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PROJECT NAME: **TAMWORTH HOSPITAL MENTAL HEALTH UNIT**

DISCIPLINE: **WAYFINDING & SIGNAGE**
DOCUMENT NAME: **SCHEMATIC DESIGN REPORT**

ISSUE: **B**
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CONTENTS

Wayfinding is the system that assists users to find their way through a complex environment.

The tools to assist people in wayfinding can include:

- Printed information.
- Architectural features and design elements.
- Permanent and temporary signage.
- Digital devices e.g. the website.
- Digital technologies for people with disabilities, especially vision impairments, are considered such as 'BlindSquare' and 'Bindimaps'.
- Human interactions e.g. with dedicated staff at information / entry point. It is recommended reliance on staff and volunteers is minimised where possible.
- Mandatory requirements under the BCA and Premises Standards.
- Additional enhanced recommendations in accordance with the spirit and intent of the DDA.

Patients and visitors at hospitals and other health care facilities face some unique wayfinding challenges.

- Complex environments
- Multiple destinations during their visit
- Unfamiliar terminology
- Stress caused by illness or the unknown.

A successful wayfinding system will provide information for users.

- Confirm correct start or finish point of a journey
- Identify a location within a building or an external space
- Reinforce travel in the correct direction
- Orientation within a building or an external space
- Understand location and any potential hazards
- Identify destination on arrival
- Escape safely in an emergency.

The functional aspects of signage are many-fold.

- Integration with the built environment (interfacing with other structures)
- Ergonomics relating to user interface
- Measure of self reliance
- Durability
- Flexibility
- Ease of maintenance
- Value for money.

Strategy

New signage will be planned, designed and implemented in accordance with best practice and evidence based design.

The following principles for wayfinding apply:

- **People centric**
  Information is aimed at all user groups;
- **Creating Identity**
  Clearly identifying the health facility to instill confidence;
- **Clarity of Movement** into and across the site
  Avoid any form of ambiguity;
- **Connectivity**
  Provide seamless connections in accordance with progressive disclosure from the macro to the micro level;
- **Future proofing**
  Provide a signage system that allows for changes and expansion;
- **Clearly state the entries** and paths to secondary destinations;
- **Relaxed stress reducing design**, colours and placement designed to be non-institutional and connecting with country.
- **Anti ligature signage** and fixings in consumer areas.

When applying wayfinding principles to a hospital site, we organise the peripheral roads and entries to the site with a clear hierarchical family of signs addressing mainly vehicular traffic, although pedestrian traffic will rely on these signs as well.

The signs are organised into main site identification signs at strategic locations featuring the hospital name at the top of the sign.

Secondary directional signs feature the hospital name as an endorsement at the base of the sign. Tertiary signs feature a regulation or a single direction. This strategy enforces best practice, that of creating clear information structure and hierarchy, avoiding ambiguity.

The signs are designed as a realistic and responsible answer to the type, size and budget of the project.

The pedestrian concourse allows for uninterrupted sightlines and movement with little signage required, however the signage is hierarchical in accordance with progressive disclosure (macro to micro level).

The internal signage will follow the same principles and is flexible in terms of future changes. Signage is integrated with the building fabric and therefore allows for ceiling and wall mounted versions.

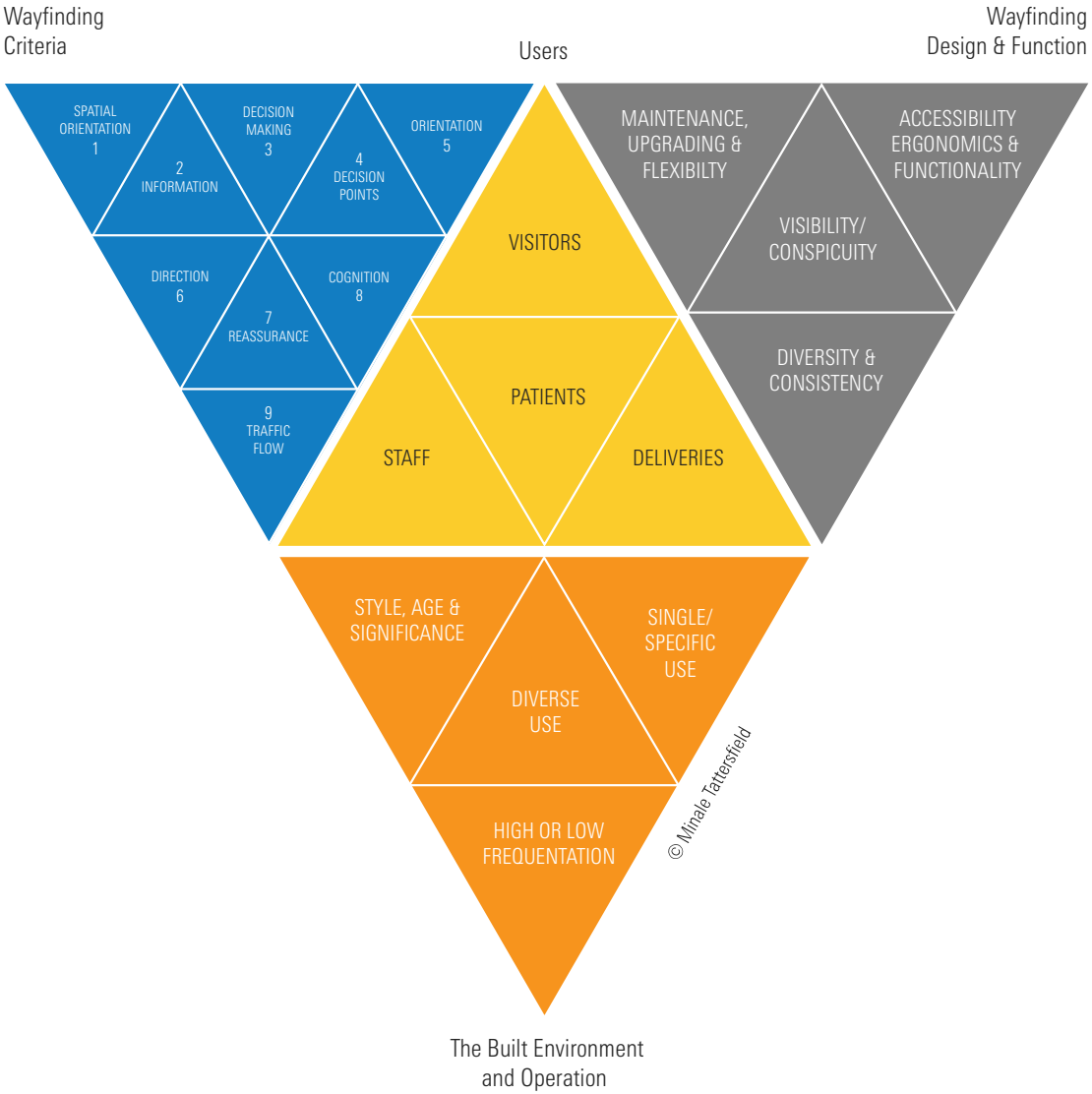
The terminology used for messages is subject to an agreed naming convention and should follow best practice.

International and Australian standards for pictograms are integrated.

Regulations and Guideline Compliance Frameworks

- National Code of Construction / Building Code of Australia;
- AS1428.1 and AS1428.2
- Australiasian Health Facility Guidelines Part C- Design for Access, Mobility, Safety and Security.
- Design for Consistency with Existing Campus and Local Health District Wayfinding and Signage
- NSW Health 2014 GI2014_18 Wayfinding for Health Care Facilities

Integral Components of the System



This diagram illustrates the reliance between larger scale and smaller scale elements when planning, designing, implementing and maintaining a wayfinding system.

All elements rely on each other and each represent a consideration necessary for a successful system.

This illustrates the reliance between:

- User groups.
- Environment, the different scales of the project environment.
- Wayfinding criteria, which are elements required in planning a system for the needs and benefits of the user.
- Wayfinding design and function, which are elements required when designing a system for the needs and benefits of the user and the requirements for maintaining the system.

It is essential that the chosen colours for the signage work together visually but also create the best environment for the patients.

With this in mind, the following must be considered when selecting the colour:

RED

- rich and highly emotive energises the body, increasing heart rate, blood,
- pressure and respiration,
- associated with increased aggression and hyper activity so best used in accents or in softer tones.

PINK

- exudes empathy and feminity, creating a calming atmosphere,
- may become irritating over time leading to agitation and anxiety so best used in unison with other colours.

YELLOW

- bright and cheery,
- associated with happiness and motivation,
- soft subtle yellows promote mental concentration,
- brighter shades may stimulate memory,
- may also evoke feelings of anger and frustration.

ORANGE

- friendly and welcoming
- distinct social nature inspiring interpersonal communication and putting people at ease
- like yellow, too much can over stimulate so to be used sparingly

BLUE

- calms mind and body, lowering blood pressure, heart rate and respiration and decreasing feelings of anxiety and aggression

PURPLE

- associated with wisdom and spirituality
- combines stability of blue and the energy of red taking on the characteristics of either, depending on the shade
- very cerebral colour speaking to the intellect more than emotions

GREEN

- symbolic of nature and promotes a serene and calming environment
- associated with health, healing and well being
- has a soothing effect on the body and mind reducing anxiety and promoting concentration
- good for contemplation and restful states

FOR MENTAL HEALTH FACILITIES:

- some colours, particularly the bold primary colours and green should be avoided as many people find them disturbing;
- extremes of colour and pattern, such as geometric designs which may disturb perception, should be avoided;
- colours and interior design should be chosen to reflect the need of consumers/patients.

Ergonomics

Ergonomics is the study of designing equipment and devices that fit the human body, its movements, and its cognitive abilities.

Ergonomics (or human factors) is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance.

Ergonomics is employed to fulfill the two goals of health and productivity.

When an environment is visually controlled by intuitive design and by applying a legible layer (signage), the viewers awareness is significantly improved. Apart from cultural and learned experience each viewers perception and response to wayfinding signs are conditioned by certain physical and psychological characteristics, referred to as human factors.

Physical Factors

Normal field of vision (also cone of vision) covers an angle of about 60 degrees. This is 30 degrees from a vertical or a horizontal centre line (30 degrees either side). However this angle is reduced for viewers from within a moving vehicle.

Visual Acuity

Viewers differ considerably in their ability to see clearly.

Reading Rate

The reading rate is significantly improved when information is logically and clearly structured with a minimum of graphic elements.

Legibility (viewing distances)

AS 1428.2

– 20mm letter from 6 metres

– 40mm letter form 12 metres

– 80mm letter from 25 metres

– 150mm letter from 50 metres

Eye Level

For a person standing that is about 1.7 metres.

For a person sitting that is 1.3 metres.

For a person sitting in a car that is about 1.4 metres.

This data is important for defining the height above ground for text on signs and the placement of signs above ground.

Psychological Factors

Figure-Ground Relationship

How shapes or patterns are perceived against a background. Anything which affects a clear perception of the contours may affect recognition of the object.

In learning to read we mentally organise letters into words, learning to distinguish an entire word by its shape. Hence the use of sentence case in this project, where the first letter is upper case and the following letters are lower case.

Luminance contrast between graphics and sign background are to be 30%.

Colour Implication

Individuals vary considerably in their ability to distinguish and remember colours. Probably the maximum of six colours – not including white and black- can be distinguished, identified and remembered by viewers, these are:

Red

Yellow

Blue

Green

Orange

Brown

However red and green are difficult to distinguish by viewers with colour blindness.

Factors Affecting Perception

Environmental factors affect the viewers perception of a sign. These are the quality, intensity and colour of ambient light falling on the sign; the physical obstructions of sight lines between the viewer and the sign and the visual environment behind and around a sign.

While not all of these factors can be controlled, signs must be placed to enhance sight lines.

Symbols

The majority of people are verbally oriented, absorbing most information through words, while the minority respond to visual devices, such as symbols.

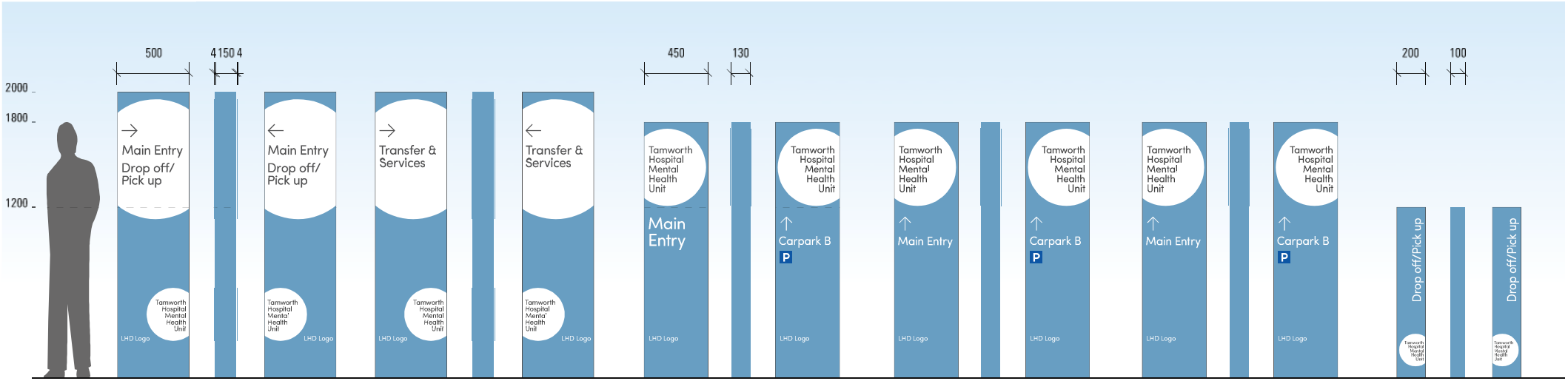
This indicates that typical sign systems require verbal messages. Facilities such as airports often use symbols to reinforce the verbal message or act as a stand alone message. Symbols must be of international standards.

- Natural
- Soft & Light
- Friendly & Calm
- Fluid

Recommended on the periphery of the Mental Health Unit.

The brief regarding external signage /carpark signage stipulates to use design of existing campus signage. However it is recommended that external signage for the Mental Health Unit be of similar proportions and colour but feature a graphic design which has the same visual language of internal signs, that of circles in order to diminish the institutional look in favour of the calm feel to the Unit and make anxious patients feel at ease. Exterior and interior design and "branding" of the Unit should be based on a holistic approach.

All other external signage as per existing design.



SITE WAYFINDING AND SIGNAGE TO BE RESOLVED WITH FURTHER CONSULTATION WITH LHD

1 ENTRY PLAZA

KEY

1. Existing Indigenous garden embellished and extended
2. Feature native shade trees
3. Accessible pedestrian ramp with stairs
4. Open meeting space
5. Open seating adjacent to dry creek bed
6. Community gathering space
7. Raised pedestrian threshold

SITE WAYFINDING LOCATIONS TO BE RESOLVED WITH NEW FORECOURT DESIGN AND WITH CONSULTATION WITH LHD

KEY

- EMERGENCY SIGN
- HEIGHT RESTRICTION BAR
- VEHICULAR DIRECTIONAL PYLON
- EXTERNAL IDENTIFICATION WALL MOUNTED
- DROP OFF/PICK UP PYLON
- PEDESTRIAN PYLON
- RECEPTION IDENTIFICATION
- STAFF LIFT DIRECTORY
- PUBLIC LIFT DIRECTORY
- STAIR IDENTIFICATION
- WALL MOUNTED DEPARTMENT IDENTIFICATION
- BULKHEAD MOUNTED DIRECTIONAL
- BULKHEAD MOUNTED POD IDENTIFICATION
- PATIENT SIDE ROOM IDENTIFICATION
- STAFF SIDE ROOM IDENTIFICATION
- BEDROOM / RESIDENT ROOM IDENTIFICATION
- STAFF ONLY DOOR SIGN
- AMENITY INFORMATION SIGN
- BRAILLE/TACTILE
- UTILITY DOOR/CUPBOARD SIGN

Note:
Statutory signage including Braille/Tactile signage to separate scope.

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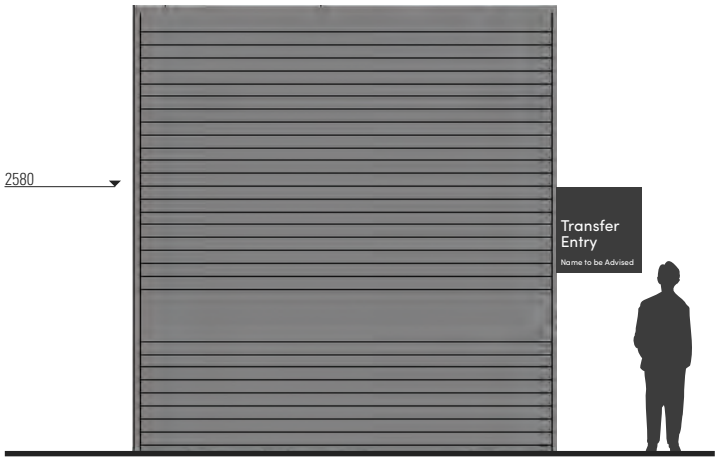
Main Entry

Main Entry Detail



EX-01

Emergency Vehicle Entry
900 x 900mm
Cap height: 114mm / 60mm

Specifications

Fixed to cladding

900mm H x 900mm W

Cap Height:114mm, 60mm
Kerning: Optical
Tracking: 0

Construction

Signlink Signsystems. Benchmark frame.

Invisibly fixed to cladding.

Frame painted with colour to match cladding colour, 2 pack polyurethane satin.

Graphic Application

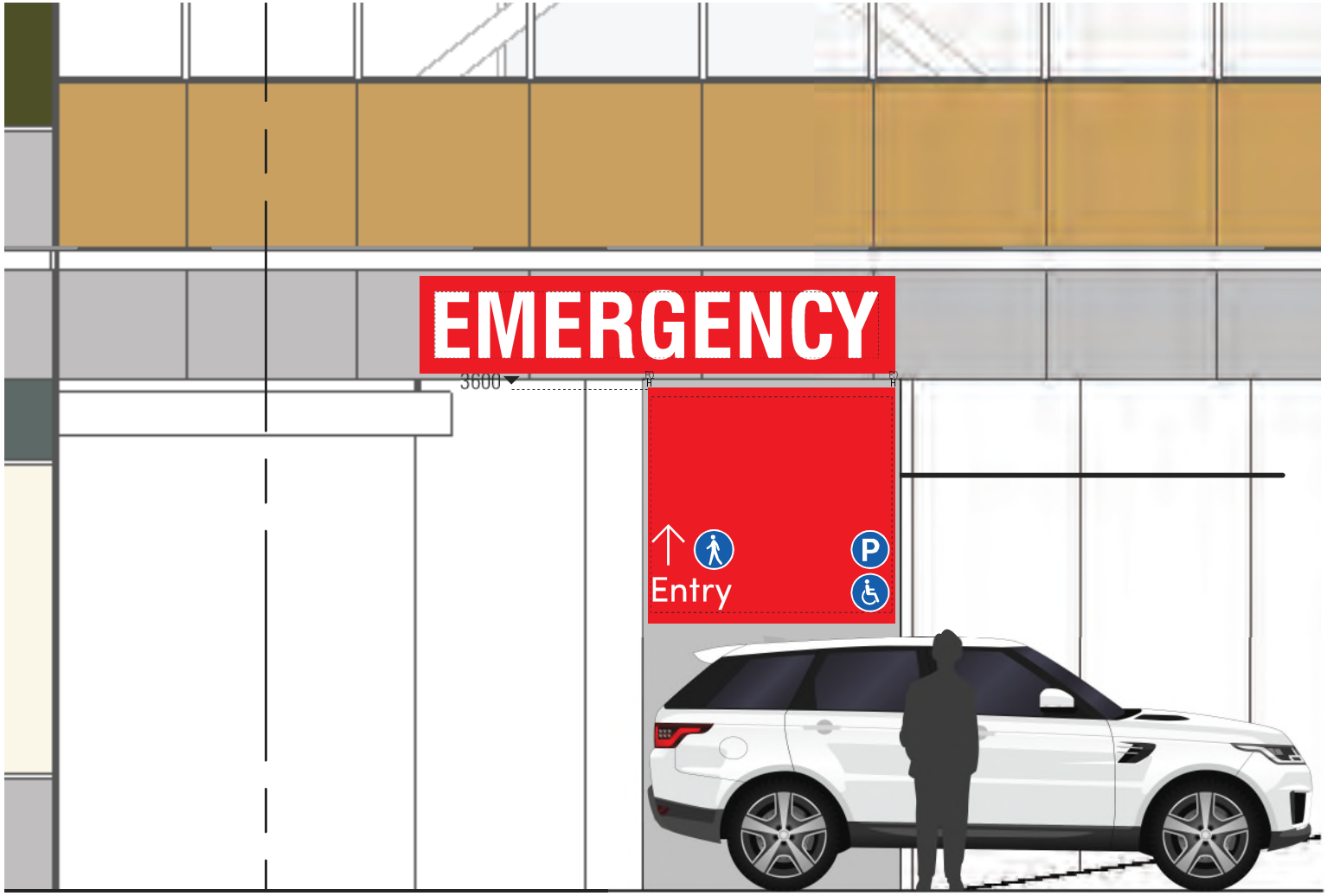
Graphics digital print onto 3M IJ40-10 Polymeric Gloss white vinyl. Overlaminated with 3M IJ40-124 Polymeric matt clear vinyl.

Colour of sign face to match colour of cladding.

Graphics in white.

Shop drawings

Signage contractor to prepare detailed shop drawings for review until approval.



EM-02

Emergency Sign
650 x 3250mm
Cap Height: 450mm

EM-01

Emergency Directional Sign
1600 x 1740mm
Cap Height: 185mm
Column: 1800mm Wide

Specifications

Emergency Sign
650mm x 3250mm

Construction

Sign internally illuminated.
White lettering illuminated.
Aluminium signbox fixed to bridge through cladding, painted 2pack polyurethane satin red to match PMS 1797C to be compatible with "Emergency red". Signbox to allow for easy maintenance of lighting.

Signbox 120mm deep to house LED's – 5 year /80,000hrs Tridonic or similar white sealed unit LED's with exteriorgrade convertors. All LED's at minimum IP65 rating. Ensure convertors are housed in a IP65 rated lockable box.

Letters: 4mm white opal Palsun polycarbonate FR rated and integrated flush with signbox face.

Signage contractor to measure on site and liaise with head contractor.
For cabling, fixing method and measurements.
Signage contractor to prepare detailed shopdrawings for review and approval.

Emergency Directional Sign
1600 x 1740mm

Construction

Folded aluminium panel painted 2pack polyurethane satin red to match PMS 1797C to be compatible with "Emergency red". Where two panels are required, prepare two equal panels with Horizontal hairline joint.

Graphic Application

Graphics digital print onto 3M IJ40-10 Polymeric Gloss White vinyl. Overlaminated with 3M IJ40-124 Polymeric Matte Clear vinyl.
Signage contractor to measure on site.
Signage contractor to prepare detailed shopdrawings for review and approval.

HEIGHT CLEARANCE SIGNAGE
WEST ELEVATION

EX-09

Hight Clearance
180 x 1800mm
Cap Hieght: 110mm

Construction

Sign subject to contractor shopdrawing.

AS/NZS 2890. 1:2004.

HEIGHT CLEARANCE SIGNAGE
EAST ELEVATION

EX-10

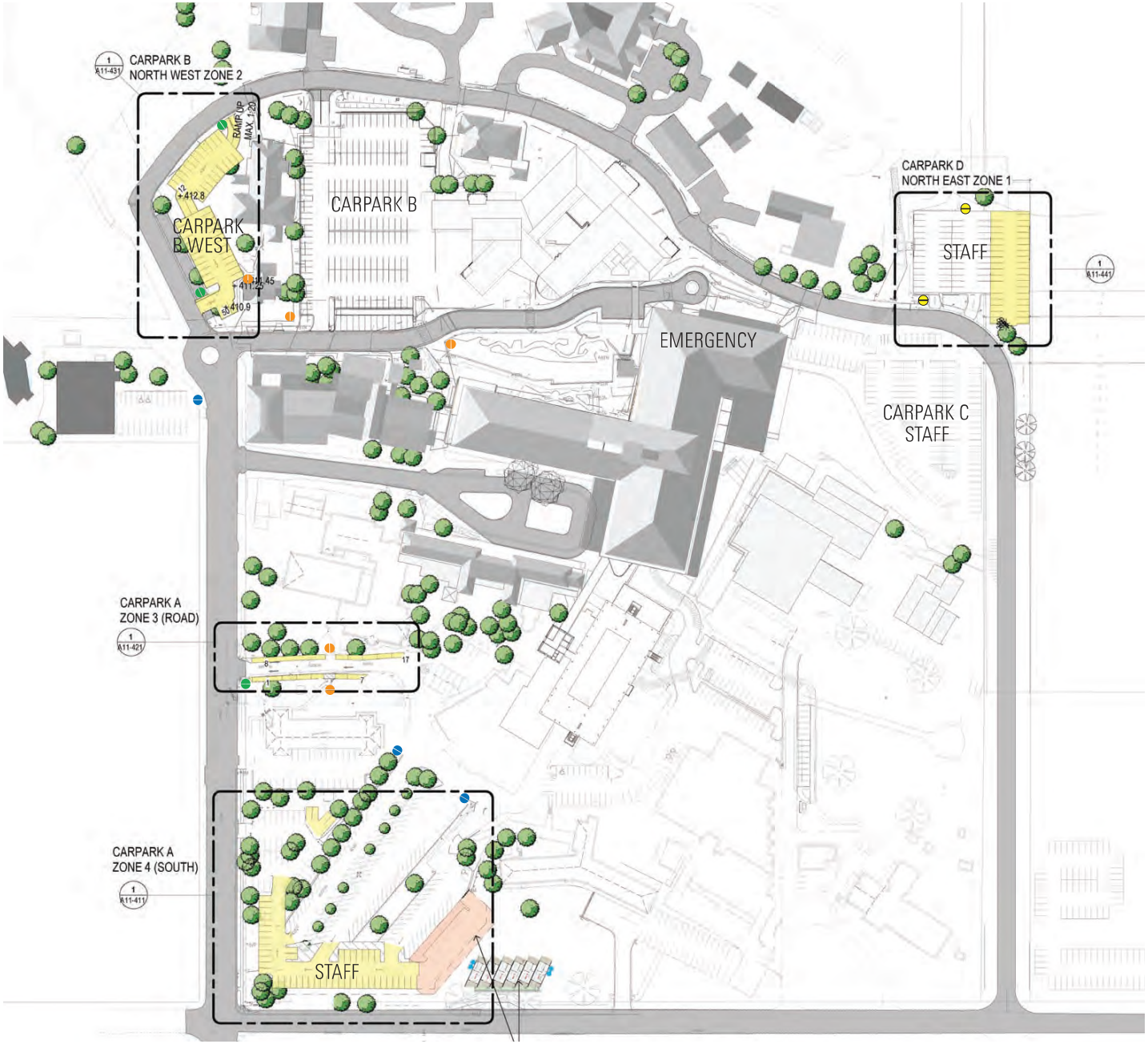
Hight Clearance
180 x 1800mm
Cap Hieght: 110mm

Construction

Sign subject to contractor shopdrawing.

AS/NZS 2890. 1:2004.

SITE PLAN
CARPARK SIGNAGE LOCATION PLAN



KEY

- EXISTING LARGE PYLON TO BE UPDATED
- EXISTING CARPARK PYLON TO BE UPDATED
- NEW CARPARK PYLON
  NOTE: VEHICULAR SIGNAGE SUBJECT TO CLARIFICATION OF VEHICULAR CIRCULATION ROUTES
- NEW CARPARK CONDITIONS SIGN (TBC)
- NEW PEDESTRIAN PYLON
  NOTE: PEDESTRIAN SIGNAGE SUBJECT TO CLARIFICATION OF PEDESTRIAN CIRCULATION ROUTES

NOTE: STATUTORY SIGNAGE, CCTV, OSD PIT, TIME OF DAY VISITOR PARKING SIGNAGE, STOP SIGNS ETC BY TRAFFIC CONSULTANT.

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