



ABN 48 612 666 172

Sydney | Brisbane | Melbourne

Level 23, 101 Miller St  
North Sydney NSW 2060

PO Box 3  
North Sydney NSW 2059  
Ph (02) 94371000

## MEMO

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<b>PROJECT NAME:</b>	Nepean Hospital Stage 2 – CAMHS & TAMS Development REF
<b>PROJECT NUMBER:</b>	211102
<b>ATTENTION:</b>	Oliver Klein (planning)
<b>FROM:</b>	Luke Wheeler (JHA)
<b>DATE:</b>	19 April 2022

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## 1 INTRODUCTION

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JHA has been engaged by Health Infrastructure to provide Design Development (DD) documentation for the Electrical and ICT related services for the proposed new Child & Adolescent Mental Health Services (CAMHS) and Total Asset management Services (TAMS) facilities at Nepean Hospital.

This memo provides services advice to support the Review of Environmental Factors (REF) for the proposed Package.

This memo looks at the conditions and locations of the existing Electrical & Communications services that need to be considered as part of this REF.

The proposed development shall be designed to comply with all other relevant codes, standards, and Authorities requirements.

### 1.1 THE SITE

This memorandum has been prepared by JHA to form part of the REF submission for the proposed new Child & Adolescent Mental Health Services (CAMHS) and Total Asset management Services (TAMS) at Nepean Hospital.

CAMHS and TAMS is currently in the Design Development (DD) phase and entails construction of a new 2-storey CAMHS building and new 1-storey TAMS building.

This REF is exclusively associated with proposed works associated with the CAMHS and TAMS developments.

## 1.2 LIMITATIONS

This memo is subject to the following limitations:

- The information in this report has been provided based on the survey information of services as provided for the project to date.
- Information provided by third parties and respective Authorities has been utilised in the preparation of this report and have been assumed to be of sufficient accuracy to utilise for the REF process.

## 2 ELECTRICAL & COMMUNICATIONS SERVICES

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### 2.1 EXISTING HIGH VOLTAGE SERVICES

Existing HV infrastructure on-site does not form part of the proposed works, however an application to Endeavour Energy is necessary to inform Endeavour Energy of the increased load. JHA is to undertake this application on behalf of the client

### 2.2 LOW VOLTAGE SERVICES

There are currently no Low Voltage Authority works proposed under the project scope.

In order to facilitate demolition of the existing Nepean 1 and Nepean 2 buildings, a new external MSB is proposed, along with a series of existing LV submain diversions.

This proposed new external MSB shall feed the new CAMHS and TAMS buildings.

The primary requirement is for coordination of existing in-ground services with the proposed services diversions in order to mitigate risk of disruption to operations services.

### 2.3 EXISTING INCOMING TELCO SERVICES

Existing Telco infrastructure on-site does not form part of the proposed works; nor is it expected to be affected by the proposed works under this package.

### 2.4 PRIVATE COMMUNICATIONS SERVICES

Due to the decommissioning of existing ICT 01 (Nepean 1) and existing ICT 23 (Nepean 2), a series of private ICT backbone cabling diversions are proposed.

The scope entails replacement of existing backbone cabling from the abovelisted ICT Rooms to existing buildings within the southern campus footprint; including to the following communications rooms:

- ICT Room 10 (Multideck Carpark)
- ICT Room 11 (Oral Health)
- ICT Room 12 (Exec)
- ICT Room 34 (Court)

The development scope also entails establishment of 2-off floor distributors in the CAMHS building and 1-off floor distributor in the TAMS building.

## 2.5 ELECTRICAL SERVICES DIVERSIONS

The following electrical services diversions are proposed under this package of works.

### 2.5.1 NEPEAN HOSPITAL EXECUTIVE

The existing Nepean Hospital Executive building is currently fed from MSB Nepean 1. In order to facilitate the decommissioning of MSB Nepean 1, it is proposed that this building be provided with a new low voltage supply from the proposed new external MSB under an early works scope.

### 2.5.2 SEXUAL HEALTH

The existing Sexual Health building is currently fed from Main Switchboard (MSB) Nepean 1. In order to facilitate the decommissioning of MSB Nepean 1, it is proposed that this building be provided with a new low voltage supply from the proposed new external MSB under an early works scope.

### 2.5.3 COURT BUILDING

The existing Court Building is currently fed from MSB Nepean 1. In order to facilitate the decommissioning of MSB Nepean 1, it is proposed that this building be provided with a new low voltage supply from the proposed new external MSB under an early works scope.

## 2.6 NEW ELECTRICAL SERVICES

### 2.6.1 CAMHS BUILDING ELECTRICAL SUPPLY

The new CAMHS building will be provided with a non-essential supply from the proposed new external MSB and an essential supply from the existing Generator Switchboard in existing Adult Mental Health.

Fire / Life Safety Services as defined in NCC, as well as nominated Hospital Essential (HE) services will be provided with stand-by power provisions.

JHA is currently assessing the stand-by power requirements for CAMHS against available capacity in the existing Stand-by diesel generator unit earmarked to support the building.

### 2.6.2 TAMS BUILDING ELECTRICAL SUPPLY

The new TAMS building will be provided with a non-essential supply from the proposed new external MSB and an essential supply from the existing Generator Switchboard in existing Adult Mental Health.

Fire / Life Safety Services as defined in NCC, as well as nominated Hospital Essential (HE) services will be provided with stand-by power provisions.

JHA is currently assessing the stand-by power requirements for TAMS against available capacity in the existing Stand-by diesel generator unit earmarked to support the building.

#### PHOTO-VOLTAIC PROVISIONS

It is currently proposed that the new CAMHS building be provided with a minimum 10kW capacity PV System to facilitate notional Green Star requirements.

It is proposed that the TAMS roof and switchboard be designed such that a PV system could be installed on the TAMS roof in the future.