

Northern Sydney Local Health District Mona Vale Hospital

Facade Conditions Inspection Report

Inspection was undertaken on 14/2/17 and 18/2/17

by Sprack Construction Inspections



E.A. & Associates
Consulting Engineers Pty Ltd

E.A. & Associates Engineers

PO Box 6013 North Sydney, NSW, 2060

+61 411 245 100

sam@eaae.com.au

www.eaae.com.au

Structural Engineer: Sam Ebeid

BE(civ), FIEAust, CPEng, RPEQ, NPER



ENGINEERS
AUSTRALIA

E A and Associates Consulting Engineers
Sprack Constructions

Project Engineer: Sam Ebeid

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Introduction

Mona Vale hospital was established in 1964 and is under the management of the Northern Sydney Local Health District. In conjunction with Manly hospital, Mona Vale hospital provides health services to those living in the Northern Beaches area. Having been founded in 1964, the hospital has now been in operation for more than 50 years. As a result of exposure to elements over time, however, the building's facade is starting to show signs of deterioration.

A report by ARUP in September of 2010 identified a number of aspects of the building that pose a risk to pedestrians and those working around the hospital.

Following the essential maintenance work conducted by Kane Constructions in 2014/15, it was decided to conduct six-monthly inspections of the facade over the next four years while the hospital is in operation as an ongoing precaution to ensure public safety.

This report aims to highlight problem areas with the building's facade and solutions that are required to maintain the public safety. This will include either fencing areas, hoarding installations in areas where repairs are required or a combination of these solutions.

Given below is a layout of the hospital premises, labelled with the respective elevations and areas that will be referred to in the report. The report will describe integrity of the facade and general condition. All images contained within the report were taken by E A & Associates Consulting Engineers. The inspections were undertaken between the 14/2/17 and 18/2/17 by Spracks Construction Inspections. .

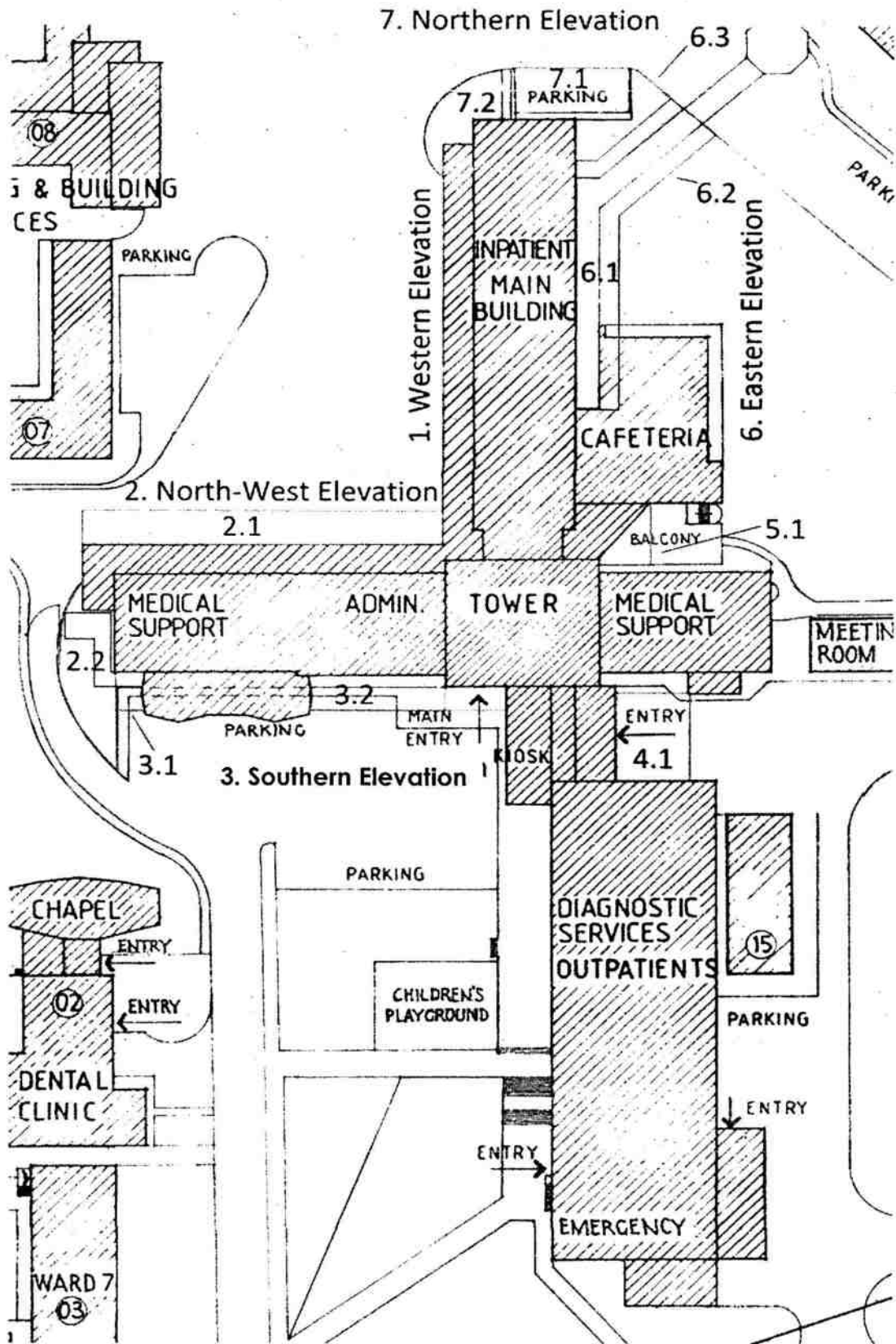


Image 1- Plan Layout of Mona Vale Hospital

Executive Summary

Following the facade inspection using a boom lift to get the operatives close enough to the facade of the building, the summary below lists the areas with the condition of the facades inspected.

Inspection date 14/2/17 Area inspected:

- 7.1- Facade in reasonable condition (the drummy render that needed to be restrained was carried out in 2015 and is now in good condition)
- 7.2 - Facade in reasonable condition (drummy render detected). No action is required but this area must be monitored and will be reinspected in June 2017.
- 1.0- Facade is in a reasonable condition

Inspection date 14/2/17 Area inspected:

- 2.1 - Facade in reasonable condition (brickwork is in a reasonable condition even though there is drummy render in some areas). No action is required but this area must be monitored and will be reinspected in June 2017.
- 2.2 - Facade in reasonable condition
- 3.1 - Facade in reasonable condition
- 3.2 - Facade in reasonable condition

Inspection date 15/2/17 Area inspected:

- 6.1 - Facade in reasonable condition. This area has been fenced off from the public and this must be maintained on-going.
- 4.1 - Facade in reasonable condition
- 5.1 - Facade in reasonable condition

Please note that the integrity of the windows can only be fully determined through inspection from inside the building. Given that EAAE does not have clearance to access the building, inspection of the windows was not conducted. It is recommended that the on-site maintenance

personnel inspect windows internally on a regular basis (quarterly recommended).

Given that the building is air-conditioned, there should not be a need to open windows. However, we have observed some windows being open. Given the age and deterioration of the windows and the risk of window panes dislodging, we recommend that all windows are permanently secured to prevent windows from being opened.

Inspection and Condition

1. Western Elevation (Area 1.0)

Inspection

This side of the building faces the car park, which would have high pedestrian activity throughout operational hours. Image 2 show the current state of the western elevation of the building. The inspection on this elevation was carried out 14/2/17

- Fagade was found to be in a reasonable condition
- Brickwork and render was in in a reasonable condition with some render being drummy but not unstable
- 10 aluminium louvers were removed
- All the louvers were checked for structural soundness and found to be satisfactory

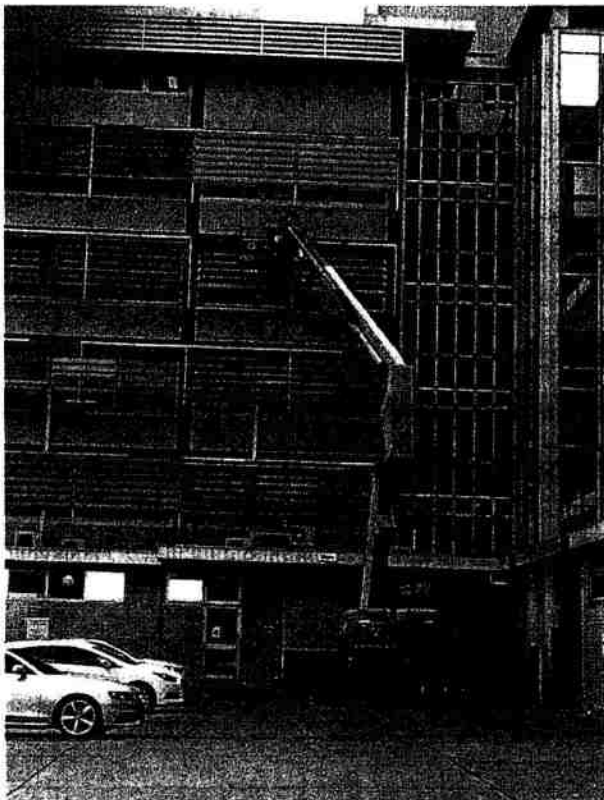




Image 2 - Continuation of Western Elevation of Mona Vale Hospital

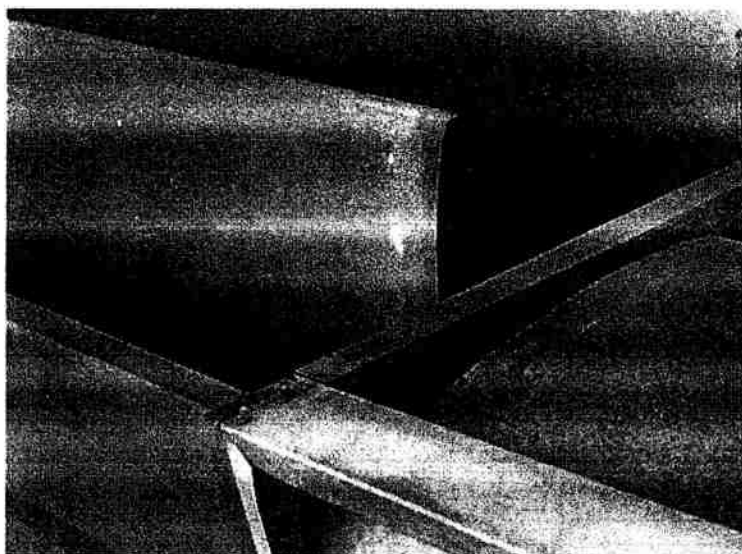
2. North-West Elevation (Area 2.1)

Inspection

The North-West elevation of the building sits above an area of high staff activity. This facade was inspected on the 15/2/2017 with a boom lift in order to get a close-up appraisal.

The inspection on this elevation showed the following:

- Facade was found in a reasonable condition.
- Brickwork was in a reasonable condition. Some of the render was found to be drummy but the greater extent was in good condition. No action is required but this area must be monitored and will be reinspected in June 2017.
- Aluminium windows were checked for soundness.
- Some of the old flashing that had come loose were Sika flexed down again and secured against wind loads.



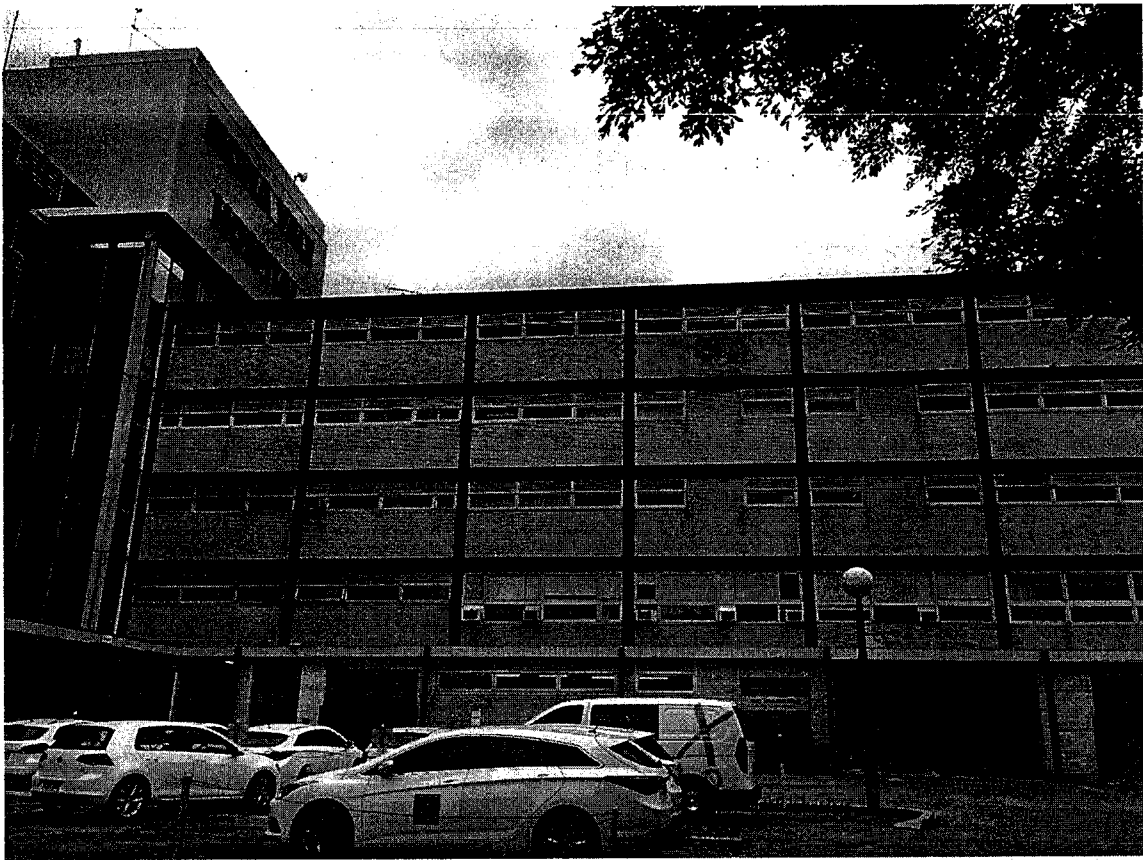


Image 3- North-West Elevation

The image below shows the drummy areas in the North-West elevation that were reported in 2015 and this remains unchanged.

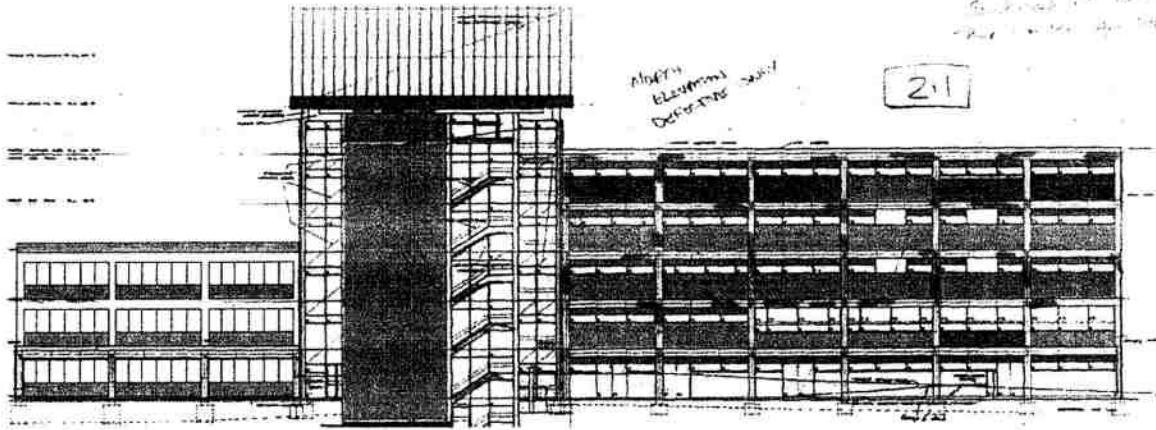


Image 4 (Area 2.1)

As previously reported, the pink areas show early stages of render being drummy and have not increased in size. These areas are in a reasonable condition and are not in danger of being dislodged.

All brickwork was inspected and there is no sign of brickwork failure.

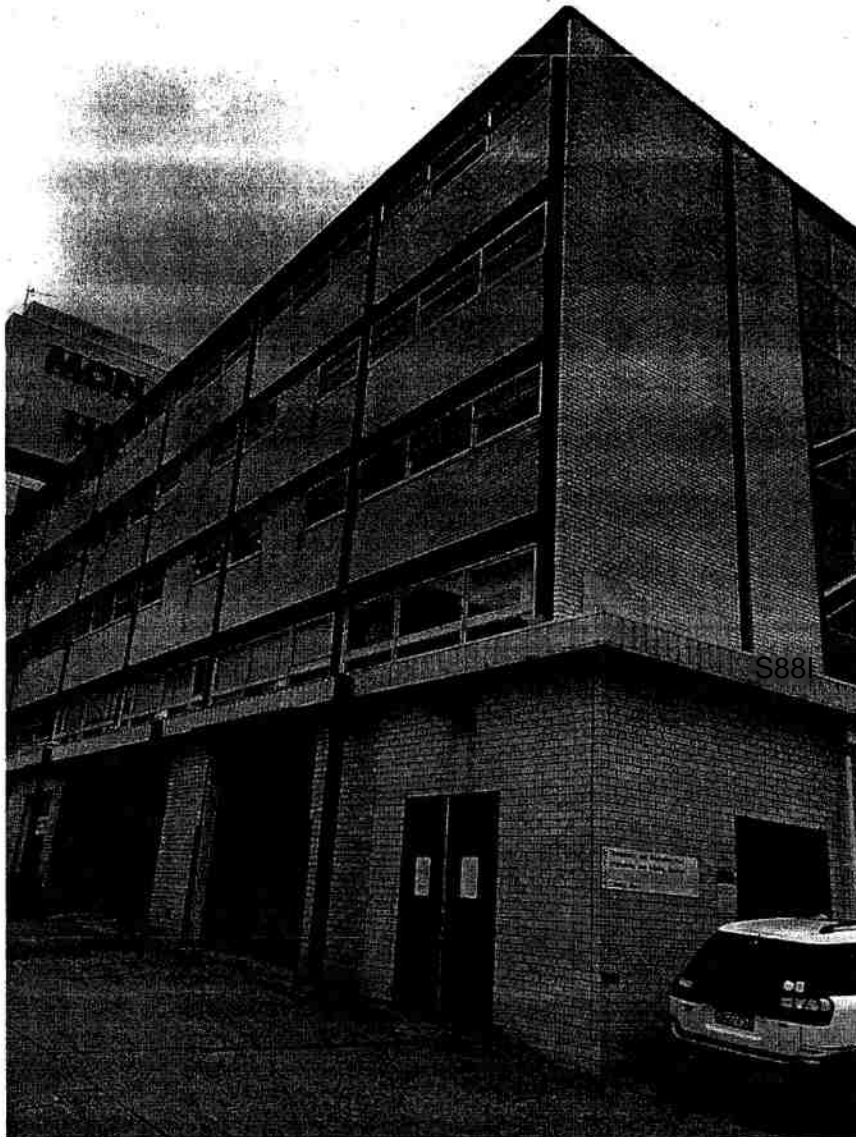


Image 5 (Area 2.2) - Wall connecting North-West and Southern Elevation

The inspection on this face was carried out 15/2/17:

- Fagade was found to be in reasonable condition.
- Brickwork and render was in a reasonable condition.
- Aluminium windows were checked for soundness and found to be in fair condition.

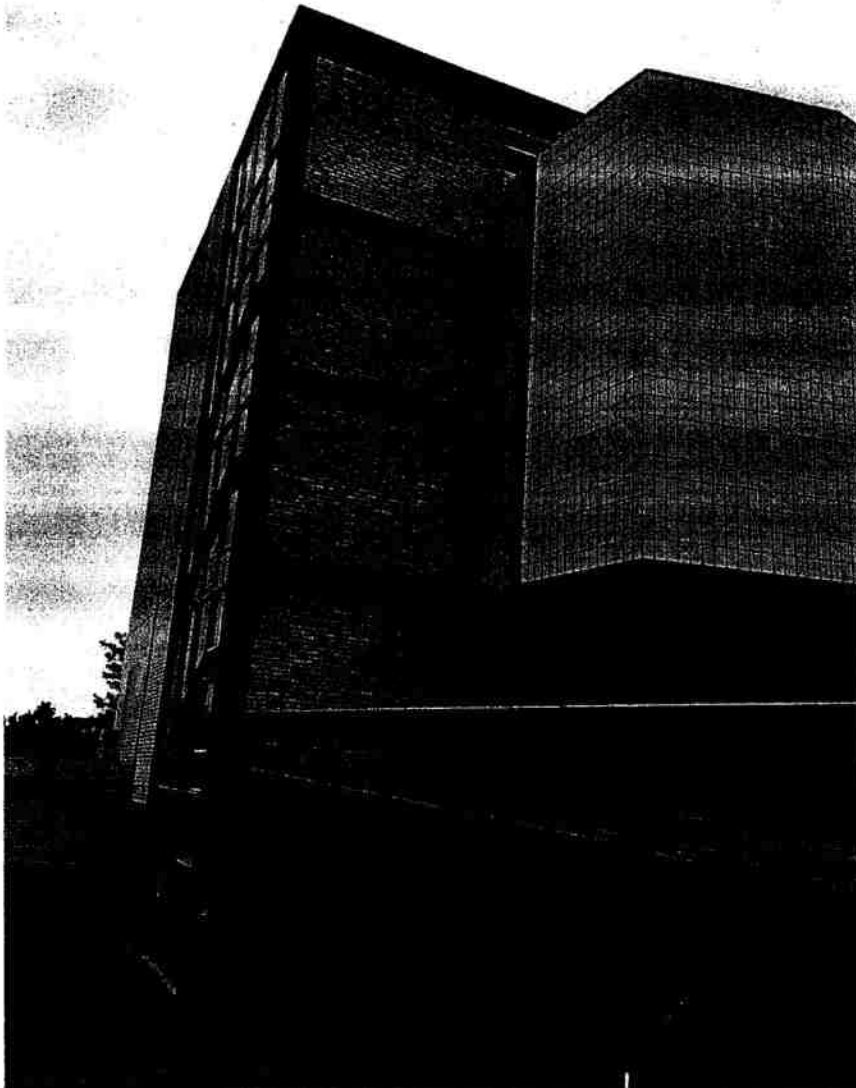


Image 6 (Area 2.2) - Continuation of wall connecting North-West and Southern Elevation.

The inspection on this face was carried out 15/2/2017:

- Fagade was found to be in reasonable condition.
- Some cracking of brickwork around windows and this was filled with stabilised grout.
- Some minor areas of render were found to be drummy. No action is required but this area must be monitored and will be reinspected in June 2017.
- Aluminium windows were checked for stability and found to be in a fair condition.

3. Southern Elevation

Inspection

The Southern Elevation of the hospital is situated directly above a parking area and is shown in images 6 and 7.

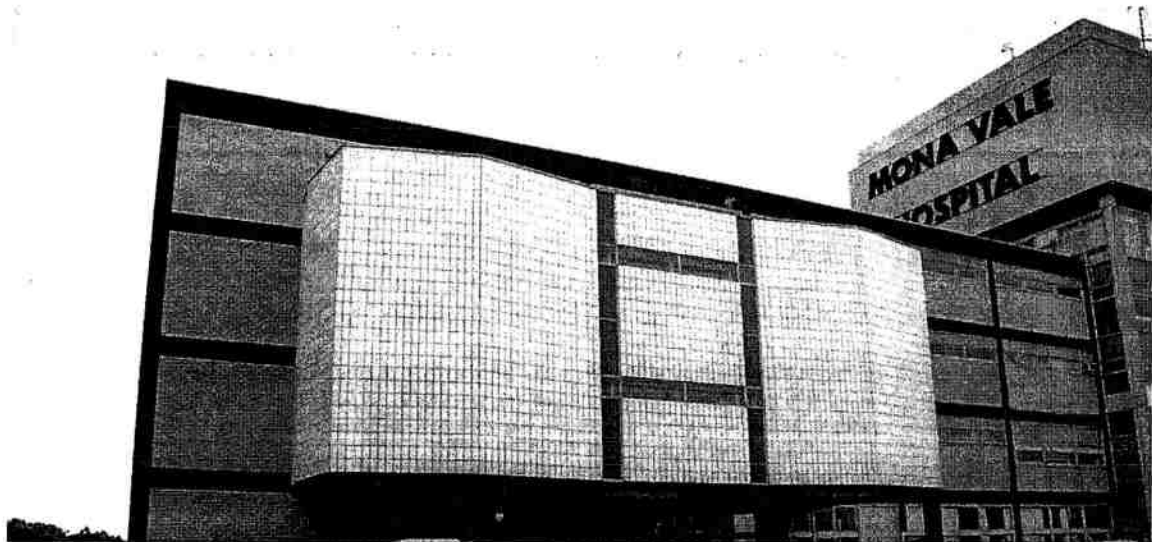


Image 7 - Southern Elevation of the building showing car park below.

The inspection on this face was carried out 15/2/17:

- Fagade generally was found to be in a reasonable condition.
- Brickwork and render were in a reasonable condition (loose sections of render removed on site).
- Aluminium windows were checked for stability and found to be in a fair condition.
- Fagade tiles were inspected and there are a number of areas that seem to be drummy. No action is required at this stage but these areas will need to be carefully watched and must be reinspected in June 2017.

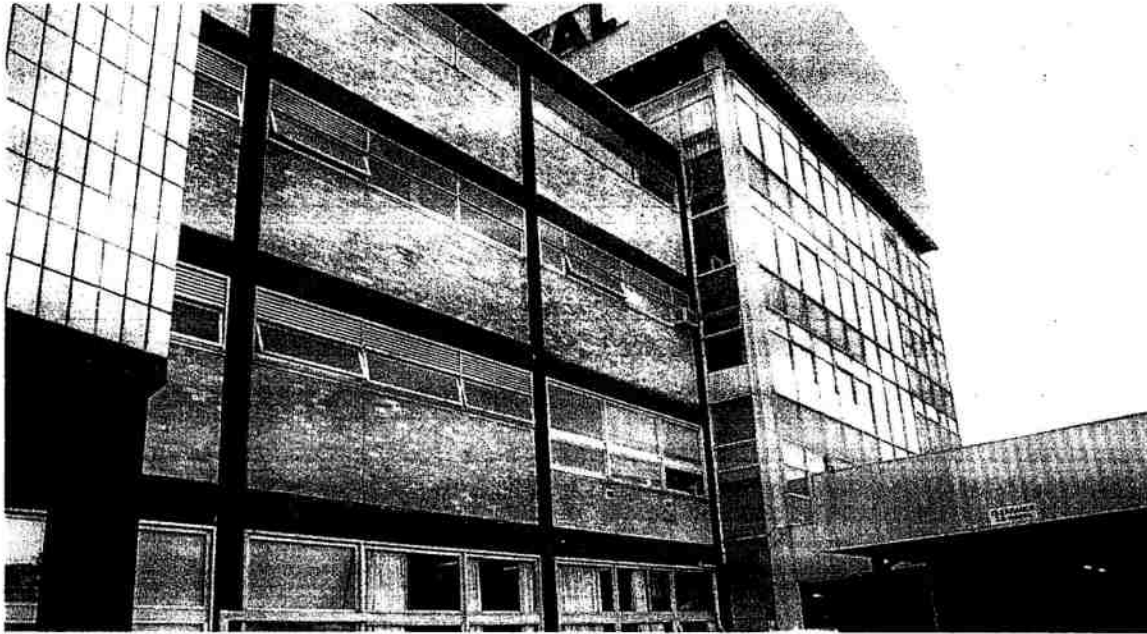


Image 8 - Closer view of Southern Elevation

The inspection on this face was carried out 15/2/2017:

- Fagade was found to be in a reasonable condition.
- Some cracking of brickwork around windows and this was filled with stabilised grout.
- Aluminium windows were checked for stability and found to be in a reasonable condition.

4. Ambulance Entry

Inspection

The ambulance entry area is of obvious concern due to vehicles and personnel moving through the area. This area was inspected on 15/2/2017 in the same manner as the other areas. Close inspection found the brickwork and fagade fabric in a reasonable condition.

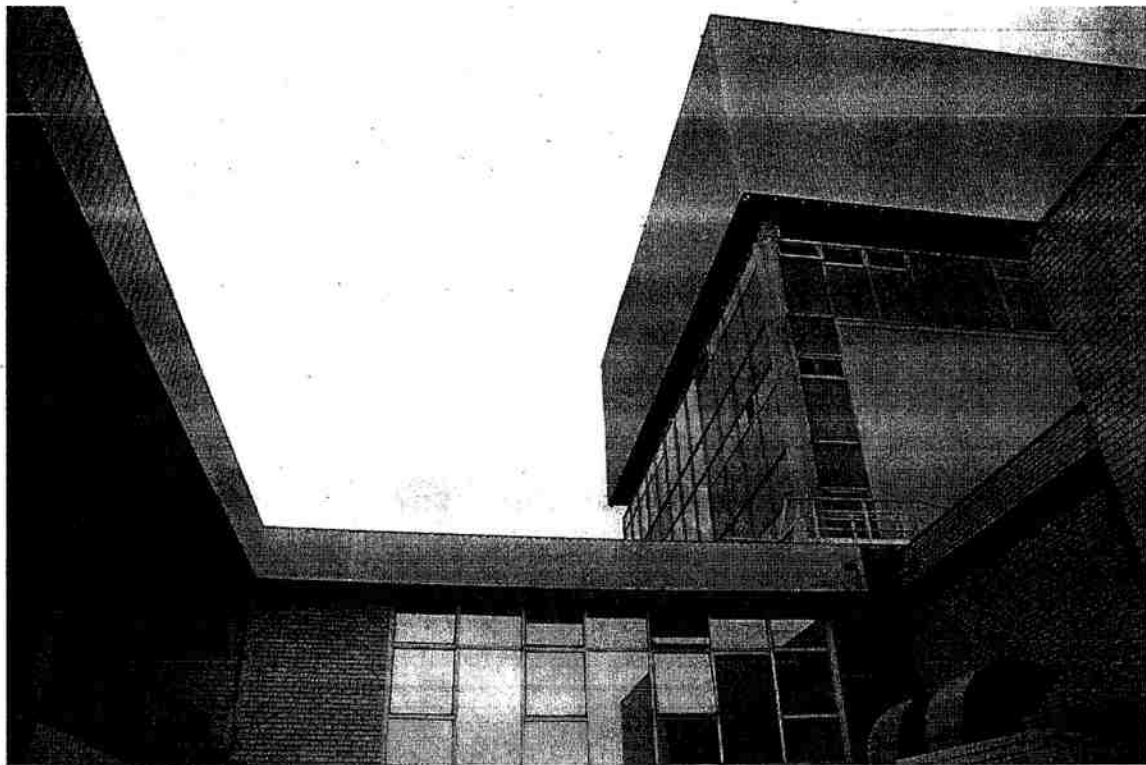


Image 9 - View of the tower section of the building above the ambulance entry area of the hospital premises.



Image 10 - Ambulance entry area of the hospital.

5. Balcony

Inspection

The balcony area of the hospital is flanked by the tower section and Eastern Elevation of the hospital building and is illustrated below in Image 1.

This area could not be inspected effectively. Close inspection of brick work and other facade fabric could not be reached by access equipment.



Image 11 - View of tower section and Eastern Elevation of the hospital building above the balcony.

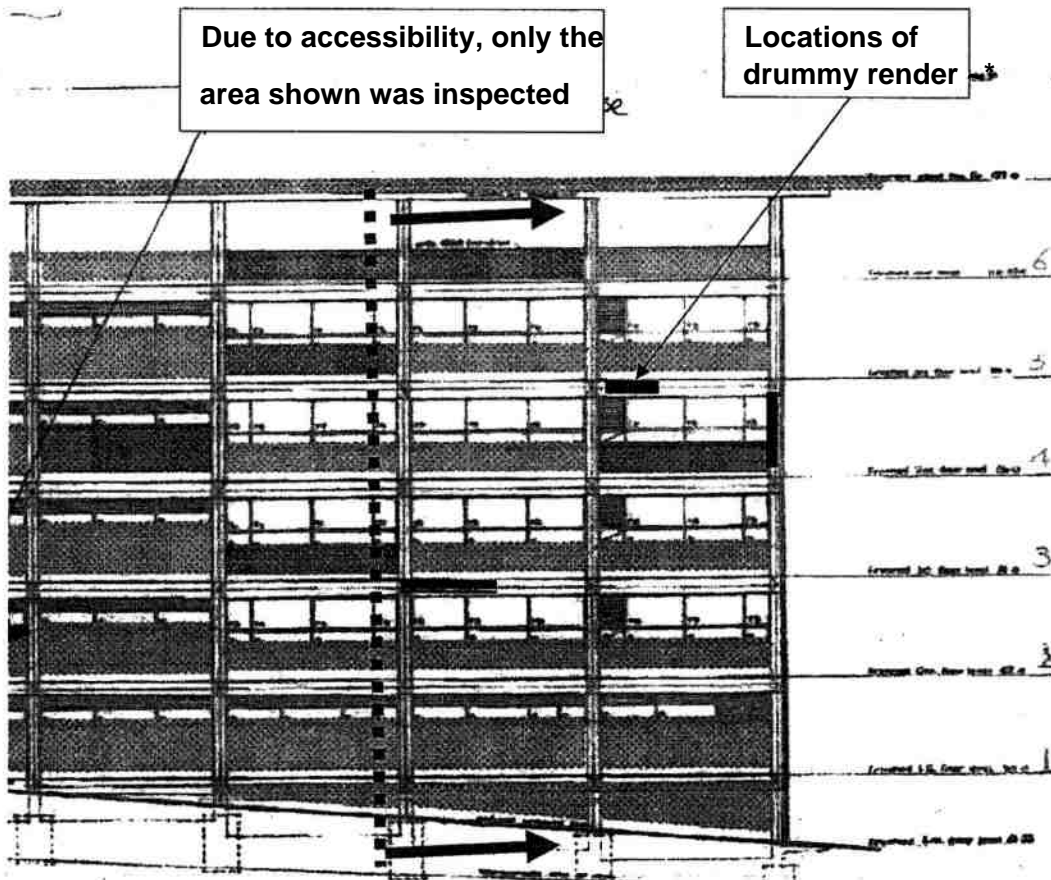
Access to this area can only be through using a crane box. It is recommended that a crane box is used for the six-monthly inspection in June 2017. Alternatively, a IOkPa hoarding is recommended to be installed in this area.

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Inspection undertaken 15/2/17

The Eastern Elevation of the building sits directly above the cafeteria, grass recreation area and a thoroughfare between the main hospital building and the Assessment and Rehabilitation Unit.

This inspection was undertaken using a boom lift.



Eastern Elevation of the hospital building: (Inspection date 15/2/17)

The inspection of the Eastern facade revealed 3 areas of drummy render and one area where there is loose brick work. Window vents were also checked and 6 of the dislodged blades of the vents were removed.

No further action is required in this area as it has been made safe by fencing off the North/Eastern corner.



Eastern facade view: On our last inspection the Pink area found loose brick work and yellow area small section of loose aluminium which was removed.

The area as shown in the image above could not be inspected but we recommend that it is inspected in the June inspection using a crane box.

The Northern most area is now fenced off and no further action is required.

7. Northern Elevation

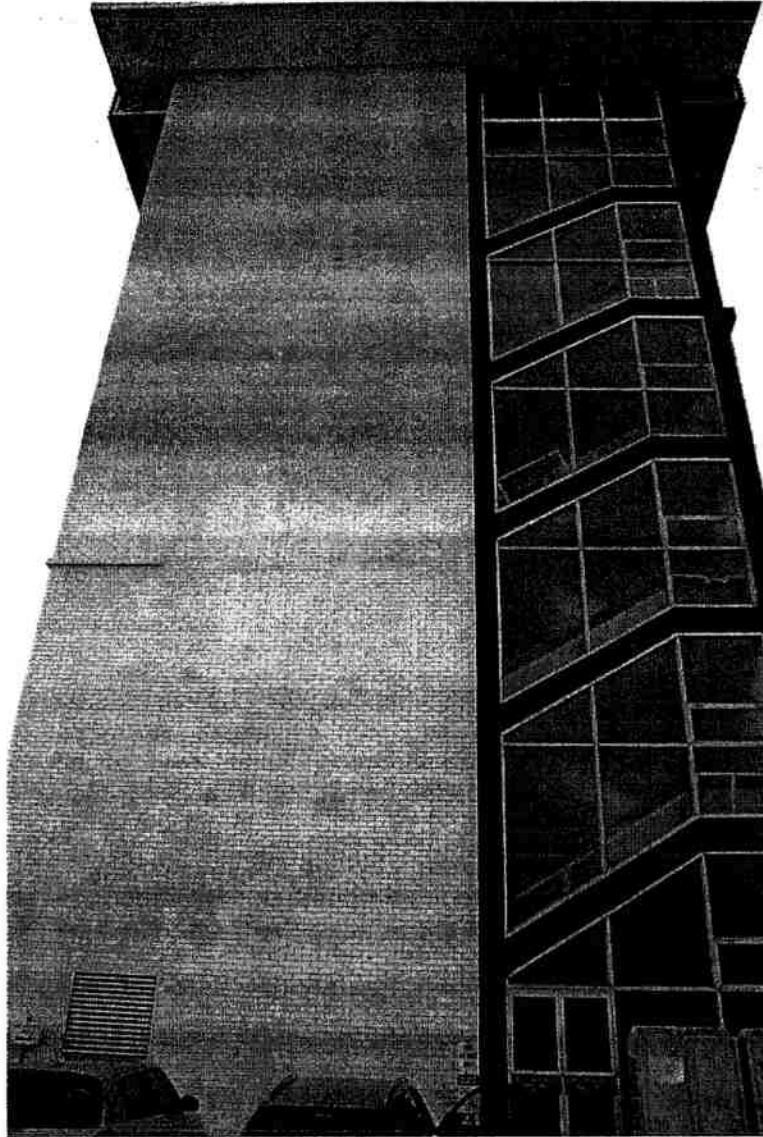


Image 14 - View of the Northern Elevation of the hospital building.

Area 7.1 This area of the facade had multiple areas of drummy render identified in 2015 but it has been stabilised for the time being using cladding over the rendered areas.

The brick work was found to be in good condition and unlikely to be dislodged.

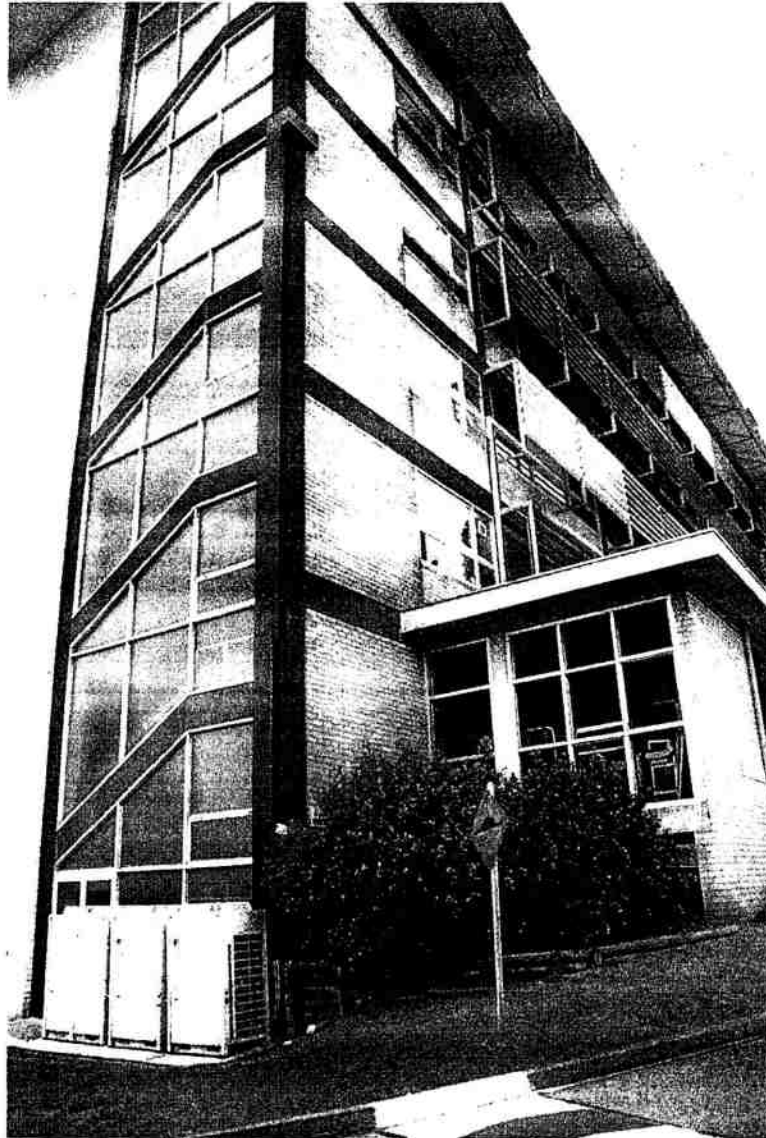


Image 15 - Continuation of Northern Elevation where it meets the Western Elevation showing grass area below.

Area 7.2 This corner area has sections with early signs of drummy render. At this stage we see no reason for any action. This corner will be closely investigated during the next inspection in June 2017.

This area is not usually used by pedestrians so we see no reason for it to be fenced off.

End
