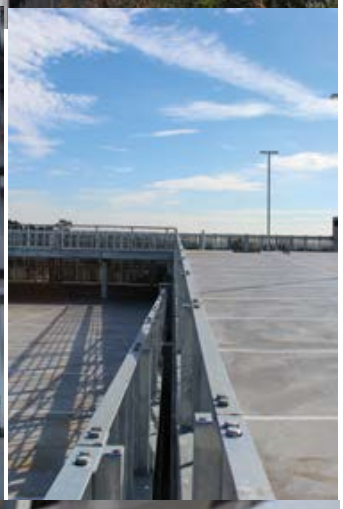
CARING FOR GROWING HOSPITAL CAR PARK

Recent improvements of the car park of Austin Hospital in Melbourne showed that hot dip galvanizing (HDG) with steel frame construction can speed construction time, ease trades and congestion onsite, increase safety and ensure the asset will be protected against corrosion for decades to come.



The car park has been extensively expanded over the past decade at what is the largest hospital redevelopment ever undertaken in Victoria, and one of the largest in Australia.

Structural beams, cable trays, handrails and lighting towers were all galvanized in this 1800-tonne project.

Lay down area was extremely limited in the existing operating car park so each load of steel had to be tightly sequenced. Daily meetings between the steel fabricator and galvanizer ensured the delivery schedule was met minimising storage of galvanized items onsite.

They also held venting and draining education sessions ensuring steel sections were correctly prepared for galvanizing. This reduced rework, improved turnaround times as well as quality and ensured that all the steel was available for delivery in its scheduled load lot.

Galvanized steel arriving onsite could be immediately craned into position.

The steel fabricator adopted bolted angle connections to improve fabrication efficiency whilst making structural members an ideal size for galvanizing.

This project was the International Award winner in the 2015 American Galvanizers Association – Excellence in Hot-Dip Galvanizing Awards and was a GAA 2014 Sorel Award finalist.

The need for off-site preparation and the lack of onsite storage meant any protective coating on the steel needed to be tough and resistant to handling damage as it would be craned directly into position from the back of the transport.

To enable shear studs to be welded to the hot dip galvanized beams, stop-off or masking paint in different widths was applied to specified beams to prevent the zinc coating bonding to the steel during galvanizing. The galvanizer treated over 2000 individual pieces this way.

This project was the International Award winner in the 2015 American Galvanizers Association – Excellence in Hot-Dip Galvanizing Awards and was a GAA 2014 Sorel Award finalist.

PROJECT TEAM

Asset Owner: Austin Health
Architects: Clarke Hopkins Clarke
Principal Builder: Walton Constructions/Built
Steel Specifier: Robert Bird Group
Steel Fabricator: Page Steel
Hot Dip Galvanizer: Industrial Galvanizers
Photographer: Industrial Galvanizers

NEW DIGITAL APP
GALVANIZE

galvanize is a free magazine produced bi-annually by the Galvanizers Association of Australia and features projects from Australia and around our region. To have your project featured simply email us some details at gaa@gaa.com.au.

For iPad readers, the magazine is now available to download free from the Apple store and this version often includes extra photos and videos of the projects featured in the hard copy magazine.

You can also view the current issue and back copies at the Case Studies tab on our website (**www.gaa.com.au**).

To request your own free subscription or to update an existing subscription to the hard copy version, please complete the form on the reverse or simply email us at gaa@gaa.com.au.

1- extensive use of a galvanized structural steel frame and reinforced concrete, combined to produce a stunning and tractive addition.

2- The installation of angled louvres to the galvanized framework producea colorful, patterned exterior that creates delightful reflections from the sunlight. It also provides significant ventilation and breaks up the angular lines of the car park structure.

3-6 Extensive use of HDG fasteners complement the overall design and allow for gnificantly reduced assembly time and costs.

7- Fully exposed galvanized steel beams support Bondek which has been used to form