

**EDITORIAL:**

# BRAYBROOK SECONDARY COLLEGE

## Multi-Sport Courts Redevelopment

352 Ballarat Road, Braybrook, Victoria - Australia

<b>Project:</b>	Braybrook Secondary College Multi-Sports Court Redevelopment
<b>Project Manager:</b>	Braybrook Secondary College
<b>Surfacing System:</b>	MAPEI Mapecoat TNS Comfort
<b>Surfacing Applicator:</b>	King of Courts Pty Ltd
<b>Total Number of Courts:</b>	Five (5)
<b>Total Area:</b>	2600 m <sup>2</sup>
<b>Mapei Co-Ordinator:</b>	Nicholas Cheal
<b>Year of Completion:</b>	2019
<b>Mapei Products:</b>	Mapecomfort R 4mm, Ultrabond Turf 2 Stars Pro, Mapecoat I 600 W, Mapecoat TNS Grey Base Coat, Mapecoat Finish 1, Mapecoat TNS White Line
<b>Mapecoat TNS Colours:</b>	Sydney Blue TNS 35 Swiss Red TNS 24 Dark Grey TNS 2 White Line TNS 0



## PROJECT HISTORY

Braybrook Secondary College, located in Melbourne's western suburbs, is a proud multi-cultural, single-campus school with a strong academic reputation offering extensive programs from Years 7 to 12. The underpinning philosophy is that students should have opportunities to develop their skills to the optimum level.

The college prioritises the provision of modern equipment and facilities. With regards to sporting facilities, this was demonstrated by the school's recent investment in a new synthetic turf playing field. The synthetic field provides many benefits to the school's sports curriculum in which all Year 7 to 10 students participate in a Physical Education class.

## PROJECT OVERVIEW

However, the adjoining 2600m<sup>2</sup> uncoated asphalt multi-sports courts provided for an unattractive and non-conforming outdoor sports area that was under-utilised. The existing multi-sports courts (netball, tennis, basketball) were over thirty year old and had never been afforded the protection of an acrylic resin-based surfacing system. The old weathered asphalt had become very bony and coarse over time, which could result in injury to anyone unfortunate enough to fall on the hardcourts. The northern perimeter of the multi-sports court enclosure had large structural cracking, and this same perimeter edge did not have any concrete plinth edging and nor did it have any surface or sub-surface drainage in place, a likely a contributor to the poor condition of the surface. The substrate and outdated equipment required a refresh to bring the area up to current health and safety requirements.

## PROJECT REQUIREMENT

Therein lay the motivation and justification for a redevelopment of these under-utilised multi-sports courts. The redevelopment was 'championed' by the school's PE, and Health Coordinator Mr. Con Lekakis, who had a vision for the rejuvenation of the multi-sports courts to include a bold and colourful acrylic surfacing system that would be both slip-resistant and impact absorbing underfoot. However, in striving for a premium 'cushioned' acrylic resin-based surface, this would firstly require a structurally sound substrate on which to apply the surfacing system.

With the redevelopment project driven by the school's PE and Health Coordinator, the school engaged the services of an engineer to inspect the overall condition of the substrate. The resulting remedial works included the

removal and replacement of sections of the asphalt along both the northern and eastern perimeters and the installation of concrete plinth edging and drainage to reinforce the substrate's long-term stability. In addition, the total surface area of the substrate underwent a re-sheet of hot mix asphalt overlay, and the old tennis nets and basketball towers were removed to be replaced with new modern equipment.

## AWARDED PROJECT

The school engaged a civil contractor to undertake the asphalt rectifications and, under a separate contract, engaged **Mapecoat TNS** approved applicator company, **King of Courts Pty Ltd**, to install the acrylic surfacing system over the refurbished asphalt substrate.

The **Mapecoat TNS Comfort** surfacing system was selected to deliver on the school's objective for a long-lasting, slip-resistant, and impact-absorbing 'cushioned' surface. This system features the **Mapecomfort R 4mm** rubber shock pad, which is fully bonded to the substrate using Mapei's **Ultrabond Turf 2 Stars Pro** adhesive. Once the 4mm thick rubber shock pad fully adhered to the asphalt pavement, the upper layer of the rubber mats was then primed with **Mapecoat I 600 W** two-component water-based epoxy primer in readiness for applying two flexible filling coats of **Mapecoat TNS Grey Base Coat**. The surfacing system was then completed with **Mapecoat TNS Finish-1**, which has superior elasticity to cope with the thermal movement of the rubber shock pad underlay and is also high in content of resin binder and selected fillers that are required to provide long-lasting slip resistance and excellent depth of colour.



In keeping with the objective for this to be a bold and colourful space for students to enjoy, the school selected the striking colour combination from the **Mapecoat TNS colour range** of Sydney Blue and Swiss Red to be complemented by Dark Grey basketball keys. **Mapecoat TNS Line** paint in White was used to line mark three tennis courts and two basketball courts. The basketball courts were also multi line-marked in Swiss Red for accommodating the sport of netball.



## SUCCESSFUL OUTCOME AND BENEFITS

The 'cushioned' mat lay **Mapecoat TNS Comfort** system provides the school with a surfacing system that has an indefinite and highly economical life cycle, in which the courts will retain the impact absorption properties for years to come and can simply be re-coated with a couple of coats of **Mapecoat TNS Finish** every 6 – 8 years at a fraction of the initial installation cost.

The successful transformation means that Braybrook College now has a very attractive and well-utilised multi-sports court area adding to and complementing the school's overall facilities. With 'cushioned' comfort and excellent slip resistance, the installation of the **Mapecoat TNS Comfort system** demonstrates the ultimate in product solution capabilities in delivering a state of the art multi-layered sports surfacing system that will be well utilised for years to come by the school and in particular for their Physical Education program.



## APPLICATION SEQUENCE

Below is the application sequence of the **MAPECOAT TNS COMFORT** multi-layered granular rubber matting and acrylic resin-based multi-sports surfacing system:

### Surface Preparation Sequence:

- Clean and prep new re-sheeted asphalt overlay post 28 days using a combination of mechanical (diamond) grinding and high-pressure water cleaning.

### Surfacing System Sequence:

- Lay **Mapecomfort R 4mm** out on asphalt surface overnight to allow the rubber sheet roll to relax and de-tension prior to permanently gluing to the asphalt substrate
- Fully bond **Mapecomfort R 4mm** rubber sheet roll to asphalt substrate using **Ultrabond Turf 2 Stars Pro** adhesive
- Fill and repair any gaps identified along joins of rubber granular matting using **Ultrabond Turf 2 Stars Pro** adhesive
- Seal and chamfer the 4mm (height) perimeter edges of the granular rubber matting using **Ultrabond Turf 2 Stars Pro** adhesive
- Apply 1 coat x **Mapecoat I 600 W** primer to the upper side of **Mapecomfort R 4mm** rubber mat
- Apply 2 coats of **Mapecoat TNS Grey Base Coat**
- Apply 2 coats of **Mapecoat TNS Finish 1 - TNS 24 Swiss Red** to the inner court playing areas of 3 x tennis courts.
- Apply 2 coats x **Mapecoat TNS Finish 1 - TNS 35 Sydney Blue** to outer court surrounds of the tennis courts
- Apply 2 coats x **Mapecoat TNS Finish 1 - TNS 35 Sydney Blue** to both the inner and outer court areas of the 2 x basketball/netball multi sports area
- Apply 2 coats x **Mapecoat TNS Finish 1 - TNS 2 Dark Grey** to the 4 x basketball keys
- Apply **Mapecoat TNS White Lines** for 3 x tennis and 2 x basketball courts
- Apply **Mapecoat TNS Swiss Red** for the 2 x netball courts



Before **Mapecoat TNS Comfort System**



After **Mapecoat TNS Comfort System**