MHPS Oval Renovation Project

Community Update Document – Dec 2016

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Revision History

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Figure 1  MHPS oval renovation layout and key to work elements

Key to Work Elements

1) Retaining wall north
2) New pedestrian paths and access
3) New retained vehicle ramp
4) Retaining wall east
5) New artificial turf hockey/cricket net, and long jump pit
6) Earth fill to existing oval level
7) South 6m high ball fence and landscaping
8) East 6m high ball fence with gate
9) Improve soil, re-level and re-turf
1. Background

Following re-turfing in approximately 2013, post-construction of the new pre-primary buildings, the MHPS oval has significantly deteriorated in condition and is uneven, weed infested and with significant bare patches. This has been assessed as due to:

- Significantly growth in student numbers (increase from ~500 to >800 students), and associated student and parent traffic;
- Damage from more recent construction works (most recently demountable building additions);
- No change to the previous maintenance regime
- Poor subsoil quality

Top dressing and patching in 2015-16 has done little to improve the condition.

The school and the P&C has identified oval renovation as a priority for 2016-2017 to ensure it remains available as a sport, physical education and play space for the still increasing student population.

In September 2016 the P&C grounds committee, in conjunction with the school and school community prepared a scoping document (or “master plan”) to assist the P&C, the School and the Department of Education in planning and implementation of the renovations and ongoing maintenance.

2. Oval renovation goals

- Level and re-turf oval
- Increase level, useable turfed oval area by 20-25%
- Improve amenity and pedestrian links to oval
- Maintain all existing functionality
- Establish turf maintenance plan

3. Summary of works

3.1 Survey, design & approvals

The P&C has arranged for the oval to surveyed by GHD Pty Ltd to facilitate design works.

Approvals have been sought where required from the School Board, the Department of Education and City of Vincent for the proposed plans.

3.2 Overview and cost estimate

A budget and cost estimate have been prepared. Total costs for Stage 1 are expected to be in the range $120,000 - $140,000. Costs will be shared by the P&C, the Department of Education and the School. Given the large scale of the project, funding is not available for all elements and the works will be completed in stages.
3.3 **Program & Staging**

Staging and programme are still being determined and will depend on contractor availability, funding available (P&C, School and Department of Education) and degree of assistance (labour, in kind and donations) able to be provided from the school community.

Stage 1 works will include all works able to be completed prior to commencement of Term 1 2017.

Approved available P&C, Department and School funds will be sufficient for:

- New limestone retaining works to north and east to increase oval area;
- Levelling of oval, improved soil, functional reticulation and new turf;
- New vehicle ramp and pedestrian access from Woodstock St;
- Reinstated long jump pit and marathon running course (essential for PE curriculum);
- New concrete and artificial turf paths.

To allow for turf establishment and minimise disruption to the school community, all earthworks and retaining must be completed between 12\textsuperscript{th} December 2016 and 9\textsuperscript{th} January 2017.

Currently Stage 2 includes:

- New ball fences to south and west.
- New cricket net

Completion of all Stage 2 works is contingent on additional funding and therefore cannot be programmed at this time.
4. Oval Renovation - Scopes of Work

4.1 Retaining wall north & walkway (Stage 1)

Figure 2  Retaining wall north and walkway

**Description of works**

The ~50m northern edge of oval will be formalised with re-constituted limestone retaining to the existing embankment. Retaining is to extend from the existing wall outside pre-primary and wrap around the demountable and existing concrete/bitumen path. Two tiers of retaining is required for most of the length.

A graded elevated path is to be provided on the “middle tier”, approximately 0.6m proud of the oval.

The path will meet existing oval levels to the north (near tree) and south (near pre-primary building). The path & ramps will be graded between 5-10% (between 1 in 10 to 1 in 20). Drainage structures (soak well and/or Atlantis drain cell) will be installed to infiltrate runoff from the demountable gutters (currently discharging to ground and causing erosion)

The path surface is to be finished with permeable artificial turf.

The short ramp running north-south behind pre-primary will require an extension of the existing retaining wall and reconfiguration of the existing fence. Communications cables and other services in the area and be avoided.

**Functional design requirements**

- Minimum path/tier width 2.4m
- Retaining elements to be generally less than 600mm high
- Maximum two tiers of retaining
- Maximum cross slope on path 2.5%
- Retaining elements higher than 500mm and less than 1m will be kerbed
- Retaining must maximise the oval area
- Access to equipment shed to be maintained
- Drainage for existing demountable classrooms must be provided for
4.2 Pedestrian paths and access (Stage 1)

Figure 3  Pedestrian access path

*Description of works*

Significant oval foot traffic is due to traversing from the east gate. The retaining walls will help minimise this traffic, however a well-defined pedestrian route will assist further.

New paths to link with an existing path behind the playground as well the new north-west walkway will assist.

Approximately 55m of 1.4m - 2m wide path (concrete or poured limestone) is proposed. Slight relocation of existing tables and benches will be required and removal of two tree stumps. Opportunities for additional planting/garden beds exist to the east of the path.

*Functional design requirements*

- Minimum path width 1.4m
- Paths to be brushed concrete or poured limestone
4.3 Woodstock St vehicle access ramp (Stage 1)

Figure 4  Vehicle access ramp

Description of works
A new vehicle access ramp is required at the eastern gates. Ramp is to be at maximum safe grade of 1 in 6 (or match existing). The ramp and a 2m runoff apron at the base will be completed using reinforced turf such as Novaplas “Grassrings” or similar, with a suitable crushed rock subgrade.

Functional design requirements
- Must be at maximum safe grade to minimise intrusion onto oval (1 in 6)
- Engineered for commercial vehicle loads
- 2m runoff apron
- Minimum 5m wide (existing gate width)
4.4 Retaining wall east (Stage 1)

Description of works
Limestone reinforcing to match existing. Maximum 0.6m high to retain existing trees while maximising oval playing area while protecting tree roots. To provide seating and formal boundary for oval. Additional irrigation may be required if turf is to be re-established under trees.

Functional design requirements
- Must maximise oval area without compromising existing trees
- Maximum 0.5m height
- Terminates at long jump pit
4.5 Enclosed artificial turf hockey/cricket net (Stage 2)

Figure 6 Hockey/cricket net (yellow) and long jump pit (blue)

**Description of works**
Following re-levelling to match the existing oval levels, replace existing cage and gated storage area with wider cage and artificial turf base suitable for cricket & hockey. Under prune the existing tree to improve access. Extend the ball fence across front at same height as existing to meet tree.

**Functional design requirements**
- Artificial turf to be durable suitable for cricket & hockey
- Single cage to be approximately double width of existing
- Turf to be laid on concrete or stabilised pavement with suitable drainage
- Rubber protection on wire to protect wire from balls
- Long jump pit to be minimum 4m wide x 8m long, could be oriented east west or north south
4.6 Re-level and minor fill to existing oval level (Stage 1)

*Figure 7  Earth fill to existing oval level (yellow)*

**Description of works**
Re-level oval and fill south east corner to match existing oval level (max ~0.45m depth required).

**Functional design requirements**
- Fill to be clean (uncontaminated), free draining sands meeting engineer’s specification
- Filled levels must match existing oval.

4.7 South and east 6m high ball fence with gate (Stage 2)

*Figure 8  Extend ball fence to match existing*

**Description of works**
New 6m high ball fence (higher than existing) to be installed along southern boundary (replace existing), and western boundary outside pre-primary building. Install double gates, 2.1m high in corner to allow light vehicle access to south of pre-primary as well as pedestrian gate to allow access from pre-primary classrooms.

Extended fence will allow for multiple positions of the football/soccer goals and greater safe use of the oval space.

**Functional design requirements**
- Fence to have gap at ground level <50mm to prevent ball penetration

4.8 Re-turf and re-level oval (Stage 1)

**Description of works**
Weed spraying/digging and removal of existing turf. Soil to be tested and improved such that the oval subgrade meets the compaction, drainage, soil structure and nutrient requirements (as recommended specified by a turf specialist).

Irrigation system to be tested and adjusted/modified if required to maximise coverage and minimise overspray which affects neighbours. Oval to be re-levelled as per design levels with a maximum grade of 1% and no grade changes within the playing surface.

Expanded oval to be re-turfed using roll-on “village green kikuyu” suitable for high traffic areas, as preferred by the Department of Education for school ovals.

**Functional design requirements**

- Levels to be optimised to minimise height difference between existing school buildings
- Depression in southern corner to be filled
- Maximum slope to be 1%
- Oval playing area to increase from ~2500m² to ~3150m²

5. **Consultation Record**

Plans have been reviewed, discussed and endorsed by:

- **MHPS School staff including:**
  - Matt Jarman, MHPS Principal, October 2016 on
  - Anita Putt, MHPS Physical Education teacher
- **MHPS P&C Members**
  - Scott Yelland, P&C President
  - Tracey Denham, P&C Vice President
  - Mary Gwynne, P&C Secretary
  - Rachelle Rose, P&C Treasurer
  - Tim Swart, Bruce Webber, Jason Mascurine, Jodie Ferdinando, P&C Grounds Committee
- **MHPS School board**
  - Michael Jenkin, Chairman of the Board
- **City of Vincent**
  - John Carey, Mayor

Plans have also been circulated and discussed with the Department of Education via Andrew Hastie (Principal Consultant Environmental Services) and amendment made in response to comments.
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Note: * indicates signatures on original issue of drawing or last revision of drawing

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Level Book
Field Book
Surveyor
Approved Date
1:250 @ A1
KSJ 27.10.16
CM
KH
AHD
MGA 94 Zone 50

Rev 3

11 Dec 2016
Designer: C Gwynne/M. Kotsoglo

Mt Hawthorn PS Oval Redevelopment
Layout Plan - Stage 1 works

New concrete steps, 2m x 1.5m, 1 in 20 grade ramp.

Regrade and install ~110m² of new artificial turf on compacted limestone subbase south of demountables to repair existing surface.

Install drainage cell (Atlantis or similar) beneath path sufficient to drain demountable classrooms and connect all downpipes.

Break out and remove existing concrete.

New reinforced turf ramp, average grade 1 in 6. Ramp length 7m with 2.4m flat reinforced runoff and side batters to match oval level.

Break out and re-lay up to new steps, repair/replace stormwater pit underneath concrete at corner.

Break out 15m² existing concrete, and re-lay up to new steps, repair/replace stormwater pit underneath concrete at corner.

3250m² of new unreinforced village green kikuyu turf, laid after:
1) Removal of existing turf
2) Grading and filling of rest to match finished levels marked. Oval to be initially be regraded using cut to fill. Existing soil to be amended using "soil lover for schools" soil amendment, evenly mixed through top 800mm of soil
3) Any fill deficit to be made up using an even depth (up to ~100mm) quality loam as growing medium for new turf
4) Checking, adjusting and reconfiguring of reticulation system as required
5) All retaining works and ramp regrading complete

30m² artificial turf on compacted limestone subbase on 1 in 10 grade ramp.

New retained 32m² long jump pit with minimum 300mm deep clean white sand pit at 40.9mAHD

Remove and salvage existing (recent) high ball fence.

Demolish existing low cricket net fencing and sand pit.

85m² artificial turf with compacted limestone subbase on pathway tier.

New 54m² reinforced turf ramp, average grade 1 in 6. Ramp length 7m with 2.4m flat reinforced runoff and side batters to match oval level.

~72m new concrete path, min 1.5m wide, broom brushed to match existing footpath on Woodstock St.

85m² artificial turf with compacted limestone subbase on pathway tier.

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