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**DATE**  
06 February 2020  
**REFERENCE**  
J19074

**SIZE**  
A3  
**SCALE**  
1:750



**FIGURE 1**  
**HEIGHTS COLLEGE PROPOSED FENCE ALIGNMENT**  
Heights College, Kawana  
Flood Advice



## TECHNICAL MEMORANDUM

To: Heights College  
From: Laurence Allan  
McMurtrie Consulting Engineers  
Date: 11/02/2020  
Project No: 048-19-20/Lt02  
Re: Heights College Fence Construction – Stage 1A

### Introduction

McMurtrie Consulting Engineers (MCE) have been engaged by Heights College to provide flood advice in relation to the construction of Hercules Panel fencing (refer to Attachment 2) at Heights College located at 276 Carlton Street, Kawana, described as Lot 2 RP613996.

This Technical Memorandum (TM) relates to the proposed Stage 1A fencing (refer to Figure 1) and follows on from MCE's previous TM dated 23 January 2020 (ref 048-19-20/Lt01) as such it this TM should be read in conjunction with the previous TM.

Rockhampton Regional Council (Council) have raised concerns over the proposed Hercules Panel fence within FPA2 and noted that properties downstream of the Heights College currently experience above-floor flooding during the 1% AEP storm event.

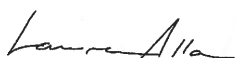
Council's Flood Planning Area (FPA) is split into two categories, FPA1 (high flood hazard zone) and FPA2 (low flood hazard zone). The FPA mapping shown on Figure 1 was extracted from Council's Region Planning Scheme Interactive Mapping (RockePlan) system and digitised for use on this site. As shown on Figure 1, some parts of the proposed Stage 1A fence are located within both FPA1 and FPA2.

The proposed Stage 1A fence alignment generally follows existing buildings and ancillary structures associated with the adjacent sports field within the Heights College site. However, the proposed Stage 1A fence is generally aligned parallel to the direction of flow through the site within Splitter Creek, as such the potential for debris build up is in minimal.

Due to the existing fence around the site, the alignment of the proposed Stage 1A fence and the existing structures within Heights College in the vicinity of the proposed fence, the proposed Stage 1A fence will not impact the available floodplain storage within the Heights College. Any potential hydraulic impacts associated with the proposed Stage 1A fence are expected to be negligible and contained within the Heights College site and as such will not result in a material increase in flood level or flood hazard on upstream, downstream or adjacent properties.

Therefore, the proposed Stage 1A fence works are in accordance to the relevant criteria of Council's Flood Overlay Code.

Yours sincerely,



RPEQ 17118  
2020.02.11 12:00:16 +10'00'

**Laurence Allan**  
Principal Civil Engineer

ATTACHMENT 1 - Figures  
Figure 1 – Heights College Proposed Fence  
ATTACHMENT 2 - Hercules Fence Specifications (Proposed Fence)

### **ROCKHAMPTON REGIONAL COUNCIL**

#### **APPROVED PLANS**

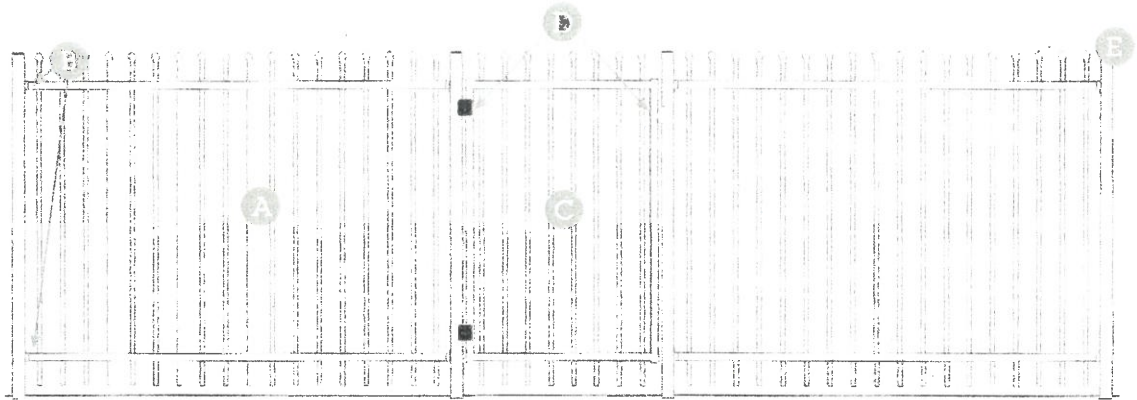
These plans are approved subject to the current conditions of approval associated with

**Development Permit No.: D/101-2019**

**Dated: 17 March 2020**

## Materials Checklist

- ☐ A Panels
- ☐ B Brackets
- ☐ C Gate
- ☐ D Gate Fittings
- ☐ E Posts



## 1 Site Plan & Ordering

- Decide on fence position and measurements of panels & posts by creating a mud map of your site.
- Following the above Materials Checklist, calculate how many of each component you require
- Contact any one of our stores to complete your order. Most products are available in stock

## 2 String Line & Post Holes

- Set Stringline along the desired line of the fence, close to the ground - this is the bottom line of your fence panels
- Measure out all holes, starting with the gate post holes
- Dig post holes along string line 600mm deep x 250mm in diameter
- Posts should sit approx. 500mm into the post holes

### 3 Install Posts

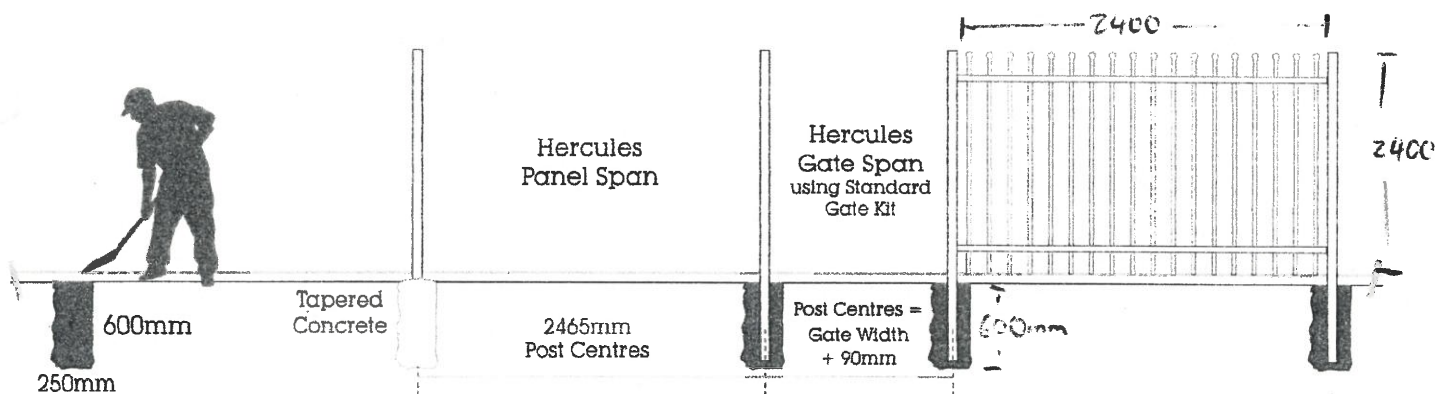
- Ensure post centres are accurate (see below diagram for details)
- Ensure posts are flush and level along stringline then pour concrete around posts up to 50mm above ground level and taper away from the post
- If you are using flanged posts, fix with appropriate concrete or timber fixings

#### 4 Install Panels

- Attach panels to posts using Panel Brackets & Self Tapping Tek Screws
- 2 Rail panel styles require 4 brackets
- Ensure the bottom of panels are no more than 100mm off the ground at any point
- Recommended height off the ground is 50-80mm

## 5 Install Gate(s)

- Attach hinge & latch components of Gate Kit to **gate** as per instructions
- Custom Hercules gates, double swing gates and sliding gates all have differing methods of installation. Please discuss this with one of our experienced staff at any of our stores
- Tap on Post caps with soft end mallet



**ROCKHAMPTON REGIONAL COUNCIL**

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## Proposed Elevations Plan #2

08-10-2019