

|                 |                                                        |                    |                                                                                            |
|-----------------|--------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------------|
| <b>To:</b>      | Victorian Planning Authority                           | <b>Attention:</b>  | [REDACTED]                                                                                 |
| <b>Project:</b> | Officer South Employment Precinct Structure Plan (PSP) | <b>Project No:</b> | 305001387                                                                                  |
| <b>From:</b>    | [REDACTED]                                             | <b>Date:</b>       | 21 June 24<br>5 July 2024 Revision 1<br>17 July 2024 Revision 2<br>26 July 2024 Revision 3 |

RE: Revised Cross-section and Costings to Remove the North Shared Use Path on BR-01 and BR-02 – 17 July 2024 Revision 2

## INTRODUCTION

Reference is made to the Officer South SAC and the traffic and ICP conclaves where the VPA agreed to conclave recommendations in relation to BR-01 and BR-02 and amendments to the ICP to provide a shared path on one side of the road only for these bridges. [REDACTED]

Stantec has modified the VPA benchmark bridge cross-sections for BR-01 and BR-02 as requested, details are outlined below:

The modifications to the bridge sections are tabulated below, with the main changes being the following:

- Adoption of a 1.2m wide shoulder adjacent the bridge barrier in accordance with AS5100:2-2017, CL 13.5 for high volume roads with > 5000 vehicles per day.
- Adoption of a 0.6m wide shoulder adjacent the kerbed pathway in accordance with AS5100:2-2017, CL 13.4.

| BR-01                                |                                                                                                                      |                                                                                                                                                                                                                                                                                           |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item                                 | Benchmark cross section                                                                                              | Modified cross section                                                                                                                                                                                                                                                                    |
| Total Clear width (between barriers) | 15.0m                                                                                                                | 12.3m                                                                                                                                                                                                                                                                                     |
| Carriageway Width                    | 8.0 m                                                                                                                | 8.8m                                                                                                                                                                                                                                                                                      |
| Configuration                        | 2 x 3.5m traffic lanes, with 0.5m shoulders<br><br>3.5m shared paths including 0.5m shoulder/offset near the barrier | 2 x 3.5m traffic lanes with Introduction of 1.2m shoulder on the left near the barrier and adoption of 0.6m shoulder on the right adjacent the kerb<br><br>Elimination of the Left shared path. Single Shared path with 3.5m width including single 0.5m shoulder/offset near the barrier |
| Number of Girders                    | 9                                                                                                                    | 7 (~1.9m width)                                                                                                                                                                                                                                                                           |

| BR-02                                   |                                                                                                                                              |                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item                                    | Benchmark cross section                                                                                                                      | Modified cross section                                                                                                                                                                                                                                                                                         |
| Total Clear width<br>(between barriers) | 16.5m                                                                                                                                        | 13.8m                                                                                                                                                                                                                                                                                                          |
| Carriageway Width                       | 9.5m                                                                                                                                         | 10.3m                                                                                                                                                                                                                                                                                                          |
| Configuration                           | 2 x 3.5m traffic lanes with 0.5m shoulders and 1.5 m central median<br><br>3.5m shared paths including 0.5m shoulder/offset near the barrier | 2 x 3.5m traffic lanes, central 1.5m median and Introduction of 1.2m shoulder on the left near the barrier and adoption of 0.6m shoulder on the right adjacent the kerb<br><br>Elimination of the Left shared path. Single Shared path with 3.5m width including single 0.5m shoulder/offset near the barrier. |
| Number of Girders                       | 10                                                                                                                                           | 8 (~1.725 wide)*                                                                                                                                                                                                                                                                                               |

\*There may be an opportunity to look at refining the number of girders required in the detailed design phase.

An updated drawings is provided as Attachment A.

Stantec and HMC have updated the final costings report to reflect the above bridge cross-section modifications as summarised below:

|                   | NOVEMBER 2023 REPORT<br>(V2.02) |               | JULY 2024 REPORT (V4.01) |               | VARIANCE (\$) |              |
|-------------------|---------------------------------|---------------|--------------------------|---------------|---------------|--------------|
|                   | P50                             | P90           | P50                      | P90           | P50           | P90          |
| Road Bridge BR-01 | \$ 7,623,061                    | \$ 8,605,535  | \$ 6,836,197             | \$ 7,655,237  | \$ 786,864    | \$ 950,298   |
| Road Bridge BR-02 | \$ 10,406,993                   | \$ 11,740,372 | \$ 9,400,198             | \$ 10,525,428 | \$ 1,006,795  | \$ 1,214,944 |
| Bridge Totals     | \$ 18,030,054                   | \$ 20,345,907 | \$ 16,236,395            | \$ 18,180,665 | \$ 1,793,659  | \$ 2,165,242 |

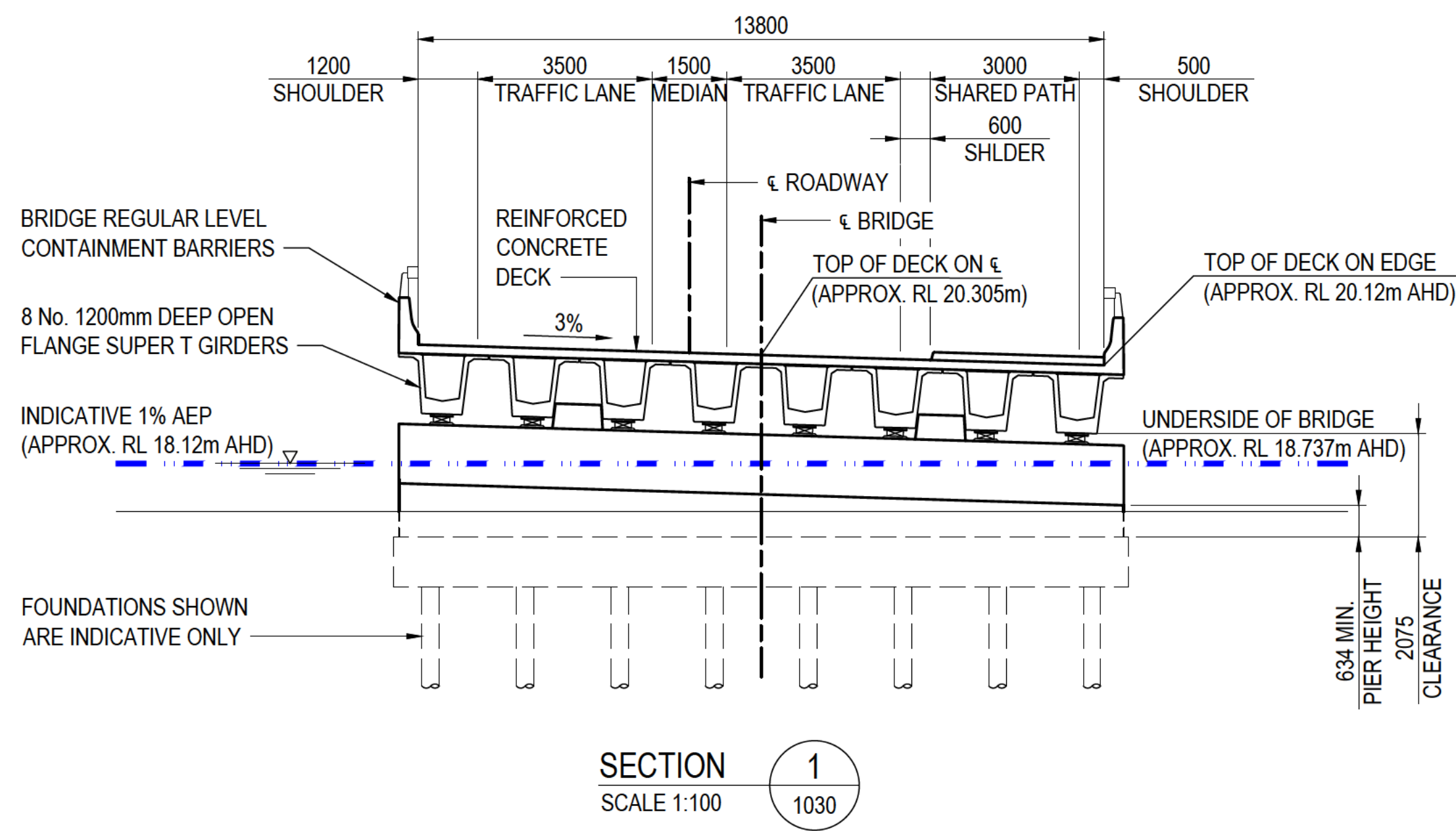
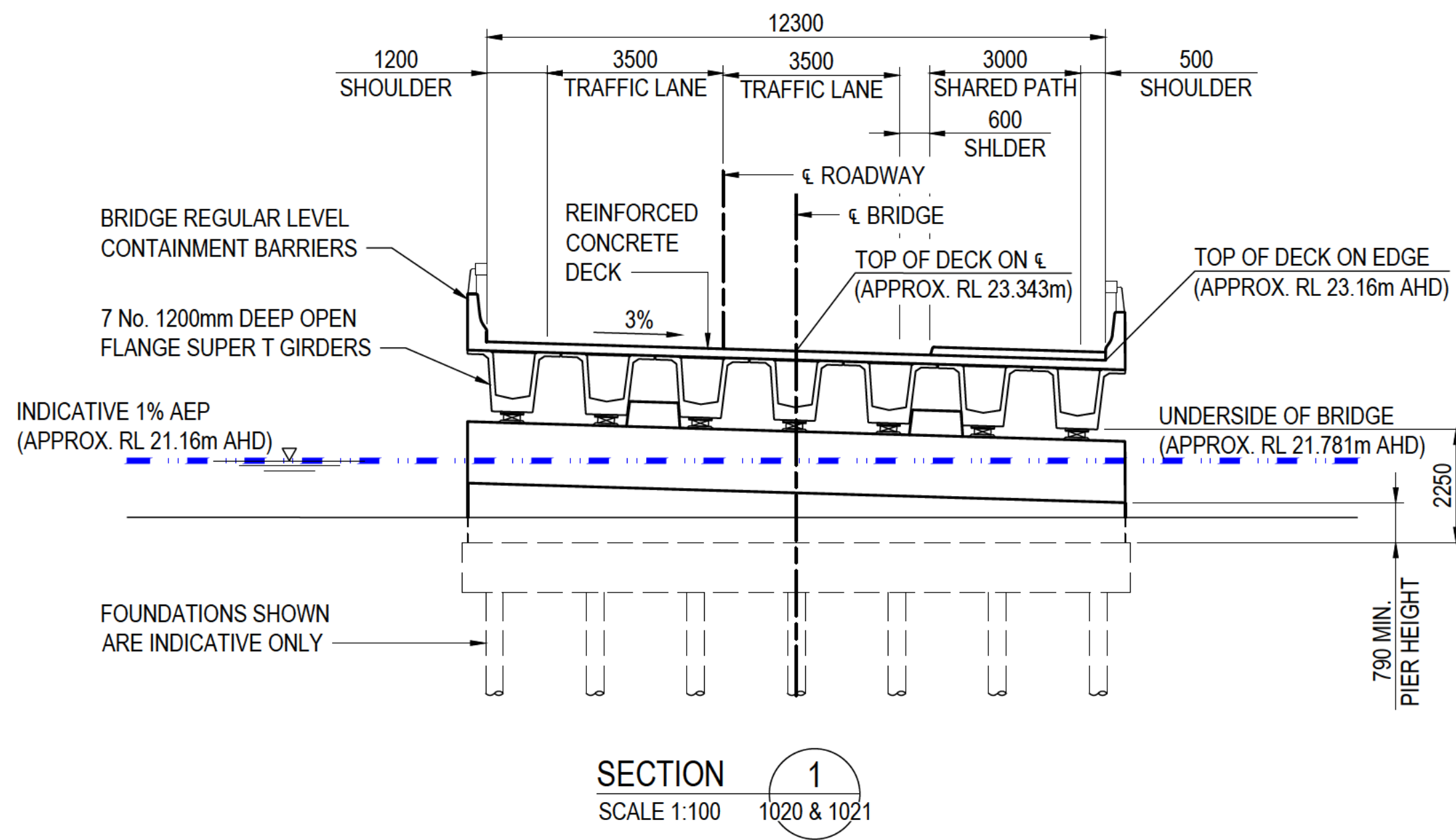
An updated Cost Estimate Report is provided as Attachment B.

**Disclaimer:** The conclusions in the report are Stantec's professional opinion, as of the time of the report, and concerning the scope described in the report. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. The report relates solely to the specific project for which Stantec was retained and the stated purpose for which the report was prepared. The report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorised use or reliance is at the recipient's own risk.

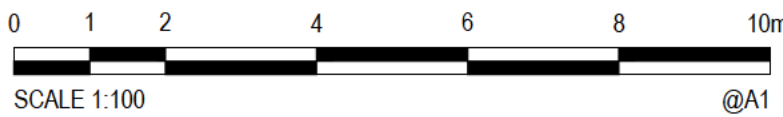
Stantec has assumed all information received from the client and third parties in the preparation of the report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

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XREFs: 304200666-SB-STRUCTURES-PLAN; 304200666-XC-EX-CONT; 304200666-XY-CADA; 304200666-XY-BASE; OSPSP-01-RA-CTRL-1000; 304200666-SB-STRUCTURES-SECTIONS; 304200666-XC-DESN-INTRM; 304200666-SE-AERIAL IMAGE; 304200666-XC-DESN-ULT; 304200666-XV-SERV; Existing Waterways; Approximate %AEP Events; 304200666-XC-INT-BATT  
CAD File: C:\pwork\rap\_projects\10187389\304200666-SK-0001.dwg  
DATE PLOTTED: 21 June 2024 1:39 PM BY: MATHIE, STUART



- NOTES
- DRAINAGE HAS NOT BEEN CONSIDERED DURING THE CONCEPT DESIGN. THIS WILL BE REQUIRED DURING THE DETAILED DESIGN PROCESS.



WARNING  
BEWARE OF UNDERGROUND SERVICES  
THE LOCATIONS OF UNDERGROUND SERVICES ARE  
APPROXIMATE ONLY AND THEIR EXACT POSITION  
SHOULD BE PROVEN ON SITE. NO GUARANTEES IS  
GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

| Rev | Date       | Description                  | Des | Vent | Appd |
|-----|------------|------------------------------|-----|------|------|
| 0   | 21-06-2024 | REVISED DRAFT CONCEPT DESIGN | AC  | MP   | MP   |



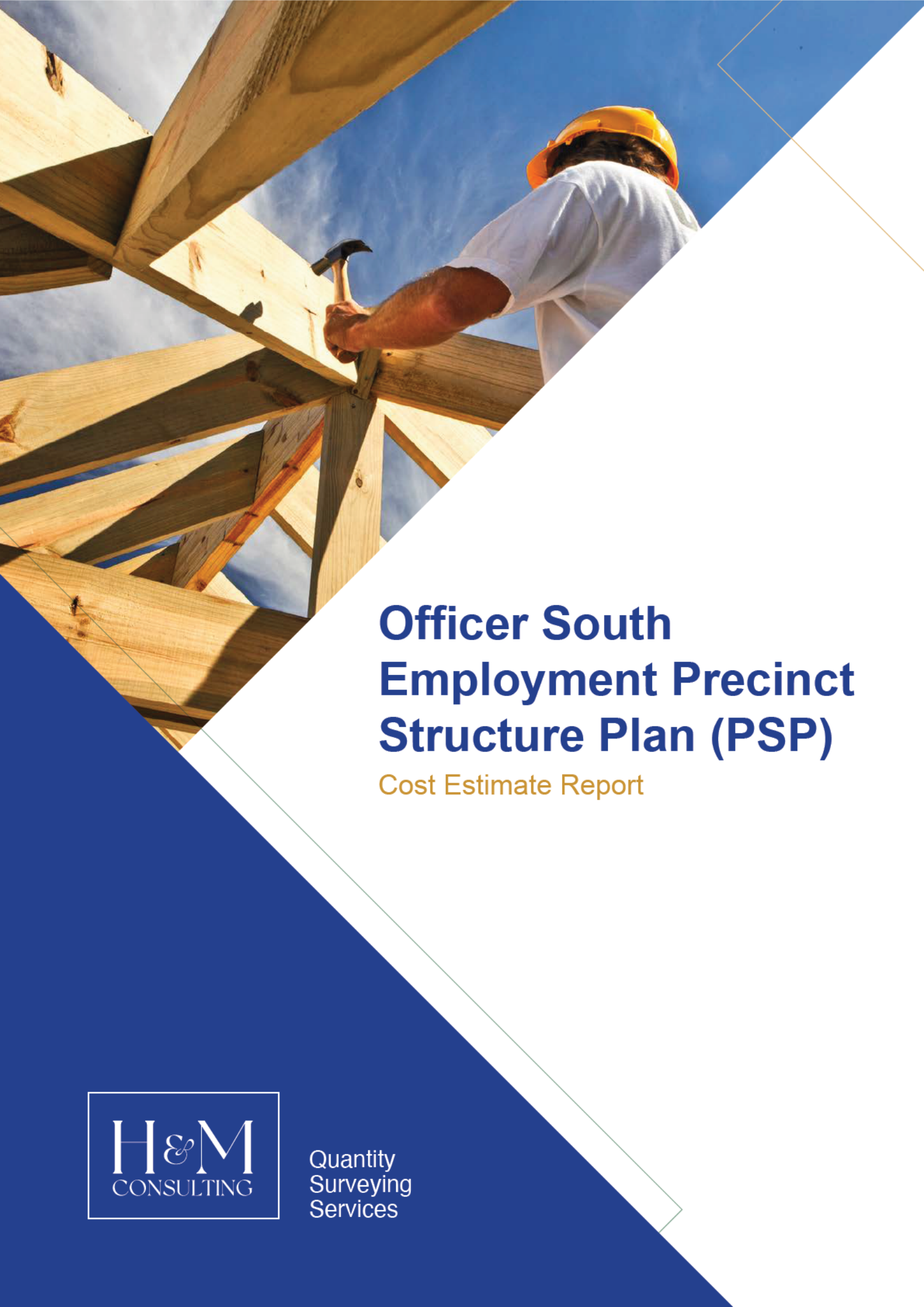
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|                       |                    |                                                                                            |
|-----------------------|--------------------|--------------------------------------------------------------------------------------------|
| Drawn<br>S.MATHIE     | Date<br>21-06-2024 | Client<br>VICTORIAN PLANNING AUTHORITY                                                     |
| Checked               | Date               | Project<br>OFFICER SOUTH EMPLOYMENT PRECINCT PSP                                           |
| Designed<br>A.CHAUDRY | Date<br>21-06-2024 | OFFICER SOUTH ROAD<br>OFFICER SOUTH 3809 VIC                                               |
| Verified              | Date               | Title<br>TRANSPORT CONCEPT DESIGN<br>ROAD BRIDGE BR-01 & BR-02<br>PROPOSED BRIDGE SECTIONS |
| Approved              |                    |                                                                                            |

|                                       |                                          |                   |               |
|---------------------------------------|------------------------------------------|-------------------|---------------|
| Status<br><b>FOR CONCEPT APPROVAL</b> | NOT TO BE USED FOR CONSTRUCTION PURPOSES |                   |               |
| SHEET No.<br>56 of 62                 | DATUM<br>MGA/AHD                         | Scale<br>AS SHOWN | Size<br>A1    |
| Drawing Number<br>304200666-SK-0001   |                                          |                   | Revision<br>0 |





# **Officer South Employment Precinct Structure Plan (PSP)**

**Cost Estimate Report**

**H&M**  
CONSULTING

Quantity  
Surveying  
Services



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| Date       | Description                                         | Prepared by | Reviewed by            | Approval    | Revision |
|------------|-----------------------------------------------------|-------------|------------------------|-------------|----------|
| 8/09/2023  | <i>Concept Drawings Report &amp; Estimate</i>       | T.Miller    | D.Antcliff<br>M.Harvey | D. Antcliff | 1.01     |
| 26/09/2023 | <i>Concept Drawings Report &amp; Estimate</i>       | T.Miller    | D.Antcliff<br>M.Harvey | D. Antcliff | 1.02     |
| 27/10/2023 | <i>Final Concept Drawings Report &amp; Estimate</i> | T.Miller    | D.Antcliff<br>M.Harvey | D. Antcliff | 2.01     |
| 31/10/2023 | <i>Final Concept Drawings Report &amp; Estimate</i> | T.Miller    | D.Antcliff<br>M.Harvey | D. Antcliff | 2.02     |
| 17/06/2024 | <i>Bridge Cost Reduction Variation</i>              | T.Miller    | D.Antcliff<br>M.Harvey | D. Antcliff | 3.01     |
| 09/07/2024 | <i>Bridge Cost Reduction Variation</i>              | T.Miller    | D.Antcliff<br>M.Harvey | D. Antcliff | 4.01     |

Harvey & Miller Consulting Pty Ltd  
 PO BOX 5300, Q Supercentre, QLD, 4218  
[www.hmconsult.com.au](http://www.hmconsult.com.au)  
**Contact:** TJ Miller (Director)  
**Mobile:** 0434 630 501  
**ABN:** 45 659 611 793  
**ACN:** 659 611 793

The following stipulations have been made in the preparation of HMC's basis of cost estimate report:

This report is for the exclusive use of the addressee and for no other purpose. No responsibility is extended to any third party who may use or rely on the whole or any of part of the content of this report

HMC's estimate is to be used as a cost guide only and is to be read in conjunction with all information and documentation relevant to this individual project. HMC's estimate is based on the documentation provided in [table 1](#).

All construction works carried out are required to comply with the relevant codes and standards applicable to the project.

HMC's estimated costs are based on the information available at the time of estimating; any future changes to this estimate should take into consideration all new and developed information and documentation.

HMC reserves the right to amend and revise this cost estimate at all times, particularly in the event of new information being made available.

## 1. Executive Summary

Harvey & Miller Consulting (HMC) are privileged to be able to provide the following report and associated cost estimates to inform the construction costs for the Precinct Structure Plan (PSP) in Officer South on behalf of Stantec Australia (Stantec). As part of HMC's engagement, multiple detailed cost estimates, construction methodology and associated ancillary documentation were requested at the Draft Concept Design stage, as well as the Final Concept Design stage to inform the most appropriate cost methodology for the project.

### HMC Estimate Summary

| Item                  | Description                 | P50 Amount (\$)           | P90 Amount (\$)           |
|-----------------------|-----------------------------|---------------------------|---------------------------|
| 1.0                   | Intersections               | \$122,560,562             | \$138,939,034             |
| 2.0                   | Road Segments               | \$10,692,655              | \$12,045,273              |
| 3.0                   | Culvert Crossings           | \$4,861,980               | \$5,602,510               |
| 4.0                   | Bridges                     | \$28,498,782 <sup>1</sup> | \$31,971,570 <sup>2</sup> |
| 5.0                   | Pedestrian Operated Signals | \$300,566                 | \$338,216                 |
| Subtotal              |                             | \$166,914,546             | \$188,896,603             |
| GST (10%)             |                             | EXCL.                     | EXCL.                     |
| TOTAL WORKS EXCL. GST |                             | \$166,914,546             | \$188,896,603             |

1. The costings provided consider only the western half of the road bridge works (BR-01 – 37.5m length; BR-02 – 46.5m length), inclusive of a 60m road lead-in. These costs are expected to be approximately 50% of the total road bridge construction costs.
2. The costings provided consider only the western half of the road bridge works (BR-01 – 37.5m length; BR-02 – 46.5m length), inclusive of a 60m road lead-in. These costs are expected to be approximately 50% of the total road bridge construction costs.





## 2. Project Background

The proposed Officer South Employment Precinct currently being undertaken by the Victorian Planning Authority (VPA) is in the early stages of development, engaging Stantec to prepare preliminary designs and concept level opinion of probable costs. These transport projects are to be funded under an Infrastructure Contributions Plan (ICP) and will form part of a suite of PSP documentation that will be subject to review by stakeholders. The development is geographically enclosed by the Princes Freeway to the north, Lower Gum Scrub Creek and unoccupied land to the east, and Cardinia Creek along with Patterson Road to the west and south.



*Figure 1: Project Site Location (Officer South, Victoria)*

The footprint enveloped by the proposed Officer South PSP entails 1,069 hectares of greenfield site dedicated for significant commercial exposure, aiming to provide approximately 22,000 jobs and deliver 1,600 new homes.

## 2.1 Purpose of This Report

Harvey & Miller Consulting (HMC) has been engaged by Stantec on behalf of the Victorian Planning Authority to undertake the development of a Draft and Final Cost Estimate and associated Quantity Surveyors Basis of Cost Estimate report for the civil construction works to be undertaken within the Officer South Precinct Structure Plan, Officer South, VIC.

HMC understands the purpose of this engagement is to support Stantec in the development of design documentation to assist the VPA in determining the likely budgetary requirements for the project. The following report stipulates the methodology's applied, assumptions and exclusions incorporated and specific outcomes from the estimate development.

## 3. Methodology

### 3.1 Source of Information

HMC's estimate has been based solely on the information and documentation provided by Stantec, including:

#### Documentation Register

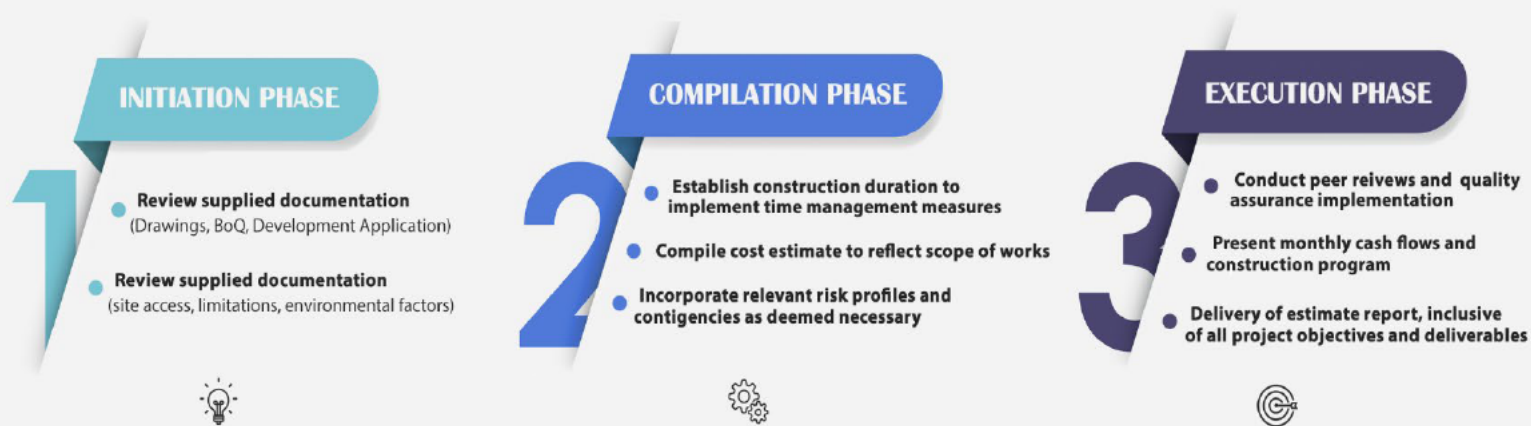
| Reference      | Title                                                                                            | Provider      |
|----------------|--------------------------------------------------------------------------------------------------|---------------|
| 304200666-0001 | <i>Final Concept Design Drawings – 21<sup>st</sup> of September 2023</i>                         | Stantec       |
| N/A            | <i>VPA Cost Estimate Templates – Appendix 3,4 &amp; 5.</i>                                       | Stantec       |
| 304200666      | <i>Concept Design and Opinion of Probable Costs Report (Draft) – 9<sup>th</sup> of June 2023</i> | Stantec       |
| V181544        | <i>Benchmark Infrastructure Report – 11<sup>th</sup> of April 2019</i>                           | Cardno        |
| N/A            | <i>Concept Designs Feedback Register – n.d.</i>                                                  | Stantec       |
| Email          | <i>OSPSP - Infrastructure Calculations (Earthworks Qty) – n.d.</i>                               | Stantec       |
| Email          | <i>Sodic Soils Management Costs – 21<sup>st</sup> of September 2023</i>                          | Stantec       |
| Email          | <i>VPA Feedback – 26<sup>th</sup> of October 2023</i>                                            | Stantec       |
| Email          | <i>Draft Bridge Reduction Sketches – 13<sup>th</sup> of June 2024</i>                            | Michael Plant |

The documentation listed above has been reviewed and accepted by HMC for the purposes of developing these cost estimates. Where deemed necessary, HMC has utilised publicly available data and references, such as Google Earth Maps, ArcGIS and NearMaps to further inform the understanding of project constraints.

## 3.2 Quantity Surveying Practices

Harvey & Miller Consulting, to conform with the Australian Institute of Quantity Surveying requirements, has utilised the [Project Cost Estimating Manual – 8<sup>th</sup> Edition](#) format to present the following basis of estimate report to the Victorian Planning Authority in anticipation of uniformity.

HMC's cost estimate was developed using the first principles estimating methodology, in combination with historical data attained by HMC on recently completed projects of a similar nature. Where a lack of information was available at the time of this cost estimate report, unit rates have been applied if deemed appropriate to the task, as communicated with Stantec Australia.



## 4. Project Scope

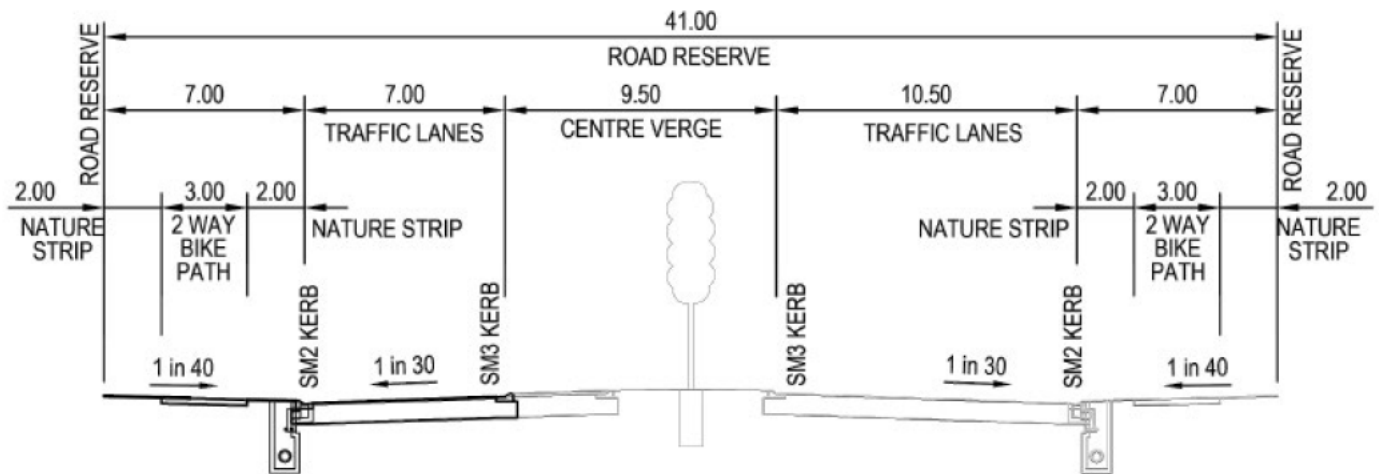
### 4.1 Scope of Works

The intended project outcome consists of the following scope of work elements, as provided by Stantec Australia:

- Project Identification & Constraints
- Site Work, Earthworks & Landscaping
- Roadworks, Access & Traffic
- Bridge Construction
- Pedestrian and Cycle Paths
- Stormwater Drainage
- Service relocations, adjustments and removal

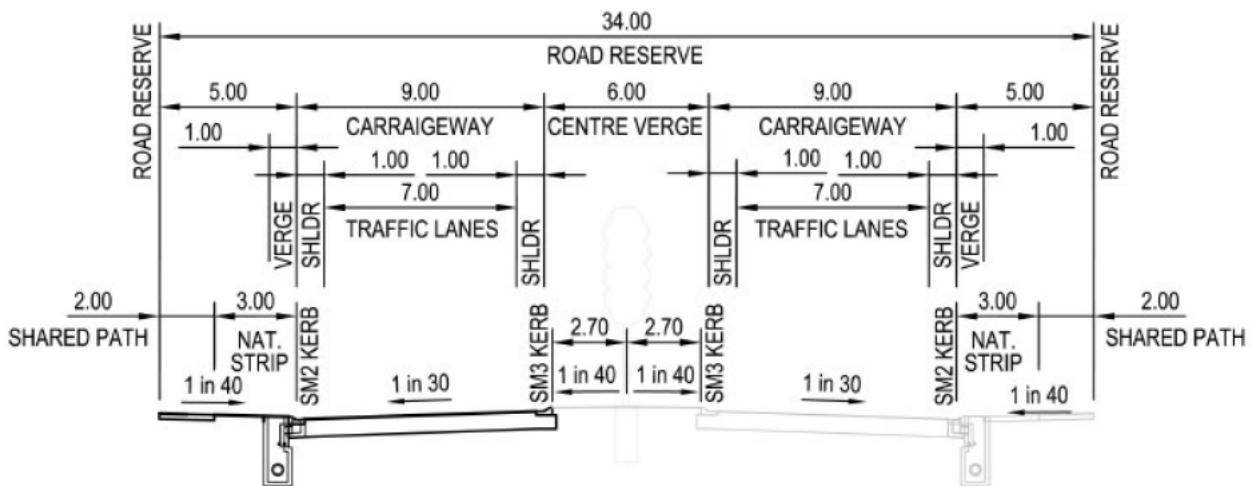


Figures 2 & 3 demonstrates the typical sections provided:



### TYPICAL PLAN AND SECTION - VPA BENCHMARK DESIGN ITEM 1 - PRIMARY ARTERIAL ROAD (INTERIM)

Figure 2 – Primary Arterial Cross Section (Stantec Australia)



### TYPICAL PLAN AND SECTION - VPA BENCHMARK DESIGN ITEM 2 - SECONDARY ARTERIAL ROAD (INTERIM)

Figure 3 – Secondary Arterial Cross Section (Stantec Australia)

## 5. Construction Cost Estimate

### 5.1 Inclusions

The following inclusions have been made in preparation for HMC's cost estimate:

- Impacts of COVID-19 and flow-on effects to the supply chain management on the construction works have been considered, and every attempt has been made to incorporate these impacts into the applied rates
- A contractor's profit margin has been applied to all rates within the estimate
- HMC has applied the contingency percentages within each cost estimate across the construction costs only, as per the VPA's advice.
- HMC has applied the percentages for project delivery allowances as per the VPA's advice within the estimate, as follows:
  - Council Fees – 3.25%
  - VicRoads Fees – 1.0%
  - Traffic Management – 5.0%
  - Environmental Management – 0.5%
  - Survey & Design – 5.0%
  - Supervision and Project Management – 9.0%
  - Site Establishment – 2.5%
  - Contingency
    - Bridges – 20.0%
    - All other cost estimates – 15.0%

### 5.2 Exclusions

The following exclusions have been made in preparation for HMC's detailed cost estimate:

#### General

- Land acquisition costs (as per the clients request)
- Property acquisition costs (as per the clients request)
- Contingency allowances across the delivery items within each cost estimate
- Installation of communication cables - electrical conduits and pits allowed for only
- Underground service upgrades, alterations and relocations allowed for only
- Works outside of regular business hours
- Rock excavation – D8 dozer included in cut-to-fill works

- Escalation beyond the date of the estimate
- Legal fees & other associated works
- Latent conditions or unforeseen damages
- Fauna / Flora Assessment
- Effects of exchange rates
- Effects of inflation
- Treatment of invasive plant growth
- Protection of protected trees or plant life
- Adoption charges in connection with existing highways
- Works outside the boundary of the limit of works provided
- Artworks/Sculptures

### **Intersection & Road Segment Works**

- No allowance for removal of existing property fencing

### **Bridge Works**

- Pile lengths beyond that stated

### **Culvert Works**

- Grouted stone pitching to all culverts
- No allowance for apron slabs, rock protection, wingwalls and headwalls to CU-02 as per Drawing number 304200666-1050

## **5.3 Assumptions**

The following assumptions have been made in the preparation of HMC's cost estimate:

### **General**

- Unsuitable material stockpiled onsite to dry prior to carting to an approved landfill facility.
- HMC has assumed the civil construction works will be carried out by a Tier 1 Civil Contractor due to the sizeable nature of the works.
- The principal contractor's preliminaries and overheads have been calculated from first principles and distributed to the unit rates.
- Excess spoil material assumed to be disposed at approved waste facility within a 6.5km radius at an assumed rate of \$26/m<sup>3</sup>. Disposal rates have been sourced from the closest waste facility to the vicinity of the works.

- All topsoil stripping and stockpiling works have been included within *Item 1.1 Site Preparation* of the VPA templates.
- Sodic soil management costs have been provided by Terralea Consulting Pty Ltd. as a subject matter expert sub-consultant to Stantec Australia.
- HMC has applied the contingency percentages within each cost estimate across the construction costs only, as per the VPA's advice.

## Intersection & Road Segment Works

- Stormwater pits, manholes and pipe lengths have been assumed as per each intersections Design Item reference within the draft Concept Design and Opinion of Probable Costs Report
- Street tree planting has been assumed as per each intersections Design Item reference within the draft Concept Design and Opinion of Probable Costs Report
- Allowance to Hydroseed all battered surface areas, inclusive of watering
- An allowance for the bullnose of each central median island to include 10m in length of concrete works has been incorporated within the estimate. The remaining area has been assumed to be vegetated.
- The lengths of street lighting utility lines have been assumed based on the external kerb road length, in conjunction with an allowance for street crossings as required
- A provisional allowance has been included to relocate the existing overhead power lines and associated poles within Intersection IN-01
- Allowance for a safety fence on both sides of RD-02-04 approaching BR-01
- All existing underground services depicted on the concept plans have been allowed to be relocated or altered under the assumption of conflicting depths with the proposed pavement detail.

## Bridge Works

- Pedestrian bridge pile design as per advice from Stantec – 6 piles per support.
  - Assume the piles to be 500 x 500 prestressed piles with a max length of 15m per pile.
  - Pile concrete strength to be 50mpa
- Road bridge pile design as per advice from Stantec
  - Assume the piles to be 500 x 500 prestressed piles with max length of 25m per pile.
  - Pile concrete strength to be 50mpa
- Road Bridge costs incorporated within this estimate have been limited to the limit of works specified in the Final Concept Drawings, which allows for approximately half of the bridges



only (inclusive of a 60m road lead-in). The bridge lengths included within the Officer South PSP costings can be seen below:

- BR-01 – 37.5m
- BR-02 – 46.5m

To assume the full bridge costings, a duplicate factor of x2 has been applied as an indicative representation of the approximate costs, as per the following:

- BR-01
  - P50: \$13,672,394 (75m length)
  - P90: \$15,310,475 (75m length)
- BR-02
  - P50: \$18,800,395 (93m length)
  - P90: \$21,050,856 (93m length)
- Shared path to one side of the road bridges only, as per the updated design advice received on 13 June 2024
- The amended road bridge design provided on 13 June 2024 indicates the following reductions to be incorporated in the final design submission:
  - 2.7m reduction in width to both BR-01 & BR-02
  - Reduction of two 1200mm deep open flange super T girders
  - Reduction of 2 piles per support to BR-01 & BR-02

## Culvert Works

- Allowance for tubular galvanised safety fence at culvert headwalls and wingwalls
- Allowance for de-watering, including spears and treatment as required
- Allowance to excavate and shape 10m past rock protection at inlet and outlet – CU-01, CU-03 and CU-04

## 5.4 Estimate Methodology

The following estimate has been compiled using first principles estimating breakdowns of labour, plant & materials to construct the composite unit rates applied; these rates are similar to those applied within projects of a similar nature and locality of works that have been undertaken previously.

The following diagram depicts the detailed project estimate structure utilised by HMC to eventuate the total project cost.

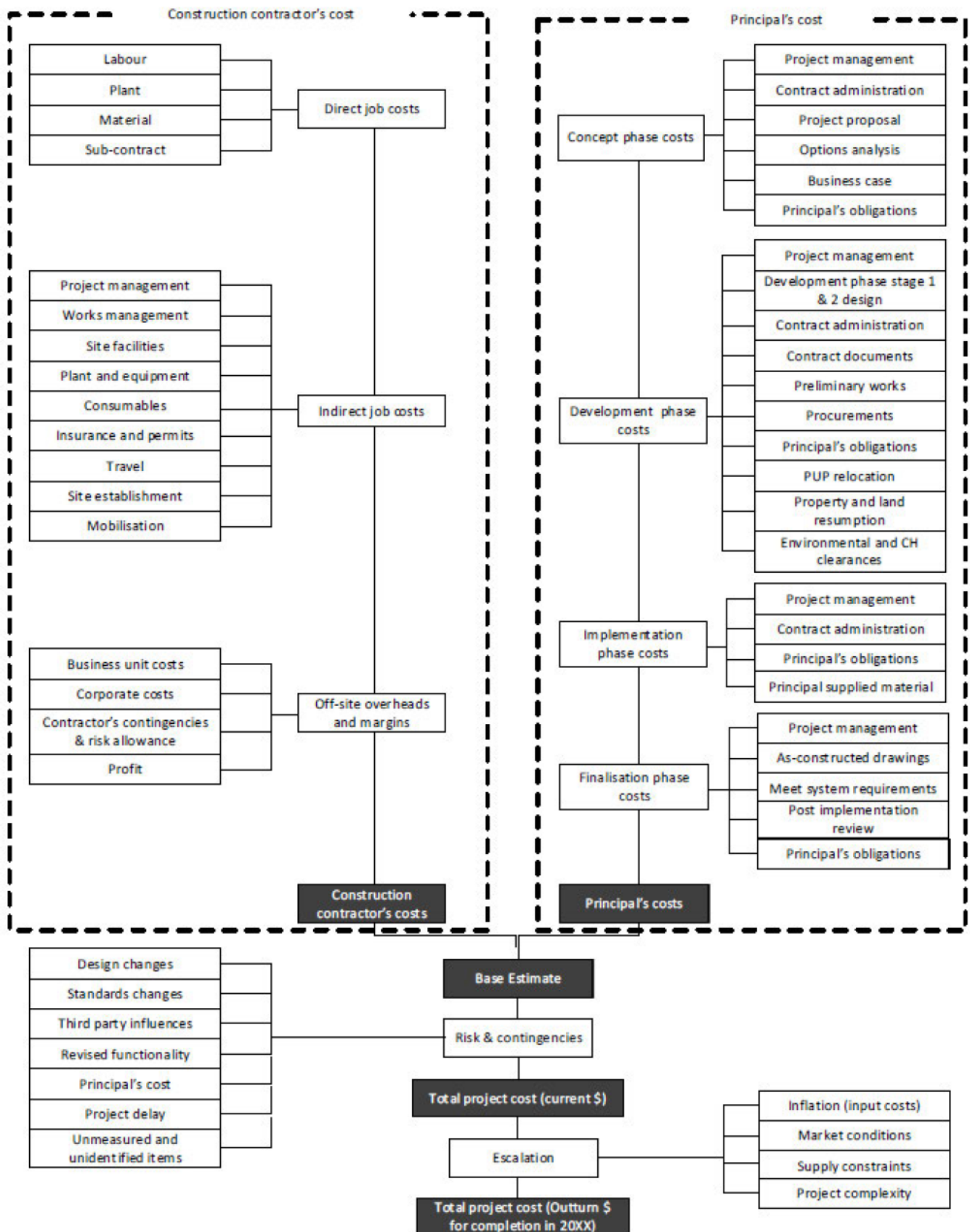
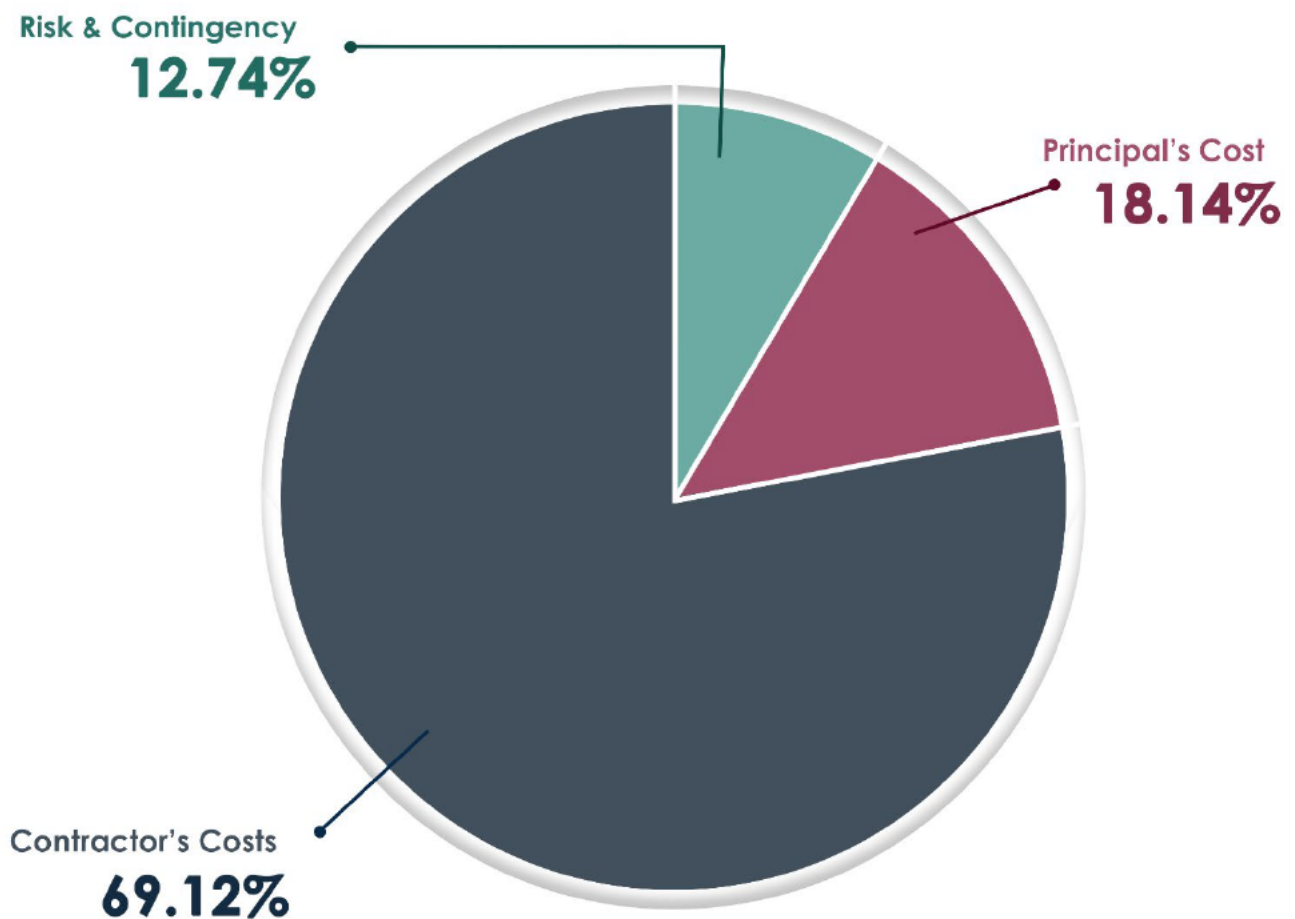


Figure 4 – Estimating Methodology (TMR 2020)

The estimated construction costs illustrated within this cost estimate are inclusive of:

- Direct Contractor Costs
- Indirect Contractor Costs
  - Site Overheads
  - Off-Site Overheads
  - Contractors Margin
- Principal's Costs
- Professional Fees & Services
- Risk Allocation
- Contingency



---

Figure 5 demonstrates the breakdown of costs by section:

---

### 5.4.1 Direct Job Costs

Direct job costs are attributed to the actual construction of the project and are inclusive of labour, plant and materials associated to undertake those works; these costs are quantified as a result of the accumulation of these elements in combination with the productivity applied and the resources available.

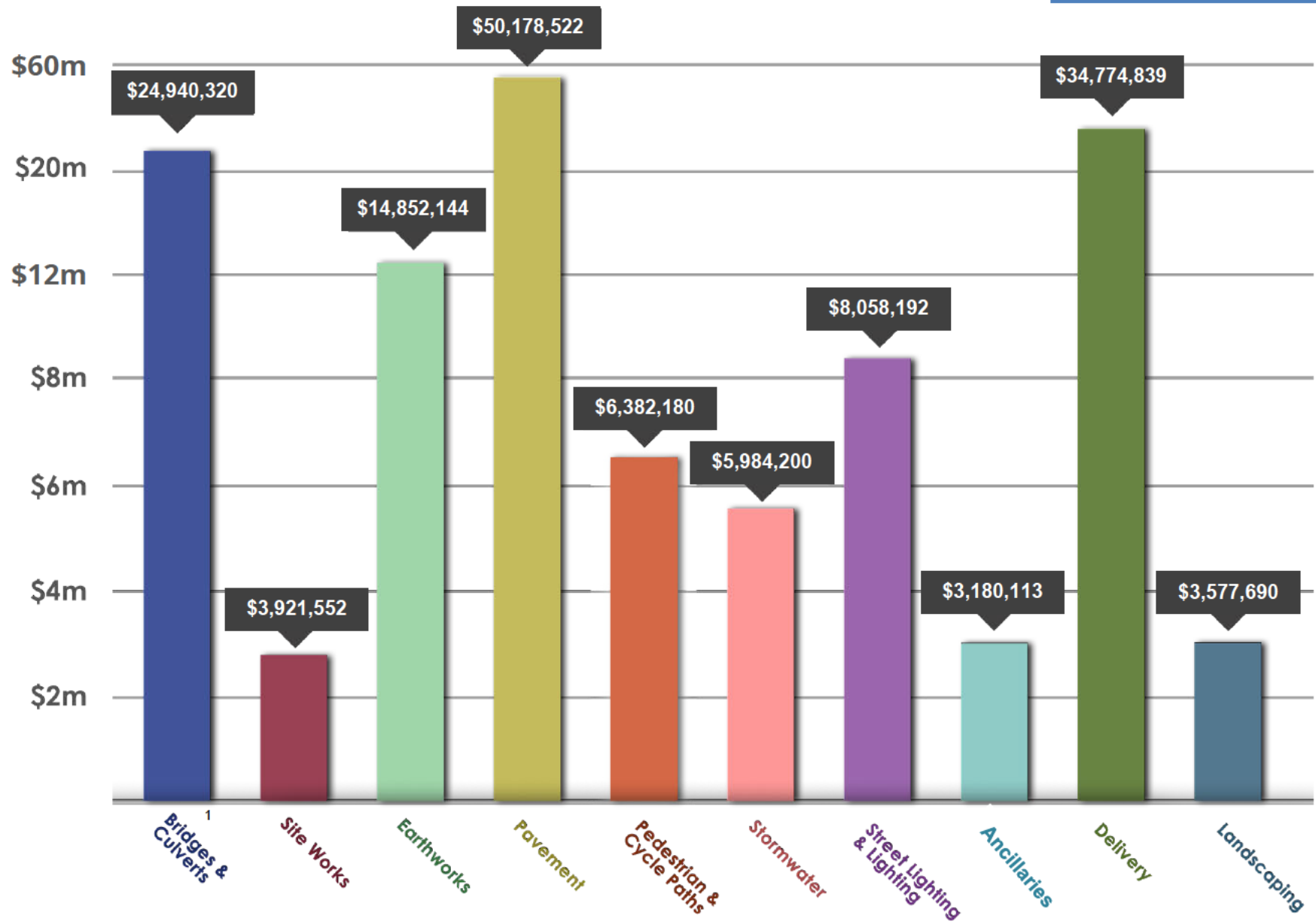


Figure 6 demonstrates the direct job costs



1. The bridge costings provided consider only the western half of the road bridge works, inclusive of a 60m road lead-in. These costs are expected to be approximately 50% of the total road bridge construction costs.

Figure 7 – P90 Construction Costs by Category



To assist in the development of the direct project costs, HMC has utilised the following productivity rates outlined below:

| Activity/ Scope                                                                                                           | Production Rate                                            |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>Earthworks - Clearing and Grubbing, Including removal of sparse trees</b>                                              | 20,000m <sup>2</sup> /day cut to stockpile                 |
| <b>Earthworks - Cut to Fill</b><br>(Allowance for 4 x 40T Moxy Dump Trucks)                                               | 970m <sup>3</sup> /day                                     |
| <b>Earthworks – Cut to Disposal</b>                                                                                       | 960m <sup>3</sup> /day                                     |
| <b>Roadworks - Unbound Pavement Material (CTCR, FCR, Select Gravel)</b><br>(Allowance for 4 x Tandem Trucks and Trailers) | 400m <sup>3</sup> /day                                     |
| <b>Stormwater – Reinforced Concrete Pipes (RCPs)</b>                                                                      | Varies depending on pipe Diameter.<br>6 – 10 pipes per day |
| <b>Concrete Pathway – Including formwork, reinforcement and pouring</b>                                                   | 90m <sup>2</sup> /day                                      |
| <b>Fibre Optic relocation – Conduit removal and relocation</b>                                                            | 60m/day                                                    |

To achieve a manageable and appropriate production rate for the bulk earthworks, as noted below; the following labour and heavy plant has been included within the unit rates applied to the estimate:

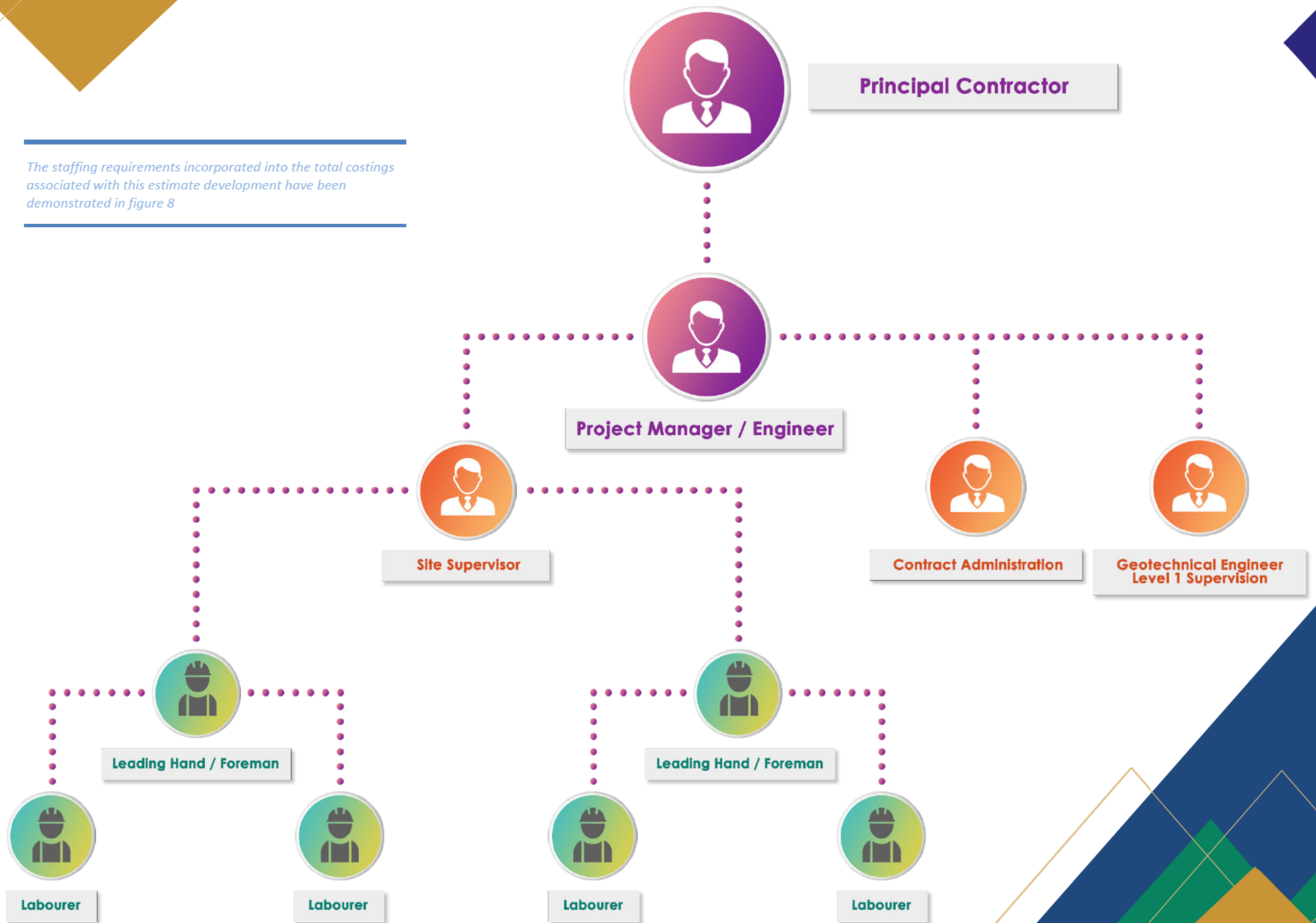
| Labour                                      | Plant               |
|---------------------------------------------|---------------------|
| Earthworks Supervisor                       | D8 Dozer x 2        |
| Labourer                                    | 825 Compactor       |
| Plant Operators                             | 18T Padfoot Roller  |
| Geotechnical Engineer – Level 1 Supervision | 12T Drum Roller x 2 |
|                                             | 12M Grader          |
|                                             | 30T Excavator       |
|                                             | 50T Excavator       |
|                                             | Moxy Dump Truck x 4 |
|                                             | Moxy Water Truck    |

### 5.4.2 Indirect Job Costs

These are costs not directly attributable to work items. For construction activities, these costs include on-site overheads (such as site supervision) and off-site overheads (contractor's corporate / business costs). They are exclusive of the contractor's contingency and profit and include elements such as those outlined below:

| Cost Category                                   | Component           | Subcomponent                                                                                                                                                                                                     |
|-------------------------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On-site indirect job cost overheads (recurring) | Project Management  | Project Manager, Project Engineer, Supervisors                                                                                                                                                                   |
|                                                 | Works Management    | Administration Officer, Systems Officer, Surveyor, Laboratory Assistant                                                                                                                                          |
|                                                 | Site Facilities     | Office Rentals, Accommodation, Photocopier, Computers, Software etc.<br>Service Utility Charges (telephone, power, water & sewerage)<br>Cleaning Charges (office cleaning, septic pumping, refuse disposal etc.) |
|                                                 | Plant and Equipment | Site Staff Vehicles, Job Trucks, Pumps, Generators, Floating Plant and loose tools.                                                                                                                              |
|                                                 | Consumables         | Stationery, Miscellaneous Materials.                                                                                                                                                                             |
|                                                 | Insurance & Permits | State Government & Local Government permit fees, insurances required by the contractor, bank guarantees & financial charges                                                                                      |
|                                                 | Travel              | Travel costs not included in wages or salaries                                                                                                                                                                   |
| On-site indirect job cost overheads (fixed)     | Site Establishment  | Transport and Erection / Construction of Site Facilities.                                                                                                                                                        |
|                                                 | Mobilisation        | Mobilisation, Site offices and amenities for contractor, principal's team and in some cases, subcontractors                                                                                                      |

The staffing requirements incorporated into the total costings associated with this estimate development have been demonstrated in figure 8





### 5.4.3 Principal Costs

Principal's costs are any costs incurred by the project owner to initiate and facilitate the realisation of the project concept. The Victorian Planning Authority have provided HMC with the indicative percentage of costs expected, attributable to the total project estimate; The total project estimates have been demonstrated below:

#### Summary of Indirect/Associate Project Costs

| Description                        | P50 Total                       | P90 Total                       |
|------------------------------------|---------------------------------|---------------------------------|
| <b>Delivery Fees</b>               |                                 |                                 |
| Council Fees                       | \$3,818,094                     | \$4,321,144                     |
| VicRoads Fees                      | \$1,174,798                     | \$1,329,583                     |
| Traffic Management                 | \$5,873,990                     | \$6,647,914                     |
| Environmental Management           | \$587,399                       | \$664,791                       |
| Surveying and Design               | \$5,873,990                     | \$6,647,914                     |
| Supervision and Project Management | \$10,573,183                    | \$11,966,244                    |
| Site Establishment                 | \$2,936,995                     | \$3,323,956                     |
| <b>Total (EXCL. GST)</b>           | <b>\$30,838,449<sup>1</sup></b> | <b>\$34,901,546<sup>2</sup></b> |

1. The costings provided consider only the western half of the road bridge works (BR-01 – 37.5m length; BR-02 – 46.5m length), inclusive of a 60m road lead-in. These costs are expected to be approximately 50% of the total road bridge construction costs.
2. The costings provided consider only the western half of the road bridge works (BR-01 – 37.5m length; BR-02 – 46.5m length), inclusive of a 60m road lead-in. These costs are expected to be approximately 50% of the total road bridge construction costs.

### 5.4.4 Total Project Estimate

#### Contractor Profit Margin

Profit margins vary between each contractor and are dictated by the current market conditions and resourcing availability. HMC would expect contractor's margins to fall within a range of 8-15% for works of this nature; therefore, HMC has incorporated an appropriate profit margin across the project estimate.

## 6. Project Risk

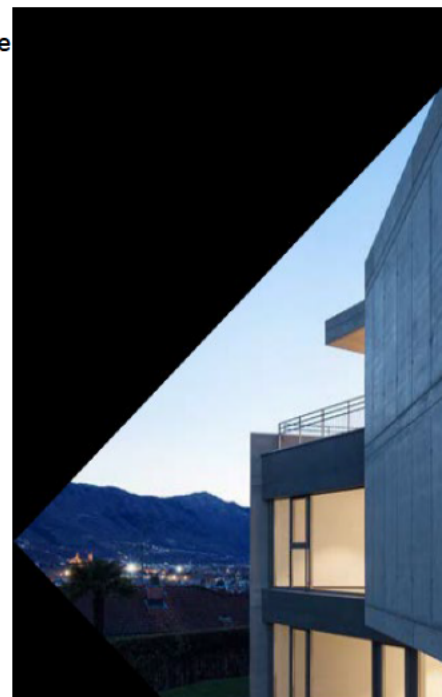
HMC's risk assessment and profile of the Officer South Precinct Structure Plan has been undertaken in accordance with ISO31000-2018. Project risks continuously develop throughout a project's life cycle as inherited and unplanned risks eventuate; HMC has conducted a probabilistic cost estimating analysis, incorporating a P50 and P90 cost estimation method. This includes a qualitative approach to ascertain the appropriate level of contingency to apply within this cost estimate and assesses the possibility of a cost variation at a line-by-line level.

Running a Monte Carlo simulation on an estimate offers a statistical analysis that assesses the probability of multiple possible results based on a specified model. The outcomes of the Monte Carlo simulation are ranked within a certain range, determined by the input probabilities; this reflects the real-world chances of an outcome occurring within that range.

HMC utilises the @RISK software to perform numerous iterations of varying cost combinations in an estimate. This allows for the formation of a probability distribution for the total project cost; Consequently, HMC has utilised the @RISK Monte Carlo Simulation method on each rate within the estimates to provide a P50 and P90 calculation illustrated in the table below.

Through HMC's probabilistic risk assessment, the below project risks have been considered the most prominent for this project:

- Pressure from current market movement, including material availability, supply lead times and competition.
- Unknown ground conditions.
- Acceleration costs due to delays in contract award
- Due to the likely extended duration of the contract, significant storm events during the final duration of works



## Summary of Costs

| Description                         | P50 Total                | P90 Total                 |
|-------------------------------------|--------------------------|---------------------------|
| Intersection IN-01                  | \$12,841,937             | \$14,508,344              |
| Intersection IN-02                  | \$9,149,578              | \$10,303,571              |
| Intersection IN-03                  | \$9,486,128              | \$10,698,029              |
| Intersection IN-04                  | \$8,948,158              | \$10,094,891              |
| Intersection IN-05                  | \$16,705,242             | \$19,043,079              |
| Intersection IN-06                  | \$7,694,023              | \$8,717,327               |
| Intersection IN-07                  | \$6,066,430              | \$6,848,861               |
| Intersection IN-08                  | \$12,326,064             | \$14,139,969              |
| Intersection IN-09                  | \$8,180,932              | \$9,300,131               |
| Intersection IN-10                  | \$14,202,917             | \$16,058,094              |
| Intersection IN-11                  | \$9,519,125              | \$10,792,395              |
| Intersection IN-12                  | \$7,440,029              | \$8,434,341               |
| Culvert Structure CU-01             | \$1,255,508              | \$1,448,965               |
| Culvert Structure CU-02             | \$1,558,818              | \$1,794,448               |
| Culvert Structure CU-03             | \$1,365,910              | \$1,569,675               |
| Culvert Structure CU-04             | \$681,744                | \$789,422                 |
| Pedestrian Bridge Structure PB-01   | \$9,535,120              | \$10,713,490              |
| Pedestrian Bridge Structure PB-02   | \$2,727,267              | \$3,077,414               |
| Road Bridge Structure BR-01         | \$6,836,197 <sup>1</sup> | \$7,655,237 <sup>2</sup>  |
| Road Bridge Structure BR-02         | \$9,400,198 <sup>1</sup> | \$10,525,428 <sup>2</sup> |
| Road Segment RD 02-01               | \$2,545,874              | \$2,907,747               |
| Road Segment RD 02-02               | \$1,522,436              | \$1,562,796               |
| Road Segment RD 02-03               | \$919,475                | \$1,046,659               |
| Road Segment RD 02-04               | \$1,901,506              | \$2,161,283               |
| Road Segment RD 03-01               | \$1,603,207              | \$1,841,456               |
| Road Segment RD 03-02               | \$2,200,158              | \$2,525,331               |
| Pedestrian Operate Signals – POS-01 | \$300,566                | \$338,216                 |
| <b>TOTALS (EXCL. GST)</b>           | <b>\$166,914,546</b>     | <b>\$188,896,603</b>      |

1. The costings provided consider only the western half of the road bridge works (BR-01 – 37.5m length; BR-02 – 46.5m length), inclusive of a 60m road lead-in. These costs are expected to be approximately 50% of the total road bridge construction costs.
2. The costings provided consider only the western half of the road bridge works (BR-01 – 37.5m length; BR-02 – 46.5m length), inclusive of a 60m road lead-in. These costs are expected to be approximately 50% of the total road bridge construction costs.

## 7. Peer Review

As a part of HMC's Quality Assurance company policy, a review of each report and estimate conducted and issued by HMC is undertaken by two independent verifiers within the company.

## 8. Glossary of Terms

| Term                          | Definition                                                                                                                                                                                                                                                            |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Activity</i>               | An element of work performed during the course of a project. An activity normally has an expected duration, cost and resource requirement. Activities can be subdivided into tasks.                                                                                   |
| <i>Actual cost</i>            | The final outturn dollar expenditure on a project.                                                                                                                                                                                                                    |
| <i>Base estimate</i>          | The base estimate is the estimator's best prediction in terms of the quantities and current rates which are likely to be associated with the delivery of a given scope of work prior to the addition of inherent and contingent risk values or escalation allowances. |
| <i>Benchmarking</i>           | Gathering, collating, and analysing historical data and storing it for future use.                                                                                                                                                                                    |
| <i>Budget</i>                 | The budget is the approved amount of funding for a project. This may be different to the estimates throughout the project life cycle.                                                                                                                                 |
| <i>Business case estimate</i> | An estimate prepared during the concept phase to support the project's business case.                                                                                                                                                                                 |
| <i>Cashflow</i>               | Cash flow is the project base estimate plus contingency amount expenditure profile across the financial years the funds are expected to be spent.                                                                                                                     |
| <i>Component</i>              | A definable part of a project, including stages of planning, design and construction that contribute to the total project cost.                                                                                                                                       |
| <i>Construction estimate</i>  | An estimate produced after acceptance of the successful tenderer just prior to the implementation phase.                                                                                                                                                              |
| <i>Contingency</i>            | A financial reserve included in the project's estimate to offset uncertain or unpredictable factors relating to the delivery of project objectives. The amount of funds, budget or time                                                                               |

|                                                        |                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                        | <p>needed above the estimate to reduce the risk of overruns of project objectives to a level acceptable to the organisation.</p> <p>Budget within the cost baseline or performance measurement baseline that is allocated for identified risks that are accepted and for which contingent or mitigating responses are developed.</p>                   |
| <i>Correlation</i>                                     | Correlation is the parameter (or statistic) used to describe the degree to which two variables are related - or the degree to which one variable's probability distribution is related to another.                                                                                                                                                     |
| <i>Cost estimating</i>                                 | The process of estimating the cost of the resources needed to complete project activities.                                                                                                                                                                                                                                                             |
| <i>Development Phase Stage 1 Design estimate (S1D)</i> | The estimate of all components of a project prepared based on advanced design. It provides a check of the alignment between the project estimate and the approved scope/budget. It occurs immediately prior to the S2D and is expressed in outturn dollars. (Formerly preliminary design).                                                             |
| <i>Development Phase Stage 2 Design estimate (S2D)</i> | The estimate of all components of a project prepared prior to calling of tenders for construction, and based on final designs, construction specifications and project documentation. It is expressed in outturn dollars. (Formerly detailed design).                                                                                                  |
| <i>Detailed design estimate</i>                        | See Development Phase Stage 2 design estimate.                                                                                                                                                                                                                                                                                                         |
| <i>Escalation</i>                                      | The anticipated increase in project costs over time as a result of various factors such as inflation, market conditions, supply constraints and project complexity.                                                                                                                                                                                    |
| <i>Estimate</i>                                        | A document recording the calculated cost prediction to undertake a specific amount of work. It is prepared in a systematic manner appropriate to the size and complexity of the work, and to a level of accuracy commensurate with the available information and the intended use of the information developed. It may include some prior expenditure. |
| <i>Estimate Probability</i>                            | Ensuring that estimates have been prepared as prescribed and in accordance with the requirements and appropriate ranges for the                                                                                                                                                                                                                        |



|                                                 |                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 | different project phases and stages – either P50, P75 or P90.                                                                                                                                                                                                                                                                  |
| <i>Estimated total project cost</i>             | The total project cost is the sum of the base estimate plus contingency plus escalation, expressed in P90 values. This is also referred to as the total outturn cost. See also total project cost.                                                                                                                             |
| <i>Estimate report</i>                          | A report containing the estimate and details of the estimating processes, assumptions, inputs and so on.                                                                                                                                                                                                                       |
| <i>First principles (basic cost) estimating</i> | A detailed estimating method based on a detailed work breakdown structure, work methods, production rates and resource requirements. The estimate is structured to provide details of direct costs, on-site overheads, off-site overheads, contractor contingencies and margin.                                                |
| <i>Margin (contractor)</i>                      | An allowance that includes the contractor's corporate overheads and profit.                                                                                                                                                                                                                                                    |
| <i>Optimism bias</i>                            | The tendency for people to be overly optimistic regarding project costs and planned durations.                                                                                                                                                                                                                                 |
| <i>P90 estimate</i>                             | An estimate with a 90% confidence of not being exceeded at project completion, while not being overly conservative.                                                                                                                                                                                                            |
| <i>Peer review</i>                              | A review of the project estimates by an independent, experienced estimator from within Transport and Main Roads.                                                                                                                                                                                                               |
| <i>Principal's costs</i>                        | Principal's costs are those costs which the department incurs to conceptualise, develop, deliver and finalise a project. These may include community consultation, environmental assessment, design planning, services relocation, resumptions, accommodation, site investigations, and principal supplied material and so on. |
| <i>Program of works</i>                         | The planned durations for performing activities and the planned dates for reaching milestones.                                                                                                                                                                                                                                 |
| <i>Project</i>                                  | A temporary endeavour was undertaken to create a unique product, service or result. It has a clearly defined scope, start and end time, a structured set of activities and tasks, a budget and a specified business case.                                                                                                      |
| <i>Project schedule</i>                         | A listing of a projects works activities and their associated costs.                                                                                                                                                                                                                                                           |
| <i>Provisional items</i>                        | Items included in an estimate which cannot be accurately quantified.                                                                                                                                                                                                                                                           |

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Public Utility Plant (PUP)</i>           | Public Utility Plant includes, but is not limited to, infrastructure related to the distribution of communications, electricity, water, sewerage, gas and so on.                                                                                                                                                                                                                                                                                    |
| <i>Qualitative risk analysis</i>            | <p>The process of prioritising risk for subsequent analysis or action by assessing and combining probability of likelihood and impact.</p> <p>In regard to estimating and risk assessment, this approach draws upon the softer skills such as past experience, asking stakeholders the right questions, decision making, problem solving and common-sense review by appropriate personnel and is more reliant on the project team's experience.</p> |
| <i>Quantitative risk analysis</i>           | The process of numerically analysing the effect on project objectives of identified risk. In regard to estimating and risk assessment, this approach draws upon the use of tools, techniques, templates, software, and the use of specialist risk estimating software, such as @Risk.                                                                                                                                                               |
| <i>Risk</i>                                 | A project risk is the effect of uncertainty on project objectives; the chance of something happening that will have an impact upon project objectives. Risk is measured in terms of consequences and likelihood.                                                                                                                                                                                                                                    |
| <i>Schedule of rates</i>                    | The list of all envisaged project work activity items, quantities and rates, whether the rates have been entered or not.                                                                                                                                                                                                                                                                                                                            |
| <i>Scope</i>                                | The scope is the work that must be undertaken to deliver a product, service or result with the specified features and functions.                                                                                                                                                                                                                                                                                                                    |
| <i>Stage</i>                                | A logical construct to describe the division of work within a project phase.                                                                                                                                                                                                                                                                                                                                                                        |
| <i>Total project cost (current dollars)</i> | The estimated total completion cost.                                                                                                                                                                                                                                                                                                                                                                                                                |
| <i>Variation</i>                            | Approved change to the scope of work.                                                                                                                                                                                                                                                                                                                                                                                                               |

Should you have any queries or require further information or assistance, please do not hesitate to contact me.

Yours faithfully,

A handwritten signature in black ink, reading "Danny Antcliff". The signature is fluid and cursive, with a large initial 'D'.

**Danny Antcliff**

**Senior Quantity Surveyor**

AAIQS, B. ConMgt (BLDG), Dip Pro Mgt





# Appendix A

## VPA Costing Templates

**H&M**  
CONSULTING

Quantity  
Surveying  
Services





# Intersections

VPA Estimates

**H&M**  
CONSULTING

Quantity  
Surveying  
Services



| Item         | Description                                                                                                                                                                                                                   | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                              | 1        | Item  | \$ 108,177.00  | \$ 108,177.00    | \$ 120,548.00  | \$ 120,548.00    |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                         | 13306    | m2    | \$ 17.49       | \$ 232,721.94    | \$ 23.33       | \$ 310,428.98    |
| 1.2          | <b>Earthworks</b>                                                                                                                                                                                                             |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                   | 4103     | m3    | \$ 40.07       | \$ 164,407.21    | \$ 45.70       | \$ 187,507.10    |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                               | 11140    | m3    | \$ 25.89       | \$ 288,414.60    | \$ 28.98       | \$ 322,837.20    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                  | 11140    | m3    | \$ 29.06       | \$ 323,728.40    | \$ 33.97       | \$ 378,425.80    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                        | 3213     | m2    | \$ 22.36       | \$ 71,842.68     | \$ 24.84       | \$ 79,810.92     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                 | 3213     | m2    | \$ 4.47        | \$ 14,362.11     | \$ 5.00        | \$ 16,065.00     |
| 1.3          | Take up existing bituminous surfaces                                                                                                                                                                                          | 2124     | m2    | \$ 5.37        | \$ 11,405.88     | \$ 6.20        | \$ 13,168.80     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                          |          |       |                |                  |                |                  |
| 2.1          | <u>Primary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 75mm Asphalt Intermediate Course<br>- 90mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 150mm FCR Base Course<br>- 200mm Select Suubase Course | 9672     | m2    | \$ 223.55      | \$ 2,162,175.60  | \$ 238.23      | \$ 2,304,160.56  |
| 2.2          | <u>Connector Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 200mm Select Suubase Course                          | 3314     | m2    | \$ 182.96      | \$ 606,329.44    | \$ 196.75      | \$ 652,029.50    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                             | 12986    | m2    | \$ 7.78        | \$ 101,031.08    | \$ 10.49       | \$ 136,223.14    |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                | 68       | tonne | \$ 346.27      | \$ 23,546.36     | \$ 371.90      | \$ 25,289.20     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                             | 1501     | m2    | \$ 23.33       | \$ 35,018.33     | \$ 29.16       | \$ 43,769.16     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                    | 17930    | m2    | \$ 23.33       | \$ 418,306.90    | \$ 29.16       | \$ 522,838.80    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                         |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                              | 3002     | LM    | \$ 79.32       | \$ 238,118.64    | \$ 86.01       | \$ 258,202.02    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                      | 3159     | m2    | \$ 110.13      | \$ 347,900.67    | \$ 124.58      | \$ 393,548.22    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                  | 2018     | m2    | \$ 129.36      | \$ 261,048.48    | \$ 141.82      | \$ 286,192.76    |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                                                                                                                                                                                       |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                     | 258      | LM    | \$ 325.26      | \$ 83,917.08     | \$ 365.68      | \$ 94,345.44     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                     | 409      | LM    | \$ 351.04      | \$ 143,575.36    | \$ 394.39      | \$ 161,305.51    |
| 4.2          | <b>Drainage - pits</b>                                                                                                                                                                                                        |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                 | 2        | No.   | \$ 2,926.92    | \$ 5,853.84      | \$ 3,251.72    | \$ 6,503.44      |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                  | 22       | No.   | \$ 3,687.63    | \$ 81,127.86     | \$ 4,175.88    | \$ 91,869.36     |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                   | 2        | No.   | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                  | 2540     | LM    | \$ 33.54       | \$ 85,191.60     | \$ 37.63       | \$ 95,580.20     |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals                                                                                                                                                                                                               | 1        | Item  | \$ 366,630.10  | \$ 366,630.10    | \$ 432,166.90  | \$ 432,166.90    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                              |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                         | 54       | No.   | \$ 737.55      | \$ 39,827.70     | \$ 832.80      | \$ 44,971.20     |
| 6.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                         | 9860     | m2    | \$ 18.79       | \$ 185,269.40    | \$ 25.18       | \$ 248,274.80    |

|                           |                                             |        |      |                 |                         |                  |                         |
|---------------------------|---------------------------------------------|--------|------|-----------------|-------------------------|------------------|-------------------------|
| 6.3                       | Hydroseeding including watering             | 3213   | m2   | \$ 1.10         | \$ 3,534.30             | \$ 1.45          | \$ 4,658.85             |
| 7                         | <b>STREET LIGHTING</b>                      |        |      |                 |                         |                  |                         |
| 7.1                       | Street Lighting                             | 26     | No.  | \$ 11,737.38    | \$ 305,171.88           | \$ 13,633.41     | \$ 354,468.66           |
| 7.2                       | Erosion protection for lighting cables      | 1459   | LM   | \$ 55.98        | \$ 81,674.82            | \$ 62.98         | \$ 91,887.82            |
| 8                         | <b>MISCELLANEOUS</b>                        |        |      |                 |                         |                  |                         |
| 8.1                       | Line marking                                | 1      | Item | \$ 25,550.37    | \$ 25,550.37            | \$ 28,716.20     | \$ 28,716.20            |
| 8.2                       | Regulatory Signage                          | 1      | Item | \$ 10,043.39    | \$ 10,043.39            | \$ 12,710.38     | \$ 12,710.38            |
| 8.3                       | Works maintenance – up to 1 year            | 1      | Item |                 | INCL                    |                  | INCL                    |
| 8.4                       | Landscape maintenance – 1yr/2 summers       | 1      | Item |                 | INCL                    |                  | INCL                    |
| 8.5                       | Traffic signals 10 year Maintenance Fee     | 1      | Item |                 | INCL                    |                  | INCL                    |
| 9                         | <b>OTHER</b>                                |        |      |                 |                         |                  |                         |
| 9.1                       | <b>Service Relocations</b>                  |        |      |                 |                         |                  |                         |
| 9.1.1                     | Fibre Optic                                 | 1      | Item | \$ 342,563.30   | \$ 342,563.30           | \$ 390,132.40    | \$ 390,132.40           |
| 9.1.1                     | Testra                                      | 1      | Item | \$ 331,095.10   | \$ 331,095.10           | \$ 370,517.80    | \$ 370,517.80           |
| 9.1.2                     | Electrical                                  | 1      | Item | \$ 891,565.00   | \$ 891,565.00           | \$ 1,004,397.00  | \$ 1,004,397.00         |
| 9.1.3                     | Watermain                                   | 1      | Item | \$ 267,002.70   | \$ 267,002.70           | \$ 299,609.00    | \$ 299,609.00           |
| 9.1.4                     | Gas Main                                    | 1      | Item | \$ 193,265.50   | \$ 193,265.50           | \$ 215,600.60    | \$ 215,600.60           |
| 9.2                       | <b>Tree Removal</b>                         |        |      |                 |                         |                  |                         |
| 9.2.1                     | Major Tree and Site Clearing incl. grubbing | 1      | Item | \$ 230,577.50   | \$ 230,577.50           | \$ 261,708.10    | \$ 261,708.10           |
| <b>SUB-TOTAL WORKS</b>    |                                             |        |      |                 | <b>\$ 9,091,636.58</b>  |                  | <b>\$ 10,271,393.92</b> |
| 10                        | <b>DELIVERY</b>                             |        |      |                 |                         |                  |                         |
| 10.1                      | Council Fees                                | 3.25%  |      | \$ 9,091,636.58 | \$ 295,478.19           | \$ 10,271,393.92 | \$ 333,820.30           |
| 10.2                      | VicRoads Fees                               | 1.00%  |      | \$ 9,091,636.58 | \$ 90,916.37            | \$ 10,271,393.92 | \$ 102,713.94           |
| 10.3                      | Traffic Management                          | 5.00%  |      | \$ 9,091,636.58 | \$ 454,581.83           | \$ 10,271,393.92 | \$ 513,569.70           |
| 10.4                      | Environmental Management                    | 0.50%  |      | \$ 9,091,636.58 | \$ 45,458.18            | \$ 10,271,393.92 | \$ 51,356.97            |
| 10.5                      | Surveying and Design                        | 5.00%  |      | \$ 9,091,636.58 | \$ 454,581.83           | \$ 10,271,393.92 | \$ 513,569.70           |
| 10.6                      | Supervision and Project Management          | 9.00%  |      | \$ 9,091,636.58 | \$ 818,247.29           | \$ 10,271,393.92 | \$ 924,425.45           |
| 10.7                      | Site Establishment                          | 2.50%  |      | \$ 9,091,636.58 | \$ 227,290.91           | \$ 10,271,393.92 | \$ 256,784.85           |
| 10.8                      | Contingency                                 | 15.00% |      | \$ 9,091,636.58 | \$ 1,363,745.49         | \$ 10,271,393.92 | \$ 1,540,709.09         |
| <b>SUB-TOTAL DELIVERY</b> |                                             |        |      |                 | <b>\$ 3,750,300.09</b>  |                  | <b>\$ 4,236,949.99</b>  |
| 11                        | <b>TOTAL ESTIMATED COST</b>                 |        |      |                 | <b>\$ 12,841,936.67</b> |                  | <b>\$ 14,508,343.91</b> |

| Item         | Description                                                                                                                                                                                                                     | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                                | 1        | Item  | \$ 72,610.49   | \$ 72,610.49     | \$ 82,567.34   | \$ 82,567.34     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                           | 6303     | m2    | \$ 17.49       | \$ 110,239.47    | \$ 23.33       | \$ 147,048.99    |
| 1.2          | <b>Earthworks</b>                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                     | 607      | m3    | \$ 40.07       | \$ 24,322.49     | \$ 45.70       | \$ 27,739.90     |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                                 | 10928    | m3    | \$ 25.89       | \$ 282,925.92    | \$ 28.98       | \$ 316,693.44    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                    | 10928    | m3    | \$ 29.06       | \$ 317,567.68    | \$ 33.97       | \$ 371,224.16    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                          | 1302     | m2    | \$ 22.36       | \$ 29,112.72     | \$ 24.84       | \$ 32,341.68     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                   | 1302     | m2    | \$ 4.47        | \$ 5,819.94      | \$ 5.00        | \$ 6,510.00      |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                            |          |       |                |                  |                |                  |
| 2.1          | <u>Secondary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 150mm FCR Base Course<br>- 150mm Select Suubase Course | 8529     | m2    | \$ 195.98      | \$ 1,671,513.42  | \$ 208.82      | \$ 1,781,025.78  |
| 2.2          | <u>Connector Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 200mm Select Suubase Course                            | 2901     | m2    | \$ 182.96      | \$ 530,766.96    | \$ 196.75      | \$ 570,771.75    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                               | 11430    | m2    | \$ 7.78        | \$ 88,925.40     | \$ 10.49       | \$ 119,900.70    |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                  | 72       | tonne | \$ 346.27      | \$ 24,931.44     | \$ 371.90      | \$ 26,776.80     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                               | 1136.5   | m2    | \$ 23.33       | \$ 26,514.55     | \$ 29.16       | \$ 33,140.34     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                      | 14927    | m2    | \$ 23.33       | \$ 348,246.91    | \$ 29.16       | \$ 435,271.32    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                           |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                                | 2273     | LM    | \$ 79.32       | \$ 180,294.36    | \$ 86.01       | \$ 195,500.73    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                        | 2423     | m2    | \$ 110.13      | \$ 266,844.99    | \$ 124.58      | \$ 301,857.34    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                    | 1179     | m2    | \$ 129.36      | \$ 152,515.44    | \$ 141.82      | \$ 167,205.78    |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                                                                                                                                                                                         |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                       | 216      | LM    | \$ 325.26      | \$ 70,256.16     | \$ 365.68      | \$ 78,986.88     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                       | 450      | LM    | \$ 351.04      | \$ 157,968.00    | \$ 394.39      | \$ 177,475.50    |
| 4.2          | <b>Drainage - pits</b>                                                                                                                                                                                                          |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                   | 2        | No.   | \$ 2,926.92    | \$ 5,853.84      | \$ 3,251.72    | \$ 6,503.44      |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                    | 24       | No.   | \$ 3,687.63    | \$ 88,503.12     | \$ 4,175.88    | \$ 100,221.12    |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                     | 2        | No.   | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                    | 1947     | LM    | \$ 33.54       | \$ 65,302.38     | \$ 37.63       | \$ 73,265.61     |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                  |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals                                                                                                                                                                                                                 | 1        | Item  | \$ 366,630.10  | \$ 366,630.10    | \$ 432,166.90  | \$ 432,166.90    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                           | 44       | No.   | \$ 737.55      | \$ 32,452.20     | \$ 832.80      | \$ 36,643.20     |
| 6.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                           | 4896     | m2    | \$ 18.79       | \$ 91,995.84     | \$ 25.18       | \$ 123,281.28    |
| 6.3          | Hydroseeding including watering                                                                                                                                                                                                 | 1302     | m2    | \$ 1.10        | \$ 1,432.20      | \$ 1.45        | \$ 1,887.90      |

|                           |                                             |        |      |                 |                        |                 |                         |
|---------------------------|---------------------------------------------|--------|------|-----------------|------------------------|-----------------|-------------------------|
| <b>7</b>                  | <b>STREET LIGHTING</b>                      |        |      |                 |                        |                 |                         |
| 7.1                       | Street Lighting                             | 23     | No.  | \$ 11,737.38    | \$ 269,959.74          | \$ 13,633.41    | \$ 313,568.43           |
| 7.2                       | Erosion protection for lighting cables      | 1273   | LM   | \$ 55.98        | \$ 71,262.54           | \$ 62.98        | \$ 80,173.54            |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                        |        |      |                 |                        |                 |                         |
| 8.1                       | Line marking                                | 1      | Item | \$ 22,577.92    | \$ 22,577.92           | \$ 25,377.82    | \$ 25,377.82            |
| 8.2                       | Regulatory Signage                          | 1      | Item | \$ 9,013.54     | \$ 9,013.54            | \$ 11,548.64    | \$ 11,548.64            |
| 8.3                       | Works maintenance – up to 1 year            | 1      | Item |                 | INCL                   |                 | INCL                    |
| 8.4                       | Landscape maintenance – 1yr/2 summers       | 1      | Item |                 | INCL                   |                 | INCL                    |
| 8.5                       | Traffic signals 10 year Maintenance Fee     | 1      | Item |                 | INCL                   |                 | INCL                    |
| <b>9</b>                  | <b>OTHER</b>                                |        |      |                 |                        |                 |                         |
| 9.1                       | <b>Service Relocations</b>                  |        |      |                 |                        |                 |                         |
| 9.1.1                     | Fibre Optic                                 | 1      | Item | \$ 577,956.87   | \$ 577,956.87          | \$ 638,921.20   | \$ 638,921.20           |
| 9.1.2                     | Telstra                                     | 1      | Item | \$ 256,191.20   | \$ 256,191.20          | \$ 288,083.30   | \$ 288,083.30           |
| 9.2                       | <b>Tree Removal</b>                         |        |      |                 |                        |                 |                         |
| 9.2.1                     | Major Tree and Site Clearing incl. grubbing | 1      | Item | \$ 247,404.80   | \$ 247,404.80          | \$ 279,957.60   | \$ 279,957.60           |
| <b>SUB-TOTAL WORKS</b>    |                                             |        |      |                 | <b>\$ 6,477,577.09</b> |                 | <b>\$ 7,294,563.51</b>  |
| <b>10</b>                 | <b>DELIVERY</b>                             |        |      |                 |                        |                 |                         |
| 10.1                      | Council Fees                                | 3.25%  |      | \$ 6,477,577.09 | \$ 210,521.26          | \$ 7,294,563.51 | \$ 237,073.31           |
| 10.2                      | VicRoads Fees                               | 1.00%  |      | \$ 6,477,577.09 | \$ 64,775.77           | \$ 7,294,563.51 | \$ 72,945.64            |
| 10.3                      | Traffic Management                          | 5.00%  |      | \$ 6,477,577.09 | \$ 323,878.85          | \$ 7,294,563.51 | \$ 364,728.18           |
| 10.4                      | Environmental Management                    | 0.50%  |      | \$ 6,477,577.09 | \$ 32,387.89           | \$ 7,294,563.51 | \$ 36,472.82            |
| 10.5                      | Surveying and Design                        | 5.00%  |      | \$ 6,477,577.09 | \$ 323,878.85          | \$ 7,294,563.51 | \$ 364,728.18           |
| 10.6                      | Supervision and Project Management          | 9.00%  |      | \$ 6,477,577.09 | \$ 582,981.94          | \$ 7,294,563.51 | \$ 656,510.72           |
| 10.7                      | Site Establishment                          | 2.50%  |      | \$ 6,477,577.09 | \$ 161,939.43          | \$ 7,294,563.51 | \$ 182,364.09           |
| 10.8                      | Contingency                                 | 15.00% |      | \$ 6,477,577.09 | \$ 971,636.56          | \$ 7,294,563.51 | \$ 1,094,184.53         |
| <b>SUB-TOTAL DELIVERY</b> |                                             |        |      |                 | <b>\$ 2,672,000.55</b> |                 | <b>\$ 3,009,007.45</b>  |
| <b>11</b>                 | <b>TOTAL ESTIMATED COST</b>                 |        |      |                 | <b>\$ 9,149,577.63</b> |                 | <b>\$ 10,303,570.96</b> |

| Item         | Description                                                                                                                                                                                                                     | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                                | 1        | Item  | \$ 63,300.29   | \$ 63,300.29     | \$ 72,019.78   | \$ 72,019.78     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                           | 6929     | m2    | \$ 17.49       | \$ 121,188.21    | \$ 23.33       | \$ 161,653.57    |
| 1.2          | Earthworks                                                                                                                                                                                                                      |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                     | 581      | m3    | \$ 40.07       | \$ 23,280.67     | \$ 45.70       | \$ 26,551.70     |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                                 | 13934    | m3    | \$ 25.89       | \$ 360,751.26    | \$ 28.98       | \$ 403,807.32    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                    | 13934    | m3    | \$ 29.06       | \$ 404,922.04    | \$ 33.97       | \$ 473,337.98    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                          | 2034     | m2    | \$ 22.36       | \$ 45,480.24     | \$ 24.84       | \$ 50,524.56     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                   | 2034     | m2    | \$ 4.47        | \$ 9,091.98      | \$ 5.00        | \$ 10,170.00     |
| 1.3          | Take up existing bituminous surfaces                                                                                                                                                                                            | 2200     | m2    | \$ 5.37        | \$ 11,814.00     | \$ 6.20        | \$ 13,640.00     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                            |          |       |                |                  |                |                  |
| 2.1          | <u>Secondary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 150mm FCR Base Course<br>- 150mm Select Suubase Course | 8321     | m2    | \$ 195.98      | \$ 1,630,749.58  | \$ 208.82      | \$ 1,737,591.22  |
| 2.2          | <u>Connector Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 200mm Select Suubase Course                            | 2941     | m2    | \$ 182.96      | \$ 538,085.36    | \$ 196.75      | \$ 578,641.75    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                               | 11262    | m2    | \$ 7.78        | \$ 87,618.36     | \$ 10.49       | \$ 118,138.38    |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                  | 68       | tonne | \$ 346.27      | \$ 23,546.36     | \$ 371.90      | \$ 25,289.20     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                               | 1125.5   | m2    | \$ 23.33       | \$ 26,257.92     | \$ 29.16       | \$ 32,819.58     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                      | 14760    | m2    | \$ 23.33       | \$ 344,350.80    | \$ 29.16       | \$ 430,401.60    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                           |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                                | 2251     | LM    | \$ 79.32       | \$ 178,549.32    | \$ 86.01       | \$ 193,608.51    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                        | 2422     | m2    | \$ 110.13      | \$ 266,734.86    | \$ 124.58      | \$ 301,732.76    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                    | 1076     | m2    | \$ 129.36      | \$ 139,191.36    | \$ 141.82      | \$ 152,598.32    |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 4.1          | Drainage - pipes                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                       | 216      | LM    | \$ 325.26      | \$ 70,256.16     | \$ 365.68      | \$ 78,986.88     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                       | 450      | LM    | \$ 351.04      | \$ 157,968.00    | \$ 394.39      | \$ 177,475.50    |
| 4.2          | Drainage - pits                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                   | 2        | No.   | \$ 2,926.92    | \$ 5,853.84      | \$ 3,251.72    | \$ 6,503.44      |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                    | 24       | No.   | \$ 3,687.63    | \$ 88,503.12     | \$ 4,175.88    | \$ 100,221.12    |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                     | 2        | No.   | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                    | 1925     | LM    | \$ 33.54       | \$ 64,564.50     | \$ 37.63       | \$ 72,437.75     |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                  |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals                                                                                                                                                                                                                 | 1        | Item  | \$ 366,630.10  | \$ 366,630.10    | \$ 432,166.90  | \$ 432,166.90    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                           | 44       | No.   | \$ 737.55      | \$ 32,452.20     | \$ 832.80      | \$ 36,643.20     |
| 6.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                           | 4895     | m2    | \$ 18.79       | \$ 91,977.05     | \$ 25.18       | \$ 123,256.10    |
| 6.3          | Hydroseeding including watering                                                                                                                                                                                                 | 2034     | m2    | \$ 1.10        | \$ 2,237.40      | \$ 1.45        | \$ 2,949.30      |



|                           |                                             |        |      |                 |                        |                 |                         |
|---------------------------|---------------------------------------------|--------|------|-----------------|------------------------|-----------------|-------------------------|
| <b>7</b>                  | <b>STREET LIGHTING</b>                      |        |      |                 |                        |                 |                         |
| 7.1                       | Street Lighting                             | 23     | No.  | \$ 11,737.38    | \$ 269,959.74          | \$ 13,633.41    | \$ 313,568.43           |
| 7.2                       | Erosion protection for lighting cables      | 1284   | LM   | \$ 55.98        | \$ 71,878.32           | \$ 62.98        | \$ 80,866.32            |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                        |        |      |                 |                        |                 |                         |
| 8.1                       | Line marking                                | 1      | Item | \$ 22,124.80    | \$ 22,124.80           | \$ 24,987.51    | \$ 24,987.51            |
| 8.2                       | Regulatory Signage                          | 1      | Item | \$ 9,013.54     | \$ 9,013.54            | \$ 11,548.64    | \$ 11,548.64            |
| 8.3                       | Works maintenance – up to 1 year            | 1      | Item |                 | INCL                   |                 | INCL                    |
| 8.4                       | Landscape maintenance – 1yr/2 summers       | 1      | Item |                 | INCL                   |                 | INCL                    |
| 8.5                       | Traffic signals 10 year Maintenance Fee     | 1      | Item |                 | INCL                   |                 | INCL                    |
| <b>9</b>                  | <b>OTHER</b>                                |        |      |                 |                        |                 |                         |
| 9.1                       | <b>Service Relocations</b>                  |        |      |                 |                        |                 |                         |
| 9.1.1                     | Fibre Optic                                 | 1      | Item | \$ 770,764.30   | \$ 770,764.30          | \$ 862,580.30   | \$ 862,580.30           |
| 9.1.2                     | Telstra                                     | 1      | Item | \$ 256,622.20   | \$ 256,622.20          | \$ 286,813.60   | \$ 286,813.60           |
| 9.2                       | <b>Tree Removal</b>                         |        |      |                 |                        |                 |                         |
| 9.2.1                     | Major Tree and Site Clearing incl. grubbing | 1      | Item | \$ 150,460.30   | \$ 150,460.30          | \$ 169,369.90   | \$ 169,369.90           |
| <b>SUB-TOTAL WORKS</b>    |                                             |        |      |                 | <b>\$ 6,715,842.64</b> |                 | <b>\$ 7,573,826.22</b>  |
| <b>10</b>                 | <b>DELIVERY</b>                             |        |      |                 |                        |                 |                         |
| 10.1                      | Council Fees                                | 3.25%  |      | \$ 6,715,842.64 | \$ 218,264.89          | \$ 7,573,826.22 | \$ 246,149.35           |
| 10.2                      | VicRoads Fees                               | 1.00%  |      | \$ 6,715,842.64 | \$ 67,158.43           | \$ 7,573,826.22 | \$ 75,738.26            |
| 10.3                      | Traffic Management                          | 5.00%  |      | \$ 6,715,842.64 | \$ 335,792.13          | \$ 7,573,826.22 | \$ 378,691.31           |
| 10.4                      | Environmental Management                    | 0.50%  |      | \$ 6,715,842.64 | \$ 33,579.21           | \$ 7,573,826.22 | \$ 37,869.13            |
| 10.5                      | Surveying and Design                        | 5.00%  |      | \$ 6,715,842.64 | \$ 335,792.13          | \$ 7,573,826.22 | \$ 378,691.31           |
| 10.6                      | Supervision and Project Management          | 9.00%  |      | \$ 6,715,842.64 | \$ 604,425.84          | \$ 7,573,826.22 | \$ 681,644.36           |
| 10.7                      | Site Establishment                          | 2.50%  |      | \$ 6,715,842.64 | \$ 167,896.07          | \$ 7,573,826.22 | \$ 189,345.66           |
| 10.8                      | Contingency                                 | 15.00% |      | \$ 6,715,842.64 | \$ 1,007,376.40        | \$ 7,573,826.22 | \$ 1,136,073.93         |
| <b>SUB-TOTAL DELIVERY</b> |                                             |        |      |                 | <b>\$ 2,770,285.09</b> |                 | <b>\$ 3,124,203.32</b>  |
| <b>11</b>                 | <b>TOTAL ESTIMATED COST</b>                 |        |      |                 | <b>\$ 9,486,127.72</b> |                 | <b>\$ 10,698,029.54</b> |



| Item         | Description                                                                                                                                                                                                                     | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                                | 1        | Item  | \$ 71,031.56   | \$ 71,031.56     | \$ 79,857.43   | \$ 79,857.43     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                           | 6799     | m2    | \$ 17.49       | \$ 118,914.51    | \$ 23.33       | \$ 158,620.67    |
| 1.2          | <b>Earthworks</b>                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                     | 378      | m3    | \$ 40.07       | \$ 15,146.46     | \$ 45.70       | \$ 17,274.60     |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                                 | 13442    | m3    | \$ 25.89       | \$ 348,013.38    | \$ 28.98       | \$ 389,549.16    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                    | 13442    | m3    | \$ 29.06       | \$ 390,624.52    | \$ 33.97       | \$ 456,624.74    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                          | 2038     | m2    | \$ 22.36       | \$ 45,569.68     | \$ 24.84       | \$ 50,623.92     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                   | 2038     | m2    | \$ 4.47        | \$ 9,109.86      | \$ 5.00        | \$ 10,190.00     |
| 1.3          | Take up existing bituminous surfaces                                                                                                                                                                                            | 3357     | m2    | \$ 5.37        | \$ 18,027.09     | \$ 6.20        | \$ 20,813.40     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                            |          |       |                |                  |                |                  |
| 2.1          | <u>Secondary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 150mm FCR Base Course<br>- 150mm Select Suubase Course | 8197     | m2    | \$ 195.98      | \$ 1,606,448.06  | \$ 208.82      | \$ 1,711,697.54  |
| 2.2          | <u>Connector Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 200mm Select Suubase Course                            | 2898     | m2    | \$ 182.96      | \$ 530,218.08    | \$ 196.75      | \$ 570,181.50    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                               | 11095    | m2    | \$ 7.78        | \$ 86,319.10     | \$ 10.49       | \$ 116,386.55    |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                  | 68       | tonne | \$ 346.27      | \$ 23,546.36     | \$ 371.90      | \$ 25,289.20     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                               | 1106.5   | m2    | \$ 23.33       | \$ 25,814.65     | \$ 29.16       | \$ 32,265.54     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                      | 14451    | m2    | \$ 23.33       | \$ 337,141.83    | \$ 29.16       | \$ 421,391.16    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                           |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                                | 2213     | LM    | \$ 79.32       | \$ 175,535.16    | \$ 86.01       | \$ 190,340.13    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                        | 2284     | m2    | \$ 110.13      | \$ 251,536.92    | \$ 124.58      | \$ 284,540.72    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                    | 1180     | m2    | \$ 129.36      | \$ 152,644.80    | \$ 141.82      | \$ 167,347.60    |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                                                                                                                                                                                         |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                       | 216      | LM    | \$ 325.26      | \$ 70,256.16     | \$ 365.68      | \$ 78,986.88     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                       | 450      | LM    | \$ 351.04      | \$ 157,968.00    | \$ 394.39      | \$ 177,475.50    |
| 4.2          | <b>Drainage - pits</b>                                                                                                                                                                                                          |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                   | 2        | No.   | \$ 2,926.92    | \$ 5,853.84      | \$ 3,251.72    | \$ 6,503.44      |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                    | 24       | No.   | \$ 3,687.63    | \$ 88,503.12     | \$ 4,175.88    | \$ 100,221.12    |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                     | 2        | No.   | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                    | 1888     | LM    | \$ 33.54       | \$ 63,323.52     | \$ 37.63       | \$ 71,045.44     |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                  |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals                                                                                                                                                                                                                 | 1        | Item  | \$ 366,630.10  | \$ 366,630.10    | \$ 432,166.90  | \$ 432,166.90    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                           | 44       | No.   | \$ 737.55      | \$ 32,452.20     | \$ 832.80      | \$ 36,643.20     |
| 6.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                           | 4652     | m2    | \$ 18.79       | \$ 87,411.08     | \$ 25.18       | \$ 117,137.36    |

|                    |                                             |        |      |                 |                 |                 |                  |
|--------------------|---------------------------------------------|--------|------|-----------------|-----------------|-----------------|------------------|
| 6.3                | Hydroseeding including watering             | 2038   | m2   | \$ 1.10         | \$ 2,241.80     | \$ 1.45         | \$ 2,955.10      |
| 7                  | STREET LIGHTING                             |        |      |                 |                 |                 |                  |
| 7.1                | Street Lighting                             | 23     | No.  | \$ 11,737.38    | \$ 269,959.74   | \$ 13,633.41    | \$ 313,568.43    |
| 7.2                | Erosion protection for lighting cables      | 1206   | LM   | \$ 55.98        | \$ 67,511.88    | \$ 62.98        | \$ 75,953.88     |
| 8                  | MISCELLANEOUS                               |        |      |                 |                 |                 |                  |
| 8.1                | Line marking                                | 1      | Item | \$ 21,789.80    | \$ 21,789.80    | \$ 24,608.33    | \$ 24,608.33     |
| 8.2                | Regulatory Signage                          | 1      | Item | \$ 9,013.54     | \$ 9,013.54     | \$ 11,548.64    | \$ 11,548.64     |
| 8.3                | Works maintenance – up to 1 year            | 1      | Item |                 | INCL            |                 | INCL             |
| 8.4                | Landscape maintenance – 1yr/2 summers       | 1      | Item |                 | INCL            |                 | INCL             |
| 8.5                | Traffic signals 10 year Maintenance Fee     | 1      | Item |                 | INCL            |                 | INCL             |
| 9                  | OTHER                                       |        |      |                 |                 |                 |                  |
| 9.1                | Service Relocations                         |        |      |                 |                 |                 |                  |
| 9.1.1              | Fibre Optic                                 | 1      | Item | \$ 531,097.50   | \$ 531,097.50   | \$ 594,610.50   | \$ 594,610.50    |
| 9.1.2              | Telstra                                     | 1      | Item | \$ 239,043.90   | \$ 239,043.90   | \$ 268,240.70   | \$ 268,240.70    |
| 9.2                | Tree Removal                                |        |      |                 |                 |                 |                  |
| 9.2.1              | Major Tree and Site Clearing incl. grubbing | 1      | Item | \$ 106,616.60   | \$ 106,616.60   | \$ 121,241.40   | \$ 121,241.40    |
| SUB-TOTAL WORKS    |                                             |        |      |                 | \$ 6,334,979.26 |                 | \$ 7,146,825.78  |
| 10                 | DELIVERY                                    |        |      |                 |                 |                 |                  |
| 10.1               | Council Fees                                | 3.25%  |      | \$ 6,334,979.26 | \$ 205,886.83   | \$ 7,146,825.78 | \$ 232,271.84    |
| 10.2               | VicRoads Fees                               | 1.00%  |      | \$ 6,334,979.26 | \$ 63,349.79    | \$ 7,146,825.78 | \$ 71,468.26     |
| 10.3               | Traffic Management                          | 5.00%  |      | \$ 6,334,979.26 | \$ 316,748.96   | \$ 7,146,825.78 | \$ 357,341.29    |
| 10.4               | Environmental Management                    | 0.50%  |      | \$ 6,334,979.26 | \$ 31,674.90    | \$ 7,146,825.78 | \$ 35,734.13     |
| 10.5               | Surveying and Design                        | 5.00%  |      | \$ 6,334,979.26 | \$ 316,748.96   | \$ 7,146,825.78 | \$ 357,341.29    |
| 10.6               | Supervision and Project Management          | 9.00%  |      | \$ 6,334,979.26 | \$ 570,148.13   | \$ 7,146,825.78 | \$ 643,214.32    |
| 10.7               | Site Establishment                          | 2.50%  |      | \$ 6,334,979.26 | \$ 158,374.48   | \$ 7,146,825.78 | \$ 178,670.64    |
| 10.8               | Contingency                                 | 15.00% |      | \$ 6,334,979.26 | \$ 950,246.89   | \$ 7,146,825.78 | \$ 1,072,023.87  |
| SUB-TOTAL DELIVERY |                                             |        |      |                 | \$ 2,613,178.94 |                 | \$ 2,948,065.63  |
| 11                 | TOTAL ESTIMATED COST                        |        |      |                 | \$ 8,948,158.20 |                 | \$ 10,094,891.41 |



| Item         | Description                                                                                                                                                                                                                     | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                                | 1        | Item  | \$ 146,827.50  | \$ 146,827.50    | \$ 164,170.10  | \$ 164,170.10    |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                           | 21613    | m2    | \$ 17.49       | \$ 378,011.37    | \$ 23.33       | \$ 504,231.29    |
| 1.2          | <b>Earthworks</b>                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                     | 2587     | m3    | \$ 40.07       | \$ 103,661.09    | \$ 45.70       | \$ 118,225.90    |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                                 | 24914    | m3    | \$ 25.89       | \$ 645,023.46    | \$ 28.98       | \$ 722,007.72    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                    | 24914    | m3    | \$ 29.06       | \$ 724,000.84    | \$ 33.97       | \$ 846,328.58    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                          | 4854     | m2    | \$ 22.36       | \$ 108,535.44    | \$ 24.84       | \$ 120,573.36    |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                   | 4854     | m2    | \$ 4.47        | \$ 21,697.38     | \$ 5.00        | \$ 24,270.00     |
| 1.3          | Take up existing bituminous surfaces                                                                                                                                                                                            | 4293     | m2    | \$ 5.37        | \$ 23,053.41     | \$ 6.20        | \$ 26,616.60     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                            |          |       |                |                  |                |                  |
| 2.1          | <u>Primary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 75mm Asphalt Intermediate Course<br>- 90mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 150mm FCR Base Course<br>- 200mm Select Suubase Course   | 10303    | m2    | \$ 223.55      | \$ 2,303,235.65  | \$ 238.23      | \$ 2,454,483.69  |
| 2.2          | <u>Secondary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 150mm FCR Base Course<br>- 150mm Select Suubase Course | 8158     | m2    | \$ 195.98      | \$ 1,598,804.84  | \$ 208.82      | \$ 1,703,553.56  |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                               | 18461    | m2    | \$ 7.78        | \$ 143,626.58    | \$ 10.49       | \$ 193,655.89    |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                  | 68       | tonne | \$ 346.27      | \$ 23,546.36     | \$ 371.90      | \$ 25,289.20     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                               | 2097.5   | m2    | \$ 23.33       | \$ 48,934.68     | \$ 29.16       | \$ 61,163.10     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                      | 24471    | m2    | \$ 23.33       | \$ 570,908.43    | \$ 29.16       | \$ 713,574.36    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                           |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                                | 4195     | LM    | \$ 79.32       | \$ 332,747.40    | \$ 86.01       | \$ 360,811.95    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                        | 4597     | m2    | \$ 110.13      | \$ 506,267.61    | \$ 124.58      | \$ 572,694.26    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                    | 1647     | m2    | \$ 129.36      | \$ 213,055.92    | \$ 141.82      | \$ 233,577.54    |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                                                                                                                                                                                         |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                       | 376      | LM    | \$ 325.26      | \$ 122,297.76    | \$ 365.68      | \$ 137,495.68    |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                       | 702      | LM    | \$ 351.04      | \$ 246,430.08    | \$ 394.39      | \$ 276,861.78    |
| 4.2          | <b>Drainage - pits</b>                                                                                                                                                                                                          |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                   | 4        | No.   | \$ 2,926.92    | \$ 11,707.68     | \$ 3,251.72    | \$ 13,006.88     |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                    | 37       | No.   | \$ 3,687.63    | \$ 136,442.31    | \$ 4,175.88    | \$ 154,507.56    |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                     | 4        | No.   | \$ 4,832.23    | \$ 19,328.92     | \$ 5,462.55    | \$ 21,850.20     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                    | 3798     | LM    | \$ 33.54       | \$ 127,384.92    | \$ 37.63       | \$ 142,918.74    |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                  |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals                                                                                                                                                                                                                 | 1        | Item  | \$ 366,630.10  | \$ 366,630.10    | \$ 432,166.90  | \$ 432,166.90    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                           | 74       | No.   | \$ 737.55      | \$ 54,578.70     | \$ 832.80      | \$ 61,627.20     |

|                           |                                                                       |        |      |                  |                         |                  |                         |
|---------------------------|-----------------------------------------------------------------------|--------|------|------------------|-------------------------|------------------|-------------------------|
| 6.2                       | Supply, deliver and lay select turf, Inc. Establishment & maintenance | 16525  | m2   | \$ 18.79         | \$ 310,504.75           | \$ 25.18         | \$ 416,099.50           |
| 6.3                       | Hydroseeding including watering                                       | 4854   | m2   | \$ 1.10          | \$ 5,339.40             | \$ 1.45          | \$ 7,038.30             |
| <b>7</b>                  | <b>STREET LIGHTING</b>                                                |        |      |                  |                         |                  |                         |
| 7.1                       | Street Lighting                                                       | 29     | No.  | \$ 11,737.38     | \$ 340,384.02           | \$ 13,633.41     | \$ 395,368.89           |
| 7.2                       | Erosion protection for lighting cables                                | 2119   | LM   | \$ 55.98         | \$ 118,621.62           | \$ 62.98         | \$ 133,454.62           |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                                                  |        |      |                  |                         |                  |                         |
| 8.1                       | Line marking                                                          | 1      | Item | \$ 36,215.96     | \$ 36,215.96            | \$ 40,892.66     | \$ 40,892.66            |
| 8.2                       | Regulatory Signage                                                    | 1      | Item | \$ 11,024.22     | \$ 11,024.22            | \$ 12,444.92     | \$ 12,444.92            |
| 8.3                       | Works maintenance – up to 1 year                                      | 1      | Item |                  | INCL                    |                  | INCL                    |
| 8.4                       | Landscape maintenance – 1yr/2 summers                                 | 1      | Item |                  | INCL                    |                  | INCL                    |
| 8.5                       | Traffic signals 10 year Maintenance Fee                               | 1      | Item |                  | INCL                    |                  | INCL                    |
| <b>9</b>                  | <b>OTHER</b>                                                          |        |      |                  |                         |                  |                         |
| 9.1                       | <b>Service Relocations</b>                                            |        |      |                  |                         |                  |                         |
| 9.1.1                     | Fibre Optic                                                           | 1      | Item | \$ 207,782.30    | \$ 207,782.30           | \$ 232,503.80    | \$ 232,503.80           |
| 9.1.2                     | Gas Main                                                              | 1      | Item | \$ 202,367.10    | \$ 202,367.10           | \$ 228,450.20    | \$ 228,450.20           |
| 9.1.3                     | Telstra                                                               | 1      | Item | \$ 376,532.30    | \$ 376,532.30           | \$ 421,122.40    | \$ 421,122.40           |
| 9.1.4                     | Watermain                                                             | 1      | Item | \$ 258,032.70    | \$ 258,032.70           | \$ 293,771.90    | \$ 293,771.90           |
| 9.1.5                     | Electrical                                                            | 1      | Item | \$ 776,804.00    | \$ 776,804.00           | \$ 981,228.00    | \$ 981,228.00           |
| 9.2                       | <b>Tree Removal</b>                                                   |        |      |                  |                         |                  |                         |
| 9.2.1                     | Major Tree and Site Clearing incl. grubbing                           | 1      | Item | \$ 206,373.30    | \$ 206,373.30           | \$ 233,788.70    | \$ 233,788.70           |
| <b>SUB-TOTAL WORKS</b>    |                                                                       |        |      |                  | <b>\$ 11,826,720.10</b> |                  | <b>\$ 13,481,825.93</b> |
| <b>10</b>                 | <b>DELIVERY</b>                                                       |        |      |                  |                         |                  |                         |
| 10.1                      | Council Fees                                                          | 3.25%  |      | \$ 11,826,720.10 | \$ 384,368.40           | \$ 13,481,825.93 | \$ 438,159.34           |
| 10.2                      | VicRoads Fees                                                         | 1.00%  |      | \$ 11,826,720.10 | \$ 118,267.20           | \$ 13,481,825.93 | \$ 134,818.26           |
| 10.3                      | Traffic Management                                                    | 5.00%  |      | \$ 11,826,720.10 | \$ 591,336.00           | \$ 13,481,825.93 | \$ 674,091.30           |
| 10.4                      | Environmental Management                                              | 0.50%  |      | \$ 11,826,720.10 | \$ 59,133.60            | \$ 13,481,825.93 | \$ 67,409.13            |
| 10.5                      | Surveying and Design                                                  | 5.00%  |      | \$ 11,826,720.10 | \$ 591,336.00           | \$ 13,481,825.93 | \$ 674,091.30           |
| 10.6                      | Supervision and Project Management                                    | 9.00%  |      | \$ 11,826,720.10 | \$ 1,064,404.81         | \$ 13,481,825.93 | \$ 1,213,364.33         |
| 10.7                      | Site Establishment                                                    | 2.50%  |      | \$ 11,826,720.10 | \$ 295,668.00           | \$ 13,481,825.93 | \$ 337,045.65           |
| 10.8                      | Contingency                                                           | 15.00% |      | \$ 11,826,720.10 | \$ 1,774,008.01         | \$ 13,481,825.93 | \$ 2,022,273.89         |
| <b>SUB-TOTAL DELIVERY</b> |                                                                       |        |      |                  | <b>\$ 4,878,522.04</b>  |                  | <b>\$ 5,561,253.20</b>  |
| <b>11</b>                 | <b>TOTAL ESTIMATED COST</b>                                           |        |      |                  | <b>\$ 16,705,242.13</b> |                  | <b>\$ 19,043,079.13</b> |



| Item         | Description                                                                                                                                                                                                                     | Quantity | Unit | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                                 |          |      |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                                 |          |      |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                                | 1        | Item | \$ 31,978.21   | \$ 31,978.21     | \$ 35,972.02   | \$ 35,972.02     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                           | 9115     | m2   | \$ 17.49       | \$ 159,421.35    | \$ 23.33       | \$ 212,652.95    |
| 1.2          | Earthworks                                                                                                                                                                                                                      |          |      |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                     | 33       | m3   | \$ 40.07       | \$ 1,322.31      | \$ 45.70       | \$ 1,508.10      |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                                 | 15918    | m3   | \$ 25.89       | \$ 412,117.02    | \$ 28.98       | \$ 461,303.64    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                    | 15918    | m3   | \$ 29.06       | \$ 462,577.08    | \$ 33.97       | \$ 540,734.46    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                          | 2379     | m2   | \$ 22.36       | \$ 53,194.44     | \$ 24.84       | \$ 59,094.36     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                   | 2379     | m2   | \$ 4.47        | \$ 10,634.13     | \$ 5.00        | \$ 11,895.00     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                            |          |      |                |                  |                |                  |
| 2.1          | <u>Secondary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 150mm FCR Base Course<br>- 150mm Select Suubase Course | 9004     | m2   | \$ 195.98      | \$ 1,764,603.92  | \$ 208.82      | \$ 1,880,215.28  |
| 2.2          | <u>Connector Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 200mm Select Suubase Course                            | 1691     | m2   | \$ 182.96      | \$ 309,385.36    | \$ 196.75      | \$ 332,704.25    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                               | 10695    | m2   | \$ 7.78        | \$ 83,207.10     | \$ 10.49       | \$ 112,190.55    |
| 2.4          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                               | 1057     | m2   | \$ 23.33       | \$ 24,659.81     | \$ 29.16       | \$ 30,822.12     |
| 2.5          | Crushed rock capping layer                                                                                                                                                                                                      | 13189    | m2   | \$ 23.33       | \$ 307,699.37    | \$ 29.16       | \$ 384,591.24    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                           |          |      |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                                | 2114     | LM   | \$ 79.32       | \$ 167,682.48    | \$ 86.01       | \$ 181,825.14    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                        | 2494     | m2   | \$ 110.13      | \$ 274,664.22    | \$ 124.58      | \$ 310,702.52    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                    | 103      | m2   | \$ 129.36      | \$ 13,324.08     | \$ 141.82      | \$ 14,607.46     |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                                 |          |      |                |                  |                |                  |
| 4.1          | Drainage - pipes                                                                                                                                                                                                                |          |      |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                       | 216      | LM   | \$ 325.26      | \$ 70,256.16     | \$ 365.68      | \$ 78,986.88     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                       | 450      | LM   | \$ 351.04      | \$ 157,968.00    | \$ 394.39      | \$ 177,475.50    |
| 4.2          | Drainage - pits                                                                                                                                                                                                                 |          |      |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                   | 2        | No.  | \$ 2,926.92    | \$ 5,853.84      | \$ 3,251.72    | \$ 6,503.44      |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                    | 24       | No.  | \$ 3,687.63    | \$ 88,503.12     | \$ 4,175.88    | \$ 100,221.12    |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                     | 2        | No.  | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                    | 2114     | LM   | \$ 33.54       | \$ 70,903.56     | \$ 37.63       | \$ 79,549.82     |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                  |          |      |                |                  |                |                  |
| 5.1          | Traffic Signals                                                                                                                                                                                                                 | 1        | Item | \$ 366,630.10  | \$ 366,630.10    | \$ 432,166.90  | \$ 432,166.90    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                                |          |      |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                           | 44       | No.  | \$ 737.55      | \$ 32,452.20     | \$ 832.80      | \$ 36,643.20     |
| 6.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                           | 6633     | m2   | \$ 18.79       | \$ 124,634.07    | \$ 25.18       | \$ 167,018.94    |
| 6.3          | Hydroseeding including watering                                                                                                                                                                                                 | 2379     | m2   | \$ 1.10        | \$ 2,616.90      | \$ 1.45        | \$ 3,449.55      |
| <b>7</b>     | <b>STREET LIGHTING</b>                                                                                                                                                                                                          |          |      |                |                  |                |                  |

|                           |                                             |        |      |                 |                        |                 |                        |
|---------------------------|---------------------------------------------|--------|------|-----------------|------------------------|-----------------|------------------------|
| 7.1                       | Street Lighting                             | 23     | No.  | \$ 11,737.38    | \$ 269,959.74          | \$ 13,633.41    | \$ 313,568.43          |
| 7.2                       | Erosion protection for lighting cables      | 1359   | LM   | \$ 55.98        | \$ 76,076.82           | \$ 62.98        | \$ 85,589.82           |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                        |        |      |                 |                        |                 |                        |
| 8.1                       | Line marking                                | 1      | Item | \$ 20,049.36    | \$ 20,049.36           | \$ 23,783.75    | \$ 23,783.75           |
| 8.2                       | Regulatory Signage                          | 1      | Item | \$ 9,013.54     | \$ 9,013.54            | \$ 11,548.64    | \$ 11,548.64           |
| 8.3                       | Works maintenance – up to 1 year            | 1      | Item |                 | INCL                   |                 | INCL                   |
| 8.4                       | Landscape maintenance – 1yr/2 summers       | 1      | Item |                 | INCL                   |                 | INCL                   |
| 8.5                       | Traffic signals 10 year Maintenance Fee     | 1      | Item |                 | INCL                   |                 | INCL                   |
| <b>9</b>                  | <b>OTHER</b>                                |        |      |                 |                        |                 |                        |
| 9.1                       | <b>Tree Removal</b>                         |        |      |                 |                        |                 |                        |
| 9.1.1                     | Major Tree and Site Clearing incl. grubbing | 1      | Item | \$ 66,043.36    | \$ 66,043.36           | \$ 73,308.58    | \$ 73,308.58           |
| <b>SUB-TOTAL WORKS</b>    |                                             |        |      |                 | <b>\$ 5,447,096.11</b> |                 | <b>\$ 6,171,558.76</b> |
| <b>10</b>                 | <b>DELIVERY</b>                             |        |      |                 |                        |                 |                        |
| 10.1                      | Council Fees                                | 3.25%  |      | \$ 5,447,096.11 | \$ 177,030.62          | \$ 6,171,558.76 | \$ 200,575.66          |
| 10.2                      | VicRoads Fees                               | 1.00%  |      | \$ 5,447,096.11 | \$ 54,470.96           | \$ 6,171,558.76 | \$ 61,715.59           |
| 10.3                      | Traffic Management                          | 5.00%  |      | \$ 5,447,096.11 | \$ 272,354.81          | \$ 6,171,558.76 | \$ 308,577.94          |
| 10.4                      | Environmental Management                    | 0.50%  |      | \$ 5,447,096.11 | \$ 27,235.48           | \$ 6,171,558.76 | \$ 30,857.79           |
| 10.5                      | Surveying and Design                        | 5.00%  |      | \$ 5,447,096.11 | \$ 272,354.81          | \$ 6,171,558.76 | \$ 308,577.94          |
| 10.6                      | Supervision and Project Management          | 9.00%  |      | \$ 5,447,096.11 | \$ 490,238.65          | \$ 6,171,558.76 | \$ 555,440.29          |
| 10.7                      | Site Establishment                          | 2.50%  |      | \$ 5,447,096.11 | \$ 136,177.40          | \$ 6,171,558.76 | \$ 154,288.97          |
| 10.8                      | Contingency                                 | 15.00% |      | \$ 5,447,096.11 | \$ 817,064.42          | \$ 6,171,558.76 | \$ 925,733.81          |
| <b>SUB-TOTAL DELIVERY</b> |                                             |        |      |                 | <b>\$ 2,246,927.15</b> |                 | <b>\$ 2,545,767.99</b> |
| <b>11</b>                 | <b>TOTAL ESTIMATED COST</b>                 |        |      |                 | <b>\$ 7,694,023.26</b> |                 | <b>\$ 8,717,326.75</b> |



| Item         | Description                                                                                                                                                                                                                     | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                                | 1        | Item  | \$ 54,513.73   | \$ 54,513.73     | \$ 61,570.93   | \$ 61,570.93     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                           | 8285     | m2    | \$ 17.49       | \$ 144,904.65    | \$ 23.33       | \$ 193,289.05    |
| 1.2          | <b>Earthworks</b>                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                     | 945      | m3    | \$ 40.07       | \$ 37,866.15     | \$ 45.70       | \$ 43,186.50     |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                                 | 7515     | m3    | \$ 25.89       | \$ 194,563.35    | \$ 28.98       | \$ 217,784.70    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                    | 7515     | m3    | \$ 29.06       | \$ 218,385.90    | \$ 33.97       | \$ 255,284.55    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                          | 1603     | m2    | \$ 22.36       | \$ 35,843.08     | \$ 24.84       | \$ 39,818.52     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                   | 1603     | m2    | \$ 4.47        | \$ 7,165.41      | \$ 5.00        | \$ 8,015.00      |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                            |          |       |                |                  |                |                  |
| 2.1          | <u>Secondary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 150mm FCR Base Course<br>- 150mm Select Suubase Course | 7732     | m2    | \$ 195.98      | \$ 1,515,317.36  | \$ 208.82      | \$ 1,614,596.24  |
| 2.2          | <u>Connector Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 200mm Select Suubase Course                            | 1291     | m2    | \$ 182.96      | \$ 236,201.36    | \$ 196.75      | \$ 254,004.25    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                               | 9023     | m2    | \$ 7.78        | \$ 70,198.94     | \$ 10.49       | \$ 94,651.27     |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                  | 32       | tonne | \$ 346.27      | \$ 11,080.64     | \$ 371.90      | \$ 11,900.80     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                               | 876      | m2    | \$ 23.33       | \$ 20,437.08     | \$ 29.16       | \$ 25,544.16     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                      | 11184    | m2    | \$ 23.33       | \$ 260,922.72    | \$ 29.16       | \$ 326,125.44    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                           |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                                | 1752     | LM    | \$ 79.32       | \$ 138,968.64    | \$ 86.01       | \$ 150,689.52    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                        | 1743     | m2    | \$ 110.13      | \$ 191,956.59    | \$ 124.58      | \$ 217,142.94    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                    | 530      | m2    | \$ 129.36      | \$ 68,560.80     | \$ 141.82      | \$ 75,164.60     |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                                 |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                                                                                                                                                                                         |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                       | 168      | LM    | \$ 325.26      | \$ 54,643.68     | \$ 365.68      | \$ 61,434.24     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                       | 430      | LM    | \$ 351.04      | \$ 150,947.20    | \$ 394.39      | \$ 169,587.70    |
| 4.2          | <b>Drainage - pits</b>                                                                                                                                                                                                          |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                   | 2        | No.   | \$ 2,926.92    | \$ 5,853.84      | \$ 3,251.72    | \$ 6,503.44      |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                    | 22       | No.   | \$ 3,687.63    | \$ 81,127.86     | \$ 4,175.88    | \$ 91,869.36     |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                     | 2        | No.   | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                    | 1605     | LM    | \$ 33.54       | \$ 53,831.70     | \$ 37.63       | \$ 60,396.15     |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                  |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals - T-Intersection                                                                                                                                                                                                | 1        | Item  | \$ 270,201.90  | \$ 270,201.90    | \$ 304,163.40  | \$ 304,163.40    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                           | 13       | No.   | \$ 737.55      | \$ 9,588.15      | \$ 832.80      | \$ 10,826.40     |
| 6.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                           | 6570     | m2    | \$ 18.79       | \$ 123,450.30    | \$ 25.18       | \$ 165,432.60    |
| 6.3          | Hydroseeding including watering                                                                                                                                                                                                 | 1603     | m2    | \$ 1.10        | \$ 1,763.30      | \$ 1.45        | \$ 2,324.35      |

|                           |                                         |        |      |                 |                        |                 |                        |
|---------------------------|-----------------------------------------|--------|------|-----------------|------------------------|-----------------|------------------------|
| <b>7</b>                  | <b>STREET LIGHTING</b>                  |        |      |                 |                        |                 |                        |
| 7.1                       | Street Lighting                         | 20     | No.  | \$ 11,737.38    | \$ 234,747.60          | \$ 13,633.41    | \$ 272,668.20          |
| 7.2                       | Erosion protection for lighting cables  | 1186   | LM   | \$ 55.98        | \$ 66,392.28           | \$ 62.98        | \$ 74,694.28           |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                    |        |      |                 |                        |                 |                        |
| 8.1                       | Line marking                            | 1      | Item | \$ 17,634.90    | \$ 17,634.90           | \$ 19,989.84    | \$ 19,989.84           |
| 8.2                       | Regulatory Signage                      | 1      | Item | \$ 8,083.96     | \$ 8,083.96            | \$ 9,167.91     | \$ 9,167.91            |
| 8.3                       | Works maintenance – up to 1 year        | 1      | Item |                 | INCL                   |                 | INCL                   |
| 8.4                       | Landscape maintenance – 1yr/2 summers   | 1      | Item |                 | INCL                   |                 | INCL                   |
| 8.5                       | Traffic signals 10 year Maintenance Fee | 1      | Item |                 | INCL                   |                 | INCL                   |
| <b>SUB-TOTAL WORKS</b>    |                                         |        |      |                 | <b>\$ 4,294,817.53</b> |                 | <b>\$ 4,848,751.44</b> |
| <b>9</b>                  | <b>DELIVERY</b>                         |        |      |                 |                        |                 |                        |
| 9.1                       | Council Fees                            | 3.25%  |      | \$ 4,294,817.53 | \$ 139,581.57          | \$ 4,848,751.44 | \$ 157,584.42          |
| 9.2                       | VicRoads Fees                           | 1.00%  |      | \$ 4,294,817.53 | \$ 42,948.18           | \$ 4,848,751.44 | \$ 48,487.51           |
| 9.3                       | Traffic Management                      | 5.00%  |      | \$ 4,294,817.53 | \$ 214,740.88          | \$ 4,848,751.44 | \$ 242,437.57          |
| 9.4                       | Environmental Management                | 0.50%  |      | \$ 4,294,817.53 | \$ 21,474.09           | \$ 4,848,751.44 | \$ 24,243.76           |
| 9.5                       | Surveying and Design                    | 5.00%  |      | \$ 4,294,817.53 | \$ 214,740.88          | \$ 4,848,751.44 | \$ 242,437.57          |
| 9.6                       | Supervision and Project Management      | 9.00%  |      | \$ 4,294,817.53 | \$ 386,533.58          | \$ 4,848,751.44 | \$ 436,387.63          |
| 9.7                       | Site Establishment                      | 2.50%  |      | \$ 4,294,817.53 | \$ 107,370.44          | \$ 4,848,751.44 | \$ 121,218.79          |
| 9.8                       | Contingency                             | 15.00% |      | \$ 4,294,817.53 | \$ 644,222.63          | \$ 4,848,751.44 | \$ 727,312.72          |
| <b>SUB-TOTAL DELIVERY</b> |                                         |        |      |                 | <b>\$ 1,771,612.23</b> |                 | <b>\$ 2,000,109.97</b> |
| <b>11</b>                 | <b>TOTAL ESTIMATED COST</b>             |        |      |                 | <b>\$ 6,066,429.76</b> |                 | <b>\$ 6,848,861.41</b> |



| Item         | Description                                                                                                                                                                                                                   | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                              | 1        | Item  | \$ 113,440.60  | \$ 113,440.60    | \$ 128,219.40  | \$ 128,219.40    |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                         | 15582    | m2    | \$ 17.49       | \$ 272,529.18    | \$ 23.33       | \$ 363,528.06    |
| 1.2          | <b>Earthworks</b>                                                                                                                                                                                                             |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                   | 735      | m3    | \$ 40.07       | \$ 29,451.45     | \$ 45.70       | \$ 33,589.50     |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                               | 14600    | m3    | \$ 25.89       | \$ 377,994.00    | \$ 28.98       | \$ 423,108.00    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                  | 14600    | m3    | \$ 29.06       | \$ 424,276.00    | \$ 33.97       | \$ 495,962.00    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                        | 3737     | m2    | \$ 22.36       | \$ 83,559.32     | \$ 24.84       | \$ 92,827.08     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                 | 3737     | m2    | \$ 4.47        | \$ 16,704.39     | \$ 5.00        | \$ 18,685.00     |
| 1.3          | Take up existing bituminous surfaces                                                                                                                                                                                          | 3716     | m2    | \$ 5.37        | \$ 19,954.92     | \$ 6.20        | \$ 23,039.20     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                          |          |       |                |                  |                |                  |
| 2.1          | <b>Primary Arterial</b><br>- 40mm Asphalt Wearing Course<br>- 75mm Asphalt Intermediate Course<br>- 90mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 150mm FCR Base Course<br>- 200mm Select Suubase Course | 10057    | m2    | \$ 223.55      | \$ 2,248,242.35  | \$ 238.23      | \$ 2,395,879.11  |
| 2.2          | <b>Connector Arterial</b><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 200mm Select Suubase Course                          | 3225     | m2    | \$ 182.96      | \$ 590,046.00    | \$ 196.75      | \$ 634,518.75    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                             | 13282    | m2    | \$ 7.78        | \$ 103,333.96    | \$ 10.49       | \$ 139,328.18    |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                | 68       | tonne | \$ 346.27      | \$ 23,546.36     | \$ 371.90      | \$ 25,289.20     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                             | 1548.5   | m2    | \$ 23.33       | \$ 36,126.51     | \$ 29.16       | \$ 45,154.26     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                    | 18617    | m2    | \$ 23.33       | \$ 434,334.61    | \$ 29.16       | \$ 542,871.72    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                         |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                              | 3097     | LM    | \$ 79.32       | \$ 245,654.04    | \$ 86.01       | \$ 266,372.97    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                      | 3541     | m2    | \$ 110.13      | \$ 389,970.33    | \$ 124.58      | \$ 441,137.78    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                  | 2007     | m2    | \$ 129.36      | \$ 259,625.52    | \$ 141.82      | \$ 284,632.74    |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                                                                                                                                                                                       |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                     | 258      | LM    | \$ 325.26      | \$ 83,917.08     | \$ 365.68      | \$ 94,345.44     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                     | 409      | LM    | \$ 351.04      | \$ 143,575.36    | \$ 394.39      | \$ 161,305.51    |
| 4.2          | <b>Drainage - pits</b>                                                                                                                                                                                                        |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                 | 2        | No.   | \$ 2,926.92    | \$ 5,853.84      | \$ 3,251.72    | \$ 6,503.44      |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                  | 22       | No.   | \$ 3,687.63    | \$ 81,127.86     | \$ 4,175.88    | \$ 91,869.36     |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                   | 2        | No.   | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                  | 2635     | LM    | \$ 33.54       | \$ 88,377.90     | \$ 37.63       | \$ 99,155.05     |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals                                                                                                                                                                                                               | 1        | Item  | \$ 366,630.10  | \$ 366,630.10    | \$ 432,166.90  | \$ 432,166.90    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                              |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                         | 54       | No.   | \$ 737.55      | \$ 39,827.70     | \$ 832.80      | \$ 44,971.20     |
| 6.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                         | 11633    | m2    | \$ 18.79       | \$ 218,584.07    | \$ 25.18       | \$ 292,918.94    |



|                           |                                             |        |      |                 |                         |                  |                         |
|---------------------------|---------------------------------------------|--------|------|-----------------|-------------------------|------------------|-------------------------|
| 6.3                       | Hydroseeding including watering             | 3737   | m2   | \$ 1.10         | \$ 4,110.70             | \$ 1.45          | \$ 5,418.65             |
| <b>7</b>                  | <b>STREET LIGHTING</b>                      |        |      |                 |                         |                  |                         |
| 7.1                       | Street Lighting                             | 25     | No.  | \$ 11,737.38    | \$ 293,434.50           | \$ 13,633.41     | \$ 340,835.25           |
| 7.2                       | Erosion protection for lighting cables      | 1442   | LM   | \$ 55.98        | \$ 80,723.16            | \$ 62.98         | \$ 90,817.16            |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                        |        |      |                 |                         |                  |                         |
| 8.1                       | Line marking                                | 1      | Item | \$ 26,190.98    | \$ 26,190.98            | \$ 29,594.52     | \$ 29,594.52            |
| 8.2                       | Regulatory Signage                          | 1      | Item | \$ 9,538.91     | \$ 9,538.91             | \$ 10,761.67     | \$ 10,761.67            |
| 8.3                       | Works maintenance – up to 1 year            | 1      | Item |                 | INCL                    |                  | INCL                    |
| 8.4                       | Landscape maintenance – 1yr/2 summers       | 1      | Item |                 | INCL                    |                  | INCL                    |
| 8.5                       | Traffic signals 10 year Maintenance Fee     | 1      | Item |                 | INCL                    |                  | INCL                    |
| <b>9</b>                  | <b>OTHER</b>                                |        |      |                 |                         |                  |                         |
| 9.1                       | <b>Service Relocations</b>                  |        |      |                 |                         |                  |                         |
| 9.1.1                     | Gas Main                                    | 1      | Item | \$ 127,436.40   | \$ 127,436.40           | \$ 143,469.60    | \$ 143,469.60           |
| 9.1.2                     | Telstra                                     | 1      | Item | \$ 299,525.10   | \$ 299,525.10           | \$ 338,114.50    | \$ 338,114.50           |
| 9.1.3                     | Watermain                                   | 1      | Item | \$ 251,383.90   | \$ 251,383.90           | \$ 284,538.70    | \$ 284,538.70           |
| 9.1.4                     | Electrical                                  | 1      | Item | \$ 761,540.00   | \$ 761,540.00           | \$ 992,551.00    | \$ 992,551.00           |
| 9.2                       | <b>Tree Removal</b>                         |        |      |                 |                         |                  |                         |
| 9.2.1                     | Major Tree and Site Clearing incl. grubbing | 1      | Item | \$ 166,185.20   | \$ 166,185.20           | \$ 186,192.50    | \$ 186,192.50           |
| <b>SUB-TOTAL WORKS</b>    |                                             |        |      |                 | <b>\$ 8,726,416.76</b>  |                  | <b>\$ 10,010,597.44</b> |
| <b>10</b>                 | <b>DELIVERY</b>                             |        |      |                 |                         |                  |                         |
| 10.1                      | Council Fees                                | 3.25%  |      | \$ 8,726,416.76 | \$ 283,608.54           | \$ 10,010,597.44 | \$ 325,344.42           |
| 10.2                      | VicRoads Fees                               | 1.00%  |      | \$ 8,726,416.76 | \$ 87,264.17            | \$ 10,010,597.44 | \$ 100,105.97           |
| 10.3                      | Traffic Management                          | 5.00%  |      | \$ 8,726,416.76 | \$ 436,320.84           | \$ 10,010,597.44 | \$ 500,529.87           |
| 10.4                      | Environmental Management                    | 0.50%  |      | \$ 8,726,416.76 | \$ 43,632.08            | \$ 10,010,597.44 | \$ 50,052.99            |
| 10.5                      | Surveying and Design                        | 5.00%  |      | \$ 8,726,416.76 | \$ 436,320.84           | \$ 10,010,597.44 | \$ 500,529.87           |
| 10.6                      | Supervision and Project Management          | 9.00%  |      | \$ 8,726,416.76 | \$ 785,377.51           | \$ 10,010,597.44 | \$ 900,953.77           |
| 10.7                      | Site Establishment                          | 2.50%  |      | \$ 8,726,416.76 | \$ 218,160.42           | \$ 10,010,597.44 | \$ 250,264.94           |
| 10.8                      | Contingency                                 | 15.00% |      | \$ 8,726,416.76 | \$ 1,308,962.51         | \$ 10,010,597.44 | \$ 1,501,589.62         |
| <b>SUB-TOTAL DELIVERY</b> |                                             |        |      |                 | <b>\$ 3,599,646.91</b>  |                  | <b>\$ 4,129,371.44</b>  |
| <b>11</b>                 | <b>TOTAL ESTIMATED COST</b>                 |        |      |                 | <b>\$ 12,326,063.67</b> |                  | <b>\$ 14,139,968.88</b> |

| Item         | Description                                                                                                                                                                                                                   | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                              | 1        | Item  | \$ 72,525.35   | \$ 72,525.35     | \$ 81,806.92   | \$ 81,806.92     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                         | 15241    | m2    | \$ 17.49       | \$ 266,565.09    | \$ 23.33       | \$ 355,572.53    |
| 1.2          | Earthworks                                                                                                                                                                                                                    |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                   | 72       | m3    | \$ 40.07       | \$ 2,885.04      | \$ 45.70       | \$ 3,290.40      |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                               | 19544    | m3    | \$ 25.89       | \$ 505,994.16    | \$ 28.98       | \$ 566,385.12    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                  | 19544    | m3    | \$ 29.06       | \$ 567,948.64    | \$ 33.97       | \$ 663,909.68    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                        | 2995     | m2    | \$ 22.36       | \$ 66,968.20     | \$ 24.84       | \$ 74,395.80     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                 | 2995     | m2    | \$ 4.47        | \$ 13,387.65     | \$ 5.00        | \$ 14,975.00     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                          |          |       |                |                  |                |                  |
| 2.1          | <b>Primary Arterial</b><br>- 40mm Asphalt Wearing Course<br>- 75mm Asphalt Intermediate Course<br>- 90mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 150mm FCR Base Course<br>- 200mm Select Suubase Course | 7731     | m2    | \$ 223.55      | \$ 1,728,265.05  | \$ 238.23      | \$ 1,841,756.13  |
| 2.2          | <b>Connector Arterial</b><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTRC Base Course<br>- 200mm Select Suubase Course                          | 1355     | m2    | \$ 182.96      | \$ 247,910.80    | \$ 196.75      | \$ 266,596.25    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                             | 9086     | m2    | \$ 7.78        | \$ 70,689.08     | \$ 10.49       | \$ 95,312.14     |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                | 28       | tonne | \$ 346.27      | \$ 9,695.56      | \$ 371.90      | \$ 10,413.20     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                             | 1076     | m2    | \$ 23.33       | \$ 25,103.08     | \$ 29.16       | \$ 31,376.16     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                    | 12715    | m2    | \$ 23.33       | \$ 296,640.95    | \$ 29.16       | \$ 370,769.40    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                         |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                              | 2152     | LM    | \$ 79.32       | \$ 170,696.64    | \$ 86.01       | \$ 185,093.52    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                      | 3273     | m2    | \$ 110.13      | \$ 360,455.49    | \$ 124.58      | \$ 407,750.34    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                  | 613      | m2    | \$ 129.36      | \$ 79,297.68     | \$ 141.82      | \$ 86,935.66     |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                                                                                                                                                                                       |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                     | 148      | LM    | \$ 325.26      | \$ 48,138.48     | \$ 365.68      | \$ 54,120.64     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                     | 401      | LM    | \$ 351.04      | \$ 140,767.04    | \$ 394.39      | \$ 158,150.39    |
| 4.2          | <b>Drainage - pits</b>                                                                                                                                                                                                        |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                 | 4        | No.   | \$ 2,926.92    | \$ 11,707.68     | \$ 3,251.72    | \$ 13,006.88     |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                  | 21       | No.   | \$ 3,687.63    | \$ 77,440.23     | \$ 4,175.88    | \$ 87,693.48     |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                   | 2        | No.   | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                  | 2017     | LM    | \$ 33.54       | \$ 67,650.18     | \$ 37.63       | \$ 75,899.71     |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals - T-Intersection                                                                                                                                                                                              | 1        | Item  | \$ 270,201.90  | \$ 270,201.90    | \$ 304,163.40  | \$ 304,163.40    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                              |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                         | 26       | No.   | \$ 737.55      | \$ 19,176.30     | \$ 832.80      | \$ 21,652.80     |

|                           |                                                                       |        |      |                 |                        |                 |                        |
|---------------------------|-----------------------------------------------------------------------|--------|------|-----------------|------------------------|-----------------|------------------------|
| 6.2                       | Supply, deliver and lay select turf, Inc. Establishment & maintenance | 11990  | m2   | \$ 18.79        | \$ 225,292.10          | \$ 25.18        | \$ 301,908.20          |
| 6.3                       | Hydroseeding including watering                                       | 2995   | m2   | \$ 1.10         | \$ 3,294.50            | \$ 1.45         | \$ 4,342.75            |
| <b>7</b>                  | <b>STREET LIGHTING</b>                                                |        |      |                 |                        |                 |                        |
| 7.1                       | Street Lighting                                                       | 22     | No.  | \$ 11,737.38    | \$ 258,222.36          | \$ 13,633.41    | \$ 299,935.02          |
| 7.2                       | Erosion protection for lighting cables                                | 1262   | LM   | \$ 55.98        | \$ 70,646.76           | \$ 62.98        | \$ 79,480.76           |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                                                  |        |      |                 |                        |                 |                        |
| 8.1                       | Line marking                                                          | 1      | Item | \$ 17,966.81    | \$ 17,966.81           | \$ 20,096.49    | \$ 20,096.49           |
| 8.2                       | Regulatory Signage                                                    | 1      | Item | \$ 8,497.75     | \$ 8,497.75            | \$ 9,682.96     | \$ 9,682.96            |
| 8.3                       | Works maintenance – up to 1 year                                      | 1      | Item |                 | INCL.                  |                 | INCL.                  |
| 8.4                       | Landscape maintenance – 1yr/2 summers                                 | 1      | Item |                 | INCL.                  |                 | INCL.                  |
| 8.5                       | Traffic signals 10 year Maintenance Fee                               | 1      | Item |                 | INCL.                  |                 | INCL.                  |
| <b>9</b>                  | <b>OTHER</b>                                                          |        |      |                 |                        |                 |                        |
| 9.1                       | <b>Service Relocations</b>                                            |        |      |                 |                        |                 |                        |
| 9.1.1                     | Telstra                                                               | 1      | Item | \$ 78,115.19    | \$ 78,115.19           | \$ 86,766.42    | \$ 86,766.42           |
| <b>SUB-TOTAL WORKS</b>    |                                                                       |        |      |                 | <b>\$ 5,791,810.20</b> |                 | <b>\$ 6,584,163.25</b> |
| <b>10</b>                 | <b>DELIVERY</b>                                                       |        |      |                 |                        |                 |                        |
| 10.1                      | Council Fees                                                          | 3.25%  |      | \$ 5,791,810.20 | \$ 188,233.83          | \$ 6,584,163.25 | \$ 213,985.31          |
| 10.2                      | VicRoads Fees                                                         | 1.00%  |      | \$ 5,791,810.20 | \$ 57,918.10           | \$ 6,584,163.25 | \$ 65,841.63           |
| 10.3                      | Traffic Management                                                    | 5.00%  |      | \$ 5,791,810.20 | \$ 289,590.51          | \$ 6,584,163.25 | \$ 329,208.16          |
| 10.4                      | Environmental Management                                              | 0.50%  |      | \$ 5,791,810.20 | \$ 28,959.05           | \$ 6,584,163.25 | \$ 32,920.82           |
| 10.5                      | Surveying and Design                                                  | 5.00%  |      | \$ 5,791,810.20 | \$ 289,590.51          | \$ 6,584,163.25 | \$ 329,208.16          |
| 10.6                      | Supervision and Project Management                                    | 9.00%  |      | \$ 5,791,810.20 | \$ 521,262.92          | \$ 6,584,163.25 | \$ 592,574.69          |
| 10.7                      | Site Establishment                                                    | 2.50%  |      | \$ 5,791,810.20 | \$ 144,795.26          | \$ 6,584,163.25 | \$ 164,604.08          |
| 10.8                      | Contingency                                                           | 15.00% |      | \$ 5,791,810.20 | \$ 868,771.53          | \$ 6,584,163.25 | \$ 987,624.49          |
| <b>SUB-TOTAL DELIVERY</b> |                                                                       |        |      |                 | <b>\$ 2,389,121.71</b> |                 | <b>\$ 2,715,967.34</b> |
| <b>11</b>                 | <b>TOTAL ESTIMATED COST</b>                                           |        |      |                 | <b>\$ 8,180,931.91</b> |                 | <b>\$ 9,300,130.59</b> |

| Item         | Description                                                                                                                                                                                                                   | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                              | 1        | Item  | \$ 234,930.70  | \$ 234,930.70    | \$ 258,221.00  | \$ 258,221.00    |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                         | 25952    | m2    | \$ 17.49       | \$ 453,900.48    | \$ 23.33       | \$ 605,460.16    |
| 1.2          | <b>Earthworks</b>                                                                                                                                                                                                             |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                   | 3854     | m3    | \$ 40.07       | \$ 154,429.78    | \$ 45.70       | \$ 176,127.80    |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                               | 10845    | m3    | \$ 25.89       | \$ 280,777.05    | \$ 28.98       | \$ 314,288.10    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                  | 10845    | m3    | \$ 29.06       | \$ 315,155.70    | \$ 33.97       | \$ 368,404.65    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                        | 3709     | m2    | \$ 22.36       | \$ 82,933.24     | \$ 24.84       | \$ 92,131.56     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                 | 3709     | m2    | \$ 4.47        | \$ 16,579.23     | \$ 5.00        | \$ 18,545.00     |
| 1.3          | Take up existing bituminous surfaces                                                                                                                                                                                          | 301      | m2    | \$ 5.37        | \$ 1,616.37      | \$ 6.20        | \$ 1,866.20      |
| 1.4          | Demolition of existing structure within limit of works                                                                                                                                                                        | 1        | Item  | \$ 42,461.35   | \$ 42,461.35     | \$ 48,026.21   | \$ 48,026.21     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                          |          |       |                |                  |                |                  |
| 2.1          | <u>Primary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 75mm Asphalt Intermediate Course<br>- 90mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 150mm FCR Base Course<br>- 200mm Select Suubase Course | 17901    | m2    | \$ 223.55      | \$ 4,001,768.55  | \$ 238.23      | \$ 4,264,555.23  |
| 2.2          | <u>Connector Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 200mm Select Suubase Course                          | 1934     | m2    | \$ 182.96      | \$ 353,844.64    | \$ 196.75      | \$ 380,514.50    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                             | 19835    | m2    | \$ 7.78        | \$ 154,316.30    | \$ 10.49       | \$ 208,069.15    |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                | 62       | tonne | \$ 346.27      | \$ 21,468.74     | \$ 371.90      | \$ 23,057.80     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                             | 2099.5   | m2    | \$ 23.33       | \$ 48,981.34     | \$ 29.16       | \$ 61,221.42     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                    | 26782    | m2    | \$ 23.33       | \$ 624,824.06    | \$ 29.16       | \$ 780,963.12    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                         |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                              | 4199     | LM    | \$ 79.32       | \$ 333,064.68    | \$ 86.01       | \$ 361,155.99    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                      | 5874     | m2    | \$ 110.13      | \$ 646,903.62    | \$ 124.58      | \$ 731,782.92    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                  | 1342     | m2    | \$ 129.36      | \$ 173,601.12    | \$ 141.82      | \$ 190,322.44    |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                                                                                                                                                                                       |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                     | 336      | LM    | \$ 325.26      | \$ 109,287.36    | \$ 365.68      | \$ 122,868.48    |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                     | 826      | LM    | \$ 351.04      | \$ 289,959.04    | \$ 394.39      | \$ 325,766.14    |
| 4.2          | <b>Drainage - pits</b>                                                                                                                                                                                                        |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                 | 16       | No.   | \$ 2,926.92    | \$ 46,830.72     | \$ 3,251.72    | \$ 52,027.52     |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                  | 30       | No.   | \$ 3,687.63    | \$ 110,628.90    | \$ 4,175.88    | \$ 125,276.40    |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                   | 4        | No.   | \$ 4,832.23    | \$ 19,328.92     | \$ 5,462.55    | \$ 21,850.20     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                  | 3864     | LM    | \$ 33.54       | \$ 129,598.56    | \$ 37.63       | \$ 145,402.32    |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals                                                                                                                                                                                                               | 1        | Item  | \$ 366,630.10  | \$ 366,630.10    | \$ 432,166.90  | \$ 432,166.90    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                              |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                         | 88       | No.   | \$ 737.55      | \$ 64,904.40     | \$ 832.80      | \$ 73,286.40     |

|                           |                                                                       |        |      |                  |                         |                  |                         |
|---------------------------|-----------------------------------------------------------------------|--------|------|------------------|-------------------------|------------------|-------------------------|
| 6.2                       | Supply, deliver and lay select turf, Inc. Establishment & maintenance | 16732  | m2   | \$ 18.79         | \$ 314,394.28           | \$ 25.18         | \$ 421,311.76           |
| 6.3                       | Hydroseeding including watering                                       | 8952   | m2   | \$ 1.10          | \$ 9,847.20             | \$ 1.45          | \$ 12,980.40            |
| <b>7</b>                  | <b>STREET LIGHTING</b>                                                |        |      |                  |                         |                  |                         |
| 7.1                       | Street Lighting                                                       | 38     | No.  | \$ 11,737.38     | \$ 446,020.44           | \$ 13,633.41     | \$ 518,069.58           |
| 7.2                       | Erosion protection for lighting cables                                | 2221   | LM   | \$ 55.98         | \$ 124,331.58           | \$ 62.98         | \$ 139,878.58           |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                                                  |        |      |                  |                         |                  |                         |
| 8.1                       | Line marking                                                          | 1      | Item | \$ 38,818.11     | \$ 38,818.11            | \$ 44,410.33     | \$ 44,410.33            |
| 8.2                       | Regulatory Signage                                                    | 1      | Item | \$ 13,594.68     | \$ 13,594.68            | \$ 15,286.84     | \$ 15,286.84            |
| 8.3                       | Works maintenance – up to 1 year                                      | 1      | Item |                  | INCL.                   |                  | INCL.                   |
| 8.4                       | Landscape maintenance – 1yr/2 summers                                 | 1      | Item |                  | INCL.                   |                  | INCL.                   |
| 8.5                       | Traffic signals 10 year Maintenance Fee                               | 1      | Item |                  | INCL.                   |                  | INCL.                   |
| <b>9</b>                  | <b>OTHER</b>                                                          |        |      |                  |                         |                  |                         |
| 9.1                       | <b>Service Relocations</b>                                            |        |      |                  |                         |                  |                         |
| 9.1.1                     | Watermain                                                             | 1      | Item | \$ 29,431.09     | \$ 29,431.09            | \$ 33,267.40     | \$ 33,267.40            |
| 9.2                       | <b>Tree Removal</b>                                                   |        |      |                  |                         |                  |                         |
| 9.2.1                     | Major Tree and Site Clearing incl. grubbing                           | 1      | Item | \$ 24,030.12     | \$ 24,030.12            | \$ 27,269.31     | \$ 27,269.31            |
| <b>SUB-TOTAL WORKS</b>    |                                                                       |        |      |                  | <b>\$ 10,055,162.33</b> |                  | <b>\$ 11,368,562.50</b> |
| <b>10</b>                 | <b>DELIVERY</b>                                                       |        |      |                  |                         |                  |                         |
| 10.1                      | Council Fees                                                          | 3.25%  |      | \$ 10,055,162.33 | \$ 326,792.78           | \$ 11,368,562.50 | \$ 369,478.28           |
| 10.2                      | VicRoads Fees                                                         | 1.00%  |      | \$ 10,055,162.33 | \$ 100,551.62           | \$ 11,368,562.50 | \$ 113,685.63           |
| 10.3                      | Traffic Management                                                    | 5.00%  |      | \$ 10,055,162.33 | \$ 502,758.12           | \$ 11,368,562.50 | \$ 568,428.13           |
| 10.4                      | Environmental Management                                              | 0.50%  |      | \$ 10,055,162.33 | \$ 50,275.81            | \$ 11,368,562.50 | \$ 56,842.81            |
| 10.5                      | Surveying and Design                                                  | 5.00%  |      | \$ 10,055,162.33 | \$ 502,758.12           | \$ 11,368,562.50 | \$ 568,428.13           |
| 10.6                      | Supervision and Project Management                                    | 9.00%  |      | \$ 10,055,162.33 | \$ 904,964.61           | \$ 11,368,562.50 | \$ 1,023,170.63         |
| 10.7                      | Site Establishment                                                    | 2.50%  |      | \$ 10,055,162.33 | \$ 251,379.06           | \$ 11,368,562.50 | \$ 284,214.06           |
| 10.8                      | Contingency                                                           | 15.00% |      | \$ 10,055,162.33 | \$ 1,508,274.35         | \$ 11,368,562.50 | \$ 1,705,284.38         |
| <b>SUB-TOTAL DELIVERY</b> |                                                                       |        |      |                  | <b>\$ 4,147,754.46</b>  |                  | <b>\$ 4,689,532.03</b>  |
| <b>11</b>                 | <b>TOTAL ESTIMATED COST</b>                                           |        |      |                  | <b>\$ 14,202,916.78</b> |                  | <b>\$ 16,058,094.53</b> |

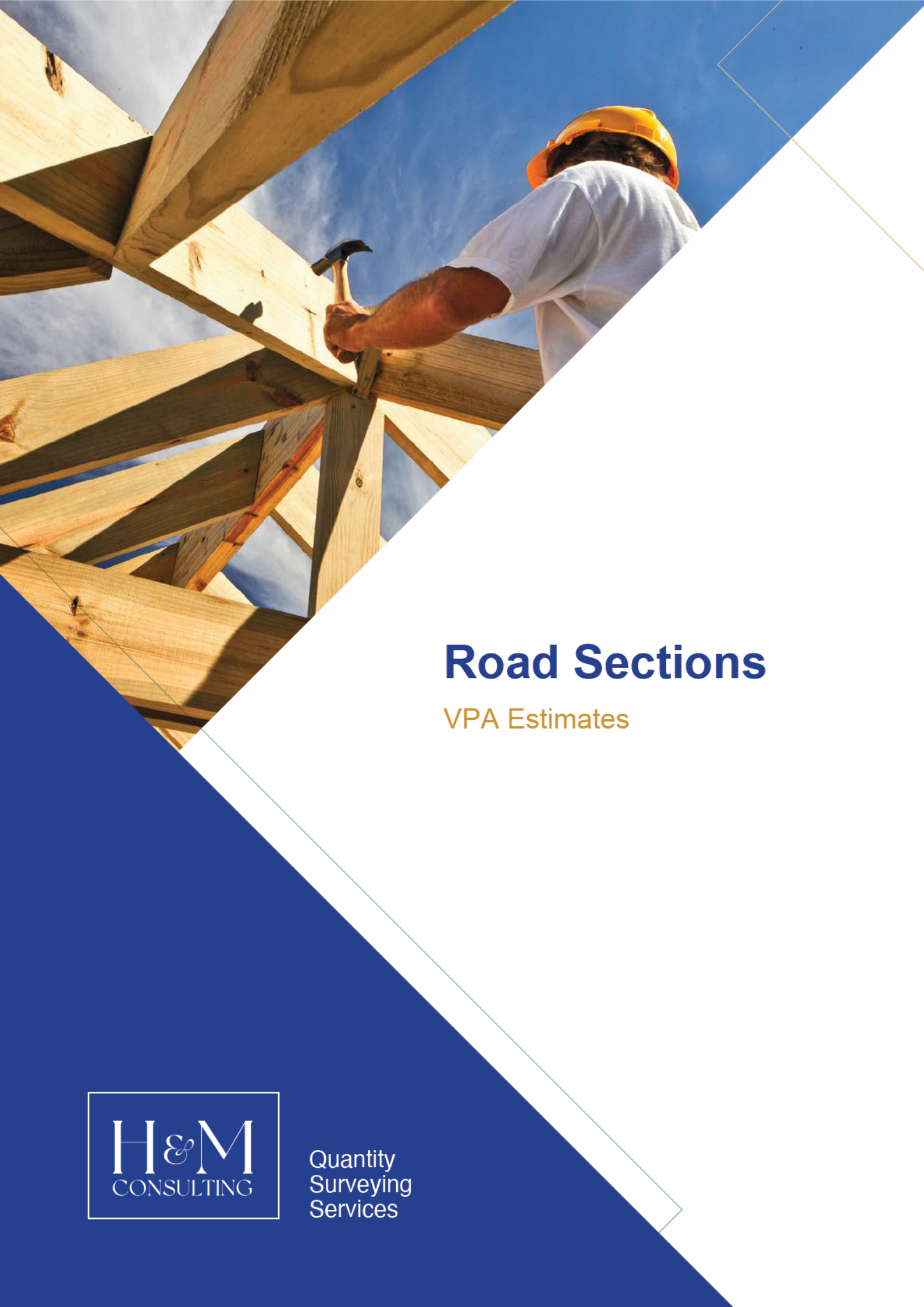


| Item         | Description                                                           | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|-----------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                       |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                       |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                      | 1        | Item  | \$ 99,475.51   | \$ 99,475.51     | \$ 111,648.20  | \$ 111,648.20    |
| 1.1.1        | Soil stabilisation - gypsum treatment                                 | 14255    | m2    | \$ 17.49       | \$ 249,319.95    | \$ 23.33       | \$ 332,569.15    |
| 1.2          | <b>Earthworks</b>                                                     |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                           | 1005     | m3    | \$ 40.07       | \$ 40,270.35     | \$ 45.70       | \$ 45,928.50     |
| 1.2.2        | Cut to Disposal                                                       | 16063    | m3    | \$ 25.89       | \$ 415,871.07    | \$ 28.98       | \$ 465,505.74    |
| 1.2.3        | Tipping Fees                                                          | 16063    | m3    | \$ 29.06       | \$ 466,790.78    | \$ 33.97       | \$ 545,660.11    |
| 1.2.4        | Formation and Reinstatement of Batters                                | 2335     | m2    | \$ 22.36       | \$ 52,210.60     | \$ 24.84       | \$ 58,001.40     |
| 1.2.5        | Erosion protection of batters                                         | 2335     | m2    | \$ 4.47        | \$ 10,437.45     | \$ 5.00        | \$ 11,675.00     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                  |          |       |                |                  |                |                  |
| 2.1          | <b>Primary Arterial</b>                                               | 9411     | m2    | \$ 223.55      | \$ 2,103,829.05  | \$ 238.23      | \$ 2,241,982.53  |
|              | - 40mm Asphalt Wearing Course                                         |          |       |                |                  |                |                  |
|              | - 75mm Asphalt Intermediate Course                                    |          |       |                |                  |                |                  |
|              | - 90mm Asphalt Base                                                   |          |       |                |                  |                |                  |
|              | - 10mm Prime                                                          |          |       |                |                  |                |                  |
|              | - 150mm CTRC Base Course                                              |          |       |                |                  |                |                  |
|              | - 150mm FCR Base Course                                               |          |       |                |                  |                |                  |
|              | - 200mm Select Suubase Course                                         |          |       |                |                  |                |                  |
| 2.2          | <b>Connector Arterial</b>                                             | 2932     | m2    | \$ 182.96      | \$ 536,438.72    | \$ 196.75      | \$ 576,871.00    |
|              | - 40mm Asphalt Wearing Course                                         |          |       |                |                  |                |                  |
|              | - 60mm Asphalt Intermediate Course                                    |          |       |                |                  |                |                  |
|              | - 75mm Asphalt Base                                                   |          |       |                |                  |                |                  |
|              | - 10mm Prime                                                          |          |       |                |                  |                |                  |
|              | - 150mm CTRC Base Course                                              |          |       |                |                  |                |                  |
|              | - 200mm Select Suubase Course                                         |          |       |                |                  |                |                  |
| 2.3          | Subgrade Preparation & Final Trim                                     | 12343    | m2    | \$ 7.78        | \$ 96,028.54     | \$ 10.49       | \$ 129,478.07    |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                        | 68       | tonne | \$ 346.27      | \$ 23,546.36     | \$ 371.90      | \$ 25,289.20     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                     | 1387     | m2    | \$ 23.33       | \$ 32,358.71     | \$ 29.16       | \$ 40,444.92     |
| 2.6          | Crushed rock capping layer                                            | 16946    | m2    | \$ 23.33       | \$ 395,350.18    | \$ 29.16       | \$ 494,145.36    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                 |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                      | 2774     | LM    | \$ 79.32       | \$ 220,033.68    | \$ 86.01       | \$ 238,591.74    |
| 3.2          | Pedestrian & Cycle Paths                                              | 3484     | m2    | \$ 110.13      | \$ 383,692.92    | \$ 124.58      | \$ 434,036.72    |
| 3.3          | Concrete infill to pedestrian median islands                          | 1325     | m2    | \$ 129.36      | \$ 171,402.00    | \$ 141.82      | \$ 187,911.50    |
| <b>4</b>     | <b>DRAINAGE</b>                                                       |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                               |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                             | 258      | LM    | \$ 325.26      | \$ 83,917.08     | \$ 365.68      | \$ 94,345.44     |
| 4.1.2        | 450mm dia                                                             | 409      | LM    | \$ 351.04      | \$ 143,575.36    | \$ 394.39      | \$ 161,305.51    |
| 4.2          | <b>Drainage - pits</b>                                                |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                         | 2        | No.   | \$ 2,926.92    | \$ 5,853.84      | \$ 3,251.72    | \$ 6,503.44      |
| 4.2.2        | Single gully on grade or sag - medium lintel                          | 22       | No.   | \$ 3,687.63    | \$ 81,127.86     | \$ 4,175.88    | \$ 91,869.36     |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                           | 2        | No.   | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                          | 2426     | LM    | \$ 33.54       | \$ 81,368.04     | \$ 37.63       | \$ 91,290.38     |
| <b>5</b>     | <b>TRAFFIC</b>                                                        |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals                                                       | 1        | Item  | \$ 366,630.10  | \$ 366,630.10    | \$ 432,166.90  | \$ 432,166.90    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                      |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                 | 54       | No.   | \$ 737.55      | \$ 39,827.70     | \$ 832.80      | \$ 44,971.20     |
| 6.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance | 11713    | m2    | \$ 18.79       | \$ 220,087.27    | \$ 25.18       | \$ 294,933.34    |
| 6.3          | Hydroseeding including watering                                       | 2335     | m2    | \$ 1.10        | \$ 2,568.50      | \$ 1.45        | \$ 3,385.75      |
| <b>7</b>     | <b>STREET LIGHTING</b>                                                |          |       |                |                  |                |                  |

|                           |                                         |        |      |                 |                        |                 |                         |
|---------------------------|-----------------------------------------|--------|------|-----------------|------------------------|-----------------|-------------------------|
| 7.1                       | Street Lighting                         | 25     | No.  | \$ 11,737.38    | \$ 293,434.50          | \$ 13,633.41    | \$ 340,835.25           |
| 7.2                       | Erosion protection for lighting cables  | 1434   | LM   | \$ 55.98        | \$ 80,275.32           | \$ 62.98        | \$ 90,313.32            |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                    |        |      |                 |                        |                 |                         |
| 8.1                       | Line marking                            | 1      | Item | \$ 24,238.47    | \$ 24,238.47           | \$ 27,314.78    | \$ 27,314.78            |
| 8.2                       | Regulatory Signage                      | 1      | Item | \$ 9,579.27     | \$ 9,579.27            | \$ 10,734.94    | \$ 10,734.94            |
| 8.3                       | Works maintenance – up to 1 year        | 1      | Item |                 | INCL.                  |                 | INCL.                   |
| 8.4                       | Landscape maintenance – 1yr/2 summers   | 1      | Item |                 | INCL.                  |                 | INCL.                   |
| 8.5                       | Traffic signals 10 year Maintenance Fee | 1      | Item |                 | INCL.                  |                 | INCL.                   |
| <b>SUB-TOTAL WORKS</b>    |                                         |        |      |                 | <b>\$ 6,739,203.64</b> |                 | <b>\$ 7,640,633.85</b>  |
| <b>9</b>                  | <b>DELIVERY</b>                         |        |      |                 |                        |                 |                         |
| 9.1                       | Council Fees                            | 3.25%  |      | \$ 6,739,203.64 | \$ 219,024.12          | \$ 7,640,633.85 | \$ 248,320.60           |
| 9.2                       | VicRoads Fees                           | 1.00%  |      | \$ 6,739,203.64 | \$ 67,392.04           | \$ 7,640,633.85 | \$ 76,406.34            |
| 9.3                       | Traffic Management                      | 5.00%  |      | \$ 6,739,203.64 | \$ 336,960.18          | \$ 7,640,633.85 | \$ 382,031.69           |
| 9.4                       | Environmental Management                | 0.50%  |      | \$ 6,739,203.64 | \$ 33,696.02           | \$ 7,640,633.85 | \$ 38,203.17            |
| 9.5                       | Surveying and Design                    | 5.00%  |      | \$ 6,739,203.64 | \$ 336,960.18          | \$ 7,640,633.85 | \$ 382,031.69           |
| 9.6                       | Supervision and Project Management      | 9.00%  |      | \$ 6,739,203.64 | \$ 606,528.33          | \$ 7,640,633.85 | \$ 687,657.05           |
| 9.7                       | Site Establishment                      | 2.50%  |      | \$ 6,739,203.64 | \$ 168,480.09          | \$ 7,640,633.85 | \$ 191,015.85           |
| 9.8                       | Contingency                             | 15.00% |      | \$ 6,739,203.64 | \$ 1,010,880.55        | \$ 7,640,633.85 | \$ 1,146,095.08         |
| <b>SUB-TOTAL DELIVERY</b> |                                         |        |      |                 | <b>\$ 2,779,921.50</b> |                 | <b>\$ 3,151,761.46</b>  |
| <b>10</b>                 | <b>TOTAL ESTIMATED COST</b>             |        |      |                 | <b>\$ 9,519,125.14</b> |                 | <b>\$ 10,792,395.31</b> |

| Item         | Description                                                                                                                                                                                                                   | Quantity | Unit  | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                              | 1        | Item  | \$ 80,448.39   | \$ 80,448.39     | \$ 93,218.84   | \$ 93,218.84     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                         | 13940    | m2    | \$ 17.49       | \$ 243,810.60    | \$ 23.33       | \$ 325,220.20    |
| 1.2          | Earthworks                                                                                                                                                                                                                    |          |       |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                   | 5758     | m3    | \$ 40.07       | \$ 230,723.06    | \$ 45.70       | \$ 263,140.60    |
| 1.2.2        | Cut to Disposal                                                                                                                                                                                                               | 7177     | m3    | \$ 25.89       | \$ 185,812.53    | \$ 28.98       | \$ 207,989.46    |
| 1.2.3        | Tipping Fees                                                                                                                                                                                                                  | 7177     | m3    | \$ 29.06       | \$ 208,563.62    | \$ 33.97       | \$ 243,802.69    |
| 1.2.4        | Formation and Reinstatement of Batters                                                                                                                                                                                        | 3248     | m2    | \$ 22.36       | \$ 72,625.28     | \$ 24.84       | \$ 80,680.32     |
| 1.2.5        | Erosion protection of batters                                                                                                                                                                                                 | 3248     | m2    | \$ 4.47        | \$ 14,518.56     | \$ 5.00        | \$ 16,240.00     |
| 1.3          | Demolition of existing structure within limit of                                                                                                                                                                              | 1        | Item  | \$ 42,461.35   | \$ 42,461.35     | \$ 48,026.21   | \$ 48,026.21     |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                          |          |       |                |                  |                |                  |
| 2.1          | <u>Primary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 75mm Asphalt Intermediate Course<br>- 90mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 150mm FCR Base Course<br>- 200mm Select Suubase Course | 8085     | m2    | \$ 223.55      | \$ 1,807,401.75  | \$ 238.23      | \$ 1,926,089.55  |
| 2.2          | <u>Connector Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 200mm Select Suubase Course                          | 1349     | m2    | \$ 182.96      | \$ 246,813.04    | \$ 196.75      | \$ 265,415.75    |
| 2.3          | Subgrade Preparation & Final Trim                                                                                                                                                                                             | 9434     | m2    | \$ 7.78        | \$ 73,396.52     | \$ 10.49       | \$ 98,962.66     |
| 2.4          | Pavement Other ( <i>Pedestrian Crossings</i> )                                                                                                                                                                                | 28       | tonne | \$ 346.27      | \$ 9,695.56      | \$ 371.90      | \$ 10,413.20     |
| 2.5          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                             | 1113.5   | m2    | \$ 23.33       | \$ 25,977.96     | \$ 29.16       | \$ 32,469.66     |
| 2.6          | Crushed rock capping layer                                                                                                                                                                                                    | 12352    | m2    | \$ 23.33       | \$ 288,172.16    | \$ 29.16       | \$ 360,184.32    |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                         |          |       |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                              | 2227     | LM    | \$ 79.32       | \$ 176,645.64    | \$ 86.01       | \$ 191,544.27    |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                      | 2564     | m2    | \$ 110.13      | \$ 282,373.32    | \$ 124.58      | \$ 319,423.12    |
| 3.3          | Concrete infill to pedestrian median islands                                                                                                                                                                                  | 677      | m2    | \$ 129.36      | \$ 87,576.72     | \$ 141.82      | \$ 96,012.14     |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                               |          |       |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                                                                                                                                                                                       |          |       |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                     | 148      | LM    | \$ 325.26      | \$ 48,138.48     | \$ 365.68      | \$ 54,120.64     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                     | 401      | LM    | \$ 351.04      | \$ 140,767.04    | \$ 394.39      | \$ 158,150.39    |
| 4.2          | <b>Drainage - pits</b>                                                                                                                                                                                                        |          |       |                |                  |                |                  |
| 4.2.1        | 900mm x 900mm Field Inlet Pit                                                                                                                                                                                                 | 4        | No.   | \$ 2,926.92    | \$ 11,707.68     | \$ 3,251.72    | \$ 13,006.88     |
| 4.2.2        | Single gully on grade or sag - medium lintel                                                                                                                                                                                  | 21       | No.   | \$ 3,687.63    | \$ 77,440.23     | \$ 4,175.88    | \$ 87,693.48     |
| 4.2.3        | 1050mm Dia pre-cast concrete access chamber                                                                                                                                                                                   | 2        | No.   | \$ 4,832.23    | \$ 9,664.46      | \$ 5,462.55    | \$ 10,925.10     |
| 4.3          | Drainage – Sub-soil drainage                                                                                                                                                                                                  | 2092     | LM    | \$ 33.54       | \$ 70,165.68     | \$ 37.63       | \$ 78,721.96     |
| <b>5</b>     | <b>TRAFFIC</b>                                                                                                                                                                                                                |          |       |                |                  |                |                  |
| 5.1          | Traffic Signals - T-Intersection                                                                                                                                                                                              | 1        | Item  | \$ 270,201.90  | \$ 270,201.90    | \$ 304,163.40  | \$ 304,163.40    |
| <b>6</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                              |          |       |                |                  |                |                  |
| 6.1          | Trees                                                                                                                                                                                                                         | 26       | No.   | \$ 737.55      | \$ 19,176.30     | \$ 832.80      | \$ 21,652.80     |
| 6.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                         | 10370    | m2    | \$ 18.79       | \$ 194,852.30    | \$ 25.18       | \$ 261,116.60    |

|                           |                                         |        |      |                 |                        |                 |                        |
|---------------------------|-----------------------------------------|--------|------|-----------------|------------------------|-----------------|------------------------|
| 6.3                       | Hydroseeding including watering         | 3248   | m2   | \$ 1.10         | \$ 3,572.80            | \$ 1.45         | \$ 4,709.60            |
| <b>7</b>                  | <b>STREET LIGHTING</b>                  |        |      |                 |                        |                 |                        |
| 7.1                       | Street Lighting                         | 21     | No.  | \$ 11,737.38    | \$ 246,484.98          | \$ 13,633.41    | \$ 286,301.61          |
| 7.2                       | Erosion protection for lighting cables  | 1271   | LM   | \$ 55.98        | \$ 71,150.58           | \$ 62.98        | \$ 80,047.58           |
| <b>8</b>                  | <b>MISCELLANEOUS</b>                    |        |      |                 |                        |                 |                        |
| 8.1                       | Line marking                            | 1      | Item | \$ 18,363.75    | \$ 18,363.75           | \$ 20,829.86    | \$ 20,829.86           |
| 8.2                       | Regulatory Signage                      | 1      | Item | \$ 8,575.20     | \$ 8,575.20            | \$ 10,942.34    | \$ 10,942.34           |
| 8.3                       | Works maintenance – up to 1 year        | 1      | Item |                 | INCL.                  |                 | INCL.                  |
| 8.4                       | Landscape maintenance – 1yr/2 summers   | 1      | Item |                 | INCL.                  |                 | INCL.                  |
| 8.5                       | Traffic signals 10 year Maintenance Fee | 1      | Item |                 | INCL.                  |                 | INCL.                  |
| <b>SUB-TOTAL WORKS</b>    |                                         |        |      |                 | <b>\$ 5,267,277.44</b> |                 | <b>\$ 5,971,215.23</b> |
| <b>9</b>                  | <b>DELIVERY</b>                         |        |      |                 |                        |                 |                        |
| 9.1                       | Council Fees                            | 3.25%  |      | \$ 5,267,277.44 | \$ 171,186.52          | \$ 5,971,215.23 | \$ 194,064.49          |
| 9.2                       | VicRoads Fees                           | 1.00%  |      | \$ 5,267,277.44 | \$ 52,672.77           | \$ 5,971,215.23 | \$ 59,712.15           |
| 9.3                       | Traffic Management                      | 5.00%  |      | \$ 5,267,277.44 | \$ 263,363.87          | \$ 5,971,215.23 | \$ 298,560.76          |
| 9.4                       | Environmental Management                | 0.50%  |      | \$ 5,267,277.44 | \$ 26,336.39           | \$ 5,971,215.23 | \$ 29,856.08           |
| 9.5                       | Surveying and Design                    | 5.00%  |      | \$ 5,267,277.44 | \$ 263,363.87          | \$ 5,971,215.23 | \$ 298,560.76          |
| 9.6                       | Supervision and Project Management      | 9.00%  |      | \$ 5,267,277.44 | \$ 474,054.97          | \$ 5,971,215.23 | \$ 537,409.37          |
| 9.7                       | Site Establishment                      | 2.50%  |      | \$ 5,267,277.44 | \$ 131,681.94          | \$ 5,971,215.23 | \$ 149,280.38          |
| 9.8                       | Contingency                             | 15.00% |      | \$ 5,267,277.44 | \$ 790,091.62          | \$ 5,971,215.23 | \$ 895,682.28          |
| <b>SUB-TOTAL DELIVERY</b> |                                         |        |      |                 | <b>\$ 2,172,751.94</b> |                 | <b>\$ 2,463,126.28</b> |
| <b>11</b>                 | <b>TOTAL ESTIMATED COST</b>             |        |      |                 | <b>\$ 7,440,029.38</b> |                 | <b>\$ 8,434,341.51</b> |



# Road Sections

VPA Estimates

**H&M**  
CONSULTING

Quantity  
Surveying  
Services



| Item         | Description                                                           | Quantity | Unit | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|-----------------------------------------------------------------------|----------|------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                       |          |      |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                       |          |      |                |                  |                |                  |
| 1.1          | Site preparation                                                      | 1        | Item | \$ 19,963.40   | \$ 19,963.40     | \$ 22,035.37   | \$ 22,035.37     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                 | 5963     | m2   | \$ 17.49       | \$ 104,292.87    | \$ 23.33       | \$ 139,116.79    |
| 1.2          | <b>Earthworks</b>                                                     |          |      |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                           | 1311     | m3   | \$ 40.07       | \$ 52,531.77     | \$ 45.70       | \$ 59,912.70     |
| 1.2.2        | Cut to Disposal                                                       | 983      | m3   | \$ 25.89       | \$ 25,449.87     | \$ 28.98       | \$ 28,487.34     |
| 1.2.3        | Tipping Fees                                                          | 983      | m3   | \$ 29.06       | \$ 28,565.98     | \$ 33.97       | \$ 33,392.51     |
| 1.2.4        | Formation and Reinstatement of Batters                                | 996      | m2   | \$ 22.36       | \$ 22,270.56     | \$ 24.84       | \$ 24,740.64     |
| 1.2.5        | Erosion protection of batters                                         | 996      | m2   | \$ 4.47        | \$ 4,452.12      | \$ 5.00        | \$ 4,980.00      |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                  |          |      |                |                  |                |                  |
| 2.1          | <b>Secondary Arterial</b>                                             | 2138     | m2   | \$ 195.98      | \$ 419,005.24    | \$ 208.82      | \$ 446,457.16    |
|              | - 40mm Asphalt Wearing Course                                         |          |      |                |                  |                |                  |
|              | - 60mm Asphalt Intermediate Course                                    |          |      |                |                  |                |                  |
|              | - 75mm Asphalt Base                                                   |          |      |                |                  |                |                  |
|              | - 10mm Prime                                                          |          |      |                |                  |                |                  |
|              | - 150mm CTCR Base Course                                              |          |      |                |                  |                |                  |
|              | - 150mm FCR Base Course                                               |          |      |                |                  |                |                  |
|              | - 150mm Select Subbase Course                                         |          |      |                |                  |                |                  |
| 2.2          | Subgrade Preparation & Final Trim                                     | 2138     | m2   | \$ 7.78        | \$ 16,633.64     | \$ 10.49       | \$ 22,427.62     |
| 2.3          | Lime stabilisation, 0.5m past BoK                                     | 237      | m2   | \$ 23.33       | \$ 5,529.21      | \$ 29.16       | \$ 6,910.92      |
| 2.4          | Crushed rock capping layer                                            | 3090     | m2   | \$ 23.33       | \$ 72,089.70     | \$ 29.16       | \$ 90,104.40     |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                 |          |      |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                      | 474      | LM   | \$ 79.32       | \$ 37,597.68     | \$ 86.01       | \$ 40,768.74     |
| 3.2          | Pedestrian & Cycle Paths                                              | 952      | m2   | \$ 110.13      | \$ 104,843.76    | \$ 124.58      | \$ 118,600.16    |
| <b>4</b>     | <b>DRAINAGE</b>                                                       |          |      |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                               |          |      |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                             | 146      | LM   | \$ 325.26      | \$ 47,487.96     | \$ 365.68      | \$ 53,389.28     |
| 4.1.2        | 450mm dia                                                             | 238      | LM   | \$ 351.04      | \$ 83,547.52     | \$ 394.39      | \$ 93,864.82     |
| 4.2          | <b>Drainage - pits</b>                                                |          |      |                |                  |                |                  |
| 4.2.1        | Single gully on grade or sag - medium lintel                          | 16       | No.  | \$ 3,687.63    | \$ 59,002.08     | \$ 4,175.88    | \$ 66,814.08     |
| 4.3          | Drainage – Sub-soil drainage                                          | 474      | LM   | \$ 33.54       | \$ 15,897.96     | \$ 37.63       | \$ 17,836.62     |
| <b>5</b>     | <b>LANDSCAPE</b>                                                      |          |      |                |                  |                |                  |
| 5.1          | Trees                                                                 | 26       | No.  | \$ 737.55      | \$ 19,176.30     | \$ 832.80      | \$ 21,652.80     |
| 5.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance | 1428     | m2   | \$ 18.79       | \$ 26,832.12     | \$ 25.18       | \$ 35,957.04     |
| 5.3          | Hydroseeding including watering                                       | 4535     | m2   | \$ 1.10        | \$ 4,988.50      | \$ 1.45        | \$ 6,575.75      |
| <b>6</b>     | <b>STREET LIGHTING</b>                                                |          |      |                |                  |                |                  |
| 6.1          | Street Lighting                                                       | 8        | No.  | \$ 11,737.38   | \$ 93,899.04     | \$ 13,633.41   | \$ 109,067.28    |
| 6.2          | Erosion protection for lighting cables                                | 519      | LM   | \$ 55.98       | \$ 29,053.62     | \$ 62.98       | \$ 32,686.62     |
| <b>7</b>     | <b>MISCELLANEOUS</b>                                                  |          |      |                |                  |                |                  |
| 7.1          | Line marking                                                          | 1        | Item | \$ 4,181.58    | \$ 4,181.58      | \$ 4,715.93    | \$ 4,715.93      |
| 7.2          | Regulatory Signage                                                    | 1        | Item | \$ 2,525.42    | \$ 2,525.42      | \$ 2,824.34    | \$ 2,824.34      |
| 7.3          | Works maintenance – up to 1 year                                      | 1        | Item |                | INCL.            |                | INCL.            |
| 7.4          | Landscape maintenance – 1yr/2 summers                                 | 1        | Item |                | INCL.            |                | INCL.            |
| 7.5          | Traffic signals 10 year Maintenance Fee                               | 1        | Item |                | INCL.            |                | INCL.            |
| <b>8</b>     | <b>OTHER</b>                                                          |          |      |                |                  |                |                  |
| 8.1          | <b>Service Relocations</b>                                            |          |      |                |                  |                |                  |
| 8.1.1        | Fibre Optic                                                           | 1        | Item | \$ 270,096.30  | \$ 270,096.30    | \$ 302,983.10  | \$ 302,983.10    |

|                    |                                             |        |      |                 |                 |                 |                 |
|--------------------|---------------------------------------------|--------|------|-----------------|-----------------|-----------------|-----------------|
| 8.1.2              | Telstra                                     | 1      | Item | \$ 118,297.40   | \$ 118,297.40   | \$ 144,831.60   | \$ 144,831.60   |
| 8.2                | Tree Removal                                |        |      |                 |                 |                 |                 |
| 8.2.1              | Major Tree and Site Clearing incl. grubbing | 1      | Item | \$ 114,177.30   | \$ 114,177.30   | \$ 127,448.20   | \$ 127,448.20   |
| SUB-TOTAL WORKS    |                                             |        |      |                 | \$ 1,802,388.90 |                 | \$ 2,058,581.81 |
| 9                  | DELIVERY                                    |        |      |                 |                 |                 |                 |
| 9.1                | Council Fees                                | 3.25%  |      | \$ 1,802,388.90 | \$ 58,577.64    | \$ 2,058,581.81 | \$ 66,903.91    |
| 9.2                | VicRoads Fees                               | 1.00%  |      | \$ 1,802,388.90 | \$ 18,023.89    | \$ 2,058,581.81 | \$ 20,585.82    |
| 9.3                | Traffic Management                          | 5.00%  |      | \$ 1,802,388.90 | \$ 90,119.45    | \$ 2,058,581.81 | \$ 102,929.09   |
| 9.4                | Environmental Management                    | 0.50%  |      | \$ 1,802,388.90 | \$ 9,011.94     | \$ 2,058,581.81 | \$ 10,292.91    |
| 9.5                | Surveying and Design                        | 5.00%  |      | \$ 1,802,388.90 | \$ 90,119.45    | \$ 2,058,581.81 | \$ 102,929.09   |
| 9.6                | Supervision and Project Management          | 9.00%  |      | \$ 1,802,388.90 | \$ 162,215.00   | \$ 2,058,581.81 | \$ 185,272.36   |
| 9.7                | Site Establishment                          | 2.50%  |      | \$ 1,802,388.90 | \$ 45,059.72    | \$ 2,058,581.81 | \$ 51,464.55    |
| 9.8                | Contingency                                 | 15.00% |      | \$ 1,802,388.90 | \$ 270,358.34   | \$ 2,058,581.81 | \$ 308,787.27   |
| SUB-TOTAL DELIVERY |                                             |        |      |                 | \$ 743,485.42   |                 | \$ 849,165.00   |
| 10                 | TOTAL ESTIMATED COST                        |        |      |                 | \$ 2,545,874.32 |                 | \$ 2,907,746.81 |

| Item         | Description                                                           | Quantity | Unit | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|-----------------------------------------------------------------------|----------|------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                       |          |      |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                       |          |      |                |                  |                |                  |
| 1.1          | Site preparation                                                      | 1        | Item | \$ 18,665.28   | \$ 18,665.28     | \$ 21,102.58   | \$ 21,102.58     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                 | 3128     | m2   | \$ 17.49       | \$ 54,708.72     | \$ 23.33       | \$ 72,976.24     |
| 1.2          | <b>Earthworks</b>                                                     |          |      |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                           | 1        | m3   | \$ 40.07       | \$ 40.07         | \$ 45.70       | \$ 45.70         |
| 1.2.2        | Cut to Disposal                                                       | 2374     | m3   | \$ 25.89       | \$ 61,462.86     | \$ 28.98       | \$ 68,798.52     |
| 1.2.3        | Tipping Fees                                                          | 2374     | m3   | \$ 29.06       | \$ 68,988.44     | \$ 33.97       | \$ 80,644.78     |
| 1.2.4        | Formation and Reinstatement of Batters                                | 297      | m2   | \$ 22.36       | \$ 6,640.92      | \$ 24.84       | \$ 7,377.48      |
| 1.2.5        | Erosion protection of batters                                         | 297      | m2   | \$ 4.47        | \$ 1,327.59      | \$ 5.00        | \$ 1,485.00      |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                  |          |      |                |                  |                |                  |
| 2.1          | <b>Secondary Arterial</b>                                             | 1208     | m2   | \$ 195.98      | \$ 236,743.84    | \$ 208.82      | \$ 252,254.56    |
|              | - 40mm Asphalt Wearing Course                                         |          |      |                |                  |                |                  |
|              | - 60mm Asphalt Intermediate Course                                    |          |      |                |                  |                |                  |
|              | - 75mm Asphalt Base                                                   |          |      |                |                  |                |                  |
|              | - 10mm Prime                                                          |          |      |                |                  |                |                  |
|              | - 150mm CTCR Base Course                                              |          |      |                |                  |                |                  |
|              | - 150mm FCR Base Course                                               |          |      |                |                  |                |                  |
|              | - 150mm Select Subbase Course                                         |          |      |                |                  |                |                  |
| 2.2          | Subgrade Preparation & Final Trim                                     | 1208     | m2   | \$ 7.78        | \$ 9,398.24      | \$ 10.49       | \$ 12,671.92     |
| 2.3          | Lime stabilisation, 0.5m past BoK                                     | 134.5    | m2   | \$ 23.33       | \$ 3,137.89      | \$ 29.16       | \$ 3,922.02      |
| 2.4          | Crushed rock capping layer                                            | 1748     | m2   | \$ 23.33       | \$ 40,780.84     | \$ 29.16       | \$ 50,971.68     |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                 |          |      |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                      | 269      | LM   | \$ 79.32       | \$ 21,337.08     | \$ 86.01       | \$ 23,136.69     |
| 3.2          | Pedestrian & Cycle Paths                                              | 540      | m2   | \$ 110.13      | \$ 59,470.20     | \$ 124.58      | \$ 67,273.20     |
| <b>4</b>     | <b>DRAINAGE</b>                                                       |          |      |                |                  |                |                  |
| 4.1          | <b>Drainage - pipes</b>                                               |          |      |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                             | 82       | LM   | \$ 325.26      | \$ 26,671.32     | \$ 365.68      | \$ 29,985.76     |
| 4.1.2        | 450mm dia                                                             | 135      | LM   | \$ 351.04      | \$ 47,390.40     | \$ 394.39      | \$ 53,242.65     |
| 4.2          | <b>Drainage - pits</b>                                                |          |      |                |                  |                |                  |
| 4.2.1        | Single gully on grade or sag - medium lintel                          | 9        | No.  | \$ 3,687.63    | \$ 33,188.67     | \$ 4,175.88    | \$ 37,582.92     |
| 4.3          | Drainage – Sub-soil drainage                                          | 269      | LM   | \$ 33.54       | \$ 9,022.26      | \$ 37.63       | \$ 10,122.47     |
| <b>5</b>     | <b>LANDSCAPE</b>                                                      |          |      |                |                  |                |                  |
| 5.1          | Trees                                                                 | 15       | No.  | \$ 737.55      | \$ 11,063.25     | \$ 832.80      | \$ 12,492.00     |
| 5.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance | 810      | m2   | \$ 18.79       | \$ 15,219.90     | \$ 25.18       | \$ 20,395.80     |
| 5.3          | Hydroseeding including watering                                       | 2318     | m2   | \$ 1.10        | \$ 2,549.80      | \$ 1.45        | \$ 3,361.10      |
| <b>6</b>     | <b>STREET LIGHTING</b>                                                |          |      |                |                  |                |                  |
| 6.1          | Street Lighting                                                       | 5        | No.  | \$ 11,737.38   | \$ 58,686.90     | \$ 13,633.41   | \$ 68,167.05     |
| 6.2          | Erosion protection for lighting cables                                | 289      | m    | \$ 55.98       | \$ 16,178.22     | \$ 62.98       | \$ 18,201.22     |
| <b>7</b>     | <b>MISCELLANEOUS</b>                                                  |          |      |                |                  |                |                  |
| 7.1          | Line marking                                                          | 1        | Item | \$ 2,263.95    | \$ 2,263.95      | \$ 2,653.93    | \$ 2,653.93      |
| 7.2          | Regulatory Signage                                                    | 1        | Item | \$ 1,509.92    | \$ 1,509.92      | \$ 1,614.59    | \$ 1,614.59      |
| 7.3          | Works maintenance – up to 1 year                                      | 1        | Item |                | INCL.            |                | INCL.            |
| 7.4          | Landscape maintenance – 1yr/2 summers                                 | 1        | Item |                | INCL.            |                | INCL.            |
| 7.5          | Traffic signals 10 year Maintenance Fee                               | 1        | Item |                | INCL.            |                | INCL.            |
| <b>8</b>     | <b>OTHER</b>                                                          |          |      |                |                  |                |                  |
| 8.1          | <b>Service Relocations</b>                                            |          |      |                |                  |                |                  |
| 8.1.1        | Fibre Optic                                                           | 1        | Item | \$ 166,413.80  | \$ 166,413.80    | \$ 185,924.40  | \$ 185,924.40    |

|                    |                                             |        |      |                 |                 |                 |                 |
|--------------------|---------------------------------------------|--------|------|-----------------|-----------------|-----------------|-----------------|
| 8.1.2              | Telstra                                     | 1      | Item | \$ 75,391.54    | \$ 75,391.54    | \$ 84,887.03    | \$ 84,887.03    |
| 8.2                | Tree Removal                                |        |      |                 |                 |                 |                 |
| 8.2.1              | Major Tree and Site Clearing incl. grubbing | 1      | Item | \$ 29,578.60    | \$ 29,578.60    | \$ 33,641.03    | \$ 33,641.03    |
| SUB-TOTAL WORKS    |                                             |        |      |                 | \$ 1,077,830.50 |                 | \$ 1,106,404.26 |
| 9                  | DELIVERY                                    |        |      |                 |                 |                 |                 |
| 9.1                | Council Fees                                | 3.25%  |      | \$ 1,077,830.50 | \$ 35,029.49    | \$ 1,106,404.26 | \$ 35,958.14    |
| 9.2                | VicRoads Fees                               | 1.00%  |      | \$ 1,077,830.50 | \$ 10,778.30    | \$ 1,106,404.26 | \$ 11,064.04    |
| 9.3                | Traffic Management                          | 5.00%  |      | \$ 1,077,830.50 | \$ 53,891.52    | \$ 1,106,404.26 | \$ 55,320.21    |
| 9.4                | Environmental Management                    | 0.50%  |      | \$ 1,077,830.50 | \$ 5,389.15     | \$ 1,106,404.26 | \$ 5,532.02     |
| 9.5                | Surveying and Design                        | 5.00%  |      | \$ 1,077,830.50 | \$ 53,891.52    | \$ 1,106,404.26 | \$ 55,320.21    |
| 9.6                | Supervision and Project Management          | 9.00%  |      | \$ 1,077,830.50 | \$ 97,004.74    | \$ 1,106,404.26 | \$ 99,576.38    |
| 9.7                | Site Establishment                          | 2.50%  |      | \$ 1,077,830.50 | \$ 26,945.76    | \$ 1,106,404.26 | \$ 27,660.11    |
| 9.8                | Contingency                                 | 15.00% |      | \$ 1,077,830.50 | \$ 161,674.57   | \$ 1,106,404.26 | \$ 165,960.64   |
| SUB-TOTAL DELIVERY |                                             |        |      |                 | \$ 444,605.08   |                 | \$ 456,391.76   |
| 10                 | TOTAL ESTIMATED COST                        |        |      |                 | \$ 1,522,435.57 |                 | \$ 1,562,796.02 |

| Item                      | Description                                                                                                                                                                                                                     | Quantity | Unit | P50 Rate<br>\$ | P50 Amount<br>\$     | P90 Rate<br>\$ | P90 Amount<br>\$       |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------------|----------------------|----------------|------------------------|
| <b>WORKS</b>              |                                                                                                                                                                                                                                 |          |      |                |                      |                |                        |
| <b>1</b>                  | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                                 |          |      |                |                      |                |                        |
| 1.1                       | Site preparation                                                                                                                                                                                                                | 1        | Item | \$ 21,509.31   | \$ 21,509.31         | \$ 24,312.02   | \$ 24,312.02           |
| 1.1.1                     | Soil stabilisation - gypsum treatment                                                                                                                                                                                           | 2292     | m2   | \$ 17.49       | \$ 40,087.08         | \$ 23.33       | \$ 53,472.36           |
| 1.2                       | <b>Earthworks</b>                                                                                                                                                                                                               |          |      |                |                      |                |                        |
| 1.2.1                     | Cut to Fill                                                                                                                                                                                                                     | 47       | m3   | \$ 40.07       | \$ 1,883.29          | \$ 45.70       | \$ 2,147.90            |
| 1.2.2                     | Cut to Disposal                                                                                                                                                                                                                 | 1216     | m3   | \$ 25.89       | \$ 31,482.24         | \$ 28.98       | \$ 35,239.68           |
| 1.2.3                     | Tipping Fees                                                                                                                                                                                                                    | 1216     | m3   | \$ 29.06       | \$ 35,336.96         | \$ 33.97       | \$ 41,307.52           |
| 1.2.4                     | Formation and Reinstatement of Batters                                                                                                                                                                                          | 232      | m2   | \$ 22.36       | \$ 5,187.52          | \$ 24.84       | \$ 5,762.88            |
| 1.2.5                     | Erosion protection of batters                                                                                                                                                                                                   | 232      | m2   | \$ 4.47        | \$ 1,037.04          | \$ 5.00        | \$ 1,160.00            |
| <b>2</b>                  | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                            |          |      |                |                      |                |                        |
| 2.1                       | <b>Secondary Arterial</b><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 150mm FCR Base Course<br>- 150mm Select Subbase Course | 1058     | m2   | \$ 195.98      | \$ 207,346.84        | \$ 208.82      | \$ 220,931.56          |
| 2.2                       | Subgrade Preparation & Final Trim                                                                                                                                                                                               | 1058     | m2   | \$ 7.78        | \$ 8,231.24          | \$ 10.49       | \$ 11,098.42           |
| 2.3                       | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                               | 117.5    | m2   | \$ 23.33       | \$ 2,741.28          | \$ 29.16       | \$ 3,426.30            |
| 2.4                       | Crushed rock capping layer                                                                                                                                                                                                      | 1522     | m2   | \$ 23.33       | \$ 35,508.26         | \$ 29.16       | \$ 44,381.52           |
| <b>3</b>                  | <b>CONCRETE WORKS</b>                                                                                                                                                                                                           |          |      |                |                      |                |                        |
| 3.1                       | Kerb and Channel                                                                                                                                                                                                                | 235      | LM   | \$ 79.32       | \$ 18,640.20         | \$ 86.01       | \$ 20,212.35           |
| 3.2                       | Pedestrian & Cycle Paths                                                                                                                                                                                                        | 464      | m2   | \$ 110.13      | \$ 51,100.32         | \$ 124.58      | \$ 57,805.12           |
| <b>4</b>                  | <b>DRAINAGE</b>                                                                                                                                                                                                                 |          |      |                |                      |                |                        |
| 4.1                       | <b>Drainage - pipes</b>                                                                                                                                                                                                         |          |      |                |                      |                |                        |
| 4.1.1                     | 300mm dia                                                                                                                                                                                                                       | 73       | LM   | \$ 325.26      | \$ 23,743.98         | \$ 365.68      | \$ 26,694.64           |
| 4.1.2                     | 450mm dia                                                                                                                                                                                                                       | 116      | LM   | \$ 351.04      | \$ 40,720.64         | \$ 394.39      | \$ 45,749.24           |
| 4.2                       | <b>Drainage - pits</b>                                                                                                                                                                                                          |          |      |                |                      |                |                        |
| 4.2.1                     | Single gully on grade or sag - medium lintel                                                                                                                                                                                    | 8        | No.  | \$ 3,687.63    | \$ 29,501.04         | \$ 4,175.88    | \$ 33,407.04           |
| 4.3                       | Drainage – Sub-soil drainage                                                                                                                                                                                                    | 235      | LM   | \$ 33.54       | \$ 7,881.90          | \$ 37.63       | \$ 8,843.05            |
| <b>5</b>                  | <b>LANDSCAPE</b>                                                                                                                                                                                                                |          |      |                |                      |                |                        |
| 5.1                       | Trees                                                                                                                                                                                                                           | 13       | No.  | \$ 737.55      | \$ 9,588.15          | \$ 832.80      | \$ 10,826.40           |
| 5.2                       | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                           | 696      | m2   | \$ 18.79       | \$ 13,077.84         | \$ 25.18       | \$ 17,525.28           |
| 5.3                       | Hydroseeding including watering                                                                                                                                                                                                 | 1596     | m2   | \$ 1.10        | \$ 1,755.60          | \$ 1.45        | \$ 2,314.20            |
| <b>6</b>                  | <b>STREET LIGHTING</b>                                                                                                                                                                                                          |          |      |                |                      |                |                        |
| 6.1                       | Street Lighting                                                                                                                                                                                                                 | 4        | No.  | \$ 11,737.38   | \$ 46,949.52         | \$ 13,633.41   | \$ 54,533.64           |
| 6.2                       | Erosion protection for lighting cables                                                                                                                                                                                          | 251      | m    | \$ 55.98       | \$ 14,050.98         | \$ 62.98       | \$ 15,807.98           |
| <b>7</b>                  | <b>MISCELLANEOUS</b>                                                                                                                                                                                                            |          |      |                |                      |                |                        |
| 7.1                       | Line marking                                                                                                                                                                                                                    | 1        | Item | \$ 2,084.48    | \$ 2,084.48          | \$ 2,424.11    | \$ 2,424.11            |
| 7.2                       | Regulatory Signage                                                                                                                                                                                                              | 1        | Item | \$ 1,509.92    | \$ 1,509.92          | \$ 1,614.59    | \$ 1,614.59            |
| 7.3                       | Works maintenance – up to 1 year                                                                                                                                                                                                | 1        | Item |                | INCL.                |                | INCL.                  |
| 7.4                       | Landscape maintenance – 1yr/2 summers                                                                                                                                                                                           | 1        | Item |                | INCL.                |                | INCL.                  |
| 7.5                       | Traffic signals 10 year Maintenance Fee                                                                                                                                                                                         | 1        | Item |                | INCL.                |                | INCL.                  |
| <b>SUB-TOTAL WORKS</b>    |                                                                                                                                                                                                                                 |          |      |                | <b>\$ 650,955.63</b> |                | <b>\$ 740,997.80</b>   |
| <b>8</b>                  | <b>DELIVERY</b>                                                                                                                                                                                                                 |          |      |                |                      |                |                        |
| 8.1                       | Council Fees                                                                                                                                                                                                                    | 3.25%    |      | \$ 650,955.63  | \$ 21,156.06         | \$ 740,997.80  | \$ 24,082.43           |
| 8.2                       | VicRoads Fees                                                                                                                                                                                                                   | 1.00%    |      | \$ 650,955.63  | \$ 6,509.56          | \$ 740,997.80  | \$ 7,409.98            |
| 8.3                       | Traffic Management                                                                                                                                                                                                              | 5.00%    |      | \$ 650,955.63  | \$ 32,547.78         | \$ 740,997.80  | \$ 37,049.89           |
| 8.4                       | Environmental Management                                                                                                                                                                                                        | 0.50%    |      | \$ 650,955.63  | \$ 3,254.78          | \$ 740,997.80  | \$ 3,704.99            |
| 8.5                       | Surveying and Design                                                                                                                                                                                                            | 5.00%    |      | \$ 650,955.63  | \$ 32,547.78         | \$ 740,997.80  | \$ 37,049.89           |
| 8.6                       | Supervision and Project Management                                                                                                                                                                                              | 9.00%    |      | \$ 650,955.63  | \$ 58,586.01         | \$ 740,997.80  | \$ 66,689.80           |
| 8.7                       | Site Establishment                                                                                                                                                                                                              | 2.50%    |      | \$ 650,955.63  | \$ 16,273.89         | \$ 740,997.80  | \$ 18,524.95           |
| 8.8                       | Contingency                                                                                                                                                                                                                     | 15.00%   |      | \$ 650,955.63  | \$ 97,643.34         | \$ 740,997.80  | \$ 111,149.67          |
| <b>SUB-TOTAL DELIVERY</b> |                                                                                                                                                                                                                                 |          |      |                | <b>\$ 268,519.20</b> |                | <b>\$ 305,661.59</b>   |
| <b>9</b>                  | <b>TOTAL ESTIMATED COST</b>                                                                                                                                                                                                     |          |      |                | <b>\$ 919,474.82</b> |                | <b>\$ 1,046,659.39</b> |



| Item         | Description                                                                                                                                                                                                                     | Quantity | Unit | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------------|------------------|----------------|------------------|
| <b>WORKS</b> |                                                                                                                                                                                                                                 |          |      |                |                  |                |                  |
| <b>1</b>     | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                                 |          |      |                |                  |                |                  |
| 1.1          | Site preparation                                                                                                                                                                                                                | 1        | Item | \$ 17,208.18   | \$ 17,208.18     | \$ 19,399.23   | \$ 19,399.23     |
| 1.1.1        | Soil stabilisation - gypsum treatment                                                                                                                                                                                           | 1851     | m2   | \$ 17.49       | \$ 32,373.99     | \$ 23.33       | \$ 43,183.83     |
| 1.2          | Earthworks                                                                                                                                                                                                                      |          |      |                |                  |                |                  |
| 1.2.1        | Cut to Fill                                                                                                                                                                                                                     | 1149     | m3   | \$ 40.07       | \$ 46,040.43     | \$ 45.70       | \$ 52,509.30     |
| 1.2.2        | Formation and Reinstatement of Batters                                                                                                                                                                                          | 1089     | m2   | \$ 22.36       | \$ 24,350.04     | \$ 24.84       | \$ 27,050.76     |
| 1.2.3        | Erosion protection of batters                                                                                                                                                                                                   | 1089     | m2   | \$ 4.47        | \$ 4,867.83      | \$ 5.00        | \$ 5,445.00      |
| <b>2</b>     | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                            |          |      |                |                  |                |                  |
| 2.1          | <u>Secondary Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 150mm FCR Base Course<br>- 150mm Select Subbase Course | 1168     | m2   | \$ 195.98      | \$ 228,904.64    | \$ 208.82      | \$ 243,901.76    |
| 2.2          | Subgrade Preparation & Final Trim                                                                                                                                                                                               | 1168     | m2   | \$ 7.78        | \$ 9,087.04      | \$ 10.49       | \$ 12,252.32     |
| 2.3          | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                               | 129.5    | m2   | \$ 23.33       | \$ 3,021.24      | \$ 29.16       | \$ 3,776.22      |
| 2.4          | Crushed rock capping layer                                                                                                                                                                                                      | 1686     | m2   | \$ 23.33       | \$ 39,334.38     | \$ 29.16       | \$ 49,163.76     |
| <b>3</b>     | <b>CONCRETE WORKS</b>                                                                                                                                                                                                           |          |      |                |                  |                |                  |
| 3.1          | Kerb and Channel                                                                                                                                                                                                                | 259      | LM   | \$ 79.32       | \$ 20,543.88     | \$ 86.01       | \$ 22,276.59     |
| 3.2          | Pedestrian & Cycle Paths                                                                                                                                                                                                        | 518      | m2   | \$ 110.13      | \$ 57,047.34     | \$ 124.58      | \$ 64,532.44     |
| <b>4</b>     | <b>DRAINAGE</b>                                                                                                                                                                                                                 |          |      |                |                  |                |                  |
| 4.1          | Drainage - pipes                                                                                                                                                                                                                |          |      |                |                  |                |                  |
| 4.1.1        | 300mm dia                                                                                                                                                                                                                       | 73       | LM   | \$ 325.26      | \$ 23,743.98     | \$ 365.68      | \$ 26,694.64     |
| 4.1.2        | 450mm dia                                                                                                                                                                                                                       | 127      | LM   | \$ 351.04      | \$ 44,582.08     | \$ 394.39      | \$ 50,087.53     |
| 4.2          | Drainage - pits                                                                                                                                                                                                                 |          |      |                |                  |                |                  |
| 4.2.1        | Single gully on grade or sag - medium lintel                                                                                                                                                                                    | 9        | No.  | \$ 3,687.63    | \$ 33,188.67     | \$ 4,175.88    | \$ 37,582.92     |
| 4.2.2        | Drainage – Sub-soil drainage                                                                                                                                                                                                    | 259      | LM   | \$ 33.54       | \$ 8,686.86      | \$ 37.63       | \$ 9,746.17      |
| 4.3          | Reinforced Concrete Box Culverts                                                                                                                                                                                                |          |      |                |                  |                |                  |
| 4.3.1        | Growing Grass Frog Passage                                                                                                                                                                                                      | 1        | item | \$ 615,622.20  | \$ 615,622.20    | \$ 702,090.60  | \$ 702,090.60    |
| <b>5</b>     | <b>LANDSCAPE</b>                                                                                                                                                                                                                |          |      |                |                  |                |                  |
| 5.1          | Trees                                                                                                                                                                                                                           | 14       | No.  | \$ 737.55      | \$ 10,325.70     | \$ 832.80      | \$ 11,659.20     |
| 5.2          | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                           | 762      | m2   | \$ 18.79       | \$ 14,317.98     | \$ 25.18       | \$ 19,187.16     |
| 5.3          | Hydroseeding including watering                                                                                                                                                                                                 | 1089     | m2   | \$ 1.10        | \$ 1,197.90      | \$ 1.45        | \$ 1,579.05      |
| <b>6</b>     | <b>STREET LIGHTING</b>                                                                                                                                                                                                          |          |      |                |                  |                |                  |
| 6.1          | Street Lighting                                                                                                                                                                                                                 | 5        | No.  | \$ 11,737.38   | \$ 58,686.90     | \$ 13,633.41   | \$ 68,167.05     |
| 6.2          | Erosion protection for lighting cables                                                                                                                                                                                          | 273      | m    | \$ 55.98       | \$ 15,282.54     | \$ 62.98       | \$ 17,193.54     |
| <b>7</b>     | <b>MISCELLANEOUS</b>                                                                                                                                                                                                            |          |      |                |                  |                |                  |
| 7.1          | Line marking                                                                                                                                                                                                                    | 1        | Item | \$ 2,280.59    | \$ 2,280.59      | \$ 2,553.73    | \$ 2,553.73      |
| 7.2          | Regulatory Signage                                                                                                                                                                                                              | 1        | Item | \$ 1,514.34    | \$ 1,514.34      | \$ 1,753.26    | \$ 1,753.26      |
| 7.3          | Works maintenance – up to 1 year                                                                                                                                                                                                | 1        | Item |                | INCL.            |                | INCL.            |
| 7.4          | Landscape maintenance – 1yr/2 summers                                                                                                                                                                                           | 1        | Item |                | INCL.            |                | INCL.            |
| 7.5          | Traffic signals 10 year Maintenance Fee                                                                                                                                                                                         | 1        | Item |                | INCL.            |                | INCL.            |
| <b>8</b>     | <b>OTHER</b>                                                                                                                                                                                                                    |          |      |                |                  |                |                  |
| 8.1          | Fencing                                                                                                                                                                                                                         |          |      |                |                  |                |                  |

|                    |                                                |        |    |                 |                 |                 |                 |
|--------------------|------------------------------------------------|--------|----|-----------------|-----------------|-----------------|-----------------|
| 8.1.1              | Safety fence - assumed galvanised tubular rail | 254    | LM | \$ 133.82       | \$ 33,990.28    | \$ 150.89       | \$ 38,326.06    |
| SUB-TOTAL WORKS    |                                                |        |    |                 | \$ 1,346,199.01 |                 | \$ 1,530,112.12 |
| 9                  | DELIVERY                                       |        |    |                 |                 |                 |                 |
| 9.1                | Council Fees                                   | 3.25%  |    | \$ 1,346,199.01 | \$ 43,751.47    | \$ 1,530,112.12 | \$ 49,728.64    |
| 9.2                | VicRoads Fees                                  | 1.00%  |    | \$ 1,346,199.01 | \$ 13,461.99    | \$ 1,530,112.12 | \$ 15,301.12    |
| 9.3                | Traffic Management                             | 5.00%  |    | \$ 1,346,199.01 | \$ 67,309.95    | \$ 1,530,112.12 | \$ 76,505.61    |
| 9.4                | Environmental Management                       | 0.50%  |    | \$ 1,346,199.01 | \$ 6,731.00     | \$ 1,530,112.12 | \$ 7,650.56     |
| 9.5                | Surveying and Design                           | 5.00%  |    | \$ 1,346,199.01 | \$ 67,309.95    | \$ 1,530,112.12 | \$ 76,505.61    |
| 9.6                | Supervision and Project Management             | 9.00%  |    | \$ 1,346,199.01 | \$ 121,157.91   | \$ 1,530,112.12 | \$ 137,710.09   |
| 9.7                | Site Establishment                             | 2.50%  |    | \$ 1,346,199.01 | \$ 33,654.98    | \$ 1,530,112.12 | \$ 38,252.80    |
| 9.8                | Contingency                                    | 15.00% |    | \$ 1,346,199.01 | \$ 201,929.85   | \$ 1,530,112.12 | \$ 229,516.82   |
| SUB-TOTAL DELIVERY |                                                |        |    |                 | \$ 555,307.09   |                 | \$ 631,171.25   |
| 10                 | TOTAL ESTIMATED COST                           |        |    |                 | \$ 1,901,506.09 |                 | \$ 2,161,283.37 |

| Item                      | Description                                                                                                                                                                                                                   | Quantity | Unit | P50 Rate<br>\$  | P50 Amount<br>\$       | P90 Rate<br>\$  | P90 Amount<br>\$       |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|-----------------|------------------------|-----------------|------------------------|
| <b>WORKS</b>              |                                                                                                                                                                                                                               |          |      |                 |                        |                 |                        |
| <b>1</b>                  | <b>SITWORKS AND EARTHWORKS</b>                                                                                                                                                                                                |          |      |                 |                        |                 |                        |
| 1.1                       | Site preparation                                                                                                                                                                                                              | 1        | Item | \$ 37,846.81    | \$ 37,846.81           | \$ 42,728.90    | \$ 42,728.90           |
| 1.1.1                     | Soil stabilisation - gypsum treatment                                                                                                                                                                                         | 5277     | m2   | \$ 17.49        | \$ 92,294.73           | \$ 23.33        | \$ 123,112.41          |
| 1.2                       | <b>Earthworks</b>                                                                                                                                                                                                             |          |      |                 |                        |                 |                        |
| 1.2.1                     | Cut to Fill                                                                                                                                                                                                                   | 13       | m3   | \$ 40.07        | \$ 520.91              | \$ 45.70        | \$ 594.10              |
| 1.2.2                     | Cut to Disposal                                                                                                                                                                                                               | 5134     | m3   | \$ 25.89        | \$ 132,919.26          | \$ 28.98        | \$ 148,783.32          |
| 1.2.3                     | Tipping Fees                                                                                                                                                                                                                  | 5134     | m3   | \$ 29.06        | \$ 149,194.04          | \$ 33.97        | \$ 174,401.98          |
| 1.2.4                     | Formation and Reinstatement of Batters                                                                                                                                                                                        | 957      | m2   | \$ 22.36        | \$ 21,398.52           | \$ 24.84        | \$ 23,771.88           |
| 1.2.5                     | Erosion protection of batters                                                                                                                                                                                                 | 957      | m2   | \$ 4.47         | \$ 4,277.79            | \$ 5.00         | \$ 4,785.00            |
| <b>2</b>                  | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                          |          |      |                 |                        |                 |                        |
| 2.1                       | <b>Primary Arterial</b><br>- 40mm Asphalt Wearing Course<br>- 75mm Asphalt Intermediate Course<br>- 90mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 150mm FCR Base Course<br>- 200mm Select Subbase Course | 1116     | m2   | \$ 223.55       | \$ 249,481.80          | \$ 238.23       | \$ 265,864.68          |
| 2.2                       | Subgrade Preparation & Final Trim                                                                                                                                                                                             | 1116     | m2   | \$ 7.78         | \$ 8,682.48            | \$ 10.49        | \$ 11,706.84           |
| 2.3                       | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                             | 155.5    | m2   | \$ 23.33        | \$ 3,627.82            | \$ 29.16        | \$ 4,534.38            |
| 2.4                       | Crushed rock capping layer                                                                                                                                                                                                    | 2049     | m2   | \$ 23.33        | \$ 47,803.17           | \$ 29.16        | \$ 59,748.84           |
| <b>3</b>                  | <b>CONCRETE WORKS</b>                                                                                                                                                                                                         |          |      |                 |                        |                 |                        |
| 3.1                       | Kerb and Channel                                                                                                                                                                                                              | 311      | LM   | \$ 79.32        | \$ 24,668.52           | \$ 86.01        | \$ 26,749.11           |
| 3.2                       | Pedestrian & Cycle Paths                                                                                                                                                                                                      | 933      | m2   | \$ 110.13       | \$ 102,751.29          | \$ 124.58       | \$ 116,233.14          |
| <b>4</b>                  | <b>DRAINAGE</b>                                                                                                                                                                                                               |          |      |                 |                        |                 |                        |
| 4.1                       | <b>Drainage - pipes</b>                                                                                                                                                                                                       |          |      |                 |                        |                 |                        |
| 4.1.1                     | 300mm dia                                                                                                                                                                                                                     | 79       | LM   | \$ 325.26       | \$ 25,695.54           | \$ 365.68       | \$ 28,888.72           |
| 4.1.2                     | 450mm dia                                                                                                                                                                                                                     | 156      | LM   | \$ 351.04       | \$ 54,762.24           | \$ 394.39       | \$ 61,524.84           |
| 4.2                       | <b>Drainage - pits</b>                                                                                                                                                                                                        |          |      |                 |                        |                 |                        |
| 4.2.1                     | Single gully on grade or sag - medium lintel                                                                                                                                                                                  | 11       | No.  | \$ 3,687.63     | \$ 40,563.93           | \$ 4,175.88     | \$ 45,934.68           |
| 4.2.2                     | Drainage – Sub-soil drainage                                                                                                                                                                                                  | 311      | LM   | \$ 33.54        | \$ 10,430.94           | \$ 37.63        | \$ 11,702.93           |
| <b>5</b>                  | <b>LANDSCAPE</b>                                                                                                                                                                                                              |          |      |                 |                        |                 |                        |
| 5.1                       | Trees                                                                                                                                                                                                                         | 9        | No.  | \$ 737.55       | \$ 6,637.95            | \$ 832.80       | \$ 7,495.20            |
| 5.2                       | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                         | 1244     | m2   | \$ 18.79        | \$ 23,374.76           | \$ 25.18        | \$ 31,323.92           |
| 5.3                       | Hydroseeding including watering                                                                                                                                                                                               | 4033     | m2   | \$ 1.10         | \$ 4,436.30            | \$ 1.45         | \$ 5,847.85            |
| <b>6</b>                  | <b>STREET LIGHTING</b>                                                                                                                                                                                                        |          |      |                 |                        |                 |                        |
| 6.1                       | Street Lighting                                                                                                                                                                                                               | 6        | No.  | \$ 11,737.38    | \$ 70,424.28           | \$ 13,633.41    | \$ 81,800.46           |
| 6.2                       | Erosion protection for lighting cables                                                                                                                                                                                        | 340      | m    | \$ 55.98        | \$ 19,033.20           | \$ 62.98        | \$ 21,413.20           |
| <b>7</b>                  | <b>MISCELLANEOUS</b>                                                                                                                                                                                                          |          |      |                 |                        |                 |                        |
| 7.1                       | Line marking                                                                                                                                                                                                                  | 1        | Item | \$ 2,188.28     | \$ 2,188.28            | \$ 2,459.60     | \$ 2,459.60            |
| 7.2                       | Regulatory Signage                                                                                                                                                                                                            | 1        | Item | \$ 1,999.13     | \$ 1,999.13            | \$ 2,279.79     | \$ 2,279.79            |
| 7.3                       | Works maintenance – up to 1 year                                                                                                                                                                                              | 1        | Item |                 | INCL.                  |                 | INCL.                  |
| 7.4                       | Landscape maintenance – 1yr/2 summers                                                                                                                                                                                         | 1        | Item |                 | INCL.                  |                 | INCL.                  |
| 7.5                       | Traffic signals 10 year Maintenance Fee                                                                                                                                                                                       | 1        | Item |                 | INCL.                  |                 | INCL.                  |
| <b>SUB-TOTAL WORKS</b>    |                                                                                                                                                                                                                               |          |      |                 | <b>\$ 1,135,013.69</b> |                 | <b>\$ 1,303,685.77</b> |
| <b>8</b>                  | <b>DELIVERY</b>                                                                                                                                                                                                               |          |      |                 |                        |                 |                        |
| 8.1                       | Council Fees                                                                                                                                                                                                                  | 3.25%    |      | \$ 1,135,013.69 | \$ 36,887.94           | \$ 1,303,685.77 | \$ 42,369.79           |
| 8.2                       | VicRoads Fees                                                                                                                                                                                                                 | 1.00%    |      | \$ 1,135,013.69 | \$ 11,350.14           | \$ 1,303,685.77 | \$ 13,036.86           |
| 8.3                       | Traffic Management                                                                                                                                                                                                            | 5.00%    |      | \$ 1,135,013.69 | \$ 56,750.68           | \$ 1,303,685.77 | \$ 65,184.29           |
| 8.4                       | Environmental Management                                                                                                                                                                                                      | 0.50%    |      | \$ 1,135,013.69 | \$ 5,675.07            | \$ 1,303,685.77 | \$ 6,518.43            |
| 8.5                       | Surveying and Design                                                                                                                                                                                                          | 5.00%    |      | \$ 1,135,013.69 | \$ 56,750.68           | \$ 1,303,685.77 | \$ 65,184.29           |
| 8.6                       | Supervision and Project Management                                                                                                                                                                                            | 9.00%    |      | \$ 1,135,013.69 | \$ 102,151.23          | \$ 1,303,685.77 | \$ 117,331.72          |
| 8.7                       | Site Establishment                                                                                                                                                                                                            | 2.50%    |      | \$ 1,135,013.69 | \$ 28,375.34           | \$ 1,303,685.77 | \$ 32,592.14           |
| 8.8                       | Contingency                                                                                                                                                                                                                   | 15.00%   |      | \$ 1,135,013.69 | \$ 170,252.05          | \$ 1,303,685.77 | \$ 195,552.87          |
| <b>SUB-TOTAL DELIVERY</b> |                                                                                                                                                                                                                               |          |      |                 | <b>\$ 468,193.15</b>   |                 | <b>\$ 537,770.38</b>   |
| <b>9</b>                  | <b>TOTAL ESTIMATED COST</b>                                                                                                                                                                                                   |          |      |                 | <b>\$ 1,603,206.83</b> |                 | <b>\$ 1,841,456.15</b> |

| Item                      | Description                                                                                                                                                                                                                   | Quantity | Unit | P50 Rate<br>\$  | P50 Amount<br>\$       | P90 Rate<br>\$  | P90 Amount<br>\$       |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|-----------------|------------------------|-----------------|------------------------|
| <b>WORKS</b>              |                                                                                                                                                                                                                               |          |      |                 |                        |                 |                        |
| <b>1</b>                  | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                                               |          |      |                 |                        |                 |                        |
| 1.1                       | Site preparation                                                                                                                                                                                                              | 1        | Item | \$ 61,463.04    | \$ 61,463.04           | \$ 69,800.85    | \$ 69,800.85           |
| 1.1.1                     | Soil stabilisation - gypsum treatment                                                                                                                                                                                         | 8260     | Item | \$ 17.49        | \$ 144,467.40          | \$ 23.33        | \$ 192,705.80          |
| 1.2                       | <b>Earthworks</b>                                                                                                                                                                                                             |          |      |                 |                        |                 |                        |
| 1.2.1                     | Cut to Fill                                                                                                                                                                                                                   | 1301     | m3   | \$ 40.07        | \$ 52,131.07           | \$ 45.70        | \$ 59,455.70           |
| 1.2.2                     | Cut to Disposal                                                                                                                                                                                                               | 1767     | m3   | \$ 25.89        | \$ 45,747.63           | \$ 28.98        | \$ 51,207.66           |
| 1.2.3                     | Tipping Fees                                                                                                                                                                                                                  | 1767     | m3   | \$ 29.06        | \$ 51,349.02           | \$ 33.97        | \$ 60,024.99           |
| 1.2.4                     | Formation and Reinstatement of Batters                                                                                                                                                                                        | 855      | m2   | \$ 22.36        | \$ 19,117.80           | \$ 24.84        | \$ 21,238.20           |
| 1.2.5                     | Erosion protection for batters                                                                                                                                                                                                | 855      | m2   | \$ 4.47         | \$ 3,821.85            | \$ 5.00         | \$ 4,275.00            |
| <b>2</b>                  | <b>ROAD PAVEMENT</b>                                                                                                                                                                                                          |          |      |                 |                        |                 |                        |
| 2.1                       | <b>Primary Arterial</b><br>- 40mm Asphalt Wearing Course<br>- 75mm Asphalt Intermediate Course<br>- 90mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 150mm FCR Base Course<br>- 200mm Select Subbase Course | 1943     | m2   | \$ 223.55       | \$ 434,357.65          | \$ 238.23       | \$ 462,880.89          |
| 2.2                       | Subgrade Preparation & Final Trim                                                                                                                                                                                             | 1943     | m2   | \$ 7.78         | \$ 15,116.54           | \$ 10.49        | \$ 20,382.07           |
| 2.3                       | Lime stabilisation, 0.5m past BoK                                                                                                                                                                                             | 264.5    | m2   | \$ 23.33        | \$ 6,170.79            | \$ 29.16        | \$ 7,712.82            |
| 2.4                       | Crushed rock capping layer                                                                                                                                                                                                    | 3548     | m2   | \$ 23.33        | \$ 82,774.84           | \$ 29.16        | \$ 103,459.68          |
| <b>3</b>                  | <b>CONCRETE WORKS</b>                                                                                                                                                                                                         |          |      |                 |                        |                 |                        |
| 3.1                       | Kerb and Channel                                                                                                                                                                                                              | 529      | LM   | \$ 79.32        | \$ 41,960.28           | \$ 86.01        | \$ 45,499.29           |
| 3.2                       | Pedestrian & Cycle Paths                                                                                                                                                                                                      | 1605     | m2   | \$ 110.13       | \$ 176,758.65          | \$ 124.58       | \$ 199,950.90          |
| <b>4</b>                  | <b>DRAINAGE</b>                                                                                                                                                                                                               |          |      |                 |                        |                 |                        |
| 4.1                       | <b>Drainage - pipes</b>                                                                                                                                                                                                       |          |      |                 |                        |                 |                        |
| 4.1.1                     | 300mm dia                                                                                                                                                                                                                     | 128      | LM   | \$ 325.26       | \$ 41,633.28           | \$ 365.68       | \$ 46,807.04           |
| 4.1.2                     | 450mm dia                                                                                                                                                                                                                     | 268      | LM   | \$ 351.04       | \$ 94,078.72           | \$ 394.39       | \$ 105,696.52          |
| 4.2                       | <b>Drainage - pits</b>                                                                                                                                                                                                        |          |      |                 |                        |                 |                        |
| 4.2.1                     | Single gully on grade or sag - medium lintel                                                                                                                                                                                  | 18       | No.  | \$ 3,687.63     | \$ 66,377.34           | \$ 4,175.88     | \$ 75,165.84           |
| 4.2.2                     | Drainage – Sub-soil drainage                                                                                                                                                                                                  | 529      | LM   | \$ 33.54        | \$ 17,742.66           | \$ 37.63        | \$ 19,906.27           |
| <b>5</b>                  | <b>LANDSCAPE</b>                                                                                                                                                                                                              |          |      |                 |                        |                 |                        |
| 5.1                       | Trees                                                                                                                                                                                                                         | 15       | No.  | \$ 737.55       | \$ 11,063.25           | \$ 832.80       | \$ 12,492.00           |
| 5.2                       | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                                         | 2140     | m2   | \$ 18.79        | \$ 40,210.60           | \$ 25.18        | \$ 53,885.20           |
| 5.3                       | Hydroseeding including watering                                                                                                                                                                                               | 6120     | m2   | \$ 1.10         | \$ 6,732.00            | \$ 1.45         | \$ 8,874.00            |
| <b>6</b>                  | <b>STREET LIGHTING</b>                                                                                                                                                                                                        |          |      |                 |                        |                 |                        |
| 6.1                       | Street Lighting                                                                                                                                                                                                               | 9        | No.  | \$ 11,737.38    | \$ 105,636.42          | \$ 13,633.41    | \$ 122,700.69          |
| 6.2                       | Erosion protection for lighting cables                                                                                                                                                                                        | 573      | m    | \$ 55.98        | \$ 32,076.54           | \$ 62.98        | \$ 36,087.54           |
| <b>7</b>                  | <b>MISCELLANEOUS</b>                                                                                                                                                                                                          |          |      |                 |                        |                 |                        |
| 7.1                       | Line marking                                                                                                                                                                                                                  | 1        | Item | \$ 3,806.72     | \$ 3,806.72            | \$ 4,196.71     | \$ 4,196.71            |
| 7.2                       | Regulatory Signage                                                                                                                                                                                                            | 1        | Item | \$ 3,039.70     | \$ 3,039.70            | \$ 3,439.42     | \$ 3,439.42            |
| 7.3                       | Works maintenance – up to 1 year                                                                                                                                                                                              | 1        | Item |                 | INCL.                  |                 | INCL.                  |
| 7.4                       | Landscape maintenance – 1yr/2 summers                                                                                                                                                                                         | 1        | Item |                 | INCL.                  |                 | INCL.                  |
| 7.5                       | Traffic signals 10 year Maintenance Fee                                                                                                                                                                                       | 1        | Item |                 | INCL.                  |                 | INCL.                  |
| <b>SUB-TOTAL WORKS</b>    |                                                                                                                                                                                                                               |          |      |                 | <b>\$ 1,557,633.79</b> |                 | <b>\$ 1,787,845.08</b> |
| <b>8</b>                  | <b>DELIVERY</b>                                                                                                                                                                                                               |          |      |                 |                        |                 |                        |
| 8.1                       | Council Fees                                                                                                                                                                                                                  | 3.25%    |      | \$ 1,557,633.79 | \$ 50,623.10           | \$ 1,787,845.08 | \$ 58,104.97           |
| 8.2                       | VicRoads Fees                                                                                                                                                                                                                 | 1.00%    |      | \$ 1,557,633.79 | \$ 15,576.34           | \$ 1,787,845.08 | \$ 17,878.45           |
| 8.3                       | Traffic Management                                                                                                                                                                                                            | 5.00%    |      | \$ 1,557,633.79 | \$ 77,881.69           | \$ 1,787,845.08 | \$ 89,392.25           |
| 8.4                       | Environmental Management                                                                                                                                                                                                      | 0.50%    |      | \$ 1,557,633.79 | \$ 7,788.17            | \$ 1,787,845.08 | \$ 8,939.23            |
| 8.5                       | Surveying and Design                                                                                                                                                                                                          | 5.00%    |      | \$ 1,557,633.79 | \$ 77,881.69           | \$ 1,787,845.08 | \$ 89,392.25           |
| 8.6                       | Supervision and Project Management                                                                                                                                                                                            | 9.00%    |      | \$ 1,557,633.79 | \$ 140,187.04          | \$ 1,787,845.08 | \$ 160,906.06          |
| 8.7                       | Site Establishment                                                                                                                                                                                                            | 2.50%    |      | \$ 1,557,633.79 | \$ 38,940.84           | \$ 1,787,845.08 | \$ 44,696.13           |
| 8.8                       | Contingency                                                                                                                                                                                                                   | 15.00%   |      | \$ 1,557,633.79 | \$ 233,645.07          | \$ 1,787,845.08 | \$ 268,176.76          |
| <b>SUB-TOTAL DELIVERY</b> |                                                                                                                                                                                                                               |          |      |                 | <b>\$ 642,523.94</b>   |                 | <b>\$ 737,486.10</b>   |
| <b>9</b>                  | <b>TOTAL ESTIMATED COST</b>                                                                                                                                                                                                   |          |      |                 | <b>\$ 2,200,157.72</b> |                 | <b>\$ 2,525,331.18</b> |





# Bridges

VPA Estimates

**H&M**  
CONSULTING

Quantity  
Surveying  
Services



| Item                      | Description                            | Quantity | Unit | P50 Rate<br>\$  | P50 Amount<br>\$                   | P90 Rate<br>\$  | P90 Amount<br>\$                   |
|---------------------------|----------------------------------------|----------|------|-----------------|------------------------------------|-----------------|------------------------------------|
| <b>WORKS</b>              |                                        |          |      |                 |                                    |                 |                                    |
| <b>1</b>                  | <b>SITEWORKS AND EARTHWORKS</b>        |          |      |                 |                                    |                 |                                    |
| 1.1                       | Site preparation                       | 1        | Item | \$ 49,882.16    | \$ 49,882.16                       | \$ 56,442.78    | \$ 56,442.78                       |
| 1.2                       | Earthworks                             | 1189     | m3   | \$ 107.99       | \$ 128,400.11                      | \$ 120.88       | \$ 143,726.32                      |
| 1.3                       | Setout                                 | 1        | Item | \$ 50,731.85    | \$ 50,731.85                       | \$ 57,487.22    | \$ 57,487.22                       |
| 1.4                       | Soil stabilisation - gypsum treatment  | 1729     | m2   | \$ 17.49        | \$ 30,240.21                       | \$ 23.33        | \$ 40,337.57                       |
| 1.5                       | Erosion protection for batters         | 829      | m2   | \$ 4.47         | \$ 3,705.63                        | \$ 5.00         | \$ 4,145.00                        |
| <b>2</b>                  | <b>STRUCTURE</b>                       |          |      |                 |                                    |                 |                                    |
| 2.1                       | Slab & foundations/piers/beams         | 480      | m2   | \$ 6,363.82     | \$ 3,054,633.60                    | \$ 7,112.81     | \$ 3,414,148.80                    |
| 2.2                       | Abutments                              | 1        | Item | \$ 77,304.64    | \$ 77,304.64                       | \$ 78,950.30    | \$ 78,950.30                       |
| 2.3                       | Bridge Containment Barrier             | 78       | LM   | \$ 1,895.78     | \$ 147,870.84                      | \$ 2,140.10     | \$ 166,927.80                      |
| <b>3</b>                  | <b>ON-BRIDGE WORKS</b>                 |          |      |                 |                                    |                 |                                    |
| 3.1                       | Asphalt wearing course over slab       | 480      | m2   | \$ 80.00        | \$ 38,400.00                       | \$ 89.84        | \$ 43,123.20                       |
| 3.2                       | Kerb and Channel                       | 78       | LM   | \$ 71.17        | \$ 5,551.26                        | \$ 79.83        | \$ 6,226.74                        |
| 3.3                       | Footpath                               | 137      | m2   | \$ 130.75       | \$ 17,912.75                       | \$ 147.74       | \$ 20,240.38                       |
| 3.4                       | Lighting on-bridge                     | 1        | Item | \$ 47,914.84    | \$ 47,914.84                       | \$ 53,959.73    | \$ 53,959.73                       |
| <b>4</b>                  | <b>OFF BRIDGE WORKS</b>                |          |      |                 |                                    |                 |                                    |
| 4.1                       | Approach slabs                         | 60       | m2   | \$ 274.66       | \$ 16,479.60                       | \$ 302.29       | \$ 18,137.40                       |
| 4.2                       | Safety guard rail/barrier              | 8        | m    | \$ 1,897.13     | \$ 15,177.04                       | \$ 2,151.65     | \$ 17,213.20                       |
| 4.3                       | Drainage                               | 1        | Item | \$ 3,189.60     | \$ 3,189.60                        | \$ 3,611.98     | \$ 3,611.98                        |
| 4.4                       | Scour protection                       | 1        | Item | \$ 54,308.03    | \$ 54,308.03                       | \$ 61,035.38    | \$ 61,035.38                       |
| 4.5                       | Other - 60m road lead in works         | 1        | Item | \$ 235,198.50   | \$ 235,198.50                      | \$ 264,354.50   | \$ 264,354.50                      |
| 4.6                       | Other - Culvert 2 - Frog Passage       | 1        | Item | \$ 594,179.10   | \$ 594,179.10                      | \$ 665,043.40   | \$ 665,043.40                      |
| 4.7                       | Lime stabilisation, 0.5m past BoK      | 60       | m2   | \$ 23.33        | \$ 1,399.80                        | \$ 29.16        | \$ 1,749.60                        |
| 4.8                       | Crushed rock capping layer             | 900      | m2   | \$ 23.33        | \$ 20,997.00                       | \$ 29.16        | \$ 26,244.00                       |
| <b>5</b>                  | <b>MISCELLANEOUS</b>                   |          |      |                 |                                    |                 |                                    |
| 5.1                       | Line marking                           | 1        | Item | \$ 3,015.37     | \$ 3,015.37                        | \$ 3,391.27     | \$ 3,391.27                        |
| 5.2                       | Regulatory Signage                     | 1        | Item | \$ 6,473.58     | \$ 6,473.58                        | \$ 7,424.79     | \$ 7,424.79                        |
| 5.3                       | Maintenance of works – 1 year          | 1        | Item | \$ 60,000.51    | \$ 60,000.51                       | \$ 67,639.36    | \$ 67,639.36                       |
| <b>6</b>                  | <b>SERVICES</b>                        |          |      |                 |                                    |                 |                                    |
| 6.1                       | Services conduit on-bridge             | 1        | Item | \$ 4,639.28     | \$ 4,639.28                        | \$ 5,232.18     | \$ 5,232.18                        |
| 6.2                       | Erosion protection for lighting cables | 120      | LM   | \$ 55.98        | \$ 6,717.60                        | \$ 62.98        | \$ 7,557.60                        |
| <b>SUB-TOTAL WORKS</b>    |                                        |          |      |                 | <b>\$ 4,674,322.90<sup>1</sup></b> |                 | <b>\$ 5,234,350.50<sup>1</sup></b> |
| <b>7</b>                  | <b>DELIVERY</b>                        |          |      |                 |                                    |                 |                                    |
| 7.1                       | Council Fees                           | 3.25%    |      | \$ 4,674,322.90 | \$ 151,915.49                      | \$ 5,234,350.50 | \$ 170,116.39                      |
| 7.2                       | VicRoads Fees                          | 1.00%    |      | \$ 4,674,322.90 | \$ 46,743.23                       | \$ 5,234,350.50 | \$ 52,343.51                       |
| 7.3                       | Traffic Management                     | 5.00%    |      | \$ 4,674,322.90 | \$ 233,716.15                      | \$ 5,234,350.50 | \$ 261,717.53                      |
| 7.4                       | Environmental Management               | 0.50%    |      | \$ 4,674,322.90 | \$ 23,371.61                       | \$ 5,234,350.50 | \$ 26,171.75                       |
| 7.5                       | Surveying and Design                   | 5.00%    |      | \$ 4,674,322.90 | \$ 233,716.15                      | \$ 5,234,350.50 | \$ 261,717.53                      |
| 7.6                       | Supervision and Project Management     | 9.00%    |      | \$ 4,674,322.90 | \$ 420,689.06                      | \$ 5,234,350.50 | \$ 471,091.55                      |
| 7.7                       | Site Establishment                     | 2.50%    |      | \$ 4,674,322.90 | \$ 116,858.07                      | \$ 5,234,350.50 | \$ 130,858.76                      |
| 7.8                       | Contingency                            | 20.00%   |      | \$ 4,674,322.90 | \$ 934,864.58                      | \$ 5,234,350.50 | \$ 1,046,870.10                    |
| <b>SUB-TOTAL DELIVERY</b> |                                        |          |      |                 | <b>\$ 2,161,874.34<sup>1</sup></b> |                 | <b>\$ 2,420,887.11<sup>1</sup></b> |
| <b>8</b>                  | <b>TOTAL ESTIMATED COST</b>            |          |      |                 | <b>\$ 6,836,197.24<sup>1</sup></b> |                 | <b>\$ 7,655,237.61<sup>1</sup></b> |

1. The costings provided consider only the western half of the bridge works (37.5m length), inclusive of a 60m road lead-in. These costs are expected to be approximately 50% of the total bridge construction costs. The full bridge length is approximately 75m.



| Item                      | Description                            | Quantity | Unit | P50 Rate<br>\$  | P50 Amount<br>\$                   | P90 Rate<br>\$  | P90 Amount<br>\$                    |
|---------------------------|----------------------------------------|----------|------|-----------------|------------------------------------|-----------------|-------------------------------------|
| <b>WORKS</b>              |                                        |          |      |                 |                                    |                 |                                     |
| <b>1</b>                  | <b>SITEWORKS AND EARTHWORKS</b>        |          |      |                 |                                    |                 |                                     |
| 1.1                       | Site preparation                       | 1        | Item | \$ 52,452.01    | \$ 52,452.01                       | \$ 59,531.81    | \$ 59,531.81                        |
| 1.2                       | Earthworks                             | 3101     | m3   | \$ 51.42        | \$ 159,453.42                      | \$ 58.22        | \$ 180,540.22                       |
| 1.3                       | Setout                                 | 1        | Item | \$ 50,731.85    | \$ 50,731.85                       | \$ 57,487.22    | \$ 57,487.22                        |
| 1.4                       | Soil stabilisation - gypsum treatment  | 1935     | m2   | \$ 17.49        | \$ 33,843.15                       | \$ 23.33        | \$ 45,143.55                        |
| 1.5                       | Erosion protection for batters         | 1334     | m2   | \$ 4.47         | \$ 5,962.98                        | \$ 5.00         | \$ 6,670.00                         |
| <b>2</b>                  | <b>STRUCTURE</b>                       |          |      |                 |                                    |                 |                                     |
| 2.1                       | Slab & foundations/piers/beams         | 642      | m2   | \$ 6,984.97     | \$ 4,484,350.74                    | \$ 7,780.89     | \$ 4,995,331.38                     |
| 2.2                       | Abutments                              | 1        | Item | \$ 91,602.17    | \$ 91,602.17                       | \$ 103,902.30   | \$ 103,902.30                       |
| 2.3                       | Bridge Containment Barrier             | 93       | LM   | \$ 1,896.39     | \$ 176,364.27                      | \$ 2,172.71     | \$ 202,062.03                       |
| <b>3</b>                  | <b>ON-BRIDGE WORKS</b>                 |          |      |                 |                                    |                 |                                     |
| 3.1                       | Asphalt wearing course over slab       | 642      | m2   | \$ 83.53        | \$ 53,626.26                       | \$ 89.84        | \$ 57,677.28                        |
| 3.2                       | Kerb and Channel                       | 93       | LM   | \$ 71.44        | \$ 6,643.92                        | \$ 79.50        | \$ 7,393.50                         |
| 3.3                       | Footpath                               | 163      | m2   | \$ 133.12       | \$ 21,698.56                       | \$ 149.22       | \$ 24,322.86                        |
| 3.4                       | Lighting on-bridge                     | 1        | Item | \$ 72,239.64    | \$ 72,239.64                       | \$ 81,320.68    | \$ 81,320.68                        |
| <b>4</b>                  | <b>OFF BRIDGE WORKS</b>                |          |      |                 |                                    |                 |                                     |
| 4.1                       | Approach slabs                         | 66       | m2   | \$ 268.24       | \$ 17,703.84                       | \$ 302.29       | \$ 19,951.14                        |
| 4.2                       | Safety guard rail/barrier              | 8        | m    | \$ 1,897.13     | \$ 15,177.04                       | \$ 2,151.65     | \$ 17,213.20                        |
| 4.3                       | Drainage                               | 1        | Item | \$ 4,780.40     | \$ 4,780.40                        | \$ 5,417.77     | \$ 5,417.77                         |
| 4.4                       | Scour protection                       | 1        | Item | \$ 92,225.09    | \$ 92,225.09                       | \$ 103,357.30   | \$ 103,357.30                       |
| 4.5                       | Other - 60m road lead in works         | 1        | Item | \$ 201,503.10   | \$ 201,503.10                      | \$ 228,179.00   | \$ 228,179.00                       |
| 4.6                       | Other - Culvert 2 - Frog Passage       | 1        | Item | \$ 789,903.80   | \$ 789,903.80                      | \$ 889,781.40   | \$ 889,781.40                       |
| 4.7                       | Lime stabilisation, 0.5m past BoK      | 60       | m2   | \$ 23.33        | \$ 1,399.80                        | \$ 29.16        | \$ 1,749.60                         |
| 4.8                       | Crushed rock capping layer             | 601      | m2   | \$ 23.33        | \$ 14,021.33                       | \$ 29.16        | \$ 17,525.16                        |
| <b>5</b>                  | <b>MISCELLANEOUS</b>                   |          |      |                 |                                    |                 |                                     |
| 5.1                       | Line marking                           | 1        | Item | \$ 3,015.37     | \$ 3,015.37                        | \$ 3,391.27     | \$ 3,391.27                         |
| 5.2                       | Regulatory Signage                     | 1        | Item | \$ 6,473.58     | \$ 6,473.58                        | \$ 7,424.79     | \$ 7,424.79                         |
| 5.3                       | Maintenance of works – 1 year          | 1        | Item | \$ 60,000.51    | \$ 60,000.51                       | \$ 67,639.36    | \$ 67,639.36                        |
| <b>6</b>                  | <b>SERVICES</b>                        |          |      |                 |                                    |                 |                                     |
| 6.1                       | Services conduit on-bridge             | 1        | Item | \$ 5,595.18     | \$ 5,595.18                        | \$ 6,303.49     | \$ 6,303.49                         |
| 6.2                       | Erosion protection for lighting cables | 120      | LM   | \$ 55.98        | \$ 6,717.60                        | \$ 62.98        | \$ 7,557.60                         |
| <b>SUB-TOTAL WORKS</b>    |                                        |          |      |                 | <b>\$ 6,427,485.61<sup>2</sup></b> |                 | <b>\$ 7,196,873.91<sup>2</sup></b>  |
| <b>7</b>                  | <b>DELIVERY</b>                        |          |      |                 |                                    |                 |                                     |
| 7.1                       | Council Fees                           | 3.25%    |      | \$ 6,427,485.61 | \$ 208,893.28                      | \$ 7,196,873.91 | \$ 233,898.40                       |
| 7.2                       | VicRoads Fees                          | 1.00%    |      | \$ 6,427,485.61 | \$ 64,274.86                       | \$ 7,196,873.91 | \$ 71,968.74                        |
| 7.3                       | Traffic Management                     | 5.00%    |      | \$ 6,427,485.61 | \$ 321,374.28                      | \$ 7,196,873.91 | \$ 359,843.70                       |
| 7.4                       | Environmental Management               | 0.50%    |      | \$ 6,427,485.61 | \$ 32,137.43                       | \$ 7,196,873.91 | \$ 35,984.37                        |
| 7.5                       | Surveying and Design                   | 5.00%    |      | \$ 6,427,485.61 | \$ 321,374.28                      | \$ 7,196,873.91 | \$ 359,843.70                       |
| 7.6                       | Supervision and Project Management     | 9.00%    |      | \$ 6,427,485.61 | \$ 578,473.70                      | \$ 7,196,873.91 | \$ 647,718.65                       |
| 7.7                       | Site Establishment                     | 2.50%    |      | \$ 6,427,485.61 | \$ 160,687.14                      | \$ 7,196,873.91 | \$ 179,921.85                       |
| 7.8                       | Contingency                            | 20.00%   |      | \$ 6,427,485.61 | \$ 1,285,497.12                    | \$ 7,196,873.91 | \$ 1,439,374.78                     |
| <b>SUB-TOTAL DELIVERY</b> |                                        |          |      |                 | <b>\$ 2,972,712.09<sup>2</sup></b> |                 | <b>\$ 3,328,554.18<sup>2</sup></b>  |
| <b>8</b>                  | <b>TOTAL ESTIMATED COST</b>            |          |      |                 | <b>\$ 9,400,197.70<sup>2</sup></b> |                 | <b>\$ 10,525,428.09<sup>2</sup></b> |

2. The costings provided consider only the western half of the bridge works (46.5m length), inclusive of a 60m road lead-in. These costs are expected to be approximately 50% of the total bridge construction costs. The full bridge length is approximately 93m.



| Item | Description                           | Quantity | Unit | P50 Rate<br>\$  | P50 Amount<br>\$ | P90 Rate<br>\$  | P90 Amount<br>\$ |
|------|---------------------------------------|----------|------|-----------------|------------------|-----------------|------------------|
|      | <b>WORKS</b>                          |          |      |                 |                  |                 |                  |
| 1    | <b>SITEWORKS AND EARTHWORKS</b>       |          |      |                 |                  |                 |                  |
| 1.1  | Site preparation                      | 1        | Item | \$ 30,631.95    | \$ 30,631.95     | \$ 34,700.15    | \$ 34,700.15     |
| 1.2  | Earthworks                            | 2130     | m3   | \$ 84.46        | \$ 179,899.80    | \$ 95.64        | \$ 203,713.20    |
| 1.3  | Setout                                | 1        | Item | \$ 44,804.62    | \$ 44,804.62     | \$ 50,430.92    | \$ 50,430.92     |
| 1.4  | Soil stabilisation - gypsum treatment | 1548     | m2   | \$ 17.49        | \$ 27,074.52     | \$ 23.33        | \$ 36,114.84     |
| 1.5  | Erosion protection for batters        | 696      | m2   | \$ 4.47         | \$ 3,111.12      | \$ 5.00         | \$ 3,480.00      |
| 2    | <b>STRUCTURE</b>                      |          |      |                 |                  |                 |                  |
| 2.1  | Slab & foundations/piers/beams        | 300      | m2   | \$ 3,930.88     | \$ 1,179,264.00  | \$ 4,407.34     | \$ 1,322,202.00  |
| 2.2  | Abutments                             | 1        | Item | \$ 49,945.56    | \$ 49,945.56     | \$ 56,596.12    | \$ 56,596.12     |
| 2.3  | Bridge Containment Barrier            | 150      | LM   | \$ 969.14       | \$ 145,371.60    | \$ 1,107.47     | \$ 166,120.50    |
| 3    | <b>ON-BRIDGE WORKS</b>                |          |      |                 |                  |                 |                  |
| 3.1  | Asphalt wearing course over slab      |          | n/a  |                 |                  |                 |                  |
| 3.2  | Kerb and Channel                      |          | n/a  |                 |                  |                 |                  |
| 3.3  | Footpath                              |          | n/a  |                 |                  |                 |                  |
| 3.4  | Lighting on-bridge                    | 1        | Item | \$ 44,804.62    | \$ 44,804.62     | \$ 50,430.92    | \$ 50,430.92     |
| 4    | <b>OFF BRIDGE WORKS</b>               |          |      |                 |                  |                 |                  |
| 4.1  | Approach slabs                        | 33       | m2   | \$ 269.71       | \$ 8,900.43      | \$ 302.86       | \$ 9,994.38      |
| 4.2  | Safety guard rail/barrier             | 16       | m    | \$ 968.16       | \$ 15,490.56     | \$ 1,080.29     | \$ 17,284.64     |
| 4.3  | Drainage                              | 1        | Item | \$ 2,389.26     | \$ 2,389.26      | \$ 2,675.36     | \$ 2,675.36      |
| 4.4  | Scour protection                      | 1        | Item | \$ 72,653.17    | \$ 72,653.17     | \$ 82,120.36    | \$ 82,120.36     |
| 4.5  | Other - 78m path lead in works        | 1        | Item | \$ 44,942.01    | \$ 44,942.01     | \$ 50,914.42    | \$ 50,914.42     |
| 5    | <b>MISCELLANEOUS</b>                  |          |      |                 |                  |                 |                  |
| 5.1  | Line marking                          | 1        | Item | \$ 1,002.53     | \$ 1,002.53      | \$ 1,123.07     | \$ 1,123.07      |
| 5.2  | Regulatory Signage                    | 1        | Item | \$ 3,501.33     | \$ 3,501.33      | \$ 3,922.96     | \$ 3,922.96      |
| 5.3  | Maintenance of works – 1 year         | 1        | Item | \$ 2,003.49     | \$ 2,003.49      | \$ 2,240.55     | \$ 2,240.55      |
| 6    | <b>SERVICES</b>                       |          |      |                 |                  |                 |                  |
| 6.1  | Services conduit on-bridge            | 1        | Item | \$ 9,007.35     | \$ 9,007.35      | \$ 10,150.32    | \$ 10,150.32     |
|      | <b>SUB-TOTAL WORKS</b>                |          |      |                 | \$ 1,864,797.92  |                 | \$ 2,104,214.71  |
| 7    | <b>DELIVERY</b>                       |          |      |                 |                  |                 |                  |
| 7.1  | Council Fees                          | 3.25%    |      | \$ 1,864,797.92 | \$ 60,605.93     | \$ 2,104,214.71 | \$ 68,386.98     |
| 7.2  | VicRoads Fees                         | 1.00%    |      | \$ 1,864,797.92 | \$ 18,647.98     | \$ 2,104,214.71 | \$ 21,042.15     |
| 7.3  | Traffic Management                    | 5.00%    |      | \$ 1,864,797.92 | \$ 93,239.90     | \$ 2,104,214.71 | \$ 105,210.74    |
| 7.4  | Environmental Management              | 0.50%    |      | \$ 1,864,797.92 | \$ 9,323.99      | \$ 2,104,214.71 | \$ 10,521.07     |
| 7.5  | Surveying and Design                  | 5.00%    |      | \$ 1,864,797.92 | \$ 93,239.90     | \$ 2,104,214.71 | \$ 105,210.74    |
| 7.6  | Supervision and Project Management    | 9.00%    |      | \$ 1,864,797.92 | \$ 167,831.81    | \$ 2,104,214.71 | \$ 189,379.32    |
| 7.7  | Site Establishment                    | 2.50%    |      | \$ 1,864,797.92 | \$ 46,619.95     | \$ 2,104,214.71 | \$ 52,605.37     |
| 7.8  | Contingency                           | 20.00%   |      | \$ 1,864,797.92 | \$ 372,959.58    | \$ 2,104,214.71 | \$ 420,842.94    |
|      | <b>SUB-TOTAL DELIVERY</b>             |          |      |                 | \$ 862,469.04    |                 | \$ 973,199.30    |
| 8    | <b>TOTAL ESTIMATED COST</b>           |          |      |                 | \$ 2,727,266.96  |                 | \$ 3,077,414.01  |





# Culverts

VPA Estimates

**H&M**  
CONSULTING

Quantity  
Surveying  
Services

| Item                      | Description                                                | Quantity | Unit | P50 Rate<br>\$ | P50 Amount<br>\$       | P90 Rate<br>\$  | P90 Amount<br>\$       |
|---------------------------|------------------------------------------------------------|----------|------|----------------|------------------------|-----------------|------------------------|
| <b>WORKS</b>              |                                                            |          |      |                |                        |                 |                        |
| <b>1</b>                  | <b>SITEWORKS AND EARTHWORKS</b>                            |          |      |                |                        |                 |                        |
| 1.1                       | Diversion works                                            | 1        | Item | \$ 13,619.94   | \$ 13,619.94           | \$ 15,170.66    | \$ 15,170.66           |
| 1.2                       | Soil stabilisation - gypsum treatment                      | 832      | m2   | \$ 17.49       | \$ 14,551.68           | \$ 23.33        | \$ 19,410.56           |
| 1.3                       | Waterway re-shaping inc. disposal of spoil                 | 1        | Item | \$ 79,367.53   | \$ 79,367.53           | \$ 90,124.17    | \$ 90,124.17           |
| 1.4                       | Cut to disposal                                            | 1070     | m3   | \$ 26.05       | \$ 27,873.50           | \$ 31.36        | \$ 33,555.20           |
| 1.5                       | Tipping fees                                               | 1070     | m3   | \$ 29.28       | \$ 31,329.60           | \$ 33.09        | \$ 35,406.30           |
| 1.6                       | Cut to stockpile                                           | 470      | m3   | \$ 38.99       | \$ 18,325.30           | \$ 43.70        | \$ 20,539.00           |
| 1.7                       | Strip topsoil and stockpile onsite (150mm nominal depth)   | 629      | m2   | \$ 5.18        | \$ 3,258.22            | \$ 5.84         | \$ 3,673.36            |
| 1.8                       | Erosion protection for batter                              | 360      | m2   | \$ 4.47        | \$ 1,609.20            | \$ 5.00         | \$ 1,800.00            |
| 1.9                       | Lime stabilisation/rip rap protection of modified waterway | 832      | m2   | \$ 23.33       | \$ 19,410.56           | \$ 29.16        | \$ 24,261.12           |
| 1.10                      | Formation and reinstatement of topsoil to batters          | 192      | m2   | \$ 22.50       | \$ 4,320.00            | \$ 27.30        | \$ 5,241.60            |
| 1.11                      | Batter protection during excavation                        | 832      | m2   | \$ 8.94        | \$ 7,438.08            | \$ 10.17        | \$ 8,461.44            |
| <b>2</b>                  | <b>DRAINAGE STRUCTURE</b>                                  |          |      |                |                        |                 |                        |
| 2.1                       | <b>Box Culverts</b>                                        |          |      |                |                        |                 |                        |
| 2.1.1                     | Box Culverts (2 x 25 No. 2100mm x 1500mm)                  | 50       | No.  | \$ 3,822.52    | \$ 191,126.00          | \$ 4,355.33     | \$ 217,766.50          |
| 2.2                       | <b>Concrete Works</b>                                      |          |      |                |                        |                 |                        |
| 2.2.1                     | Reinforced Concrete Base Slab - 300mm thick                | 404      | m2   | \$ 467.70      | \$ 188,950.80          | \$ 553.11       | \$ 223,456.44          |
| 2.2.2                     | Reinforced Apron Slab                                      | 32       | m2   | \$ 525.81      | \$ 16,825.92           | \$ 598.29       | \$ 19,145.28           |
| 2.2.3                     | Wingwall                                                   | 21       | m2   | \$ 961.96      | \$ 20,201.16           | \$ 1,095.15     | \$ 22,998.21           |
| 2.2.4                     | Headwall above culvert                                     | 21       | m2   | \$ 961.96      | \$ 20,201.16           | \$ 1,095.15     | \$ 22,998.21           |
| 2.2.5                     | 150mm x 150mm concrete nib                                 | 367      | LM   | \$ 95.47       | \$ 35,037.49           | \$ 106.72       | \$ 39,166.24           |
| 2.3                       | <b>Other</b>                                               |          |      |                |                        |                 |                        |
| 2.3.1                     | Compacted Granular Base - 150mm thick                      | 501      | m2   | \$ 55.77       | \$ 27,940.77           | \$ 62.29        | \$ 31,207.29           |
| 2.3.2                     | Backfill culverts                                          | 278      | m3   | \$ 196.58      | \$ 54,649.24           | \$ 221.21       | \$ 61,496.38           |
| 2.3.3                     | Free draining granular backfill                            | 60       | m3   | \$ 167.55      | \$ 10,053.00           | \$ 193.48       | \$ 11,608.80           |
| 2.3.4                     | Geofabric for granular backfill                            | 555      | m2   | \$ 11.17       | \$ 6,199.35            | \$ 13.80        | \$ 7,659.00            |
| 2.3.5                     | Agi pipe drainage                                          | 132      | LM   | \$ 5.59        | \$ 737.88              | \$ 6.22         | \$ 821.04              |
| 2.3.6                     | Geofabric wrapped rock protection - 300mm thick            | 39       | m3   | \$ 179.58      | \$ 7,003.62            | \$ 209.92       | \$ 8,186.88            |
| 2.3.7                     | De-watering                                                | 1        | item | \$ 50,609.73   | \$ 50,609.73           | \$ 58,742.55    | \$ 58,742.55           |
| <b>3</b>                  | <b>ON-STRUCTURE WORKS</b>                                  |          |      |                |                        |                 |                        |
| 3.1                       | Backfill above drainage structure                          | 470      | m3   | \$ 75.86       | \$ 35,654.20           | \$ 85.20        | \$ 40,044.00           |
| 3.2                       | Safety fencing on headwalls                                | 19       | LM   | \$ 134.81      | \$ 2,561.39            | \$ 151.37       | \$ 2,876.03            |
| <b>SUB-TOTAL WORKS</b>    |                                                            |          |      |                | <b>\$ 888,855.32</b>   |                 | <b>\$ 1,025,816.27</b> |
| <b>4</b>                  | <b>DELIVERY</b>                                            |          |      |                |                        |                 |                        |
| 4.1                       | Council Fees                                               | 3.25%    |      | \$ 888,855.32  | \$ 28,887.80           | \$ 1,025,816.27 | \$ 33,339.03           |
| 4.2                       | VicRoads Fees                                              | 1.00%    |      | \$ 888,855.32  | \$ 8,888.55            | \$ 1,025,816.27 | \$ 10,258.16           |
| 4.3                       | Traffic Management                                         | 5.00%    |      | \$ 888,855.32  | \$ 44,442.77           | \$ 1,025,816.27 | \$ 51,290.81           |
| 4.4                       | Environmental Management                                   | 0.50%    |      | \$ 888,855.32  | \$ 4,444.28            | \$ 1,025,816.27 | \$ 5,129.08            |
| 4.5                       | Surveying and Design                                       | 5.00%    |      | \$ 888,855.32  | \$ 44,442.77           | \$ 1,025,816.27 | \$ 51,290.81           |
| 4.6                       | Supervision and Project Management                         | 9.00%    |      | \$ 888,855.32  | \$ 79,996.98           | \$ 1,025,816.27 | \$ 92,323.46           |
| 4.7                       | Site Establishment                                         | 2.50%    |      | \$ 888,855.32  | \$ 22,221.38           | \$ 1,025,816.27 | \$ 25,645.41           |
| 4.8                       | Contingency                                                | 15.00%   |      | \$ 888,855.32  | \$ 133,328.30          | \$ 1,025,816.27 | \$ 153,872.44          |
| <b>SUB-TOTAL DELIVERY</b> |                                                            |          |      |                | <b>\$ 366,652.82</b>   |                 | <b>\$ 423,149.21</b>   |
| <b>5</b>                  | <b>TOTAL ESTIMATED COST</b>                                |          |      |                | <b>\$ 1,255,508.14</b> |                 | <b>\$ 1,448,965.48</b> |



| Item                      | Description                                                | Quantity | Unit | P50 Rate<br>\$ | P50 Amount<br>\$       | P90 Rate<br>\$  | P90 Amount<br>\$       |
|---------------------------|------------------------------------------------------------|----------|------|----------------|------------------------|-----------------|------------------------|
| <b>WORKS</b>              |                                                            |          |      |                |                        |                 |                        |
| <b>1</b>                  | <b>SITEWORKS AND EARTHWORKS</b>                            |          |      |                |                        |                 |                        |
| 1.1                       | Diversion works                                            | 1        | Item | \$ 18,032.32   | \$ 18,032.32           | \$ 20,363.13    | \$ 20,363.13           |
| 1.2                       | Soil stabilisation - gypsum treatment                      | 688      | m2   | \$ 17.49       | \$ 12,033.12           | \$ 23.33        | \$ 16,051.04           |
| 1.3                       | Waterway re-shaping inc. disposal of spoil                 | 1        | Item | \$ 87,716.36   | \$ 87,716.36           | \$ 99,683.33    | \$ 99,683.33           |
| 1.4                       | Cut to disposal                                            | 813      | m3   | \$ 26.05       | \$ 21,178.65           | \$ 31.36        | \$ 25,495.68           |
| 1.5                       | Tipping fees                                               | 813      | m3   | \$ 29.28       | \$ 23,804.64           | \$ 33.09        | \$ 26,902.17           |
| 1.6                       | Cut to stockpile                                           | 657      | m3   | \$ 38.99       | \$ 25,616.43           | \$ 43.70        | \$ 28,710.90           |
| 1.7                       | Strip topsoil and stockpile onsite (150mm nominal depth)   | 698      | m2   | \$ 5.18        | \$ 3,615.64            | \$ 5.84         | \$ 4,076.32            |
| 1.8                       | Erosion protection for batter                              | 216      | m2   | \$ 4.47        | \$ 965.52              | \$ 5.00         | \$ 1,080.00            |
| 1.9                       | Lime stabilisation/rip rap protection of modified waterway | 688      | m2   | \$ 23.33       | \$ 16,051.04           | \$ 29.16        | \$ 20,062.08           |
| 1.10                      | Formation and reinstatement of topsoil to batters          | 216      | m2   | \$ 24.67       | \$ 5,328.72            | \$ 29.87        | \$ 6,451.92            |
| 1.11                      | Batter protection during excavation                        | 688      | m2   | \$ 8.94        | \$ 6,150.72            | \$ 10.17        | \$ 6,996.96            |
| <b>2</b>                  | <b>DRAINAGE STRUCTURE</b>                                  |          |      |                |                        |                 |                        |
| 2.1                       | <b>Box Culverts</b>                                        |          |      |                |                        |                 |                        |
| 2.1.1                     | Box Culverts (2 x 22 No. 3000mm x 1500mm)                  | 44       | No.  | \$ 4,958.49    | \$ 218,173.56          | \$ 5,595.46     | \$ 246,200.24          |
| 2.2                       | <b>Concrete Works</b>                                      |          |      |                | \$ -                   |                 | \$ -                   |
| 2.2.1                     | Reinforced Concrete Base Slab - 300mm thick                | 452      | m2   | \$ 467.70      | \$ 211,400.40          | \$ 553.11       | \$ 250,005.72          |
| 2.2.2                     | Reinforced Apron Slab                                      | 38       | m2   | \$ 525.81      | \$ 19,980.78           | \$ 598.29       | \$ 22,735.02           |
| 2.2.3                     | Wingwall                                                   | 22       | m2   | \$ 961.96      | \$ 21,163.12           | \$ 1,095.15     | \$ 24,093.37           |
| 2.2.4                     | Headwall above culvert                                     | 19       | m2   | \$ 961.96      | \$ 18,277.24           | \$ 1,095.15     | \$ 20,807.91           |
| 2.2.5                     | 150mm x 150mm concrete nib                                 | 324      | LM   | \$ 95.47       | \$ 30,932.28           | \$ 106.72       | \$ 34,577.28           |
| 2.3                       | <b>Other</b>                                               |          |      |                | \$ -                   |                 | \$ -                   |
| 2.3.1                     | Compacted Granular Base - 150mm thick                      | 548      | m2   | \$ 55.77       | \$ 30,561.96           | \$ 62.29        | \$ 34,134.92           |
| 2.3.2                     | Backfill culverts                                          | 248      | m3   | \$ 196.58      | \$ 48,751.84           | \$ 221.21       | \$ 54,860.08           |
| 2.3.3                     | Free draining granular backfill                            | 54       | m3   | \$ 167.55      | \$ 9,047.70            | \$ 193.48       | \$ 10,447.92           |
| 2.3.4                     | Geofabric for granular backfill                            | 496      | m2   | \$ 11.17       | \$ 5,540.32            | \$ 13.80        | \$ 6,844.80            |
| 2.3.5                     | Agi pipe drainage                                          | 118      | LM   | \$ 5.59        | \$ 659.62              | \$ 6.22         | \$ 733.96              |
| 2.3.6                     | Geofabric wrapped rock protection - 300mm thick            | 46       | m3   | \$ 179.58      | \$ 8,260.68            | \$ 209.92       | \$ 9,656.32            |
| 2.3.7                     | De-watering                                                | 1        | item | \$ 70,832.50   | \$ 70,832.50           | \$ 80,845.77    | \$ 80,845.77           |
| <b>3</b>                  | <b>ON-STRUCTURE WORKS</b>                                  |          |      |                |                        |                 |                        |
| 3.1                       | Backfill above drainage structure                          | 657      | m3   | \$ 75.86       | \$ 49,840.02           | \$ 85.20        | \$ 55,976.40           |
| 3.2                       | Safety fencing on headwalls                                | 23       | LM   | \$ 134.81      | \$ 3,100.63            | \$ 151.37       | \$ 3,481.51            |
| <b>SUB-TOTAL WORKS</b>    |                                                            |          |      |                | <b>\$ 967,015.81</b>   |                 | <b>\$ 1,111,274.74</b> |
| <b>4</b>                  | <b>DELIVERY</b>                                            |          |      |                |                        |                 |                        |
| 4.1                       | Council Fees                                               | 3.25%    |      | \$ 967,015.81  | \$ 31,428.01           | \$ 1,111,274.74 | \$ 36,116.43           |
| 4.2                       | VicRoads Fees                                              | 1.00%    |      | \$ 967,015.81  | \$ 9,670.16            | \$ 1,111,274.74 | \$ 11,112.75           |
| 4.3                       | Traffic Management                                         | 5.00%    |      | \$ 967,015.81  | \$ 48,350.79           | \$ 1,111,274.74 | \$ 55,563.74           |
| 4.4                       | Environmental Management                                   | 0.50%    |      | \$ 967,015.81  | \$ 4,835.08            | \$ 1,111,274.74 | \$ 5,556.37            |
| 4.5                       | Surveying and Design                                       | 5.00%    |      | \$ 967,015.81  | \$ 48,350.79           | \$ 1,111,274.74 | \$ 55,563.74           |
| 4.6                       | Supervision and Project Management                         | 9.00%    |      | \$ 967,015.81  | \$ 87,031.42           | \$ 1,111,274.74 | \$ 100,014.73          |
| 4.7                       | Site Establishment                                         | 2.50%    |      | \$ 967,015.81  | \$ 24,175.40           | \$ 1,111,274.74 | \$ 27,781.87           |
| 4.8                       | Contingency                                                | 15.00%   |      | \$ 967,015.81  | \$ 145,052.37          | \$ 1,111,274.74 | \$ 166,691.21          |
| <b>SUB-TOTAL DELIVERY</b> |                                                            |          |      |                | <b>\$ 398,894.02</b>   |                 | <b>\$ 458,400.83</b>   |
| <b>5</b>                  | <b>TOTAL ESTIMATED COST</b>                                |          |      |                | <b>\$ 1,365,909.83</b> |                 | <b>\$ 1,569,675.57</b> |



# Pedestrian Operated Signals

VPA Estimates

**H&M**  
CONSULTING

Quantity  
Surveying  
Services

| Item                      | Description                                                                                                                                                                                          | Quantity | Unit | P50 Rate<br>\$ | P50 Amount<br>\$ | P90 Rate<br>\$ | P90 Amount<br>\$ |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------------|------------------|----------------|------------------|
| <b>WORKS</b>              |                                                                                                                                                                                                      |          |      |                |                  |                |                  |
| <b>1</b>                  | <b>SITEWORKS AND EARTHWORKS</b>                                                                                                                                                                      |          |      |                |                  |                |                  |
| 1.1                       | Site preparation                                                                                                                                                                                     | 1        | Item | \$ 3,707.68    | \$ 3,707.68      | \$ 4,186.68    | \$ 4,186.68      |
| 1.2                       | Earthworks                                                                                                                                                                                           |          |      |                |                  |                |                  |
| 1.2.1                     | Cut to Disposal                                                                                                                                                                                      | 98       | m3   | \$ 25.89       | \$ 2,537.22      | \$ 28.98       | \$ 2,840.04      |
| 1.2.2                     | Tipping Fees                                                                                                                                                                                         | 98       | m3   | \$ 29.06       | \$ 2,847.88      | \$ 33.97       | \$ 3,329.06      |
| <b>2</b>                  | <b>ROAD PAVEMENT</b>                                                                                                                                                                                 |          |      |                |                  |                |                  |
| 2.1                       | <u>Connector Arterial</u><br>- 40mm Asphalt Wearing Course<br>- 60mm Asphalt Intermediate Course<br>- 75mm Asphalt Base<br>- 10mm Prime<br>- 150mm CTCR Base Course<br>- 200mm Select Suubase Course | 178      | m2   | \$ 182.96      | \$ 32,566.88     | \$ 196.75      | \$ 35,021.50     |
| 2.2                       | Subgrade Preparation & Final Trim                                                                                                                                                                    | 178      | m2   | \$ 7.78        | \$ 1,384.84      | \$ 10.49       | \$ 1,867.22      |
|                           | Crushed rock capping layer                                                                                                                                                                           | 178      | m2   | \$ 23.33       | \$ 4,152.74      | \$ 29.16       | \$ 5,190.48      |
| <b>3</b>                  | <b>CONCRETE WORKS</b>                                                                                                                                                                                |          |      |                |                  |                |                  |
| 3.1                       | Kerb and Channel                                                                                                                                                                                     | 99       | LM   | \$ 79.32       | \$ 7,852.68      | \$ 86.01       | \$ 8,514.99      |
| 3.2                       | Pedestrian & Cycle Paths                                                                                                                                                                             | 172      | m2   | \$ 110.13      | \$ 18,942.36     | \$ 124.58      | \$ 21,427.76     |
| 3.3                       | Pedestrian access ramps                                                                                                                                                                              | 2        | No.  | \$ 1,748.15    | \$ 3,496.30      | \$ 1,985.04    | \$ 3,970.08      |
| <b>4</b>                  | <b>DRAINAGE</b>                                                                                                                                                                                      |          |      |                |                  |                |                  |
| 4.1                       | Drainage - pipes                                                                                                                                                                                     |          |      |                |                  |                |                  |
| 4.1.1                     | 450mm dia                                                                                                                                                                                            | 24       | LM   | \$ 351.04      | \$ 8,424.96      | \$ 394.39      | \$ 9,465.36      |
| 4.2                       | Drainage - pits                                                                                                                                                                                      |          |      |                |                  |                |                  |
| 4.2.1                     | Drainage – Sub-soil drainage                                                                                                                                                                         | 99       | LM   | \$ 33.54       | \$ 3,320.46      | \$ 37.63       | \$ 3,725.37      |
| <b>5</b>                  | <b>PEDESTRIAN SIGNALS</b>                                                                                                                                                                            |          |      |                |                  |                |                  |
| 5.1                       | Conduits & Pits                                                                                                                                                                                      | 1        | Item | \$ 26,984.42   | \$ 26,984.42     | \$ 30,265.62   | \$ 30,265.62     |
| 5.1                       | Footings                                                                                                                                                                                             | 1        | Item | \$ 8,980.58    | \$ 8,980.58      | \$ 10,095.53   | \$ 10,095.53     |
| 5.1                       | Traffic Signals                                                                                                                                                                                      | 1        | Item | \$ 21,187.55   | \$ 21,187.55     | \$ 23,867.75   | \$ 23,867.75     |
| 5.1                       | Mains Power & Cabling                                                                                                                                                                                | 1        | Item | \$ 4,040.93    | \$ 4,040.93      | \$ 4,538.93    | \$ 4,538.93      |
| 5.1                       | Controller                                                                                                                                                                                           | 1        | Item | \$ 2,801.86    | \$ 2,801.86      | \$ 3,164.22    | \$ 3,164.22      |
| <b>6</b>                  | <b>LANDSCAPE</b>                                                                                                                                                                                     |          |      |                |                  |                |                  |
| 6.1                       | Supply, deliver and lay select turf, Inc. Establishment & maintenance                                                                                                                                | 288      | m2   | \$ 18.79       | \$ 5,411.52      | \$ 25.18       | \$ 7,251.84      |
| <b>7</b>                  | <b>MISCELLANEOUS</b>                                                                                                                                                                                 |          |      |                |                  |                |                  |
| 7.1                       | Line marking                                                                                                                                                                                         | 1        | Item | \$ 349.93      | \$ 349.93        | \$ 393.44      | \$ 393.44        |
| 7.2                       | Regulatory Signage                                                                                                                                                                                   | 1        | Item | \$ 2,001.34    | \$ 2,001.34      | \$ 2,274.46    | \$ 2,274.46      |
| 7.3                       | Works maintenance – up to 1 year                                                                                                                                                                     | 1        | Item |                | INCL.            |                | INCL.            |
| 7.4                       | Landscape maintenance – 1yr/2 summers                                                                                                                                                                | 1        | Item |                | INCL.            |                | INCL.            |
| 7.5                       | Traffic signals 10 year Maintenance Fee                                                                                                                                                              | 1        | Item |                | INCL.            |                | INCL.            |
| <b>8</b>                  | <b>OTHER</b>                                                                                                                                                                                         |          |      |                |                  |                |                  |
| 8.1                       | Service Relocations                                                                                                                                                                                  |          |      |                |                  |                |                  |
| 8.1.1                     | Fibre Optic                                                                                                                                                                                          | 1        | Item | \$ 23,531.92   | \$ 23,531.92     | \$ 26,433.20   | \$ 26,433.20     |
| 8.1.2                     | Gas Main                                                                                                                                                                                             | 1        | Item | \$ 10,871.69   | \$ 10,871.69     | \$ 12,216.36   | \$ 12,216.36     |
| 8.1.3                     | Telstra                                                                                                                                                                                              | 1        | Item | \$ 17,394.37   | \$ 17,394.37     | \$ 19,405.31   | \$ 19,405.31     |
| <b>SUB-TOTAL WORKS</b>    |                                                                                                                                                                                                      |          |      |                | \$ 212,790.11    |                | \$ 239,445.20    |
| <b>9</b>                  | <b>DELIVERY</b>                                                                                                                                                                                      |          |      |                |                  |                |                  |
| 9.1                       | Council Fees                                                                                                                                                                                         | 3.25%    |      | \$ 212,790.11  | \$ 6,915.68      | \$ 239,445.20  | \$ 7,781.97      |
| 9.2                       | VicRoads Fees                                                                                                                                                                                        | 1.00%    |      | \$ 212,790.11  | \$ 2,127.90      | \$ 239,445.20  | \$ 2,394.45      |
| 9.3                       | Traffic Management                                                                                                                                                                                   | 5.00%    |      | \$ 212,790.11  | \$ 10,639.51     | \$ 239,445.20  | \$ 11,972.26     |
| 9.4                       | Environmental Management                                                                                                                                                                             | 0.50%    |      | \$ 212,790.11  | \$ 1,063.95      | \$ 239,445.20  | \$ 1,197.23      |
| 9.5                       | Surveying and Design                                                                                                                                                                                 | 5.00%    |      | \$ 212,790.11  | \$ 10,639.51     | \$ 239,445.20  | \$ 11,972.26     |
| 9.6                       | Supervision and Project Management                                                                                                                                                                   | 9.00%    |      | \$ 212,790.11  | \$ 19,151.11     | \$ 239,445.20  | \$ 21,550.07     |
| 9.7                       | Site Establishment                                                                                                                                                                                   | 2.50%    |      | \$ 212,790.11  | \$ 5,319.75      | \$ 239,445.20  | \$ 5,986.13      |
| 9.8                       | Contingency                                                                                                                                                                                          | 15.00%   |      | \$ 212,790.11  | \$ 31,918.52     | \$ 239,445.20  | \$ 35,916.78     |
| <b>SUB-TOTAL DELIVERY</b> |                                                                                                                                                                                                      |          |      |                | \$ 87,775.92     |                | \$ 98,771.15     |
| <b>10</b>                 | <b>TOTAL ESTIMATED COST</b>                                                                                                                                                                          |          |      |                | \$ 300,566.03    |                | \$ 338,216.35    |





**Practical Advice  
Through Proven  
Performance**

## **Contacts**

**TJ Miller • Director**  
0434 630 501  
[tj@hmconsult.com.au](mailto:tj@hmconsult.com.au)

**Mitchell Harvey • Director**  
0432 414 760  
[mitchell@hmconsult.com.au](mailto:mitchell@hmconsult.com.au)

**Danny Antcliff • Director**  
0438 651 431  
[danny@hmconsult.com.au](mailto:danny@hmconsult.com.au)

**[www.hmconsult.com.au](http://www.hmconsult.com.au)**