



Byford Traditional Infrastructure Development Contribution Plan Report

Report Revision 8

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Revision Schedule

| Report No. | Revision Date | Author |
|------------|---------------|----------|
| DCP 1 | 21-Jan-2014 | J Ellis |
| DCP 2 | 13-Apr-2015 | J Ellis |
| DCP 3 | 06-Sep-2016 | J Ellis |
| DCP 4 | 07-Jun-2017 | J Ellis |
| DCP 5 | 27-Jul-2020 | J Ellis |
| DCP 6 | 26-Sep-2021 | S Murphy |
| DCP 7 | 17-Jul-2023 | S Murphy |
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Byford Traditional Infrastructure Development Contribution Plan Report

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1 Purpose

The purpose of this development contribution plan (DCP) report is to:

- enable the application of infrastructure contributions for the development of new, and the upgrade of existing infrastructure, which is required because of increased demand generated in the Development Contribution Area (DCA)
- provide for the equitable sharing of the costs of infrastructure and administrative items between owners.
- ensure that cost contributions are reasonably required because of the subdivision, and development of land in the DCA,
- coordinate the timely provision of infrastructure.

The following documents are relevant documents which coordinate the timely provision of the infrastructure items:

- Community Infrastructure Implementation Plan
- Corporate Business Plan
- Long Term Financial Plan
- Local Planning Strategy (LPS3)
- Byford District Structure Plan

2 Development Contribution Area

The Development Contribution Area (DCA) for this DCP is known as DCA1. The DCA area is shown on the scheme map and included in Figure 1.

3 Period of the plan

20 years: From 21-Jan-2014 to 21-Jan-2034.

4 Operation of the DCP

The DCP and associated report have been prepared in accordance with the provisions of State Planning Policy 3.6 - Infrastructure Contributions (SPP 3.6).

The plan will operate in accordance with the provisions of the most recent DCP Amendment to LPS3 (being Amendment 2), and Part 5 clause 36A and Schedule 7.1 of LPS3.

5 Application requirements

Where an application for subdivision, strata subdivision, development or an extension of land use is lodged which relates to land to which this plan applies, the local government shall take the provisions of the plan into account in making a recommendation on, or determining, that application.

5.1 Items included in the Plan

This section of the DCP Report identifies the items for which development contributions will be collected in the DCA. Infrastructure items included in the DCP reflect the provisions of the latest Structure Plan(s). The Need and Nexus, as well as the scope for each of the infrastructure inclusions, is in Appendix A.

5.2 Estimated Costs

The costs allocated to this DCP have been derived based on the capital investment required for infrastructure and/or facilities generated by additional development in the DCA.

Initial cost estimates are undertaken by a suitably qualified professional and will be reviewed by a suitably qualified professional at each Major Review (as a minimum).

At each Minor Review the costs may be indexed using the previous year's annual escalation rate for "Road and Bridge Construction" in the latest WALGA Quarterly Economic Briefing available at the time the DCP Report is adopted. Where deemed pertinent, some items may be reviewed by a suitably qualified professional.

The associated costs for each DCP item *exclude*:

- Ongoing maintenance costs
- Demand for infrastructure that is generated by the current population
- Demand created by external usage (the proportion of the use drawn from outside the DCA)
- Future usage (the proportion of usage that will be generated by future development outside the development contribution plan timeframe).

Where there is more than one Precinct in the DCA, development within each precinct will be required to contribute to a certain set of infrastructure and land items based on the perceived need for, and use of, those items within the precinct.

This DCA is divided into 4 Precincts (Precincts A, B, C & D). Figure 4 provides a geographical representation of the DCP Precinct area(s).

Appendix B shows the DCP item(s) each precinct is contributing towards, and details of the cost apportionment can be seen in the Cost Apportionment Schedule in Appendix C.

The cost breakdown of all included items in this DCP are included in the appendices as follows:

Appendix F: Administration Costs

Appendix G: Infrastructure Costs

Appendix H: Land for Infrastructure

Appendix I: Land for Public Open Space and/or Drainage

Appendix J: Water Monitoring

Further context for the above cost appendices are provided within:

Appendix D: Example Contribution calculations

Appendix E: Capital Expenditure Plan (timing of anticipated delivery)

The Cost Review Reconciliation, which adjusts future costs based on historic development, is included in Appendix K.

Note: Grants or other external Funding shall be shown as a deduction against the applicable item in Appendix C: Cost Apportionment Schedule.

6 Infrastructure Items to be constructed or upgraded

The Need and Nexus, as well as the scope for each of the infrastructure inclusions, is in Appendix A.

6.1 Roads

It is noted that costs associated with land to be acquired for infrastructure items within this DCP are costed separately to construction costs, due to different indexation rates applied to the Construction component and the Land Value component.

The cost of Roads undertaking district functions is shared equally across the DCA.

All other road costs will be allocated to the Precinct in which they are located (where more than one Precinct exists within the DCA), being infrastructure envisaged to predominantly service that Precinct.

The amenity of urban areas can be substantially enhanced through public realm improvement works such as vegetation, hard landscaping, public art, and higher design standards of infrastructure. Road reserves provide significant opportunities for amenity enhancement, especially in the case of wider reserves such as distributor roads and in the instance of split-carriageways. There is, however, not a clear nexus between development in a new urban area and its associated increase in traffic, and the need for general road reserve improvements.

Nonetheless, it should be noted that most developers undertake works to provide attractive streetscapes as a marketing feature, especially in the context of distributor and connector roads leading into new estates. As such, road reserve improvements, such as hard and soft landscaping and higher design standards of infrastructure, are not included in the DCP. See Figure 2 for map.

6.2 District Open Space to be constructed or upgraded

The Shire's Community Infrastructure and Public Open Space Strategy (CIPOS) outlines the general approach and philosophy in planning for community infrastructure and public open space in the Shire of Serpentine Jarrahdale. It provides a guiding document for current and future development relevant to this purpose.

The types of community infrastructure include sport, recreation, community, emergency, tourism and Shire administration requirements. These facilities are to cater for the growing pressures on local clubs, community groups and service providers, where the increasing population increases service delivery requirements. See Figure 3 for map.

The scope of construction included in this DCP is confined to land and at/below surface works including drainage, irrigation and grassing. Further above ground works may be included within the Shire's Community Infrastructure Development Contribution Plan (CIDCP).

7 Non-Infrastructure Items Included within the DCP

7.1 Administration costs

Administrative costs of the DCP including:

- Costs to prepare and administer the DCP
- Costs associated with the annual review of cost estimates
- Costs associated with the review of the cost apportionment schedules based on land development undertaken since the last review
- Costs for undertaking valuations
- Fees for professional services directly linked to the preparation and implementation of the DCP.
- Costs for computer software and/or hardware upgrades necessary to enable DCP preparation.
- Proportion of staff salaries directly related to DCP administration.
- Financial institution fees and charges associated with the administration of DCP funds
- Interest charged on loans taken out to pre-fund items included in the DCP.

In general, Administration costs of the DCP are broken down into Legal Expenses, expenses associated with advertising & consultancy, and proportional salary allocations for overhead personnel whose are involved in the general operation of the DCP(s). This allocation is reflective of the percentage of time the employee is expected to spend on work associated with the general running of the DCP. This does not include time spent on specific DCP funded infrastructure projects, which is captured within the individual project costings).

The Technical Specialist Infrastructure Contributions (previously titled “DCP Coordinator”) is the only employee whose cost is 100% allocated across the DCPs.

It is noted that staff may also be required to spend time on specific DCP funded projects as part of the design and/or project delivery phase. Any such time/cost allocation is recorded separately and where allowable under the scope/costing for the project, will be recovered under those project costings.

Administration Costs are shared equally across the DCA.

A detailed breakdown of the administrative costs is provided in Appendix F.

7.2 Land

Many traditional infrastructure items include a land component. It is noted that costs associated with land to be acquired for infrastructure items within this DCP are costed separately, due to different indexation rates applied to the Construction and Land Value components.

7.2.1 Land for Infrastructure (Roads and/or District Open Space)

The DCP takes responsibility for acquiring land for District Open Space and Road Reserves (such as road widening or for new roads) associated with DCP infrastructure items.

The associated value of this land is credited to the DCP account of the landowner at the time of ceding. In respect of land for road reserves, DCP Credits only apply to the area in excess of the

standard 20m. For example, if the road is 30m wide, only 10m width will be compensated for through this Development Contribution Plan.

This approach ensures transparency, equity (particularly in instances of fragmented ownership) and simplicity of calculation.

The cost of land associated with road widening and/or district open space is shared equally across the DCA.

All land included within the DCP for Infrastructure Items (Roads and District Open Space), is detailed in Appendix H.

7.2.2 Land for Public Open Space and/or Drainage

Land will be provided within the DCA for Public Open Space and Drainage. This includes land required for: public open space and drainage where accessible to the general public (as prescribed within Liveable Neighbourhoods, drainage only and multiple-use corridors with a dual drainage and recreation function, community public open space, and district and neighbourhood-level playing fields including where provided to complement school playing fields).

The associated value of this land is credited to the DCP account of the landowner at the time of ceding. This approach ensures transparency, equity (particularly in instances of fragmented ownership) and simplicity of calculation.

A significant amount of detailed planning has been completed for the DCA, in the form of LSPs. This level of planning allows for the specific identification of land areas required for drainage and/or Public Open Space.

There are however areas within the DCA which have not yet been subject to the preparation of LSPs. To ensure that appropriate funds are collected to allow for the future purchase of land required for POS and drainage within these areas, it has been necessary to determine an estimated amount for some LSPs.

The following methodology has been applied:

1. A review of LSPs and spatial data has been undertaken to identify the total amount of land covered by each LSP and the total amount of land required for Public Open Space and drainage.
2. From these totals, the percentage of land required for Public Open Space and drainage has been calculated.
3. Spatial data has been used to identify the total land area of areas in the DCA for which LSPs have yet to be prepared.
4. The percentage identified in step 2 has then been applied to the total identified in step 3 to generate an estimated amount of land required for Public Open Space and drainage in these areas.

The Public Open Space and drainage land areas identified in steps 1 and 4 are then added to identify a total estimate of land required for POS and drainage within the DCA.

Council has resolved not to require Public Open Space contributions from subdivision and development in the existing Byford Town site, identified as Precinct C. This is due to the absence of a Public Open Space strategy or LSP identifying strategic locations for additional recreation lands. A strategy or LSP is necessary, as it is difficult to achieve reasonably sized and consolidated areas of Public Open Space in the context of small and fragmented landholdings. Precinct C will, however, be required to contribute to District Open Space land and associated

below surface improvements. Costs associated with POS and Drainage are shared equally across the DCA.

Appendix I details the calculations for Public Open Space and Drainage land.

POS Items not included

State Policy provides a clear indication that the development of POS to a minimum standard, and maintenance for a minimum period, is at the developer's expense. As such, the development and initial maintenance of Public Open Space is not included within the Development Contribution Plan and will be the responsibility of the subdivider.

In addition, land identified as having conservation value, for example Bush forever sites or protected Wetlands, is excluded from the Development Contribution Plan.

While the Development Contribution Plan includes land for drainage purposes, it does not include drainage works themselves (i.e. earthworks, drainage infrastructure such as piping, pits, mechanical treatments, water sensitive urban design treatments or similar). These are considered subdivisional works, generally required by local water management strategies and urban water management plans.

Such drainage works are very difficult to calculate given the varying nature of drainage infrastructure and developers may treat drainage works in various ways to benefit their development. The requirement to provide optimal certainty in costing Development Contribution Plan items to achieve equity between developers, reinforces the need to exclude drainage works.

7.2.3 Land Valuation

To determine the total cost of the items, an estimate of land value needs to be identified. Land to be acquired may be required for areas which can be categorised (through the land use zoning) as residential or non-residential. There is therefore a requirement for two separate rates; one for 'Residential' and one for 'Mixed Use/Non-Residential'.

Residential (Standard and Non-Standard):

This rate is based on current valuation advice for an indicative residential zoned 5-hectare lot typical for the DCP area, with no servicing constraints.

Non-Residential and/or Mixed Use:

This rate is based on a Mixed Use R60 zoned area. It has been assumed the typical land parcel is a regular shaped 5-hectare area with no major servicing constraints and no major geotechnical/environmental issues.

The net land value is to be determined having general regard to the International Valuation Standards Committee's definition of market value as adopted by the Australian Property Institute. To account for the direct transfer of land, the fair market value does not include for standard marketing costs such as fees, commissions, and advertising cost. The estimated land value will be reviewed at least annually.

The rates for land are included in Appendix M.

7.3 Water Monitoring

The Shire has in place Drainage and Water Management Plans (DWMPs) which establish the framework for water management in the new urban development areas. This ensures that water quantity and quality design objectives can be achieved and that concerns and risks identified by the Department of Water (DoW) and the Water Corporation can be addressed. The DWMP reinforces the Shire's commitment to ensuring that water sensitive urban design principles are incorporated into new urban development.

The Shire will implement water quality and quantity monitoring within the DCA. The Sampling and Analysis Plan prepared for the Shire, identifies the sampling and analysis requirements and will allow term trends in water quality and quantity to be identified and monitored as the DCA is developed. Suitable remediation works or structural controls may be implemented to rectify any identified problems.

It is likely that subdivision and development would not be approved within the area without the approval and ongoing implementation of the DWMP. As such, it is considered reasonable that all costs of, and associated with, the required water monitoring be funded by developers within the DCA.

Details of the Water Monitoring Plan and associated costs are contained within Appendix J.

8 Method of calculating contributions

Appendix B shows the DCP item(s) each precinct is contributing towards.

8.1 Calculating the Developable Potential of each Precinct

It is necessary to estimate the potential number of additional lots/dwellings to be created in each Precinct within the DCA. This estimate will be used to determine the development contribution rate(s). A review of LSPs and spatial data has been undertaken to identify the number of additional lots/dwellings estimated for each area covered by an LSP or approved subdivision application. As lots extinguish their liability to pay contributions, and/or an LSP is revised, the future lot count is updated accordingly at the next DCP Report Review.

The yield estimate calculated for mixed development is based on 15 lots per gross hectare to provide for infrastructure of subdivision works such as roads and drainage facilities to be transferred to the state / local government. Where individual lots do not require land to be transferred to the state / local government, 20 lots per gross hectare has been applied.

There are some instances where an LSP is not prepared for an area within the DCA. In those areas, the following approach has been taken to assess the lot yield and public open space considerations:

1. Due to the nature of infill development, lot/dwelling estimates in such areas have been made based on manual calculations of the subdivision/development potential of each lot. The yield has been discounted by 50% in recognition of the likelihood some existing lots may not be redeveloped.
2. Land for public purposes (i.e. Roads, Public Open Space, drainage and similar) is expected to be provided within non-structure planned areas. As such, a 40 percent deduction has been applied to the total site area of each precinct, other than areas where it is expected that no land will be provided for public purposes.

3. In the absence of finalised (or draft) LSPs depicting residential densities, an R20 code for Byford has been utilised to determine the lot/dwelling estimates for the Residential yield in non-structure planned areas.

See Appendix L for details on completed and remaining anticipated development at this DCP Report revision.

Using the Total Cost allocated per Precinct and dividing this figure by the estimated number of future lots per Precinct, gives the Contribution Per Lot Value for each Precinct in the DCA.

$$\begin{aligned} & \text{Allocated Cost (Precinct) / anticipated future Lots to be developed} \\ & = \text{Precinct Contribution per Lot Value} \end{aligned}$$

The “Cost Apportionment Schedule” shows the split of costs by item and Precinct and shows the Contribution Per Lot value for each Precinct – See Appendix C.

8.2 Calculating the Contribution Rate between Cost Reviews

To ensure costs are current during the time between cost reviews, all costs will be escalated daily, calculated from the number of days since the last cost review (being the latest adopted DCP revision), using an annual escalation rate.

The annual escalation rates for Administration and Infrastructure reflect the forecasts in latest WALGA Quarterly Economic Briefing (the LGCI Forecasts table) available at the time the DCP Report is adopted.

- The Administration index reflects the LGCI Component “Employee Costs”
- The Infrastructure index reflects the LGCI Component “Road and Bridge Construction”.
- The Land Value index is provided as part of the independent Land Valuation.

Escalation rates will separately apply to infrastructure costs, land costs and administration costs. The escalation rates will be set at each cost review.

Given that the contribution rate entails items with different escalation rates, it is necessary to calculate a weighted escalation rate as follows:

$ER = (\%IC/TC \times IER) + (\%LV/TC \times LVER) + (\%AC/TC \times AER)$, where for each precinct:

ER - is the weighted annual Escalation Rate

TC - is the Total Cost being $AC + IC + LV$

AC - is the estimated Administration and Water Monitoring Cost

AER - is the Administration Escalation Rate;

IC - is the estimated Infrastructure Cost

IER - is the Infrastructure Escalation Rate

LV - is the estimated Land Value

LVER - is the Land Value Escalation Rate

Using the annual Escalation Rate (ER) we can then break this down into a Daily Escalation Rate where $DER = ER/365$.

To ensure costs remain current between Cost Reviews, all costs will be calculated daily based upon an annual escalation rate to be established through the Cost Review. The start date for daily escalation is the approval date for the prevailing Cost Review.

The Contribution Rate is to be applied as follows where the DER is the daily escalation rate and D is the number of days since the last cost review:

Starting Contribution Rate \times (D \times DER) = Escalated Contribution Rate at a particular date.

The daily indexing of costs described above, means that at any point in time, the Precinct contribution per Lot value will vary according to the number of days since the last Cost Review.

8.3 Calculating the Contribution liability for Landowners/Developers

DCA1 is divided into 4 Precincts.

The Cost Contribution rate is to be calculated based on the remaining developable Lot in the Precinct. The remaining DCP cost is shared proportionally across the remaining Lot in the DCP Precinct as follows:

(Remaining Cost / Remaining Lot = \$ contribution rate per Lot).

For simplicity of calculation, all Residential lots/dwellings will be calculated as an average R20 (450m²) lot. For Non-Residential subdivision or development, the actual lot area is used for the calculation.

A cost review is to be undertaken at least annually, at which time the Contribution rate will be reviewed based on the future value of remaining DCP items and remaining anticipated area to be developed.

Appendix D gives examples of the respective calculations for the below development types.

8.3.1 Residential subdivision or development:

The number of additional dwellings/lots being created at the time of subdivision/development, less the parent lot discount if applicable, multiplied by the applicable development contribution rate. Non-standard residential development (such as Lifestyle village, retirement village, caravan park, park home estate or similar) is treated the same as standard residential development, where each dwelling, residential unit or similar, is deemed to be a residential lot.

(Precinct contribution rate per lot/dwelling \times DER \times D \times number of additional lots or dwellings being created = Required development contribution).

It is acknowledged that land within the DCA may be developed to a residential density lower than that envisaged within the yield calculations. Such development may however allow for additional subdivision and/or development in the future. In addition, should there be subsequent residential development above a non-residential development footprint; additional contribution liability will be incurred for the additional residential dwellings.

Contributions will be required for the creation of additional lots/dwellings post-initial development at the time that those additional lots/dwellings are created. Such additional contributions will be required in accordance with the Development Contribution Plan.

8.3.2 Mixed-use development

The development contribution calculation will be based on the R20 subdivision/development potential of the site OR the actual number of lots/dwellings being created at the time of subdivision/ development, whichever is the greater (less the parent lot discount if applicable), multiplied by the applicable development contribution rate.

Where based on dwelling potential:

(Precinct contribution rate per lot/dwelling x DER x D x subdivision/development potential of the site = Required contribution rate).

Where based on the actual number of dwellings:

(Precinct contribution rate per lot/dwelling x DER x D x actual number of residential lots/dwellings being created = Required development contribution).

8.3.3 Non-residential subdivision or development

A development contribution is required for the creation of non-residential lots based on the actual size and number of lots created, multiplied by the applicable development contribution rate. Where a subdivision creates a lot that accommodates an existing approved non-residential development, that lot shall be exempt from the requirement for a development contribution to be made. For clarity purposes, the area of the lot accommodating the existing approved non-residential development is to be subtracted from the overall subdivision area, before calculating the development contribution for the remaining balance of the subdivision area.

New non-residential development (including alterations and additions to existing non-residential development) will not be required to make a development contribution unless the new non-residential development results in increased traffic to the subject land, as identified by the information provided by the applicant in support of the development application for that new non-residential development. Where increased traffic is identified to occur, the applicable development contribution is to be calculated as follows:

Square metre rate x square metre size of land being developed = Required development contribution (less a one time, one lot discount for the Parent Lot)

It is important to note that where the land use is non-residential, the DCP liability will be incurred only once on any site area (footprint) provided the liability discharged is based on the full development potential of the lot. Subsequent non-residential development will not be liable for additional DCP contributions.

For example, multilevel non-residential development or ongoing development on the non-residential site will be exempt from further DCP liability; liability is based on the non-residential land footprint.

For new private education establishments and associated development, provided a shared use agreement for public access to district open space is agreed to the satisfaction of the Local Government, development contributions shall be levied at 0.3 percent of the total development costs of the site, as agreed with the Local Government based on the building licence application.

9 Priority and timing of infrastructure delivery

Details of the priority/timing of infrastructure items can be seen in the Capital Expenditure Plan in Appendix C.

Timelines are based on the forecast rate of development and expected DCP funds from forecast contributions to be paid. This is reviewed annually and may be adjusted depending upon the rate of development and available DCA funds.

Appendix N contains the Infrastructure Delivery Status Report, which details the planned timelines and any variation to these from the previous DCP revision.

10 Payment of contributions

An owner's liability to pay the owner's cost contribution to the local government arises on the earlier of:

1. the local government recommending its approval on the deposited plan or survey strata plan of the subdivision of the owner's land within the development contribution area (subdivision/strata clearance);
2. the commencement of any development on the owner's land within the development contribution area (typically triggered at Building Permit application); or
3. the approval of a change or extension of use by the local government on the owner's land within the development contribution area.

Where a subdivision is staged, the development contribution is payable only on those stages being cleared.

10.1 Form of Contributions

Conditions relating to development contribution requirements can, to the satisfaction of the Shire, be satisfied by:

4. Cheque or cash
5. Transferring to the local government or a public authority land in satisfaction of the cost contribution
6. The provision of physical infrastructure
7. Some other method acceptable to the local government, or
8. Any combination of these methods.

10.2 Exemptions

Clause 36A 5(c) of LPS3 details specific exemptions for which a development contribution is not required.

11 DCP Credits

11.1 DCP Credits to offset Contributions

A landowner may gain DCP credits for provision of DCP infrastructure items (known as "Pre-Funding") and/or land ceded for road widening, POS/Drainage, and DOS.

DCP Credits can be used to offset DCP Contributions (within the same DCA). Credits must be "banked" (through ceding land or completion of pre-funded infrastructure) before they can be used to offset Contributions.

DCP Credits will always be allocated to the registered landowner, as likewise, the liability for DCP Contributions is a liability of the landowner. Credits do not transfer upon sale of the land, unless a legal agreement between the seller, purchaser and the Shire is in place to enable this.

11.2 Credits for DCP Land Ceded

Credits are applicable for land included in the DCP for POS/Drainage, DOS and Road Reserves. The land value applied to credits, will be the land value published in the DCP Report Revision at the time the land is ceded (i.e. Subdivision Clearance).

11.3 Credits for Pre-Funding of DCP Infrastructure

11.3.1 Pre-Funding Agreement

The Shire will support pre-funding and delivery of the infrastructure, provided there are good reasons for doing so and in instances where:

- The works are necessary for the progression of an approved subdivision; or,
- The Developer wishes to undertake works specified in the DCP and the Shire does not hold enough DCP funds to undertake the works and/or has not prioritised such works.

By way of an exchange of letters, the Shire and the Developer will agree the extent, composition and timing of the infrastructure works to be pre-funded. Once agreed, the works become the Approved Works. The Approved Works must be identified sufficiently to ensure the cost and quantities of completed and remaining works in that item can be quantified.

11.3.2 Acceptance of Works

The Developer shall ensure the works are:

- Undertaken in a proper and workmanlike manner
- In accordance with plans and specifications constituting the Approved Works
- Completed within the agreed period.

Following written notification from the Developer, that the Approved Works are complete as above, the Shire will confirm the delivery of the Approved Works to its satisfaction.

The Shire can modify, accept, or reject the claim where justified, following review of standard and cost. Referral should be made to the Byford Industry Reference Group for comment, where rejection of the claim is proposed.

11.3.3 Principles for Cost Recoupment

The recoup is to be based on the current Cost Schedule in accordance with the latest revision of the DCP Report whereby the current cost estimate (including the applicable contingency allowance) as described in the prevailing DCP Report, shall constitute the maximum claimable amount for the completed Approved Works.

Once Approved, costs claimed by the Developer/Landowner for the pre-funded works will be independently verified by the Shire as reasonable and in line with DCP inclusions/exclusions. DCP credits will only be allocated once agreement is reached on the final claim value for such works after the independent review has occurred.

The value of DCP Credits allocated is *exclusive* of GST.

11.4 Repayment of DCP Credit Balance

Where a developer or landowner has completed all their developments within the DCA and has no further holdings in the DCA, any resulting credit balance amount is held by the local government as a credit to the developer or landowner until sufficient funds are available in the DCP fund to cover the credited amount, taking consideration of planned or committed expenditure at that time.

All credit balance repayment requests during the operation of the DCP, and which qualify for consideration (as per above), will be subject to a council report, and determined by Council. The credit is then reimbursed to the developer or landowner as soon as circumstances permit.

Requests for repayment of a credit balance, once development and landholdings applicable to that developer/landowner within the DCA are complete, should be made in writing to developmentcontributions@sjshire.wa.gov.au.

At the completion of the DCP, all credit balances are to be repaid no later than 90 days from the end date of the DCP.

12 Review

12.1 Major Review (5 Yearly)

In addition to the Annual Review provisions identified below, the Development Contribution Plan will be reviewed five years from the date of gazettal of the local planning scheme, or amendment to the local planning scheme to incorporate or amend the plan, or earlier should the local government consider it appropriate, having regard to the rate of development in the area and the degree of development potential still existing.

There is a statutory obligation for the Shire to advertise and seek comment on a major review of a DCP report. In addition to the statutory provisions, the Shire will consult with the Byford Industry Reference Group.

12.2 Annual (Minor) Review

The DCP Report which accompanies the Plan, is to be reviewed at least annually. The following contribution rate inputs will be revised as part of this review:

- Actual and remaining infrastructure and water monitoring costs
- Actual and remaining administration costs
- Actual and remaining lots and/or m2 developable area
- The latest Cost Review Reconciliation surplus or deficit
- Actual and remaining land acquisition costs

There is no statutory obligation for the Shire to advertise or seek comment on the minor annual review of a DCP report, however where the costing and details of the DCP Report are:

- revised based on accounting for completed works
- revised based on construction cost increases/decreases
- revised based on land value increases/decreases

- revised based on revisions to the anticipated undeveloped lot yield; and
- not subject to other material change

the Shire will consult with the Byford Industry Reference Group.

It is noted that SPP 3.6 requires an Annual Status Report to be prepared by the local government providing an overview of progress of the delivery of infrastructure specified in the DCP, which is to be published on the local government's website, within 6 months of Financial Year End. It therefore does not form part of this DCP Report.

The Annual Report will be available on the Shire's website for each respective DCP, by no later than end December of each Financial Year: [Infrastructure Contributions » Shire of Serpentine Jarrahdale \(sjshire.wa.gov.au\)](https://www.sjshire.wa.gov.au/infrastructure-contributions).

12.2.1 Updates to Infrastructure Cost Estimates

Cost estimates will be updated annually. For the purposes of the cost reviews, infrastructure costs may be reviewed in full by an appropriately qualified person or may be indexed based on the Building Cost Index or other appropriate index.

The Cost Apportionment Schedule will identify and adjust/apportion any funding received/required from non-DCP sources (e.g. grants or any "Shire-Share" portion of costs).

12.2.2 Cost Review Reconciliation

The Cost Review Reconciliation is an adjustment made in each revision to adjust for any over-collection or under-collection of DCP contributions versus DCP expenditure. DCP contributions are always based on an estimate of future costs, whereas DCP expenditure is based on actual values. Any variance at the end of the prevailing DCP Report revision, is therefore adjusted on the "Reconciliation" line in the Cost Apportionment Spreadsheet, to assist the DCP in achieving the goal of breaking-even at its closure.

At each Cost Review, the net balance of contributions and expenditure will be calculated.

This net balance accounts for all contributions due from development in the previous development periods (no account is taken of contributions paid, i.e. cash received) and all expenditure (including credits earned, whether reimbursed or held on account).

A Cost Review can result in a surplus or deficit at the date of review. A surplus means the total contributions arising from development has exceeded the total costs incurred at the review date. A deficit means that the total contributions arising from development were less than the total costs incurred at the review date.

Future Development Contribution Plan contribution rates account for this surplus or deficit, as well as future costs and lots yet to be developed.

Over the life of the Development Contribution Plan, the methodology employed should see the annual surpluses and deficits cancel out, to result in a break-even position for the DCP at the end of its lifespan.

Appendix K details the annual cost review outcomes from the latest review and any adjustment required for the following DCP Report period.

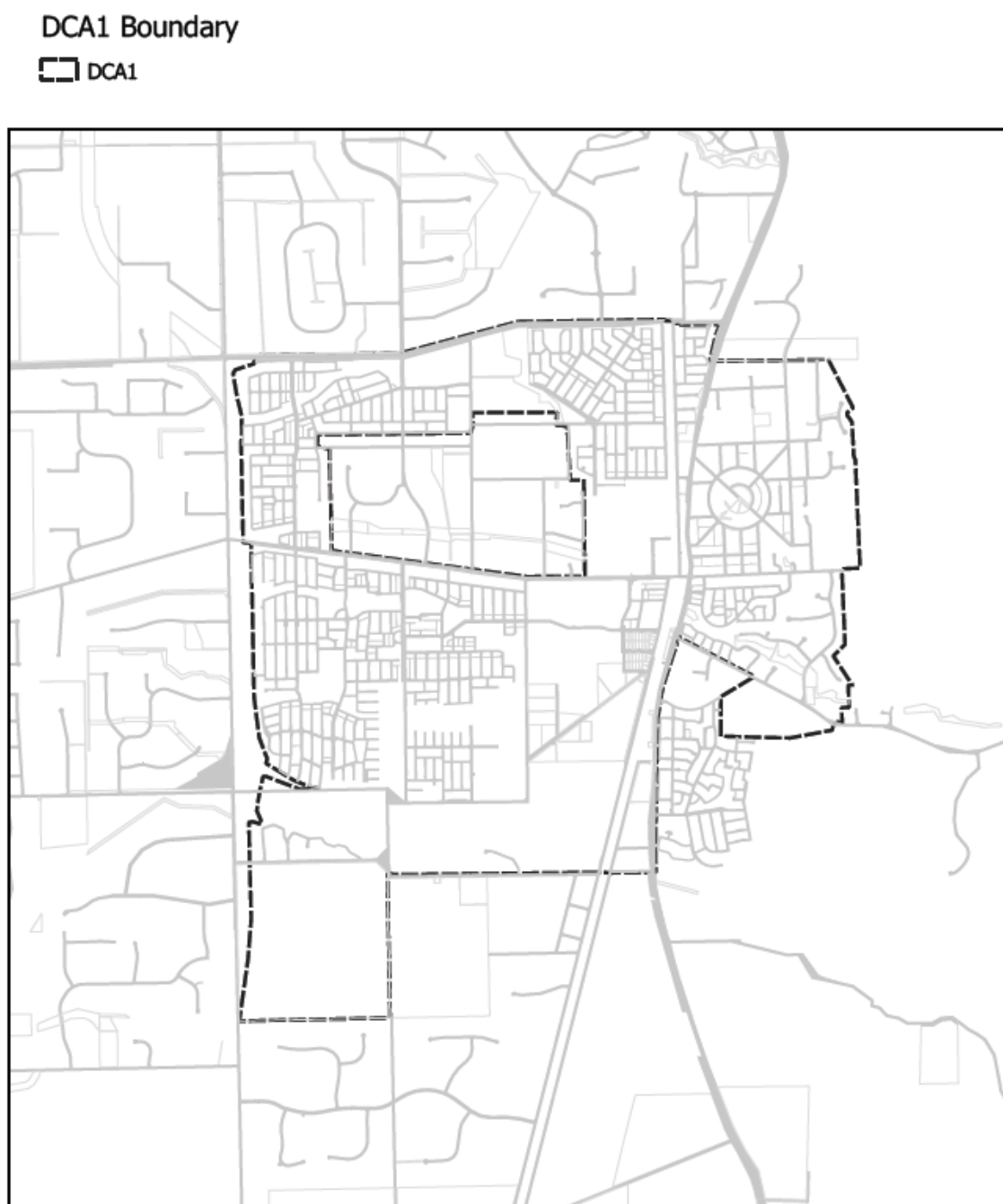
Figure 1 – Map of Development Contribution Area Boundary

Figure 2 – Map of Roads to be constructed/upgraded

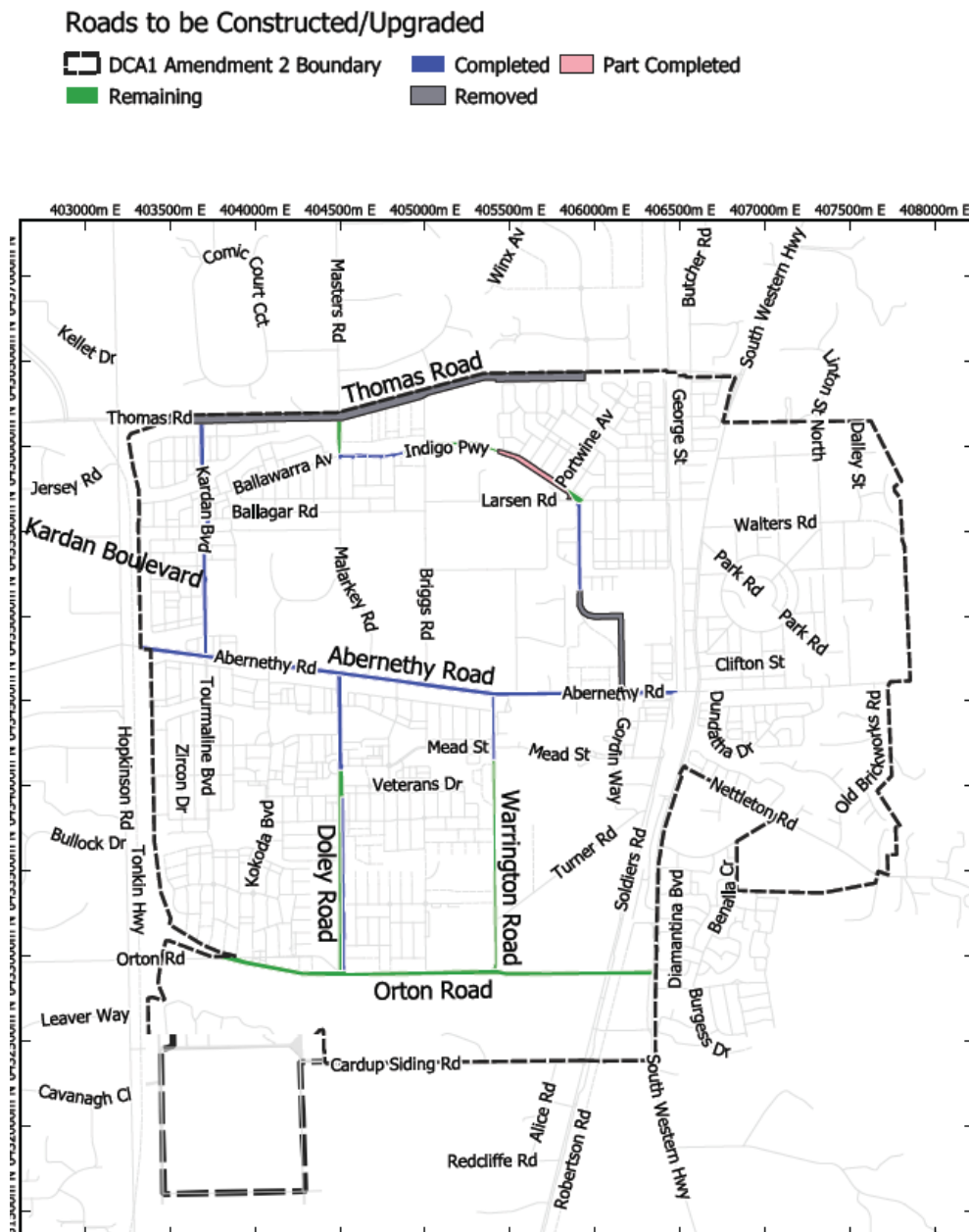


Figure 3 – Map of District Open Space to be constructed/upgraded

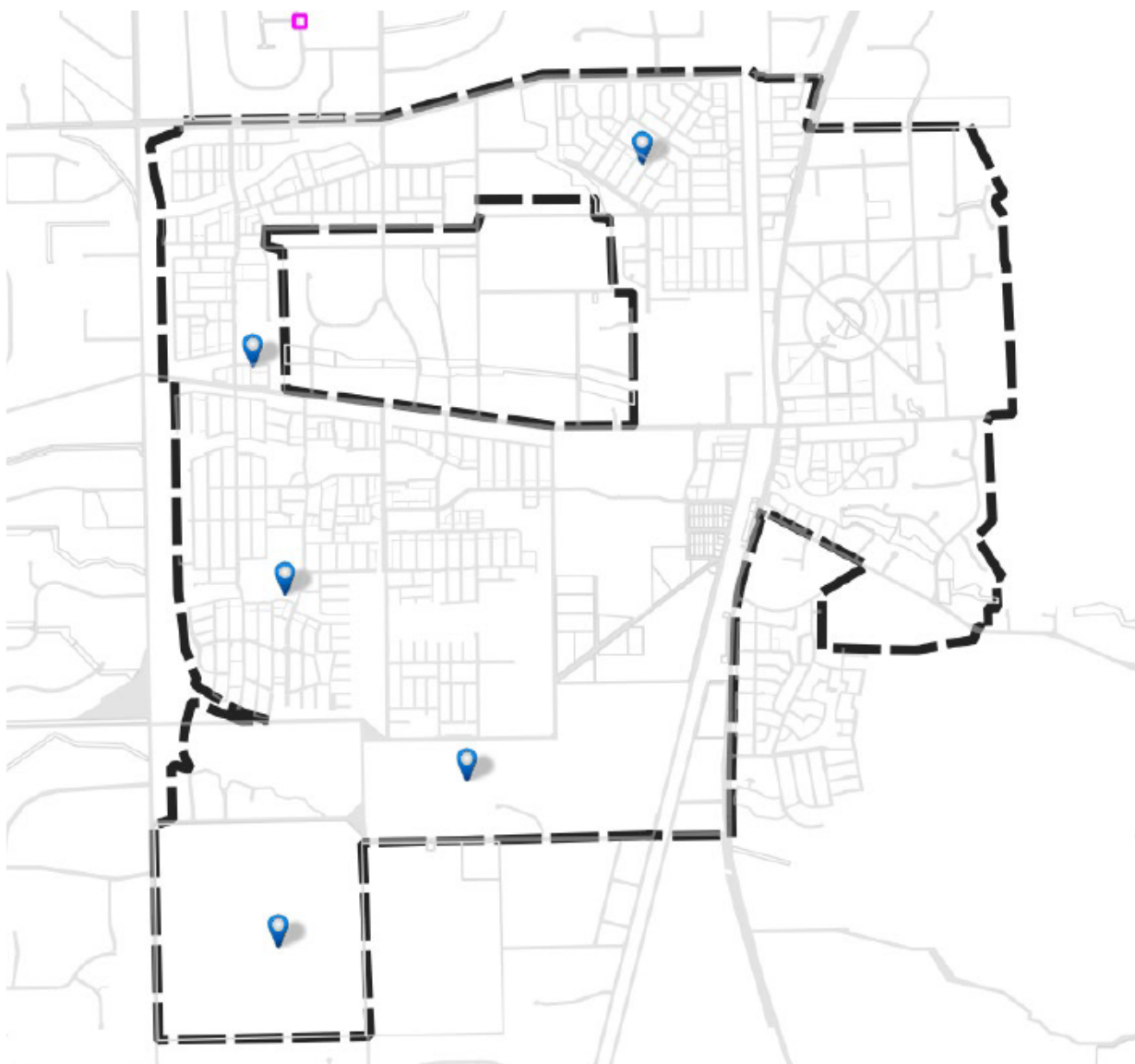
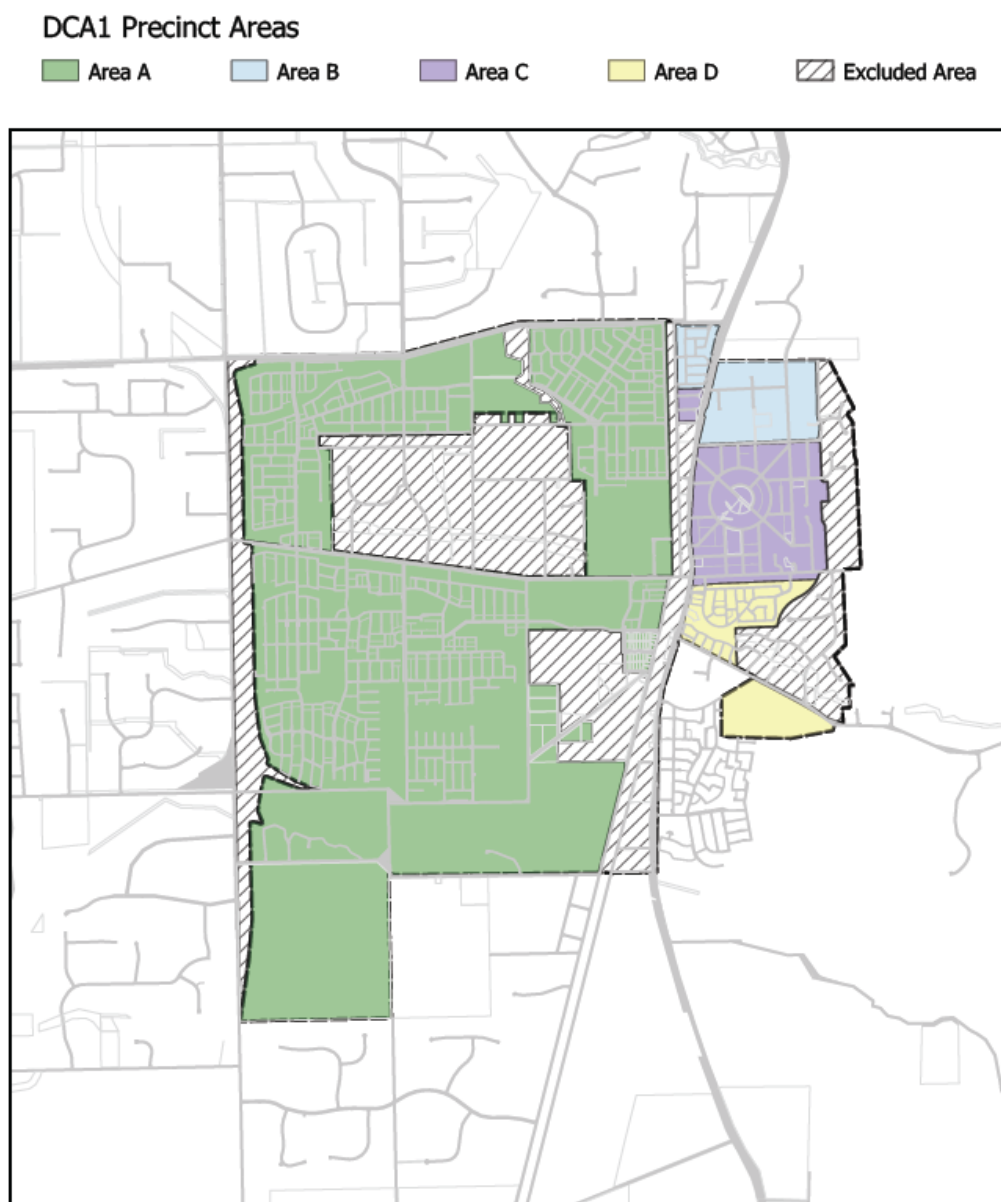


Figure 4 – Map of DCP Precinct(s)



APPENDICES

Appendix A: Project Inclusions (Need & Nexus)

Byford Traditional Infrastructure Development Contribution Plan Report

Appendix A: Project Inclusions: Need and Nexus

Abernethy Road – Integrator A (Completed)

It is noted that the Byford Traditional Infrastructure DCP funded works for this infrastructure item have been completed.

Abernethy Road is located centrally within DCA1, providing an east-west connection and linking in with the proposed expansion of the Byford Town Centre. Abernethy Road is a Shire controlled road and is not reserved under the MRS. The existing state of Abernethy Road is rural in nature, with a narrow single carriageway allowing for one lane in either direction. The road is not proposed to provide a direct connection to the future extension of Tonkin Highway and will ultimately become a grade separated underpass beneath Tonkin Highway, once extended.

The width of Abernethy Road will generally be 30 metres.

The upgrade of Abernethy Road will occur between the Tonkin Highway reserve to the west and the railway reserve to the east. The portion of Abernethy Road adjacent to the Byford Trotting Complex will have half the cost of road widening, construction and upgrade borne by the DCP. The portion of Abernethy Road between Kardan Boulevard and Hopkinson Road will be retained as a single carriageway. The overall portion of costs borne by the Byford Development Contribution Plan is 71.25%.

The following items are included in the Byford Development Contribution Plan for Abernethy Road:

- Land required in excess of a standard 20m reserve, to achieve a 30m wide road reserve, plus additional land where necessary to accommodate channelization and/or roundabout construction at intersections;
- Earthworks for the whole road reserve;
- Complete road construction based on the Liveable Neighbourhoods Integrator A standard;
- Intersection treatments as required for the following intersections:
 - Kardan Boulevard (Roundabout)
 - Doley Road (Roundabout)
 - Briggs Road (Roundabout)
 - Warrington Road (Roundabout)
 - Sansimeon Boulevard (Roundabout)
- Associated drainage works including water sensitive urban design measures;
- Shared paths;
- Utility removal, relocation and insertion; and
- Associated costs including design and management.

Byford Traditional Infrastructure Development Contribution Plan Report

The Byford Development Contribution Plan proportionate share is 71.25%, with the Shire's share being 28.75% of the full cost.

The following items are not included in the Byford Development Contribution Plan for Abernethy Road:

- Minor intersections treatments into the adjoining subdivisional road network. These will be subject to a standard truncation requirement;
- In accordance with normal subdivision cost apportionment, half the cost share associated with the portion of road adjacent to the Byford Trotting Complex is excluded from the Byford Development Contribution Plan, as it is the responsibility of future development within the Trotting Complex. The excluded 50% cost share includes the land for widening, earthworks, drainage, construction and associated works; and
- Modifications to the current railway crossing configuration, as this may change in the future when detailed planning is undertaken by the Public Transport Authority for the future electrification of the railway line to Byford.

Doley Road – Neighbourhood Connector A

Doley Road is in the southern portion of DCA1, providing a north-south connection between Abernethy Road and Cardup Siding Road. The DCP funded upgrade of Doley Road will occur between Abernethy Road and Orton Road.

Doley Road will play an important district role by providing vehicle access into the proposed local centre, which will cater for a wide catchment population.

Considering the function of Doley Road, the Shire requires a 30m road reserve between Abernethy Road and Orton Road.

The following items are included in the Byford Development Contribution Plan for Doley Road:

- Land required in excess of a standard 20m reserve, to achieve a 30m wide road reserve, plus additional land where necessary to accommodate channelization and/or roundabout construction at intersections;
- Earthworks for the whole road reserve;
- Complete road construction based on the Liveable Neighbourhoods Neighbourhood Connector A standard;
- Intersection treatments as required for the following intersection;
- Mead Street (Roundabout)
- Associated drainage works including water sensitive urban design measures;
- Shared paths;
- Utility removal, relocation and insertion; and
- Associated costs including design and management.

The following items are not included in the Byford Development Contribution Plan for Doley Road:

- Minor intersections treatments into the adjoining subdivisional road network. These will

Byford Traditional Infrastructure Development Contribution Plan Report

be subject to a standard truncation requirement.

Indigo Parkway – Integrator B

Indigo Parkway is in the northern portion of the DCA, providing a northwest- southeast connection between Thomas Road and Larsen Road.

Originally part of the “Sansimeon Boulevard” upgrade in previous DCP revisions, this project is now identified separately, which reflects the correct road name, and which will allow Indigo Parkway and Sansimeon Boulevard to have different priority build status.

Ultimately, the Indigo-Sansimeon connector will be a key district level connection from Thomas Road to Abernethy Road and, with the additional inclusion of Clara Street, will provide a through route into Byford Town Centre. This connection will also assist in limiting vehicle movements through the Byford Trotting Complex.

The construction the Indigo Parkway will occur between Thomas Road and Larsen Road. Indigo Parkway will have a width of 22.5 metres in areas adjacent to public open space, 30m width along the existing Malarkey Road, and 27.5 metres in the remaining areas.

The following items are included in the Byford Development Contribution Plan for Indigo Parkway:

- Land required in excess of a standard 20m reserve, to achieve a 22.5m wide road reserve adjacent to Public Open Space, a 30m wide road reserve for the Malarkey Road section, and a 27.5m wide road reserve for the remaining areas plus additional land where necessary to accommodate channelization and/or roundabout construction at intersections;
- Earthworks for the whole road reserve;
- Complete road construction based on the Liveable Neighbourhoods Integrator B standard;
- Intersection treatments as required for the following intersections:
 - Ballawarra Avenue (Roundabout)
 - Briggs Road (Left In, Left Out)
 - Caraway Avenue (Roundabout)
 - Portwine Avenue (Left In, Left Out)
 - Larsen Road (Roundabout)
- Associated drainage works including water sensitive urban design measures;
- Shared paths;
- Utility removal, relocation and insertion; and
- Associated costs including design and management.

The following items are not included in the Byford Development Contribution Plan for Indigo Parkway:

- Minor intersections treatments into the adjoining subdivisional road network. These will be subject to a standard truncation requirement.

Byford Traditional Infrastructure Development Contribution Plan Report

Kardan Boulevard – Neighbourhood Connector A (Completed)

It is noted that the Byford Traditional Infrastructure DCP funded works for this infrastructure item have been completed at this revision.

Kardan Boulevard is in the north-west portion of DCA1, providing a north-south connection between Thomas Road and Abernethy Road. Construction of the road provides an important connection for district traffic and public transport movements.

Considering Kardan Boulevard's role, the Shire requires a road width of 25 metres from Abernethy Road to Fawcett Road, and a road width of 30 metres from Fawcett Road to Thomas Road.

The following items are included in the Byford Development Contribution Plan for Kardan Boulevard:

- Land required in excess of a standard 20m reserve, to achieve a 25m wide road reserve from Abernethy Road to Fawcett Road and a 30m wide road reserve from Fawcett Road to Thomas Road, plus additional land where necessary to accommodate channelization and/or roundabout construction at intersections;
- Earthworks for the whole road reserve;
- Complete road construction based on the Liveable Neighbourhoods Neighbourhood Connector A standard;
- Intersection treatments as required for the following intersections:
 - Kalyang Loop/Pingaring Court (Roundabout)
 - Ballawarra Avenue (Roundabout)
 - Ethereal Road (Roundabout)
 - Saintly Turn (Roundabout)
- Associated drainage works including water sensitive urban design measures;
- Shared paths;
- Utility removal, relocation and insertion; and
- Associated costs including design and management.

The following items are not included in the Byford Development Contribution Plan for Kardan Boulevard:

- Minor intersections treatments into the adjoining subdivisional road network. These will be subject to a standard truncation requirement.

Orton Road New – Integrator B

Orton Road is in the southern portion of the DCA, currently running east to west between Hopkinson Road and Warrington Road. Orton Road is a Shire controlled road and is not reserved under the MRS.

Byford Traditional Infrastructure Development Contribution Plan Report

The existing state of Orton Road is rural in nature, with a narrow single carriageway allowing for one lane in either direction. The BDSP 2020 indicates that the road is to be realigned to the west of Doley Road and be extended from Warrington Road to the South Western Highway. Other changes to the alignment of the road are proposed towards Tonkin Highway where the road is proposed to connect into Tonkin Highway.

The width of Orton Road will be 30 metres. The upgrade and construction of Orton Road will occur between the Tonkin Highway reserve and the South Western Highway.

The following items are included in the Byford Development Contribution Plan for Orton Road:

- Land required in excess of a standard 20m reserve, to achieve a 30m wide road reserve, plus additional land where necessary to accommodate channelization and/or roundabout construction at intersections;
- Earthworks for the whole road reserve;
- One at-grade rail crossing;
- Complete road construction based on the Liveable Neighbourhoods Integrator B standard;
- Intersection treatments as required for the following intersections:
 - Kokoda Boulevard (Roundabout)
 - Doley Road (Roundabout)
 - Lawrence Way (Roundabout)
 - Warrington Road (Roundabout)
 - Soldiers Road (Roundabout)
 - South Western Highway (Channelised Intersection)
- Associated drainage works including water sensitive urban design measures;
- Shared paths;
- Utility removal, relocation and insertion; and
- Associated costs including design and management.

The following items are not included in the Byford Development Contribution Plan for Orton Road:

- Minor intersections treatments into the adjoining subdivisional road network. These will be subject to a standard truncation requirement; and
- Any intersection treatment with Tonkin Highway.

Sansimeon Boulevard – Integrator B (DCP Component Completed)

At this DCP revision, Metronet will be delivering the remaining length of Sansimeon Boulevard. All remaining costs have been removed from the DCP.

Sansimeon Boulevard is in the central portion of DCA1, providing a northwest- southeast connection between Larsen Road and Abernethy Road.

Byford Traditional Infrastructure Development Contribution Plan Report

The Indigo-Sansimeon connector will be a key district level connection from Thomas Road to Abernethy Road and, with the additional inclusion of Clara Street, will provide a through route into Byford Town Centre. This connection will also assist in limiting vehicle movements through the Byford Trotting Complex.

The following items are included in the Byford Development Contribution Plan for Sansimeon Boulevard:

- Land required in excess of a standard 20m reserve, to achieve a 22.5m wide road reserve between Larsen Road and Armadan Court, and 25m wide road reserve for the remaining areas, plus additional land where necessary to accommodate channelization and/or roundabout construction at intersections;
- Earthworks for the whole road reserve;
- Complete road construction based on the Liveable Neighbourhoods Integrator B standard;
- Intersection treatments as required for the following intersections;
 - Clara Street (Byford Town Centre Main Street) (Roundabout)
- Associated drainage works including water sensitive urban design measures;
- Shared paths;
- Utility removal, relocation and insertion; and
- Associated costs including design and management.

The following items are not included in the Byford Development Contribution Plan for Sansimeon Boulevard:

- Minor intersections treatments into the adjoining subdivisional road network. These will be subject to a standard truncation requirement.

Thomas Road – Primary Regional Road (DCP Component Completed)

At this revision, it has been confirmed that Main Roads Western Australia will take over ownership of Thomas Road. There are some historical costs borne by the DCP from works already undertaken and land for road widening purchased, however all costs for remaining works and land have been removed from the calculations.

Thomas Road borders a significant portion of the DCA1 area to the north. Under the Metropolitan Region Scheme (MRS), the road is reserved as an “Other Regional Road” and is identified as a district distributor. This road is being investigated for transfer to MRWA control. Until the transfer terms and timing are finalised, the Shire needs to make provision for the Thomas Road upgrade within the DCP.

The road currently exists but will require upgrades to future intersections and road widening for the future alignment and configuration, in order to support district development and increased regional traffic.

The width of the Thomas Road reserve will be 50 metres.

The upgrade of Thomas Road was originally planned to occur between the Tonkin Highway reserve to the west and the rail reserve to the east. With a grade separate bridge crossing over

Byford Traditional Infrastructure Development Contribution Plan Report

the rail reserve confirmed as being funded by the State Government, the bridge will reduce the planned upgrade length by circa 500m (to the west of the rail reserve). Therefore, this project will now occur between the Tonkin Highway Reserve to the west and the intersection with Wungong South Road to the east.

The following items are included within the Byford Development Contribution Plan for Thomas Road:

- Land required in excess of a standard 20m reserve, to achieve a 50m wide road reserve, plus additional land where necessary to accommodate channelization and/or roundabout construction at intersections;
- Earthworks;
- The construction and upgrade of one carriageway to a Primary Regional Road standard
- Intersection treatments as required for the following intersections:
 - Kardan Boulevard (Roundabout)
- Associated drainage works and water sensitive urban design measures;
- Shared paths;
- Utility removal, relocation and insertion; and
- Associated costs including design and management.

The following items are not included in the Byford Development Contribution Plan for Thomas Road:

- Modifications to the current railway crossing configuration and any portion covered by the state funded rail bridge crossing;
- Any upgrades to Thomas Road east of the railway crossing, up to the dual carriageway near South Western Highway;
- Any intersection treatment with Tonkin Highway; and
- Minor intersections treatments into the adjoining subdivisional road network. These will be subject to a standard truncation requirement.

Warrington Road – Neighbourhood Connector B

Warrington Road is in the southern portion of the DCA area, providing a north-south connection between Abernethy Road and Orton Road. The road passes through an area of highly fragmented landownership. Warrington Road has been included within the Byford DCP to ensure a coordinated upgrade catering for increased traffic volumes.

The width of Warrington Road will be 20 metres.

The following items are included in the Byford Development Contribution Plan for Warrington Road:

- Land required where necessary to accommodate channelization and/or roundabout construction at intersections;

Byford Traditional Infrastructure Development Contribution Plan Report

- Earthworks for the whole road reserve;
- Complete road construction based on the Liveable Neighbourhoods Neighbourhood Connector B standard;
- Intersection treatments as required for the following intersections;
 - Mead Street (Roundabout)
 - Turner Road (Roundabout)
- Associated drainage works including water sensitive urban design measures;
- Shared paths;
- Utility removal, relocation and insertion; and
- Associated costs including design and management

The following items are not included in the Byford Development Contribution Plan for Warrington Road:

- Minor intersections treatments into the adjoining subdivisional road network. These will be subject to a standard truncation requirement.

Byford Central District Open Space (Bill Hicks) (Completed)

It is noted that the Byford Traditional Infrastructure DCP funded works for this infrastructure item have been completed, with final costs allocated to the DCP for this project confirmed at \$953,532.

The Byford Central District Open Space is too small for AFL competition (senior or junior) however; it is the correct size for Soccer. The District Open Space has been constructed and the following items were included in the Byford Development Contribution Plan:

- Earthworks;
- Grassing;
- Irrigation; and
- Associated costs relating to construction including design and management.

The Glades District Open Space

Current advice is that a District Level Futsal space (hardcourts) would be of significant benefit to the Byford community as an alternative to a traditional football oval/grassed playing field.

This site will be a district level Futsal space (2 hardcourts).

The following items are included in the Byford Development Contribution Plan

- Earthworks;
- Irrigation;
- Grassing and / or Hard Landscaping; and
- Associated costs relating to construction including design and management.

Byford Traditional Infrastructure Development Contribution Plan Report

Hopkinson Road District Open Space

This is a shared project with the Community Infrastructure DCP to provide a District Open Space with one full sized AFL oval. The building and lights will be covered by the Community DCP and the oval and land will be provided through the Byford Traditional Infrastructure DCP. Works covered under the Byford Traditional DCP include:

- Earthworks;
- Grassing;
- Irrigation; and
- Associated costs relating to construction including design and management.

Orton Road District Open Space and REW

This is a shared project with the Community Infrastructure DCP to provide a District Open Space with one full sized AFL oval. The building and lights will be covered by the Community DCP and the oval and land will be provided through the Byford Traditional Infrastructure DCP.

The DOS will be located to the south of Orton Road.

As part of this project, the buffer associated with the Cardup Brook Resource Enhancement Wetland (REW) which is considered a regionally valuable ecological and environmentally sensitive corridor, will be rehabilitated.

The following items are included in the Byford Traditional Infrastructure Development Contribution Plan:

- Earthworks;
- Irrigation;
- Grassing; and
- Associated costs relating to construction including design and management.

West Byford Primary School / Kalimna District Open Space (Completed)

It is noted that the Byford Traditional Infrastructure DCP funded works for this infrastructure item have been completed, with final costs allocated to the DCP for this project confirmed at \$585,808.

This is a full-sized AFL Oval (165m x 135m) partially located on Department of Education land and subject to a SUA. The SUA shares the cost of developing the oval between the Shire and the Department of Education.

As with all clubs, the Centrals Senior and Junior Clubs are experiencing rapid growth in their playing membership due to the rapid population increase brought on by new developments. Based on figures provided by the club, the juniors are projected to add two new teams each year for the near future and the seniors will add an additional team each year. The Cricket clubs are also experiencing growth. It is because of this growth that these clubs are outgrowing their existing facilities and require new facilities to be able to keep up with demand from the increasing population. According to the Youth Strategy, almost a quarter (21%) of young people played football.

The following items were included in the Byford Development Contribution Plan:

Byford Traditional Infrastructure Development Contribution Plan Report

- Earthworks;
- Grassing;
- Irrigation; and
- Associated costs relating to construction including design and management.

Appendix B: DCP Funded items by Precinct

DCP Funded Items by Precinct

DCA1_Revision

Byford Traditional Infrastructure DCP

[illegible]

Appendix C: Cost Apportionment Schedule

| | Land Value | LVDER |
|------------------------|------------------|----------------|
| Residential | \$ 60.00 | \$0.000 |
| Non Residential | \$ 115.00 | \$0.000 |

Status **Draft**

\$80,011,698.9724

[illegible]

Appendix D: Example Calculations

EXAMPLE CALCULATIONS: Note, for simplicity, daily indexing has not been applied to the below examples.

DCA: DCA1_ Byford Traditional Infrastructure DCP
Report Revision: 8

Example 1

A residential subdivision creating 50 lots within Precinct A, with one existing parent lot:

| Precinct | Development Contribution Rate per lot/dwelling | Number of additional lots/dwellings | Total development contribution | Calculation |
|----------|--|-------------------------------------|--------------------------------|--|
| A | \$14,859.05 | 49 | \$728,093.22 | $\$14,859.05 \times (50 - 1) = \$728,093.22$ |

Example 2

A residential subdivision in Precinct A, creating 50 lots, with one existing parent lot AND providing 10,000 m² of creditable public open space / drainage residential land)

Note: creditable land must be cleared before, or at the same time, as the lot clearance in order to be offset against contributions due. Credits that are not yet earned/cleared cannot be used to offset Contributions due.

| Precinct | Development Contribution Rate per lot/dwelling | Number of additional lots/dwellings | Total development contribution | Calculation |
|--------------------------|--|---|--------------------------------|--|
| A | \$14,859.05 | 49 | \$728,093.22 | $\$14,859.05 \times (50 - 1) = \$728,093.22$ |
| Public open space credit | m ² of land being provided | Land value per m ² | Credit amount | Calculation |
| | 10,000 | \$60.00 | \$600,000.00 | $\$10,000.00 \times 60 = \$600,000.00$ |
| | | Total net development contribution | \$128,093.22 | $\$728,093.22 - \$600,000.00 = \$128,093.22$ |

Example 3

A non-residential subdivision creating a 4000m² lot within Precinct A

| Precinct | Development Contribution Rate per m ² | Parent Lot Discount | Total development contribution | Calculation |
|----------|--|---------------------|--------------------------------|---|
| A | \$33.02 | N/A | \$132,080.40 | $(\$33.02 \times 4,000\text{m}^2) = \$132,080.40$ |

#REF!

Appendix E: Capital Expenditure Plan

Capital Expenditure Plan

DCA:
Report Revision:

DCA1_ Byford Traditional Infrastructure DCP
8

| Name | Start Date | End Date |
|-----------------------|------------|----------|
| Water Monitoring | 2023 | 2034 |
| The Glades DOS | 2024 | 2025 |
| Doley Road (to Orton) | 2014 | 2026 |
| Orton Road | 2024 | 2031 |
| Indigo Parkway | 2019 | 2025 |
| Warrington Road | 2027 | 2028 |
| Orton Road DOS & REW | 2025 | 2026 |
| Hopkinson Road DOS | 2031 | 2032 |

Appendix F: Administration Cost

SCHEDULE OF COSTS

10.1.4 - attachment 2

ADMINISTRATION COSTS Budget FY 2023
Report Revision
Fiscal Year

| | | | | |
|-------|------------|----------------|------------|-------|
| DCA1_ | 23/01/2024 | 30/01/2024 | 23/01/2024 | Match |
| 8 | DCP Head | New DCA Review | DCP Head | |
| 2023 | | | | |

| | Budget FY 2023 | Years Remaining | Remaining Spend | Spend to Date (See Table 4) | Total Forecast Spend |
|--|----------------|-----------------|-----------------|-----------------------------|----------------------|
| Byford Traditional Infrastructure DCP | | | | | |
| Legal Expenses | \$4,000.00 | 9.98 | \$39,900.00 | | |
| Advertising, Promotion & Consultancy | \$3,000.00 | 9.98 | \$29,925.00 | | |
| DWMS Review | \$0.00 | 9.98 | \$0.00 | | |
| Wages Totals (See Table 1) | \$80,651.31 | 9.98 | \$804,496.86 | | |
| Sub Total | \$87,651.31 | 9.98 | \$874,321.86 | \$2,262,695.88 | \$3,137,017.74 |
| Change from previous year (see Tables 2 and 3) | -\$48,723 | -0.54 | -\$559,126 | -\$28,012 | -\$587,139 |

Table 1 - Budget allocations current FY

| | DCA1 | DCA2 | DCA3 | DCA4 | Totals |
|---|------------|-----------|------------|-------------|-----------|
| Budget FY 2023 | | | | | |
| Legal Expenses | \$4,000 | \$4,000 | \$4,000 | \$4,000 | \$16,000 |
| Advertising, Promotion & Consultancy | \$3,000 | \$3,000 | \$3,000 | \$3,000 | \$12,000 |
| DWMS Review | \$0 | \$0 | \$0 | \$0 | \$0 |
| Wages Totals (see below allocations) | \$80,651 | \$13,441 | \$40,326 | \$134,418 | \$268,836 |
| Sub Totals | \$87,651 | \$20,441 | \$47,326 | \$141,418 | \$296,836 |
| Change from previous year | -\$48,723 | -\$25,370 | \$1,513 | \$80,972 | \$8,391 |
| Salary allocations | 30% of FTE | 5% of FTE | 15% of FTE | 50 % of FTE | Total FTE |
| Technical Specialist Infrastructure Contributions (DCP Coordinator) | 0.30 | 0.050 | 0.150 | 0.500 | 1.000 |
| Director Development Services | 0.03 | 0.005 | 0.015 | 0.050 | 0.100 |
| Coordinator Strategic Planning | 0.02 | 0.003 | 0.008 | 0.025 | 0.050 |
| Manager Strategic Planning | 0.02 | 0.005 | 0.015 | 0.050 | 0.100 |
| Manager Engineering Services | 0.01 | 0.001 | 0.003 | 0.010 | 0.020 |
| Engineering Development Lead | 0.01 | 0.002 | 0.005 | 0.015 | 0.030 |
| Engineering Design Lead | 0.01 | 0.001 | 0.003 | 0.010 | 0.020 |
| Infrastructure Projects Lead | 0.01 | 0.001 | 0.003 | 0.010 | 0.020 |
| Manager Major Projects | 0.01 | 0.001 | 0.003 | 0.010 | 0.020 |
| Senior Project Engineer | 0.01 | 0.001 | 0.003 | 0.010 | 0.020 |
| Manager Finance | 0.03 | 0.005 | 0.015 | 0.050 | 0.100 |
| Management Accountant | 0.03 | 0.005 | 0.015 | 0.050 | 0.100 |
| Financial Accountant | 0.06 | 0.010 | 0.030 | 0.100 | 0.200 |

| DCA | DCA1_ |
|------------------|----------------|
| Report Revision | All |
| Development Name | Administration |

| Row Labels | Administration Spend |
|--|----------------------|
| 2014 | |
| Administration costs 2014 | -\$1,600,226 |
| 2015 | |
| Administration costs 2015 | -\$211,909 |
| 2016 | |
| Administration costs 2016 | -\$263,039 |
| Interest added | \$340,154 |
| Not Required | \$0 |
| 2017 | |
| Administration costs 2017 | -\$275,028 |
| Interest added | \$116,503 |
| 2018 | |
| Administration costs 2018 | -\$204,172 |
| Interest added | \$210,704 |
| 2019 | |
| Administration costs 2019 | -\$241,838 |
| Interest added | \$183,557 |
| 2020 | |
| Administration costs 2020 | -\$208,984 |
| Interest added | \$50,353 |
| 2021 | |
| Administration adjustment and drawdown | \$0 |
| Administration costs 2021 | -\$226,949 |
| Auditing Adjustment (Interim) 2021 | -\$144,598 |
| Interest added | \$16,161 |
| 2022 | |
| Admin costs 2021/22 | -\$153,007 |
| Interest 21/22 | \$865 |
| Interest earned - adjustment | \$449,388 |
| Interest Received 2021/22 | \$7,732 |
| 2023 | |
| Adjustment for confirmed Admin costs 2022/23 | -\$31,952 |
| Admin costs (budget) 2022/23 - TBC | -\$136,375 |
| Interest FYE 2022/23 | \$59,964 |
| Grand Total | -\$2,262,696 |

Appendix G: Infrastructure Costs

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|---------------------|--|----------|------|---------|---------------------------------------|-------------------|---------------|-----------------|
| A | ROAD - ORTON ROAD NEW | | | | | | | |
| <u>A.A</u> | <u>Road Construction</u> | | | | | | | |
| <u>A.A.A</u> | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | \$0 | | | |
| A.A.A.1 | Site Clearance (based on light shrubs) | 49,223 | m2 | \$4 | \$173,265 | | | |
| A.A.A.2 | Extra over for removal of trees | | item | | \$64,485 | | | |
| A.A.A.3 | Remove existing structures along Orton Road | | item | | \$23,420 | | | |
| A.A.A.4 | Removal of topsoil 150mm and stockpile for later re-use | 49,223 | m2 | \$2 | \$79,249 | | | |
| A.A.A.5 | Cut to Fill - General Earthworks | 19,560 | m3 | \$8 | \$160,979 | | | |
| A.A.A.6 | Detailed excavation - mill and profile | 6,984 | m2 | \$19 | \$132,556 | | | |
| A.A.A.7 | Imported Fill | | m3 | \$30 | \$0 | | | |
| A.A.A.8 | Form swale | 8,993 | m2 | \$4 | \$34,083 | | | |
| | Subgrade Preparation | | | | \$0 | | | |
| A.A.A.9 | Preparation, trim and compact | 56,206 | m2 | \$6 | \$309,133 | | | |
| | Sub Base and Base Course | | | | \$0 | | | |
| A.A.A.10 | 100mm thick crushed rock base course | 33,499 | m2 | \$8 | \$275,362 | | | |
| | 200mm thick compacted limestone sub base | | m2 | \$14 | | | | |
| A.A.A.11 | 250mm thick compacted limestone sub base | 33,499 | m2 | \$17 | \$585,563 | | | |
| A.A.A.12 | 300mm thick compacted limestone sub base | | m2 | \$21 | \$0 | | | |
| | Road Paving | | | | \$0 | | | |
| A.A.A.13 | 50mm thick (AC14) | 28,103 | m2 | \$31 | \$877,938 | | | |
| A.A.A.14 | Extra over for 2% red oxide | 12,366 | m2 | \$6 | \$77,040 | | | |
| A.A.A.15 | Primer seal | 28,103 | m2 | \$4 | \$113,536 | | | |
| | Kerbing | | | | \$0 | | | |
| A.A.A.16 | Mountable Kerb (MK) | 4,497 | m | \$25 | \$114,404 | | | |
| A.A.A.17 | Kerb openings | 225 | no | \$350 | \$78,750 | | | |
| A.A.A.18 | Semi Mountable Kerb (SMK) | 4,497 | m | \$30 | \$133,336 | | | |
| A.A.A.19 | Concrete flush edge beam | 2,249 | m | \$67 | \$150,795 | | | |
| | Line Marking and Furniture | | | | \$0 | | | |
| A.A.A.20 | Line marking | 4,497 | m | \$6 | \$28,511 | | | |
| A.A.A.21 | Street sign post | 0 | no | \$122 | \$0 | | | |
| A.A.A.22 | Street name plate | 0 | no | \$199 | \$0 | | | |
| A.A.A.23 | Chevron sign | 0 | no | \$613 | \$0 | | | |
| A.A.A.24 | Traffic sign | 0 | no | \$450 | \$0 | | | |
| | Landscaping | | | | | | | |
| A.A.A.25 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | \$0 | | | |
| A.A.A.26 | Trees (100l) | 0 | no | \$506 | \$0 | | | |
| A.A.A.27 | Soft landscaping | 12,740 | m2 | \$0 | \$0 | | | |
| A.A.A.28 | Landscape mix | 3,185 | m3 | \$90 | \$286,650 | | | |
| A.A.A.29 | Rock pitching | 750 | m2 | \$155 | \$116,438 | | | |
| A.A.A.30 | Drainage layer | 13,490 | m2 | \$0 | \$0 | | | |
| | TOTAL Road Works | | Item | | | \$3,815,493 | | |
| <u>A.A.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| A.A.B.1 | Site Clearance (based on light shrubs) | 10,118 | m2 | \$4 | \$35,615 | | | |
| A.A.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 10,118 | m2 | \$2 | \$16,290 | | | |
| A.A.B.3 | Cut to Fill - General Earthworks | 3,036 | m3 | \$8 | \$24,986 | | | |
| A.A.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| A.A.B.5 | Preparation, trim and compact | 10,118 | m2 | \$6 | \$55,649 | | | |
| | Pathway | | | | | | | |
| A.A.B.6 | 100 thick concrete footpath with broomed finish | 10,118 | m2 | \$71 | \$716,759 | | | |
| A.A.B.7 | Sand fill below concrete footpath (100mm) | 10,118 | m2 | \$5 | \$55,244 | | | |
| A.A.B.8 | Pram ramp | 0 | no | \$670 | Included with intersections | | | |
| | TOTAL Shared Paths | | Item | | | \$904,544 | | |
| <u>A.A.C</u> | <u>Street Lighting</u> | | | | | | | |
| A.A.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 129 | no | \$3,442 | \$443,982 | | | |
| A.A.C.2 | 6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 65 | no | \$5,111 | \$332,214 | | | |
| | TOTAL Street Lighting | | Item | | | \$776,196 | | |
| <u>A.A.D</u> | <u>Road Drainage</u> | | | | | | | |
| A.A.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 2,249 | m | \$233 | \$524,129 | | | |
| A.A.D.2 | 150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand | 2,249 | m | \$189 | \$424,161 | | | |
| A.A.D.3 | Side entry pits including liner, cover, excavation, and associated works | 0 | no | \$2,667 | CESP measured at intersections, RAB's | | | |

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total | | |
|--------------|--|----------|-------------|-------------|----------------|-------------------|---------------|-----------------|--|--|
| A.A.D.4 | Raised gully / bubble up pits including liner, cover, grate, excavation, rock pitching, and associated works | 75 | no | \$3,021 | \$226,544 | \$1,174,834 | \$9,356,171 | | | |
| | TOTAL Road Drainage | | Item | | | | | | | |
| <u>A.A.E</u> | <u>Preliminaries and Project Costs</u> | | | | | \$2,685,104 | | | | |
| A.A.E.1 | Traffic Management | 5.0000 | % | \$6,671,067 | \$333,553 | | | | | |
| A.A.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$6,671,067 | \$1,000,660 | | | | | |
| A.A.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$6,671,067 | \$500,330 | | | | | |
| A.A.E.4 | Risk Contingency Allowance | 10.0000 | % | \$8,505,610 | \$850,561 | | | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | | | | | |
| | TOTAL Road Construction | | Item | | | | | | | |
| <u>A.B</u> | <u>Tourmaline Boulevard (Left In Left out Intersection)</u> | | | | | | | | | |
| <u>A.B.A</u> | <u>Road Works</u> | | | | | | | | | |
| A.B.A.1 | Earthworks and Site Preparation Site Clearance (based on light shrubs) | 966 | m2 | \$4 | Excl. Excl. | | | | | |
| A.B.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 966 | m2 | \$2 | Excl. | | | | | |
| A.B.A.3 | Cut to Fill - General Earthworks | 290 | m3 | \$8 | Excl. | | | | | |
| A.B.A.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | | | |
| A.B.A.5 | Subgrade Preparation Preparation, trim and compact Sub Base and Base Course | 966 | m2 | \$6 | Excl. Excl. | | | | | |
| A.B.A.6 | 100mm thick crushed rock base course | 786 | m2 | \$8 | Excl. | | | | | |
| A.B.A.7 | 250mm thick compacted limestone sub base | 786 | m2 | \$17 | Excl. | | | | | |
| A.B.A.8 | Road Paving 50mm thick (AC14) | 516 | m2 | \$31 | Excl. | | | | | |
| A.B.A.9 | Extra over for 2% red oxide | 90 | m2 | \$6 | Excl. | | | | | |
| A.B.A.10 | Primer seal | 516 | m2 | \$4 | Excl. | | | | | |
| A.B.A.11 | Kerbing Mountable Kerb (MK) | 60 | m | \$25 | Excl. | | | | | |
| A.B.A.12 | Semi Mountable Kerb (SMK) | 71 | m | \$30 | Excl. | | | | | |
| A.B.A.13 | Line Marking and Furniture Line marking | 80 | m | \$6 | Excl. | | | | | |
| A.B.A.14 | Street sign post | 1 | no | \$122 | Excl. | | | | | |
| A.B.A.15 | Street name plate | 2 | no | \$199 | Excl. | | | | | |
| A.B.A.16 | Traffic sign | 2 | no | \$450 | Excl. | | | | | |
| A.B.A.17 | Landscaping Soft landscaping | 180 | m2 | \$0 | Excl. | | | | | |
| A.B.A.18 | Landscape mix | 42 | m3 | \$90 | Excl. | | | | | |
| A.B.A.19 | Rock pitching | 8 | m2 | \$155 | Excl. | | | | | |
| A.B.A.20 | Drainage layer | 180 | m2 | \$0 | Excl. | | | | | |
| | TOTAL Road Works | | Item | | | \$0 | | | | |
| <u>A.B.B</u> | <u>Shared Paths</u> | | | | | | | | | |
| A.B.B.1 | Earthworks and Site Preparation Site Clearance (based on light shrubs) | 150 | m2 | \$4 | Excl. | | | | | |
| A.B.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 150 | m2 | \$2 | Excl. | | | | | |
| A.B.B.3 | Cut to Fill - General Earthworks | 45 | m3 | \$8 | Excl. | | | | | |
| A.B.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | | | |
| A.B.B.5 | Subgrade Preparation Preparation, trim and compact Pathway | 150 | m2 | \$6 | Excl. | | | | | |
| A.B.B.6 | 100 thick concrete footpath with broomed finish | 150 | m2 | \$71 | Excl. | | | | | |
| A.B.B.7 | Sand fill below concrete footpath (100mm) | 150 | m2 | \$5 | Excl. | | | | | |
| A.B.B.8 | Pram ramp | 0 | no | \$670 | Excl. | | | | | |
| A.B.B.9 | Pram ramp including tactile | 2 | no | \$973 | Excl. | | | | | |
| A.B.B.10 | Line Marking and Furniture Traffic sign | 2 | no | \$450 | Excl. | | | | | |
| | TOTAL Shared Paths | | Item | | | \$0 | | | | |
| <u>A.B.C</u> | <u>Street Lighting</u> | | | | | | | | | |
| A.B.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 2 | no | \$3,442 | Excl. | | | | | |
| | TOTAL Street Lighting | | Item | | | \$0 | | | | |
| <u>A.B.D</u> | <u>Road Drainage</u> | | | | | | | | | |
| A.B.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 65 | m | \$233 | Excl. | | | | | |
| A.B.D.2 | Side entry pits including liner, cover, excavation, and associated works | 2 | no | \$2,667 | Excl. | | | | | |
| | TOTAL Road Drainage | | Item | | | \$0 | | | | |
| <u>A.B.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | | | |
| A.B.E.1 | Traffic Management | 5.0000 | % | \$105,821 | Excl. | | | | | |

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|-------------|-----------|----------|-------------------|---------------|-----------------|
| A.B.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$105,821 | Excl. | | | |
| A.B.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$105,821 | Excl. | | | |
| A.B.E.4 | Risk Contingency Allowance | 10.0000 | % | \$134,922 | Excl. | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$0 | | |
| | TOTAL Tourmaline Boulevard (Left In Left out Intersection) | | Item | | | | \$0 | |
| A.C | <u>Kokoda Boulevard (Roundabout)</u> | | | | | | | |
| A.C.A | <u>Road Works</u> | | | | | | | |
| A.C.A.1 | Earthworks and Site Preparation Site Clearance (based on light shrubs) | 2,504 | m2 | \$4 | \$8,814 | | | |
| A.C.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,504 | m2 | \$2 | \$4,031 | | | |
| A.C.A.3 | Cut to Fill - General Earthworks | 752 | m3 | \$8 | \$6,189 | | | |
| A.C.A.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| A.C.A.5 | Subgrade Preparation Preparation, trim and compact Sub Base and Base Course | 2,504 | m2 | \$6 | \$13,772 | | | |
| A.C.A.6 | 100mm thick crushed rock base course | 1,983 | m2 | \$8 | \$16,300 | | | |
| A.C.A.7 | 250mm thick compacted limestone sub base | 1,983 | m2 | \$17 | \$34,663 | | | |
| A.C.A.8 | Road Paving 50mm thick (AC14) | 1,518 | m2 | \$31 | \$47,422 | | | |
| A.C.A.9 | Primer seal | 1,518 | m2 | \$4 | \$6,133 | | | |
| A.C.A.10 | Brick Paving 80 thick brick pavers | 333 | m2 | \$100 | \$33,333 | | | |
| A.C.A.11 | 30 thick compacted sand bed | 180 | m2 | \$2 | \$295 | | | |
| A.C.A.12 | 40 thick compacted sand bed (RAB) | 153 | m2 | \$2 | \$335 | | | |
| A.C.A.13 | 170mm thick compacted limestone | 180 | m2 | \$11 | \$2,047 | | | |
| A.C.A.14 | 250mm thick compacted limestone sub base | 153 | m2 | \$17 | \$2,674 | | | |
| | Kerbing | | | | | | | |
| A.C.A.15 | Mountable Kerb (MK) | 70 | m | \$25 | \$1,781 | | | |
| A.C.A.16 | Semi Mountable Kerb (SMK) | 143 | m | \$30 | \$4,240 | | | |
| A.C.A.17 | Barrier Kerb (BK) | 54 | m | \$53 | \$2,869 | | | |
| A.C.A.18 | Line Marking and Furniture Line marking | 53 | m | \$6 | \$336 | | | |
| A.C.A.19 | Street sign post | 1 | no | \$122 | \$122 | | | |
| A.C.A.20 | Street name plate | 2 | no | \$199 | \$398 | | | |
| A.C.A.21 | Chevron sign | 1 | no | \$613 | \$613 | | | |
| A.C.A.22 | Traffic sign | 3 | no | \$450 | \$1,350 | | | |
| A.C.A.23 | Landscaping Landscape mix | 57 | m3 | \$90 | \$5,130 | | | |
| | TOTAL Road Works | | Item | | | \$192,847 | | |
| A.C.B | <u>Shared Paths</u> | | | | | | | |
| A.C.B.1 | Earthworks and Site Preparation Site Clearance (based on light shrubs) | 356 | m2 | \$4 | \$1,253 | | | |
| A.C.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 356 | m2 | \$2 | \$573 | | | |
| A.C.B.3 | Cut to Fill - General Earthworks | 107 | m3 | \$8 | \$881 | | | |
| A.C.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| A.C.B.5 | Subgrade Preparation Preparation, trim and compact Pathway | 356 | m2 | \$6 | \$1,958 | | | |
| A.C.B.6 | 100 thick concrete footpath with broomed finish | 356 | m2 | \$71 | \$25,219 | | | |
| A.C.B.7 | Sand fill below concrete path (100mm) | 356 | m2 | \$5 | \$1,944 | | | |
| A.C.B.8 | Pram ramp | 0 | no | \$670 | \$0 | | | |
| A.C.B.9 | Pram ramp including tactile | 6 | no | \$973 | \$5,836 | | | |
| A.C.B.10 | Tactile paving | 10 | m2 | \$325 | \$3,250 | | | |
| A.C.B.11 | Line Marking and Furniture Traffic sign | 2 | no | \$450 | \$900 | | | |
| | TOTAL Shared Paths | | Item | | | \$41,814 | | |
| A.C.C | <u>Street Lighting</u> | | | | | | | |
| A.C.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 4 | no | \$3,442 | \$13,767 | | | |
| | TOTAL Street Lighting | | Item | | | \$13,767 | | |
| A.C.D | <u>Road Drainage</u> | | | | | | | |
| A.C.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 130 | m | \$233 | \$30,297 | | | |
| A.C.D.2 | Side entry pits including liner, cover, excavation, and associated works | 4 | no | \$2,667 | \$10,666 | | | |
| | TOTAL Road Drainage | | Item | | | \$40,963 | | |
| A.C.E | <u>Preliminaries and Project Costs</u> | | | | | | | |
| A.C.E.1 | Traffic Management | 5.0000 | % | \$289,390 | \$14,470 | | | |
| A.C.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$289,390 | \$43,409 | | | |

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|------|-----------|----------|-------------------|---------------|-----------------|
| A.C.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$289,390 | \$21,704 | \$116,480 | \$405,870 | |
| A.C.E.4 | Risk Contingency Allowance | 10.0000 | % | \$368,973 | \$36,897 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | | | |
| | TOTAL Kokoda Boulevard (Roundabout) | | Item | | | | | |
| A.D | <u>Doley Road (Roundabout)</u> | | | | | | | |
| A.D.A | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| A.D.A.1 | Site Clearance (based on light shrubs) | 2,504 | m2 | \$4 | \$8,814 | | | |
| A.D.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,504 | m2 | \$2 | \$4,031 | | | |
| A.D.A.3 | Cut to Fill - General Earthworks | 752 | m3 | \$8 | \$6,189 | | | |
| A.D.A.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| A.D.A.5 | Preparation, trim and compact | 2,504 | m2 | \$6 | \$13,772 | | | |
| | Sub Base and Base Course | | | | | | | |
| A.D.A.6 | 100mm thick crushed rock base course | 1,983 | m2 | \$8 | \$16,300 | | | |
| A.D.A.7 | 250mm thick compacted limestone sub base | 1,983 | m2 | \$17 | \$34,663 | | | |
| | Road Paving | | | | | | | |
| A.D.A.8 | 50mm thick (AC14) | 1,518 | m2 | \$31 | \$47,422 | | | |
| A.D.A.9 | Primer seal | 1,518 | m2 | \$4 | \$6,133 | | | |
| | Brick Paving | | | | | | | |
| A.D.A.10 | 80 thick brick pavers | 333 | m2 | \$100 | \$33,333 | | | |
| A.D.A.11 | 30 thick compacted sand bed | 180 | m2 | \$2 | \$295 | | | |
| A.D.A.12 | 40 thick compacted sand bed (RAB) | 153 | m2 | \$2 | \$335 | | | |
| A.D.A.13 | 170mm thick compacted limestone | 180 | m2 | \$11 | \$2,047 | | | |
| A.D.A.14 | 250mm thick compacted limestone sub base | 153 | m2 | \$17 | \$2,674 | | | |
| | Kerbing | | | | | | | |
| A.D.A.15 | Mountable Kerb (MK) | 70 | m | \$25 | \$1,781 | | | |
| A.D.A.16 | Semi Mountable Kerb (SMK) | 143 | m | \$30 | \$4,240 | | | |
| A.D.A.17 | Barrier Kerb (BK) | 54 | m | \$53 | \$2,869 | | | |
| | Line Marking and Furniture | | | | | | | |
| A.D.A.18 | Line marking | 53 | m | \$6 | \$336 | | | |
| A.D.A.19 | Street sign post | 1 | no | \$122 | \$122 | | | |
| A.D.A.20 | Street name plate | 2 | no | \$199 | \$398 | | | |
| A.D.A.21 | Chevron sign | 1 | no | \$613 | \$613 | | | |
| A.D.A.22 | Traffic sign | 3 | no | \$450 | \$1,350 | | | |
| | Landscaping | | | | \$0 | | | |
| A.D.A.23 | Landscape mix | 57 | m3 | \$90 | \$5,130 | | | |
| | Other | | | | | | | |
| A.D.A.24 | Allow for connection to existing Doley Road | | Item | | \$10,000 | | | |
| | TOTAL Road Works | | Item | | | \$202,847 | | |
| A.D.B | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| A.D.B.1 | Site Clearance (based on light shrubs) | 356 | m2 | \$4 | \$1,253 | | | |
| A.D.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 356 | m2 | \$2 | \$573 | | | |
| A.D.B.3 | Cut to Fill - General Earthworks | 107 | m3 | \$8 | \$881 | | | |
| A.D.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| A.D.B.5 | Preparation, trim and compact | 356 | m2 | \$6 | \$1,958 | | | |
| | Pathway | | | | | | | |
| A.D.B.6 | 100 thick concrete footpath with broomed finish | 356 | m2 | \$71 | \$25,219 | | | |
| A.D.B.7 | Sand fill below concrete path (100mm) | 356 | m2 | \$5 | \$1,944 | | | |
| A.D.B.8 | Pram ramp | 0 | no | \$670 | \$0 | | | |
| A.D.B.9 | Pram ramp including tactile | 6 | no | \$973 | \$5,836 | | | |
| A.D.B.10 | Tactile paving | 10 | m2 | \$325 | \$3,250 | | | |
| | Line Marking and Furniture | | | | | | | |
| A.D.B.11 | Traffic sign | 2 | no | \$450 | \$900 | | | |
| | Landscaping | | | | | | | |
| A.D.B.12 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| A.D.B.13 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| A.D.B.14 | Soft landscaping | 0 | m2 | \$0 | Excl. | | | |
| | Other | | | | | | | |
| A.D.B.15 | Allow for connecting into existing footpath | | item | | \$2,500 | | | |
| | TOTAL Shared Paths | | Item | | | \$44,314 | | |
| A.D.C | <u>Street Lighting</u> | | | | | | | |
| | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 4 | no | \$3,442 | \$13,767 | | | |
| A.D.C.1 | TOTAL Street Lighting | | Item | | | \$13,767 | | |
| A.D.D | <u>Road Drainage</u> | | | | | | | |
| | 450dia reinforced concrete pipe including excavation and backfill | 130 | m | \$233 | \$30,297 | | | |
| A.D.D.1 | Side entry pits including liner, cover, excavation, and associated works | 4 | no | \$2,667 | \$10,666 | | | |
| A.D.D.2 | | | | | | | | |
| | TOTAL Road Drainage | | Item | | | \$40,963 | | |

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|---|----------|-------------|-----------|----------|-------------------|------------------|-----------------|
| A.D.E | <u>Preliminaries and Project Costs</u> | | | | | | | |
| A.D.E.1 | Traffic Management | 5.0000 | % | \$301,890 | \$15,095 | | | |
| A.D.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$301,890 | \$45,284 | | | |
| A.D.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$301,890 | \$22,642 | | | |
| A.D.E.4 | Risk Contingency Allowance | 10.0000 | % | \$384,910 | \$38,491 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$121,511 | | |
| | TOTAL Doley Road (Roundabout) | | Item | | | | \$423,401 | |
| A.E | <u>Lawrence Way (Roundabout)</u> | | | | | | | |
| A.E.A | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| A.E.A.1 | Site Clearance (based on light shrubs) | 2,504 | m2 | \$4 | \$8,814 | | | |
| A.E.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,504 | m2 | \$2 | \$4,031 | | | |
| A.E.A.3 | Cut to Fill - General Earthworks | 752 | m3 | \$8 | \$6,189 | | | |
| A.E.A.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| A.E.A.5 | Preparation, trim and compact Sub Base and Base Course | 2,504 | m2 | \$6 | \$13,772 | | | |
| A.E.A.6 | 100mm thick crushed rock base course | 1,983 | m2 | \$8 | \$16,300 | | | |
| A.E.A.7 | 250mm thick compacted limestone sub base | 1,983 | m2 | \$17 | \$34,663 | | | |
| | Road Paving | | | | | | | |
| A.E.A.8 | 50mm thick (AC14) | 1,518 | m2 | \$31 | \$47,422 | | | |
| A.E.A.9 | Primer seal | 1,518 | m2 | \$4 | \$6,133 | | | |
| | Brick Paving | | | | | | | |
| A.E.A.10 | 80 thick brick pavers | 333 | m2 | \$100 | \$33,333 | | | |
| A.E.A.11 | 30 thick compacted sand bed | 180 | m2 | \$2 | \$295 | | | |
| A.E.A.12 | 40 thick compacted sand bed (RAB) | 153 | m2 | \$2 | \$335 | | | |
| A.E.A.13 | 170mm thick compacted limestone | 180 | m2 | \$11 | \$2,047 | | | |
| A.E.A.14 | 250mm thick compacted limestone sub base | 153 | m2 | \$17 | \$2,674 | | | |
| | Kerbing | | | | | | | |
| A.E.A.15 | Mountable Kerb (MK) | 70 | m | \$25 | \$1,781 | | | |
| A.E.A.16 | Semi Mountable Kerb (SMK) | 143 | m | \$30 | \$4,240 | | | |
| A.E.A.17 | Barrier Kerb (BK) | 54 | m | \$53 | \$2,869 | | | |
| | Line Marking and Furniture | | | | | | | |
| A.E.A.18 | Line marking | 53 | m | \$6 | \$336 | | | |
| A.E.A.19 | Street sign post | 1 | no | \$122 | \$122 | | | |
| A.E.A.20 | Street name plate | 2 | no | \$199 | \$398 | | | |
| A.E.A.21 | Chevron sign | 1 | no | \$613 | \$613 | | | |
| A.E.A.22 | Traffic sign | 3 | no | \$450 | \$1,350 | | | |
| | Landscaping | | | | | | | |
| A.E.A.23 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| A.E.A.24 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| A.E.A.25 | Soft landscaping | 227 | m2 | \$0 | Excl. | | | |
| A.E.A.26 | Landscape mix | 57 | m3 | \$90 | \$5,130 | | | |
| | Other | | | | | | | |
| A.E.A.27 | Allow for connection to existng Lawrence Way | | item | | \$10,000 | | | |
| | TOTAL Road Works | | Item | | | \$202,847 | | |
| A.E.B | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| A.E.B.1 | Site Clearance (based on light shrubs) | 356 | m2 | \$4 | \$1,253 | | | |
| A.E.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 356 | m2 | \$2 | \$573 | | | |
| A.E.B.3 | Cut to Fill - General Earthworks | 107 | m3 | \$8 | \$881 | | | |
| A.E.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| A.E.B.5 | Preparation, trim and compact Pathway | 356 | m2 | \$6 | \$1,958 | | | |
| A.E.B.6 | 100 thick concrete footpath with broomed finish | 356 | m2 | \$71 | \$25,219 | | | |
| A.E.B.7 | Sand fill below concrete path (100mm) | 356 | m2 | \$5 | \$1,944 | | | |
| A.E.B.8 | Pram ramp | 0 | no | \$670 | \$0 | | | |
| A.E.B.9 | Pram ramp including tactile | 6 | no | \$973 | \$5,836 | | | |
| A.E.B.10 | Tactile paving | 10 | m2 | \$325 | \$3,250 | | | |
| | Line Marking and Furniture | | | | | | | |
| A.E.B.11 | Line marking | 0 | m | \$6 | Excl. | | | |
| A.E.B.12 | Street sign post | 0 | no | \$122 | Excl. | | | |
| A.E.B.13 | Street name plate | 0 | no | \$199 | Excl. | | | |
| A.E.B.14 | Chevron sign | 0 | no | \$613 | Excl. | | | |
| A.E.B.15 | Traffic sign | 2 | no | \$450 | \$900 | | | |
| | Landscaping | | | | | | | |
| A.E.B.16 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| A.E.B.17 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| A.E.B.18 | Soft landscaping | 0 | m2 | \$0 | Excl. | | | |
| | TOTAL Shared Paths | | Item | | | \$41,814 | | |
| A.E.C | <u>Street Lighting</u> | | | | | | | |

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total | | |
|--------------|--|----------|-------------|-----------|----------|-------------------|---------------|-----------------|--|--|
| A.E.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 4 | no | \$3,442 | \$13,767 | \$13,767 | | | | |
| | TOTAL Street Lighting | | Item | | | | | | | |
| <u>A.E.D</u> | <u>Road Drainage</u> | | | | | \$40,963 | | | | |
| A.E.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 130 | m | \$233 | \$30,297 | | | | | |
| A.E.D.2 | Side entry pits including liner, cover, excavation, and associated works | 4 | no | \$2,667 | \$10,666 | | | | | |
| | TOTAL Road Drainage | | Item | | | | | | | |
| <u>A.E.E</u> | <u>Preliminaries and Project Costs</u> | | | | | \$120,505 | | | | |
| A.E.E.1 | Traffic Management | 5.0000 | % | \$299,390 | \$14,970 | | | | | |
| A.E.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$299,390 | \$44,909 | | | | | |
| A.E.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$299,390 | \$22,454 | | | | | |
| A.E.E.4 | Risk Contingency Allowance | 10.0000 | % | \$381,723 | \$38,172 | | | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$120,505 | | | | |
| | TOTAL Lawrence Way (Roundabout) | | Item | | | | | | | |
| <u>A.F</u> | <u>Warrington Road (Roundabout)</u> | | | | | \$192,847 | | | | |
| <u>A.F.A</u> | <u>Road Works</u> | | | | | | | | | |
| A.F.A.1 | Earthworks and Site Preparation | | | | | | | | | |
| A.F.A.1 | Site Clearance (based on light shrubs) | 2,504 | m2 | \$4 | \$8,814 | | | | | |
| A.F.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,504 | m2 | \$2 | \$4,031 | | | | | |
| A.F.A.3 | Cut to Fill - General Earthworks | 752 | m3 | \$8 | \$6,189 | | | | | |
| A.F.A.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | | | |
| A.F.A.5 | Subgrade Preparation | | | | | | | | | |
| A.F.A.5 | Preparation, trim and compact | 2,504 | m2 | \$6 | \$13,772 | | | | | |
| A.F.A.6 | Sub Base and Base Course | | | | | | | | | |
| A.F.A.6 | 100mm thick crushed rock base course | 1,983 | m2 | \$8 | \$16,300 | | | | | |
| A.F.A.7 | 250mm thick compacted limestone sub base | 1,983 | m2 | \$17 | \$34,663 | | | | | |
| A.F.A.8 | Road Paving | | | | | | | | | |
| A.F.A.8 | 50mm thick (AC14) | 1,518 | m2 | \$31 | \$47,422 | | | | | |
| A.F.A.9 | Primer seal | 1,518 | m2 | \$4 | \$6,133 | | | | | |
| A.F.A.10 | Brick Paving | | | | | | | | | |
| A.F.A.10 | 80 thick brick pavers | 333 | m2 | \$100 | \$33,333 | | | | | |
| A.F.A.11 | 30 thick compacted sand bed | 180 | m2 | \$2 | \$295 | | | | | |
| A.F.A.12 | 40 thick compacted sand bed (RAB) | 153 | m2 | \$2 | \$335 | | | | | |
| A.F.A.13 | 170mm thick compacted limestone | 180 | m2 | \$11 | \$2,047 | | | | | |
| A.F.A.14 | 250mm thick compacted limestone sub base | 153 | m2 | \$17 | \$2,674 | | | | | |
| A.F.A.15 | Kerbing | | | | | | | | | |
| A.F.A.15 | Mountable Kerb (MK) | 70 | m | \$25 | \$1,781 | | | | | |
| A.F.A.16 | Semi Mountable Kerb (SMK) | 143 | m | \$30 | \$4,240 | | | | | |
| A.F.A.17 | Barrier Kerb (BK) | 54 | m | \$53 | \$2,869 | | | | | |
| A.F.A.18 | Concrete flush edge beam | 0 | m | \$67 | \$0 | | | | | |
| A.F.A.19 | Line Marking and Furniture | | | | | | | | | |
| A.F.A.19 | Line marking | 53 | m | \$6 | \$336 | | | | | |
| A.F.A.20 | Street sign post | 1 | no | \$122 | \$122 | | | | | |
| A.F.A.21 | Street name plate | 2 | no | \$199 | \$398 | | | | | |
| A.F.A.22 | Chevron sign | 1 | no | \$613 | \$613 | | | | | |
| A.F.A.23 | Traffic sign | 3 | no | \$450 | \$1,350 | | | | | |
| A.F.A.24 | Landscaping | | | | | | | | | |
| A.F.A.24 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | | | |
| A.F.A.25 | Trees (100l) | 0 | no | \$506 | Excl. | | | | | |
| A.F.A.26 | Soft landscaping | 227 | m2 | \$0 | Excl. | | | | | |
| A.F.A.27 | Landscape mix | 57 | m3 | \$90 | \$5,130 | | | | | |
| | TOTAL Road Works | | Item | | | \$192,847 | | | | |
| <u>A.F.B</u> | <u>Shared Paths</u> | | | | | | | | | |
| A.F.B.1 | Earthworks and Site Preparation | | | | | | | | | |
| A.F.B.1 | Site Clearance (based on light shrubs) | 356 | m2 | \$4 | \$1,253 | | | | | |
| A.F.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 356 | m2 | \$2 | \$573 | | | | | |
| A.F.B.3 | Cut to Fill - General Earthworks | 107 | m3 | \$8 | \$881 | | | | | |
| A.F.B.4 | Imported Fill | 0 | m3 | \$30 | \$0 | | | | | |
| A.F.B.5 | Subgrade Preparation | | | | | | | | | |
| A.F.B.5 | Preparation, trim and compact | 356 | m2 | \$6 | \$1,958 | | | | | |
| A.F.B.6 | Pathway | | | | | | | | | |
| A.F.B.6 | 100 thick concrete footpath with broomed finish | 356 | m2 | \$71 | \$25,219 | | | | | |
| A.F.B.7 | Sand fill below concrete path (100mm) | 356 | m2 | \$5 | \$1,944 | | | | | |
| A.F.B.8 | Pram ramp | | no | \$670 | | | | | | |
| A.F.B.8 | Pram ramp including tactile | 6 | no | \$973 | \$5,836 | | | | | |
| A.F.B.9 | Tactile paving | 10 | m2 | \$325 | \$3,250 | | | | | |
| A.F.B.10 | Line Marking and Furniture | | | | | | | | | |
| A.F.B.10 | Line marking | 0 | m | \$6 | Excl. | | | | | |
| A.F.B.11 | Street sign post | 0 | no | \$122 | Excl. | | | | | |
| A.F.B.12 | Street name plate | 0 | no | \$199 | Excl. | | | | | |

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|-------------|-----------|----------|-------------------|------------------|-----------------|
| A.F.B.13 | Chevron sign | 0 | no | \$613 | Excl. | | | |
| A.F.B.14 | Traffic sign | 2 | no | \$450 | \$900 | | | |
| | Landscaping | | | | | | | |
| A.F.B.15 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| A.F.B.16 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| A.F.B.17 | Soft landscaping | 0 | m2 | \$0 | Excl. | | | |
| | TOTAL Shared Paths | | Item | | | \$41,814 | | |
| <u>A.F.C</u> | <u>Street Lighting</u> | | | | | | | |
| A.F.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 4 | no | \$3,442 | \$13,767 | | | |
| | TOTAL Street Lighting | | Item | | | \$13,767 | | |
| <u>A.F.D</u> | <u>Road Drainage</u> | | | | | | | |
| A.F.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 130 | m | \$233 | \$30,297 | | | |
| A.F.D.2 | Side entry pits including liner, cover, excavation, and associated works | 4 | no | \$2,667 | \$10,666 | | | |
| | TOTAL Road Drainage | | Item | | | \$40,963 | | |
| <u>A.F.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| A.F.E.1 | Traffic Management | 5.0000 | % | \$289,390 | \$14,470 | | | |
| A.F.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$289,390 | \$43,409 | | | |
| A.F.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$289,390 | \$21,704 | | | |
| A.F.E.4 | Risk Contingency Allowance | 10.0000 | % | \$368,973 | \$36,897 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$116,480 | | |
| | TOTAL Warrington Road (Roundabout) | | Item | | | | \$405,870 | |
| <u>A.G</u> | <u>Soldiers Road (Roundabout)</u> | | | | | | | |
| <u>A.G.A</u> | <u>Road Works</u> | | | | | | | |
| A.G.A.1 | Earthworks and Site Preparation Site Clearance (based on light shrubs) | 2,728 | m2 | \$4 | \$9,603 | | | |
| A.G.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,728 | m2 | \$2 | \$4,392 | | | |
| A.G.A.3 | Cut to Fill - General Earthworks | 819 | m3 | \$8 | \$6,740 | | | |
| A.G.A.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| A.G.A.5 | Preparation, trim and compact Sub Base and Base Course | 2,728 | m2 | \$6 | \$15,004 | | | |
| A.G.A.6 | 100mm thick crushed rock base course | 2,139 | m2 | \$8 | \$17,583 | | | |
| A.G.A.7 | 250mm thick compacted limestone sub base | 2,139 | m2 | \$17 | \$37,390 | | | |
| | Road Paving | | | | | | | |
| A.G.A.8 | 50mm thick (AC14) | 1,672 | m2 | \$31 | \$52,233 | | | |
| A.G.A.9 | Primer seal | 1,672 | m2 | \$4 | \$6,755 | | | |
| | Brick Paving | | Item | | | | | |
| A.G.A.10 | 80 thick brick pavers | 393 | m2 | \$100 | \$39,339 | | | |
| A.G.A.11 | 30 thick compacted sand bed | 240 | m2 | \$2 | \$394 | | | |
| A.G.A.12 | 40 thick compacted sand bed (RAB) | 153 | m2 | \$2 | \$335 | | | |
| A.G.A.13 | 170mm thick compacted limestone | 240 | m2 | \$11 | \$2,729 | | | |
| A.G.A.14 | 250mm thick compacted limestone sub base | 153 | m2 | \$17 | \$2,674 | | | |
| | Kerbing | | | | | | | |
| A.G.A.15 | Mountable Kerb (MK) | 70 | m | \$25 | \$1,781 | | | |
| A.G.A.16 | Semi Mountable Kerb (SMK) | 146 | m | \$30 | \$4,329 | | | |
| A.G.A.17 | Barrier Kerb (BK) | 54 | m | \$53 | \$2,869 | | | |
| | Concrete flush edge beam | | m | \$67 | | | | |
| | Line Marking and Furniture | | | | | | | |
| A.G.A.18 | Line marking | 70 | m | \$6 | \$444 | | | |
| A.G.A.19 | Street sign post | 1 | no | \$122 | \$122 | | | |
| A.G.A.20 | Street name plate | 2 | no | \$199 | \$398 | | | |
| A.G.A.21 | Chevron sign | 0 | no | \$613 | \$0 | | | |
| A.G.A.22 | Traffic sign | 4 | no | \$450 | \$1,800 | | | |
| | Landscaping | | | | | | | |
| A.G.A.23 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| A.G.A.24 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| A.G.A.25 | Soft landscaping | 227 | m2 | \$0 | Excl. | | | |
| A.G.A.26 | Landscape mix | 57 | m3 | \$90 | \$5,130 | | | |
| | Other | | | | | | | |
| A.G.A.27 | Allowance to tie in to existing Soldiers Road (in No 2 locations) | | item | | \$20,000 | | | |
| | TOTAL Road Works | | Item | | | \$232,043 | | |
| <u>A.G.B</u> | <u>Shared Paths</u> | | | | | | | |
| A.G.B.1 | Earthworks and Site Preparation Site Clearance (based on light shrubs) | 364 | m2 | \$4 | \$1,281 | | | |
| A.G.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 364 | m2 | \$2 | \$586 | | | |
| A.G.B.3 | Cut to Fill - General Earthworks | 110 | m3 | \$8 | \$905 | | | |
| A.G.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |

**Shire of Serpentine Jarrahdale DCP
 DCA 1 - Byford Traditional Infrastructure - Update**

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|------|-----------|----------|-------------------|------------------|-----------------|
| A.G.B.5 | Subgrade Preparation | | | | | | | |
| A.G.B.5 | Preparation, trim and compact | 364 | m2 | \$6 | \$2,002 | | | |
| A.G.B.6 | Pathway | | | | | | | |
| A.G.B.6 | 100 thick concrete footpath with broomed finish | 364 | m2 | \$71 | \$25,786 | | | |
| A.G.B.7 | Sand fill below concrete path (100mm) | 364 | m2 | \$5 | \$1,987 | | | |
| A.G.B.8 | Pram ramp | | no | \$670 | | | | |
| A.G.B.8 | Pram ramp including tactile | 8 | no | \$973 | \$7,781 | | | |
| A.G.B.9 | Tactile paving | 13 | m2 | \$325 | \$4,225 | | | |
| A.G.B.10 | Line Marking and Furniture | | | | | | | |
| A.G.B.10 | Traffic sign | 4 | no | \$450 | \$1,800 | | | |
| A.G.B.11 | Landscaping | | | | | | | |
| A.G.B.11 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| A.G.B.12 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| A.G.B.13 | Soft landscaping | 0 | m2 | \$0 | Excl. | | | |
| | TOTAL Shared Paths | | Item | | | \$46,354 | | |
| <u>A.G.C</u> | <u>Street Lighting</u> | | | | | | | |
| A.G.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 4 | no | \$3,442 | \$13,767 | | | |
| | TOTAL Street Lighting | | Item | | | \$13,767 | | |
| <u>A.G.D</u> | <u>Road Drainage</u> | | | | | | | |
| A.G.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 130 | m | \$233 | \$30,297 | | | |
| A.G.D.2 | Side entry pits including liner, cover, excavation, and associated works | 4 | no | \$2,667 | \$10,666 | | | |
| | TOTAL Road Drainage | | Item | | | \$40,963 | | |
| <u>A.G.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| A.G.E.1 | Traffic Management | 5.0000 | % | \$333,126 | \$16,656 | | | |
| A.G.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$333,126 | \$49,969 | | | |
| A.G.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$333,126 | \$24,984 | | | |
| A.G.E.4 | Risk Contingency Allowance | 10.0000 | % | \$424,736 | \$42,474 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$134,083 | | |
| | TOTAL Soldiers Road (Roundabout) | | Item | | | | \$467,210 | |
| <u>A.H</u> | <u>South Western Highway (Channelised Intersection)</u> | | | | | | | |
| <u>A.H.A</u> | <u>Road Works</u> | | | | | | | |
| A.H.A.1 | Earthworks and Site Preparation | | | | | | | |
| A.H.A.1 | Site Clearance (based on light shrubs) | 2,550 | m2 | \$4 | \$8,976 | | | |
| A.H.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,550 | m2 | \$2 | \$4,106 | | | |
| A.H.A.3 | Cut to Fill - General Earthworks | 765 | m3 | \$8 | \$6,296 | | | |
| A.H.A.4 | Detailed excavation - mill and profile | 1,800 | m2 | \$19 | \$34,164 | | | |
| A.H.A.5 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| A.H.A.6 | Subgrade Preparation | | | | | | | |
| A.H.A.6 | Preparation, trim and compact | 2,550 | m2 | \$6 | \$14,025 | | | |
| A.H.A.7 | Sub Base and Base Course | | | | | | | |
| A.H.A.7 | 100mm thick crushed rock base course | 2,466 | m2 | \$8 | \$20,271 | | | |
| A.H.A.8 | 250mm thick compacted limestone sub base | 2,466 | m2 | \$17 | \$43,106 | | | |
| A.H.A.9 | Road Paving | | | | | | | |
| A.H.A.9 | 50mm thick (AC14) | 1,980 | m2 | \$31 | \$61,855 | | | |
| A.H.A.10 | Extra over for 2% red oxide | 90 | m2 | \$6 | \$561 | | | |
| A.H.A.11 | Primer seal | 1,980 | m2 | \$4 | \$7,999 | | | |
| A.H.A.12 | Kerbing | | | | | | | |
| A.H.A.12 | Mountable Kerb (MK) | 60 | m | \$25 | \$1,526 | | | |
| A.H.A.13 | Semi Mountable Kerb (SMK) | 80 | m | \$30 | \$2,372 | | | |
| A.H.A.14 | Line Marking and Furniture | | | | | | | |
| A.H.A.14 | Line marking | 660 | m | \$6 | \$4,184 | | | |
| A.H.A.15 | Street sign post | 1 | no | \$122 | \$122 | | | |
| A.H.A.16 | Street name plate | 2 | no | \$199 | \$398 | | | |
| A.H.A.17 | Chevron sign | 1 | no | \$613 | \$613 | | | |
| A.H.A.18 | Traffic sign | 3 | no | \$450 | \$1,350 | | | |
| A.H.A.19 | Landscaping | | | | \$0 | | | |
| A.H.A.19 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| A.H.A.20 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| A.H.A.21 | Soft landscaping | 180 | m2 | \$0 | Excl. | | | |
| A.H.A.22 | Landscape mix | 42 | m3 | \$90 | \$3,780 | | | |
| A.H.A.23 | Rock pitching | 8 | m2 | \$155 | \$1,242 | | | |
| A.H.A.24 | Drainage layer | 180 | m2 | \$0 | Excl. | | | |
| A.H.A.25 | Other | | | | | | | |
| A.H.A.25 | Allow for connection to SWH | | item | | \$20,000 | | | |
| | TOTAL Road Works | | Item | | | \$236,945 | | |
| <u>A.H.B</u> | <u>Shared Paths</u> | | | | | | | |
| A.H.B.1 | Earthworks and Site Preparation | | | | | | | |
| A.H.B.1 | Site Clearance (based on light shrubs) | 150 | m2 | \$4 | \$528 | | | |

**Shire of Serpentine Jarrahdale DCP
 DCA 1 - Byford Traditional Infrastructure - Update**

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|-------------|-----------|----------|-------------------|------------------|-----------------|
| A.H.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 150 | m2 | \$2 | \$242 | | | |
| A.H.B.3 | Cut to Fill - General Earthworks | 45 | m3 | \$8 | \$370 | | | |
| A.H.B.4 | Imported Fill | 0 | m3 | \$30 | \$0 | | | |
| | Subgrade Preparation | | | | | | | |
| A.H.B.5 | Preparation, trim and compact | 150 | m2 | \$6 | \$825 | | | |
| | Pathway | | | | | | | |
| A.H.B.6 | 100 thick concrete footpath with broomed finish | 150 | m2 | \$71 | \$10,626 | | | |
| A.H.B.7 | Sand fill below concrete footpath (100mm) | 150 | m2 | \$5 | \$819 | | | |
| A.H.B.8 | Pram ramp | | no | \$670 | \$0 | | | |
| A.H.B.9 | Pram ramp including tactile | 2 | no | \$973 | \$1,945 | | | |
| | Line Marking and Furniture | | | | | | | |
| A.H.B.10 | Traffic sign | 2 | no | \$450 | \$900 | | | |
| | Landscaping | | | | | | | |
| A.H.B.11 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| A.H.B.12 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| A.H.B.13 | Soft landscaping | 0 | m2 | \$0 | Excl. | | | |
| | TOTAL Shared Paths | | Item | | | \$16,255 | | |
| <u>A.H.C</u> | <u>Street Lighting</u> | | | | | | | |
| A.H.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 2 | no | \$3,442 | \$6,883 | | | |
| | TOTAL Street Lighting | | Item | | | \$6,883 | | |
| <u>A.H.D</u> | <u>Road Drainage</u> | | | | | | | |
| A.H.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 90 | m | \$233 | \$20,975 | | | |
| A.H.D.2 | Side entry pits including liner, cover, excavation, and associated works | 2 | no | \$2,667 | \$5,333 | | | |
| | TOTAL Road Drainage | | Item | | | \$26,308 | | |
| <u>A.H.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| A.H.E.1 | Traffic Management | 5.0000 | % | \$286,391 | \$14,320 | | | |
| A.H.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$286,391 | \$42,959 | | | |
| A.H.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$286,391 | \$21,479 | | | |
| A.H.E.4 | Risk Contingency Allowance | 10.0000 | % | \$365,148 | \$36,515 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$115,272 | | |
| | TOTAL South Western Highway (Channelised Intersection) | | Item | | | | \$401,663 | |
| <u>A.I</u> | <u>At-Grade Rail Crossing</u> | | | | | | | |
| <u>A.I.A</u> | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| A.I.A.1 | Site Clearance (based on light shrubs) | 1,063 | m2 | \$4 | \$3,742 | | | |
| A.I.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 1,063 | m2 | \$2 | \$1,711 | | | |
| A.I.A.3 | Cut to Fill - General Earthworks | 532 | m3 | \$8 | \$4,378 | | | |
| A.I.A.4 | Dispose of material off site | 532 | cum | \$10 | \$5,320 | | | |
| A.I.A.5 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| A.I.A.6 | Preparation, trim and compact | 1,063 | m2 | \$6 | \$5,847 | | | |
| | Sub Base and Base Course | | | | | | | |
| A.I.A.7 | 100mm thick crushed rock base course | 740 | m2 | \$8 | \$6,083 | | | |
| A.I.A.8 | 250mm thick compacted limestone sub base | 740 | m2 | \$17 | \$12,935 | | | |
| | Road Paving | | | | | | | |
| A.I.A.9 | 50mm thick (AC14) | 995 | m2 | \$31 | \$31,084 | | | |
| A.I.A.10 | Primer seal | 995 | m2 | \$4 | \$4,020 | | | |
| | Kerbing | | | | | | | |
| A.I.A.11 | Semi Mountable Kerb (SMK) | 65 | m | \$30 | \$1,927 | | | |
| | Line Marking and Furniture | | | | | | | |
| A.I.A.12 | Line marking | 106 | m | \$6 | \$672 | | | |
| A.I.A.13 | Line marking at crossing | 995 | sqm | \$10 | \$9,950 | | | |
| A.I.A.14 | Traffic sign | 4 | no | \$450 | \$1,800 | | | |
| | Landscaping | | | | | | | |
| A.I.A.15 | Mulch to planter boxes (2m x 2m) | | m2 | \$16 | Excl. | | | |
| A.I.A.16 | Trees (100l) | | no | \$506 | Excl. | | | |
| A.I.A.17 | Soft landscaping | | m2 | \$0 | Excl. | | | |
| A.I.A.18 | Landscape mix | | m3 | \$90 | Excl. | | | |
| | Other | | | | | | | |
| | TOTAL Road Works | | Item | | | \$89,469 | | |
| <u>A.I.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| A.I.B.1 | Site Clearance (based on light shrubs) | 213 | m2 | \$4 | \$750 | | | |
| A.I.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 213 | m2 | \$2 | \$343 | | | |
| A.I.B.3 | Cut to Fill - General Earthworks | 107 | m3 | \$8 | \$881 | | | |
| A.I.B.4 | Dispose of material off site | 107 | m3 | \$10 | \$1,070 | | | |

**Shire of Serpentine Jarrahdale DCP
 DCA 1 - Byford Traditional Infrastructure - Update**

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|-------------|-------------|-------------|-------------------|--------------------|-----------------|
| A.I.B.5 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| A.I.B.6 | Subgrade Preparation | | | | | | | |
| A.I.B.6 | Preparation, trim and compact | 213 | m2 | \$6 | \$1,172 | | | |
| A.I.B.7 | Pathway | | | | | | | |
| A.I.B.7 | 100 thick concrete footpath with broomed finish | 213 | m2 | \$71 | \$15,089 | | | |
| A.I.B.8 | Sand fill below concrete path (100mm) | 213 | m2 | \$5 | \$1,163 | | | |
| A.I.B.9 | Pram ramp | | no | \$670 | | | | |
| A.I.B.9 | Pram ramp including tactile | 4 | no | \$973 | \$3,891 | | | |
| A.I.B.10 | Line Marking and Furniture | | | | | | | |
| A.I.B.10 | Traffic sign | 4 | no | \$450 | \$1,800 | | | |
| A.I.B.11 | Landscaping | | | | | | | |
| A.I.B.11 | Mulch to planter boxes (2m x 2m) | | m2 | \$16 | Excl. | | | |
| A.I.B.12 | Trees (100l) | | no | \$506 | Excl. | | | |
| A.I.B.13 | Soft landscaping | | m2 | \$0 | Excl. | | | |
| | TOTAL Shared Paths | | Item | | | \$26,157 | | |
| <u>A.I.C</u> | <u>Street Lighting</u> | | | | | | | |
| A.I.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads (provisional allowance) | 4 | no | \$3,442 | \$13,767 | | | |
| | TOTAL Street Lighting | | Item | | | \$13,767 | | |
| <u>A.I.D</u> | <u>Road Drainage</u> | | | | | | | |
| A.I.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 115 | m | \$233 | \$26,801 | | | |
| A.I.D.2 | Side entry pits including liner, cover, excavation, and associated works (provisional allowance) | 4 | no | \$2,667 | \$10,666 | | | |
| | TOTAL Road Drainage | | Item | | | \$37,467 | | |
| <u>A.I.E</u> | <u>Level crossing at Orton Road</u> | | | | | | | |
| A.I.E.1 | Level crossing | | | | | | | |
| A.I.E.1 | Allow for new level crossing at Orton Road | 1 | no | \$632,500 | \$632,500 | | | |
| | TOTAL Level crossing at Orton Road | | item | | | \$632,500 | | |
| <u>A.I.F</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| A.I.F.1 | Traffic Management | 10.0000 | % | \$799,360 | \$79,936 | | | |
| A.I.F.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$799,360 | \$119,904 | | | |
| A.I.F.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$799,360 | \$59,952 | | | |
| A.I.F.4 | Risk Contingency Allowance | 10.0000 | % | \$1,059,152 | \$105,915 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$365,707 | | |
| | TOTAL At-Grade Rail Crossing | | Item | | | | \$1,165,067 | |
| <u>A.J</u> | <u>Utilities</u> | | | | | | | |
| <u>A.J.A</u> | <u>Power and Lighting (Western Power)</u> | | | | | | | |
| A.J.A.1 | Relocate 920m of Overhead Power underground - Provisional Sum | 1 | PS | \$1,439,038 | \$1,439,038 | | | |
| | TOTAL Power and Lighting (Western Power) | | Item | | | \$1,439,038 | | |
| <u>A.J.B</u> | <u>Communications (NBN / Telstra / Westnet / etc.)</u> | | | | | | | |
| A.J.B.1 | Relocate 920m road length of communications related infrastructure about 10m from the current location - Provisional Sum | 1 | PS | \$301,521 | \$301,521 | | | |
| | TOTAL Communications (NBN / Telstra / Westnet / etc.) | | Item | | | \$301,521 | | |
| <u>A.J.C</u> | <u>Water and Sewer (Water Corporation)</u> | | | | | | | |
| | No allowance has been made for Water Corporation diversions as we do not see existing valves from our desktop study | | Note | | | | | |
| | TOTAL Water and Sewer (Water Corporation) | | Item | | | \$0 | | |
| <u>A.J.D</u> | <u>Gas (ATCO)</u> | | | | | | | |
| | No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study | | Note | | | | | |
| | TOTAL Gas (ATCO) | | Item | | | \$0 | | |
| <u>A.J.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| A.J.E.1 | Traffic Management | 10.0000 | % | \$1,740,559 | \$174,056 | | | |
| A.J.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$1,740,559 | \$261,084 | | | |
| A.J.E.3 | Project Owner's Cost (Planning and Design Costs) | 5.0000 | % | \$1,740,559 | \$87,028 | | | |
| A.J.E.4 | Risk Contingency Allowance | 10.0000 | % | \$2,262,727 | \$226,273 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$748,440 | | |
| | TOTAL Utilities | | Item | | | | \$2,488,999 | |
| A.A.A.7 | Estimated Imported Fill | 33,521 | m3 | | | | | |
| A.A.A.5 | Total m3 of Cut to Fill - General Earthworks | 28,745 | m3 | | | | | |



Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|------|---|---|------|------|-----------|-------------------------|---------------|-----------------|
| | Less Cut to Filll costed | 4,776 | m3 | \$30 | \$143,265 | | | |
| | Total Adjustment for Imported Fill (less Cut to Fill) | See "Imported Fill" sheet at the end of these costings. | | | | | \$143,265 | |
| | TOTAL Road - Orton Road New | | Item | | | | | \$15,677,411 |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|---------------------|--|----------|------|---------|---------------------------------------|-------------------|---------------|-----------------|
| B | ROAD - INDIGO PARKWAY | | | | | | | |
| <u>B.A</u> | <u>Road Construction</u> | | | | | | | |
| <u>B.A.A</u> | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| B.A.A.1 | Site Clearance (based on light shrubs) | 31,628 | m2 | \$4 | \$111,331 | | | |
| B.A.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 31,628 | m2 | \$2 | \$50,921 | | | |
| B.A.A.3 | Cut to Fill - General Earthworks | 11,233 | m3 | \$8 | \$92,448 | | | |
| B.A.A.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| B.A.A.5 | Form swale | 5,816 | m2 | \$4 | \$22,043 | | | |
| | Subgrade Preparation | | | | | | | |
| B.A.A.6 | Preparation, trim and compact | 31,628 | m2 | \$6 | \$173,954 | | | |
| | Sub Base and Base Course | | | | | | | |
| B.A.A.7 | 100mm thick crushed rock base course | 19,304 | m2 | \$8 | \$158,679 | | | |
| B.A.A.8 | 250mm thick compacted limestone sub base | 19,304 | m2 | \$17 | \$337,434 | | | |
| | Road Paving | | | | | | | |
| B.A.A.9 | 50mm thick (AC14) | 15,814 | m2 | \$31 | \$494,029 | | | |
| B.A.A.10 | Extra over for 2% red oxide | 4,362 | m2 | \$6 | \$27,175 | | | |
| B.A.A.11 | Primer seal | 15,814 | m2 | \$4 | \$63,889 | | | |
| | Kerbing | | | | | | | |
| B.A.A.12 | Mountable Kerb (MK) | 2,908 | m | \$25 | \$73,980 | | | |
| B.A.A.13 | Kerb openings | 146 | no | \$350 | \$51,100 | | | |
| B.A.A.14 | Semi Mountable Kerb (SMK) | 2,908 | m | \$30 | \$86,222 | | | |
| | Barrier Kerb (BK) | | m | \$53 | | | | |
| B.A.A.15 | Concrete flush edge beam | 646 | m | \$67 | \$43,314 | | | |
| | Line Marking and Furniture | | | | | | | |
| B.A.A.16 | Line marking | 2,908 | m | \$6 | \$18,437 | | | |
| | Landscaping | | | | | | | |
| B.A.A.17 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| B.A.A.18 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| B.A.A.19 | Soft landscaping | 8,245 | m2 | \$0 | Excl. | | | |
| B.A.A.20 | Landscape mix | 2,062 | m3 | \$90 | \$185,580 | | | |
| B.A.A.21 | Rock pitching | 485 | m2 | \$155 | \$75,296 | | | |
| B.A.A.22 | Drainage layer | 8,723 | m2 | \$0 | Excl. | | | |
| | Other | | | | | | | |
| B.A.A.23 | Allow for tie in to existing Indigo Parkway | | item | | \$10,000 | | | |
| | TOTAL Road Works | | Item | | | \$2,075,831 | | |
| <u>B.A.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| B.A.B.1 | Site Clearance (based on light shrubs) | 8,445 | m2 | \$4 | \$29,726 | | | |
| B.A.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 8,445 | m2 | \$2 | \$13,596 | | | |
| B.A.B.3 | Cut to Fill - General Earthworks | 2,534 | m3 | \$8 | \$20,855 | | | |
| B.A.B.4 | Imported Fill | 0 | m3 | \$30 | \$0 | | | |
| | Subgrade Preparation | | | | | | | |
| B.A.B.5 | Preparation, trim and compact | 8,445 | m2 | \$6 | \$46,448 | | | |
| | Pathway | | | | | | | |
| B.A.B.6 | 100 thick concrete footpath with broomed finish | 8,445 | m2 | \$71 | \$598,244 | | | |
| B.A.B.7 | Sand fill below concrete footpath (100mm) | 8,445 | m2 | \$5 | \$46,110 | | | |
| B.A.B.8 | Pram ramp | 0 | no | \$670 | Included with intersections | | | |
| | TOTAL Shared Paths | | Item | | | \$754,979 | | |
| <u>B.A.C</u> | <u>Street Lighting</u> | | | | | | | |
| | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 20 | no | \$3,442 | \$68,834 | | | |
| B.A.C.2 | 6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 36 | no | \$5,111 | \$183,995 | | | |
| | TOTAL Street Lighting | | Item | | | \$252,830 | | |
| <u>B.A.D</u> | <u>Road Drainage</u> | | | | | | | |
| | 450dia reinforced concrete pipe including excavation and backfill | 1,244 | m | \$233 | \$289,914 | | | |
| B.A.D.2 | 150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand | 1,244 | m | \$189 | \$234,618 | | | |
| | | | | | CESP measured at intersections, RAB's | | | |
| B.A.D.3 | Side entry pits including liner, cover, excavation, and associated works | 0 | no | \$2,667 | | | | |
| | Raised gully / bubble up pits including liner, cover, grate, excavation, rock pitching, and associated works | 42 | no | \$3,021 | \$126,864 | | | |
| | TOTAL Road Drainage | | Item | | | \$651,397 | | |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|------------|-------------|--------------|-------------------|--------------------|-----------------|
| <u>B.A.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| B.A.E.1 | Traffic Management | 5.0000 | % | \$3,735,036 | \$18,675 | | | |
| B.A.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$3,735,036 | \$560,255 | | | |
| B.A.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$3,735,036 | \$280,128 | | | |
| B.A.E.4 | Risk Contingency Allowance | 10.0000 | % | \$4,594,094 | \$459,409 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$1,318,468 | | |
| | TOTAL Road Construction | | | | | | \$5,053,504 | |
| <u>B.B</u> | <u>Ballawarra Avenue (Roundabout)</u> | | | | | | | |
| <u>B.B.A</u> | <u>Road Works</u> | | | | | | | |
| B.B.A.1 | Earthworks and Site Preparation Site Clearance (based on light shrubs) | 368 | m2 | \$4 | \$1,295 | | | |
| B.B.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 368 | m2 | \$2 | \$592 | | | |
| B.B.A.3 | Cut to Fill - General Earthworks | 111 | m3 | \$8 | \$914 | | | |
| B.B.A.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| B.B.A.5 | Subgrade Preparation Preparation, trim and compact Sub Base and Base Course | 368 | m2 | \$6 | \$2,024 | | | |
| B.B.A.6 | 100mm thick crushed rock base course | 198 | m2 | \$8 | \$1,628 | | | |
| B.B.A.7 | 250mm thick compacted limestone sub base Road Paving | 198 | m2 | \$17 | \$3,461 | | | |
| B.B.A.8 | 50mm thick (AC14) | 156 | m2 | \$31 | \$4,873 | | | |
| B.B.A.9 | Primer seal Brick Paving | 156 | m2 | \$4 | \$630 | | | |
| B.B.A.10 | 80 thick brick pavers | 60 | m2 | \$100 | \$6,006 | | | |
| B.B.A.11 | 30 thick compacted sand bed | 60 | m2 | \$2 | \$98 | | | |
| B.B.A.12 | 170mm thick compacted limestone Kerbing | 60 | m2 | \$11 | \$682 | | | |
| B.B.A.13 | Semi Mountable Kerb (SMK) Line Marking and Furniture | 71 | m | \$30 | \$2,105 | | | |
| B.B.A.14 | Line marking | 18 | m | \$6 | \$114 | | | |
| B.B.A.15 | Traffic sign Landscaping | 1 | no | \$450 | \$450 \$0 | | | |
| B.B.A.16 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| B.B.A.17 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| B.B.A.18 | Soft landscaping | 227 | m2 | \$0 | Excl. | | | |
| B.B.A.19 | Landscape mix Other | 57 | m3 | \$90 | \$5,130 | | | |
| B.B.A.20 | Remove existing SMK | 30 | m | \$10 | \$300 | | | |
| B.B.A.21 | Allow for connection to existing RAB asphalt | | item | | \$5,000 | | | |
| B.B.A.22 | Allow for connection to existing footpath TOTAL Road Works | | item | | \$2,500 | \$37,804 | | |
| <u>B.B.B</u> | <u>Shared Paths</u> | | | | | | | |
| B.B.B.1 | Earthworks and Site Preparation Site Clearance (based on light shrubs) | 178 | m2 | \$4 | \$627 | | | |
| B.B.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 178 | m2 | \$2 | \$287 | | | |
| B.B.B.3 | Cut to Fill - General Earthworks | 54 | m3 | \$8 | \$444 | | | |
| B.B.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| B.B.B.5 | Subgrade Preparation Preparation, trim and compact Pathway | 178 | m2 | \$6 | \$979 | | | |
| B.B.B.6 | 100 thick concrete footpath with broomed finish | 178 | m2 | \$71 | \$12,610 | | | |
| B.B.B.7 | Sand fill below concrete path (100mm) | 178 | m2 | \$5 | \$972 | | | |
| B.B.B.8 | Pram ramp | 0 | no | \$670 | \$0 | | | |
| B.B.B.9 | Pram ramp including tactile | 2 | no | \$973 | \$1,945 | | | |
| B.B.B.10 | Tactile paving Line Marking and Furniture | 4 | m2 | \$325 | \$1,300 | | | |
| B.B.B.11 | Traffic sign Landscaping | 2 | no | \$450 | \$900 | | | |
| B.B.B.12 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | Excl. | | | |
| B.B.B.13 | Trees (100l) | 0 | no | \$506 | Excl. | | | |
| B.B.B.14 | Soft landscaping TOTAL Shared Paths | 0 | m2 | \$0 | Excl. | \$20,063 | | |
| <u>B.B.C</u> | <u>Street Lighting</u> | | | | | | | |
| B.B.C.1 | 6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads (existing ROB, allowed for additional DOR) TOTAL Street Lighting | 1 | no Item | \$5,111 | \$5,111 | \$5,111 | | |
| <u>B.B.D</u> | <u>Road Drainage</u> | | | | | | | |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|------|----------|----------|-------------------|------------------|-----------------|
| B.B.D.1 | 450dia reinforced concrete pipe including excavation and backfill (for new SEP's) | 20 | m | \$233 | \$4,661 | | | |
| B.B.D.2 | 150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand | 0 | m | \$189 | \$0 | | | |
| B.B.D.3 | Side entry pits including liner, cover, excavation, and associated works at new turning points | 2 | no | \$2,667 | \$5,333 | | | |
| | TOTAL Road Drainage | | Item | | | \$9,994 | | |
| <u>B.B.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| B.B.E.1 | Traffic Management | 5.0000 | % | \$72,972 | \$3,649 | | | |
| B.B.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$72,972 | \$10,946 | | | |
| B.B.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$72,972 | \$5,473 | | | |
| B.B.E.4 | Risk Contingency Allowance | 10.0000 | % | \$93,039 | \$9,304 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$29,371 | | |
| | TOTAL Ballawarra Avenue (Roundabout) | | | | | | \$102,343 | |
| <u>B.C</u> | <u>Briggs Road (Left in left out intersection)</u> | | | | | | | |
| <u>B.C.A</u> | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | \$0 | | | |
| B.C.A.1 | Site Clearance (based on light shrubs) | 1,931 | m2 | \$4 | \$6,797 | | | |
| B.C.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 1,931 | m2 | \$2 | \$3,109 | | | |
| B.C.A.3 | Cut to Fill - General Earthworks | 580 | m3 | \$8 | \$4,773 | | | |
| B.C.A.4 | Imported Fill | 966 | m3 | \$30 | \$28,980 | | | |
| | Subgrade Preparation | | | | | | | |
| B.C.A.5 | Preparation, trim and compact | 1,931 | m2 | \$6 | \$10,621 | | | |
| | Sub Base and Base Course | | | | \$0 | | | |
| B.C.A.6 | 100mm thick crushed rock base course | 1,572 | m2 | \$8 | \$12,922 | | | |
| B.C.A.7 | 250mm thick compacted limestone sub base | 1,572 | m2 | \$17 | \$27,479 | | | |
| | Road Paving | | | | \$0 | | | |
| B.C.A.8 | 50mm thick (AC14) | 1,031 | m2 | \$31 | \$32,208 | | | |
| B.C.A.9 | Extra over for 2% red oxide | 180 | m2 | \$6 | \$1,121 | | | |
| B.C.A.10 | Primer seal | 1,031 | m2 | \$4 | \$4,165 | | | |
| | Kerbing | | | | | | | |
| B.C.A.11 | Mountable Kerb (MK) | 120 | m | \$25 | \$3,053 | | | |
| B.C.A.12 | Semi Mountable Kerb (SMK) | 141 | m | \$30 | \$4,181 | | | |
| | Line Marking and Furniture | | | | | | | |
| B.C.A.13 | Line marking | 160 | m | \$6 | \$1,014 | | | |
| B.C.A.14 | Street sign post | 2 | no | \$122 | \$244 | | | |
| B.C.A.15 | Street name plate | 4 | no | \$199 | \$795 | | | |
| B.C.A.16 | Traffic sign | 4 | no | \$450 | \$1,800 | | | |
| | Landscaping | | | | | | | |
| B.C.A.17 | Soft landscaping | 360 | m2 | \$0 | Excl. | | | |
| B.C.A.18 | Landscape mix | 83 | m3 | \$90 | \$7,470 | | | |
| B.C.A.19 | Rock pitching | 15 | m2 | \$155 | \$2,329 | | | |
| B.C.A.20 | Drainage layer | 360 | m2 | \$0 | Excl. | | | |
| | Other | | | | | | | |
| B.C.A.21 | Allow for connection to existing Briggs Road | | item | | \$10,000 | | | |
| | TOTAL Road Works | | Item | | | \$163,061 | | |
| <u>B.C.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| B.C.B.1 | Site Clearance (based on light shrubs) | 300 | m2 | \$4 | \$1,056 | | | |
| B.C.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 300 | m2 | \$2 | \$483 | | | |
| B.C.B.3 | Cut to Fill - General Earthworks | 90 | m3 | \$8 | \$741 | | | |
| B.C.B.4 | Imported Fill | 150 | m3 | \$30 | \$4,500 | | | |
| | Subgrade Preparation | | | | | | | |
| B.C.B.5 | Preparation, trim and compact | 300 | m2 | \$6 | \$1,650 | | | |
| | Pathway | | | | | | | |
| B.C.B.6 | 100 thick concrete footpath with broomed finish | 300 | m2 | \$71 | \$21,252 | | | |
| B.C.B.7 | Sand fill below concrete footpath (100mm) | 300 | m2 | \$5 | \$1,638 | | | |
| B.C.B.8 | Pram ramp | 0 | no | \$670 | \$0 | | | |
| B.C.B.9 | Pram ramp including tactile | 4 | no | \$973 | \$3,891 | | | |
| | Line Marking and Furniture | | | | | | | |
| B.C.B.10 | Traffic sign | 4 | no | \$450 | \$1,800 | | | |
| | TOTAL Shared Paths | | Item | | | \$37,010 | | |
| <u>B.C.C</u> | <u>Street Lighting</u> | | | | | | | |
| | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 4 | no | \$3,442 | \$13,767 | | | |
| | TOTAL Street Lighting | | Item | | | \$13,767 | | |
| <u>B.C.D</u> | <u>Road Drainage</u> | | | | | | | |
| B.C.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 115 | m | \$233 | \$26,801 | | | |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|------|-----------|--------------------|-------------------|------------------|-----------------|
| B.C.D.2 | Side entry pits including liner, cover, excavation, and associated works | 4 | no | \$2,667 | \$10,666 | \$37,467 | | |
| | TOTAL Road Drainage | | Item | | | | | |
| <u>B.C.E</u> | <u>Preliminaries and Project Costs</u> | | | | | \$101,150 | | |
| B.C.E.1 | Traffic Management | 5.0000 | % | \$251,305 | \$12,565 | | | |
| B.C.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$251,305 | \$37,696 | | | |
| B.C.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$251,305 | \$18,848 | | | |
| B.C.E.4 | Risk Contingency Allowance | 10.0000 | % | \$320,414 | \$32,041 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | | | |
| | TOTAL Briggs Road (Left in left out intersection) | | | | | | \$352,455 | |
| <u>B.D</u> | <u>Caraway (Roundabout)</u> | | | | | \$235,407 | | |
| <u>B.D.A</u> | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| B.D.A.1 | Site Clearance (based on light shrubs) | 2,504 | m2 | \$4 | \$8,814 | | | |
| B.D.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,504 | m2 | \$2 | \$4,031 | | | |
| B.D.A.3 | Cut to Fill - General Earthworks | 752 | m3 | \$8 | \$6,189 | | | |
| B.D.A.4 | Detailed excavation - mill and profile | 0 | m3 | \$19 | Measured elsewhere | | | |
| B.D.A.5 | Imported Fill | 1,252 | m3 | \$30 | \$37,560 | | | |
| | Subgrade Preparation | | | | | | | |
| B.D.A.6 | Preparation, trim and compact | 2,504 | m2 | \$6 | \$13,772 | | | |
| | Sub Base and Base Course | | | | | | | |
| B.D.A.7 | 100mm thick crushed rock base course | 1,983 | m2 | \$8 | \$16,300 | | | |
| B.D.A.8 | 200mm thick compacted limestone sub base | | m2 | \$14 | \$0 | | | |
| B.D.A.9 | 250mm thick compacted limestone sub base | 1,983 | m2 | \$17 | \$34,663 | | | |
| | Road Paving | | | | | | | |
| | 30mm thick (AC10) | | m2 | \$18 | | | | |
| B.D.A.10 | 50mm thick (AC14) | 1,518 | m2 | \$31 | \$47,422 | | | |
| | Extra over for 2% red oxide | | m2 | \$6 | | | | |
| B.D.A.11 | Primer seal | 1,518 | m2 | \$4 | \$6,133 | | | |
| | Brick Paving | | Item | | \$0 | | | |
| B.D.A.12 | 80 thick brick pavers | 333 | m2 | \$100 | \$33,333 | | | |
| B.D.A.13 | 30 thick compacted sand bed | 180 | m2 | \$2 | \$295 | | | |
| B.D.A.14 | 40 thick compacted sand bed (RAB) | 153 | m2 | \$2 | \$335 | | | |
| B.D.A.15 | 170mm thick compacted limestone | 180 | m2 | \$11 | \$2,047 | | | |
| B.D.A.16 | 250mm thick compacted limestone sub base | 153 | m2 | \$17 | \$2,674 | | | |
| | Concrete Paving | | | | | | | |
| B.D.A.17 | 100 thick concrete paving with broomed finish | 0 | m2 | \$71 | \$0 | | | |
| B.D.A.18 | Sand fill below concrete paving (100mm) | 0 | m2 | \$5 | \$0 | | | |
| | Kerbing | | | | | | | |
| B.D.A.19 | Mountable Kerb (MK) | 70 | m | \$25 | \$1,781 | | | |
| B.D.A.20 | Semi Mountable Kerb (SMK) | 143 | m | \$30 | \$4,240 | | | |
| B.D.A.21 | Barrier Kerb (BK) | 54 | m | \$53 | \$2,869 | | | |
| B.D.A.22 | Concrete flush edge beam | 0 | m | \$67 | \$0 | | | |
| | Line Marking and Furniture | | | | | | | |
| B.D.A.23 | Line marking | 53 | m | \$6 | \$336 | | | |
| B.D.A.24 | Street sign post | 1 | no | \$122 | \$122 | | | |
| B.D.A.25 | Street name plate | 2 | no | \$199 | \$398 | | | |
| B.D.A.26 | Chevron sign | 1 | no | \$613 | \$613 | | | |
| B.D.A.27 | Traffic sign | 3 | no | \$450 | \$1,350 | | | |
| | Landscaping | | | | \$0 | | | |
| B.D.A.28 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | \$0 | | | |
| B.D.A.29 | Trees (100l) | 0 | no | \$506 | \$0 | | | |
| B.D.A.30 | Soft landscaping | 227 | m2 | \$0 | \$0 | | | |
| B.D.A.31 | Landscape mix | 57 | m3 | \$90 | \$5,130 | | | |
| | Other | | | | | | | |
| B.D.A.32 | Allow for connection to existing Caraway Avenue | | item | | \$5,000 | | | |
| | TOTAL Road Works | | Item | | | | | |
| <u>B.D.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| B.D.B.1 | Site Clearance (based on light shrubs) | 356 | m2 | \$4 | \$1,253 | | | |
| B.D.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 356 | m2 | \$2 | \$573 | | | |
| B.D.B.3 | Cut to Fill - General Earthworks | 107 | m3 | \$8 | \$881 | | | |
| | Detailed excavation - mill and profile | | m3 | \$19 | | | | |
| B.D.B.4 | Imported Fill | 178 | m3 | \$30 | \$5,340 | | | |
| | Subgrade Preparation | | | | | | | |
| B.D.B.5 | Preparation, trim and compact | 356 | m2 | \$6 | \$1,958 | | | |
| | Pathway | | | | | | | |
| B.D.B.6 | 100 thick concrete footpath with broomed finish | 356 | m2 | \$71 | \$25,219 | | | |
| B.D.B.7 | Sand fill below concrete path (100mm) | 356 | m2 | \$5 | \$1,944 | | | |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|---------------------|--|----------|------------|-----------|----------|-------------------|------------------|-----------------|
| | Pram ramp | | no | \$670 | | | | |
| B.D.B.8 | Pram ramp including tactile | 6 | no | \$973 | \$5,836 | | | |
| B.D.B.9 | Tactile paving | 10 | m2 | \$325 | \$3,250 | | | |
| | Line Marking and Furniture | | | | | | | |
| B.D.B.10 | Line marking | 0 | m | \$6 | \$0 | | | |
| B.D.B.11 | Street sign post | 0 | no | \$122 | \$0 | | | |
| B.D.B.12 | Street name plate | 0 | no | \$199 | \$0 | | | |
| B.D.B.13 | Chevron sign | 0 | no | \$613 | \$0 | | | |
| B.D.B.14 | Traffic sign | 2 | no | \$450 | \$900 | | | |
| | Landscaping | | | | | | | |
| B.D.B.15 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | \$0 | | | |
| B.D.B.16 | Trees (100l) | 0 | no | \$506 | \$0 | | | |
| B.D.B.17 | Soft landscaping | 0 | m2 | \$0 | \$0 | | | |
| | TOTAL Shared Paths | | Item | | | \$47,154 | | |
| <u>B.D.C</u> | <u>Street Lighting</u> | | | | | | | |
| | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | | | | | | | |
| B.D.C.1 | TOTAL Street Lighting | 4 | no Item | \$3,442 | \$13,767 | \$13,767 | | |
| <u>B.D.D</u> | <u>Road Drainage</u> | | | | | | | |
| | 450dia reinforced concrete pipe including excavation and backfill | | | | | | | |
| B.D.D.1 | | 130 | m | \$233 | \$30,297 | | | |
| | 150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand | | | | | | | |
| B.D.D.2 | | 0 | m | \$189 | \$0 | | | |
| | Side entry pits including liner, cover, excavation, and associated works | | | | | | | |
| B.D.D.3 | | 4 | no | \$2,667 | \$10,666 | | | |
| | Drainage layer measured with landscaping | | Note | | | | | |
| | TOTAL Road Drainage | | Item | | | \$40,963 | | |
| <u>B.D.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| B.D.E.1 | Traffic Management | 5.0000 | % | \$337,290 | \$16,865 | | | |
| | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$337,290 | \$50,594 | | | |
| B.D.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$337,290 | \$25,297 | | | |
| B.D.E.4 | Risk Contingency Allowance | 10.0000 | % | \$430,045 | \$43,005 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$135,759 | | |
| | TOTAL Caraway (Roundabout) | | | | | | \$473,050 | |
| <u>B.E</u> | <u>Portwine Avenue (Left in left out intersection)</u> | | | | | | | |
| <u>B.E.A</u> | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | \$0 | | | |
| B.E.A.1 | Site Clearance (based on light shrubs) | 816 | m2 | \$4 | \$2,872 | | | |
| B.E.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 816 | m2 | \$2 | \$1,314 | | | |
| B.E.A.3 | Cut to Fill - General Earthworks | 245 | m3 | \$8 | \$2,016 | | | |
| B.E.A.4 | Imported Fill | 408 | m3 | \$30 | \$12,240 | | | |
| | Subgrade Preparation | | | | | | | |
| B.E.A.5 | Preparation, trim and compact | 816 | m2 | \$6 | \$4,488 | | | |
| | Sub Base and Base Course | | | | \$0 | | | |
| B.E.A.6 | 100mm thick crushed rock base course | 1,041 | m2 | \$8 | \$8,557 | | | |
| B.E.A.7 | 250mm thick compacted limestone sub base | 1,041 | m2 | \$17 | \$18,197 | | | |
| | Road Paving | | | | \$0 | | | |
| B.E.A.8 | 50mm thick (AC14) | 516 | m2 | \$31 | \$16,120 | | | |
| B.E.A.9 | Extra over for 2% red oxide | 90 | m2 | \$6 | \$561 | | | |
| B.E.A.10 | Primer seal | 516 | m2 | \$4 | \$2,085 | | | |
| | Kerbing | | | | | | | |
| B.E.A.11 | Mountable Kerb (MK) | 60 | m | \$25 | \$1,526 | | | |
| B.E.A.12 | Semi Mountable Kerb (SMK) | 71 | m | \$30 | \$2,105 | | | |
| | Line Marking and Furniture | | | | | | | |
| B.E.A.13 | Line marking | 80 | m | \$6 | \$507 | | | |
| B.E.A.14 | Street sign post | 1 | no | \$122 | \$122 | | | |
| B.E.A.15 | Street name plate | 2 | no | \$199 | \$398 | | | |
| B.E.A.16 | Traffic sign | 2 | no | \$450 | \$900 | | | |
| | Landscaping | | | | | | | |
| B.E.A.17 | Soft landscaping | 180 | m2 | \$0 | Excl. | | | |
| B.E.A.18 | Landscape mix | 42 | m3 | \$90 | \$3,780 | | | |
| B.E.A.19 | Rock pitching | 8 | m2 | \$155 | \$1,242 | | | |
| B.E.A.20 | Drainage layer | 180 | m2 | \$0 | Excl. | | | |
| | TOTAL Road Works | | Item | | | \$79,030 | | |
| <u>B.E.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| B.E.B.1 | Site Clearance (based on light shrubs) | 150 | m2 | \$4 | \$528 | | | |
| B.E.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 150 | m2 | \$2 | \$242 | | | |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|------|-----------|----------|-------------------|------------------|-----------------|
| B.E.B.3 | Cut to Fill - General Earthworks | 45 | m3 | \$8 | \$370 | | | |
| B.E.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| B.E.B.5 | Subgrade Preparation | | | | | | | |
| B.E.B.5 | Preparation, trim and compact Pathway | 150 | m2 | \$6 | \$825 | | | |
| B.E.B.6 | 100 thick concrete footpath with broomed finish | 150 | m2 | \$71 | \$10,626 | | | |
| B.E.B.7 | Sand fill below concrete footpath (100mm) | 150 | m2 | \$5 | \$819 | | | |
| B.E.B.8 | Pram ramp | 0 | no | \$670 | \$0 | | | |
| B.E.B.9 | Pram ramp including tactile | 2 | no | \$973 | \$1,945 | | | |
| B.E.B.10 | Line Marking and Furniture | | | | | | | |
| B.E.B.10 | Traffic sign | 2 | no | \$450 | \$900 | | | |
| | TOTAL Shared Paths | | Item | | | \$16,255 | | |
| B.E.C | Street Lighting | | | | | | | |
| B.E.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 2 | no | \$3,442 | \$6,883 | | | |
| | TOTAL Street Lighting | | Item | | | \$6,883 | | |
| B.E.D | Road Drainage | | | | | | | |
| B.E.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 65 | m | \$233 | \$15,148 | | | |
| B.E.D.2 | Side entry pits including liner, cover, excavation, and associated works | 2 | no | \$2,667 | \$5,333 | | | |
| | TOTAL Road Drainage | | Item | | | \$20,481 | | |
| B.E.E | Preliminaries and Project Costs | | | | | | | |
| B.E.E.1 | Traffic Management | 5.0000 | % | \$122,649 | \$6,132 | | | |
| B.E.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$122,649 | \$18,397 | | | |
| B.E.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$122,649 | \$9,199 | | | |
| B.E.E.4 | Risk Contingency Allowance | 10.0000 | % | \$156,378 | \$15,638 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$49,366 | | |
| | TOTAL Portwine Avenue (Left in left out intersection) | | | | | | \$172,016 | |
| B.F | Larsen Road (Roundabout) | | | | | | | |
| B.F.A | Road Works | | | | | | | |
| B.F.A.1 | Earthworks and Site Preparation | | | | | | | |
| B.F.A.1 | Site Clearance (based on light shrubs) | 2,728 | m2 | \$4 | \$9,603 | | | |
| B.F.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,728 | m2 | \$2 | \$4,392 | | | |
| B.F.A.3 | Cut to Fill - General Earthworks | 819 | m3 | \$8 | \$6,740 | | | |
| B.F.A.4 | Detailed excavation - mill and profile | 900 | m2 | \$19 | \$17,082 | | | |
| B.F.A.5 | Imported Fill | 1,316 | m3 | \$30 | \$39,480 | | | |
| B.F.A.6 | Subgrade Preparation | | | | | | | |
| B.F.A.6 | Preparation, trim and compact Sub Base and Base Course | 2,728 | m2 | \$6 | \$15,004 | | | |
| B.F.A.7 | 100mm thick crushed rock base course | 2,139 | m2 | \$8 | \$17,583 | | | |
| B.F.A.8 | 250mm thick compacted limestone sub base | 2,139 | m2 | \$17 | \$37,390 | | | |
| B.F.A.9 | Road Paving | | | | | | | |
| B.F.A.9 | 50mm thick (AC14) | 1,672 | m2 | \$31 | \$52,233 | | | |
| B.F.A.10 | Primer seal | 1,672 | m2 | \$4 | \$6,755 | | | |
| B.F.A.11 | Brick Paving | | Item | | \$0 | | | |
| B.F.A.11 | 80 thick brick pavers | 393 | m2 | \$100 | \$39,339 | | | |
| B.F.A.12 | 30 thick compacted sand bed | 240 | m2 | \$2 | \$394 | | | |
| B.F.A.13 | 40 thick compacted sand bed (RAB) | 153 | m2 | \$2 | \$335 | | | |
| B.F.A.14 | 170mm thick compacted limestone | 240 | m2 | \$11 | \$2,729 | | | |
| B.F.A.15 | 250mm thick compacted limestone sub base | 153 | m2 | \$17 | \$2,674 | | | |
| B.F.A.16 | Concrete Paving | | | | | | | |
| B.F.A.16 | 100 thick concrete paving with broomed finish | 0 | m2 | \$71 | \$0 | | | |
| B.F.A.17 | Sand fill below concrete paving (100mm) | 0 | m2 | \$5 | \$0 | | | |
| B.F.A.18 | Kerbing | | | | | | | |
| B.F.A.18 | Mountable Kerb (MK) | 70 | m | \$25 | \$1,781 | | | |
| B.F.A.19 | Semi Mountable Kerb (SMK) | 146 | m | \$30 | \$4,329 | | | |
| B.F.A.20 | Barrier Kerb (BK) | 54 | m | \$53 | \$2,869 | | | |
| B.F.A.21 | Concrete flush edge beam | | m | \$67 | | | | |
| B.F.A.21 | Line Marking and Furniture | | | | | | | |
| B.F.A.21 | Line marking | 70 | m | \$6 | \$444 | | | |
| B.F.A.22 | Street sign post | 1 | no | \$122 | \$122 | | | |
| B.F.A.23 | Street name plate | 2 | no | \$199 | \$398 | | | |
| B.F.A.24 | Chevron sign | 0 | no | \$613 | \$0 | | | |
| B.F.A.25 | Traffic sign | 4 | no | \$450 | \$1,800 | | | |
| B.F.A.26 | Landscaping | | | | \$0 | | | |
| B.F.A.26 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | \$0 | | | |
| B.F.A.27 | Trees (100l) | 0 | no | \$506 | \$0 | | | |
| B.F.A.28 | Soft landscaping | 227 | m2 | \$0 | \$0 | | | |
| B.F.A.29 | Landscape mix | 57 | m3 | \$90 | \$5,130 | | | |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|--|----------|------|-----------|-----------|-------------------|------------------|-----------------|
| B.F.A.30 | Other Allow for connection to existing Larsen Road | | item | | \$15,000 | | | |
| | TOTAL Road Works | | Item | | | \$283,605 | | |
| <u>B.F.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| B.F.B.1 | Site Clearance (based on light shrubs) | 364 | m2 | \$4 | \$1,281 | | | |
| B.F.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 364 | m2 | \$2 | \$586 | | | |
| B.F.B.3 | Cut to Fill - General Earthworks | 110 | m3 | \$8 | \$905 | | | |
| | Detailed excavation - mill and profile | | m3 | \$19 | | | | |
| B.F.B.4 | Imported Fill | 182 | m3 | \$30 | \$5,460 | | | |
| | Subgrade Preparation | | | | | | | |
| B.F.B.5 | Preparation, trim and compact | 364 | m2 | \$6 | \$2,002 | | | |
| | Pathway | | | | | | | |
| B.F.B.6 | 100 thick concrete footpath with broomed finish | 364 | m2 | \$71 | \$25,786 | | | |
| B.F.B.7 | Sand fill below concrete path (100mm) | 364 | m2 | \$5 | \$1,987 | | | |
| | Pram ramp | | no | \$670 | | | | |
| B.F.B.8 | Pram ramp including tactile | 8 | no | \$973 | \$7,781 | | | |
| B.F.B.9 | Tactile paving | 13 | m2 | \$325 | \$4,225 | | | |
| | Line Marking and Furniture | | | | | | | |
| B.F.B.10 | Line marking | 0 | m | \$6 | \$0 | | | |
| B.F.B.11 | Street sign post | 0 | no | \$122 | \$0 | | | |
| B.F.B.12 | Street name plate | 0 | no | \$199 | \$0 | | | |
| B.F.B.13 | Chevron sign | 0 | no | \$613 | \$0 | | | |
| B.F.B.14 | Traffic sign | 4 | no | \$450 | \$1,800 | | | |
| | Landscaping | | | | | | | |
| B.F.B.15 | Mulch to planter boxes (2m x 2m) | 0 | m2 | \$16 | \$0 | | | |
| B.F.B.16 | Trees (100l) | 0 | no | \$506 | \$0 | | | |
| B.F.B.17 | Soft landscaping | 0 | m2 | \$0 | \$0 | | | |
| | TOTAL Shared Paths | | Item | | | \$51,814 | | |
| <u>B.F.C</u> | <u>Street Lighting</u> | | | | | | | |
| B.F.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 4 | no | \$3,442 | \$13,767 | | | |
| | TOTAL Street Lighting | | Item | | | \$13,767 | | |
| <u>B.F.D</u> | <u>Road Drainage</u> | | | | | | | |
| B.F.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 130 | m | \$233 | \$30,297 | | | |
| B.F.D.2 | 150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand | 0 | m | \$189 | \$0 | | | |
| B.F.D.3 | Side entry pits including liner, cover, excavation, and associated works | 6 | no | \$2,667 | \$15,999 | | | |
| | Drainage layer measured with landscaping | | Note | | | | | |
| | TOTAL Road Drainage | | Item | | | \$46,296 | | |
| <u>B.F.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| B.F.E.1 | Traffic Management | 5.0000 | % | \$395,481 | \$19,774 | | | |
| B.F.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$395,481 | \$59,322 | | | |
| B.F.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$395,481 | \$29,661 | | | |
| B.F.E.4 | Risk Contingency Allowance | 10.0000 | % | \$504,239 | \$50,424 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$159,181 | | |
| | TOTAL Larsen Road (Roundabout) | | | | | | \$554,663 | |
| <u>B.G</u> | <u>Utilities</u> | | | | | | | |
| <u>B.G.A</u> | <u>Power and Lighting (Western Power)</u> | | | | | | | |
| B.G.A.1 | Relocate 228m of inground Power underground about 20m - Provisional Sum | 1 | PS | \$206,441 | \$206,441 | | | |
| B.G.A.2 | Relocate one Overhead Power Pole on Thomas Road - Provisional Sum | 1 | PS | \$46,501 | \$46,501 | | | |
| B.G.A.3 | Relocate two Overhead Power Poles on Larsen Road - Provisional Sum | 1 | PS | \$93,002 | \$93,002 | | | |
| | TOTAL Power and Lighting (Western Power) | | Item | | | \$345,944 | | |
| <u>B.G.B</u> | <u>Communications (NBN / Telstra / Westnet / etc.)</u> | | | | | | | |
| B.G.B.1 | Relocate 228m road length of communications related infrastructure about 20m from the current location - Provisional Sum | 1 | PS | \$112,098 | \$112,098 | | | |
| B.G.B.2 | Relocate approximately 60m of communications related infrastructure about 20m from the current location at Larsen Road - Provisional Sum | 1 | PS | \$71,673 | \$71,673 | | | |
| | TOTAL Communications (NBN / Telstra / Westnet / etc.) | | Item | | | \$183,771 | | |
| <u>B.G.C</u> | <u>Water and Sewer (Water Corporation)</u> | | | | | | | |

**Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update**

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|---------|---|----------|------|-------------|-----------|-------------------|--------------------|--------------------|
| B.G.C.1 | Relocate 228m road length of water and sewer about 20m from the current location - Provisional Sum | 1 | PS | \$229,023 | \$229,023 | | | |
| B.G.C.2 | Relocate 60m of water and sewer about 20m from the current location and relocate existing mahole at Larsen Road - Provisional Sum | 1 | PS | \$107,260 | \$107,260 | | | |
| | TOTAL Water and Sewer (Water Corporation) | | Item | | | \$336,282 | | |
| B.G.D | <u>Gas (ATCO)</u> | | | | | | | |
| | No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study | | Note | | | | | |
| | TOTAL Gas (ATCO) | | Item | | | \$0 | | |
| B.G.E | <u>Preliminaries and Project Costs</u> | | | | | | | |
| B.G.E.1 | Traffic Management (Road not constructed but may require minor management at Thomas Road) | 5.0000 | % | \$865,997 | \$43,300 | | | |
| B.G.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$865,997 | \$129,900 | | | |
| B.G.E.3 | Project Owner's Cost (Planning and Design Costs) | 5.0000 | % | \$865,997 | \$43,300 | | | |
| B.G.E.4 | Risk Contingency Allowance | 10.0000 | % | \$1,082,497 | \$108,250 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$324,749 | | |
| | TOTAL Utilities | | | | | | \$1,190,746 | |
| A.A.A.7 | Estimated Imported Fill | 7,487 | m3 | | | | | |
| A.A.A.5 | Total m3 of Cut to Fill - General Earthworks | 16,680 | m3 | | | | | |
| | Less Cut to Fill costed | 0 | m3 | \$30 | \$0 | | | |
| | Total Adjustment for Imported Fill (less Cut to Fill) | | | | | | \$0 | |
| | | | | | | | | |
| | TOTAL Road - Indigo Parkway | | Item | | | | | \$7,898,777 |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|---|----------|------|---------|-----------------------------|-------------------|---------------|-----------------|
| C | ROAD – DOLEY ROAD | | | | | | | |
| C.A | Road Construction | | | | | | | |
| <u>C.A.A</u> | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | \$0 | | | |
| C.A.A.1 | Site Clearance (based on light shrubs) | 18,431 | m2 | \$4 | \$64,877 | | | |
| C.A.A.2 | Extra over for removal of trees | | item | | \$20,704 | | | |
| C.A.A.3 | Removal of topsoil 150mm and stockpile for later re-use | 18,431 | m2 | \$2 | \$29,674 | | | |
| C.A.A.4 | Cut to Fill - General Earthworks | 6,956 | m3 | \$8 | \$57,248 | | | |
| C.A.A.5 | Imported Fill | 0 | m3 | \$30 | Excl | | | |
| C.A.A.6 | Form swale | 4,757 | m2 | \$4 | \$18,029 | | | |
| | Subgrade Preparation | | | | | | | |
| C.A.A.7 | Preparation, trim and compact Sub Base and Base Course | 18,431 | m2 | \$6 | \$101,371 | | | |
| C.A.A.8 | 100mm thick crushed rock base course | 10,345 | m2 | \$8 | \$85,036 | | | |
| C.A.A.9 | 200mm thick compacted limestone sub base | 10,345 | m2 | \$14 | \$144,727 | | | |
| | Road Paving | | | | | | | |
| C.A.A.10 | 30mm thick (AC10) | 8,918 | m2 | \$18 | \$162,218 | | | |
| C.A.A.11 | Extra over for 2% red oxide | 8,918 | m2 | \$6 | \$55,559 | | | |
| C.A.A.12 | Primer seal | 8,918 | m2 | \$4 | \$36,029 | | | |
| | Kerbing | | | | \$0 | | | |
| C.A.A.13 | Mountable Kerb (MK) | 2,379 | m | \$25 | \$60,522 | | | |
| C.A.A.14 | Kerb openings | 67 | no | \$350 | \$23,450 | | | |
| C.A.A.15 | Semi Mountable Kerb (SMK) | 1,336 | m | \$30 | \$39,612 | | | |
| | Barrier Kerb (BK) | | m | \$53 | | | | |
| C.A.A.16 | Concrete flush edge beam | 1,190 | m | \$67 | \$79,790 | | | |
| | Line Marking and Furniture | | | | | | | |
| C.A.A.17 | Line marking | 2,379 | m | \$6 | \$15,083 | | | |
| | Landscaping | | | | | | | |
| C.A.A.18 | Soft landscaping | 6,738 | m2 | \$0 | Excl. | | | |
| C.A.A.19 | Landscape mix | 1,685 | m3 | \$90 | \$151,650 | | | |
| C.A.A.20 | Rock pitching | 397 | m2 | \$155 | \$61,634 | | | |
| C.A.A.21 | Drainage layer | 7,135 | m2 | \$0 | Excl. | | | |
| | Other | | | | | | | |
| C.A.A.22 | Allow for connection to existing Mead RAB asphalt | | item | | \$5,000 | | | |
| C.A.A.23 | Remove existing median and kerbing | | item | | \$5,000 | | | |
| C.A.A.24 | Allow for making good existing asphalt as required | | item | | \$20,000 | | | |
| | TOTAL Road Works | | Item | | | \$1,237,212 | | |
| <u>C.A.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| C.A.B.1 | Site Clearance (based on light shrubs) | 2,973 | m2 | \$4 | \$10,465 | | | |
| C.A.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,973 | m2 | \$2 | \$4,787 | | | |
| C.A.B.3 | Cut to Fill - General Earthworks | 892 | m3 | \$8 | \$7,341 | | | |
| C.A.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| C.A.B.5 | Preparation, trim and compact Pathway | 2,973 | m2 | \$6 | \$16,352 | | | |
| C.A.B.6 | 100 thick concrete footpath with broomed finish | 2,973 | m2 | \$71 | \$210,607 | | | |
| C.A.B.7 | Sand fill below concrete footpath (100mm) | 2,973 | m2 | \$5 | \$16,233 | | | |
| C.A.B.8 | Pram ramp | 0 | no | \$670 | Included with intersections | | | |
| | TOTAL Shared Paths | | Item | | | \$265,784 | | |
| <u>C.A.C</u> | <u>Street Lighting</u> | | | | | | | |
| C.A.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads (allowed for one side from Orton to Kinsella as other side already included) | 23 | no | \$3,442 | \$79,160 | | | |
| | TOTAL Street Lighting | | Item | | | \$79,160 | | |
| <u>C.A.D</u> | <u>Road Drainage</u> | | | | | | | |
| | 450dia reinforced concrete pipe including excavation and backfill (assuming Orton to Kinsella Ave already has the provisions based on aerial view) | 147 | m | \$233 | \$34,258 | | | |
| C.A.D.1 | | | | | | | | |
| | 150dia slotted PVC subsoil drainage pipe including aggregate, geofabric and porous sand (assuming Orton to Kinsella Ave do not have the subsoil provisions) | 1,190 | m | \$189 | \$224,434 | | | |
| C.A.D.2 | | | | | | | | |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|---|----------|--------------|-------------|---|-------------------|--------------------|-----------------|
| C.A.D.3 | Side entry pits including liner, cover, excavation, and associated works | 0 | no | \$2,667 | CESP mesured at intersections, RAB's | | | |
| C.A.D.4 | Raised gully / bubble up pits including liner, cover, grate, excavation, rock pitching, and associated works (assuming Orton to Kinsella Ave already has the provisions based on aerial view) | 5 | no Item | \$3,021 | \$15,103 | \$273,795 | | |
| | TOTAL Road Drainage | | | | | | | |
| <u>C.A.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| C.A.E.1 | Traffic Management | 5.0000 | % | \$1,855,951 | \$92,798 | | | |
| C.A.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$1,855,951 | \$278,393 | | | |
| C.A.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$1,855,951 | \$139,196 | | | |
| C.A.E.4 | Risk Contingency Allowance | 10.0000 | % | \$2,366,337 | \$236,634 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$747,020 | | |
| | TOTAL Road Construction | | | | | | \$2,602,971 | |
| <u>C.B</u> | <u>Mead Street (Roundabout) - already constructed</u> | | | | | | | |
| <u>C.B.A</u> | <u>Road Works</u> | | | | | | | |
| C.B.A.1 | Already Constructed | | | | \$0 | | | |
| | TOTAL Road Works | | Item | | | \$0 | | |
| <u>C.B.B</u> | <u>Shared Paths</u> | | | | | | | |
| C.B.B.1 | Already Constructed | | | | \$0 | | | |
| | TOTAL Shared Paths | | Item | | | \$0 | | |
| <u>C.B.C</u> | <u>Street Lighting</u> | | | | | | | |
| C.B.C.1 | Already Constructed | | | | \$0 | | | |
| | TOTAL Street Lighting | | Item | | | \$0 | | |
| <u>C.B.D</u> | <u>Road Drainage</u> | | | | | | | |
| C.B.D.1 | Already Constructed | | | | \$0 | | | |
| | TOTAL Road Drainage | | Item | | | \$0 | | |
| <u>C.B.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| C.B.E.1 | Already Constructed | | | | \$0 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$0 | | |
| | TOTAL Mead Street (Roundabout) - already constructed | | | | | | \$0 | |
| <u>C.C</u> | <u>Utilities</u> | | | | | | | |
| C.C.A | Power and Lighting (Western Power) | | | | | | | |
| | No allowance has been made for Power diversions as it seems that the overhead lines have already been relocated underground from our desktop study | | Note Item | | | \$0 | | |
| | TOTAL Power and Lighting (Western Power) | | | | | | | |
| <u>C.C.B</u> | <u>Communications (NBN / Telstra / Westnet / etc.)</u> | | | | | | | |
| C.C.B.1 | Relocate 1189 m road length of communications related infrastructure about 20m from the current location - Provisional Sum | 1 | PS | \$358,231 | \$358,231 | | | |
| | TOTAL Communications (NBN / Telstra / Westnet / etc.) | | Item | | | \$358,231 | | |
| <u>C.C.C</u> | <u>Water and Sewer (Water Corporation)</u> | | | | | | | |
| C.C.C.1 | Relocate 147m road length of water and sewer about 20m from the current location - Provisional Sum | 1 | PS | \$167,981 | \$167,981 | | | |
| | TOTAL Water and Sewer (Water Corporation) | | Item | | | \$167,981 | | |
| <u>C.C.D</u> | <u>Gas (ATCO)</u> | | | | | | | |
| | No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study | | Note Item | | | \$0 | | |
| | TOTAL Gas (ATCO) | | | | | | | |
| <u>C.C.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| C.C.E.1 | Traffic Management | 10.0000 | % | \$526,212 | \$52,621 | | | |
| C.C.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$526,212 | \$78,932 | | | |
| C.C.E.3 | Project Owner's Cost (Planning and Design Costs) | 5.0000 | % | \$526,212 | \$26,311 | | | |



Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|---------|--|---|------|-----------|----------|-------------------|------------------|--------------------|
| C.C.E.4 | Risk Contingency Allowance | 10.0000 | % | \$684,075 | \$68,408 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$226,271 | | |
| | TOTAL Utilities | | | | | | \$752,483 | |
| A.A.A.7 | Estimated Imported Fill | 5,940 | m3 | | | | | |
| A.A.A.5 | Total m3 of Cut to Fill - General Earthworks | 7,848 | m3 | | | | | |
| | Less Cut to Filll costed | 0 | m3 | \$30 | \$0 | | | |
| | Total Adjustment for Imported Fill (less Cut to Fill) | See "Imported Fill" sheet at the end of these costings. | | | | | \$0 | |
| | TOTAL Road – Doley Road | | Item | | | | | \$3,355,453 |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|---|----------|------|-------------|-----------------------------|-------------------|--------------------|-----------------|
| D | ROAD – WARRINGTON ROAD | | | | | | | |
| D.A | Road Construction | | | | | | | |
| <u>D.A.A</u> | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | \$0 | | | |
| D.A.A.1 | Site Clearance (based on light shrubs) | 12,898 | m2 | \$4 | \$45,401 | | | |
| D.A.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 12,898 | m2 | \$2 | \$20,766 | | | |
| D.A.A.3 | Cut to Fill - General Earthworks | 5,897 | m3 | \$8 | \$48,532 | | | |
| D.A.A.4 | Detailed excavation - mill and profile | 6,756 | m2 | \$19 | \$128,229 | | | |
| D.A.A.5 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| D.A.A.6 | Preparation, trim and compact Sub Base and Base Course | 19,654 | m2 | \$6 | \$108,097 | | | |
| D.A.A.7 | 100mm thick crushed rock base course | 17,689 | m2 | \$8 | \$145,404 | | | |
| D.A.A.8 | 200mm thick compacted limestone sub base | 17,689 | m2 | \$14 | \$247,469 | | | |
| | Road Paving | | | | | | | |
| D.A.A.9 | 30mm thick (AC10) | 14,741 | m2 | \$18 | \$268,139 | | | |
| D.A.A.10 | Primer seal | 14,741 | m2 | \$4 | \$59,554 | | | |
| | Kerbing | | | | | | | |
| D.A.A.11 | Mountable Kerb (MK) | 2,457 | m | \$25 | \$62,506 | | | |
| | Line Marking and Furniture | | | | \$0 | | | |
| D.A.A.12 | Line marking | 2,457 | m | \$6 | \$15,577 | | | |
| | Other | | | | | | | |
| D.A.A.13 | Allow to connect to existng asphalt | | item | | \$5,000 | | | |
| | TOTAL Road Works | | Item | | | \$1,154,674 | | |
| <u>D.A.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| D.A.B.1 | Site Clearance (based on light shrubs) | 6,142 | m2 | \$4 | \$21,620 | | | |
| D.A.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 6,142 | m2 | \$2 | \$9,889 | | | |
| D.A.B.3 | Cut to Fill - General Earthworks | 1,843 | m3 | \$8 | \$15,168 | | | |
| D.A.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| D.A.B.5 | Preparation, trim and compact Pathway | 6,142 | m2 | \$6 | \$33,781 | | | |
| D.A.B.6 | 100 thick concrete footpath with broomed finish | 6,142 | m2 | \$71 | \$435,099 | | | |
| D.A.B.7 | Sand fill below concrete footpath (100mm) | 6,142 | m2 | \$5 | \$33,535 | | | |
| D.A.B.8 | Pram ramp | 0 | no | \$670 | Included with intersections | | | |
| | TOTAL Shared Paths | | Item | | | \$549,092 | | |
| <u>D.A.C</u> | <u>Street Lighting</u> | | | | | | | |
| | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads (allowed for one side only as per already constructed portion of road) | 27 | no | \$3,442 | \$92,926 | | | |
| D.A.C.1 | TOTAL Street Lighting | | Item | | | \$92,926 | | |
| <u>D.A.D</u> | <u>Road Drainage</u> | | | | | | | |
| | 450dia reinforced concrete pipe including excavation and backfill | 1,169 | m | \$233 | \$272,435 | | | |
| D.A.D.2 | Side entry pits including liner, cover, excavation, and associated works (to one side only at 30m spacings) | 39 | no | \$2,667 | \$103,997 | | | |
| | TOTAL Road Drainage | | Item | | | \$376,432 | | |
| <u>D.A.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| D.A.E.1 | Traffic Management | 5.0000 | % | \$2,173,124 | \$108,656 | | | |
| D.A.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$2,173,124 | \$325,969 | | | |
| D.A.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$2,173,124 | \$162,984 | | | |
| D.A.E.4 | Risk Contingency Allowance | 10.0000 | % | \$2,770,733 | \$277,073 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$874,682 | | |
| | TOTAL Road Construction | | | | | | \$3,047,806 | |
| D.B | Mead Street (Roundabout) - already constructed | | | | | | | |
| <u>D.B.A</u> | <u>Road Works</u> | | | | | | | |
| D.B.A.1 | Already Constructed | | | | \$0 | | | |

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|---|----------|------|-------|----------|-------------------|---------------|-----------------|
| | TOTAL Road Works | | Item | | | \$0 | | |
| <u>D.B.B</u> | <u>Shared Paths</u> | | | | | | | |
| D.B.B.1 | Already Constructed | | | | \$0 | | | |
| | TOTAL Shared Paths | | Item | | | \$0 | | |
| <u>D.B.C</u> | <u>Street Lighting</u> | | | | | | | |
| D.B.C.1 | Already Constructed | | | | \$0 | | | |
| | TOTAL Street Lighting | | Item | | | \$0 | | |
| <u>D.B.D</u> | <u>Road Drainage</u> | | | | | | | |
| D.B.D.1 | Already Constructed | | | | \$0 | | | |
| | TOTAL Road Drainage | | Item | | | \$0 | | |
| <u>D.B.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| D.B.E.1 | Already Constructed | | | | \$0 | | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | \$0 | | |
| | TOTAL Mead Street (Roundabout) - already constructed | | | | | | \$0 | |
| <u>D.C</u> | <u>Turner Road (Roundabout)</u> | | | | | | | |
| <u>D.C.A</u> | <u>Road Works</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| D.C.A.1 | Site Clearance (based on light shrubs) | 2,504 | m2 | \$4 | \$8,814 | | | |
| D.C.A.2 | Removal of topsoil 150mm and stockpile for later re-use | 2,504 | m2 | \$2 | \$4,031 | | | |
| D.C.A.3 | Cut to Fill - General Earthworks | 752 | m3 | \$8 | \$6,189 | | | |
| D.C.A.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| D.C.A.5 | Preparation, trim and compact | 2,504 | m2 | \$6 | \$13,772 | | | |
| | Sub Base and Base Course | | | | | | | |
| D.C.A.6 | 100mm thick crushed rock base course | 1,983 | m2 | \$8 | \$16,300 | | | |
| D.C.A.7 | 250mm thick compacted limestone sub base | 1,983 | m2 | \$17 | \$34,663 | | | |
| | Road Paving | | | | | | | |
| D.C.A.8 | 50mm thick (AC14) | 1,518 | m2 | \$31 | \$47,422 | | | |
| D.C.A.9 | Primer seal | 1,518 | m2 | \$4 | \$6,133 | | | |
| | Brick Paving | | | | \$0 | | | |
| D.C.A.10 | 80 thick brick pavers | 333 | m2 | \$100 | \$33,333 | | | |
| D.C.A.11 | 30 thick compacted sand bed | 180 | m2 | \$2 | \$295 | | | |
| D.C.A.12 | 40 thick compacted sand bed (RAB) | 153 | m2 | \$2 | \$335 | | | |
| D.C.A.13 | 170mm thick compacted limestone | 180 | m2 | \$11 | \$2,047 | | | |
| D.C.A.14 | 250mm thick compacted limestone sub base | 153 | m2 | \$17 | \$2,674 | | | |
| | Kerbing | | | | | | | |
| D.C.A.15 | Mountable Kerb (MK) | 70 | m | \$25 | \$1,781 | | | |
| D.C.A.16 | Semi Mountable Kerb (SMK) | 143 | m | \$30 | \$4,240 | | | |
| D.C.A.17 | Barrier Kerb (BK) | 54 | m | \$53 | \$2,869 | | | |
| | Line Marking and Furniture | | | | | | | |
| D.C.A.18 | Line marking | 53 | m | \$6 | \$336 | | | |
| D.C.A.19 | Street sign post | 1 | no | \$122 | \$122 | | | |
| D.C.A.20 | Street name plate | 2 | no | \$199 | \$398 | | | |
| D.C.A.21 | Chevron sign | 1 | no | \$613 | \$613 | | | |
| D.C.A.22 | Traffic sign | 3 | no | \$450 | \$1,350 | | | |
| | Landscaping | | | | \$0 | | | |
| D.C.A.23 | Soft landscaping | 227 | m2 | \$0 | Excl. | | | |
| D.C.A.24 | Landscape mix | 57 | m3 | \$90 | \$5,130 | | | |
| | TOTAL Road Works | | Item | | | \$192,847 | | |
| <u>D.C.B</u> | <u>Shared Paths</u> | | | | | | | |
| | Earthworks and Site Preparation | | | | | | | |
| D.C.B.1 | Site Clearance (based on light shrubs) | 356 | m2 | \$4 | \$1,253 | | | |
| D.C.B.2 | Removal of topsoil 150mm and stockpile for later re-use | 356 | m2 | \$2 | \$573 | | | |
| D.C.B.3 | Cut to Fill - General Earthworks | 107 | m3 | \$8 | \$881 | | | |
| D.C.B.4 | Imported Fill | 0 | m3 | \$30 | Excl. | | | |
| | Subgrade Preparation | | | | | | | |
| D.C.B.5 | Preparation, trim and compact | 356 | m2 | \$6 | \$1,958 | | | |
| | Pathway | | | | | | | |
| D.C.B.6 | 100 thick concrete footpath with broomed finish | 356 | m2 | \$71 | \$25,219 | | | |
| D.C.B.7 | Sand fill below concrete path (100mm) | 356 | m2 | \$5 | \$1,944 | | | |
| D.C.B.8 | Pram ramp including tactile | 6 | no | \$973 | \$5,836 | | | |
| D.C.B.9 | Tactile paving | 10 | m2 | \$325 | \$3,250 | | | |
| | Line Marking and Furniture | | | | | | | |
| D.C.B.10 | Traffic sign | 2 | no | \$450 | \$900 | | | |
| | TOTAL Shared Paths | | Item | | | \$41,814 | | |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|--------------|---|---|-----------|-------------|-------------|-------------------|--------------------|--------------------|
| <u>D.C.C</u> | <u>Street Lighting</u> | | | | | | | |
| D.C.C.1 | 6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads | 4 | no Item | \$3,442 | \$13,767 | \$13,767 | | |
| | TOTAL Street Lighting | | | | | | | |
| <u>D.C.D</u> | <u>Road Drainage</u> | | | | | | | |
| D.C.D.1 | 450dia reinforced concrete pipe including excavation and backfill | 130 | m | \$233 | \$30,297 | | | |
| D.C.D.2 | Side entry pits including liner, cover, excavation, and associated works | 4 | no Item | \$2,667 | \$10,666 | \$40,963 | | |
| | TOTAL Road Drainage | | | | | | | |
| <u>D.C.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| D.C.E.1 | Traffic Management | 5.0000 | % | \$289,390 | \$14,470 | | | |
| D.C.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$289,390 | \$43,409 | | | |
| D.C.E.3 | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$289,390 | \$21,704 | | | |
| D.C.E.4 | Risk Contingency Allowance | 10.0000 | % | \$368,973 | \$36,897 | \$116,480 | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | | | |
| | TOTAL Turner Road (Roundabout) | | | | | | \$405,870 | |
| <u>D.D</u> | <u>Utilities</u> | | | | | | | |
| <u>D.D.A</u> | <u>Power and Lighting (Western Power)</u> | | | | | | | |
| D.D.A.1 | Relocate 1213m of Overhead Power underground - Provisional Sum | 1 | PS Item | \$1,600,386 | \$1,600,386 | \$1,600,386 | | |
| | TOTAL Power and Lighting (Western Power) | | | | | | | |
| <u>D.D.B</u> | <u>Communications (NBN / Telstra / Westnet / etc.)</u> | | | | | | | |
| D.D.B.1 | Relocate 1213m road length of communications related infrastructure about 10m from the current location - Provisional Sum | 1 | PS Item | \$332,861 | \$332,861 | \$332,861 | | |
| | TOTAL Communications (NBN / Telstra / Westnet / etc.) | | | | | | | |
| <u>D.D.C</u> | <u>Water and Sewer (Water Corporation)</u> | | | | | | | |
| | No allowance has been made for Water Corporation diversions as we do not see existing mains from our desktop study | | Note Item | | | \$0 | | |
| | TOTAL Water and Sewer (Water Corporation) | | | | | | | |
| <u>D.D.D</u> | <u>Gas (ATCO)</u> | | | | | | | |
| | No allowance has been made for ATCO diversions as we do not see existing valves from our desktop study | | Note Item | | | \$0 | | |
| | TOTAL Gas (ATCO) | | | | | | | |
| <u>D.D.E</u> | <u>Preliminaries and Project Costs</u> | | | | | | | |
| D.D.E.1 | Traffic Management | 10.0000 | % | \$1,933,247 | \$193,325 | | | |
| D.D.E.2 | Project Overheads and Preliminaries (Indirect Construction Costs) | 15.0000 | % | \$1,933,247 | \$289,987 | | | |
| D.D.E.3 | Project Owner's Cost (Planning and Design Costs) | 5.0000 | % | \$1,933,247 | \$96,662 | | | |
| D.D.E.4 | Risk Contingency Allowance | 10.0000 | % | \$2,513,221 | \$251,322 | \$831,296 | | |
| | TOTAL Preliminaries and Project Costs | | Item | | | | | |
| | TOTAL Utilities | | | | | | \$2,764,543 | |
| A.A.A.7 | Estimated Imported Fill | 0 | m3 | | | | | |
| A.A.A.5 | Total m3 of Cut to Fill - General Earthworks | 8,599 | m3 | | | | | |
| | Less Cut to Fill costed | 0 | m3 | \$30 | \$0 | | | |
| | Total Adjustment for Imported Fill (less Cut to Fill) | See "Imported Fill" sheet at the end of these costings. | | | | | \$0 | |
| | TOTAL Road – Warrington Road | | Item | | | | | \$6,218,219 |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|-------------------|--|----------|------|----------|----------|-------------------|------------------|-----------------|
| E | DISTRICT OPEN SPACE – THE GLADES (FUTSAL COURTS) | | | | | | | |
| <u>E.A</u> | <u>Siteworks & Earthworks</u> | | | | | | | |
| E.A.A | Site Clearance (based on light scrub) | 10,992 | m2 | \$4 | | \$40,451 | | |
| E.A.B | Removal of topsoil 150mm and remove off-site | 10,992 | m2 | \$2 | | \$18,456 | | |
| E.A.C | Cut to Fill - General Earthworks of 300mm across site | 3,298 | m3 | \$8 | | \$27,118 | | |
| E.A.D | Excavation to 350 below finished levels to playing courts | 688 | m3 | \$14 | | \$9,494 | | |
| E.A.E | Levelling, grading and compaction to final design levels | 10,992 | m2 | \$3 | | \$36,274 | | |
| E.A.F | Weed eradication | 10,086 | m2 | \$1 | | \$5,900 | | |
| E.A.G | Gypsum soil conditioner | 10,086 | m2 | \$2 | | \$17,045 | | |
| E.A.H | 15 deep C-Wise Horticulture soil conditioner | 10,086 | m2 | \$5 | | \$55,070 | | |
| E.A.I | 100 thick imported turf sand | 5,080 | m2 | \$5 | | \$25,095 | | |
| E.A.J | Organic fertilizer to turf | 5,080 | m2 | \$1 | | \$5,944 | | |
| E.A.K | Protect and retain existing trees | 28 | no | \$190 | | \$5,320 | | |
| E.A.L | Forming batter using existing soil on site | 1,333 | m2 | \$6 | | \$8,331 | | |
| E.A.M | Drainage swale including excavation, drainage cells and matting | 771 | m3 | \$50 | | \$38,550 | | |
| E.A.N | Adjust existing fence for carpark entry | 1 | Item | \$2,780 | | \$2,780 | | |
| | TOTAL Siteworks & Earthworks | | | | | | \$296,000 | |
| <u>E.B</u> | <u>Grassing & Irrigation</u> | | | | | | | |
| E.B.A | Supply and lay roll on turf including maintaining | 5,080 | m2 | \$25 | | \$127,000 | | |
| E.B.B | Ground cover including planting | 5,006 | m2 | \$15 | | \$75,090 | | |
| E.B.C | Trees medium including irrigation | 12 | no | \$520 | | \$6,240 | | |
| E.B.D | Trees large including irrigation | 4 | no | \$1,080 | | \$4,320 | | |
| E.B.E | Irrigation | 10,086 | m2 | \$10 | | \$100,860 | | |
| E.B.F | Provisional sum allowance for pumps, bores and controls - no allowance for storage tank | 1 | Item | \$50,000 | | \$50,000 | | |
| | TOTAL Grassing & Irrigation | | | | | | \$364,000 | |
| <u>E.C</u> | <u>Courts</u> | | | | | | | |
| | Sub Base and Base Course | | | | | | | |
| E.C.A | 100mm thick crushed rock base course | 1,226 | m2 | \$8 | | \$10,067 | | |
| E.C.B | 250mm thick compacted limestone sub base | 1,226 | m2 | \$17 | | \$21,430 | | |
| | Playing surface | | | | | | | |
| E.C.C | Sports surface on prepared surface | 1,226 | sqm | \$155 | | \$190,030 | | |
| E.C.D | Court linemarking | 353 | m | \$10 | | \$3,530 | | |
| | Fencing & Gates | | | | | | | |
| E.C.E | 3600 high chainlink fence with tubular posts | 237 | m | \$150 | | \$35,550 | | |
| E.C.F | 1000 wide gate | 2 | no | \$480 | | \$960 | | |
| | TOTAL Courts | | | | | | \$262,000 | |
| <u>E.D</u> | <u>Landscaping & Equipment</u> | | | | | | | |
| | Equipment | | | | | | | |
| E.D.A | Futsal goals including net | 4 | no | \$3,432 | | \$13,727 | | |
| E.D.B | Basketball post including ring and backboard | 4 | no | \$4,482 | | \$17,927 | | |
| E.D.C | Stainless steel bin enclosures | 2 | no | \$7,236 | | \$14,472 | | |
| E.D.D | Drinking fountain stainless steel including water supply | 1 | no | \$10,120 | | \$10,120 | | |
| E.D.E | Continuous seating fixed to ground | 41 | m | \$1,364 | | \$55,904 | | |
| E.D.F | Individual bench seats 3000 long fixed to ground | 2 | no | \$3,182 | | \$6,363 | | |
| E.D.G | Timber Bollards @1200 spacing | 159 | no | \$121 | | \$19,239 | | |
| E.D.H | Lighting poles for paths | 16 | no | \$5,500 | | \$88,000 | | |
| E.D.I | Lighting for courts | 4 | no | \$20,000 | | \$80,000 | | |
| E.D.J | Stainless steel bike rack to suit 5 bikes fixed to ground | 1 | no | \$3,000 | | \$3,000 | | |
| | Provisional Sums | | | | | | | |
| E.D.K | Provisional sum allowance for shade structures comprising metal roof similar to a gazebo | 2 | no | \$20,000 | | \$40,000 | | |
| E.D.L | Provisional sum allowance for K9700 Parkland automated public toilets including full fitout and installation | 1 | no | \$80,000 | | \$80,000 | | |
| E.D.M | Provisional sum allowance for signage | 1 | item | \$5,000 | | \$5,000 | | |
| | TOTAL Landscaping & Equipment | | | | | | \$434,000 | |
| <u>E.E</u> | <u>Roadworks & Pavings</u> | | | | | | | |
| | Subgrade Preparation | | | | | | | |
| E.E.A | Preparation, trim and compact | 793 | m2 | \$8 | | \$6,566 | | |
| | Sub Base and Base Course | | | | | | | |

**Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update**

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|------------|--|----------|-------------|-------------|----------|-------------------|------------------|--------------------|
| E.E.B | 100mm thick crushed rock base course | 518 | m2 | \$8 | | \$4,253 | | |
| E.E.C | 250mm thick compacted limestone sub base | 518 | m2 | \$17 | | \$9,055 | | |
| | Asphalt Paving | | | | | | | |
| E.E.D | 30mm thick (AC10) | 518 | m2 | \$19 | | \$9,847 | | |
| E.E.E | Primer seal | 518 | m2 | \$4 | | \$2,186 | | |
| | Concrete Paving | | | | | | | |
| E.E.F | 100 thick grey concrete footpath with broomed finish | 1,446 | m2 | \$74 | | \$106,888 | | |
| E.E.G | Sand fill below concrete footpath (100mm) | 276 | m2 | \$6 | | \$1,574 | | |
| E.E.H | Pram ramp | 1 | no | \$670 | | \$670 | | |
| | Kerbing | | | | | | | |
| E.E.I | Mountable Kerb (MK) | 126 | m | \$50 | | \$6,300 | | |
| E.E.J | Mowing kerb | 62 | m | \$50 | | \$3,100 | | |
| | Miscellaneous | | | | | | | |
| E.E.K | Line marking | 60 | m | \$6 | | \$380 | | |
| | Crossovers | | | | | | | |
| E.E.L | Public crossovers to carpark including additional traffic management | 2 | no | \$10,000 | | \$20,000 | | |
| | TOTAL Roadworks & Pavings | | | | | | \$171,000 | |
| E.F | <u>Drainage</u> | | | | | | | |
| E.F.A | 150 diameter pipe including excavation and backfill | 399 | m | \$143 | | \$56,858 | | |
| E.F.B | Buried flushing points | 2 | no | \$500 | | \$1,000 | | |
| E.F.C | Headwall, rock pitching, and associated works | 1 | no | \$3,021 | | \$3,021 | | |
| E.F.D | Stormwater drainage to carpark including excavation, backfill, pits, grates and pipework | 518 | m2 | \$30 | | \$15,540 | | |
| | TOTAL Drainage | | | | | | \$77,000 | |
| E.G | <u>Preliminaries & Project Costs</u> | | | | | | | |
| E.G.A | Traffic Management | 0.0000 | % | \$1,604,000 | | \$0 | | |
| E.G.B | Project Overheads and Preliminaries (Indirect Construction Costs) | 10.0000 | % | \$1,604,000 | | \$160,400 | | |
| E.G.C | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$1,604,000 | | \$120,300 | | |
| E.G.D | Risk Contingency Allowance | 10.0000 | % | \$1,884,700 | | \$188,470 | | |
| | TOTAL Preliminaries & Project Costs | | | | | | \$470,000 | |
| | TOTAL District Open Space – The Glades (Futsal courts) | | Item | | | | | \$2,074,000 |

Shire of Serpentine Jarrahdale DCP DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|---------------------|---|----------|-------------|-------------|----------|-------------------|--------------------|--------------------|
| F | DISTRICT OPEN SPACE – ORTON ROAD OVAL | | | | | | | |
| <u>F.A</u> | <u>Siteworks & Earthworks</u> | | | | | | | |
| F.A.A | Site Clearance (based on light shrubs) | 43,875 | m2 | \$4 | | \$161,460 | | |
| F.A.B | Removal of topsoil 150mm and remove off-site | 43,875 | m2 | \$2 | | \$73,666 | | |
| F.A.C | Cut to Fill - General Earthworks of 300mm across site | 13,163 | m3 | \$8 | | \$108,233 | | |
| F.A.D | Levelling, grading and compaction to final design levels | 43,875 | m2 | \$3 | | \$144,788 | | |
| F.A.E | Weed eradication | 43,875 | m2 | \$1 | | \$25,667 | | |
| F.A.F | Excavation to 300 below finished levels | 13,163 | m2 | \$14 | | \$181,649 | | |
| F.A.G | Clean sand fill to oval | 13,163 | m3 | \$30 | | \$394,890 | | |
| F.A.H | Gypsum soil conditioner | 43,875 | m2 | \$2 | | \$74,149 | | |
| F.A.I | 15 deep C-Wise Horticulture soil conditioner | 43,875 | m2 | \$5 | | \$239,558 | | |
| F.A.J | 100 thick imported turf sand | 43,875 | sqm | \$5 | | \$216,743 | | |
| F.A.K | Organic fertilizer to turf | 43,875 | sqm | \$1 | | \$51,334 | | |
| | TOTAL Siteworks & Earthworks | | | | | | \$1,673,000 | |
| <u>F.B</u> | <u>Grassing & Irrigation</u> | | | | | | | |
| F.B.A | Supply and lay roll on turf including maintaining | 43,875 | sqm | \$20 | | \$877,500 | | |
| F.B.B | Irrigation | 43,875 | sqm | \$8 | | \$351,000 | | |
| F.B.C | Provisional sum allowance for pumps, bores and controls - no allowance for storage tank | 1 | Item | \$80,000 | | \$80,000 | | |
| | TOTAL Grassing & Irrigation | | | | | | \$1,309,000 | |
| <u>F.C</u> | <u>Landscaping & Equipment</u> | | | | | | | |
| | Equipment | | | | | | | |
| F.C.A | AFL goal posts (set of 8) including sleeves, footings, cages and post padding | 1 | no | \$7,406 | | \$7,406 | | |
| F.C.B | Timber Bollards @1200 spacing | 188 | no | \$121 | | \$22,748 | | |
| <u>F.C.C</u> | <u>Line marking to oval</u> | | | | | | | |
| F.C.C.1 | Allow 2 guys 1 day | 16 | hrs | \$100 | \$1,600 | | | |
| F.C.C.2 | Equipment | 1 | no | \$1,000 | \$1,000 | | | |
| F.C.C.3 | Profit | | | | \$260 | | | |
| | TOTAL Line marking to oval | 710 | m | \$4 | | \$2,860 | | |
| F.C.D | Provisional Sums | | | | | | | |
| | Provisional sum allowance for signage | 1 | item | \$5,000 | | \$5,000 | | |
| | TOTAL Landscaping & Equipment | | | | | | \$39,000 | |
| <u>F.D</u> | <u>Drainage</u> | | | | | | | |
| F.D.A | 150 diameter pipe including excavation and backfill | 1,300 | m | \$143 | | \$185,250 | | |
| | TOTAL Drainage | | | | | | \$186,000 | |
| <u>F.E</u> | <u>Preliminaries & Project Costs</u> | | | | | | | |
| F.E.A | Traffic Management | 0.0000 | % | \$3,207,000 | | \$0 | | |
| F.E.B | Project Overheads and Preliminaries (Indirect Construction Costs) | 10.0000 | % | \$3,207,000 | | \$320,700 | | |
| F.E.C | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$3,207,000 | | \$240,525 | | |
| F.E.D | Risk Contingency Allowance | 10.0000 | % | \$3,768,225 | | \$376,823 | | |
| | TOTAL Preliminaries & Project Costs | | | | | | \$939,000 | |
| | TOTAL District Open Space – Orton Road Oval | | Item | | | | | \$4,146,000 |



Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure - Update

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|------------|--|----------|-------------|-------------|----------|-------------------------|--------------------|--------------------|
| G | DISTRICT OPEN SPACE – ORTON ROAD WETLAND REHABILITATION | | | | | | | |
| G.A | <u>Siteworks & Earthworks</u> | | | | | | | |
| G.A.A | Site Clearance (based on light shrubs) | 69,716 | m2 | \$4 | | \$256,555 | | |
| G.A.B | Removal of topsoil 150mm and remove off-site | 69,716 | m2 | \$2 | | \$117,053 | | |
| G.A.C | Cut to Fill - General Earthworks of 300mm across site | 20,915 | m3 | \$8 | | \$171,974 | | |
| G.A.D | Levelling, grading and compaction to final design levels | 69,716 | m2 | \$3 | | \$230,063 | | |
| G.A.E | Allow for 50 deep mulch | 60,623 | m2 | \$12 | | \$727,476 | | |
| G.A.F | Allow for wetland vegetation planting | 60,623 | m2 | \$8 | | \$484,984 | | |
| | TOTAL Siteworks & Earthworks | | | | | | \$1,988,104 | |
| G.B | <u>Roadworks & Pavings</u> | | | | | | | |
| | Subgrade Preparation | | | | | | | |
| G.B.A | Preparation, trim and compact | 9,094 | m2 | \$8 | | \$75,298 | | |
| | Paving | | | | | | | |
| G.B.B | 25 thick red asphalt paving | 9,094 | m2 | \$58 | | \$522,905 | | |
| G.B.C | Sand fill below footpath (100mm) | 9,094 | m2 | \$6 | | \$51,872 | | |
| | TOTAL Roadworks & Pavings | | | | | | \$650,075 | |
| G.C | <u>Preliminaries & Project Costs</u> | | | | | | | |
| G.C.A | Traffic Management | 0.0000 | % | \$2,638,180 | | \$0 | | |
| | Project Overheads and Preliminaries (Indirect Construction Costs) | 10.0000 | % | \$2,638,180 | | \$263,818 | | |
| G.C.C | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$2,638,180 | | \$197,863 | | |
| G.C.D | Risk Contingency Allowance | 10.0000 | % | \$3,099,861 | | \$309,986 | | |
| | TOTAL Preliminaries & Project Costs | | | | | | \$771,668 | |
| | TOTAL District Open Space – Orton Road Wetland Rehabilitation | | Item | | | | | \$3,409,848 |

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional DCP

| Code | Description | Quantity | UOM | Rate | Subtotal | Sub Section Total | Section Total | Road/ DOS Total |
|------------|---|----------|-------------|-------------|----------|-------------------|--------------------|--------------------|
| G | DISTRICT OPEN SPACE – LOT 33 Hopkinson Road | | | | | | | |
| | DISTRICT SPORTING SPACE | | | | | | | |
| G.A | Siteworks & Earthworks | | | | | | | |
| G.A.A | Site Clearance (based on light shrubs) | 46,000 | m2 | \$4 | | \$169,280 | | |
| G.A.B | Removal of topsoil 150mm and remove off-site | 46,000 | m2 | \$2 | | \$77,234 | | |
| G.A.C | Cut to Fill - General Earthworks of 300mm across site | 13,800 | m3 | \$8 | | \$113,471 | | |
| G.A.D | Levelling, grading and compaction to final design levels | 46,000 | m2 | \$3 | | \$151,800 | | |
| G.A.E | Weed eradication | 46,000 | m2 | \$1 | | \$26,910 | | |
| G.A.F | Excavation to 300 below finished levels | 13,800 | m2 | \$14 | | \$190,440 | | |
| G.A.G | 300 deep clean sand fill | 13,800 | m3 | \$30 | | \$414,000 | | |
| G.A.H | Gypsum soil conditioner | 46,000 | m2 | \$2 | | \$77,740 | | |
| G.A.I | 15 deep C-Wise Horticulture soil conditioner | 46,000 | m2 | \$5 | | \$251,160 | | |
| G.A.J | 100 thick imported turf sand | 46,000 | sqm | \$5 | | \$227,240 | | |
| G.A.K | Organic fertilizer to turf | 46,000 | sqm | \$1 | | \$53,820 | | |
| | TOTAL Siteworks & Earthworks | | | | | | \$1,754,000 | |
| G.B | Grassing & Irrigation | | | | | | | |
| G.B.A | Supply and lay roll on turf including maintaining | 46,000 | sqm | \$20 | | \$920,000 | | |
| G.B.B | Irrigation | 46,000 | sqm | \$8 | | \$368,000 | | |
| G.B.C | Provisional sum allowance for pumps, bores and controls - no allowance for storage tank | 1 | Item | \$80,000 | | \$80,000 | | |
| | TOTAL Grassing & Irrigation | | | | | | \$1,368,000 | |
| G.C | Landscaping & Equipment | | | | | | | |
| | Equipment | | | | | | | |
| G.C.A | AFL goal posts (set of 8) including sleeves, footings, cages and post padding | 1 | no | \$7,406 | | \$7,406 | | |
| G.C.B | Timber Bollards @1200 spacing | 188 | no | \$121 | | \$22,748 | | |
| G.C.C | Line marking to oval | | | | | | | |
| G.C.C.1 | Allow 2 guys 1 day | 16 | hrs | \$100 | \$1,600 | | | |
| G.C.C.2 | Equipment | 1 | no | \$1,000 | \$1,000 | | | |
| G.C.C.3 | Profit | | | | \$260 | | | |
| | TOTAL Line marking to oval | 710 | m | \$4 | | \$2,860 | | |
| G.C.D | Provisional Sums | | | | | | | |
| | Provisional sum allowance for signage | 1 | item | \$5,000 | | \$5,000 | | |
| | TOTAL Landscaping & Equipment | | | | | | \$39,000 | |
| G.D | Drainage | | | | | | | |
| G.D.A | 150 diameter pipe including excavation and backfill | 1,310 | m | \$143 | | \$186,675 | | |
| | TOTAL Drainage | | | | | | \$187,000 | |
| G.E | Preliminaries & Project Costs | | | | | | | |
| G.E.A | Traffic Management | 0.0000 | % | \$3,348,000 | | \$0 | | |
| G.E.B | Project Overheads and Preliminaries (Indirect Construction Costs) | 10.0000 | % | \$3,348,000 | | \$334,800 | | |
| G.E.C | Project Owner's Cost (Planning and Design Costs) | 7.5000 | % | \$3,348,000 | | \$251,100 | | |
| G.E.D | Risk Contingency Allowance | 10.0000 | % | \$3,933,900 | | \$393,390 | | |
| | TOTAL Preliminaries & Project Costs | | | | | | \$980,000 | |
| | TOTAL District Open Space District Sporting Space | | Item | | | | | \$4,328,000 |

| DCP Roads - Imported Fill inputs | | Average fill depth required before topsoil removal (mm) | Topsoil removal (mm) | Total Sand depth reqd (mm) | Length | Width | Vol | Total m3 | Notes |
|----------------------------------|---|---|-------------------------|-------------------------------|--------|-------|------|----------|---|
| DCA1 | Orton Road New – Integrator B | 300 | 150 | 450 | 2483 | 30 | 0.45 | 33,520.5 | 300mm fill required to lift full length |
| | Indigo Parkway – Integrator B | 300 | 150 | 450 | 605 | 27.5 | 0.45 | 7,486.9 | First 375m length (Larsen to Caraway), No fill required. 605m length (Caraway Ave to Briggs Rd) - 300mm fill required for full road reserve width |
| | Doley Road – Neighbourhood Connector A | 300 | 150 | 450 | 880 | 15 | 0.45 | 5,940.0 | Existing Eastern carriageway to be upgraded, No fill required. 320m of Western Carriageway Mead St to Allanson Road, No fill Required. 880m of Eastern Carriageway (1/2 road reserve Allanson Rd to Orton Road) 300mm fill required |
| | Warrington Road – Neighbourhood Connector B | 0 | 0 | 0 | 0 | 0 | 0 | - | Road upgrade only, No fill or top soil removal required. |

This information has been internally generated by the Shire in order to calculate Fill volumes to inform the costings provided by Rawlinsons. These calculations are reflected at the bottom of each costing sheet as supplementary to the information Rawlinson's has provided.

Appendix H: Land for Infrastructure

Land for Infrastructure
10.1.4 - attachment 2

DCA: DCA1_ Byford Traditional Infrastructure DCP
Report Revision: 8

| | |
|---|----------|
| Residential Land Value (this revision): | \$60.00 |
| Non-Residential Land Value (this revision): | \$115.00 |

[illegible][illegible]

Appendix I: Land for Public Open Space & Drainage

POS Completed and Remaining

| | |
|---|----------|
| Residential Land Value (this revision): | \$60.00 |
| Non-Residential Land Value (this revision): | \$115.00 |

Ordinary Council Meeting

[illegible]

Appendix J: Water Monitoring

Shire of Serpentine Jarrahdale DCP
DCA 1 - Byford Traditional Infrastructure

Our Ref: E23/7670

| DCP7 | | | |
|--------------------------|------------------|-------------|------------------|
| Summary of Costs: | Costed by | Date | Cost |
| Water Monitoring | Urbaqua | Jun-22 | \$897,750 |
| TOTAL (excl. GST) | | | \$897,750 |

WATER MONITORING COSTS

Byford Development Contribution Plan

| Description | Hours Qty | People Qty | Salary \$/hr | Sample No. Qty | Sample runs/yr Qty | Cost Per Sample \$ | Sites Qty | Rate \$ | Cost | Contingency 25% | Annual Cost (GST Excl) | Years | Total Cost (GST Excl) |
|---|-----------|------------|--------------|----------------|--------------------|--------------------|-----------|----------|------------------|-----------------|------------------------|-------------|-----------------------|
| Sampling Program Management | | | | | | | | | | | | | |
| Preparation of the RFQ/Tender, Tender Brief, Scope and Specification | 120 | 1 | \$200 | | | | | | \$24,000 | \$6,000 | \$30,000 | 1 | \$30,000 |
| Preparation of Sample and Analysis Plan (SAP) | 20 | 1 | \$100 | | | | | | \$2,000 | \$500 | \$2,500 | 1 | \$2,500 |
| Program management (incl updates to SAP as required) | 50 | 1 | \$200 | | | | | | \$10,000 | \$2,500 | \$12,500 | 10 | \$125,000 |
| Data Management (site and program registration, data entry, validation) | 40 | 1 | \$100 | | | | | | \$4,000 | \$1,000 | \$5,000 | 10 | \$50,000 |
| Preparation / assistance with report (Annual Report) | 50 | 2 | \$100 | | | | | | \$10,000 | \$2,500 | \$12,500 | 10 | \$125,000 |
| Total - Sampling Program Management | | | | | | | | | \$50,000 | \$12,500 | \$62,500 | \$32 | \$332,500 |
| Water Analysis (12 GW & 12 SW sites) | | | | | | | | | | | | | |
| Nitrogens (TN, TKN, NH4, NOx-N (NO3+NO2)) + TP + FRP | | | | 26 | 6 | 20 | 24 | | \$3,120 | \$780 | \$3,900 | 10 | \$39,000 |
| Dissolved Organic Nitrogen, DON | | | | 26 | 6 | 50 | 24 | | \$7,800 | \$1,950 | \$9,750 | 10 | \$97,500 |
| Total Dissolved Solids, TDS | | | | 14 | 6 | 25 | 12 | | \$2,100 | \$525 | \$2,625 | 10 | \$26,250 |
| Metals Set-up (Filtered) | | | | 26 | 1 | 12 | 24 | | \$312 | \$78 | \$390 | 10 | \$3,900 |
| Heavy Metals (Al, As, Cd, Cr, Cu, Fe, Pb, Ni, Zn & Hg) | | | | 26 | 1 | 70 | 24 | | \$1,820 | \$455 | \$2,275 | 10 | \$22,750 |
| Total Recoverable Hydrocarbons (TRH) | | | | 26 | 1 | 40 | 24 | | \$1,040 | \$260 | \$1,300 | 10 | \$13,000 |
| Polycyclic Aromatic Hydrocarbons and BTEX | | | | 26 | 1 | 90 | 24 | | \$2,340 | \$585 | \$2,925 | 10 | \$29,250 |
| Total - Water Analysis | | | | | | | | | \$18,532 | \$4,633 | \$23,165 | | \$231,650 |
| Sediment Analysis (10 sites) | | | | | | | | | | | | | |
| Total Recoverable Hydrocarbons (TRH) & BTEX | | | | 12 | 1 | 40 | 10 | | \$480 | \$120 | \$600 | 10 | \$6,000 |
| Polycyclic Aromatic Hydrocarbons (PAH) | | | | 12 | 1 | 90 | 10 | | \$1,080 | \$270 | \$1,350 | 10 | \$13,500 |
| Metals Set-up | | | | 12 | 1 | 14 | 10 | | \$168 | \$42 | \$210 | 10 | \$2,100 |
| Heavy Metals (Al, As, Cd, Cr, Cu, Fe, Pb, Ni, Zn & Hg) | | | | 12 | 1 | 70 | 10 | | \$840 | \$210 | \$1,050 | 10 | \$10,500 |
| Moisture (no charge with metals) | | | | 12 | 1 | 0 | 10 | | \$0 | \$0 | \$0 | 10 | \$0 |
| Total - Sediment Analysis | | | | | | | | | \$2,568 | \$642 | \$3,210 | | \$32,100 |
| Analysis - Other | | | | | | | | | | | | | |
| Troll 9500 Profiler XP (in-situ analysis) | | | | | | | | \$20,000 | \$20,000 | \$5,000 | \$25,000 | 1 | \$25,000 |
| Consumables (incl. nitrile Gloves) | | | | | 6 | | | \$100 | \$600 | \$150 | \$750 | 10 | \$7,500 |
| Equipment hire (pumps etc) | | | | | 6 | | | \$300 | \$1,800 | \$450 | \$2,250 | 10 | \$22,500 |
| Courier fees | | | | | 6 | | | \$40 | \$240 | \$60 | \$300 | 10 | \$3,000 |
| Total - Analysis - Other | | | | | | | | | \$22,640 | \$5,660 | \$28,300 | | \$58,000 |
| Superficial Groundwater Monitoring (12 sites) | | | | | | | | | | | | | |
| Installation of monitoring wells for superficial aquifer monitoring (average 3m depth, includes survey & development) | | | | | | | 12 | \$4,000 | \$48,000 | \$12,000 | \$60,000 | 1 | \$60,000 |
| Monitor local superficial aquifer groundwater levels (Monthly) - Labour incl travel between sites | 0.25 | 1 | 200 | | 12 | | 12 | | \$7,200 | \$1,800 | \$9,000 | 1 | \$9,000 |
| Monitor local superficial aquifer groundwater quality (Quarterly) - Labour incl travel between sites | 0.25 | 1 | 200 | | 4 | | 12 | | \$2,400 | \$600 | \$3,000 | 10 | \$30,000 |
| Monitor local superficial aquifer groundwater levels (Quarterly) - Labour incl travel between sites | 0.25 | 1 | 200 | | 4 | | 12 | | \$2,400 | \$600 | \$3,000 | 9 | \$27,000 |
| Total - Superficial Groundwater Monitoring | | | | | | | | | \$60,000 | \$15,000 | \$75,000 | | \$126,000 |
| Surface Water Monitoring | | | | | | | | | | | | | |
| Purchase & installation of surface water level loggers - 10 sites | | | | | | | 10 | \$5,000 | \$50,000 | \$12,500 | \$62,500 | 1 | \$62,500 |
| Monitor flows in Multiple Use Corridors - labour - 10 sites | 0.25 | 1 | 200 | | 4 | | 10 | | \$2,000 | \$500 | \$2,500 | 10 | \$25,000 |
| Monitor quality in Multiple Use Corridors - labour - 12 sites | 0.25 | 1 | 200 | | 4 | | 12 | | \$2,400 | \$600 | \$3,000 | 10 | \$30,000 |
| Total - Surface Water Level Monitoring | | | | | | | | | \$54,400 | \$13,600 | \$68,000 | | \$117,500 |
| Total - Water Quality Management | | | | | | | | | \$208,140 | \$52,035 | \$260,175 | | \$897,750 |

| | | | |
|--------------------|-----------|---|------------------|
| Year 0 setup costs | \$189,000 | 1 | \$189,000 |
| Year 1 - 9 costs | \$71,175 | 9 | \$640,575 |
| Year 10 costs | \$68,175 | 1 | \$68,175 |
| | | | \$897,750 |

Appendix K: Cost Review Reconciliation

Cost Review Reconciliation

DCA: **DCA1_**
Report Revision: **8**

This data reflects up to the end of the previous revision, does not include data from current revision or lots carried over (cleared under a pending Amendment) - see Appendix K for more details on lots carried over

| | |
|---|-----------------------|
| Lots Cleared | 6,360 |
| Gross Contributions | \$79,182,037 |
| Land for Roads/DOS settled | (\$8,323,882) |
| Land for POS settled | (\$41,531,004) |
| Works settled | (\$24,493,158) |
| Administration Costs incurred | (\$2,262,696) |
| Total Costs | (\$76,610,741) |
| Net Contribution Surplus/Deficit for Review Period | \$2,571,296 |

The DCP is intended to be "break-even" at its ultimate closure, i.e. the net contribution at the end of the DCP life should be zero (monies collected equal monies expended). In order to support this end target of zero, the Surplus or Defecit present at the end of each revision, is used to adjust the contribution values in the next revision.

For example, a Surplus at the end of a revision would result in a "credit" (or cost reduction) in the next DCP Report revision - thus reducing the contribution value. Likewise a defecit would result in a cost increase (cost addition) to the next DCP Report, for the equivalent value - thus increasing the contribution value.

This can be seen in the Cost Apportionment Schedule, referenced as "Reconciliation".

The Net Contribution for this revision represents a SURPLUS in the DCP

This means that the Contributions collected for the DCP so far, have exceeded the monies spent (at the closure of the last DCP Revision).

This surplus value is included in the Cost Apportionment Schedule as a CREDIT to the costs of the DCP (i.e. a cost reduction) in the "Reconciliation" line, in order to bring the balance back towards zero.

Appendix L: Lots Completed & Remaining

Byford Traditional Infrastructure DCP

Ordinary Council Meeting

Appendix M: Land Valuation

Executive Summary

| | | | | | | | |
|-----------------------------|--|-----------------------------|---|-------------|----------------------------|---|-------------|
| Property Address: | Byford Traditional Infrastructure DCP – Development Contribution Area 1 (DCA1) | | | | | | |
| General Description: | <p>The subject of our valuation comprises notional englobo landholdings zoned as follows:</p> <p>1) “Residential R20”</p> <p>2) “Mixed Use / R60”</p> <p>Both scenarios assume the land comprises a 5.0ha parcel that requires servicing but is within close proximity to services so there are no major servicing constraints and no major geotechnical / environmental issues.</p> | | | | | | |
| Purpose of Valuation: | Annual Scheme Contribution purposes. | | | | | | |
| Valuation: | <table><tr><td>“Residential R20” Land Rate</td><td>-</td><td>\$ 60.00/m²</td></tr><tr><td>“Mixed Use / R60 Land Rate</td><td>-</td><td>\$115.00/m²</td></tr></table> <p>The above values assume the land comprises a 5ha parcel that requires servicing but is within close proximity to services so there are no major servicing constraints and no major geotechnical/environmental issues.</p> <p>The above values are stated inclusive of GST and take into consideration a discount of 2.5% including GST, being an allowance for selling costs (sales commission, marketing and legal costs).</p> <p>Our valuation has assumed that there is no significant change in market conditions between the date of inspection and the date of valuation.</p> | “Residential R20” Land Rate | - | \$ 60.00/m² | “Mixed Use / R60 Land Rate | - | \$115.00/m² |
| “Residential R20” Land Rate | - | \$ 60.00/m² | | | | | |
| “Mixed Use / R60 Land Rate | - | \$115.00/m² | | | | | |
| Date of Inspection: | 25 November 2022. | | | | | | |
| Date of Valuation: | 1 February 2023. | | | | | | |
| Senior Valuer: | <p>David Molony AAPI, B.Com (Property & Finance) Certified Practising Valuer Licensed Valuer No. 44387 Western Australia</p> | | | | | | |

This Executive Summary is a brief synopsis of the property and our assessment of market value.

It is designed to provide a brief overview and must not be read in isolation, separate from our formal valuation report.

Definition of “Market Value”:

The International Valuation Standards Council (and as adopted by the Australian Property Institute) defines Market Value in the *International Valuation Standards 2022* as:

“The estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm’s length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.”

Assumptions, Conditions and Limitations:

- The market is being impacted by the uncertainty caused by the COVID-19 pandemic. As at the date of valuation we consider that there is market uncertainty resulting in significant valuation uncertainty.

This valuation is therefore reported on the basis of 'significant valuation uncertainty'. As a result, less certainty exists than normal and a higher degree of caution should be attached to our valuation than normally would be the case. Given the unknown future impact that COVID-19 might have on markets, we recommend that the user(s) of this report review this valuation periodically.

This valuation is current at the date of valuation only. The value assessed herein may change significantly and unexpectedly over a relatively short period of time (including as a result of factors that the valuer could not reasonably have been aware of as at the date of valuation). We do not accept responsibility or liability for any losses arising from such subsequent changes in value.

- The planning and cadastral details obtained from the Department of Planning, Lands & Heritage, Main Roads Western Australia, Landgate and Local Authority websites are current and correct.
- Adjoining land owners or community groups do not impede or restrain development as foreseen.
- We are not aware of any Notices currently issued against the property and we have made no enquiries in this regard.
- Our valuation assumes there is no asbestos contamination.

We must point out however, that we are not experts in the detection or quantification of asbestos problems and accordingly, have not carried out a detailed investigation. Therefore, this valuation is made on the assumption that there are no actual or potential asbestos contamination issues affecting the subject property.

Should a subsequent investigation undertaken by a suitably qualified expert show that the site is contaminated, we reserve the right to amend our valuation accordingly.

- The value and utility of land can be adversely affected by the presence of Aboriginal sacred sites and/or sites of Aboriginal heritage significance. We have made no investigations in this regard, as Aboriginal requirements can only be determined by the appointment of an appropriate expert.

Under these circumstances, we cannot warrant that there are no such sites on the land and if it is subsequently determined that the reality is so affected, we reserve the right to review this valuation.

- The land is assumed to comprise topsoils which are relatively free draining, however as no geotechnical investigations have been either undertaken or commissioned, we are unable to report on the underlying nature of the site.
- This market valuation assumes there is no environmental contamination of the property.
- This market valuation assumes there is no encroachment of adjoining buildings onto the subject property.
- This market valuation assumes an unencumbered fee simple title to the property.
- If there are any encumbrances, encroachments, restrictions, leases or covenants which are not noted in this report, they may affect the assessment of market value. If any such matters are known or discovered, we should be advised and asked as to whether they affect our assessment of market value.
- We have assumed that all information supplied in conducting this market valuation consists of a full and accurate disclosure of all information that is relevant.
- It is assumed that no significant event occurs between the date of inspection and the date of valuation that would impact on the market value of the subject property.

- We have not obtained a Property Interest Report in providing our advice. A property-specific report will provide detailed information of property interests not listed on the Certificate of Title that may affect the use and enjoyment of the land.

A report can be obtained from Landgate for a charge of \$54.95 (incl. GST). If a subsequent Property Interest Report reveals any aspects of the property that may impact on its value, we reserve the right to review our market valuation.

If there is any variance/contradiction in any of the above assumptions, then we reserve the right to review this market valuation accordingly.

16.0 VALUATION CONCLUSIONS

In considering suitable lands rate for the subject hypothetical parcels, we are of the opinion the following factors require due regard in this instance.

- The properties comprises notional parent parcels of 5.00ha.
- It is assumed the land requires servicing but is within close proximity to services so there are no major servicing constraints.
- It is assumed there are no major geotechnical/environmental issues.
- The DCP Area is rapidly emerging and whilst peripheral, benefits from established arterial road linkages.
- The first scenario assumes a relatively low notional density coding of "Residential R20".
- The second scenario assumes a broader scope for development as "Mixed Use / R60".
- Whilst finished lot values have generally appreciated in recent years, civil development costs have escalated rapidly which is having an associated negative impact on project feasibility.

Value per m² for Standard Residential/Non-Standard Residential:

Based on our analysis we have adopted a rate of **\$60.00/m²** including GST. This takes into consideration the 2.5% discount applicable for selling costs (sales commission, marketing and legal costs).

The above rate is current as at 1 February 2023.

Our valuation has assumed that there is no significant change in market conditions between the date of inspection and the date of valuation

Value per m² for Non-Residential:

Based on our analysis we have adopted a rate of **\$115.00/m²** including GST. This takes into consideration the 2.5% discount applicable for selling costs (sales commission, marketing and legal costs).

The above rate is current as at 1 February 2023.

Our valuation has assumed that there is no significant change in market conditions between the date of inspection and the date of valuation

Land Value Escalation Rate:

Based on current market conditions, we believe an indicative growth rate of **2.5%** is reasonable for the next 12 months.



David Molony AAPI, B. Com (Property & Finance)
 Certified Practising Valuer
 Licensed Valuer No. 44387
 Western Australia

Appendix N: Infrastructure Delivery Status Report

Infrastructure Construction - Estimated and Completed

DCA: DCA1_ Byford Traditional Infrastructure DCP
Report Revision: 8

[illegible]