

Shire of Serpentine Jarrahdale

Oakford Fire Station 4 Bay Option, Pony Place

Cost Plan Business Cass

March 2022

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PARTNERSHIP**

**Quantity Surveyors
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Definitions

Preliminaries

The following definitions have been extracted from the Australian Institute of Quantity Surveyors (AIQS) Australian Cost Management Manual, Volume 2

- Management cost and margins
- Site Staff
- Living away from home allowances
- Labouring
- Surveying during construction
- Hoardings, fences & barriers
- Site accommodation
- Temporary roads
- Security & communication
- Plant & equipment, cranes, elevated work platform
- Scaffolding
- Safety precautions
- Insurance & bank guarantees
- Sundry operation cost (Systems management & accreditation)
- Overhead recoverable (business running costs)
- Cleaning & rubbish removal.

Siteworks and External Services

The following definitions have been extracted from the Australian Institute of Quantity Surveyors (AIQS) Australian Cost Management Manual, Volume 2

Siteworks

Siteworks cover the following elements

- **Site Preparation**
site clearance, general levelling and filling, retaining walls, removal of any paving, fences, trees and services
- **Roads Footpaths and Paved Areas**
car parks, footpaths, playgrounds, kerbs, crossovers, bollards, steps and associated balustrading
- **Boundary Walls, Fencing and Gates**
all walls, fencing and gates
- **Outbuildings and Covered Ways**
detached covered ways, garages, sheds
- **Landscaping and Improvements**
grassing and turfing, screen walls, seats, fountains, sculptures, flag poles, signs and notices, cricket nets, basketball posts, sporting pitches and goal posts

Definitions

External Services

External Services covers the following elements

- **External Stormwater Drainage** *To dispose of rain and surface water from site*
 pipe runs from external face of buildings, inspection pits, sumps, road gullies, outfalls and headwalls, sub-soil drains
- **External Sewer Drainage** *To dispose of soil and waste water from site*
 pipe runs from external face of buildings, inspection pits and manholes, acid resisting and special drains, grease gullies, dilution pits, petrol and plaster arrestors, septic tanks, pumps and ejectors, connection to Ministers Sewer
- **External Water Supply** *To supply water up to the external face of building*
 reticulation pipework, storage tanks and pumps, meters, water bores, irrigation and ground watering, connection to External Water Main
- **External Gas** *To supply gas to external face of buildings*
 storage cylinders and tanks, meters and regulators, reticulation pipework, connection to External Gas Mains
- **External Fire Protection** *To supply fire hydrants and gas or vaporising agent runs to external face of buildings*
 pipework, standby booster pumps, storage of gas and vaporising agents, hydrants, connection to External Water Main
- **External Electric Light and Power** *To supply electric power to main distribution boards of buildings and to provide lighting and power to external site areas*
 connection to source of power supply, consumer mains, sub-station equipment, emergency generating plant, main switchboard, underground and overhead cabling, pylons and all trenching for cables, car parking and area lighting, illumination signs and building flood lighting
- **External Communications** *To provide external communication cabling to terminating frames of new buildings and to provide communications systems between buildings and to external site areas*
 voice / data Provider work, underground and overhead cabling, pylons and all trenching for cables, connection to existing cables, external speakers, data outlets, clocks, bells, hooters, closed circuit T.V., community antenna systems, communication towers

Definitions

Other Project Costs

The following has been extracted from the Strategic Asset Management Framework (SAMF) for Westralian Public Sector Agencies, published by the then Department of Treasury and Finance, August 2005

- **Contingencies**

- **Construction Contingency**

- This allowance is specifically allocated to funding contingent items that arise during the construction period. At this stage of cost planning, industry standards indicate this amount should be approximately 5% of the Net Project Cost

- **Design Contingency**

- This allowance should be risk-based, and is specifically allocated to addressing oversights in the preparation of the project brief. The extent of a client contingency is determined by assessing the likelihood that all stakeholders understand, and have confirmed, that the project brief (as outlined within either the Business Case or Project Definition Plan) fully addresses the desired project outcomes. Typically, this amount would be 5% of the Net Project Cost.

- **Headworks**

- These are costs imposed by regulatory providers such as Western Power, Water Corporation and Telstra to cover the connection of the project site to the service delivery networks of these utilities. These costs can only be estimated at planning stages of a project via liaison with each utility provider, or by making an appropriate provision.
Headworks, 2.0%, average from historical projects.

- **Percent for Art**

- This is a Government policy that requires up to 1 % of the total cost of the project to be allocated for the inclusion of public art in projects over \$2 million.

- **Professional Fees**

- This budgeted item is applicable to all projects, and shall include all consultancy services that are directly attributable to the capital project throughout all phases of procurement. These might include architects, engineers, quantity surveyors, project managers, planners.
Professional fees are to include provisions for travel disbursements, as applicable.

PROJECT CAPITAL COST PLAN

A. Fill in each of the boxes or write "n/a" if the element is not applicable

B. Elemental Costs include relevant contingencies, locality costs, market conditions and escalation during construction

C. All Elemental Costs are **exclusive** of GST

Cost Plan Version No.	1	Cost Plan Base Date	22-Mar-22	
Cost Plan issued on	25-Mar-22	Building Cost Index	207.30	
PROJECT FIRE STATION, BUSH - 4 BAYS				
Location PONY PLACE, OAKFORD				
BUILDINGS				
	Areas	GFA Rate	Elemental Cost	
APPLIANCE - 4 BAYS, TRAINING AND MEETINGS	900	\$ 1,944	\$ 1,750,000	
	-		\$ -	
	-		\$ -	
	-		\$ -	
	-		\$ -	
	-		\$ -	
	-		\$ -	
	-		\$ -	
Total GFA and Building Cost	900	\$ 1,944	\$ 1,750,000	
		Site Works	\$180,000	
		Site Services	\$240,000	
		Sub-Division Works and Services		
		Other Costs (incl Preliminaries)	\$80,000	
		External Works and Services Subtotal	\$500,000	
TOTAL CONSTRUCTION COST - PERTH PRICES SUBTOTAL			\$ 2,250,000	
REGIONAL LOADING % (% figure acceptable Evaluation Phase only)				
TOTAL CONSTRUCTION COST			\$ 2,250,000	
		Land Acquisition & Native Title Compensation (if required)	\$ -	
		Planning Contingency	\$ -	
		Design Contingency	\$ 50,000	
		Construction Contingency	\$ 110,000	
		Headworks and Statutory Charges	\$ 60,000	
		Building Act Compliance	\$ 5,000	
		Percent for Public Art	\$ -	
		Loose Furniture and Equipment	\$ -	
		Other - Shire Managed Costs	\$ -	
		Professional Fees	\$ 200,000	
		Subtotal	\$ 425,000	
TOTAL NET PROJECT COST (At Current Prices)			\$ 2,675,000	
	Expected Tender Date	Escalation Rate (%) per annum		
Escalation Allowance	Sep-22	5.16%	\$ 145,000	
		Shire Management Fee	\$ -	
		Client Agency Special Provisions	\$ 280,000	
ESTIMATED GROSS PROJECT (COMMITMENT) TOTAL COST			\$ 3,100,000	
		Goods and Services Tax	\$ 282,000	
ESTIMATED GROSS PROJECT (COMMITMENT) TOTAL COST CASHFLOW (excl. GST)				
Year 1	Year 2	Year 3	Year 4	Carryover
2021 / 22	2022 / 23	2023 / 24	2024 / 25	20__ / __
\$20,000	\$2,930,000	\$150,000		

Is there an asset disposal associated with this project?

No

Yes

PROJECT COST PLAN SUMMARY

A. Fill in each of the boxes or write "n/a" if the element is not applicable

B. Elemental Costs including relevant contingencies, locality costs*, market conditions and escalation during construction

C. All Elemental Costs are **exclusive** of GST

Prepared by	John Stranger	Cost Plan Base Date	22-Mar-22
Project Manager	David Richer	Building Cost Index	207.3
Client Agency	Serpentine Jarradale Shire		
Project Phase / Type	Business Case	Cost Plan Version No.	1
Project Risk Level		Cost Plan issued on	25-Mar-22

PROJECT TITLE FIRE STATION, BUSH - 4 BAYS

Location PONY PLACE, OAKFORD

BUILDINGS

(From Single Building Cost Plans)

	GFA	GFA Rate	Elemental Cost
1 APPLIANCE - 4 BAYS, TRAINING AND MEETINGS	900	\$ 1,940	\$ 1,750,000
2			
3			
4			
5			
6			
7			
Total GFA and Building Cost	900	\$ 1,940	\$ 1,750,000

Code	AIQS Element	Elemental Quantity	Elemental Rate	GFA Rate	Elemental Cost
CE	Centralised Energy Systems			Insert N/A	
AR	Alterations and Renovations			Insert N/A	
XP	Site Preparation No Fill allowed	1,800	\$39	\$78	\$70,000
XR	Roads, Footpaths and Paved Areas - <i>Compacted Roadbase, No Kerbing & Signage</i>	1,650	\$33	\$61	\$55,000
XN	Boundary Walls, Fencing and Gates - <i>Rural Style</i>	400	\$75	\$33	\$30,000
XB	Outbuildings and Covered Ways			\$28	\$25,000
XL	Landscaping and Improvements - <i>By Others</i>			Insert N/A	
External Works Subtotal (CE to XL)				\$200	\$180,000
XK	External Stormwater Drainage (Sumps)			\$56	\$50,000
XD	External Sewer Drainage (ATU Disposal System)			\$56	\$50,000
XW	External Water Supply			\$17	\$15,000
XG	External Gas			Insert N/A	
XF	External Fire Protection (Hydrant Only)			\$28	\$25,000
XE	External Electric Light and Power			\$83	\$75,000
XC	External Communications			\$28	\$25,000
XS	External Special Services (Security Cameras)			Insert N/A	
External Services Subtotal (XK to XS)				\$267	\$240,000
XR	Roads, Footpaths and Paved Areas			Insert N/A	
XK	External Stormwater Drainage			Insert N/A	
XD	External Sewer Drainage			Insert N/A	
XW	External Water Supply			Insert N/A	
XG	External Gas			Insert N/A	
XE	External Electric Light and Power			Insert N/A	
XC	External Communications			Insert N/A	
Sub-Division Works and Services Subtotal (XR to XC)				Insert N/A	
XX	External Alterations and Renovations			Insert N/A	
PR	Proportion of Preliminaries			\$89	\$80,000
TOTAL CONSTRUCTION COST - PERTH PRICES SUBTOTAL				\$2,500	\$ 2,250,000
TOTAL CONSTRUCTION COST				\$2,500	\$ 2,250,000

PROJECT COST PLAN SUMMARY

A. Fill in each of the boxes or write "n/a" if the element is not applicable

B. Elemental Costs including relevant contingencies, locality costs*, market conditions and escalation during construction

C. All Elemental Costs are **exclusive** of GST

Prepared by	John Stranger	Cost Plan Base Date	22-Mar-22
Project Manager	David Richer	Building Cost Index	207.3
Client Agency	Serpentine Jarradale Shire		
Project Phase / Type	Business Case	Cost Plan Version No.	1
Project Risk Level		Cost Plan issued on	25-Mar-22

PROJECT TITLE FIRE STATION, BUSH - 4 BAYS

Location PONY PLACE, OAKFORD

BUILDINGS

(From Single Building Cost Plans)

		GFA	GFA Rate	Elemental Cost
1	APPLIANCE - 4 BAYS, TRAINING AND MEETINGS	900	\$ 1,940	\$ 1,750,000
2				
3				
4				
5				
6				
7				
Total GFA and Building Cost		900	\$ 1,940	\$ 1,750,000

Code	AIQS Element	Elemental Quantity	Elemental Rate	GFA Rate	Elemental Cost
Shire Managed Costs (Construction)					
YY	Planning Contingency				
YY	Design Contingency			2.00%	\$50,000
YY	Construction Contingency			5.00%	\$110,000
YY	Headworks and Statutory Charges			Item	\$60,000
YY	Building Act Compliance			0.28%	\$5,000
YY	Percent for Public Art				
LC	Land Acquisition & Native Title Compensation (if applicable & Shire Managed)			Item	
FE	Loose Furniture and Equipment (Shire Managed)				
YYSP	Other Costs - Special Provisions (Shire Managed)			Item	
YYSP	Commissioning, Relocation Costs and Disbursements (Shire Managed)			Item	
YYSP	Computing Equipment and Services (Shire Managed)				
PF	Professional Fees - Perth Prices			8.00%	\$200,000
PF	Professional Fees - Disbursements			12.00%	
TOTAL NET PROJECT COST (at Current Prices)					\$ 2,675,000
ET	Escalation to Tender		Tender Date	Sep-22	\$145,000
			BCI	218.0	
ESCALATED NET PROJECT COST					\$ 2,820,000
BMW	Shire Management Fees				
ESTIMATED BMW PROJECT TOTAL COST					\$ 2,820,000
Client Agency Managed Costs					
YYSP	Special Client Agency Provisions			Item	
YYSP	Client Agency Project Director / Professional Fees				
YYSP	Client Agency Administration Fees			10.00%	\$280,000
YYSP	Client Agency Commissioning, Relocation and Disbursements				
YYSP	Client Agency Land Costs & Native Title Comp. (if applicable & Agency Managed)			Item	
YYSP	Client Agency Loose Furniture and Equipment				
YYSP	Client Agency Computing Equipment and Services				
YYSP	Other Special Client Agency Provisions (Agency Consultant Disbursements)			Item	
YYSP	Total Client Agency Managed Costs				\$ 280,000
ESTIMATED GROSS PROJECT (COMMITMENT) TOTAL COST					\$ 3,100,000
GOODS and SERVICES TAX					\$ 282,000

SINGLE BUILDING COST PLAN

Prepared by	John Stranger
BMW Project Manager	David Richer
Client Agency	Serpentine Jarradale Shire
Project Phase / Type	Business Case
Building Risk Level	

Cost Plan Base Date	22-Mar-22
Building Cost Index	207.30
Cost Plan Version No.	1
Cost Plan issued on	25-Mar-22

Building	APPLIANCE - 4 BAYS, TRAINING AND MEETINGS		
Number of Storeys	ONE	Fully Enclosed Covered Area	770
Location	PONY PLACE, OAKFORD	Unenclosed Covered Area	130
Functional Unit		Gross Floor Area (GFA)	900
Function Quantity		Usable Floor Area	

Code	AIQS Element	Elemental Quantity	Elemental Rate	GFA Rate	Elemental Cost
SB	Substructure	1,120	\$152	\$189	\$170,000
CL	Columns	960	\$31	\$33	\$30,000
UF	Upper Floors		Insert N/A	Insert N/A	
SC	Staircases		Insert N/A	Insert N/A	
RF	Roof	960	\$281	\$300	\$270,000
EW	External Walls	415	\$325	\$150	\$135,000
WW	Windows	20	\$750	\$17	\$15,000
WWSP	Sun Protection		Insert N/A	Insert N/A	
ED	External Doors	190	\$789	\$167	\$150,000
NW	Internal Walls	360	\$208	\$83	\$75,000
NS	Internal Screens and Borrowed Lights	10	\$500	\$6	\$5,000
ND	Internal Doors	75	\$600	\$50	\$45,000
	Superstructure Subtotal (CL to ND)			\$806	\$725,000
WF	Wall Finishes	1,135	\$44	\$56	\$50,000
FF	Floor Finishes (excls Appliance Bays)	370	\$122	\$50	\$45,000
CF	Ceiling Finishes	460	\$109	\$56	\$50,000
		595	(WF to CF)	\$161	\$145,000
FT	Fitments (excls Lockers)	460	\$76	\$39	\$35,000
SE	Special Equipment (White Goods)			\$22	\$20,000
	Fittings Subtotal (FT & SE)			\$61	\$55,000
SF	Sanitary Fixtures			Insert N/A	
PD	Sanitary Plumbing	22	\$3,636	\$89	\$80,000
WS	Water Supply			Insert N/A	
GS	Gas Service		Insert N/A	Insert N/A	
SH	Space Heating		Insert N/A	Insert N/A	
VE	Ventilation	130	\$423	\$61	\$55,000
EC	Evaporative Cooling		Insert N/A	Insert N/A	
AC	Air Conditioning	185	\$270	\$56	\$50,000
FP	Fire Protection	770	\$32	\$28	\$25,000
LP	Light and Power	900	\$167	\$167	\$150,000
CM	Communications	770	\$52	\$44	\$40,000
TS	Transportation Systems			Insert N/A	
SS	Special Services (Security System)			\$33	\$30,000
SSRP	Cool Room - By Others			Insert N/A	
	Services Subtotal (SF to SS)			\$478	\$430,000
PR	Proportion of Preliminaries			\$250	\$225,000
	BUILDING COST TOTAL			\$1,944	\$1,750,000