

## **APPENDIX 28**

Cost estimates for Glen Osmond Creek minor upgrade works

# COST ADVICE

## GLEN OSMOND CREEK

### Torrens Ave and Fern Ave - Bridge Upgrade

**CLIENT:** CITY OF UNLEY

Date Prepared	9 Feb 2016
Revision Status	Rev 1
Issued to:	Michael Salkeld

The following cost advice is provided for the proposed culvert upgrades at Torrens Avenue and Fern Avenue along Glen Osmond Creek (Fullarton).

The estimate is based on the information provided by the City of Unley, in particular the document: 20151219 Brown Hill, Keswick & GO Creeks Culvert/Bridge Details - Mitigation Option.

### **Torrens Avenue Culvert Crossing No. 65:**

Chainage	2562
USIL (m)	59.00
DSIL (m)	58.75
Length (m)	12.00
Existing Structure	Box Culvert: 1 x 1.8(w) x 1.3(h)
Proposed Structure	Box Culvert: 1 x 2.5(w) x 1.35(h)
Comment	Culvert Upgrade
Approximate Road RL	61.00

### **Estimate Summary**

Design	\$2,082
Client Project Management Costs	\$4,164
Existing service relocations	\$20,000
Tree protection/ trimming and removals	\$2,082
<b>Total Client Costs</b>	<b>\$28,329</b>
Overheads	\$16,658
Construction works	\$66,631
<b>Total Construction Costs</b>	<b>\$83,289</b>
Contingency	\$39,066
<b>Estimate Total</b>	<b>\$150,684</b>

### **Scope:**

An allowance has been made for:

- Closing of the road to all traffic during the construction. Local access to driveways will be maintained where possible.
- Identification and protection of in-ground and overhead services.
- Removal and storage of the existing pavers.
- Excavation and removal of the existing culvert structure.

- Supply, installation and backfilling of the new culvert structure including headwall works to tie into the existing upstream and downstream channel.
- Reinstatement of the road. Assumed asphalt thickness of 50mm.
- Reinstatement of the existing footpaths including relaying the existing pavers.
- Removal and replacement of the kerbing, driveway cross overs and fence plinth.
- Removal and reinstatement of the existing fence.
- Reinstatement of line marking to match existing.



Photo 1: View of Eastern Side of the Torrens Avenue Culvert



Photo 2: View of Western Side of the Torrens Avenue Culvert



Photo 3: View of Torrens Ave Culvert Crossing



Photo 4: Aerial View of the Torrens Avenue Culvert Crossing Location

**Fern Avenue Culvert Crossing No. 66:**

Chainage	2675
USIL (m)	57.50
DSIL (m)	57.20
Length (m)	6.00 Does not Appear Correct.
	Costs based on 12 M road crossing including footpaths
Existing Structure	Box Culvert: 1 x 2.4(w) x 0.9(h)
Proposed Structure	Box Culvert: 1 x 2.5(w) x 1.5(h)
Comment	Culvert Upgrade
Approximate Road RL	59.00

**Estimate Summary**
**Client Costs**

Design	\$2,309
Client Project Management Costs	\$4,618
Existing service relocations	\$20,000
Tree protection/ trimming and removals	\$2,309
<b>Total Client Costs</b>	<b>\$29,237</b>

**Construction Costs**

Overheads	\$18,474
Construction works	\$73,895
<b>Total Construction Costs</b>	<b>\$92,369</b>

Contingency	\$42,562
<b>Estimate Total</b>	<b>\$164,168</b>

**Scope:**

An allowance has been made for:

- Closing of the road to all traffic during the construction. Local access to driveways will be maintained where possible.
- Working around the Tree and the overhead power.
- Identification and protection of in-ground services.
- Removal and storage of the existing pavers.
- Excavation and removal of the existing culvert structure.
- Supply, installation and backfilling of the new culvert structure including headwall works to tie into the existing upstream and downstream channel.

- Reinstatement of the road. Assumed asphalt thickness of 50mm.
- Reinstatement of the existing footpaths including relaying of the existing pavers.
- Removal and replacement of the kerbing, driveway cross overs and fence plinth.
- Removal and reinstatement of the existing fence.
- Reinstatement of line marking to match existing.

**Exclusions and Limitation:**

- Refer photo 3: The culvert appears to extend underground from the Eastern side of Fern Street. The scope of this estimate is limited to the road crossing.
- In the brief the length of the culvert is listed as 6m. However the estimate has allowed for a full road width replacement.

**Photos:**

Photo 1: View of Eastern Side of the Fern Avenue Culvert





Photo 2: View of the Fern Avenue Culvert Crossing



Photo 3: Aerial View of the Fern Avenue Culvert Crossing Location

Note: the culvert appears to be underground through the gardens on the Western side of the road.