



A428 Western Corridor Guided Bus Route Option 1

for

Cambridgeshire County Council

Masterplanning Stage Cost Study - Highways

June 2017



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Document Status



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0	29.06.2017	First issue	I. Chui	J. Leeding	P. Ashworth

**A428 Western Corridor
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Main Summary**



Option 1	Section i	£5,105,000
	Section ii	£7,301,000
	Total	£12,406,000

All prices are as at 2010 and exclusive of VAT.

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Assumptions and Exclusions**



1.00 Exclusions

- 1.01 Works arising from asbestos surveys or analyses.
- 1.02 Works arising from the identification of hazardous materials.
- 1.03 Abnormal ground conditions over and above risk allowance.
- 1.04 Client direct order works.
- 1.05 Requirements imposed by Planning Authority or Fire Officer.
- 1.06 Landfill tax higher level for active waste.
- 1.07 Agency costs, legal fees and finance charges.
- 1.08 Development taxes, levies or other "planning gain" items.
- 1.09 Section 106 /278 agreements and costs.
- 1.10 VAT.
- 1.11 Statutory fees.
- 1.12 Land acquisition and associated costs (CPO), provided separately.
- 1.13 Noise barriers.
- 1.14 Piled foundations other than as covered by the risk allowance.
- 1.15 Professional fees and surveys - 12% to be added to TUBA spreadsheet.

2.00 Assumptions

- 2.01 Ground conditions are generally good with no soft spots.
- 2.02 "Shallow foundations" for the entire length of the guideway i.e. no piling.
- 2.03 Stabilisation of soils not required over and above risk allowance.
- 2.04 No major ecological impacts i.e. badgers, owls, newts, etc. over and above risk allowance.

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Schedule of Information**



The Estimate has been prepared by reference to the following information:-

A428-ATK-HML-1A_1-M2-D-0001

Risk

For the purposes of this Masterplanning Stage Cost Study, Faithful+Gould have considered the risk profile for the construction element of the A428 Western Corridor Study. We have taken into account other comparable schemes such as the extension to the Cambridge Guided Busway at Chesterton and the A13 Diversionary Works at Barking, as well as producing a Quantitative Risk Assessment specifically for this project.

The allowance for risk at Masterplanning Stage is set at 30% and whilst no specific allowance has been included for Government Optimism Bias, we consider this to be a 'standard civil engineering project', that is to say, not requiring any special design considerations.

Commentary

Generally the rates and percentage additions used are derived from historical data from other comparable schemes.

Unmeasured works and design development (10%) includes for items which have not been designed at this early stage in the process or where a design is modified as more detail is added.

Preliminaries (25%) is to cover for items which aren't included in the measured works such as; staff, welfare provisions, site offices, site waste clearance, water, electricity, furniture, ICT and consumables, protection of work, protective clothing, site transport, and so on.

Traffic management (30%) includes for all temporary works associated with maintaining transport routes for the duration of the works and will include: temporary roads and footpaths; diversions; traffic lights and signage.

Overheads & profit (8%) is the percentage that will be added to all the contractor's costs, including subcontract packages,

Contingency (30%) is an allowance for risk, as outlined in the above Risk section, and represents a sum of money that the client should have in reserve to meet the cost of any identified or unforeseen risks which may materialise on a given project.

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Description	Quantity	Unit	Rate	Total £	Notes
<u>Section I : Northhampton Street - Lansdowne Road</u>					A428-ATK-HML-1A_1-M2-D-0001
1 Breaking out existing hard pavings	1,800	m	70	126,000	
2 Disposal of excavated materials	810	m3	45	36,450	
3 Stabilisation of existing ground	1	item	50,000	50,000	
4 Disposal of surface and ground water	1	item	20,000	20,000	
5 New footpath	1,800	m	200	360,000	
6 Widening existing carriageway	1,800	m	500	900,000	
7 Kerbing	3,600	m	30	108,000	
8 Removing existing traffic island	6	nr	1,500	9,000	
9 New traffic island	8	nr	3,000	24,000	
10 Road markings	5,000	m	5	25,000	
11 Street lighting	1,800	m	70	126,000	
12 Utilities diversions	1	item	250,000	250,000	
13 Unmeasured works and design development	10.0%			203,445	
Sub-total:				2,237,895	
14 Preliminaries	25.0%			559,000	
15 Traffic management	30.0%			839,000	
16 Overheads & profit	8.0%			291,000	
17 Contingency	30%			1,178,000	
To Summary £				5,104,895	

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Description	Quantity	Unit	Rate	Total £	Notes
<u>Section II : M11 Bridge - Madingley Mulch Roundabout</u>					A428-ATK-HML-1A_1-M2-D-0001
1 Stabilisation of existing ground	1	item	80,000	80,000	
2 Disposal of surface and ground water	1	item	30,000	30,000	
3 New cycleway and footpath	2,600	m	400	1,040,000	
4 Widening existing carriageway to allow for new inbound buslane	2,600	m	600	1,560,000	
5 New kerbing to buslane	2,600	m	30	78,000	
6 New traffic island	1	nr	3,000	3,000	
7 Road markings	2,600	m	5	13,000	
8 Allowance to move existing street lighting	110	m	50	5,500	
9 Utilities diversions	1	item	100,000	100,000	
10 Unmeasured works and design development	10.0%			290,950	
Sub-total:				3,200,450	
11 Preliminaries	25.0%			800,000	
12 Traffic management	30.0%			1,200,000	
13 Overheads & profit	8.0%			416,000	
14 Contingency	30%			1,685,000	
To Summary £				7,301,450	