

Appendix J – Cost Estimates

Hereford Eastern River Crossing (ERiC) (SOC)

Herefordshire Council

July 2023

Title High-Level Construction Cost Estimate _Hereford Eastern Link Road - Option 1a

SUMMARY SHEET

Client	Herefordshire Council
Project Name	EASTERN RIVER CROSSING -
Project Number	60695983
Calculation number	1
Prepared by	Hannah Round
Date	03/07/2023
Checked by	Amr Fouda

Series	Description	COST (£)	
200	Site Clearance	60,470	
300	Fencing	154,319	
400	Safety Fencing, Barriers and Guard Rails	77,078	
500	Drainage and Service Ducts	771,624	
600	Earthworks	7,008,612	
700	Pavement	1,884,302	
1100	Footways and Paved Areas	812,973	
1200	Traffic signs and Road Markings	24,362	
1300	Lighting Columns and CCTV Masts	192,700	
1400	Electrical Works for Lighting Columns and Traffic Signs	95,202	
1700	Structural Concrete	1,986	
2400	Brickwork, Blockwork and Stonework	-	
2600	Miscellaneous	74,326	
3000	Landscaping and Ecology	12,164	
TSE	Traffic Signal Equipment	572,500	
Bridge Construction		29,727,900.00	
Flood Compensation		646,442.00	
Land take		214,500.00	
Culvert		5,573,750.00	
Total Works Cost	Subtotal	48,713,174.94	
	PRELIMINARIES	20%	9,742,635
	TRAFFIC MANAGEMENT	20%	2,348,523
	C3 Utilities Cost	20%	9,742,635
	Preliminary and Detailed Design Development (Provisional Fee)	10%	4,871,317
	Subtotal		75,632,785.86
	Subtotal		75,632,785.86
	Risk and Contingency	46%	34,791,081.50
	TOTAL		£ 110,423,867.36
	Inflation		£ 33,340,435.81

Notes

This cost estimate is based on Drg numbers. 60695983-ACM-GEN-HC-DR-TR-000002
The cost estimate is based on outline design drawing . No design has been developed yet for many elements including drainage, pavement, street lighting, etc. Quantities shown are indicative only.
Further scheme development is required to refine the cost estimate.

Assumptions:

- 1 No allowance for CPOs process
- 2 Earthworks estimated according to pavement assumptions.
- 3 No allowance made to improve any existing structural pavement defects, existing road specification / structures
- 4 No allowance for trees removal and associated costs.
- 5 No allowance for legal costs.
- 6 No allowance for VAT beyond 2023
- 7 No allowance for any potential costs in relation to environmental issues, habitat or sites of special scientific interest.
- 8 No allowance for ground investigation.
- 9 No allowance for the Dedication of Land. An indicative allowance has been included for potential land take costs based on experience from other projects
- 10 No allowance for Traffic Regulation Orders (TRO) and any associated TRO consultation.
- 11 No allowance for tendering and contract documentation for appointment of Contractor including contractor profit and overhead
- 12 No allowance for landscaping design.
- 13 No allowance for upgrades to existing sewerage system (drainage assumed connected to existing system).
- 14 No allowance for improving existing footway specification, i.e. existing footway subbase assumed to be durable for new footway/cycle track construction.
- 15 Earthworks assumed to be split as 50% vacuum excavation, 25% acceptable material and 25% unacceptable material.
- 16 Assumed only resurfacing and build up on top of existing carriageway. No allowance for improving existing carriageway pavement.
- 17 The majority of rates are based on SPONS 2023 rates. Where rates are not available in SPONS, rates from previous similar projects have been used.
- 18 Flood compensation costing is based upon an estimated required compensation storage volume of 28538.8m³.
- 19 The primary cost for the compensation storage will be for excavation. Other activities, such as potential landscaping or construction of inlet/outlet structures have not been accounted for.
- 20 The compensation storage will likely be a maximum of 2.2-5m deep and will be limited by the water table. The costs are based on excavation to 2.0-5.0m deep as a conservative estimate, but it should be noted that the overall cost would be lower for an excavation depth of less than 2.0m.

Total Cost (incl inflation) £ 143,764,303.17

Title **High-Level Construction Cost Estimate _Hereford Eastern Link Road - Option 1b**

SUMMARY SHEET

Client	Herefordshire Council
Project Name	EASTERN RIVER CROSSING -
Project Number	60695983
Calculation number	1
Prepared by	Hannah Round
Date	03/07/2023
Checked by	Amr Fouda

Series	Description	COST (£)
200	Site Clearance	60,470
300	Fencing	154,319
400	Safety Fencing, Barriers and Guard Rails	77,078
500	Drainage and Service Ducts	771,624
600	Earthworks	7,279,956
700	Pavement	2,116,216
1100	Footways and Paved Areas	812,973
1200	Traffic signs and Road Markings	24,362
1300	Lighting Columns and CCTV Masts	192,700
1400	Electrical Works for Lighting Columns and Traffic Signs	95,202
1700	Structural Concrete	1,986
2400	Brickwork, Blockwork and Stonework	-
2600	Miscellaneous	74,326
3000	Landscaping and Ecology	14,597
TSE	Traffic Signal Equipment	572,500
	Bridge Construction	30,699,400.00
	Flood Compensation	646,442.00
	Land take	242,000.00
	Culvert	5,573,750.00
	Total Works Cost	Subtotal 49,167,900.11
	PRELIMINARIES	20%
	TRAFFIC MANAGEMENT	20%
	C3 Utilities Cost	20%
	Preliminary and Detailed Design Development (Provisional Fee)	10%
		Subtotal 76,443,511.78
		Subtotal 76,443,511.78
		Subtotal 76,443,511.78
	Risk and Contingency	46%
		35,164,015.42
		TOTAL £ 111,607,527.20
		Inflation £ 33,697,819.91

Notes

This cost estimate is based on Drg numbers. 60695983-ACM-GEN-HC-DR-TR-000002

The cost estimate is based on outline design drawing. No design has been developed yet for many elements including drainage, pavement, street lighting, etc. Quantities shown are indicative only.

Further scheme development is required to refine the cost estimate.

Assumptions:

- 1 No allowance for CPOs process
- 2 Earthworks estimated according to pavement assumptions.
- 3 No allowance made to improve any existing structural pavement defects, existing road specification / structures
- 4 No allowance for trees removal and associated costs.
- 5 No allowance for legal costs.
- 6 No allowance for VAT beyond 2023
- 7 No allowance for any potential costs in relation to environmental issues, habitat or sites of special scientific interest.
- 8 No allowance for ground investigation.
- 9 No allowance for the Dedication of Land. An indicative allowance has been included for potential land take costs based on experience from other projects
- 10 No allowance for Traffic Regulation Orders (TRO) and any associated TRO consultation.
- 11 No allowance for tendering and contract documentation for appointment of Contractor including contractor profit and overhead
- 12 No allowance for landscaping design.
- 13 No allowance for upgrades to existing sewerage system (drainage assumed connected to existing system).
- 14 No allowance for improving existing footway specification, i.e. existing footway subbase assumed to be durable for new footway/cycle track construction.
- 15 Earthworks assumed to be split as 50% vacuum excavation, 25% acceptable material and 25% unacceptable material.
- 16 Assumed only resurfacing and build up on top of existing carriageway. No allowance for improving existing carriageway pavement.
- 17 The majority of rates are based on SPONS 2023 rates. Where rates are not available in SPONS, rates from previous similar projects have been used.
- 18 Flood compensation costing is based upon an estimated required compensation storage volume of 28538.8m³.
- 19 The primary cost for the compensation storage will be for excavation. Other activities, such as potential landscaping or construction of inlet/outlet structures have not been accounted for.
- 20 The compensation storage will likely be a maximum of 2.2.5m deep and will be limited by the water table. The costs are based on excavation to 2.0-5.0m deep as a conservative estimate, but it should be noted that the overall cost would be lower for an excavation depth of less than 2.0m.

Total Cost (incl Inflation) £ 145,305,347.12

Title **High-Level Construction Cost Estimate - Hereford Eastern Link Road - Option 3a**

SUMMARY SHEET

Client	Herefordshire Council
Project Name	EASTERN RIVER CROSSING -
Project Number	60695983
Calculation number	1
Prepared by	Hannah Round
Date	03/07/2023
Checked by	Amr Fouda

Series	Description	COST (£)
200	Site Clearance	60,470
300	Fencing	154,319
400	Safety Fencing, Barriers and Guard Rails	77,078
500	Drainage and Service Ducts	771,624
600	Earthworks	10,569,904
700	Pavement	1,893,444
1100	Footways and Paved Areas	815,242
1200	Traffic signs and Road Markings	24,362
1300	Lighting Columns and CCTV Masts	192,700
1400	Electrical Works for Lighting Columns and Traffic Signs	95,202
1700	Structural Concrete	1,986
2400	Brickwork, Blockwork and Stonework	-
2600	Miscellaneous	74,376
3000	Landscaping and Ecology	12,223
TSE	Traffic Signal Equipment	687,000

Bridge Construction	49,717,350.00
Flood Compensation	
Land take	214,500.00
Culvert	
Total Works Cost	Subtotal 65,147,229.78

PRELIMINARIES	20%	13,029,445.96
TRAFFIC MANAGEMENT	20%	3,085,975.96
C3 Utilities Cost	20%	13,029,445.96
Preliminary and Detailed Design Development (Provisional Fee)	10%	6,514,722.98
		Subtotal 101,021,320.62
		Subtotal 101,021,320.62
Risk and Contingency	46%	46,469,807.48

TOTAL £ 147,491,128.10
Inflation £ 44,532,206.73

Total Cost (incl Inflation) £ 192,023,334.83

Notes

This cost estimate is based on Drg numbers. 60695983-ACM-GEN-HC-DR-TR-000002
The cost estimate is based on outline design drawing. No design has been developed yet for many elements including drainage, pavement, street lighting, etc. Quantities shown are indicative only.
Further scheme development is required to refine the cost estimate.

Assumptions:

- No allowance for CPOs process
- Earthworks estimated according to pavement assumptions.
- No allowance made to improve any existing structural pavement defects, existing road specification / structures
- No allowance for trees removal and associated costs.
- No allowance for legal costs.
- No allowance for VAT beyond 2023
- No allowance for any potential costs in relation to environmental issues, habitat or sites of special scientific interest.
- No allowance for ground investigation.
- No allowance for the Dedication of Land. An indicative allowance has been included for potential land take costs based on experience from other projects
- No allowance for Traffic Regulation Orders (TRO) and any associated TRO consultation.
- No allowance for tendering and contract documentation for appointment of Contractor including contractor profit and overhead
- No allowance for landscaping design.
- No allowance for upgrades to existing sewerage system (drainage assumed connected to existing system).
- No allowance for improving existing footway specification, i.e. existing footway subbase assumed to be durable for new footway/cycle track construction.
- Earthworks assumed to be split as 50% vacuum excavation, 25% acceptable material and 25% unacceptable material.
- Assumed only resurfacing and build up on top of existing carriageway. No allowance for improving existing carriageway pavement.
- The majority of rates are based on SPONS 2023 rates. Where rates are not available in SPONS, rates from previous similar projects have been used.
- Flood compensation costing is based upon an estimated required compensation storage volume of 28538.8m³.
- The primary cost for the compensation storage will be for excavation. Other activities, such as potential landscaping or construction of inlet/outlet structures have not been accounted for.
- The compensation storage will likely be a maximum of 2-2.5m deep and will be limited by the water table. The costs are based on excavation to 2.0-5.0m deep as a conservative estimate, but it should be noted that the overall cost would be lower for an excavation depth of less than 2.0m.

Title **High-Level Construction Cost Estimate Hereford Eastern Link Road - Option 3b**

SUMMARY SHEET

Client	Herefordshire Council
Project Name	EASTERN RIVER CROSSING -
Project Number	60695983
Calculation number	1
Prepared by	Hannah Round
Date	03/07/2023
Checked by	Amr Fouda

Series	Description	COST (£)
200	Site Clearance	60,470
300	Fencing	154,319
400	Safety Fencing, Barriers and Guard Rails	77,078
500	Drainage and Service Ducts	771,624
600	Earthworks	10,842,564
700	Pavement	2,126,484
1100	Footways and Paved Areas	815,242
1200	Traffic signs and Road Markings	24,362
1300	Lighting Columns and CCTV Masts	192,700
1400	Electrical Works for Lighting Columns and Traffic Signs	95,202
1700	Structural Concrete	1,986
2400	Brickwork, Blockwork and Stonework	-
2600	Miscellaneous	74,326
3000	Landscaping and Ecology	14,668
TSE	Traffic Signal Equipment	687,000

Bridge Construction		51,342,100.00
Flood Compensation		
Land take		225,500.00
Culvert		
Total Works Cost	Subtotal	67,280,124.26

PRELIMINARIES	20%		13,456,024.85
TRAFFIC MANAGEMENT	20%		3,187,604.85
C3 Utilities Cost	20%		13,456,024.85
Preliminary and Detailed Design Development (Provisional Fee)	10%		6,728,012.43
		Subtotal	104,333,291.24
		Subtotal	104,333,291.24
Risk and Contingency	46%		47,993,313.97

Notes	TOTAL £	152,326,605.20
	Inflation £	45,992,189.23
	Total Cost £	198,318,794.43

This cost estimate is based on Drg numbers. 60695983-ACM-GEN-HC-DR-TR-000002

The cost estimate is based on outline design drawing. No design has been developed yet for many elements including drainage, pavement, street lighting, etc. Quantities shown are indicative only.

Further scheme development is required to refine the cost estimate.

Assumptions:

- 1 No allowance for CPOs process
- 2 Earthworks estimated according to pavement assumptions.
- 3 No allowance made to improve any existing structural pavement defects, existing road specification / structures
- 4 No allowance for trees removal and associated costs.
- 5 No allowance for legal costs.
- 6 No allowance for VAT beyond 2023
- 7 No allowance for any potential costs in relation to environmental issues, habitat or sites of special scientific interest.
- 8 No allowance for ground investigation.
- 9 No allowance for the Dedication of Land. An indicative allowance has been included for potential land take costs based on experience from other projects
- 10 No allowance for Traffic Regulation Orders (TRO) and any associated TRO consultation.
- 11 No allowance for tendering and contract documentation for appointment of Contractor including contractor profit and overhead
- 12 No allowance for landscaping design.
- 13 No allowance for upgrades to existing sewerage system (drainage assumed connected to existing system).
- 14 No allowance for improving existing footway specification, i.e. existing footway subbase assumed to be durable for new footway/cycle track construction.
- 15 Earthworks assumed to be split as 50% vacuum excavation, 25% acceptable material and 25% unacceptable material.
- 16 Assumed only resurfacing and build up on top of existing carriageway. No allowance for improving existing carriageway pavement.
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- 18 Flood compensation costing is based upon an estimated required compensation storage volume of 28538.8m³.
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- 20 The compensation storage will likely be a maximum of 2-2.5m deep and will be limited by the water table. The costs are based on excavation to 2.0-5.0m deep as a conservative estimate, but it should be noted that the overall cost would be lower for an excavation depth of less than 2.0m.