

 Project:
 Preston Western Distributor Road / East West Link Road

 Title:
 Cost Verification of the Current Scheme Estimate

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# **Document Verification**

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Revision	Date		Prepared	Reviewed	Approved
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Contents		
1.0	Introduction	1
2.0	Information Used and General Assumptions	2
3.0	Review of Preliminaries	4
4.0	Review of Structures	6
5.0	Review of Road works	15
6.0	Summary	21

# APPENDICES

- Appendix A : Review of Rates Schedule
- Appendix B : Check of Quantities Structures
- Appendix C : Measurement Summaries Road works
- Appendix D : Earthworks Review (word and excel documents)



#### 1.0 Introduction

Corderoy has been appointed by the Lancashire County Council (LCC) to provide a cost verification of the 'Current Scheme Estimate' (referred to hereinafter as 'the Estimate') provided by its ECI Contractor Costain Ltd. The current estimate is based upon environmental masterplan and structures general arrangement drawings, submitted as part of the planning application. An MX Genio file was also made available.

This report will:

- 1. Verify rates that support the Estimate (see Appendix A)
- 2. Verify quantities that support the Estimate (see Appendices B & D)
- 3. Attempt to assess where possible lump sum items (see Appendix C)
- 4. Assess the validity of the Estimate (see below)



### 2.0 Information Used and General

#### 2.1 Information Used

The following information has been provided to Corderoy:

Bridge Drawings (PDFs):

Bartle Lane Bridge: CLM01-DEV-040-6613B1/01E Bartle Underpass: CLM01-DEV-040-6617U1/01B Becconsall Bridge: CLM01-DEV-040-6614B1/01 Rev3 Darkinson Lane: CLM01-DEV-040-6610B1/01C Earls Farm Cattle Creek: CLM01-DEV-040-6612B1/01D Lea Viaduct: CLM01-DEV-040-6611B1/01 Rev1 Savick Brook (No ref shown on drawing)

Masterplan Drawings (PDFs):

CLM01-DEV-040-020 Sheet 1 of 14 CLM01-DEV-040-020 Sheet 2 of 14 CLM01-DEV-040-020 Sheet 3 of 14 CLM01-DEV-040-020 Sheet 4 of 14 CLM01-DEV-040-020 Sheet 5 of 14 CLM01-DEV-040-020 Sheet 6 of 14 CLM01-DEV-040-020 Sheet 7 of 14 CLM01-DEV-040-020 Sheet 8 of 14 CLM01-DEV-040-020 Sheet 9 of 14 CLM01-DEV-040-020 Sheet 10 of 14 CLM01-DEV-040-020 Sheet 11 of 14 CLM01-DEV-040-020 Sheet 12 of 14 CLM01-DEV-040-020 Sheet 13 of 14 CLM01-DEV-040-020 Sheet 14 of 14

Costain's Bill of Quantities/Cost Plan (Excel File)

# 2.2 Measurement

As far as possible, measurement has been undertaken using the Standard Method of Measurement for Highway Works (MMHW4) and standard highway design principles. The measurement is based on the above preliminary design information and limited or no information on the following:

- Construction programme
- Site constraints
- Ground conditions
- Temporary works information
- Detail drawings

#### 2.3 Pricing

The Pricing (rates) are base dated to Q4/2016. The Costain price includes an inflation calculation that does not appear to have been carried forward in to the Estimate summary.

# 2.4 Assumptions

- Kerbs are required to both edges of the single carriageway road.
- Tie-in areas on Blackpool road are to the point where the horizontal alignment changes on the existing carriageway. This is academic in terms of an overall area measurement. The roundabout on Blackpool Road is included within the Preston Western Distributor Road measured area.
- Earthworks Proper evaluation (spot checks) of the earthworks quantities cannot be undertaken without an earthworks schedule being provided, an example of which is included within **Appendix D**. See paragraph 5.4 below.

### 3.0 Review of Preliminaries

#### 3.1 Preliminaries

The stated figure of 24m represents 18.91% of the total scheme value of 127m. Prima facie this appears reasonable, however, it should be noted that it would increase to 27.62% if all of the Preliminaries type items such as temporary works, scaffolding, method related charges and traffic management costs etc. were included. There is no build-up provided for the Preliminary items and no construction programme either. The Preliminaries comprise the following:

PRELIMINARIES	
Staff	£13,856,997
Labour	£1,412,667
Site Accommodation	£3,272,934
Plant/Transport	£2,992,336
Skips	£1,102,864
HSE	£836,593
IT/Set up	£178,861
Fees	£398,425
Total	£24,051,675

#### 3.2 Staff

A breakdown is not provided. The 13.8m roughly equates to 11% of the total estimate value of 127m. We have not had sight of a programme but Costains have assumed (see inflation calculation) a construction duration of 4 years (Jan 18 – Dec 22). This would suggest therefore the that staff element per annum is circa. 3.45m. If we assume an all in staff cost of 100k the figures suggest that Costain will employ 35 staff members or full time equivalents (FTEs). This staffing level appears high. We would expect the following to be employed on this type of scheme:

- Project Director
- Commercial Manager
- Construction Manager
- 2 x Senior Engineers
- 2 x Junior Engineers
- 2 x senior quantity surveyors bridges & road works
- 2 x quantity surveyors bridges & road works
- 1 x safety manager (may be included elsewhere, see below)
- Stakeholder/Public Relations liaison person
- Third Party liaison
- 2 x Admin Support

The above is not an exhaustive list but is less than half of the number of staff that appear to have been included for within the Estimate.

### 3.3 Labour

It is presumed that this item is for general operatives not included for within the Direct Works rates or lump sum items. It is noted that traffic management (TM) vehicles and operatives are included within the relevant TM section of Road works.

#### 3.4 Site Accommodation

We can't comment here without visibility of costs.

#### 3.5 Plant/Transport

Presumably this item includes for craneage and haulage costs etc.

#### 3.6 Skips

Presumably this item includes for general waste and the skips would be located within the site compound. If the contractor had two 'builders skips' permanently located within the compound both being emptied weekly this would cost somewhere in the region of 92k (208 weeks x 2 skips x £222 [local rate source JA Jacksons]). Roll on roll of skips are more expensive but conversely contain more waste.

#### 3.7 HSE

Presumably this item is to comply with HSE requirements, PPE and/or including staff. Evaluation is difficult without seeing a breakdown.

#### 3.8 IT/Set up

These costs seem reasonable and may include staffing.

#### 3.9 Fees

We can't comment here without visibility of costs.



### 4.0 Review of Structures

4.1 Virtually all of the rates that are shown within the various BQs appear reasonable and/or sustainable (see **Appendix A**). Most BQs have a section of Method Related Charge items which are difficult to evaluate without visibility or knowledge of the construction methodology, temporary works (including design) and construction programme etc.

All major inconsistencies with quantities are tabled below. We have revised the BQs (see **Appendix B**) accordingly and applied the difference to Costains' rates to show the effect upon pricing. The variances are stated below.

The Structures items within the Estimate comprise the following:

STRUCTURES	
Savick Brook Viaduct	£17,733,979
Darkinson Lane Underpass	£732,245
Lea Viaduct	£11,150,987
Earls Farm Cattle Creek	£723,071
Bartle Lane	£2,081,375
Becconsall	£3,574,728
Bartle Underpass	£712,000
Temporary Bridges	£424,768
Sheet Piling – Savick Brook	£252,164
Sheet Piling – Lea Viaduct	£210,039
STRUCTURES SUBTOTAL	£37,595,355

# 4.2 Savick Brook Viaduct

The BQ includes for 288 no piles whilst the GA drawing reveals 245 no piles. The abutment and pile cap concrete quantities appear to be under-measured. We have estimated quantities based upon a similar viaduct design.

The BQ includes 2.16m of method related charges which equates to 12.25% of the total. If the BQ is adjusted as per the GA drawing and assumption made above, it would result in a reduction of 728k to the current total value. The major differences are summarised in the table below.

Savick Brook Viaduct: Description	Unit	Costains Quantity	Corderoy Quantity	Variance	Comment
Set up/move to pile position b) Unrestricted H/room	no	288	245	-£12,255.00	Total number of piles as per drawing 245no 70 assumed as restricted head room thus balance 175
Bored and concreted length	m	8496	7219	- £479,762.01	Prorated to 245 no piles
a) Main cage reinforcement	t	1240.87	1054.36	- £233,134.45	Prorated to 245 no piles
Prepare 1200 dia pile heads	no	288.00	245.00	-£10,750.00	Not standard HMMHW item deemed to be included in pile rates
Excavation of acceptable material excluding Class 5A in structural foundations 0 to 6 metres in depth	m3	6023.00	3568.00	-£29,460.00	Corderoy calculation
Disposal of acceptable material excluding Class 5A	m3	5420.70	2965.70	-£24,550.00	Based on Corderoy excavation calc and deposition
Imported acceptable material Class 6N in fill to structures	m3	2175.00	3215.00	£31,252.00	Org Measure seems low. Allowance of filling may only be to the existing G.L. if so had the 6N allowed in S600
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (South Abt pile cap)	m3	204.00	525.00	£42,341.79	Corderoy measure as GA assume 1.50m thick
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (pile cap)	m3	204.00	525.00	£42,341.79	Corderoy measure as GA assume 1.50m thick

Savick Brook Viaduct: Description	Unit	Costains Quantity	Corderoy Quantity	Variance	Comment
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (wing wall base slab)	m3	252.00	240.00	-£1,582.87	Corderoy measure as GA assume 1.50m thick
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (abutment all items)	m3	271.50	1030.00	£123,577.24	Abut conc qty very light estimated based on similar viaduct
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (wing wall +cope)	m3	15175	432.00	£42,082.19	Wing wall conc qty very light
Formwork Class vertical more than 300 mm wide (wing wall) F1 & F3	m2	235.84	576.00	£40,661.11	Contractors qty seems low
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B- 500C to BS4449:2005	t	214.26	544.33	£351,880.41	Using org r/f ratio of 198 kg/m3 which is reasonable
Excavation of acceptable material excluding Class 5A in structural foundations 0 to 6 metres in depth	m3	2160.00	3420.00	£15,120.00	
Disposal of acceptable material excluding Class 5A	m3	1944.00	3204.00	£13,230.00	
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (pier pile cap)	m3	1632.00	2565.00	£123,068.19	Corderoy measure as GA assume 1.50m thick
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF2 (pier column)	m3	763.41	393.00	-£52,536.36	Corderoy measure as GA
Formwork Class F1 vertical more than 300 mm wide (pier base)	m2	468.00	705.00	£17,579.91	Corderoy measure as GA assume 1.50m thick
Curved patterned profile formwork Class F3 at any inclination (pier column)	m2	1526.81	785.40	-£89,842.32	Corderoy measure as GA
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B- 500C to BS4449:2005	ton	454.11	560.44	£113,356.87	Using org r/f ratio of 189 kg/m3 which is reasonable
Bearing (Type not detailed)	no	40.00	35.00	-£5,449.30	As per GA
Installation of bearing (Type not detailed)	no	40.00	35.00	-£3,750.00	As per GA

Savick Brook Viaduct: Description	Unit	Costains Quantity	Corderoy Quantity	Variance	Comment
Piling Mats, geotextile/600mm 6F2 (Revised to 1000mm)	item	2.67	0.00	- £725,860.81	Is this not included in Pile mobilization?

# 4.3 Darkinson Lane Underpass

The BQ includes 79k of method related charges which equates to 11% of the total. If the BQ is adjusted as per the GA drawing it would result in a 24k increase to the current total value. The major differences are summarised in the table below.

Darkinson Lane Underpass: Description	Unit	Contractors Quantity	Corderoy Quantity	Value difference	Comment
1.0m high aluminium N2 vehicle parapet working width class W2 with stainless steel mesh infills straight or curved exceeding 50 metres radius	m	52.00	104.00	£2,623.62	both sides
Hot rolled asphalt 35/14, polymer modified bitumen binder course, 40mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)	m2	504.15	781.00	£2,835.15	
Heavy duty macadam with AC 20 aggregate binder course 50mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)	m2	504.15	781.00	£2,623.62	
Masterpave 14mm surface course PSV 60 surface course 35mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)	m2	504.15	781.00	£2,526.66	
Precast concrete road works kerb laid straight or curved exceeding 12 metres radius	m	103.26	168.00	£5,567.98	ОК

# 4.4 Lea Viaduct

There are some differences in quantities. However, when corrected they result in a 104k reduction to the current BQ total value.

The BQ includes 969k of method related charges which equates to 9% of the total. The major differences are summarised in the table below.

Lea Viaduct: Description	Unit	Costains Quantity	Corderoy Quantity	Value Difference	Comment
Imported acceptable material Class 6N in fill to structures	m3	8089.50	3215.00	-£146,478.73	qty seems high
Formwork Class F1 vertical more than 300 mm wide (ballast wall)	m2	336.00	144.00	-£22,694.71	Assuming 30m long 1.4 deep
Permanent formwork in accordance with BA36	m2	6058.00	5476.00	-£45,916.75	250 mm for girders deducted
Bearing (Type not detailed)	no	30.00	60.00	£90,340.11	2 bearing per girder
Installation of bearing (Type not detailed)	no	30.00	60.00	£21,000.00	2 bearing per girder

# 4.5 Earls Farm Cattle Creek

The BQ does not seem to represent the GA drawing for the following reasons:

- The BQ includes 115m of PCC units whilst the GA drawing reveals 15m.
- The excavation quantity seems high and should not exceed 300m3 (from EGL).
- Brick parapet and copings are not included within the BQ, but pedestrian parapet is measured.
- Brick cladding (approx. 20m2) is not included within the BQ.
- Formwork (small quantity) is not included within the BQ.

The BQ includes 95k of method related charges which equates to 13% of the total.

If the BQ is adjusted as per the GA drawing it would result in a reduction of 479k to the current total value. The major differences are summarised in the table below.

Earls Farm Cattle Creek: Description	Unit	Costains Quantity	Corderoy Quantity	Value Difference	Comment
150 mm diameter porous drain in 300 mm x 300 mm no fines concrete surround on minimum 150 mm ST2 concrete bed (Back of wall drainage)	m	230.00	40.00	-£8,877.51	
225 mm hollow blockwork drainage layer	m2	360.00	144.00	-£5,072.61	Allowed for underpass walls and wing walls
300 x 105 Concrete Dish Channel to underpass	m	115.00	28.00	-£3,961.16	0
Excavation of acceptable material excluding Class 5A in structural foundations 0 to 3 metres in depth	m3	3240.00	300.00	-£37,044.00	Excavation qty high looking at the structure not more than 300 m3 could be expected from the EGL
Disposal of acceptable material excluding class 5A	m3	2916.00	300.00	-£27,468.00	0

Earls Farm Cattle Creek: Description	Unit	Costains Quantity	Corderoy Quantity	Value Difference	Comment
Imported acceptable material Class 6N in fill to structures	m3	3180.00	212.00	-£93,647.82	fill is high corrected assuming fill either side to 1:1 slope + behind wing walls
In situ concrete ST 2 in blinding 100 mm or less in thickness	m3	128.70	5.00	-£17,601.19	Concrete over measure
In situ concrete Grade S50R (screed to achieve fall)	m3	69.00	8.00	-£8,651.88	assuming avg 200 mm layer
Precast concrete underpass units	m	45.00	15.00	- £111,450.00	number of under pass units does not match GA
Precast concrete underpass units	m	70.00	0.00	- £154,166.25	number of under pass units does not match GA
Waterproofing with two coats of bitumen more than 300 mm wide horizontal or at any inclination up to and including 30 degrees to the horizontal	m2	360.00	7.00	-£2,891.07	Waterproofing over measure
Waterproofing with bridge deck spray applied waterproofing system more than 300 mm wide at any inclination more than 30 degrees up to and including 90 degrees to the horizontal	m2	90.00	42.00	-£724.75	Waterproofing over measure
Waterproofing with two coats of bitumen more than 300 mm wide at any inclination more than 30 degrees up to and including 90 degrees to the horizontal	m2	520.00	98.00	-£3,456.18	Waterproofing over measure
Waterproofing with bridge deck spray applied waterproofing system more than 300 mm wide horizontal or at any inclination up to and including 30 degrees to the horizontal	m2	162.00	0.00	-£2,446.04	Waterproofing over measure
Surface impregnation with Pavix CCC100 or similar approved to plain surfaces	m2	252.00	73.00	-£1,221.68	minimum exposed conc faces



### 4.6 Bartle Lane

The estimate appears to be based upon a different design from that shown on the GA drawing provided, for the following reasons:

- The abutment quantities and wing wall quantities are higher than those shown on the GA drawing.
- No quantities have been measured for the pier.
- The Deck span seems to be shorter and narrower than that shown on the GA drawing.
- The estimate includes 57k for wing wall cladding.

The BQ includes 412k of method related charges which equates to 20% of the BQ total.

If the BQ is adjusted as per the GA drawing it would result in a reduction of 486k to the current total value. The major differences are summarised in the table below.

Bartle Lane: Description	Unit	Costains Qty	Corderoy Qty	Value Difference	Comment
Excavation of acceptable material excluding Class 5A in structural foundations 0 to 6 metres in depth	m3	4714	1148	-£42,792.00	Contractor's qty seems very high.
Disposal of acceptable material excluding Class 5A	m3	4243	677	-£35,660.00	
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (East abutment pile cap)	m3	105	90	-£1,978.59	15 x 4.5 x1.2 m assumed for check
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (West abutment pile cap)	m3	105	90	-£1,978.59	9.50 x 3.5 x 1.2 m assumed for check
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (wing wall pile caps)	m3	306	160	-£19,258.26	
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (wing walls)	m3	643	72	-£77,356.33	Corrected assuming 11m long x 0.65 m thick 8-2 m (tapering) deep wing wall, 4no,
Formwork Class F1 vertical more than 300 mm wide (wing walls)	m2	1302	220	- £108,041.02	Corrected assuming 11m long x 0.65 m thick 8-2 m



Bartle Lane: Description	Unit	Costains Qty	Corderoy Qty	Value Difference	Comment
					(tapering) deep wing wall, 4no,
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005 (abutments)	tonne	275	70	- £194,182.33	290 kg/m3 is high corrected @ 190kg/m3 applied to corrected concrete volume
Cladding to abutment face and wing walls	ltem			-£57,000	Not on GA

# 4.7 Becconsall

The GA drawing reveals 8 number steel I beams whilst Costain have included for 7 no Pre Cast Concrete (PCC) W18 beams. We don't understand the item '*Change from single span to triple span*' valued at 282k? The deck span is measured at 41.5m whilst the drawing shows 47m.

We have checked the quantities and re-priced using Costain's rates. For completeness and ease of pricing we have assumed that 7 PCC beams will be used. This would negate the use of bearings, hence why they are not allowed for within the BQ.

If the BQ is adjusted as per the GA drawing and above, it would result in an increase of 6k (282k not deducted) to the current total value. The major differences are summarised in the table below.

The BQ includes 823k of method related charges which equate to 23% of the BQ total.

Becconsall: Description	Unit	Costains Quantity	Corderoy Quantity	Value Difference	Comment
Formwork vertical more than 300mm wide to F1 class surface finish (Diaphragm)	m²	236.18	179.00	-£8,112.69	Assumed for 23m long 1.8m deep diaphragm
Safety barrier; Performance class N2; Working width class W2; Designed to be impacted on one side only; Straight or curved exceeding 120m					bridge span + approach
radius 1.4m high aluminium parapet containment performance class N2 working width class W2 with mesh infill both sides straight or curved exceeding 50 metres	m	83.00	172.00	£3,420.89 £12,369.00	*2 (86*2) bridge span + approach *2 (86*2)



Becconsall: Description	Unit	Costains Quantity	Corderoy Quantity	Value Difference	Comment
radius - Changed to 1.0m		-			
N2 barrier					
1.0m high galvanised					
tubular steel pedestrian					
guardrail	m	61.99	0.00	-£7,201.34	not shown
Precast concrete kerb to					
bridge deck laid straight or					Bridge
curved exceeding 12					span
metres radius	m	166.00	188.00	£2,679.60	(47m) *4
Central reserve infill					
concrete Grade C40/50					
aggregate size 10/20					Bridge
exposure class X0, XF4					span
approximately 250mm		44440	110.00	0700 40	(47m)
thick	m2	114.13	118.00	£782.16	*2.5m
Hot rolled asphalt 35/14,					
polymer modified bitumen					Dridge
binder course, 40mm thick					Bridge
in carriageway, hardshoulder and hardstrip					span (47m)
(Pavement Type 5)	m2	605.90	686.00	£861.29	*7.3*2
Heavy duty macadam with	1112	005.30	000.00	2001.23	1.5 2
AC 20 aggregate binder					
course 50mm thick in					Bridge
carriageway, hardshoulder					span
and hardstrip (Pavement					(47m)
Type 5)	m2	605.90	686.00	£797.03	*7.3*2
Masterpave 14mm surface					
course PSV 60 surface					
course 35mm thick in					Bridge
carriageway, hardshoulder					span
and hardstrip (Pavement					(47m)
Туре 5)	m2	605.90	686.00	£767.57	*7.3*2

# 4.8 Bartle Underpass

The BQ comprises 702k for the box culvert and a 10k allowance for brickwork. The adjustments made to the Earls Farm Cattle Creep Culvert suggest a reduction of cost here of 325-350k plus additional craneage costs.

# 4.9 Temporary Bridges

There are no details provided or breakdown to the sum included.

# 4.10 Sheet Piling – Savick Brook

The quantities and rates appear ok.

# 4.11 Sheet Piling – Lea Viaduct (Canal)

The quantities and rates appear ok.



### 5.0 Review of Road Works

5.1 Notwithstanding lump sum items which without the build-ups are difficult to evaluate the majority of rates within the various BQs appear reasonable and/or sustainable (see **Appendix A**). The Road works items within the Estimate comprise the following:

ROAD WORKS	
Traffic Management	£2,972,353
Site Clearance & Demolition	£238,289
Earthworks	£14,498,888
Road Markings	£421,349
Motorway Comms	£1,985,497
Accommodation Works	£483,904
Landscaping & Ecology	£1,942,265
Road works MRC	£3,028,870
Site Wide Access Roads	Incl. above
Temp Water Management	Incl. above
Fencing	£611,765
Safety Fencing	£953,342
Drainage	£6,875,984
Kerbing & Footways	£1,592,237
Pavements Including Sub-base	£12,248,403
Traffic Signals	£515,794
Road Signs and Road Lighting	£2,272,530
ROAD WORKS SUBTOTAL	£50,641,471

# 5.2 Traffic Management (TM)

The TM build-up consists of the following:

- An allowance of 13,140 hours (times TM Operatives) for work undertaken during the day
- An allowance of 10,920 hours (times TM Operatives) for work undertaken during the night
- Subcontract costs including varioguard and temporary road markings

The 13,104 hours is calculated by multiplying a 12 hour shift x 7 days per week (84 hours) x 52 (weeks) x 3 (years) = 13,104 hours.

The 10,920 hours is calculated as above but based upon 2.5 years. This item is annotated as *"needed at Northern Section for access to site and to start the bridges at the M55"* We assume that access to the site will be required from Blackpool Road (Southern Section). We can appreciate that a TSCO would be required for this element (plus the M55 Tie-in) of the TM works, but fail to see why there is a general allowance for the full duration elsewhere. Further, notwithstanding daily maintenance TM would only be required at these locations when the varioguard is installed and subsequently removed. Once installed work can be undertaken safely behind varioguard (day or night).

The shift costs included for the varioguard and temporary road markings are typical for the industry. However, Costain have allowed for one shift to install the varioguard and one shift to remove at both locations. This generates a cost of 6k but typically Varioguard suppliers charge £8.50 per metre to install and/or remove. Therefore the real cost of installation/removal could be in the region of 82k (4800m x £17/m).

### 5.3 Site Clearance & Demolition

There are no quantities within the Estimate so evaluation was difficult. Therefore we have undertaken a measure and extended quantities by typical rates. Our assessment is 112k higher than that included within for within the BQ.

#### 5.4 Earthworks

We have reviewed the MX genio model and include a separate review (see **Appendix D**) the salient points to note are:

The earthworks items within the Estimate are generally are not in accordance with MMHW4.

For completeness, all quantities within the worksheet entitled 'Earthworks 2' have been reviewed, However, please ignore the 'First Review' as this Report pertains only to values carried forward to the summary ('Second Review').

From the information provided it is only possible to check the balance of top soil and 'site won' material quantities.

The removal or storage of 5,272 cubic metres of top soil has not been billed.

It appears that the removal or re-location of 24,195 cubic metres of acceptable material has not been billed.

# 5.5 Road Markings

Evaluation of the road markings BQ is difficult without seeing the build-ups to the sums claimed. The sum of 213k seems high for anti-skid surfacing. We have roughly calculated 5650m2 which equates to £38/m2. This rate is high but could be due to over measure.



### 5.6 Motorway Comms

The BQ item description refers to "Motorway Communications located by M55 Southbound On-slip". There is no detail or build up to the sum included. The following annotation only is provided:

SC/SM assessment assumed that MS3 equipment is free issue from HE Retaining walls - 4 nr 2m high and 25m long. Not including cladding

A duct crossing may be required across the M55 motorway which presumably would require thrust boring. This would be a costly item.

#### 5.7 Accommodation Works

There is no breakdown to the 484k included.

#### 5.8 Landscaping & Ecology

There are no quantities to support the lump sum of  $\pounds 1.7m$  within the landscaping BQ. However, the drawings are fairly detailed in terms of landscaping works. Therefore we have undertaken a detailed measure and extended quantities by typical rates (see **Appendix C**). Our assessment has resulted in a total value of 4.2m which is significantly more than that included for within the estimate.

#### 5.9 Road works MRC

Four haul roads and bell mouths have been included for within the BQ. We would need visibility of the temporary works design and methodology in order to evaluate properly.

#### 5.10 Site Wide Access Roads

Included within 'Roadworks MRC' above.

#### 5.11 Temporary Water Management

Included within 'Road works MRC' above.

#### 5.12 Fencing

There is no fencing shown on the GA drawings but presumably there will be a requirement, the extent of which is unknown. Therefore evaluation of the BQ items is difficult. There is an allowance of 158k for fencing to the East West Link Road. The stated length is 3,200m therefore this equates to £25/m for boundary fencing which seems ok.

#### 5.13 Safety Fencing

Presumably the 8,250m of safety fencing (N2/W2) is an advised allowance/quantity. The rates  $(\pounds101.29 + \pounds16.46)$  for the concrete barrier are a bit on the high side. We would expect an all-in rate (including base) of circa  $\pounds90/m$  here. Without detail on drawings evaluation is difficult but the overall allowance seems ok.

#### 5.14 Drainage

In the absence of design for drainage (detail or otherwise) we make the following observations:

The GA drawings are fairly detailed in terms of landscaping items and show ponds and watercourses etc. However they don't include a drainage ditch.

The contractor has allowed 3300 m of 'V' channel to drain surface water on the East West Link Road. However, this is inconsistent with the road design and the kerbs and footway arrangement. There is no provision of central reserve in the single carriageway to accommodate 'V' Channel and layout of kerbs and footways prohibit 'V' Chanel on verges. However, this has not been deducted from our assessment below as an alternative drainage design solution will be required

We don't have design information to verify culverts and headwalls etc.

The BQ includes for a carrier drain on either side of the East West Link Road. It may only require drainage on one side only.

The BQ includes for 15 number Interceptors which seems excessive.

The chambers priced seem to be based upon the HCD F22 detail.

We have tabled the salient items below. The variances suggest a reduction in value of 886k.

Description	Unit	Costains Quantity	Corderoy Quantity	Variance	Comment
375mm internal diameter carrier drain specified design group 2 in trench depth to invert not exceeding 2m, average depth to invert 1.71 metres with Type S bed and surround to HCD F1	m	4,200	3642	-£60,137	Adjusted for structures
450mm internal diameter carrier drain specified design group 5 in trench depth to invert not exceeding 2m, average depth to invert 1.77 metres with Type S bed and surround to HCD F1	m	4,200	3642	-£59,527	Adjusted for structures
Construction of drainage ditch; Type D4 to LCC 11063/520/020 as stated in drawings 11063/500/001 to 38; depth not exceeding 1.0m.	m	8,500	0	-£295,715	Ditch is not detailed on GA
375mm internal diameter carrier drain specified design group 2 in trench depth to invert not exceeding 2m, average depth to invert 1.71 metres with Type S bed and surround to HCD F1	m	6,600	3227	-£363,515	Adjusted for one verge and structures



Description	Unit	Costains Quantity	Corderoy Quantity	Variance	Comment
Chamber specified design group 1200 dia Manhole Type A Chamber to LCC FL14; depth to invert exceeding 1m but not exceeding 2m with D400/M1 cover and frame with 675 x 675 clear opening to LCC FL10.	m	66	33	-37,917	Chambers allowed below under SWC, we believe same chamber could be used for carrier drainage
Linear drainage channel systems; 1m wide surface water channel to dwg 2500316/Cos/S282 Rev A and detail to dwg named "Surface Water Channel - 1m wide" dated 2804/15; straight or curved exceeding 12m radius in central reservation	m	8,400	7284	-£68,913	Adjusted for structures

# 5.15 Kerbing and Footways

The Estimate includes 15,274m of kerbs (all). We have made assumptions on the location of kerbs and have arrived at a total of 20,926. Therefore the estimate could be £200k - £300k light.

We have undertaken a measure of edgings and arrived a higher figure of 16,804m as opposed to the 12,306m included within the Estimate. Therefore the Estimate could be £31k light.

We have undertaken a measure of footway areas and arrived a higher figure of 54,933m2 as opposed to the 47,388m2 included within the Estimate. Therefore the Estimate could be £160k light.

#### 5.16 Pavements including sub-base

We have undertaken an overall measure of pavement areas shown on the GA drawings and reconciled with quantities included within the Estimate. The results are summarised below.

Pavement Areas	Unit	Costain Quantity	Corderoy Quantity	Variance	Comment
Preston Western	m2				
Distributor Road		132,479			
East West Link	m2	32,200			Corderoy
Road					quantity
Savick Brook	m2	5,450	160,908	-£955,416	includes the
Bartle Lane	m2	204			bridge



Pavement Areas	Unit	Costain Quantity	Corderoy Quantity	Variance	Comment
Lea Viaduct	m2	4,334			surfacing
Becconsall	m2	606			
Tie-in to Motorway		3,980	4,329	£23,212	
Tie-in to Blackpool Road	m2	9,760	4150	-£373,121	
Totals	m2	189,013	169,387	-£1,305,325	

The Costains composite rate for surfacing (including sub-base) is  $\pounds 66.51/m^2$ . If we assume that the over-measure pertains to full depth construction, the above difference suggests a reduction in value of  $\pounds 1.3m$ .

# 5.17 Traffic Signals

The sum of 516k included is difficult to evaluate without seeing the relevant build-up Blackpool Road would be a complex junction and all other junctions would be minor

# 5.18 Road Signs and Road Lighting

The BQ includes a sum of £1.8m for street lighting to either side of the East West Link Road. If we assume that the lighting columns will be steel and spaced every 40m we crudely estimate that this cost should be in the region of  $\pounds 600 - \pounds 700k$ . It is assumed therefore that the sum also includes for street lighting to the Preston Western Distributor Road. There is also an allowance of 427k for signs which without visibility of the build-up is difficult to evaluate.



#### 6.0 Summary

On a general note the Estimate appears to be robust. We have discovered inconsistencies with quantities but most rates (Structures and Road Works) used appear ok.

The level (18.91%) of prelims included for within the estimate appears to be typical for this size of scheme.

Based upon the Bridge Design drawings provided and a check of quantities only, the Structures appear to be overpriced by some £2.1m. In addition, we recommend that Costain are asked to provide detailed build-ups of all Method Related Charge items for review.

An Earthworks schedule based upon the MX Genio file has not been provided. Therefore review of model and verification of quantities is limited within the time constraints of this report

The allowance for landscaping seems light and could be under-priced by £2.6m.

The allowances for drainage seem generous. An assessment of drainage items suggests that Costains may have included for drainage items that are not required. The omission of these items could reduce the Estimate by 886k.

A measure and reconciliation of pavement quantities suggests that pavements appear to be over-priced by £1.3m.

Kerbs, edgings and footways appear to be under-measured and therefore the estimate could somewhere between £400k and £500k light.

The above suggests an overall reduction of circa. £1.3m. However, bearing in mind some of the constraints on the review and design information made available this figure would need to be discussed with Costain to clarify variances and major lump sum allowances.



Appendix A

**Review of Rates Schedule** 



Appendix B

Check of Quantities - Structures



Appendix C

Measurement Summaries - Road Works



Appendix D

Earthworks Review (word and excel documents)



**PROPERTY & CONSTRUCTION CONSULTANTS** 

{Insert Client Logo}

# **VERIFICATION REPORT**

Preston West Distributor Road 20 December 2017

1

Prepared for Lanchashire City Council

# Prepared by

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# **VERSION CONTROL**

Project No.

# 5,005,029

VERSION	DATE	DESCRIPTION	CREATED BY	REVIEWED BY
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# CONTENTS

1. EXECUTIVE SUMMARY	1
3. VERIFICATION FINDINGS	3
3. INFORMATION USED	4
4. APPENDICIES	5

APPENDIX 1 - RIDGE REVIEW AND COMMENTS ON COSTAIN COST PLAN

APPENDIX 2 - RIDGE PRELIMINARIES ANALYSIS

APPENDIX 3 - RIDGE TRAFFIC MANAGEMENT ANALYSIS

APPENDIX 4 - EARTHWORKS ANALYSIS

# **1. EXECUTIVE SUMMARY**

Lancashire City Council as part of the City Deal, are planning to construct the Preston Western Distributor Road, which consists of approximately 4.3km of dual carriageway, 3.5km of single carriageway and a number of new structures which includes two large viaducts. Lancashire City Council have appointed a design team and Costain as contracting partner to deliver the scheme. This is an ongoing process which commenced in 2016. Over this time the design work has progressed and the costplan/ budget had been developed and evolved.

Ridge have been appointed to undertake a review of the cost plan provided by Costain, taking into account both rates and quantification, while also sense checking the cost plan against the available design information.

This report has been prepared to summarise the findings of this review.

It should be noted that a full independant cost estimate has not been produced. The exercise is based on a review of the key rates and quantities together with a sense check on the scope of work and a benchmark exercise against a number of similar projects undertaken for Highways England.

An inflation calculation has been included in the information provided by Costain. This calculation has not been carried forward into the construction costs. However, it is understood that the figure calculated by Costain has been used by LCC in the overall budget calculation. This error is largely as a consequence of not compounding interest annually, the correction of which has made a substantial difference. In formulating the Ridge calculation, we have also taken a view on the future inflation rate used. It is extremely difficult to accurately forecast future inflation rate changes at present time due to significant uncertaincies in the economy surrounding 'Brexit', and as a consequence of this we have undertaken the exercise providing a high and low range for consideration.

Throughout the report a number of lump sum items have been included by Costain. While we feel these are acceptable allowances give the nature and size of the scheme, Ridge would advise a review of these items be undertaken as part of future cost verification exercises once the appropriate level of scheme development has been undertaken.

The table below is a comparrison of the exercise undertaken, comparing the Costain cost plan with the verification exercise undertaken by Ridge. A detailed narrative of each heading is provided in section 2, Verification Findings, below.

Report Section	Costain	Ridge	Difference
Preliminaries	24,051,675	24,051,675	
Savick Brook Viaduct	16,215,912	16,390,907	174,995
Darkinson Lane Underpass	737,768	732,923	(4,846)
Lea Viaduct	11,296,213	11,305,103	8,890
Earls Farm Cattle creep	638,890	648,170	9,280
Bartle Lane	1,900,064	1,985,524	85,460
Becconsall	3,650,870	3,751,549	100,679
Bartle Underpass	712,000	712,000	
Temporary bridges	424,768	424,768	
Sheet Piling - Lea Viaduct (Canal)	248,839	248,839	
Traffic Management	2,972,353	2,972,353	
Site clearance & Demolition	238,289	238,289	
Earthworks	14,498,888	13,248,592	(1,250,296)
Road Markings	421,349	421,349	
Motorway Comms	3,324,110	3,324,110	
Accommodation Works	483,904	483,904	
Landscaping & Ecology	2,705,186	2,745,096	39,910
Roadworks MRC	3,028,870	3,028,870	
Fencing	611,765	611,765	
Safety Fencing	953,342	859,969	(93,373)
Drainage	6,875,984	7,172,956	296,972
Kerbing and Footways	1,592,237	1,708,159	115,922
Pavements including sub-base	12,248,403	10,526,532	(1,721,871)
Traffic Signals	515,794	515,794	
Road Signs and Road Lighting	1,847,530	1,847,530	
Management Fee	8,594,137	8,431,339	(162,798)
TOTAL	<u>120,789,140</u>	<u>118,388,065</u>	<u>(2,401,075)</u>

The table below summarises the inflation calculation that needs to be taken into consideration in the overall scheme budget. The calculations are provided in Appendix 1 of this document.

Inflation Allowance	Costain	Ridge Low (3%)	Ridge High (5%)
	5,865,324	14,832,174	25,483,859

# 2. VERIFICATION FINDINGS

### Introduction

Ridge have undertaken a measurement exercise of both the GA's and structures plans provided and also commissioned an independent review of the 3D Earthwork Model information provided in order to generate our own quantities for use in this verification exercise.

We have also undertaken a rates comparison exercise, comparing rates against our own benchmark data

Set out below is a narrative of the findings that Ridge made during the analysis. The quantum and rate comparison exercise is included in Appendix 1 attached.

# 1. Savick Brook

1.1- The works to Savick Brook all appear to be measured and quantified correctly. In regards to rates; despite the majority being in line with expected current market prices a number of items did vary between Ridge and Costain. In particular formwork prices appeared high while rates for excavation of class 5A material appeared low. There are also some rates which require clarification as large sums are itemised and Ridge were not supplied with a back up to this. Furthermore across the structures there were a number of items which are priced differently, and an understanding of why like for like items are varying in cost is required; in particular rebar and parapet costs, for identical specifications, appear to be priced at different levels.

It appears that no allowance has been made for pavements in the structures. Costain have stated that these costs have been deleted in this version of the cost plan, and that they are now included within the overall pavement measure. The Ridge verification of the pavement measure below does not support this and so we have made allowance here.

# 2. Bartle Lane

**2.1-** As with Savick Brook, the measure appears to be accurate, however the same discrepancies with low rates for excavation of class 5A and high rates for formwork are evident. Furthermore across the structures there were a number of items which are priced differently, and an understanding of why like for like items are varying in cost is required; in particular rebar and parapet costs, for identical specifications appear to be priced at different levels.

It appears that no allowance has been made for pavements in the structures. Costain have stated that these costs have been deleted in this version of the cost plan, and that they are now included within the overall pavement measure. The Ridge verification of the pavement measure below does not support this and so we have made allowance here.

### 3. Darkinson Lane

**3.1-** As with Savick Brook, the measure appears to be accurate, however the same discrepancies with low rates for excavation for class 5A and high rates for formwork. Furthermore across the structures there were a number of items which are priced differently, and an understanding of why like for like items are varying in cost is required; in particular rebar and parapet costs, for identical specifications appear to be priced at different levels. Within Darkinson Lane waterproofing costs also varying to the other structures.

It appears that no allowance has been made for pavements in the structures. Costain have stated that these costs have been deleted in this version of the cost plan, and that they are now included within the overall pavement measure. The Ridge verification of the pavement measure below does not support this and so we have made allowance here.

### 4. Lea Viaduct

**4.1-** As with Savick Brook, the measure appears to be accurate, however the same discrepancies with low rates for excavation of class 5A and high rates for formwork. Furthermore across the structures there were a number of items which are priced differently, and an understanding of why like for like items are varying in cost is required; in particular rebar and parapet costs, for identical specifications appear to be priced at different levels. Lea viaduct also has a discrepancy between the structures in the rate included for waterproofing.

It appears that no allowance has been made for pavements in the structures. Costain have stated that these costs have been deleted in this version of the cost plan, and that they are now included within the overall pavement measure. The Ridge verification of the pavement measure below does not support this and so we have made allowance here.

#### 5. Becconsall

5.1- As with Savick Brook, the measure appears to be accurate, however the same discrepancies with low rates for excavation of class 5A and high rates for formwork. Furthermore across the structures there were a number of items which are priced differently, and an understanding of why like for like items are varying in cost is required; in particular rebar and parapet costs, for identical specifications appear to be priced at different levels. Beaconsall also has a discrepancy between the structures in the rate included for waterproofing and concrete to the central reservation.

It appears that no allowance has been made for pavements in the structures. Costain have stated that these costs have been deleted in this version of the cost plan, and that they are now included within the overall pavement measure. The Ridge verification of the pavement measure below does not support this and so we have made allowance here.

# 6. Earls Farm Cattle Creep

**6.1-** As with Savick Brook, the measure appears to be accurate, however the same discrepancies with low rates for excavation of class 5A and high rates for formwork. Furthermore across the structures there were a number of items which are priced differently, and an understanding of why like for like items are varying in cost is required.

Earls Farm Cattle Creep also requires clarification on the build ups to a number of large rates for the concrete structures being used and the assumptions made based on the limited design information provided.

# 7. Bartle Underpass

**7.1-** Bartle underpass has been priced with 2 large lump sums which Ridge require a breakdown of to make a proper assessment of the feasibility to work to these prices.

### 8. Sheet Piling - Brook

8.1- Sheet piling to the brook area was discontinued. Nothing to report as no cost impact.

#### 9. Sheet Piling - Canal

**9.1-** The measurement in this section appears reasonable, however some rates are itemised and ideally would require back up. The rates do not appear excessive so we are comfortable an appropriate allowance has been made.

### 10. Traffic Management

**10.1** The Costain cost plan includes a sum of £2.9m for traffic management, which appears to have been built up from a resourced based analysis. Ridge have undertaken a benchmark appraisal against a number of similar schemes undertaken for Highways England and are happy that the overall sum included with the cost plan is reasonable at this stage of the scheme development.

#### 11. Site Clearance

**11.1-** Large lump sum items in this section require clarification in order to allow for full analysis, Ridge also found that the removal of kerbs to the M55 may be included in the tying in of new roads under pavements, Ridge therefore would seek clarification further before a full analysis could be undertaken.

# 12. Earthworks

**12.1-** In preparing the highway design surface, channel lines of overpasses/bridge sections where clipped back to where we reasonably thought abutments would be.

There where also a number of minor issues with the model prided that where adjusted prior to undertaken the cut & fill calculation eg levels where the road/bridge crossings occur are jumbled and over lap, levels at the RAB islands had to be adjusted and some erroneous levels along the middle of the RAB's

Overall cut / fill quantities where calculated separately for the main Distributor Road, the East / West Link and for the attenuation Ponds. These quantities where used in the earthworks verification exercise included in Appendix 1 and a opy of the Cut / Fill output report is included in Appendix 4

#### 13. Road Markings

**13.1-** This section of the report requires clarification to be properly assessed. Rate discrepancies in other sections leads us to believe there could be over estimations, and without a build up to rates there is no proper way to quantify these works and analyse if what has been allowed for is appropriate.

# 14. Motorway Comms

**14.1-** Ridge are happy that the main allowance of £2,400,000 is sufficient for works of this size and nature, however to allow for a full analysis a back up to the estimate for gantry works is required.

# 15. Accommodation Works

**15.1-** Not enough information has been provided for Ridge to verify this cost.

# 16. Landscape and Ecology

**16.1-** The backup documentation provided to support the Landscaping sums schedules out the individual plant species and numbers required for the scheme. The schedule does not link this to any specific areas. Ridge have undertaken a measurement exercise from the GA drawings provided and although we feel that the overall cost is a fair reflection given the size of landscaping areas required, we can not fully verify until numbers etc are linked to specific areas of landscaping.

The costs also allow for provision of a 'Bat House'. Although not identified on the drawings, Ridge believe it reasonable to include for this given the size and nature of the scheme. Ridge have also added the cost of providing bird / bat boxes which are identified on the drawings but not allowed for in the cost plan.

### 17. Temporary Works & Water Management and Method Related Charges

17.1- Ridge are satisfied that the allowance of £3.028m is appropriate for works of this size and nature.

#### 18. Fencing

**18.1-** Fencing costs have been allowed for as 3 separate lumpsum items. Without further breakdown of these lump sums we are not able to verify the costs.

# 19. Safety Fencing

**19.1-** Ridge finds the rates to be acceptable, however a discrepancy in the measurement of some items requires clarification in order for a full evaluation to be completed. The key areas of difference were in the measurement of safety barriers, where Ridge found Costain to be approximately 1,633m less of barrier across all barrier types.

#### 20. Drainage

**20.1-** Drainage verification has shown that rate allowances by Costain are sufficient, and smaller allowances are in line with what would be expected. The Ridge measure has identified a number of areas where there are differences between the measured items.

#### 21. Kerbs and Footways

21.1- This section offers appropriate rates, however quantification differences between Ridge and Costain within the measure of kerbs to the East West link road mean that Ridge would cost this section of works at a higher rate than Costain.

## Preston West Distributor Road

## 22. Pavements

**22.1-** In regards to pavements, Ridge reviewed both rates and the measure provided by Costain and while rates appeared acceptable in the majority of items, a substantial difference of over 10,000m<sup>2</sup> less pavement was found. Subsequently this means that a number of items within other sections of the report equate to less than Costain had allowed for.

Despite Costain assuring Ridge that works to pavements in structures are included in this section, the substantial difference in quantities lead to a requirement for a more detailed back up to the quantities included for this to be appropriately validated.

## 23. Traffic Signals

**23.1-** The cost plan includes large lump sums for numerous items, Ridge will require a more detailed breakdown of the allowances to make a further assessment.

## 24. Traffic Signs and Road Markings

24.1- Similar to the traffic signal works, Ridge require a breakdown of rates that make up the items in this section.

## 25. Inflation Calculation

**25.1** Inflation costs have been calculated based on a cashflow of the works cost with. Ridge have identified that the formulas used in the calculation contain an error, and the assumed annual cost increase is not compounded year on year, which results in a much smaller figure.

The Costain calculation also did not make any allowance for inflation on the Management Fee or the Statutory Utility Costs.

Ridge have corrected this formula error and included for the omitted items. We have provided 2 scenarios for consideration & discussion, compounding the yearly increase at both 3% as a lower range and 5% as an upper range.

These calculations are included in Appendix 1.

## Preston West Distributor Road

## 5. SCHEDULE OF INFORMATION USED

The following documentation was used by Ridge to formulate the preceeding report, along with the cost plan from Costain;

### CLM01-DEV-040-020;

- Sheet 1 of 14
- Sheet 2 of 14
- Sheet 3 of 14
- Sheet 4 of 14
- Sheet 5 of 14
- Sheet 6 of 14
- Sheet 7 of 14
- Sheet 8 of 14
- Sheet 9 of 14
- Sheet 10 of 14
- Sheet 11 of 14
- Sheet 12 of 14
- Sheet 13 of 14
- Sheet 14 of 14

### Structures Drawings

- 6614/B2237802/P/004
- CLM01/LCC/DR/6613/0001/BLB GA/W/01/INF
- CLM01/LCC/DR/6610/0001/DLU GA/W/01/INF
- CLM01 JAC DR 6611 1200
- CLM01/LCC/DR/6612/0001/EFCC GA/W/01/INF
- CLM01/LCC/DR/6617/0001/BU GA/W/01/INF
- CLM01/LCC/DR/33822/0001/BHRW GA/W/01/INF

3D Earthworks Model

- 09619-3dT Preston REV B
- CLM01-LCC-3D-0120-0001-W01-INF (3D PWD EWLR GENIO)
- PWD EWLR Design 3D
- triangulation

## VERIFICATION REPORT

Preston West Distributor Road

## 6. APPENDICES

APPENDIX 1 - RIDGE REVIEW AND COMMENTS ON COSTAIN COSTPLAN

#### PRESTON WESTERN DISTRIBUTOR ROAD

Inflation Calculation - Low

mation calculation - Low																		
Fixed Price Allowance - July 19 Start																		
			Jan-16 to	Dec-16	Jan-17 to	Dec-17	Jan-18	to Dec-18	Jan-19	to Dec-19	Jan-20	to Dec-20	Jan-21	to Dec-21	Jan-22 t	o Dec-22	Jan-23 t	Dec-23
		1																
DIRECT WORKS	Total Target Cost Submission excl	Total Inflation																
	Inflation & Fee	Allowance	Inflation %	Vr Total	Inflation %	Vr Total	Inflation %	Vr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Vr Total	Inflation %	Vr Total
	initation & i ee	Allowance	initiation 76	TT TOLAI	3.00%	TTTOLAT	3.00%	11 Total	3.00%	11 TOLAI	3.00%	11 TOTAL	3.00%	11 TOTAL	3.00%	11 TOLAI	3.00%	TTTO(a)
IMINARIES					0.0070		0.0070		0.0070		0.0070		0.0070		0.0070		0.0070	
1	13,856,997	1,676,488		0	0.03	0	0.06	42,195	0.09	449,721	0.13	608,711	0.16	441,412	0.19	134,449		
our	1,412,667	170,911		0	0.03	0	0.06	4,302	0.09	45,847	0.13	62,056	0.16	45,000	0.19	13,707		
Accom	3,272,934	395,976		0	0.03	0	0.06	9,966	0.09	106,221	0.13	143,774	0.16	104,259	0.19	31,756		
nt/Transport	2,992,336	362,028		0	0.03	0	0.06	9,112	0.09	97,115	0.13	131,448	0.16	95,320	0.19	29,033		
Bonds ddct from total	1,051,648			0	0.03	0	0.06	3,202	0.09	34,131	0.13	46,197	0.16	33,500	0.19	10,204		
s	1,102,864	133,430		0	0.03	0	0.06	3,358	0.09	35,793	0.13	48,447	0.16	35,132	0.19	10,701		
	836,593	101,215		0	0.03	0	0.06	2,547	0.09	27,151	0.13	36,750	0.16	26,650	0.19	8,117		
t up	178,861	21,639		0	0.03	0	0.06	545	0.09	5,805	0.13	7,857	0.16	5,698	0.19	1,735		
	398,425	48,203		0	0.03	0	0.06	1,213	0.09	12,931	0.13	17,502	0.16	12,692	0.19	3,866		
Carried to Target Submission Total	24.051.675	3.037.125		0		0		76,440		814,715		1.102.741		799.662	-	243.568		0
Carried to Target Submission Total	24,031,073	3,037,123		0		0		70,440		014,715		1,102,741		135,002		243,300		0
RECT WORKS	Total Target Cost Submission excl	Total Inflation																
	Inflation & Fee		Inflation %	Vr Total	Inflation %	Vr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Vr Total	Inflation %	Vr Total
	initiation of 100	Velowanoc	initiation 70	III I Olus	3.00%	TT TOLLI	3.00%	TT TOTAL	3.00%	iii i otta	3.00%	iii i olus	3.00%	11 Fota	3.00%	III TOtta	3.00%	TT TOTAL
WORKS GENERAL					0.0070		0.0070		0.0070		0.0070		0.0070		0.0070		0.0070	
tures		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
earance & demolition		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
vorks		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
farkings		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
y Comms		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
odation Works aping & Ecology		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
orks MRC		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
ng Ning		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
y Fencing		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
ae		0		ő	0.03	õ	0.06	ŏ	0.09	ŏ	0.13	ő	0.16	ő	0.19	ő		
as and Footings		ŏ		ŏ	0.03	ŏ	0.06	ŏ	0.09	ŏ	0.13	ŏ	0.16	ŏ	0.19	ŏ		
ients including sub base		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
Signals		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
Signs and Lighting		0		0	0.03	0	0.06	0	0.09	0	0.13	0	0.16	0	0.19	0		
Sub tota		11,413,285		0	0.03	0	0.06	287,254	0.09	3,061,636	0.13	4,144,017	0.16	3,005,068	0.19	915,310		
Fee	6,268,691	381,763		0	0.03	0	0.06	381,763	0.09	0	0.13	0	0.16	0	0.19	0		
& OPPORTUNITY		0	0.0%	0	3.0%	0	5.0%	0	5.0%	0	5.0%	0	5.0%	0	5.0%	0		0

3,061,636

669,018

4,144,017

3,005,069

915,310

0

TOTAL INFLATION	
	Total Target Cost Submission excl Inflation & Fee
TOTAL Indirect Works Direct Works	3,037,125 11,795,049
Carried to Target Submission Total	14,832,174
Previous reported inflation	5,717,227
Change	9,114,946.91

Carried to Target Submission Total

100,605,082 11,795,049

0

#### PRESTON WESTERN DISTRIBUTOR ROAD

Inflation Calculation - High

			Jan-16 to	Dec-16	Jan-17 to	Dec-17	Jan-18	to Dec-18	Jan-19	to Dec-19	Jan-20	to Dec-20	Jan-21	to Dec-21	Jan-22	to Dec-22	Jan-23 ti	Dec-23
DIRECT WORKS	Total Target Cost Submission excl Inflation & Fee	Total Inflation Allowance	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total
					5.00%		5.00%		5.00%		5.00%		5.00%		5.00%		5.00%	
RELIMINARIES	13,856,997	2,882,006		0	0.05	0	0.10	71,017	0.16	764,473	0.22	1.045.194	0.28	765,687	0.34	235,635		
bour	1,412,667	293.809		ő	0.05	ő	0.10	7,240	0.16	77,935	0.22	106.553	0.28	78,059	0.34	24.022		
e Accom	3,272,934	680,711		ō	0.05	ō	0.10	16,774	0.16	180,564	0.22	246,868	0.28	180,850	0.34	55,656		
nt/Transport	2,992,336	622,352		ō	0.05	ō	0.10	15.336	0.16	165.083	0.22	225,703	0.28	165.345	0.34	50,884		
Bonds ddct from total	1,051,648	218,724		Ó	0.05	ò	0.10	5,390	0.16	58,018	0.22	79,323	0.28	58,110	0.34	17,883		
lps	1,102,864	229,376		0	0.05	0	0.10	5,652	0.16	60,844	0.22	83,186	0.28	60,940	0.34	18,754		
Ē	836,593	173,996		0	0.05	0	0.10	4,288	0.16	46,154	0.22	63,102	0.28	46,227	0.34	14,226		
Set up	178,861	37,200		0	0.05	0	0.10	917	0.16	9,868	0.22	13,491	0.28	9,883	0.34	3,041		
35	398,425	82,865		0	0.05	0	0.10	2,042	0.16	21,981	0.22	30,052	0.28	22,015	0.34	6,775		
Carried to Target Submission Tota	24,051,675	5,221,040		0		0		128,655		1,384,919		1,893,473		1,387,117		426,877		0
RECT WORKS	Total Target Cost Submission excl	Total Inflation																
	Submission excl	Total Inflation																
	Inflation & Fee	Allowance	Inflation %	Vr Total	Inflation %	Vr Total	Inflation %	Vr Total	Inflation %	Vr Total	Inflation %	Vr Total	Inflation %	Vr Total	Inflation %	Vr Total	Inflation %	Vr Total
	Inflation & Fee	Allowance	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total	Inflation %	Yr Total
ADWORKS GENERAL	Inflation & Fee	Allowance	Inflation %	Yr Total	Inflation % 3.00%	Yr Total	Inflation % 3.00%	Yr Total	Inflation % 3.00%	Yr Total	Inflation % 3.00%	Yr Total	Inflation % 3.00%	Yr Total	Inflation % 3.00%	Yr Total	Inflation % 3.00%	Yr Total
	Inflation & Fee	0	Inflation %	0	3.00% 0.05	0	3.00% 0.10	0	3.00%	0	3.00% 0.22	0	3.00% 0.28	0	3.00% 0.34	0		Yr Total
ctures	Inflation & Fee	0	Inflation %	0	3.00% 0.05 0.05	0	3.00% 0.10 0.10	0	3.00% 0.16 0.16	0	3.00% 0.22 0.22	0	3.00% 0.28 0.28	0	3.00% 0.34 0.34	0		Yr Total
ctures clearance & demolition	Inflation & Fee	0 0 0	Inflation %	0 0 0	3.00% 0.05 0.05 0.05	0 0 0	3.00% 0.10 0.10 0.10	0 0 0	3.00% 0.16 0.16 0.16	0 0 0	3.00% 0.22 0.22 0.22	0 0 0	3.00% 0.28 0.28 0.28	0 0 0	3.00% 0.34 0.34 0.34	0 0 0		Yr Total
ctures clearance & demolition hworks	Inflation & Fee	0 0 0	Inflation %	0 0 0	3.00% 0.05 0.05 0.05 0.05	0 0 0 0	3.00% 0.10 0.10 0.10 0.10	0 0 0	3.00% 0.16 0.16 0.16 0.16	0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22	0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28	0 0 0 0	3.00% 0.34 0.34 0.34 0.34	0 0 0 0		Yr Total
ctures clearance & demolition thworks id Markings	Inflation & Fee	0 0 0 0	Inflation %	0 0 0 0 0	3.00% 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0	3.00% 0.10 0.10 0.10 0.10 0.10 0.10	0 0 0 0	3.00% 0.16 0.16 0.16 0.16 0.16 0.16	0 0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28	0 0 0 0	3.00% 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0		Yr Total
ADWORKS GENERAL uctures c clearance & demolition thworks ad Markings torway Comms somodation Works	Inflation & Fee	0 0 0	Inflation %	0 0 0	3.00% 0.05 0.05 0.05 0.05	0 0 0 0	3.00% 0.10 0.10 0.10 0.10	0 0 0	3.00% 0.16 0.16 0.16 0.16	0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22	0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28	0 0 0	3.00% 0.34 0.34 0.34 0.34	0 0 0 0		Yr Total
uctures e clearance & demolition thworks ad Markings torway Comms comodation Works	Inflation & Fee	0 0 0 0 0	Inflation %	0 0 0 0 0 0	3.00% 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0	3.00% 0.10 0.10 0.10 0.10 0.10 0.10 0.10	0 0 0 0 0	3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0 0 0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	0 0 0 0 0	3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0 0		Yr Total
cctures c clearance & demolition thworks ad Markings torway Comms comodation Works discapting & Ecology	Inflation & Fee	0 0 0 0 0 0	Inflation %	0 0 0 0 0 0 0	3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0 0	3.00% 0.10 0.10 0.10 0.10 0.10 0.10 0.10	0 0 0 0 0 0	3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0 0 0 0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	0 0 0 0 0 0	3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0 0 0		Yr Total
uctures clearance & domolition throwis ad Markings torway Comme comodation Works comodation Works context discolary & Ecology adworks MRC ncing	Inflation & Fee	0 0 0 0 0 0 0 0 0 0	Inflation %	0 0 0 0 0 0 0 0 0	3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0 0 0 0 0	3.00% 0.10 0.10 0.10 0.10 0.10 0.10 0.10	0 0 0 0 0 0 0 0 0 0	3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0 0 0 0 0 0 0 0 0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0 0 0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	0 0 0 0 0 0 0 0 0 0	3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0 0 0 0 0 0		Yr Total
clearance & demolition Invortes de Markingen oway Comme oway Comme descaping & Ecology dworks MFC orige day Fencing	Inflation & Fee		Inflation %	0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.10 0.10 0.10 0.10 0.10 0.10 0.10	0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16		3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0 0 0 0 0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0 0 0 0 0 0 0 0		Yr Total
uctures & demolition theories & demolition theories & demolition ad Markings comodation Works decaping & Ecology udworks MRC coing def refreq theories & theories & th	Inflation & Fee		Inflation %	0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05		3.00% 0.10 0.10 0.10 0.10 0.10 0.10 0.10	0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0 0 0 0 0 0 0 0 0 0		Yr Total
clures clearance & denoition hworks d Marings owns/Common works Grant deniss MRC deniss MRC deniss MRC mage ma	Inflation & Fee		Inflation %		3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05		3.00% 0.10 0.10 0.10 0.10 0.10 0.10 0.10		3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16		3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28		3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0 0 0 0 0 0 0 0 0 0 0		Yr Total
clures clearance & demolition works works www.y Comms modation Works Kosping & Ecology works MRC ang ang works MRC modation works mode modation works mode modation works moda	Inflation & Fee		Inflation %	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05		3.00% 0.10 0.10 0.10 0.10 0.10 0.10 0.10		3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16		3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22		3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28		3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34			Yr Total
Iteres Jearance & demolition works Markings www.Comms modalion Works caping & Ecology works MFC Pencing age ngs and Footings ments including sub base Signals	Inflation & Fee		Inflation %		3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05		3.00% 0.10 0.10 0.10 0.10 0.10 0.10 0.10		3.00% 0.16		3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22		3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28		3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34			Yr Total
Iteres Jearance & demolition works Markings www.Comms modalion Works caping & Ecology works MFC Pencing age ngs and Footings ments including sub base Signals	Inflation & Fee		Inflation %	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05		3.00% 0.10 0.10 0.10 0.10 0.10 0.10 0.10		3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16		3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22		3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28		3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34			Yr Total
ctures clearance & demolition hworks 0 Markingsmin amodation Works stocaping & Ecology dworks MRC works MRC works MRC dworks MRC registration registration to signification of Signs and Footings to Signs of Signs and Lighting Sub tool	94,336,391	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Inflation %		3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05		3.00% 0.10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Yr Total
tures Jearance & demolition works works newsy Commis modation Works saceing & Ecology works MRC ng mga and Footings mga and Footings mga and Footings mga and Footings mga and Footings mga and Footings sage & Signa Si		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05		3.00% 0.10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
ures learance & demolition works Markings Markings modalan Works caping & Ecology works MRC Prenng age ga and Footings age ga and Footings sg and Footings Signis Signis Signis Signis Sub toti	94,336,391	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0%		3.00% 0.05 0.05 0.05 0.05 0.05 0.05 0.05		3.00% 0.10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.22 0.22 0.22 0.22 0.22 0.22 0.22	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.28 0.28 0.28 0.28 0.28 0.28 0.28 0.28	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.00% 0.34 0.34 0.34 0.34 0.34 0.34 0.34 0.34	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Yr Total

TOTAL INFLATION	
	Total Target Cost Submission excl Inflation & Fee
TOTAL	
Indirect Works	5,221,040
Direct Works	20,262,819
Carried to Target Submission Total	25,483,859
Previous reported inflation	5,717,227
Change	19 766 631 90

Project Na	me:			Report Title:						Date:		July 2017 Est	imate
PRESTOR	WESTERN DISTRIBUTOR ROAD & EA	ST WE	EST LINK ROAD	PROJECT CONSTRU	JCTION COST ES	TIMA	ATE			28-Sep-17		Totals	Variance
Section PWDR Main Cottam Link Lea Lane Bartle Lane East West I	Road (including the bridge)		1000 800 400	m m m m									
Cost Code	Description	Esti	mated End Cost	%age of Direct Works	%age of Total	E	EWLR Component Included (£)		M55 Junction 2	Comments			
6611B1 6612B1 6613B1 6614B1 TBC TBC	Structures Savick Brook Viaduct Darkinson Lane Underpass Lea Viaduct Earls Farm Cattle creep Bartle Lane Becconsall Bartle Underpass Temporary bridges Sheet Piling - Savick Brook Sheet Piling - Lea Viaduct (Canal)	£ £ £ £ £ £ £ £ £	16,215,911.70 737,768.34 11,296,212.75 638,890.15 1,900,064.05 3,650,870.40 712,000.00 424,767.54 248,838.82	45.3% 2.1% 31.5% 1.8% 5.3% 10.2% 2.0% 1.2% 0.7%	12.8% 0.6% 8.9% 0.5% 1.5% 2.9% 0.6% 0.3% 0.2%			£	3,650,870.40	Accommodation Works Accommodation Works Accommodation Works		15,218,978 792,704 11,069,735 524,665 1,900,064 3,556,378 712,000 424,768 0 248,839	996,933 -54,935 226,478 114,225 0 94,493 0 0 0 0 0 0
	Structures Sub-total	£	35,825,323.77	100%	28%	£	•	£	3,650,870.40		35,825,324	£ 34,448,130.00	1,377,194
100 200 600 1200 1500 2700 3000	Roadworks Traffic Management Site clearance & Demolition Earthworks Road Markings Motorway Comms Accommodation Works Landscaping & Ecology	£ £ £ £ £ £	2,972,352.80 238,289.05 14,498,887.98 421,349.19 3,324,110.00 483,903.76 2,705,185.91	5.7% 0.5% 27.7% 0.8% 6.4% 0.9% 5.2%	2.3% 0.2% 11.4% 0.3% 2.6% 0.4% 2.1%	£	24,657.81 788,819.40		1,629,377.52 145,822.26 5,811,584.16 3,324,110.00 48,390.38	Access roads, water management, temporary		2,972,353 238,289 14,498,888 421,349 1,985,497 483,904 1,942,265	0 0 1,338,613 0 762,921
100 100 300 400 500 1100 700 1400 1200	Roadworks MRC Site Wide Access Roads Temp Water Management Fencing Safety Fencing Drainage Kerbing and Footways Pavements including sub-base Traffic Signals Road Signs and Road Lighting	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	3,028,869.96 611,765.13 953,342.48 6,875,983.53 1,592,237.48 12,248,402.88 515,794.34 1,847,529.85	5.8% 1.2% 13.1% 3.0% 23.4% 1.0% 3.5%	2.4% 0.5% 0.8% 5.4% 1.3% 9.6% 0.4% 1.5%	£	363,539.59	£	538,543.94	barriers, han, temporary barriers, haul routes, 4 nr Temporary Roads Included in RMR Included in RMR Accomodation Works		3,028,870 611,765 953,342 6,875,984 1,592,237 12,248,403 515,794 1,847,530	0 0 0 0 0 0 0 0 0 0 0
	Roadworks Sub-total	£	52,318,004.34	100%	41.2%	£	1,177,016.79	£	11,497,828.26		51,140,988	£ 50,216,471.02	2,101,533
4000	Statutory Undertakers Civils Work												
	Statutory Undertakers	£	-	0	0							0	0
	Premilinaries Prelimiary Costs (See separate Build-Up)	£	24,051,674.77	100%	18.9%	£	541,099.10	£	5,285,790.80			24,051,675	0
	Premilinaries Sub-total	£	24,051,674.77	100.0%	18.9%	£	541,099.10	f	5,285,790.80		23,510,576	£ 24,051,674.77	0
	Risk and Opportunity Construction Risk	~	24,001,014.11		10.0 /0	~		~	0,200,100,00		20,010,010	2	
	Risk and Opportunity	£	-	0	0							0	0
	Direct Fee 7.66%	£	8,594,137.22			3	131,607.68	£	1,565,281.89		8,462,530	8,327,667	266,470
	Statutory Undertakers Work (Zero Fee LCC Expenditure)	£	6,268,691.16	100.0%	4.9%	£	884,911.32	£	3,484,000.00		5,383,780	6,268,691	0
Project Co	nstruction Cost Estimate	£	127,057,831.26			£	2,734,634.89	£	25,483,771.35		124,323,196	123,312,634	3,745,198

110,186,532.75 14,136,663.61

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425,000.00

**£ 123,737,633.68 £** 3,745,197.58

£ 110,611,532.75 £14,136,663.61

Less EWLR 124,323,196.36 -

Becon (singlespan) Savick 7 to 6 span Retaining walls

£ £ £ 425,000.00

£ 127,482,831.26

Revised less EWLR £ 124,748,196.36

1,223,411

	COSTAIN								RIDGE	
Description	Qty	<u>Unit</u>	Unit Cost	<u>Amount</u>	RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	Difference	COMMENT
PILING										
Piling Plant										
Fransport all necessary plant, labour & equipment o site for works piles and clear upon completion	1.00		057.005	057.005						
a) Mob/demob (up to 2No rigs)	1.00	Visit	357,335	357,335						as Bachy Quote 2/8/17
Rig modification for lower headroom	1.00	no	234,000	234,000						as Bachy Quote 2/8/17
Set up/move to pile position a) Restricted H/room	208.00	no	262	54,496						Bachy quote £55,536
b) Unrestricted H/room	0.00	no	285							
Bored and concreted length a) 900mm dia: Restricted H/room(n.e.:42.00m)	4692.30	m	308	1,443,351						as Bachy Quote 2/8/17
) 1200mm dia:UnrestrictedH/room (n.e.:42.5m)	3781.90	m	396	1,495,931						as Bachy Quote 2/8/17
Credit for pile length not constructed a) 1200mm diameter										
Supply, fix and place TIED reinforcement										
a) Main cage reinforcement b) Shear cage reinforcement	430.04 80.40	t	1,250 1,250	537,550 100,500						as Bachy Quote 2/8/17 as Bachy Quote 2/8/17
		l		100,500						as Bachy Quote 2/8/17
Supply, fix and place debonding foam	0.00		9,000							
supply and install permanenet liners	0.00		56,000							
JKAS accredited site personnel ntegrity Tests: Sonic Echo				0						
a) Preliminary Pile b) Working Piles	0.00		12,000 182,500	0						
nstall & carry out test load to 2.5 x working load to a max				0						
nax test of : a) 4375 kN :900 diametere			71,500	0						
) 4050kN 1200 diameter			90,500	0						
Carry out test load to 1.5 x working load/to a mex test load a) 2625kN 900 diameter			36,025	0						
b) 4050kN 1200 diameter			42,880	0						
ntergrity tests: Sonic Echo				0						
a)mobilisation per visit o)test and report per pile (200 per visit min)	1.00 93.60		100 10	100 936						
Standing time per rig and crew due to delays or				0 0						
obstructions. Rate applicable up to 20 hrs obstructions removed by main contractor)	0.00		800	<u>    0                                </u>						
Dbstruction time per rig and crew	0.00		860	0						
Test Piles										
Fransport all necessary plant, labour & equipment o site for works piles and clear upon completion										
a) Mob/demob (up to 1No rigs) - LDA a) Mob/demob (up to 1No rigs) - CFA	1.00 1.00	Visit Visit	94,105 85,170	94,105 85,170						Not in Quote - is this Not in Quote - is this
nstall and carryout test load to 2.5 x workig load on a										
orelim pile to max test load of upto 6750kN 1200d nstall and carryout test load to 2.5 x workig load on a	1.00	no	88,200	88,200						Bachy quote £90,500
orelim pile to max test load of upto 4375kN 900d	1.00	no	69,300	69,300						Bach quote £71,500
Carryout test load to 1.5 x working load to a max test load of upto 4050kN	0.00	no	35,165							
Carryout test load to 1.5 x working load to a max test load of upto 2625 kN 900d	5.00	no	34,855	174,275						Bachy quote £36,025 e
Carryout test load to 1.5 x working load to a max test load of upto 4050kN 1200d	5.00	no	41,690	208,450						Bachy quote £42,880 e
Prepare 1200 dia pile heads	165.00	no	250	41,250						ok
SUBSTRUCTURE - END SUPPORTS										
Drainage and Service Ducts						-				
Drainage and Service Ducts in Structures (including										
Reinforced Earth Structures and Anchored Earth Structures)										
150 mm diameter porous drain in 300 mm x 300 mm no ines concrete surround on minimum 150 mm ST2 concret				e ·						
bed	62.00	m	99	6,167						
75 mm diameter weepholes 0.60 m in length	8.00	no	6	48						
5 mm diameter weepholes 1.6 m in length	6.00	no	9	51						
25 mm hollow blockwork drainage layer	445.20	m2	25	11,002						
Now for forming 150mm diameter drainage channel in earing gallery floor	62.00	m	15	899						
Now for connection to highway drainage system	2.00	no	1,500	3,000						
	2.00	10	1,300	3,000						
arthworks										
xcavation										
Excavation of acceptable material excluding Class 5A in structural foundations 0 to 6 metres in depth	6023.00	m3	12	72,276		6023	00	23	138,529 66,3	Rate appears low, plea 253 clarify
Deposition of Fill										
Deposition of acceptable material in fill above structural										
concrete foundations	602.30	m3	16	9,637						
Disposal of Material										
Disposal of acceptable material excluding Class 5A	5420.70	m3	10	54,207						
mported Fill										

Description	<u>COSTAIN</u> <u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>	RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	<u>RIDGE</u> <u>Differenc</u>	<u>COMMENT</u>	
Imported acceptable material Class 6N in fill to structures	2175.00	m3	30	65,359							
Imported acceptable material Class 6N in fill above structural concrete foundations	inc above	m3									
Imported acceptable material Class 1 in fill beneath											
structural concrete foundations Compaction of Fill	inc above	m3									
Compaction of acceptable material in fill to structures	inc above	m3									
Compaction of acceptable material in fill above structural concrete foundations	inc above	m3									
Compaction of acceptable material in fill beneath structures	inc above	m3									-
Structural Concrete											
In Situ Concrete											
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (South Abt pile cap)	204.00	m3	132	26,909							
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (pile cap)	204.00	m3	132	26,909							
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (wingwall base slab)	252.00	m3	132	33,240							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (abutment wall)	158.72	m3	142	22,512							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (ballast wall)	93.00	m3	156	14,506							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (bearing plinth)	0.51	m3	177	90							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (bearing wall)	15.50	m3	156	2,418							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (masking wall)	3.00	m3	156	468							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (wingwall)	135.30	m3	142	19,190							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF4 (wingwall cope)	16.45	m3	177	2,915							
In situ concrete ST 2 aggregate size 10/20 exposure Class X0, AC-1 in blinding 75 mm or less in thickness	50.40	m3	142	7,171							
Surface Finish of Concrete-Formwork											
Formwork Class F2 horizontal more than 300 mm wide (ballast wall overhang)	18.60	m2	140	2,610		18.	60	95	1,767	Rate appears high -843 clarify	1, please
Formwork Class F1 vertical more than 300 mm wide (abutment wall)	299.92	m2	100	29,937							
Formwork Class F1 vertical more than 300 mm wide (ballast wall)	310.00	m2	118	36,642		310.	00 1	00	30,944 -	Rate appears high 5,698 clarify	n, please
Formwork Class F1 vertical more than 300 mm wide (pile cap)	114.00	m2	74	8,456							
Formwork Class F1 vertical more than 300 mm wide (South abt base slab)	108.40	m2	74	8,041							
Formwork Class F1 vertical more than 300 mm wide (wingwall base slab)	150.00	m2	74	11,127							
Formwork Class F1 vertical more than 300 mm wide (wingwall)	168.64	m2	100	16,833							
Formwork Class F2 vertical more than 300 mm wide (bearing wall)	62.00	m2	118	7,328		62.	001	10	6,820	Rate appears high -508 clarify	n, pleas
Formwork Class F2 vertical more than 300 mm wide (masking wall)	30.00	m2	118	3,546		30.		10	3,300	Rate appears high -246 clarify	n, please
Formwork Class F3 vertical more than 300 mm wide (wingwall cope)	67.20	m2	146	9,814		67.	20 1:	25	8,400 -	Rate appears high 1,414 clarify	1, pleas
Formwork Class F1 300 mm wide or less at any inclination (ballast wall)	12.40	m2	173	2,147		12.	40 1	45	1,798	Rate appears high -349 clarify	n, please
Formwork Class F4 300 mm wide or less at any inclination (bearing plinth)	2.56	m2	173	443		2.	56 1·	45	371	Rate appears high -72 clarify	n, please
Formwork Class F4 300 mm wide or less at any inclination (wingwall cope)	9.40	m2	173	1,627		9.	40 14	45	1,363	Rate appears high -264 clarify	n, please
Steel Reinforcement for Structures											
Steel bar reinforcement nominal size 16 mm and under Grade B-500B or B-500C to BS4449:2005	0.00	t									
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005	214.26	t	1,066	228,419							
Bridge Expansion Joints and Sealing of Gaps											
Sealing of Gaps	1.00	lte	E00	500							
Hydrophilic sealant	1.00	Item	500	500							

Pescription Polyurethane joint sealant	COSTAIN Qty 1.00	<u>Unit</u> Item	<u>Unit Cost</u> 500	<u>Amount</u> 500	RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	<u>RIDGE</u> Dif	ference	COMMENT
Closed cell polythene joint sealant	1.00	Item	100	100							
Joint filler board 20 mm thick	1.00	Item	50	50							
Earthworks Excavation											
Excavation of acceptable material excluding Class 5A in											Rate appears low, pleas
structural foundations 0 to 6 metres in depth	2160.00	m3	12	25,920		2160.0	0	23	49,680	23,76	io clarify
Excavation in Hard Material											
Deposition of Fill											
Deposition of acceptable material in fill above structural concrete foundations	216.00	m3	16	3,456							
Disposal of Material											
Disposal of acceptable material excluding Class 5A	1944.00	m3	11	20,412							
Compaction of Fill											
Compaction of acceptable material in fill above structural concrete foundations	inc above	m3									
Scour Protection											
Structural Concrete											
In Situ Concrete											
In situ concrete Grade C32/40 aggregate size 10/20	1075.00		100	100.100							
exposure Class XC2, XD1, XF1, AC-1 (pier pile cap)	1275.00	m3	132	168,180							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF2 (bearing plinth)	12.10	m3	177	2,144							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF2 (pier column)	470.00	m3	142	66,662							
In situ concrete ST 2 aggregate size 10/20 exposure Class X0, AC-1 in blinding 75 mm or less in thickness	94.50	m3	142	13,446							
Surface Finish of Concrete-Formwork											
Formwork Class F1 vertical more than 300 mm wide (pier				00.000							
base) Formwork Class F1 vertical more than 300 mm wide (pier	390.00	m2	74	28,929							
wall)	0.00	m2									
Formwork Class F3 300 mm wide or less at any inclination (bearing plinth)	55.00	m2	173	9,522							
Surface Finish of Concrete-Patterned Profile Formwork											
Curved patterned profile formwork Class F3 at any											
inclination (pier column)	940.33	m2	121	113,946							
Steel Reinforcement for Structures Steel bar reinforcement nominal size 16 mm and under											
Grade B-500B or B-500C to BS4449:2005	0.00	ton									
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005	332.12	ton	1,066	354,067							
Mesh A393		m2									
Provision of Crosshead beams spanning pier columns including In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF2, Formwork Class F4 more than 300 mm wide and Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449-2005 based on 7 weeks hite of ragidshore											
formwork	0.00	m3									
SUPERSTRUCTURE											
Drainage and Service Ducts											
Drainage and Service Ducts in Structures (including Reinforced Earth Structures and Anchored Earth Structures)											
Drainage of superstructure		item									
100 mm diameter spare service duct laid in verge	1112.00	m	30	33,360							
Structural Concrete											
In Situ Concrete											
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1 (deck slab)	1918.20	m3	145	278,842							
In situ concrete Grade C40/50 aggregate size 10/20											
exposure Class XC4, XD1, XF1 (diaphragm)	104.88	m3	145	15,246							
Precast Concrete											
Precast concrete parapet coping Type 1 in accrodance with											Rate discrepency, this ra differs from other structures with the same
Precast concrete parapet coping Type 1 in accrooance with Drawing No. B1082600/6552/0042	93.50	no	892	83,371		93.5	0 8	92	83,371		0 item, please clarifty

<u>Description</u>	OSTAIN Qty	<u>Unit</u>	Unit Cost	<u>Amount</u>	RAG	<u>QTY</u>	RATE	TOTAL	<u>RIDGE</u> <u>Difference</u>	<u>COMMENT</u>
Precast concrete parapet coping Type 2 in accrodance with Drawing No. B1082600/6552/0042	93.50	no	892	83,371		93.50	) 89	2	83,371	Rate discrepency, this rate differs from other structures with the same 0 item, please clarifty
Surface Finish of Concrete-Formwork										
Permanent formwork in accordance with BA36	7228.00	m2	79	570,251						
Formwork Class F2 horizontal more than 300 mm wide (diaphragm)	55.20	m2	120	6,604						
Formwork Class F3 horizontal more than 300 mm wide (deck cantilever)	722.80	m2	373	269,396						
Formwork Class F2 vertical more than 300 mm wide										
(diaphragm) Steel Reinforcement for Structures	209.76	m2	142	29,761						
Steel bar reinforcement nominal size 16 mm and under Grade B-500B or B-500C to BS4449:2005	82.18	ton	1,119	91,991						
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005	578.16	ton	1,066	616,366						
Steelwork for Structures										
Fabrication of Steelwork										
										Please provide breakdown
Supply & fabrication of steel Treatment & transport	1.00	item	3,247,180	3,247,180						of rate
	1.00	item	106,792	106,792						Please provide breakdown of rate
Erection of Steelwork	1.00	110111	100,732	100,732						0.140
Permanent erection of superstructure	1.00	item	978,134	978,134						Please provide breakdown of rate
Bridge Bearings										
Bearings					1					
Bearing (Type not detailed)	40.00	no	1,090	43,594						
Installation of bearing (Type not detailed)	0.00	no	750	30,000						
Bridge Expansion Joints and Sealing of Gaps				•						
Bridge Deck Expansion Joints										
Type 5 expansion joint (BD33/94) 31m in length with +/-										
40mm movement range Compressible joint sealant 20mm thick between precast	55.20	no	1,594	87,985	-					
copes Deep grey polyurethane sealant 20mm x 15mm thick	45.00	m2	20	900						
between precast copes	320.00	m	3	1,053						
Joint sealant tape between precast copes	110.00	m	3	201						
FINISHINGS										
Road Restraint Systems (Vehicle and Pedestrian)										
Satety Barriers										
1.4m high aluminium parapet containment performance class N2 working width class W2 with mesh infill both sides straight or curved exceeding 50 metres radius	302.50	m	194	58,646		302.50	) 27	5	83,188 24	Rate appears light, please 542 clarify
1.0m high aluminium parapet containment performance class N2 working width class W2 with mesh infill both sides straight or curved exceeding 50 metres radius	302.50	m	200	60,349		302.50	) 20	5	62,013 1	Rate appears light, please ,664 clarify
Cast in parapet cluster @ 3m centres	186.00	no	85	15,810			_0			
Concrete Safety Barrier										
Concrete safety barrier; Performance class H2; Working width class W2; Designed to be impacted on both sides; Straight or curved exceeding 120m radius	278.00	m	57	15,921						
Kerbs, Footways and Paved Areas										
Kerbs, Channels, Edgings, Combined Drainage and Kerb Blocks and Linear Drainage Channel Systems										
Precast concrete roadworks kerb laid straight or curved exceeding 12 metres radius	556.00	m	90	50,207						
Combined drainage and kerb laid straight or curved										
exceeding 12 metres radius	556.00	m	122	67,721						
Subsurface drainage channel	55.20	m	91	5,023						
SERIES 700 - PAVEMENTS										
Deck Construction										
Hot rolled asphalt 35/14, polymer modified bitumen binder course, 40mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)	0.00	m2	11							
Heavy duty macadam with AC 20 aggregate binder course 50mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)	0.00	m2	10			3491	1	0	34,737 34	Not included for in 1,727 pavements
					I L	ı L				

Description	<u>COSTAIN</u> <u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	Amount	RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	<u>RIDG</u>	E ifference	<u>COMMENT</u>
Masterpave 14mm surface course PSV 60 surface course 5mm thick in carriageway, hardshoulder and hardstrip Pavement Type 5)	0.00	m2	10			3491	10	)	33,453	33,4	Not included for in 44 pavements
Footways and Paved Areas											
Central reserve infill concrete Grade C40/50 aggregate siz 10/20 exposure class X0, XF4 approximately 250mm thick	e 183.48	m3	119	21,785							
Verge infill concrete Grade C40/50 aggregate size 10/20 exposure class X0, XF4 approximately 300mm thick	397.54	m3	119	47,202							
Hardened verge construction to bridge deck comprising 20mm thin surface course (CL919) and 60mm binder (CL912); Surfaces sloping at 10° or less to the horizontal	1807.00	m2	24	43,109							
Slabs/open blockwork sloping at more than 10 degrees to the horizontal	310.00	m2	100	30,923							
Bearing inspection platform (no details)	1.00	ltem	1,000	1,000							Please provide break
Steps											
Access steps cut into batter slopes with lockable access gate flight length approximately 10.50m Steelwork for Structures	28.50	m	550	15,675							
Miscellaneous Metalwork											
Galvanised steel lockable access door 1.200 m wide 1.000 m high	2.00	nr	1,100	2,200		2.00	1,100	)	2,200		Rate discrepency, this 0 differs from other
Waterproofing for Structures Waterproofing											
Surface preparation	8130.80	m2	2	16,262		<b>—</b>					
Waterproofing with bridge deck spray applied waterproofing system more than 300 mm wide horizontal o at any inclination up to and including 30 degress to the horizontal			15								
Materproofing with two coats of bitumen more than 300 mm wide horizontal or at any inclination up to and including		m2	15	116,601							
30 degress to the horizontal	1460.00	m2	8	11,957							
Waterproofing with bridge deck spray applied waterproofing system more than 300 mm wide at any nclination more than 30 degrees up to and including 90 degrees to the horizontal	408.40	m2	15	6,166							
Waterproofing with two coats of bitumen more than 300 mm wide at any inclination more than 30 degrees up to and including 90 degrees to the horizontal	949.40	m2	8	7,776							
Waterproofing with 20mm of black asphalt protection layer more than 300mm wide horizontal or at any inclination up t and including 30 degress to the horizontal	0 1807.00	m2	11	20,491							
Abutment Sub-surface Drainage											
325 Channel drain 2000mm long and fittings	25.00	m	210	5,250							
Surface Impregnation of Concrete Surface impregnation to plain surfaces with Pavix 100 CCC or similar approved	2131.60	m2	7	14,548							
CMP05 Method Related											
Temporary site Roads											
Access point off public highway site clear, signs, apron	1.00	item	7,707	7,707							
Parking & office (paved area) geotextile/150mm 6F2/50mm black	1.00	item	19,556	19,556							
General construction requirements:-											
Temporary Haul/Access Roads, 8m wide/2x geotextile/300mm 6F2 (revised to 600mm)	1.00	item	177,807	177,807							Please provide break of rate
Hardstandings (general access), geotextile/150mm 6F2	1.00	item	16,415	16,415							
Piling Mats, geotextile/600mm 6F2 (Revised to 1000mm)	2.67	item	272,198	725,861							Please provide break of rate
General construction crane mats, geotextile/400mm 6F2 revised to 800mm)	2.67	item	23,599	62,932							Please provide break of rate
Earthworks for laydowns & access, ut/stockpile/fill/reinstate	1.18	item	15,177	17,909							
Beam erection requirements:-											
General laydown area, geotextile/150mm 6F2 Beam erection crane mat (medium crane),	1.18	item	130,395	153,866							Please provide break
geotextile/400mm 6F2 (assume 800mm)	2.66	item	63,173	168,041							of rate
Beam erection crane mat (large crane), geotextile/600mm 6F2		item									

	<u>DSTAIN</u> Qty	<u>Unit</u>	Unit Cost	Amount
Beam erection - Launching platforms (assume 50% saving)	1.00	nr	72,767	72,767
Earthworks for laydowns & access,	1.00	111	12,101	12,101
cut/stockpile/fill/reinstate	1.00	item	8,343	8,343
Temporary public Roads				
Temporary Footpaths	1.00	item	16,075	16,075
Existing Services				
Service protection - In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC- 1 (Service protection slabs 6mx6x0.3m and 30mx42mx0.3m))				55.007
F 201	388.80	item	142	55,367
Facilities				
Accommodation works generally		1 Item	83,904	83,904
Security (Visiting)	108.00	Wk	150	16,200
Fencing/Hoardings				
Heras / Site Temporary Fencing	1.00	item	12,834	12,834
Gates in Heras	1.00	item	950	950
Site Pedestrian fencing	1.00	item	7,598	7,598
Site Pedestrian/Traffic Segregation	1.00	item	16,621	16,621
Orange Netting/Fencing	1.00	item	3,418	3,418
Baulk timbers	1.00	item	5,733	5,733
Pumping/Dewatering				
Ground Water	1.00	item	116,230	116,230
Temporary works backfil adjustments	1.00	item	-83,689	-83,689
Cofferdams				
Batterered excavation (Extra over quant) Assume 1:1 batter plus 1.8m working room		item		
Sheets & Frames	5.00	Nr	65,191	325,956
Sheets & Frames		item		
Access for pile pre-auger rig	1.00	item	21,066	21,066
Scaffolding				
Scaffolding - Abutment & 5no Piers	1.14	item	85,000	96,900
Scaffolding - Handrails/Edge Protection	1.14	item	5,000	5,700
Fall arrest system	1.14	item	20,000	22,800
Adaptions Alterations	1.14	item	5,000	5,700
	1.14	item	3,000	5,700
Falsework	1.00	·	7 500	7 500
Temp timber platforms for erection of perm formwork	1.00	item	7,520	7,520
Other Temporary Works	0.00	•.		
Deck works craneage	0.00	item		
Allowance for insitu stringcourse	1.00	item	50,000	50,000
allowance for dewatering for piling until bases completed see jacobs email re 1.5 m above groundwater	1.00	item	250,000	250,000
			To Collection	16,215,912
			-	15,216,528 999,383
			-	999,383

<u></u>	<u>STAIN</u>			
Description	<u>Qtv</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>
PILING				
Piling Plant	-			
Transport all necessary plant, labour & equipment to site				
for works piles and clear upon completion	1.00	10-14	05 000	05 000
a) Main mob/demob (up to 1No rig)	1.00	Visit	25,000	25,000
b) Tracked inter-site move per rig	1.00	Visit	5,000	5,000
Transport all necessary plant, labour & equipment to site for works piles and clear upon completion - TEST PILES				
a) Main mob/demob (1No Rig)	1.00	Nr		
b) Low loader inter-site move per rig	0.00	Nr		
c) Tracked inter-site move per rig	0.00	Nr	10	
Set up/move to pile position	24.00	Nr	40	960
Bored and concreted length a) 1050mm diameter (n.e.: 17.0m)				
) 1050mm diameter (n.e.: 17.0m)	0.00	Lm	278	
Arising disposal	3.00	Wk	4,813	14,438
Credit for pile length not constructed				
) 1050mm diameter	Rate only	Lm		
Supply, fix and place TIED reinforcement a) Main cage reinforcement	34.27	tn	1,250	42,838
) Shear cage reinforcement	7.99	tn	1,250	9,988
ntegrity Tests: Sonic Echo a) Mobilisation per visit	3.00	Visit	100	300
b) Test and report per pile	48.00	Nr	10	480
Supply & fix debonding foam	1.00	item	1,250	1,250
) Preliminary Piles	0.00	Nr		
Working Piles	0.00	Item		
nstall & carry out test load to 2.5 x working load on reliminary test pile to max test load of upto 4800kN	0.00	Nr		
aryout test load to 1.5 x workling load to a max test load		•		a
f upto 2880kN	2.00	Nr	12,055	24,110
Prepare 1050 dia pile heads	24.00	no	350	8,400
SUBSTRUCTURE - END SUPPORTS				
Drainage and Service Ducts				
Drainage and Service Ducts in Structures (including Reinforced Earth Structures and Anchored Earth				
Structures)				
150 mm diameter porous drain in 300 mm x 300 mm no fines concrete surround on minimum 150 mm ST2			<u>-</u>	· =
concrete bed	37.70	m	99	3,750
75 mm diameter weepholes 0.60 m in length	2.40	no	6	14
75 mm diameter weepholes 1.6 m in length	2.00	no	9	17
225 mm hollow blockwork drainage layer	1106.43	m2	25	27,344
Allow for forming 150mm diameter drainage channel in bearing gallery floor	37.70	m	15	547
Allow for connection to highway drainage system	2.00	no	1,500	3,000
Earthworks				
Excavation				
Excavation of acceptable material excluding Class 5A in		-		
structural foundations 0 to 6 metres in depth	4714.00	m3	12	56,568
Deposition of Fill				
Deposition of acceptable material in fill above structural concrete foundations	471.40	m3	16	7,542
Disposal of Material				
Disposal of acceptable material excluding Class 5A	4242.60	m3	10	42,426
Imported Fill				
Imported acceptable material Class 6N in fill to structures	1887.00	m3	30	56,704
Imported acceptable material Class 6N in fill above structural concrete foundations	inc above	m3		
Imported acceptable material Class 1 in fill beneath				
structural concrete foundations	inc above	m3		
Structural Concrete				
In Situ Concrete				
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (East abutment pile				
cap)	105.00	m3	132	13,850
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (West abutment				
pile cap)	105.00	m3	132	13,850
In situ concrete Grade C32/40 aggregate size 10/20				
exposure Class XC2, XD1, XF1, AC-1 (wingwall pile caps)	306.00	m3	132	40,363

	<u>STAIN</u> <u>Qty</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (abutment walls)	278.40	m3	142	39,487
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (ballast walls)	26.10	m3	156	4,071
In situ concrete Grade C40/50 aggregate size 10/20				
exposure Class XC4, XD1, XF1, AC-1 (bearing plinth) In situ concrete Grade C40/50 aggregate size 10/20	0.43	m3	177	77
exposure Class XC4, XD1, XF1, AC-1 (bearing upstand walls)	7.25	m3	156	1,131
n situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (cheek walls)	6.14	m3	156	958
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (wingwalls)	617.40	m3	142	87,568
n situ concrete Grade C40/50 aggregate size 10/20	05.00	0	477	
exposure Class XC4, XD3, XF4 (wingwall cope) In situ concrete ST 2 aggregate size 10/20 exposure Class	25.92	m3	177	4,593
K0, AC-1 in blinding 75 mm or less in thickness Surface Finish of Concrete-Formwork	48.98	m3	142	6,969
prmwork Class F2 horizontal more than 300 mm wide				
oallast wall overhangs) ormwork Class F1 vertical more than 300 mm wide	17.40	m2	140	2,441
butment walls)	470.12	m2	100	46,926
ormwork Class F1 vertical more than 300 mm wide ballast walls)	87.00	m2	118	10,284
ormwork Class F1 vertical more than 300 mm wide (E bt Pile cap)	54.00	m2	74	4,006
Formwork Class F1 vertical more than 300 mm wide (N	54.00	m2	74	4,006
Formwork Class F1 vertical more than 300 mm wide				
vingwall pile caps) ormwork Class F1 vertical more than 300 mm wide	222.00	m2	74	16,467
vingwalls)	1302.40	m2	100	130,001
ormwork Class F2 vertical more than 300 mm wide earing walls)	34.80	m2	118	4,113
ormwork Class F2 vertical more than 300 mm wide nasking walls)	20.48	m2	118	2,421
ormwork Class F3 vertical more than 300 mm wide ringwall copes)	87.84	m2	146	12,828
ormwork Class F1 300 mm wide or less at any				
ormwork Class F4 300 mm wide or less at any	11.60	m2	173	2,008
nclination (bearing plinths)	2.88	m2	173	499
ormwork Class F4 300 mm wide or less at any actination (wingwall copes)	14.40	m2	173	2,493
Steel Reinforcement for Structures				
teel bar reinforcement nominal size 16 mm and under arade B-500B or B-500C to BS4449:2005	0.00	t		
Steel bar reinforcement nominal size 20 mm and over				
Grade B-500B or B-500C to BS4449:2005	210.00	t	949	199,373
Bridge Expansion Joints and Sealing of Gaps Sealing of Gaps				
lydrophilic sealant	1.00	Item	500	500
olyurethane joint sealant	1.00	Item	500	500
losed cell polythene joint sealant	1.00	Item	100	100
oint filler board 20 mm thick SUBSTRUCTURE - INTERMEDIATE SUPPORTS	1.00	Item	50	50
arthworks				
Excavation Excavation of acceptable material excluding Class 5A in				
structural foundations 0 to 6 metres in depth	0.00	m3		
Excavation in Hard Material Deposition of Fill				
Deposition of acceptable material in fill above structural		- *		
concrete foundations Disposal of Material		m3		
Disposal of Matchai		m3		
Structural Concrete				
In Situ Concrete				
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (pier pile caps)	0.00	m3		
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF2 (bearing plinths)	0.00	m3		
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF2 (pier column)	0.00	m3		
In situ concrete ST 2 aggregate size 10/20 exposure Class				
X0, AC-1 in blinding 75 mm or less in thickness	0.00	m3		

<u>C</u> Description	<u>OSTAIN</u> <u>Qty</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>
Surface Finish of Concrete-Formwork				
Formwork Class F1 vertical more than 300 mm wide (pie				
bases) Formwork Class F1 vertical more than 300mm wide (pie	0.00 r	m2		
all) -N/A	1	m2		
ormwork Class F3 300 mm wide or less at any aclination (bearing plinths)	0.00	m2		
urface Finish of Concrete-Patterned Profile Formwork				
atterned profile formwork Class F3 at any inclination pier columns)	0.00	m2		
Steel Reinforcement for Structures				
teel bar reinforcement nominal size 16 mm and under arade B-500B or B-500C to BS4449:2005	0.00	ton		
Steel bar reinforcement nominal size 20 mm and over Arade B-500B or B-500C to BS4449:2005	0.00	ton		
UPERSTRUCTURE	0.00	.011		
Prainage and Service Ducts				
Drainage and Service Ducts in Structures (including Reinforced Earth Structures and Anchored Earth Structures)				
Nater Main protection slab	1.00	item	10,000	10,000
100 mm diameter spare service duct laid in verge	112.00	m	32	3,528
Structural Concrete				
In Situ Concrete In situ concrete Grade C40/50 aggregate size 10/20				
exposure Class XC4, XD1, XF1 (deck slab - inc stitch)	58.24	m3	145	8,466
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1 (diaphragms)	13.52	m3	145	1,965
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1 (Parapet Cope)	20.16	m3	145	2,931
Surface Finish of Concrete-Formwork				
Permanent formwork in accordance with BA36	288.40	m2	79	22,753
Formwork Class F2 horizontal more than 300 mm wide (diaphragm)	10.40	m2	120	1,244
Formwork Class F3 horizontal more than 300 mm wide				
(deck cantilever) -paraslim Formwork Class F2 vertical more than 300 mm wide	84.00	m2	373	31,308
(diaphragm)	67.60	m2	142	9,591
Formwork Class F3 vertical more than 300 mm wide (Deck cope) -paraslim	68.64	m2	373	25,583
Formwork Class F4 300 mm wide or less at any inclination (Deck cope) -paraslim	22.40	m2	373	8,349
Steel Reinforcement for Structures				
Steel bar reinforcement nominal size 16 mm and under Grade B-500B or B-500C to BS4449:2005	0.00	ton		
	0.00	1011		
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005	17.11	ton	949	16,244
Steelwork for Structures				
Fabrication of Steelwork				
Fabrication of permanent bracing comprising plated sections	0.00	item		
Fabrication of main members comprising plated sections	0.00	item		
Treatment & transport	0.00	item		
Erection of Steelwork				
Permanent erection of superstructure	0.00	item		
Supply and install precast concrete Y8 Beams	1.00	ia	447 444	4 47 4 4 4
Permanent erection of superstructure Bridge Bearings	1.00	item	147,444	147,444
Bearings				
Bearing (Type not detailed)	24.00	no	984	23,620
Installation of bearing (Type not detailed)	24.00	no	700	16,800
Bridge Expansion Joints and Sealing of Gaps Bridge Deck Expansion Joints				
Type 5 expansion joint (BD33/94) 12.30m in length with ⊣	+/-			
40mm movement range	26.00	m	1,594	41,442
FINISHINGS Road Restraint Systems (Vehicle and Pedestrian)				
Safety Barriers				

Bin by Advance of Advance Server Advance Advan		<u>STAIN</u>	<u>Unit</u>	Unit Cost	Amount
des straign of curved exceeding 0.3 Dm eters radius         120.0         m         200         25.58           at in parapet clusters 0.3 Dm eterters         42.67         no         80         3.849           correls Settly Burits	1.0m high aluminium parapet containment performance	<u>Qty</u>	Unit	<u>Unit Cost</u>	<u>Amount</u>
ancrete Suite/ Barrier         m         m           concrete Suite/ Darrier, Performance data FE, Working tragit is convide deceding 15m radius         m         m           strip for convide deceding 15m radius         m         m         m           strip for convide deceding 15m radius         m         m         m           strip for convide deceding 15m radius         0.00         m         m         m           strip for convide deceding 15m radius         0.00         m         122         6.821           ab surface durange laid straight or curved ecceding 12         26.00         m         122         6.821           ab surface durange laid straight or curved ecceding 12         26.00         m         122         6.821           actions durange laid straight or curved ecceding 12         26.00         m         122         6.821           actions durange laid straight or curved ecceding 12         26.00         m         123         6.821           actions durange laid straight or curved ecceding 12         26.00         m         124         3.807           BERES Too FNACMEMENTS         E         11         m         11         11         11           exclose straight or curved ecceding 120         0.00         m2         10         100	sides straight or curved exceeding 50 metres radius				
montes autély burier, Performance dass F2: Wohling trigght o carved exceeding 120n radius         n           mbit.         mail de la carve de exceeding 120n radius         n           exce.         formates.         formates.           excel.         mail de la carve de exceeding 120n radius         0.00         n           excel.         formates.         formates.         formates.         formates.           excel.         non-mail de la faite for anvel de exceding 12         6.600         n         122         6.821           dates radius         0.00         n         122         6.821         1           dates radius         0.00         n         122         6.821         1           dates radius         0.00         n         122         6.821         1           dates radius         0.00         m2         10         1         1           excel.         0.00         m2         10         1         1	Cast in parapet clusters @ 3.0m centres	42.67	no	90	3,849
arbs, Pootanyp and Paved Acass	Concrete safety barrier; Performance class H2; Working width class W2; Designed to be impacted on both sides;				
bode and functor Uninging Charmed Systemi         0.00         m           consider output of the block is lungely for curved conductors herb bids is lungely for curved exceeding 12 to the set set of the set	Kerbs, Footways and Paved Areas				
neared concrete readworks hash laid straight or ourved       0.00       m       m         seaded n.2 meles nakus       0.00       m       120       0.821         index of malay laid straight or ourved exceeding 12       26.00       m       96       2.464         index of malay laid straight or ourved exceeding 12       26.00       m       96       2.464         index of malay laid straight or ourved exceeding 12       0.00       m2       11       11         ext or notes angle laid straight or ourved exceeding 12       0.00       m2       11       11         ext or notes angle laid straight or ourved exceeding 12       0.00       m2       11       11         ext or notes angle laid straight or ourved exceeding 12       0.00       m2       10       11         ext or notes angle laid straight or ourved exceeding 12       0.00       m2       10       11         ext or notes angle laid straight or ourved exceeding 12       0.00       m2       10       11         ext or notes angle laid straight or ourved exceeding 12       0.00       m2       10       11         ext or not ext or notes angle laid straight or ourved exceeding 12       0.00       m2       10       10         ext or not ext or notes angle laid straight or ourved exceeding 12       0.00	Kerbs, Channels, Edgings, Combined Drainage and Kerb Blocks and Linear Drainage Channel Systems				
animized datages and kerb block incorporating sub stress radius         56.00         m         122         0.821           attracts radius         26.00         m         92         2.484           extra charage bild straight or curved exceeding 12         26.00         m         92         2.484           ERIES 700 - PAVEMENTS                ext Construction         0.00         m2         11             ext Construction         0.00         m2         10             ext Construction in the consigned physics binder course flow flow construction to bindge deck comprising routes. dwarps, hardbackder and hardstrip         0.00         m2         10             active construction to bindge deck comprising routes. dwarps routes. dwarps r	Precast concrete roadworks kerb laid straight or curved				
under and/une biol straight or curved exceeding 12       20.00       m       122       6.821         ub surface dramage lied straight or curved exceeding 12       20.00       m       96       2.444         Define dramage lied straight or curved exceeding 12       20.00       m       96       2.444         Define dramage lied straight or curved exceeding 12       0.00       m2       11       11         exce dramage lied straight or curved exceeding 12       0.00       m2       11       11         exce dramage lied straight or curved exceeding 12       0.00       m2       11       11         exce dramage lied straight or curved exceeding 12       0.00       m2       10       11         exce dramage lied straight or curved exceeding 12       0.00       m2       10       10         exter dramage lied straight or curved exceeding 12       0.00       m2       10       10         exter dramage lied straight or curved exceeding 12       0.00       m2       10       10         exter dramage lied straight or curved exceeding 12       0.00       m2       10       10         exter dramage lied straight or curved exceeding 12       0.00       m2       10       10         exter dramage lied straight or curved exceeding 12       0.00       m2		0.00	m		
exters analyses         26.00         m         96         2.484           ERIES 700 - PAVEMENTS	surface drainage laid straight or curved exceeding 12 metres radius	56.00	m	122	6,821
exk Construction	Sub surface drainage laid straight or curved exceeding 12 metres radius	26.00	m	96	2,484
or folded asphalt 35'14, polymer modified bitumen binder burke, dimm thick in cartageway, hardshoulder and using in thick in cartageway, hardshoulder and hardstrip       0.00       m2       11         easy duby macadam with AC 20 aggregate binder course film thick in cartageway, hardshoulder and hardstrip       0.00       m2       10         easy duby macadam with AC 20 aggregate binder course film thick in cartageway, hardshoulder and hardstrip       0.00       m2       10         easy duby macadam with AC 20 aggregate binder course film thick in cartageway, hardshoulder and hardstrip       0.00       m2       10         easy duby macadam with AC 20 aggregate dub 1020 gegre infliconcrete (Cla90 and Ghom binder Cla92). Suffices stoping at 10° or less to the hotorontal 159.60       m2       2.4       3.807         early infliconcrete Clade CA050 aggregate and response class 30. XF4 approximately 250mm obstript aggregate duby AC 44 approximately 250mm obstript aggregate duby AC 450 aggregate bit aggregate duby AC 450 aggregate bit aphotochotal at any inclinator, usis and including 30 a	SERIES 700 - PAVEMENTS				
curses. 40mm Thick in carriageway, hardshoulder and and the product of the service of th	Deck Construction				
Dmm thick in carriageway, hardshoulder and hardstrip         0.00         m2         10         617           Staterpare Harm sufface course PSV 60 surface course         m2         10         617           Sothing and Paved Areas         10         617           ardened varge construction to bridge deck comprising firms this an arguing and 10 or tests to honcornal         19.80         m2         24         3,807           erge infill concrete Criate C40/50 aggregate size 1020 geoure class X0, XF4 approximately 250mm isk.         0.00         m3         119         4,188           erge infill concrete Griate C40/50 aggregate size 1020 geoure class X0, XF4 approximately 250mm isk.         0.00         m3         119         4,188           erge infill concrete Griate C40/50 aggregate size 1020 aggregate         0.00         m3         110         110           etable opposure class X0, XF4 approximately 250mm isk.         0.00         m2         110         110         110           test         0.00         m2         0.00         m2         1111         110         110         110           test         0.00         m2         1.155         2.310         120         120           table ideal in galaxies and table ideal in an 10 degrees to 10         0.00         m2         1.155         2.310 <t< td=""><td>ourse, 40mm thick in carriageway, hardshoulder and</td><td>0.00</td><td>m2</td><td>11</td><td></td></t<>	ourse, 40mm thick in carriageway, hardshoulder and	0.00	m2	11	
Simu Ticki Larriageway, hardshoulder and handship         0.00         m2         10         617           colowitys and Paved Areas	leavy duty macadam with AC 20 aggregate binder course 0mm thick in carriageway, hardshoulder and hardstrip	0.00	m2	10	
codewsys and Paved Areas	Masterpave 14mm surface course PSV 60 surface course	0.00		10	
advand verge cardinulion to bridge dek comprising		0.00	m2	10	
Dimm this siftace course (CL19) and 60mm binder         199.60         m2         2.4         3.807           Str212), Strates sloping at 10° or tens to the horizontal         199.60         m2         3.807           sposure class X0, XF4 approximately 300mm bick         5.11         m3         119         4.168           entral reserve infil concrete Grade C4050 apgregate isze 10:20         0.00         m3         100         100           is (0:20 opposer class X0, XF4 approximately 200mm bick         0.00         m2         100         100           is (0:20 opposer class X0, XF4 approximately 200mm bick         0.00         m2         100         100         100           is (0:20 opposer class X0, XF4 approximately 10.50m         0.00         m2         100					
posure class X0, XF4 approximately 200mm thick 35.11 m3 119 4,188 entral reserve infil concrete Crade C4056 aggregate so 10:00 opposer class X0, XF4 approximately 250mm data class X0, XF4 approximately 10 data class data class X0, XF4 approximately 10 S0m data class X0, XF4 approximately 10 X0m data class X0, XF4 approximately X10m data class X0, XF4 xF4 xF4 data class X0, XF4 xF4 xF4 data c	ardened verge construction to bridge deck comprising Omm thin surface course (CL919) and 60mm binder CL912); Surfaces sloping at 10° or less to the horizontal	159.60	m2	24	3,807
D20 exposure class X0, XF4 approximately 250mm         0.00         m3	ferge infill concrete Grade C40/50 aggregate size 10/20 xposure class X0, XF4 approximately 300mm thick	35.11	m3	119	4,168
le horizontal 0.00 m2 earing inspection platform (no details) lem tegis coess steps cut into batter alopes with lockable access alle alight length approximately 10.50m 0.00 no realight length approximately 10.50m 0.00 no lealiwork for Structures lescellaneous Metalwork	Central reserve infill concrete Grade C40/50 aggregate size 10/20 exposure class X0, XF4 approximately 250mm hick	0.00	m3		
aaring inspection platform (no details) Item	Slabs/open blockwork sloping at more than 10 degrees to he horizontal	0.00	<u>m</u> 2		
ccess steps cut into batter slopes with lockable access       0.00       no         teal work for Structures	Bearing inspection platform (no details)				
ate flight length approximately 10.50m 0.00 no teelwork for Structures liscellaneous Metalwork alvanised steel lockable access door 1.200 m wide 000 m high 2.00 nr 1,155 2,310 2.00 1.1 Atterproofing for Structures alvanised steel lockable access door 1.200 m wide 000 m high 2.00 nr 1,155 2,310 2.00 1.1 Atterproofing for Structures alvanised steel lockable access door 1.200 m wide 000 m high 2.00 nr 1,155 2,310 2.00 1.1 Atterproofing with bridge deck spray applied aterproofing system more than 300 mm wide horizontal aterproofing system more than 300 mm wide horizontal aterproofing vith two coats of bitumen more than 300 mw wide horizontal 491.00 m2 8 4,021 Atterproofing with bridge deck spray applied aterproofing with two coats of bitumen more than 300 m wide at any inclination up to and including 90 apprese to the horizontal 95.60 m2 11 1.810	teps				
Iscellaneous Metalwork alvanised steel lockable access door 1.200 m wide alvanised steel lockable access door 1.200 m wide alvanised steel lockable access door 1.200 m wide 2.00 nr 1,155 2,310 2.00 1,11 2.0	Access steps cut into batter slopes with lockable access gate flight length approximately 10.50m	0.00	no		
alvanised steel lockable access door 1.200 m wide 000 m high 2.00 nr 1,155 2,310 2.00 1,10 2.00 1	Steelwork for Structures				
.000 m high       2.00       nr       1,155       2,310       2.00       1,100         /aterproofing for Structures	Viscellaneous Metalwork				
Atterproofing	Galvanised steel lockable access door 1.200 m wide .000 m high	2.00	nr	1,155	2,310
urface preparation prior to waterprofing - Grit Blasting 524.90 m2 2 1,102	Waterproofing for Structures				
Atterproofing with bridge deck spray applied         atterproofing system more than 300 mm wide horizontal         rat ary inclination up to and including 30 degress to the         orizontal       390.10       m2       15       5,890         Atterproofing with two coats of bitumen more than 300       mw wide horizontal or at any inclination up to and       eluding 30 degress to the horizontal       491.00       m2       8       4.021         Atterproofing with bridge deck spray applied         Atterproofing with bridge deck spray applied       134.80       m2       15       2.035         Including 30 degrees up to and including 90       egrees to the horizontal       952.90       m2       8       7,804         Atterproofing with two coats of bitumen more than 300 mm wide horizontal       952.90       m2       1       1.610         Materproofing with 20mm of black asphalt protection layer       ore than 300mm wide horizontal       15.00       m2       11       1.610         Materproofing with 20mm of black asphalt protection layer       ore than 300mm wide horizontal       15.00       m2       1       1.610         Materproofing with 20mm of black asphalt protection layer       32.80       m2       7	Waterproofing Surface preperation prior to waterprrofing - Grit Blasting	524.90	m2	2	1,102
rat ary inclination up to and including 30 degress to the prizontal 390.10 m2 15 5,890 ////////////////////////////////////	Waterproofing with bridge deck spray applied				
Im wide horizontal or at any inclination up to and cluding 30 degress to the horizontal and the horizontal a	or at any inclination up to and including 30 degress to the horizontal	390.10	m2	15	5,890
aterproofing system more than 300 mm wide at any clination more than 300 degrees up to and including 90 egrees to the horizontal 134.80 m2 15 2,035 Aterproofing with two coats of bitumen more than 300 mm wide at any inclination more than 300 degrees up to and including 90 degrees to the horizontal 952.90 m2 8 7,804 Aterproofing with 20mm of black asphalt protection layer tore than 300mm wide horizontal 159.60 m2 11 1,810 butment Sub-surface Drainage 25 Channel drain 2000mm long and fittings 15.00 m 210 3,150 urface Impregnation of Delain surfaces with Pavix 100 CC or similar approved 332.80 m2 7 2,271 MPO5 Method Related emporary site Roads ceess point off public highway site clear, signs, apron 1.00 item 7,707 7,707	Waterproofing with two coats of bitumen more than 300 mm wide horizontal or at any inclination up to and including 30 degress to the horizontal	491.00	m2	8	4,021
Alterproofing with two coats of bitumen more than 300 Im wide at any inclination more than 30 degrees up to nd including 90 degrees to the horizontal 952.90 m2 8 7,804 Alterproofing with 20mm of black asphalt protection layer fore than 300mm wide horizontal or at any inclination up and including 30 degrees to the horizontal 159.60 m2 11 1,810 butment Sub-surface Drainage 25 Channel drain 2000mm long and fittings 15.00 m 210 3,150 urface Impregnation of Concrete urface Impregnation to plain surfaces with Pavix 100 CC or similar approved 332.80 m2 7 2,271 MP05 Method Related emporary site Roads ccess point off public highway site clear, signs, apron 1.00 item 7,707 7,707	Waterproofing with bridge deck spray applied waterproofing system more than 300 mm wide at any inclination more than 30 degrees up to and including 90 degreese to the baciments.	101.00			0.005
Jaterproofing with 20mm of black asphalt protection layer tore than 300mm wide horizontal or at any inclination up and including 30 degress to the horizontal 159.60 m2 11 1.810     1.810       buttment Sub-surface Drainage	Waterproofing with two coats of bitumen more than 300 mm wide at any inclination more than 30 degrees up to				
vore than 300mm wide horizontal or at any inclination up 2 and including 30 degress to the horizontal 159.60 m2 11 1.810	and including 90 degrees to the horizontal	952.90	m2	8	7,804
25 Channel drain 2000mm long and fittings       15.00       m       210       3,150         urface Impregnation of Concrete       urface impregnation to plain surfaces with Pavix 100       CC or similar approved       332.80       m2       7       2,271         MP05 Method Related	Waterproofing with 20mm of black asphalt protection layer more than 300mm wide horizontal or at any inclination up to and including 30 degress to the horizontal	159.60	m2	11	1,810
urface Impregnation of Concrete urface Impregnation to plain surfaces with Pavix 100 CC or similar approved MP05 Method Related emporary site Roads ccess point off public highway site clear, signs, apron 1.00 item 7,707 7,707	Abutment Sub-surface Drainage				
urface impregnation to plain surfaces with Pavix 100 CC or similar approved 332.80 m2 7 2,271 MP05 Method Related emporary site Roads ccess point off public highway site clear, signs, apron 1.00 item 7,707 7,707	325 Channel drain 2000mm long and fittings	15.00	m	210	3,150
CC or similar approved     332.80     m2     7     2,271       MP05 Method Related					
emporary site Roads ccess point off public highway site clear, signs, apron 1.00 item 7,707 7,707	CCC or similar approved	332.80	m2	7	2,271
ccess point off public highway site clear, signs, apron 1.00 item 7,707 7,707	CMP05 Method Related				
		1.00	item	7.707	7.707
	General construction requirements:-	1.00		1,101	7,707

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### PRESTON WEST DISTRIBUTOR ROAD Darkinson Lane

COST Description		<u>Unit</u>	<u>Unit Cost</u> <u>Am</u>	<u>ount</u>	RAG	<u>QTY RA</u>	<u>.TE TOT</u>		<u>RIDGE</u> erence <u>COMMENT</u>
Drainage and Service Ducts in Structures (including Reinforced Earth Structures and Anchored Earth Structures)									
Weepholes 75mm dia, 2.5m long	16.00	no	14	216					
Chamber specified design group 1500 dia manhole Type 4a chamber to HCD F6. Depth to invert exceeding 2m but not 3m with D400M1 cover & frame with 675 x 675 clear opening to LCC FL 10	2.00	no	3,505	7,011					
900mm Culvert replacement replacement Type S	76.50	m	536	41,005					
300 x 105 Concrete Dish Channel to underpass	34.02	m	43	1,475					
Connection of dish channel to Culvert	1.00	ltem	1,500	1,500					
100mm dia ductwork (2 way per verge) Earthworks	103.26	m	30	3,098					
Excavation Excavation of acceptable material excluding Class 5A in structural foundations 0 to 3 metres in depth	800.00	m3	12	9,600		800.00	23	18,400	8,800 Rate appears low, please clarify
Deposition of Fill								,	
Deposition of acceptable material in fill to structures Disposal of Material	84.00	m3	16	1,344					
Disposal of acceptable material excluding class 5A	756.00	m3	10	7,560					
Imported Fill				.,000					
Imported acceptable material Class 6M in fill to structures	1939.74	m3	30	58,289					
Imported acceptable material Class 6L in upper bedding layer	32.32	m3	30	971					
Imported acceptable material Class 6K in fill beneath structural foundations	162.62	m3	30	4,887					
Compaction of Fill									
Compaction of acceptable material in fill to structures	2023.74	m3							
Compaction of acceptable material in fill beneath structural concrete foundations	162.62	m3							
Compaction of acceptable material in upper bedding layer	32.32	m3							
Structural Concrete									
In Situ Concrete									
In situ concrete ST 2 in blinding 75 mm or less in thickness	69.69	m3	136	9,444					
In situ concrete Grade S40R (wingwall base slab)		m3	126						
In situ concrete Grade S50R (wingwall)		m3	135						
In situ concrete Grade S50 (Stringcourse)	27.10	m3	169	4,574					
In situ concrete Grade S50 (Cover Slab)	146.37	m3	138	20,263					
Surface Finish of Concrete-Formwork									Rate discrepency, this rate differs from
Formwork Class F1 vertical more than 300 mm wide (Wingwall base slab)	57.54	m2	71	4,065		57.54	100	5,744	other structures with the same item, 1,679 please clarifty
Formwork Class F1 vertical more than 300 mm wide (wingwall)	205.80	m2	95	19,564		205.80	100	20,543	Rate discrepency, this rate differs from other structures with the same item, 979 please clarifty
Formwork Class F1 inclined more than 300 mm wide (wingwall)	226.38	m2	200	45,276		226.38	135	30,561	-14,715 Rate appears high, please clarify
Formwork Class F3 vertical more than 300 mm wide (Stringcourse)	78.60	m2	150	11,766		78.60	125	9,825	-1,941 Rate appears high, please clarify
Formwork Class F3 300 mm wide or less at any inclination (Stringcourse) Formwork Class F3 Horizontal more than 300 mm wide	2.71	m2	165	447		2.71	145	393	-54 Rate appears high, please clarify
Formwork Class F3 Horizontal more than 300 mm wide (Stringcourse soffit) Formwork Class F1 300 mm wide or less at any inclination	18.97	m2	355	6,735		18.97	190	3,605	-3,130 Rate appears high, please clarify
(Cover slab)	22.18	m2	136	3,018		22.18	125	2,773	-245 Rate appears high, please clarify
Steel Reinforcement for Structures Steel bar reinforcement nominal size 16 mm and under not									Rate discrepency, this rate differs from
exceeding 12 metres in length Grade B-500B or B-500C to BS4449:2005		t	1,066	62,429		58.56	1,119	65,551	other structures with the same item, 3,122 please clarifty
Steel bar reinforcement nominal size 20 mm and over not exceeding 12 metres in length Grade B-500B or B-500C to BS4449:2005	70.27	t	904	63,538		70.27	1,066	74,909	Rate discrepency, this rate differs from other structures with the same item, 11,371 please clarifty
Corrugated Steel Buried Structures									
Corrugated steel buried structures (multiplate), length 32m (bottom), dia. 5.84m	1.00	Nr	92,920	92,920					Rate build up required
Bridge Expansion Joints and Sealing of Gaps									
Sealing of Gaps									

### PRESTON WEST DISTRIBUTOR ROAD Darkinson Lane

COST/	<u>AIN</u> Qtv	<u>Unit</u>	<u>Unit Cost</u>	A <u>mount</u>	RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>		RIDGE erence	COMMENT	
Allow for joint at wingwall and culvert interface (no details provided)	2.00	Nr	330	660								
Allow for joint at block expansion joints (no details provided) FINISHINGS	4.00	Nr	235	940								
Brickwork, Blockwork, Stonework												
Brickwork, 102.5mm thick with a battered face in facework to concrete	213.78	m2	198	42,326		213.	78	112	23,943	-18,383	Rate appears high, please	clarify
Brickwork, 102.5mm thick with a battered face in arches Road Restraint Systems (Vehicle and Pedestrian)	12.60	m2	236	2,971		12.	60	195	2,457	-514	Rate appears high, please	clarify
Pedestrian Parapets, Guardrails and Handrails												
1.0m high aluminium N2 vehicle parapet working width class W2 with stainless steel mesh infills straight or curved exceeding 50 metres radius	52.00	m	200	10,374								
Cast in parapet clusters	18.00	nr	85	1,530								
SERIES 700 - PAVEMENTS												
Deck Construction												
Hot rolled asphall 35/14, polymer modified bitumen binder course, 40mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)		m2	10									
Heavy duty macadam with AC 20 aggregate binder course 50mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)		m2	9			4	40	9	4,170	4,170	Not included for in paveme	nt areas
Masterpave 14mm surface course PSV 60 surface course 35mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)		m2	9			4	40	9	4,016	4,016	Not included for in paveme	nt areas
Footways and Paved Areas												
Central reserve infill concrete Grade C40/50 aggregate size 10/20 exposure class X0, XF4 approximately 250mm thick	16.94	m3	113	1,916								
Verge infill concrete Grade C40/50 aggregate size 10/20 exposure class X0, XF4 approximately 220mm thick	41.14	m3	113	4,653								
Hardened verge construction to bridge deck comprising 20mm thin surface course (CL919) and 60mm binder (CL912); Surfaces sloping at 10° or less to the horizontal	187.02	m2	23	4,249								
Pavement 200mm thick in underpass base slab (no details)	156.49	m2	46	7,236								
Kerbs, Footways and Paved Areas												
Kerbs, Channels, Edgings, Combined Drainage and Kerb Blocks and Linear Drainage Channel Systems												
Precast concrete roadworks kerb laid straight or curved exceeding 12 metres radius	103.26	m	86	8,880								
Waterproofing for Structures												
Waterproofing												
Surface preparation (minimum visit applies)	1.00	ltem	1,000	1,000								
Waterproofing with two coats of bitumen more than 300 mm wide horizontal or at any inclination up to and including 30 degress to the horizontal	7.56	m2	8	59		7.	56	8 0	59		Rate discrepency, this rate other structures with the sa olease clarifty	
Waterproofing with bridge deck spray applied waterproofing system more than 300 mm wide at any inclination more than 30 degrees up to and including 90 degrees to the horizontal	22.18	m2	14	319		22.	18	14	319		Rate discrepency, this rate other structures with the sa please clarifty	
Waterproofing with two coats of bitumen more than 300 mm wide at any inclination more than 30 degrees up to and including 90 degrees to the horizontal	305.40	m2	8	2,382		305.	40	8 0	2,382		Rate discrepency, this rate other structures with the sa please clarifty	
Waterproofing with bridge deck spray applied waterproofing system more than 300 mm wide horizontal or at any inclination up to and including 30 degress to the horizontal	731.83	m2	14	10,524		731.	33	14	10,524		Rate discrepency, this rate other structures with the sa please clarifty	
Waterproofing with 20mm of black asphalt protection layer under verges more than 300mm wide horizontal or at any inclination up to and including 30 degress to the horizontal	187.02	m2	11	2,020								
Surface Impregnation of Concrete												
Surface impregnation with Pavix CCC100 or similar approved to plain surfaces	65.05	m2	7	423								
Method Related (CMP014)												
Temporary site Roads						-						
Access point off public highway site clear, signs, apron	1.00	item	5,042	5,042								
Parking & office (paved area) geotextile/150mm 6F2/50mm black	1.00	item										
Protection/marking of Overhead Cables, goalposts & signs	1.00	item	1,158	1,158								

### PRESTON WEST DISTRIBUTOR ROAD Darkinson Lane

COST	AIN								<u>RIDGE</u>	
Description	<u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>	RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	Difference	COMMENT
General construction requirements:-										
General construction requirements										
Hardstandings (general access), geotextile/150mm 6F2	1.00	item	2,740	2,740						
Beam erection requirements:-										
Temporary Haul/Access Roads, 2x geotextile/300mm 6F2	1.00	item	3,486	3,486						
Temporary public Roads										
Temporary Footpaths	1.00	item	2,179	2,179						
Fencing/Hoardings										
Heras / Site Temporary Fencing	1.00	item	5,591	5,591						
Gates in Heras	1.00	item	516	516						
Site Pedestrian fencing	1.00	item	1,086	1,086						
Orange Netting/Fencing	1.00	item	396	396						
Baulk timbers	1.00	item	432	432						
Pumping/Dewatering										
Surface Water	1.00	item	4,206	4,206						
Ground Water	1.00	item	11,075	11,075						
Sumps	1.00	item	10,110	10,110						
Flow Diversions	1.00	item	5,538	5,538						
Over pumping 900mm culvert for replacement works	1.00	ltem	2,000	2,000						
Silt \ Run-off Management										
Silt Buster	1.00	item	12,977	12,977						
Ponds/Ditches	1.00	item	1,114	1,114						
Concrete washout facility	1.00	item	2,168	2,168						
Cofferdams										
Batterered excavation (Extra over quant) Assume 1:1 batter plus 1.8m working room		item								
Scaffolding										
Scaffolding - Wall	1.00	item	5,000	5,000						
Scaffolding - Handrails/Edge Protection	1.00	item	2,500	2,500						
Pumping station required due to lowering of alignment	1.00	item	75,000	75,000						Please provide build up of rate
										. Isado provido dalla ap or rato
			To Collection	737,768					-4,8	46
				54,935				Ridge Total		_
								Ridge Total	/ 32,9/	10

### PRESTON WEST DISTRIBUTOR ROAD Lea Viaduct

Description	<u>COSTAIN</u> <u>Qty</u>	<u>Unit</u>	Unit Cost	Amount	
		onit	Unit Cost	Amount	
PILING Piling Plant					
Transport all necessary plant, labour & equipment to site					
for works piles and clear upon completion					
a) Mala mah (an ah (an ah Chi					
a) Main mob/demob (up to 2No rigs) b) Low loader inter-site move per rig	1.00	Visit Visit	81,	000	81,000 0 0
o) Low loader inter-site move per rig	1.00	visit		U	0
Transport all necessary plant, labour & equipment to site for works piles and clear upon completion - TEST PILES					0
a) Main mob/demob (1No Rig)	1.00	Nr	25,	000	0 25,000
b) Low loader inter-site move per rig	3.00	Nr	5,	000	0 15,000
c) Tracked inter-site move per rig	0.00	Nr			0
Set up/move to pile position	172.00	Nr		40	6,880 0
Bored and concreted length a) 900mm diameter (n.e.: 24.0m)					0
a) 750mm diameter (n.e.: 25.0m)	1800.00	Lm		131	0 235,980
a) 1050mm diameter (n.e.: 26.0m)	2546.00	Lm		215	0 548,281
Arising disposal	5.50	Wk		625	0 14,438
Credit for pile length not constructed					0
a) 750mm diameter	Rate only	Lm			0
a) 900mm diameter	Rate only	Lm			0
Supply, fix and place TIED reinforcement a) Main cage reinforcement b) Shear cage reinforcement	204.34	tn		250	255,425
b) Shear cage reinforcement Integrity Tests: Sonic Echo	44.74	tn	1,:	250	55,925 0 0
a) Mobilisation per visit b) Test and report per pile	3.00 172.00	Visit Nr		100 10	300 1,720
Supply & fix debonding foam	1.00	item	8,	000	8,000
UKAS accredited site personnel					0
a) Preliminary Piles b) Working Piles	1.00 1.00	Nr Item		0 0	0
Install & carry out test load to 2.5 x working load on					0
preliminary test pile to max test load of upto 4800kN	1.00	Nr	38,	000	38,000 0
Caryout test load to 1.5 x workling load to a max test loa of upto 2880kN	d 6.00	Nr	23,	695	142,170
Prepare 1050 dia pile heads	172.00	no		250	0 43,000
SUBSTRUCTURE - END SUPPORTS					0
Drainage and Service Ducts					0
Drainage and Service Ducts in Structures (including Reinforced Earth Structures and Anchored Earth Structures)					0
150 mm diameter porous drain in 300 mm x 300 mm no					0
fines concrete surround on minimum 150 mm ST2 concrete bed	56.00	m		99	5,570
75 mm diameter weepholes 0.60 m in length	4.00	no		6	0 24
75 mm diameter weepholes 1.6 m in length	6.00	no		9	0 51
225 mm hollow blockwork drainage layer	763.60	m2		25	0 18,871
Allow for forming 150mm diameter drainage channel in	FA 44			15	0
bearing gallery floor	2 00	m		15	812
Allow for connection to highway drainage system Earthworks	2.00	no	1,	300	3,000 0 0
Excavation					0
Excavation of acceptable material excluding Class 5A in					0
structural foundations 0 to 6 metres in depth	7050.00	m3		12	84,600 0
Deposition of Fill					0
Deposition of acceptable material in fill above structural concrete foundations	705.00	m3		16	11,280
Disposal of Material					0
Disposal of acceptable material excluding Class 5A	6345.00	m3		10	0 63,450
Imported Fill					0
Imported acceptable material Clear Chile States	0000 50			20	0
Imported acceptable material Class 6N in fill to structure Imported acceptable material Class 6N in fill above	s 8089.50	m3		30	243,089 0
structural concrete foundations	inc above	m3			0
Imported acceptable material Class 1 in fill beneath structural concrete foundations	inc above	m3			0
Compaction of Fill	40076				0
Compaction of acceptable material in fill to structures	inc above	m3			0
Structural Concrete					0
In Situ Concrete					0
					0

### PRESTON WEST DISTRIBUTOR ROAD Lea Viaduct

Description	<u>COSTAIN</u> <u>Qty</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>		RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	<u>RIDGE</u> <u>Differen</u>	<u>ce CO</u>	MMENT
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (South Abt base slab)	310.80	m3		132	40,996							
In situ concrete Grade C32/40 aggregate size 10/20	510.00	110		102	40,000							
exposure Class XC2, XD1, XF1, AC-1 (North Abt base slab)	310.80	m3		132	40,996							
In situ concrete Grade C32/40 aggregate size 10/20 exposure Class XC2, XD1, XF1, AC-1 (wingwall base slab - North & South)	483.00	m3		132	63,711							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (abutment wall South)	604.80	m3		142	0 85,781							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (abutment wall					0							
North)	378.00	m3		142	53,613 0							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (ballast wall)	92.40	m3		156	14,412							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (bearing plinth)	2.50	m3		177	443							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (bearing shelf)	75.60	m3		156	11,792							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (masking wall)	9.00	m3		156	0							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1, AC-1 (wingwall)	577.72	m3		142	0 81,940							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF4 (wingwall cope)	28.73	m3		177	5,091							
In situ concrete ST 2 aggregate size 10/20 exposure Class					0		<u> </u>					
X0, AC-1 in blinding 75 mm or less in thickness	79.11	m3		142	11,257 0							
Surface Finish of Concrete-Formwork Formwork Class F2 horizontal more than 300 mm wide					0						Bai	te appears high, please
(ballast wall overhang)	16.80	m2		140	2,357 0		16.8	0	95	1,596	-761 cla	
Formwork Class F1 vertical more than 300 mm wide (South abutment wall)	491.20	m2		100	49,030 0							
Formwork Class F1 vertical more than 300 mm wide (North abutment wall)	307.00	m2		100	30,644							
Formwork Class F1 vertical more than 300 mm wide (ballast wall)	336.00	m2		118	0 39,716		336.0	10	100	33,540	Ra -6,176 cla	te appears high, please rify
					0							te discrepency, this rate
Formwork Class F1 vertical more than 300 mm wide (North abt base)	109.80	m2		74	8,145 0		109.8	0	100	10,960	witi 2,816 cla	
Formwork Class F1 vertical more than 300 mm wide (South abt base)	109.80	m2		74	8,145		109.8	10	100	10,960	diff	te discrepency, this rate ers from other structures h the same item, please rifty
					0						Rat	te discrepency, this rate
Formwork Class F1 vertical more than 300 mm wide (wingwall base slab)	180.00	m2		74	13,352		180.0	0	100	17,968		ers from other structures in the same item, please rifty
Formwork Class F1 vertical more than 300 mm wide (wingwall)	937.68	m2		100	93,596							
Formwork Class F2 vertical more than 300 mm wide (bearing shelf)	100.80	m2		118	0		100.8	:0	110	11,088	Rat -827 cla	te appears high, please rifv
Formwork Class F2 vertical more than 300 mm wide (masking wall)	63.60	m2		118	7,518		63.6		110	6,996		te appears high, please
Formwork Class F3 vertical more than 300 mm wide		1112			0		03.0			0,990		te appears high, please
(wingwall cope) Formwork Class F1 300 mm wide or less at any	90.09	m2		146	13,156 0		90.0	9	125	11,261	-1,895 cla	
inclination (ballast wall)	11.20	m2		173	1,939 0		11.2	0	145	1,624	-315 cla	te appears high, please rify
Formwork Class F4 300 mm wide or less at any inclination (bearing plinth)	10.00	m2		173	1,731		10.0	10	145	1,450	Rat -281 cla	te appears high, please rify
Formwork Class F4 300 mm wide or less at any inclination (wingwall cope)	13.60	m2		173	2,354		13.6	i0	145	1,972	Rat -382 cla	te appears high, please rify
Steel Reinforcement for Structures					0							
Steel bar reinforcement nominal size 16 mm and under Grade B-500B or B-500C to BS4449:2005	0.00	t			0							
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005	558.02	t	1	,066	594,891		558.0	121,	066	594,891	diff	te discrepency, this rate ers from other structures in the same item, please rifty
Bridge Expansion Joints and Sealing of Gaps					0	$\models \exists$						
Sealing of Gaps					0							
Hydrophilic sealant	1.00	Item		500	500 0							
Polyurethane joint sealant	1.00	Item		500	500 0							
Closed cell polythene joint sealant Joint filler board 20 mm thick	1.00	Item Item		100 50	100 0 50							
SUBSTRUCTURE - INTERMEDIATE SUPPORTS Earthworks	1.00	nem		50	0 0 0							
Excavation					0		-					
Excavation of acceptable material excluding Class 5A in					0						Ra	te appears low, please
structural foundations 0 to 6 metres in depth	1645.00	m3		12	19,740		1645.0	0	23	37,835	18,095 cla	

# PRESTON WEST DISTRIBUTOR ROAD

	COSTAIN									RIDG	F	
Description	Qty	<u>Unit</u>	Unit Cost	<u>Amount</u>		RAG	<u>QTY</u>	RATE	<u>TOTAL</u>		erence	COMMENT
Excavation in Hard Material					0							
Deposition of Fill					0							
Deposition of acceptable material in fill above structural					0							
concrete foundations	164.50	m3		16	2,632							
Disposal of Material					0							
Disposal of acceptable material excluding Class 5A	1480.50	m3		10	14,805 0							
Compaction of Fill					0							
Compaction of acceptable material in fill above structural concrete foundations	inc above	m3										
Structural Concrete					0							
In Situ Concrete					0							
In situ concrete Grade C32/40 aggregate size 10/20					0							
exposure Class XC2, XD1, XF1, AC-1 (pier base)	710.40	m3		132	93,706 0							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF2 (bearing plinth)	5.00	m3		177	886							
Provision of Crosshead beams spanning pier columns including In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD3, XF2, Formwork Class F4 more than 300 mm wide and Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005 based on 7 weeks hire of rapidshore formwork	0.00	m3			0							
In situ concrete Grade C40/50 aggregate size 10/20					0							
exposure Class XC4, XD3, XF2 (pier column)	404.47	m3		142	57,368 0							
In situ concrete ST 2 aggregate size 10/20 exposure Class					0							
X0, AC-1 in blinding 75 mm or less in thickness	56.88	m3		142	8,093							
Surface Finish of Concrete-Formwork					0							
Formwork Class F1 vertical more than 300 mm wide (pier base)	403.20	m2		74	29,908							
Formwork Class F3 300 mm wide or less at any	00.00			170	0		00.00			0.000		Rate appears high, pleas
inclination (bearing plinth)	20.00	m2		173	3,462		20.00	145	0	2,900	-	562 clarify
Surface Finish of Concrete-Patterned Profile Formwork					0							
Curved patterned profile formwork Class F3 at any inclination (pier column)	874.53	m2		121	105,973							
Steel Reinforcement for Structures					0							
Steel bar reinforcement nominal size 16 mm and under Grade B-500B or B-500C to BS4449:2005	0.00	ton			0							
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005	222.41	ton	1	,066	0 237,103 0		222.41	1,250	)	278,008	40,	Rate discrepency, this ra differs from other structu with the same item, plea 205 clarifty
Mesh A393		m2			0							
SUPERSTRUCTURE					0							
Drainage and Service Ducts Drainage and Service Ducts in Structures (including Reinforced Earth Structures and Anchored Earth Structures) Drainage of superstructure		item			0 0 0 0 0							
100 mm diameter spare service duct laid in verge	932.00	m		32	0 29.358							
Structural Concrete	502.00	.11			0							
In Situ Concrete					0							
In situ concrete Grade C40/50 aggregate size 10/20					0							
exposure Class XC4, XD1, XF1 (deck slab)	1607.70	m3		145	233,705 0							
In situ concrete Grade C40/50 aggregate size 10/20 exposure Class XC4, XD1, XF1 (diaphragm)	71.76	m3		145	10,431							
Precast Concrete					0							
Precast concrete parapet coping Type 1	78.50	no		966	0 75,792 0		78.50	892	2	69,996	-5,	Rate discrepency, this ra differs from other structu with the same item, plea 796 clarifty
												Rate discrepency, this ra differs from other structu with the same item, plea
Precast concrete parapet coping Type 2	78.50	no		966	75,792		78.50	892	2	69,996	-5,	796 clarifty
Surface Finish of Concrete-Formwork					0							
Permanent formwork in accordance with BA36	6058.00	m2		79	477,944 0							
Formwork Class F2 horizontal more than 300 mm wide (diaphragm)	55.20	m2		120	6,604		55.20	105	5	5,796		Rate appears high, pleas 308 clarify
Formwork Class F3 horizontal more than 300 mm wide (deck cantilever)	605.80	m2		373	0 225,789		605.80	190		115,102		Rate appears high, pleas 687 clarify
Formwork Class F2 vertical more than 300 mm wide	000.00	1112		070	225,789		005.60	190	,	113,102	-110,	Rate appears high, pleas
(diaphragm)	143.52	m2		142	20,363		143.52	120	)	17,222	-3,	140 clarify
Steel Reinforcement for Structures					0 0 0							Rate discrepency, this ra differs from other structu
Steel bar reinforcement nominal size 16 mm and under Grade B-500B or B-500C to BS4449:2005	68.22	ton	1	,119	76,368 0		68.22	1,119	)	76,368		with the same item, plea 0 clarifty

### PRESTON WEST DISTRIBUTOR ROAD Lea Viaduct

	COSTAIN										RIDGE		
<u>Description</u>	<u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>		RAG	<u>QTY</u>	RATE	<u>TOTAL</u>		Difference		DMMENT ate discrepency, this rate
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005	457.11	ton	94	19	433,973 0		457.1	11 1	,066	487,275		di	fers from other structures th the same item, please
Steelwork for Structures					0								
Fabrication of Steelwork					0								
Fabrication of permanent bracing comprising plated sections	1.00	item	2,816,53	34	2,816,534 0							PI	ease provide rate build up
Fabrication of main members comprising plated sections	1.00	item			0								
Treatment & transport	1.00	item	74,98	34	0 74,984							PI	ease provide rate build up
Erection of Steelwork					0 0 0								
Permanent erection of superstructure	1.00	item	1,008,54	10	1,008,540							PI	ease provide rate build up
Bridge Bearings					0								
Bearings					0								
					0								ate discrepency, this rate
Bearing (Type not detailed)	30.00	no	3,01	11	90,340 0		30.0	00	948	28,445			ifers from other structures th the same item, please arifty
												di	ate discrepency, this rate fers from other structures th the same item, please
Installation of bearing (Type not detailed)	30.00	no	70	00	21,000							cla	arifty
Bridge Expansion Joints and Sealing of Gaps					0								
Bridge Deck Expansion Joints					0								
Type 5 expansion joint (BD33/94) 27.60m in length with +, 40mm movement range	55.20	m	1,59	94	87,985 0								
Compressible joint sealant 20mm thick between precast copes	66.33	m2	2	20	1,327								
Deep grey polyurethane sealant 20mm x 15mm thick					0		-						
beep grey polyuremane sealant 20mm x 15mm tnick between precast copes	306.15	m		3	1,007								
Joint sealant tape between precast copes	110.00	m		3	281 0								
FINISHINGS					0								
Road Restraint Systems (Vehicle and Pedestrian)					0								
Safety Barriers					0								
1.8m high aluminium parapet containment performance class H4a type straight or curved not exceeding 50 metres radius	178.00	m	1,16	65	207,370								
1.4m high aluminium parapet containment performance class N2 working width class W2 with mesh infill both sides straight or curved exceeding 50 metres radius	178.00	m	19	94	0 34,509								
1.0m high aluminium parapet containment performance class N2 working width class W2 with mesh infill both sides straight or curved exceeding 50 metres radius	178.00	m	20	00	0 35,511								
Cast in parapet clusters @ 3.0m centres	0.00	no			0								
Concrete Safety Barrier					0								
Concrete safety barrier; Performance class H2; Working width class W2; Designed to be impacted on both sides; Straight or curved exceeding 120m radius	233.00	m		57	0								
Kerbs, Footways and Paved Areas					0								
Kerbs, Channels, Edgings, Combined Drainage and Kerb Blocks and Linear Drainage Channel Systems					0								
Precast concrete roadworks kerb laid straight or curved exceeding 12 metres radius	466.00	m	S	90	0 42,080								
Combined drainage and kerb blocks incorporating sub surface drainage laid straight or curved exceeding 12				20				20	400			di wi	ate discrepency, this rate fers from other structures th the same item, please
metres radius	466.00	m	12		56,759 0		466.0	JU	122	56,759			ate discrepency, this rate
Sub surface drainage laid straight or curved exceeding 12 metres radius	55.20	m	S	96	5,274 0		55.2	20	91	5,023		di wi -251 cla	fers from other structures th the same item, please arifty
SERIES 700 - PAVEMENTS					0		-						
Deck Construction					0								
Hot rolled asphalt 35/14, polymer modified bitumen binder course, 40mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)	0.00	m2	1	11	0								
Heavy duty macadam with AC 20 aggregate binder course 50mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)	0.00	m2	1	10	0		4021.0	00	10	40,011		40,011	
Masterpave 14mm surface course PSV 60 surface course 35mm thick in carriageway, hardshoulder and hardstrip (Pavement Type 5)		m2		10	0		4021.0		10	38,532		38,532	
(Pavement Type 5) Footways and Paved Areas	0.00	1112			0 0 0 0 0 0		4021.0	50	IU	30,532		30,332	
Hardened verge construction to bridge deck comprising 20mm thin surface course (CL919) and 60mm binder (CL912); Surfaces sloping at 10° or less to the horizontal	1514.50	m2	2	24	36,131								
Verge infill concrete Grade C40/50 aggregate size 10/20 exposure class X0, XF4 approximately 300mm thick	350.67	m3	11	19	0								
					0								

### PRESTON WEST DISTRIBUTOR ROAD Lea Viaduct

Description	COSTAIN Qty	<u>Unit</u>	Unit Cost	Amount		RAG	<u>QTY</u>	RATE	<u>TOTAL</u>		DGE ifference		COMMENT	
Central reserve infill concrete Grade C40/50 aggregate										-	-			
size 10/20 exposure class X0, XF4 approximately 250mm thick	145.63	m3		119	17,286									
Slabs/open blockwork sloping at more than 10 degrees to the horizontal	476.00	m2		100	47,481									
Bearing inspection platform (no details)	1.00	Item	1,	,000	1,000									
Steps					0									
													Rate discrepency differs from othe	
Access steps cut into batter slopes with lockable access gate flight length approximately 10.50m	50.00	no		650	32,500		5	0.00	550	27,500		-5,000	with the same ite clarifty	
Steelwork for Structures					0									
Miscellaneous Metalwork					0									
Galvanised steel lockable access door 1.200 m wide					0									
1.000 m high	2.00	nr	1,	,100	2,200		-							
Waterproofing for Structures					0									
Waterproofing					0									
Surface preperation prior to waterproofing - Grit Blasting	6974.50	m2		2	14,646									
Waterproofing with bridge deck spray applied					0									
waterproofing system more than 300 mm wide horizontal or at any inclination up to and including 30 degress to the horizontal	6481.20	m2		15	97,860									
Waterproofing with two coats of bitumen more than 300					0									
mm wide horizontal or at any inclination up to and including 30 degress to the horizontal	1047.36	m2		8	8,578									
Waterproofing with bridge deck spray applied waterproofing system more than 300 mm wide at any					5									
inclination more than 30 degrees up to and including 90 degrees to the horizontal	493.30	m2		15	7,448									
Waterproofing with two coats of bitumen more than 300					0									
mm wide at any inclination more than 30 degrees up to and including 90 degrees to the horizontal	955.00	m2		8	7,821									
	500.00			*	0									
Waterproofing with 20mm of black asphalt protection layer more than 300mm wide horizontal or at any inclination up to and including 30 degress to the horizontal	1514.50	m2		11	17,174									
Abutment Sub-surface Drainage					0									
325 Channel drain 2000mm long and fittings	30.00	m		210	0 6,300									
Surface Impregnation of Concrete					0									
Surface impregnation to plain surfaces with Pavix 100					0									
CCC or similar approved	1388.40	m2		7	9,476									
CMP05 Method Related					0									
Temporary site Roads					0									
Access point off public highway site clear, signs, apron	1.00	item	7,	,707	7,707 0									
Parking & office (paved area) geotextile/150mm 6F2/50mm black	1.00	item	19.	,556	19,556									
General construction requirements:-					0		-							
Temporary Haul/Access Roads, 8m wide/2x					0								Please provide b	reakdown o
geotextile/300mm 6F2	1.00	item	88,	,903	88,903 0								rate	
Hardstandings (general access), geotextile/150mm 6F2	1.00	item	16,	,415	16,415									
Piling Mats, geotextile/600mm 6F2	1.00	item	272		0 272,198		E							
					0									
General construction crane mats, geotextile/400mm 6F2	1.00	item	23,	,599	23,599 0									
Earthworks for laydowns & access, cut/stockpile/fill/reinstate	1.00	item	15,	,177	15,177									
Beam erection requirements:-					0									
	1.00	1a.		205	120.205								Please provide b	reakdown c
General laydown area, geotextile/150mm 6F2	1.00	item	130,	,395	130,395 0								rate	
Beam erection crane mat (medium crane), geotextile/400mm 6F2	3.00	item	63,	,173	189,520								Please provide b rate	reakdown o
Earthworks for laydowns & access, cut/stockpile/fill/reinstate	1.00	item	8,	,343	0 8,343									
Temporary public Roads					0									
Temporary Footpaths	1.00	item	16,	,075	0 16,075									
Existing Services					0									
Service protection		item			0									
Fencing/Hoardings					0 0 0									
Heras / Site Temporary Fencing	1.00	item	12,	,834	12,834									
Gates in Heras	1.00	item		950	0 950									
Site Pedestrian fencing	1.00	item	7,	,598	0 7,598									
Site Pedestrian/Traffic Segregation	1.00	item	16,	,621	0 16,621									
Orange Netting/Fencing	1.00	item	3,	,418	0 3,418									
Baulk timbers	1.00	item	5,	,733	0 5,733									
Pumping/Dewatering					0									
					0		L							

# PRESTON WEST DISTRIBUTOR ROAD

	COSTAIN								RIDGE	
Description	<u>Qtv</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>	RAG	<u> QТҮ</u>	RATE	TOTAL	<b>Difference</b>	<u>COMMENT</u>
Ground Water	1.00	item	116,23	0						Please provide breakdown of rate
Cofferdams				0 0 0						
Cofferdam		Nr		0 0 0						
Sheets & Frames	4.00	item	65,19	01 260,764						Please provide breakdown of rate
Access for pile pre-auger rig	1.00	item	21,06	6 21,066 0 0						
Scaffolding				0						
Scaffolding - Abutments and Piers	1.00	item	80,00	0 80,000						Please provide breakdown of rate
Scaffolding - Handrails/Edge Protection	1.00	item	7,00	0 7,000						
Fall arrest system	1.00	item	7,00	0 7,000						
Adaptions Alterations	1.00	item	7,00	0 7,000 0						
Other Temporary Works				0						
Deck works craneage Crane Utilisation	0.00	item item		0 0 0						
Rail monitoring Cots	1.00	item	15,00	0 15,000						
Bank Seat saving required to be detailed	1.00	item	-380,00	0 -380,000						Please provide breakdown of rate
Allowance for insitu stringcourse	1.00	item	50,000	50,000						Please provide breakdown of rate
			To Collectio	n <u>11,296,213</u> 11,069,735 226,478				Ridge Total	<u> </u>	890

	COSTAIN			
cription	<u>Qtv</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>
STRUCTURE - END SUPPORTS				
NG				
ng Plant				
nsport all necessary plant, labour & equipment to s ks piles and clear upon completion	ite for		0	0
fain mob/demob (up to 1No rig)	1.00	Visit	0 176,710	0 176,710
ow loader inter-site move per rig	1.00	Visit	55,500	0 55,500
				0
nsport all necessary plant, labour & equipment to s ks piles and clear upon completion - TEST PILES	ite for			0
lain mob/demob (1No Rig)	0.00	Nr		0 0 0
ow loader inter-site move per rig	0.00	Nr		0 0 0
racked inter-site move per rig	0.00	Nr		0
up/move to pile position	26.00	Nr	312	8,112 0
ed and concreted length a) 1500mm diameter (n.e )m)	.:			0
500mm diameter (n.e.: 24.0m)	582.40	Lm	631	0 367,727
ing disposal / piling attendance	4.50	Wk	2,625	0 11,813
dit for pile length not constructed				0
500mm diameter	Rate only	/ Lm		0
ply, fix and place TIED reinforcement fain cage reinforcement	114.08	tn	1,250	0 142,600
hear cage reinforcement	17.24	tn	1,250	21,550
grity Tests: Sonic Echo Iobilisation per visit	3.00	Visit	100	0 300
est and report per pile	12.00	Nr	10	120 0
ply & fix debonding foam	1.00	item	2,800	2,800 0
AS accredited site personnel reliminary Piles	0.00	Nr	9,750	0 0
Vorking Piles	0.00	ltem	11,660	0
all & carry out test load to 2.5 x working load on iminary test pile to max test load of upto 1000kN	0.00	Nr	102,550	0
yout test load to 1.5 x workling load to a max test I	bad			0
pto 6000kN	0.00	Nr	74,600	0 0
pare 1500 dia pile heads	26.00	no	798	20,760
BSTRUCTURE - END SUPPORTS				
inage and Service Ducts				
inage and Service Ducts in Structures (including inforced Earth Structures and Anchored Earth				
ctures)				
mm diameter porous drain with 150mm porous crete surround on ST2 concrete bed	37.20	m	99	3,700
nm diameter weepholes 1.50m in length	16.00	no	6	96
mm hollow blockwork drainage layer	897.27	m2	25	22,175
cast concrete drainage channel or similar to rear o gwalls	61.99	m	23	1,432
	01.00		20	1,702
w for connection to highway drainage system	2.00	no	800	1,600
hworks	2.00			.,
avation				
avation of acceptable material excluding Class 5A				
ctural foundations 0 to 3 metres in depth	1853.00	m3	13	23,348
osition of Fill				
osition of acceptable material in fill above structure crete foundations	al 185.30	m3	17	3,113
posal of Material			·	
oosal of acceptable material excluding Class 5A	1667.70	m3	11	17,511
orted Fill			· ·	4-11
orted acceptable material Class 6N in fill to structu	res 5472.00	m3	30	164,434
ange in lightweight fill to back of structures orted leightweight fill to back of structures	3264.00	m3	59	192,576
npaction of Fill				
npaction of acceptable material in fill to structures	inc above	e m3		
ctural Concrete				
itu Concrete				

<u>CC</u> Description	<u>OSTAIN</u> <u>Qty</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>	RAG	QTY	RATE	TOTAL	<u>RIDGE</u> Difference	<u>COMMENT</u>	
In situ concrete ST 2 in blinding 75 mm or less in thickness Strength class C8/10 exposure class X0 AC-1 (Abutments		<u></u>		Junodin					<u></u>	<u></u>	
& Wingwalls)	47.69	m³	142	6,785							
In situ concrete Grade C32/40 aggregate size10/20 exposure Class XC2, XD1, XF1, AC-1 (abutment pile cap)	81.36	m <sup>3</sup>	132	10,732							
In situ concrete Grade C40/50 exposure class XC4, XD3,											
XF2 AC-1 (Abutment Wall) In situ concrete Grade C32/40 exposure class XC2, XD2,	531.55	m <sup>3</sup>	142	75,392							
XF2 AC-1 (Wingwall Base)	280.32	m³	132	36,976							
In situ concrete Grade C40/50 exposure class XC4, XD3, XF2 AC-1 (WingWall)	432.16	m <sup>3</sup>	142	61,295							
In situ concrete ST 2 in blinding more than 75 mm in thickness. Strength class C8/10 exposure class X0 AC-1 (Ground beams)	10.50	m3	142	1,494							
In situ concrete Grade S40R (ground beam base slab)	96.00	m3	132	12,663							
In situ concrete Grade S40R (ground beam)	48.00	m3	132	6,331							
Surface Finish of Concrete - Formwork Formwork vertical more than 300mm wide to F1 class											
surface finish (Abutment Base)	125.28	m²	74	9,293							
Formwork vertical more than 300mm wide to F1 class surface finish (Abutment Wall)	755.78	m²	100	75,439							
Formwork vertical more than 300mm wide to F1 class surface finish (Wingwall Base)	89.28	m²	74	6,623							
Formwork vertical more than 300mm wide to F1 class surface finish (Wingall)	883.72	m²	100	88,210							
Formwork vertical more than 300mm wide to F1 class surface finish (Groundbeam Base)	80.00	m²	74	5,934							
Formwork vertical more than 300mm wide to F1 class surface finish (Groundbeam)	200.00	m2	74	14,835							
Steel Reinforcement for Structures											
Steel bar reinforcement nominal size 16 mm and under Grade B-500B or B-500C to BS4449:2005	0.00	t									
										Rate discrepen	cy this
Steel bar reinforcement nominal size 20 mm and over Grade B-500B or B-500C to BS4449:2005	288.71	t	1,066	307,790		288.7	1 1,066	3	07,790	rate distrepen rate differs from structures with 0 item, please cla	n other the same
Bridge Expansion Joints and Sealing of Gaps											
Sealing of Gaps											
Allow for joint at wingwall and abutment wall interface (no details provided)	4.00	no	300	1,200							
SUPERSTRUCTURE											
Drainage and Service Ducts											
Drainage and Service Ducts in Structures (including Reinforced Earth Structures and Anchored Earth Structures)											
100mm diameter spare duct	249.00	m	32	7,844							
Structural Concrete											
In Situ Concrete											
In situ concrete strength class C40/50 aggregate size 10/20 exposure class XC4, XD1, XF1 (Diaphragm)	166.11	m <sup>3</sup>	145	24,147							
In situ concrete strength class C40/50 aggregate size 10/20 exposure class XC4, XD1, XF1 (Deck Slab)	) 187.58	m <sup>3</sup>	145	27,268							
In situ concrete strength class C40/50 aggregate size 10/20 exposure class XC4, XD3, XF4 (Deck Cope)	) 25.80	m <sup>3</sup>	177	4,572							
Insitu concrete mortar pads 2000mm x 750mm x 20mm thickness for PCC beams	0.54	m <sup>3</sup>	152	82							
Precast Concrete											
Precast W18 beams strength class C50/60 aggregate size											
10/20mm exposure class XC4, XD1, XF1. Length 41.5m Surface Finish of Concrete - Formwork	7.00	no	67,734	474,137							
Permanent GRP formwork	676.45	m2	62	41,684							
Formwork vertical more than 300mm wide to F3 class surface finish (Deck Cope)	87.20	m2	117	10,232		87.2	10 1	190	16,568	Rate appears L 6.336 please clarify	_ow,
Formwork Class F3 horizontal more than 300 mm wide										Rate appears h	nigh,
(deck cantilever) Formwork vertical more than 300mm wide to F1 class	66.22	m2	373	24,681		66.2				2,099 please clarify Rate appears h	nigh,
surface finish (Diaphragm) Steel Reinforcement for Structures	236.18	m²	142	33,509		236.1	8 1	100	23,575	9,934 please clarify	
Steel bar reinforcement nominal size 16 mm and under											
Grade B-500B or B-500C to BS4449:2005	0.00	t									

Control	Seaconsai					-					
The bar work is the "Decision of all and all an			<u>Unit</u>	Unit Cost	<u>Amount</u>	RAG	<u>QTY</u>	RATE	<u>TOTAL</u>		ence <u>COMMENT</u>
											Bate discrepency
	Steel har reinforcement nominal size 20 mm and over										rate differs from o
		71.83	t	1,066	76,572		71.83	3 1,066		76,572	
	ERIES 400 ROAD RESTRAINT SYSTEMS										
2.4. Doop of a marked of a first of a marked of	afety Barrier										
	afety barrier; Performance class N2; Working width class	5									
	/2; Designed to be impacted on one side only; Straight or	r	m	38	3 190						
		03.00		30	3,190						
	edestrian Parapets, Guardrails and Handrails										
Bit Not with with with Not We show with Note Note Note Note Note Note Note Note	4m high aluminium parapet containment performance										Bate discrepency.
On N2 sorting parameter late that map packalle parameter late that packalle parameter late that packa	lass N2 working width class W2 with mesh infill both side										rate differs from o
			m	200	21,945		110.00	) 194		21,326	
	0m high galvanised tubular steel pedestrian guardrail	61.99	m	116	7,201						
bits       Status	erbs. Footways and Paved Areas										
bick and Linking       During System       10.00       n       12       0.019         control the bit bit of system       10.00       n       12       0.019       10         control the bit bit of system       10.00       n       12       0.019       10         control the bit bit of system       10.00       n       10       10       10       10         control the bit of system       10.00       n       10											
Searchy 2 Arook value         164.00         n         122         20.291											
ETHED 710 - 74 VEREMONDS       Image: 100 -											
colump and Pared Areas         m2	xceeding 12 metres radius	166.00	m	122	20,219						
Instantion of unitor panel units         m2	ERIES 700 - PAVEMENTS						<b>—</b>				
wind abs locing at more than 10 dirighted to the constraint of the constraint of the cons	ootways and Paved Areas										
extractal         61.99         n²         29         1.767           Served reserve for locate Galo (4000 aggregate size (202 ergosters clask X) XF4 aggregation miles 114.13         119         13.547         -9.488 Zen, please clask 114.13         119         13.547         -9.488 Zen, please clask 114.13         119         13.547         -9.488 Zen, please clask 202 ergosters clask X) XF4 aggregation miles 202 ergosters clask X) XF4	Grasscrete or similar paved area		m2								
extractal         61.99         n²         29         1.767           Served reserve for locate Galo (4000 aggregate size (202 ergosters clask X) XF4 aggregation miles 114.13         119         13.547         -9.488 Zen, please clask 114.13         119         13.547         -9.488 Zen, please clask 114.13         119         13.547         -9.488 Zen, please clask 202 ergosters clask X) XF4 aggregation miles 202 ergosters clask X) XF4											
and backers will converte Cade C4050 Jagoegate size 202 organized case X0, VF4 agoontaley 200m 118.0       114.13       119       12547       -0.408 less, peaker case 202 organized case X0, VF4 agoontaley 200m 118.0         spectra class X0, VF4 agoontaley 200m 118.0       118.2.0       nc2       119       21.6       114.13       119       12.547       -0.408 less, peaker case 200 mm 118.0       114.13       119       12.547       -0.408 less, peaker case 200 mm 118.0       114.13       119       12.547       -0.408 less, peaker case 200 mm 118.0       114.13       119       12.547       -0.408 less, peaker case 200 mm 118.0       114.13       119       12.547       -0.408 less, peaker case 200 mm 118.0       114.13       119       12.547       -0.408 less, peaker case 200 mm 118.0       114.13       119       12.547       -0.408 less, peaker case 200 mm 118.0       114.13       119       12.547       -0.408 less, peaker case 200 mm 118.0       114.13       119       12.547       -0.408 less, peaker case 200 mm 118.0       110       111		61.99	m2	29	1,787						
Include the own if if comme Cade C450 sygregate is:       114.13       no       202       202.000       114.13       119       13.547       -0.408 iss., please call         Visit if it concil con							-				Data diamana
0000 expose data X0, XF4 agroundity 250mm thisk       114.13       119       13.547       0.4489 item, please dat7         trop inf accords Grade C40/90 agroundity 250mm thisk       120.0       m2       119       21.081         the Bridge Deck Contraction       119       21.081       119       13.547       0.4489 item, please dat7         the Bridge Deck Contraction       119       21.081       119       13.547       0.489 item, please dat7         the Bridge Deck Contraction       110       110       110       110       110       110         the Bridge Deck Contraction       0.00       m2       11       110											rate differs from o
Signal Process Grade C40-00 approprise Size 10:20 approver all cases A, XFA approvementations         110         111         1			m2	202	23,036		114.13	3 119		13,547	
upoure disk 20. XF4 approximation         119         21.081           there Bridge Davk Construction											,
The Bidge Deck Contruction		100.00	0	110	01.001						
In radia gaila 35.14, polymer modified blumen bindle additip (Preveneen Type 5)       0.00       m2       11         sex dating information of the radiant sex dating informatio		182.60	m2	119	21,681						
cores. 40m thick is carring-even, hutdholder and hutdhip is appropriate binder coruse form multiple sources. The source form the hutdholder is an hutdholder in a hutdholder	Other Bridge Deck Construction										
arading (Parement Type 5)         0.00         m2         11											
Intermit         O         m2         10         S18.00         10         S3.900         pacement           Attemment Type 5]         0.00         m2         10         S18.00         10         S3.900         pacement           Attemment Type 5]         0.00         m2         10         S18.00         10         S3.900         pacement           Pacement Type 5]         0.00         m2         10         S18.00         10         S1.904         pacement           Decleves         0.00         m2         10         S18.00         10         S1.904         pacement           Decleves         0.00         m2         10         S1.904         pacement         pacement           Decleves         0.00         m2         24         4.956         pacement         pacement <td< td=""><td></td><td>0.00</td><td>m2</td><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		0.00	m2	11							
Parement Type 5)         0.00         m2         10         51800         10         53.050         53.050         parements           Istempore 14mm surface course FSV 50 surface course         0.00         m2         10         51800         10         53.050         53.050         parements           Istempore 14mm surface course FSV 50 surface course         0.00         m2         10         51800         10         51.904         51.904         51.904         parements           Parement Type 5)         0.00         m2         10         51.804         51.904         parements           Construction to tricing deck comprising         m2         2.4         4.356         m2         2.804         m2         2.804         m2         m2         2.804         m2		e									
Sime Init is carriageway, hardboukder and hatdstrip         mol included for in           Solutions         0.00         m2         10         5418.00         10         51.904         pavement is           colways and Paved Areas	Umm thick in carriageway, hardshoulder and hardstrip Pavement Type 5)	0.00	m2	10			5418.00	) 10		53,909	
Parement Type 5)         0.00         m2         10         5418.00         10         51.904         51.904 pavements           colowys and Pawed Aneas	Asterpave 14mm surface course PSV 60 surface course										
contways and Paned Areas		0.00	m2	10			5418.00	) 10		51.904	
lardened verge construction to bridge deck comprising min mustates: course (CL19) and 60mm bridger 21/21/2, Statless stopp as 10° or less to the torcontal 182.60 m2 2/4 4,256       Image: Cl19 or less to the torcontal 182.60 m2 2/4 4,256         valerproofing for Structures       Image: Cl19 or less to the torcontal 182.60 m2 2/4 4,256       Image: Cl19 or less to the torcontal 182.60 m2 2/4 4,256         valerproofing for Structures       Image: Cl19 or less to the torcontal or 182.60 m2 2/2 2,004       Image: Cl19 or less torter or less tor less tor less torter or less torter or less torter or less torte											
Drim this surface ocurse (C1919) and 60mm binder       182.60 m2       24       4,356         Atterproofing for Structures	oolways and I aved Aleas										
CL1212; Surfaces aloging at 10 <sup>6</sup> or less to the horizontal         182.60         m2         2.4         4,356           Vaterprooling tor Structures											
Valeproofing visit bridge deck spray applied at any including 30 degrees to the forizontal including 30 degrees to the norizontal inclu	0mm thin surface course (CL919) and 60mm binder CL912); Surfaces sloping at 10° or less to the horizontal	182.60	m2	24	4,356						
Valeproofing vint bridge deck spray applied at any including 90 degrees to the horizontal 16.60 m2 15 251 Valeproofing with bridge deck spray applied at any including 90 degrees to the norizontal 16.80 m2 15 251 Valeproofing with bridge deck spray applied at any including 90 degrees to the norizontal 16.80 m2 15 251 Valeproofing with bridge deck spray applied at any including 90 degrees to the norizontal 16.80 m2 15 251 Valeproofing with bridge deck spray applied at any including 90 degrees to the norizontal 16.80 m2 15 251 Valeproofing with bridge deck spray applied at any including 90 degrees to the norizontal 16.80 m2 15 251 Valeproofing with bridge deck spray applied at any including 90 degrees to the norizontal 16.80 m2 15 251 Valeproofing with 20m or black asphal protection layer dination more than 30 degrees up to and including 90 degrees to the horizontal 207.50 m2 11 2,353 Valeproofing with 20m or black asphal protection layer dination up to and including 90 degrees to the horizontal 207.50 m2 11 2,353 Valeproofing vith 20m or black asphal protection layer dination up to and including 90 degrees to the horizontal 207.50 m2 11 2,353 Valeproofing vith 20m or black asphal protection layer dination up to and including 90 degrees to the horizontal 207.50 m2 11 2,353 Valeproofing vith 20m or black asphal protection layer dination up to and including 90 degrees to the horizontal 207.50 m2 11 2,353 Valeproofing vith 20m or black asphal protection layer dination up to and including 90 degrees to the horizontal 207.50 m2 11 2,353 Valeproofing vith 20m or black asphal protection layer dination with a valeproofing vith 20m or black asphal protection layer dination up to and including 90 degrees to the horizontal 207.50 m2 11 2,353 Valeproofing vith 20m or black asphal protection layer dination up to and including 90 degrees to the horizontal 207.50 m2 11 2,353 Valeproofing vith 20m or black asphal protection layer dination up to and including 90 degrees to the horizontal 207.50 m2 11 2,353 Valeproofing vith 20m or											
urface preparation       954.50       m2       2       2.004         Vateproofing with bridge deck spray applied       aterproofing system more than 300 mm wide horizontal or tary inclination up to and including 30 degress to the norizontal       937.90       m2       15       14,161         Vateproofing with two coats of blumen more than 300       mm wide horizontal or tary inclination up to and including 0       mm wide horizontal or tary inclination up to and including 0       mm wide horizontal including 30 degrees up to and including 0       mm wide horizontal including 30 degrees up to and including 0       mm wide at any inclination more than 300 degrees up to and including 90       mm wide at any inclination more than 300 degrees up to and including 90       mm wide at any inclination more than 300 degrees up to and including 90       mm wide at any inclination more than 300 degrees up to and including 90       mm wide at any inclination more than 300 degrees up to and including 90       mm wide at any inclination more than 300 degrees up to and including 90       mm wide at any inclination more than 300 degrees up to and including 90       mm wide at any inclination more than 30 degrees up to and including 90       mm wide at any inclination more than 30 degrees up to and including 90       mm wide at any inclination more than 300 mm wide at any inclination more than 30 degrees up to and including 90       mm wide at any inclination more than 300 mm wide at any inclination more than 300 mm wide at any inclination more than 30 degrees up to and including 90       mm wide at any inclination more than 30 degrees up to and including 90       mm wide at any inclination more than 30 degrees up to	· · ·										
Alterproofing with bridge deck spray applied atterproofing system more than 300 mm wide horizontal or tray inclination up to and including 30 degress to the orizontal 937.90 m2 15 14,161 Valerproofing with two coats of bitumen more than 300 m wide horizontal or at any inclination up to and including 0 degress to the horizontal 180.80 m2 8 1,481 Valerproofing with bridge deck spray applied atterproofing with an 30 degrees up to and cluding 30 degrees to the horizontal 16.60 m2 15 251 Valerproofing with 20mm of black asphalt protection layer nder verges more than 300mm wide horizontal 207.50 m2 11 2,353 turface Impregnation of Concrete turface Impregnation to plain surfaces with Pavix 100 CCC r similar approved 980.78 m2 8 7,724 WP 004 Method Related teneral construction requirements:- emporary Haul/Access Roads, 8m wide/2x Please provide a											
atterproofing system more than 300 mm wide horizontal or tany inclination up to and including 30 degress to the more than 300 mm wide horizontal or at any inclination up to and including 0 degress to the horizontal 180.80 m2 8 1,481       Image: Control of	Surface preparation	954.50	m2	2	2,004	= 1	<u> </u>				
tary inclination up to and including 30 degress to the orizontal 937.90 m2 15 14,161 937.90 m2 14,161 93.90 m2 8 1,481 93.90 m2 8 1,2386 93.90 m2 15 251 93.90 m2 11 2,353 94.90 m2 11 10 m2 10,10 m2 10	Vaterproofing with bridge deck spray applied	or									
Aterproofing with two coats of bitumen more than 300       180.80       m2       8       1,481         Aterproofing with two coats of bitumen more than 300       180.80       m2       8       1,481         Aterproofing with two coats of bitumen more than 300 mm wide at any biolaciton more than 30 degrees up to and cluding 90 degrees to the horizontal       1512.31       m2       8       12,386         Aterproofing with bridge deck spray applied       1512.31       m2       8       12,386         Aterproofing with bridge deck spray applied       16.60       m2       15       251         Aterproofing with 20mm of black asphalt protection layer       m2       15       251         Aterproofing with Paix 100 CCC       m2       11       2,353         urface Impregnation to plain surfaces with Paix 100 CCC       m2       8       7,724         MP 004 Method Related       980.78       m2       8       7,724         Impregnation to requirements:       m2       8       7,724       Please provide a	t any inclination up to and including 30 degress to the		~								
In wide horizontal or at any inclination up to and including O degrees to the horizontal 180.80 m2 8 1,481 Vaterproofing with two coats of bitumen more than 300 mi wide at any inclination more than 30 degrees up to and including 90 degrees to the horizontal 1512.31 m2 8 12,386 Vaterproofing with bridge deck spray applied rearerorofing system more than 300 erg wide at any colination more than 30 degrees up to and including 90 egrees to the horizontal 16.60 m2 15 251 Vaterproofing with 20mm of black asphalt protection layer nder verges more than 300 degrees to the horizontal or at any celination up to and including 30 degrees to the horizontal at any celination of Concrete Vaterproofing with Pavix 100 CCC similar approved 980.78 m2 8 7,724 Vaterproofing with And Related Heneral construction requirements:- Emporary Haul/Access Roads, 8m wide/2x Vaterproofing with And Related		937.90	m2	15	14,161						
0 degress to the horizontal 180.80 m2 8 1,481   Vaterproofing with two coats of bitumen more than 300 degrees up to and locking 90 degrees to the horizontal   1512.31 m2 8 12,386   Vaterproofing with bridge deck spray applied vaterproofing system more than 300 mm wide at any inclination more than 300 degrees up to and including 90 degrees to the horizontal   Vaterproofing with 20mm of black asphalt protection layer inder verges more than 300 mm wide horizontal at any inclination up to and including 30 degrees with Pavix 100 CCC raining and related index approved in the value of the val	Vaterproofing with two coats of bitumen more than 300 nm wide horizontal or at any inclination up to and including	g									
In wide at any inclination more than 30 degrees up to and including 90 degrees to the horizontal 1512.31 m2 8 12,386 Vaterproofing with bridge deck spray applied vaterproofing system more than 300 mm wide at any inclination more than 30 degrees up to and including 90 egrees to the horizontal 16.60 m2 15 251 Vaterproofing with 20mm of black asphalt protection layer and including 30 degrees to the horizontal 207.50 m2 11 2,353 urface Impregnation of Concrete Undrace Impregnation to plain surfaces with Pavix 100 CCC is impregnated is impregnation to plain sur			m2	8	1,481						
vicuiting 90 degrees to the horizontal       1512.31       m2       8       12,386         Vaterproofing with bridge deck spray applied atterproofing system more than 300 degrees up to and including 90 degrees to the horizontal       16.60       m2       15       251         Vaterproofing with 20mm of black asphalt protection layer noder verges more than 300 degrees to the horizontal or at any noder verges more than 300 degrees to the horizontal       16.60       m2       15       251         vaterproofing with 20mm of black asphalt protection layer noder verges more than 300 degress to the horizontal or at any node verges more than 300 degress to the horizontal       207.50       m2       11       2,353         sturface impregnation of Concrete											
raterproofing with bridge deck spray applied       aterproofing system more than 300 mm wide at any       ination more than 300 degrees up to and including 90         garees to the horizontal       16.60       m2       15       251         /aterproofing with 20mm of black asphalt protection layer			m2	8	12,386						
aterproofing system more than 300 mm wide at any clination more than 300 mm wide at any clination more than 300 mm wide box asphalt protection layer nder verges more than 300 mm wide horizontal or at any clination up to and including 30 degress to the horizontal 207.50 m2 11 2,353 urface Impregnation of Concrete urface Impregnation to plain surfaces with Pavix 100 CCC r similar approved 980.78 m2 8 7,724 MP 004 Method Related meneral construction requirements:- emporary Hau//Access Roads, 8m wide/2x MP loake spoals, 8m wide/2x MP proved 100 mm wide/2x MP proved 100 mm wide box asphalt protection layer meneral construction requirements:- emporary Hau//Access Roads, 8m wide/2x MP proved 200 mm wide/2x MP protection to plain surfaces with Pavix 100 CCC meneral construction requirements:- emporary Hau//Access Roads, 8m wide/2x MP protection to plain surfaces with protection to plai									-		
egrees to the horizontal       16.60       m2       15       251         /aterproofing with 20mm of black asphalt protection layer ndrev reges more than 300mm wide horizontal or at any clination up to and including 30 degress to the horizontal       207.50       m2       11       2,353         urface impregnation of Concrete	aterproofing system more than 300 mm wide at any										
inder verges more than 300mm wide horizontal or at any       207.50       m2       11       2,353         urface impregnation of Concrete		16.60	m2	15	251						
Inder verges more than 300mm wide horizontal or at any clination up to and including 30 degress to the horizontal 207.50 m2 11 2,353   urface Impregnation of Concrete Impregnation to plain surfaces with Pavix 100 CCC Impregnation to plain surfaces with Pavix 100 CCC   r similar approved 980.78 m2 8   P004 Method Related Impregnation requirements:											
clination up to and including 30 degress to the horizontal       207.50       m2       11       2,353       11       2,353       11       2,353       11       11       2,353       11       11       2,353       11       11       2,353       11       11       2,353       11       11       2,353       11       11       2,353       11       11       11       12,353       11 <t< td=""><td>aterproofing with 20mm of black asphalt protection layer</td><td>r</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	aterproofing with 20mm of black asphalt protection layer	r									
urface impregnation to plain surfaces with Pavix 100 CCC     8     7,724     1       r similar approved     980.78     m2     8     7,724       MP 004 Method Related     1     1       eneral construction requirements:     1     1       mporary Haul/Access Roads, 8m wide/2x     Please provide a		207.50	m2	11	2,353		ļ				
urdace impregnation to plain surfaces with Pavix 100 CCC r similar approved 980.78 m2 8 7,724  MP 004 Method Related eneral construction requirements:	urface Impregnation of Concrete										
r similar approved     980.78     m2     8     7,724       MP 004 Method Related     Image: Construction requirements:     Image: Construction requirements:       emporary Haul/Access Roads, 8m wide/2x     Please provide a		c					<u> </u>				
eneral construction requirements:-			m2	8	7,724						
emporary Haul/Access Roads, 8m wide/2x Please provide a											
emporary Haul/Access Roads, 8m wide/2x Please provide a						╘╘─┤					
	eneral construction requirements:-										
eotextile/300mm 6F2 1.00 item 59,260 59,260 breakdown of the r											

<u>CO</u> Description	<u>STAIN</u> <u>Qty</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>	RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	<u>RIDGE</u> <u>Difference</u>	<u>COMMENT</u>
										Please provide
Hardstandings (general access), geotextile/150mm 6F2	1.00	item	24,791	24,791						breakdown of
General construction crane mats, geotextile/400mm 6F2	1.00	item	36,262	36,262						Please provid breakdown of
Piling Mats, geotextile/600mm 6F2	1.00	item	90,733	90,733						Please provid breakdown of
Earthworks for laydowns & access, cut/stockpile/fill/reinstate		item								
Beam erection requirements:-						-				
						-				Please provid
Temporary Haul/Access Roads, 2x geotextile/300mm 6F2	1.00	item	30,502	30,502						breakdown of
General laydown area, geotextile/150mm 6F2	1.00	item	18,519	18,519						
Beam erection crane mat (medium crane), geotextile/400mm 6F2	2.00	item	11,785	23,570						Please provid breakdown of
Beam erection crane mat (large crane), geotextile/600mm 6F2	1.00	item	13,413	13,413						
Fencing/Hoardings										
Heras / Site Temporary Fencing	1.00	item	4,445	4,445						
Gates in Heras	1.00	item	4,445	4,445						
	1.00		547	547						
Site Pedestrian fencing		item								
Site Pedestrian/Traffic Segregation	1.00	item	2,650	2,650						
Orange Netting/Fencing	1.00	item	840	840						
Other	1.00	item	5,000	5,000						
Pumping/Dewatering										
Surface Weter	1.00	;*	00 175	00 175		-				Please provid
Surface Water	1.00	item	28,175	28,175						breakdown of
Silt \ Run-off Management										
Concrete washout facility	1.00	item	4,595	4,595						
Cofferdams										
Sheets & Frames	2.00	item	65,191	130,382						Please provide breakdown of
Scaffolding										
Scaffolding - Wall	1.00	item	20,000	20,000						
Scaffolding - Handrails/Edge Protection	1.00	item	1,040	1,040						
Fall arrest system	1.00	item	9,250	9,250						
Adaptions / Alterations	1.00	item	5,000							
				- 4						Please provid
Crane Utilisation	1.00	item	32,428	32,428						breakdown of
Change from triple concrete span to single steel span	1.00	item	282,000	282,000						Please provid breakdown of

### PRESTON WEST DISTRIBUTOR ROAD

Earls Farm	Cattle Creep

COS	<u>TAIN</u>								<u>RIDG</u>	<u>E</u>		
Description	<u>Qty</u>	<u>Unit</u>	Unit Cost Amour	<u>nt.</u>	RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	Diffe	erence	<u>COMMENT</u>	
MAIN CONSTRUCTION												
Drainage and Service Ducts												
Drainage and Service Ducts in Structures (including Reinforced Earth Structures and Anchored Earth Structures)												
150 mm diameter porous drain in 300 mm x 300 mm no fines concrete surround on minimum 150 mm ST2 concrete bed (Back of wall drainage)	230.00	m	47	10,746								
225 mm hollow blockwork drainage layer	360.00	m2	23	0 8,454 0								
Weepholes 75mm dia, 2.5m long	60.00	no	15	902								
Chamber specified design group 1500 dia manhole Type 4a chamber to HCD F6. Depth to invert exceeding 2m but not 3m with D400/M1 cover & frame with 675 x 675 clear opening to LCC FL 10	2.00	no	4,198	8,395								
100mm internal diameter carrier drain specified design				0								
group 10 in trench depth to invert not exceeding 2m average depth to invert 1.13m with Type S bed and surround to HCD F1	115.00	m	38	4,336 0								
Rodding eye specified design group LCC FL 13 in carriageway with 225x225 rodding eye cover & frame	1.00	no	154	154								
900mm Culvert replacement Type S		m		0								
300 x 105 Concrete Dish Channel to underpass	115.00	m	46	0 5,236								
Connection of dish channel to Culvert	1.00	ltem	1,575	0 1,575 0								
100mm dia ductwork (2 way per verge)		m		0								
Earthworks				0								
Excavation		_		0						_		
Excavation of acceptable material excluding Class 5A in structural foundations 0 to 3 metres in depth Deposition of Fill	3240.00	m3	13	40,824 0 0		3240.00	) 2	23 7	4,520	33,69	Rate appears low, plea: 6 clarify	se
Deposition of acceptable material in fill to structures	324.00	m3	17	0 5,443								
Disposal of Material				0								
Disposal of acceptable material excluding class 5A	2916.00	m3	11	0 30,618 0								
Imported Fill				0								
Imported acceptable material Class 6N in fill to structures	3180.00	m3	32	100,337								
Compaction of Fill				0								
Compaction of acceptable material in fill to structures	inc above	m3		0		-						
Structural Concrete				0								
In Situ Concrete				0								
In situ concrete ST 2 in blinding 100 mm or less in thickness	127.80	m3	142	18,185								
In situ concrete Grade S50R (screed to achieve fall)	69.00	m3	142	0 9,787								
In situ concrete Grade S50 (stitch)	15.00	m3	142	2,128								
Precast Concrete				0								
Precast concrete underpass units	18.00	m	3,715	0 66,870								
Precast concrete underpass units	0.00	m	2,202	0								
Steel Reinforcement for Structures				0 0								
				0							Rate discrepency, this r	rate
Steel bar reinforcement nominal size 16 mm and under not exceeding 12 metres in length Grade B-500B or B-500C to BS4449:2005	1.50	t	1,119	1,679 0		1.50	) 1,1	19	1,679		differs from other struct with the same item, plea 0 clarifty	ase
Steel bar reinforcement nominal size 20 mm and over not exceeding 12 metres in length Grade B-500B or B-500C to BS4449:2005	1.80	t	949	1,709		1.80	) 1,06	66	1,919	21	Rate discrepency, this r differs from other struct with the same item, plea 0 clarifty	tures
Bridge Expansion Joints and Sealing of Gaps				0 0 0								
Sealing of Gaps				0		<u> </u>						
Sealing of joints / gaps	1.00	ltem	5,000	0 5,000						_		_
FINISHINGS				0								
Pedestrian Parapets, Guardrails and Handrails				0								
1 One biok and waised to be start as the start of the	140.00			0		4000		17 .	6 330	00.1	Rate discrepency, this r differs from other struct with the same item, plea	tures
1.0m high galvanised tubular steel pedestrian guardrail	140.00	m	263	36,750 0		140.00	v 1 <sup>.</sup>	17 1	6,332	-20,41	3 clarifty	
Waterproofing for Structures Waterproofing Waterproofing				0 0								
Surface preparation (minimum visit applies)	1.00	ltem	1,000	0 1,000								
			1,000	0								

# PRESTON WEST DISTRIBUTOR ROAD Earls Farm Cattle Creep

COS	TAIN									<u>RIDGE</u>	
Description	Qty	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>		BAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	<b>Difference</b>	COMMENT
Waterproofing with two coats of bitumen more than 300											
mm wide horizontal or at any inclination up to and including 30 degress to the horizontal	360.00	m2		8	2,948						
Waterproofing with bridge deck spray applied					0						
inclination more than 30 degrees up to and including 90											
degrees to the horizontal	90.00	m2		15	1,359						
Waterproofing with two coats of bitumen more than 300					0						
mm wide at any inclination more than 30 degrees up to and including 90 degrees to the horizontal	520.00	m2		8	4,259						
Waterproofing with bridge deck spray applied					0						
waterproofing system more than 300 mm wide horizontal or at any inclination up to and including 30 degress to the											
horizontal	162.00	m2		15	2,446						
					0						
Waterproofing with 20mm of black asphalt protection layer under verges more than 300mm wide horizontal or at any											
inclination up to and including 30 degress to the horizontal	28.80	m2		11	327 0						
Surface Impregnation of Concrete					0						
Surface impregnation with Pavix CCC100 or similar approved to plain surfaces	252.00	m2		7	1,720						
Method Related (CMP014)	202.00	ΠZ		,	0						
					0						
Temporary site Roads					0						
Access point off public highway site clear, signs, apron	1.00	item	5,0	42	5,042 0						
Parking & office (paved area) geotextile/150mm 6F2/50mm black		item			0						
					0	$\square$					
Protection/marking of Overhead Cables, goalposts & signs	0.00	item			0						
General construction requirements:-					0						
				10	-						
Hardstandings (general access), geotextile/150mm 6F2	1.00	item	2,7	40	2,740 0						
Beam erection requirements:-					0						
Temporary Haul/Access Roads, 2x geotextile/300mm 6F2	1.00	item	5,1	88	5,188						
Beam erection crane mat (large crane), geotextile/600mm					0						
6F2	2.00	item	4,8	53	9,706						
Temporary public Roads					0						
Temporary Footpaths	1.00	item	2,1	/9	2,179 0						
Fencing/Hoardings					0						
Heras / Site Temporary Fencing	1.00	item	5,5	91	5,591 0						
Gates in Heras	1.00	item	5	16	516 0						
Site Pedestrian fencing	1.00	item	1,0	86	1,086						
Orange Netting/Fencing	1.00	item	3	96	396						
Baulk timbers	1.00	item	4	32	432						
Pumping/Dewatering					0						
Surface Water	1.00	item	4,2	06	0 4,206						
Ground Water	1.00	item	11,0		0 11,075						
Sumps	1.00	item	10,1		0 10,110						
Flow Diversions	1.00	item	5,5		5,538						
					0						
Over pumping 900mm culvert for replacement works	1.00	ltem	2,0	00	2,000						
Silt \ Run-off Management					0						
Silt Buster	1.00	item	12,9		12,977 0		E				
Ponds/Ditches	1.00	item	1,1	14	1,114 0						
Concrete washout facility	1.00	item	2,1	68	2,168 0						
Cofferdams					0						
Batterered excavation (Extra over quant) Assume 1:1 batter				24							
plus 1.8m working room	1.00	item	3,2	24	3,224						
Brickwork	1.00	item	15,0	00	15,000						
Concrete to wingwalls	60.00	item	1:	32	7,915		<u> </u>				
Formwork to wingwalls	200.00	item	1	46	29,208		200.0	n ₁	25 25,	000	Rate appears high, please 08 clarify
	200.00	ilenn	1		23,200		200.0	v 1	23 25,	-4,2	oo siamy
											Rate discrepency, this rate
											differs from other structures
Steel to wingwalls	13.20	item	1,0	66	14,071		13.2	0 1,0	66 14,	071	with the same item, please 0 clarifty (presumed re-bar)
Drainage blanket to structure and vibro colums - 6B/Gabion							<u> </u>				
Stone	400.00	t		35	14,000						
Vibro stone columns 600dia, 13m deep approx 100 no	1300.00	m		77	100,225						
serve entering booking form doop approx for no	. 555.00										

### PRESTON WEST DISTRIBUTOR ROAD Earls Farm Cattle Creep

	<u>COSTAIN</u>									RIDGE		
Description	Qty	<u>Unit</u>	<u>Unit Cost</u>	Amount		RAG	<u> QTY</u>	RATE	TOTAL	Difference	COMMENT	
			To Collecti		88,890					9,2		
				52	24,665				Ridge Total	648,1	70	

# PRESTON WEST DISTRIBUTOR ROAD Bartle Underpass

	<u>COSTAIN</u>									RIDGE	
Description	<u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>		RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	<b>Difference</b>	COMMENT
MAIN CONSTRUCTION											
											Please provide assumptions that have
Box Culvert 5.4mx4.8x32	1.00	Item	702,000	) 70	2,000						been made
Brickwork	1.00	item	10,000	) 1	0,000						
			To Collection	ו 71	2,000						

# PRESTON WEST DISTRIBUTOR ROAD Sheet Piling - Brook

<u>CC</u>	<u>OSTAIN</u>									<u>RIDGE</u>	
Description	<u>Qty</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>		RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	Difference	COMMEN
Savick Brook Viaduct											
Mob / De-mob plant & equipment for 'Conventional' Pile Installation	Item	0.00	7,06	2	0						
Installation	item	0.00	7,00	3	0		·				
Supply & Installation of 10.0m long sheet piles to form 2No. lines of 40.0m long permanent piling	m	0.00	2,06	9	0						
Flame cutting sheet piles to level following installation	Item	0.00	2,50	0	0						
Supply and installation of steel channel capping beam	m	0.00	35	6	0						
ST2 Infill (as Lea)	m3	0.00	15	0	0						
Platform (as Lea)	Item	0.00	37,20	6	0						
			To Collection	n	0 252,164						

### PRESTON WEST DISTRIBUTOR ROAD Sheet Piling - Canal

<u>c</u>	OSTAIN							RI	DGE	
Description	<u>Qty</u>	<u>Unit</u>	Unit Cost A	mount	RAG	<u> QТҮ</u>	RATE	<u>TOTAL</u>	Difference	COMMENT
MAIN CONSTRUCTION										
Sheet Piling										
Mob / De-mob plant & equipment for 'Conventional' Pile										
Installation	ltem	2.00	5,650	11,300						
Supply & Installation of 10.0m long sheet piles to form 2No										
ines of 40.0m long permanent piling	m	100.00	1,655	165,500						
Flame cutting sheet piles to level following installation	ltem	1.00	2,000	2,000						
Supply and installation of steel channel capping beam	m	100.00	285	28,500						
ST2 Infill	m3	28.80	150	4,333						
Platform	ltem	1.00	37,206	37,206						Please provi build up of ra
			To Collection	248,839						
			-	248,839						
				0						

Traffic Management

	<u>COSTAIN</u>			
<u>Description</u>	<u>Qty</u>	<u>Unit</u>	Unit Cost	Amount
Traffic Management				
Labour				
TSCO 12hr cover - days	13104	hr	17	227,223
TSCO/Fman 12hr cover - nights	10920	hr	17	189,353
TM operative - Foreman - days	13104	hr	17	227,223
TM operative - Foreman - nights		hr	17	(
TM operative - Days	13104	hr	16	204,029
TM operative - Nights	10920	hr	16	171,990
TM operative - Days	13104	hr	16	206,388
TM operative - Nights	10920	hr		(
TM operative - Days	13104	hr	16	206,388
TM operative - Days	13104	hr	16	206,388
				1,638,983
Plant				
Van up to 1.10 tonnes - 14 (21)	156	weeks	595	92,820
Van up to 1.10 tonnes - 14 (21)	156	weeks	595	92,820
Van up to 1.10 tonnes - 14 (21)	156	weeks	595	92,820
Van up to 1.10 tonnes - 14 (21)	156	weeks	595	92,820
Traffic warning cone - 1 mtr 37 (42)	5000	nr	6	27,500
Traffic sleeve	5000	nr	1	6,250
Lamps - Conelamp and Sequential Taper lamp	1000	nr	51	50,540
Batteries	35000	nr	1	35,000
Traffic lights 4 sets	104	week	600	62,400
Lodge x 10 men	10920	shift	25	273,000
Lodge x 10 men- weekends	936	shift	25	23,400
				849,370

Temp Road markings	1	Item	60,000	60,00
Temp signs	1	Item	25,000	25,00
Verroguard £/Im based on; barrier cost of £0.13 per day plus installation and removal cost with an estimated hire of				
730 days - Motorway Junction both sides	3200	lm	120	384,00
verro guard £/Im based on; barrier cost of £0.13 per day plus installation and removal cost with an estimated hire of				
730 days - Blackpool Road both sides	1600	lm		
Allowance for visits to alter the barrier	10	nr	1,500	15,00
				484,00
			To Collection	2,972,35
			EWL	
			M55	1,629,37

## PRESTON WEST DISTRIBUTOR ROAD Site Clearance

	COSTAIN								<u>RIDGE</u>	
Description	<u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>	RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	Difference	<u>COMMENT</u>
Preston Western Distibutor										
Site Clearance										
General site clearance (vegetation)	1	item	90,477							
Retention on site of 10% of felled timber	1	item	32,812	2 32,812						
										Is this included in pavements or separate measure,
Demolition of Footway on M55	1	item	115,000	115,000						please clarify
			To Collection	238,289						
			EWLR	24,658						
			M55	145,822						

Earthworks

COST	AIN			Co	<u>stain</u>	Ri	<u>dge</u>	
Description	<u>Qty</u> <u>Unit</u>	Unit Cost Amount	<u>Comment</u>	<u>Qty</u> <u>Unit</u>	<u>Unit Cost</u> <u>Amount</u>	<u>QTY</u> <u>UNIT</u>	RATE Total	Difference Comment
Preston Western Distributor								
SERIES 600 EARTHWORKS								
Excavate acceptable material Class 5A and move to stockpile	183,478.00 m3		Total Topsoil (total)	183,478.00 m3	5 911,886	139,000.00 m3	5 690,83	
Excavate acceptable material Class 5A and move to stockpile	144,772.00 m3	5 719	575 N/S Excavation	244,500.00 m3	5 1,215,165	183,571.00 m3	5 912,34	What is excavate for embankment 3 -302,817 void?
Excavate acceptable material Class 5A and move to stockpile - EWL	38.706.00 m3		N/S Fill from cut	52,965.00	0 0	30.000.00		0 cost included in excavation rate
	30,700.00 1113		N/S fill from stockpile	117,769.00	5 585,312	60,569.00	5 301,02	8 -284,284
Excavate acceptable material (** May need			N/S Imported Fill	250,826.00	33 8,357,522	250,826.00	33 8,357,52	2 0
modification**)	234,517.00 m3		0	421,560.00 m3		341,395.00 m3		
Excavate acceptable material - to stockpile	154,652.00 m3	5 768		52,965.00	8 448,084	52,965.00	<u>8</u> 448,08 5 279,44	
Excavate acceptable material - to stockpile - EWL	m3		Resoiling	56,797.00	5 279,441	56,797.00	5 279,44	1 0
Excavate acceptable material - to fill locations	52,965.00 m3	5 263	257 Completion of formation	165,775.37	1 215,508	183,571.00 m2	1 238,64	2 23,134
Excavate acceptable material - to fill locations - EWL	26,900.00 m3		Surlpus topsoil re-location	121,409.00	5 597,332			
Imported acceptable material Class 6F2 in fill to structura embankment	l 250,826.00 m3	33 8,357	028					
Excavate acceptable material - from stockpile for embankment 'Void'	117,769.00 m3	,		26,900.00	5 133.693	20760 m2	5 147,95	2 14,259
Excavate acceptable material - from stockpile for			0 E/W Excavation		5 133,693	29769 m3	5 147,95	
embankment 'Void' - from acceptable	117,769.00 m3	5 585	312 E/W Fill from cut E/W fill from stockpile	12,863.00 10,000.00	0 0 5 49,700	14483 10000	0 5 49,70	0 0 cost included in excavation rate
Excavate acceptable material - from stockpile for embankment 'Void' - from topsoil Class 5A	- m3	5	0 E/W Imported Fill	0	0 0	0		0
Excavate acceptable material - Surplus placed on site	36,883.00 m3	5 183	200	22,863.00		24483 m3		
i	30,003.00 1113	5 183				<u> </u>		
Resoiling 150 thick Resoiling 300 - 450 thick			0 Lime stabilisation 0 Resoiling	26,900.00 5,272.00	<u>8 227,574</u> 5 26,202	26,900.00 5,272.00	8 227,57 5 26,20	
				0,272.00	0 20,202	0,2,2.00		
Resoiling 300 - 450 thick	56,797.00 m3	5 279	441 Completion of formation	32,000.00	1 39,040	104525	1 127,52	quant seems light - 2d area is 1 88,481 104525 m2
Resoiling balance of soils - storage areas			Surlpus topsoil re-location	0	0			
Surplus of topsoil - placed on site Geotextiles to topsoil areas	121,409.00 m3 28,398.50 m2	<u> </u>	<u>332</u> 323					
De-stumping	20,390.50 m 2.00 nr		780 Attenuation Ponds					
Completion of formation in acceptable material	165,775.37 m2	1 215	442 Strip Topsoil	18,044.00	5 89,679	10750	5 53,42	rate seems high, but dstance of -36,251 stockpiles will be a factor
Lime stabilisation	52,965.00 m3	8 447	999 Excavation	74,378.00	5 369,659	57000	5 283,29	0 -86,369
Starter layer 6B	110	0 447	resoiling	18,044.00	5 89,679	10750	5 53,42	
6B starter layer	- m3	33	0 completion of formation	38,500.00	1 50,050	20513	1 26,66	
	-							
				L		L		

#### Temporary storage fields

Excavate acceptable material Class 5A outside the earthworks outline - stripping of temporary top soil storage fields

lieids	04,300.75	1110	5	522,747
Resoiling 300 - 450 thick	64,933.75	m3	5	322,747
				0
Attenuation ponds				0
Excavate acceptable material Class 5A	18,044.00	m3	5	89,686
Excavate acceptable Class 2C material in cutting and				
other excavation	37,189.00	m3	5	184,844
Excavate acceptable Class 2C material in cutting and				
other excavation - cut and haul to temporary stock pile/				
permanent home	37,189.00	m3	5	184,844
Resoiling 300 - 450 thick - haul from temporary stock pile				
to final placement	18,044.00	m3	5	89,686
Completion of formation in acceptable material for base				
and embankment of ponds	38,500.00	m2	1	50,035
East to West link				
SERIES 600 EARTHWORKS				
Imported acceptable material Class 6F2 in fill to structures		m3	33	0
Excavate acceptable material Class 5A outside the				
earthworks outline	38,706.00	m3	5	192,384
Excavate acceptable material - cut to stockpile	10,000.00	m3	5	49,704
Excavate acceptable material - to fill locations	12,863.00	m3	5	63,934
Excavate acceptable material - extra required from				
mainline to balance	4,037.00	m3	5	20,066
Excavate acceptable material from stockpile to final				
placement	10,000.00	m2	5	49,704
Resoiling 150 thick		m3		0
Resoiling 200 thick	5,272.00	m3	5	26,204
Resoiling 300 - 450 thick		m3		0
Resoiling balance of soils		m3		0
De-stumping		nr		0
Completion of formation in acceptable material	32,000.00	m2	1	39,034
Lime stabilisation	26,900.00	m3	8	227,531
attenuation ponds				
Excavate acceptable Class 2C material in cutting and				
other excavation	24,195.00	m3	5	120,259
	,		<u> </u>	,
Completion of formation in acceptable material for base				
Completion of formation in acceptable material for base and embankment of ponds		m2		

64,933.75 m3

5

Temporary storage fields Excavate acceptable material Class 5A outside the earthworks outline -stripping of temporary top soil 322,747 storage fields 322,747 Resoiling 300 - 450 thick

64,933.75 64,933.75	m3	5 5	322,747 322,747		64,933.75 64,933.75	m3	2	
64,933.75	m3	5	322,747		64,933.75	m3	2	
				_				
				-				
				_				
				-				
				_				
								_
				-				
				-				
				_				
				-				
				-				

To Collection 14,498,888

Ridge Total 13,248,592

									_	
129,868	-192,8 -192,8	79 70	rate	too	nigh	tor	scra	pe a	s re	place
 129,868	-192,8	19	rate	ι00	nigh	ıor	scra	ue i	x re	place

-1,250,296

#### PRESTON WEST DISTRIBUTOR ROAD Road Markings

COST	<u> AIN</u>								<u>RIDGE</u>	
<u>Description</u>	<u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>	RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	Difference	<u>COMMENT</u>
Roadmarkings										
Retroreflective thermoplastic road markings generally throughout		1 Item	156,78	37 156,787						Please provide breakdown as dependant on quantities in other areas
Road Studs										
Retroreflective uni-directional road studs generally		1 item	29,16	32 29,162						Please provide breakdown as dependant on quantities in other areas
High friction surfacing						-				
Epoxy resin based yellow coloured anti skid surface treatment		1 item	213,46	6 213,466						Please provide breakdown as dependant on quantities in other areas
Cycle Way - Red Thermoplastic coloured surfacing such as 'Textureflex' provided in all cycle areas		1 item	21,93	35 21,935						Please provide a rate and quantity build up
			To Collection	on 421,349						

#### PRESTON WEST DISTRIBUTOR ROAD Motorway Comms

	<u>OSTAIN</u>									<u>RIDGE</u>	
Description	<u>Qty</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>		RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	Difference	COMMENT
Preston Western Distibutor											
Notorway Communication located by the M55 Southbound an slip	1	ltem		0	0						
Comms further to four way outline design report and llowances	1	Item	2,400,00	00	2,400,000						Backup to this item appear sufficient and allowance ha been made for contingency 92k which is sufficient to all for scope change
antries introduced					924,110						We require a more detailed breakdown of this to proper evaluate
			To Collectio		3 324 110						

To Collection 3,324,110

Accomodation

	COST	AIN			
Description	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>	
Preston Western Distibutor					
Accommodation works generally	0	Item	83,904	0	
Accommodation works general - 1.5% of contract value		0 item	1	1,751,669	0
This was changed to allow for the works within summary page that LCC see as accomodation works hence LCC originalestimate of 1.5% or 1.7m		1 item		483,904	483,904
			To (	Collection	483,904

## PRESTON WEST DISTRIBUTOR ROAD Landscape and Ecology

	COSTAIN									<u>RIDGE</u>	
Description	<u>Qty</u>	<u>Unit</u>	Unit Cost	Amount	E	RAG	QTY	BATE	TOTAL	<b>Difference</b>	COMMENT
Preston Western Distibutor											
Landscaping works including maintenance	1	ltem	1,729,575	9 1,729,	579						Translocated hedgerow too high, not referenced which plants in Costain costs are for TH so cant make appropriate adjustment. Please specify
Ashlea quotation based upon LCC scope	1	item	670,421	670,	421						Please provide a copy of the aforementioned quote
Amp Barrier	2779	lm	31	86	510						
Amp/Newt Fencing	5000	lm	11	54.	600						Did not identify newt barrier only amphibian, please identify reference too this.
Mowing of exisiting land for Land Take (3 times per year) 45708 m2 x 3 year construction build	411372	m2	(	) 31.	676						
Mowing of exisiting land for Land Take (3 times per year) 5mx2x4.5kmx 3 year construction build				) 32,							
Bat House	1	1	100,000	) 100,	000						Reasonable allowance but where has this specification come from?
			To Collection	n2,705;	186		3	07 130		39,910 <b>39,910</b>	Bird/ Bat box allonce as identified from LCC drawings, estimated 1nr box per 10 mature trees planted
					-				2,7	45,096	

Description         Qtv         Unit         Unit         Amount           Preston Western Distibutor	COS	TAIN			
Road works method related & Water Management           MAAS         m         181         0           Seperator with hoarding - Red & White         3216         m         108         347,553           Heras         6730         m         7         48,052           Other materials         1         item 40,850         40,850         40,850           Temporary Access M55 North         Haul Road 600m         Excavate acceptable material Class 5A outside the earthworks outline         1215         m3         5         6,039           Excavate acceptable material Class 5A outside the earthworks outline         1215         m3         3         11,197           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1215         m3         30         36,669           Heavy duty macadam with AC 32 aggregate base 150mm         m2         0         m4m surface ourse PSV 60 surface course           70mm thick in carriageway, hardshoulder and hardstrip         m2         0         m2         0           Heavy duty macadam with AC 20 aggregate binder course         2700         m2         0         1.350           Yohne urface course PSV 60 surface course SOFT file         2700         m2         0         1.350           Uharm surface course PSV 60 surface course SOFT fole         2.00 </td <td>Description</td> <td><u>Qty</u></td> <td><u>Unit</u></td> <td><u>Unit Cost</u></td> <td><u>Amount</u></td>	Description	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>
Road works method related & Water Management           MAAS         m         181         0           Seperator with hoarding - Red & White         3216         m         108         347,553           Heras         6730         m         7         48,052           Other materials         1         item 40,850         40,850         40,850           Temporary Access M55 North         Haul Road 600m         Excavate acceptable material Class 5A outside the earthworks outline         1215         m3         5         6,039           Excavate acceptable material Class 5A outside the earthworks outline         1215         m3         3         11,197           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1215         m3         30         36,669           Heavy duty macadam with AC 32 aggregate base 150mm         m2         0         m4m surface ourse PSV 60 surface course           70mm thick in carriageway, hardshoulder and hardstrip         m2         0         m2         0           Heavy duty macadam with AC 20 aggregate binder course         2700         m2         0         1.350           Yohne urface course PSV 60 surface course SOFT file         2700         m2         0         1.350           Uharm surface course PSV 60 surface course SOFT fole         2.00 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Road works method related & Water Management           MAAS         m         181         0           Seperator with hoarding - Red & White         3216         m         108         347,553           Heras         6730         m         7         48,052           Other materials         1         item 40,850         40,850         40,850           Temporary Access M55 North         Haul Road 600m         Excavate acceptable material Class 5A outside the earthworks outline         1215         m3         5         6,039           Excavate acceptable material Class 5A outside the earthworks outline         1215         m3         3         11,197           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1215         m3         30         36,669           Heavy duty macadam with AC 32 aggregate base 150mm         m2         0         m4m surface ourse PSV 60 surface course           70mm thick in carriageway, hardshoulder and hardstrip         m2         0         m2         0           Heavy duty macadam with AC 20 aggregate binder course         2700         m2         0         1.350           Yohne urface course PSV 60 surface course SOFT file         2700         m2         0         1.350           Uharm surface course PSV 60 surface course SOFT fole         2.00 </td <td></td> <td></td> <td></td> <td></td> <td>,</td>					,
MAAS         m         181         0           Seperator with hoarding - Red & White         3216         m         108         347,553           Heras         6730         m         7         48,052           Other materials         1         item         40,850         40,850           Temporary Access M55 North         Haul Road 600Im         1         1         40,850           Excavate acceptable material Class 5A outside the earthworks outline         1215         m3         5         6,039           Excavate acceptable material Class 5A outside the earthworks outline         1080         m3         5         5,388           Imported acceptable material Class 6F2 in fill         351         m3         32         11,197           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1215         m3         30         36,669           Heavy duty macadam with AC 22 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip         m2         0         14mm surface course FSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         m2         0         14mm surface course FSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         m2         0         14mm surface course FSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         m2         0	Preston Western Distibutor				
Seperator with hoarding - Red & White         3216         m         108         347,553           Heras         6730         m         7         48,052           Other materials         1         item         40,850         40,850           Temporary Access M55 North	Road works method related & Water Management				
Heras         6730         m         7         48,052           Other materials         1         item         40,850         40,850           Temporary Access M55 North         Haul Road Gold         Heras         Heras           Excoavate acceptable material Class 5A outside the earthworks outline         1215         m3         5         6,039           Excoavate acceptable material Class 5P in fill         080         m3         5         5,368           Imported acceptable material Class 6P in fill         311         m3         32         11,197           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway, bardshoulder and hardstrip         m2         32         0           Heavy duty macadam with AC 20 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip         m2         0         m4           Tomm thick in carriageway, hardshoulder and hardstrip         m2         0         0         m2         0           Take coat         2700         m2         0         m2         0         1         1,500           Renoval of temorary road         1         titem         0         1         1,500         1,500           Renoval of temorary road         1         nr         1,0000         1,0000         1         0	MAAS		m	181	0
Other materials         1         item         40,850         40,850           Temporary Access M55 North         Haul Road 600Im         Excavate acceptable material Class 5A outside the earthworks outline         1215         m3         5         6,039           Excavate acceptable material Class 5A outside the earthworks outline         1215         m3         5         5,368           Imported acceptable material Class 6F2 in fill         351         m3         32         11,197           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1215         m3         30         36,669           Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip         m2         0         m2         0           Heavy duty macadam with AC 20 aggregate binder course form thick in carriageway, hardshoulder and hardstrip         2700         m2         0         0           Tark coat         2700         m2         1         1,350         1,500         1,500           Removal of temorary road         1         1         Visit         1,500         1,500         1,500           Removal of temorary road         1         nr         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10	Seperator with hoarding - Red & White	3216	m	108	347,553
Temporary Access M55 North         Haul Road 600Im       Excavate acceptable material Class 5A outside the earthworks outline       1215       m3       5       6,039         Excavate acceptable Class 2C material in cutting and other excavation       1080       m3       5       5,368         Imported acceptable material Class 6F2 in fill       351       m3       32       11,197         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       1215       m3       30       36,669         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course form thick in carriageway, hardshoulder and hardstrip       2700       m2       0         1 drams surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       2700       m2       1       1,350         White linning 1 visit       1       Visit       1,500       1,500       1         Removal of temorary road       1       1       1       1       0         Protection slab electricity and gas       1       nr       10,000       10,000         wheel wash       1       nr       24,960       24,960       24,960         Elel mouth       Excavate accep	Heras	6730	m	7	48,052
Hau Road 600Im         Excavate acceptable material Class 5A outside the earthworks outline       1215       m3       5       6,039         Excavate acceptable Class 2C material in cutting and other excavation       1080       m3       5       5,368         Imported acceptable material Class 6F2 in fill       351       m3       32       11,197         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       1215       m3       30       36,669         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       2       0         Tack coat       2700       m2       0       0         Tack coat       1       visit       1,500       1,500         Removal of temorary road       1       Item       0       0         Protection slab electricity and gas       1       nr       10,000       10,000         whee wash       1       nr       24,960       24,960       24,960         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable material Class 6F2 in fill to struct	Other materials	1	item	40,850	40,850
Hau Road 600Im         Excavate acceptable material Class 5A outside the earthworks outline       1215       m3       5       6,039         Excavate acceptable Class 2C material in cutting and other excavation       1080       m3       5       5,368         Imported acceptable material Class 6F2 in fill       351       m3       32       11,197         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       1215       m3       30       36,669         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       2       0         Tack coat       2700       m2       0       0         Tack coat       1       visit       1,500       1,500         Removal of temorary road       1       Item       0       0         Protection slab electricity and gas       1       nr       10,000       10,000         whee wash       1       nr       24,960       24,960       24,960         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable material Class 6F2 in fill to struct	T As a set MET Marth				
Excavate acceptable material Class 5A outside the earthworks outline       1215       m3       5       6,039         Excavate acceptable Class 2C material in cutting and other excavation       1080       m3       5       5,688         Imported acceptable material Class 6F2 in fill       351       m3       32       11,197         Sub Base Type 1 (CL803): Thickness 450mm; In carriageway       1215       m3       30       36,669         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       0       0         Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip       2700       m2       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       2700       m2       1       1,350         1500       1500       m2       1       1,350       1,500         Removal of temorary road       1       Item       0       0       1,500         Removal of temorary road       1       nr       1,00,00       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,000       10,					
earthworks outline         1215         m3         5         6,039           Excavate acceptable Class 2C material in cutting and other excavation         1080         m3         5         5,368           Imported acceptable material Class 6F2 in fill         351         m3         32         11,197           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1215         m3         30         36,669           Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip         m2         32         0           Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip         2700         m2         0           14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         2700         m2         1         1,550           White linning 1 visit         1         Visit         1,500         1,500         1,500           Removal of temorary road         1         litem         0         0         0         1         1         1,850           Excavate acceptable material Class 5A outside the earthworks outline         393.75         m3         5         1,957           Excavate acceptable Class 2C material in cutting and other excavation         350         m3         5         1,7					
Excavate acceptable Class 2C material in cutting and other excavation       1080       m3       5       5,368         Imported acceptable material Class 6F2 in fill       351       m3       32       11,197         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       1215       m3       30       36,669         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip       2700       m2       0         Tack coat       1       Visit       1,500       1,350         White linning 1 visit       1       Visit       1,500       1,000         Protection slab electricity and gas       1       nr       10,000       10,000         wheel wash       1       nr       24,960       24,960       24,960         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable material Class 6F2 in fill to structures       113.75       m3       27       3,023         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       393.75       m3       2       9,915         Heavy duty macadam with AC 32 aggregate base	•	1015	m?	5	6 020
other excavation         1080         m3         5         5,368           Imported acceptable material Class 6F2 in fill         351         m3         32         11,197           Sub Base Type 1 (CL803); Thickness 450mm; In		1215	1115	5	0,039
Imported acceptable material Class 6F2 in fill         351         m3         32         11,197           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1215         m3         30         36,669           Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip         m2         32         0           Heavy duty macadam with AC 20 aggregate binder course         700m         m2         0         0           14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         2700         m2         0         0           Minte linning 1 visit         1         Visit         1,500         1,500           Removal of temorary road         1         nr         10,000         10,000           wheel wash         1         nr         10,000         10,000           wheel wash         1         nr         10,000         10,000           wheel wash         1         nr         24,960         24,960           Excavate acceptable material Class 5A outside the earthworks outline         393.75         m3         5         1,957           Excavate acceptable material Class 6F2 in fill to structures         113.75         m3         27         3,023           Sub Base Type 1 (CL803); Thi		1080	m3	5	5 368
Sub Base Type 1 (CL803); Thickness 450mm; In       1215       m3       30       36,669         Heavy duty macadam with AC 32 aggregate base 150mm       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course       2700       m2       0         14mm surface course PSV 60 surface course 50mm thick       m2       0       1         in carriageway, hardshoulder and hardstrip       2700       m2       0         Tack coat       1       Visit       1,550         White linning 1 visit       1       Visit       1,500       1,500         Menoval of temorary road       1       Item       0       10,000       10,000         wheel wash       1       nr       24,960       24,960       24,960         Excavate acceptable material Class 5A outside the       393.75       m3       5       1,740         Imported acceptable material Class 6F2 in fill to structures       113.75       m3       27       3,023         Sub Base Type 1 (CL803); Thickness 450mm; In       1393.75       m3       25       9,915         Heavy duty macadam with AC 32 aggregate base 150mm       1900       m2       32       61,731					
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Heavy duty macadam with AC 20 aggregate binder course       m2       0         14mm surface course PSV 60 surface course 50mm thick       m2       0         in carriageway, hardshoulder and hardstrip       2700       m2       0         Tack coat       2700       m2       1       1,350         White linning 1 visit       1       Visit       1,500       1,500         Removal of temorary road       1       ttem       0       0         protection slab electricity and gas       1       nr       10,000       10,000         whele wash       1       nr       24,960       24,960         Ell mouth       2       1       1,577       27       3,023         Ekel mouth       393.75       m3       5       1,957         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,740         Imported acceptable material Class 6F2 in fill to structures       113.75       m3       27       3,023         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       393.75       m3       25       9,915         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       1900       m2       32       61,731			m2	32	0
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Bell mouth         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and other excavation       350       m3       5       1,740         Imported acceptable material Class 6F2 in fill to structures       113.75       m3       27       3,023         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       393.75       m3       25       9,915         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       1900       m2       32       61,731         Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip       875       m2       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       875       m2       0         Tack coat       875       m2       1       438	protection slab electricity and gas	1	nr	10,000	10,000
Excavate acceptable material Class 5A outside the earthworks outline393.75m351,957Excavate acceptable Class 2C material in cutting and other excavation350m351,740Imported acceptable material Class 6F2 in fill to structures113.75m3273,023Sub Base Type 1 (CL803); Thickness 450mm; In carriageway393.75m3259,915Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip1900m23261,731Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip875m2014mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip875m20Tack coat875m21438		1	nr	24,960	24,960
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other excavation350m351,740Imported acceptable material Class 6F2 in fill to structures113.75m3273,023Sub Base Type 1 (CL803); Thickness 450mm; In carriageway393.75m3259,915Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip1900m23261,731Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip875m2014mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip875m20Tack coat875m21438			_	-	,
Sub Base Type 1 (CL803); Thickness 450mm; In carriageway393.75 m3259,915Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip1900 m23261,731Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip875 m2014mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip875 m20Tack coat875 m21438		350	m3	5	1,740
Sub Base Type 1 (CL803); Thickness 450mm; In carriageway393.75 m3259,915Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip1900 m23261,731Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip875 m2014mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip875 m20Tack coat875 m21438					
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Heavy duty macadam with AC 20 aggregate binder course70mm thick in carriageway, hardshoulder and hardstrip875m2014mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip875m20Tack coat875m21438		1900	m2	32	61,731
70mm thick in carriageway, hardshoulder and hardstrip875m2014mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip875m20Tack coat875m21438				02	01,701
70mm thick in carriageway, hardshoulder and hardstrip875m2014mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip875m20Tack coat875m21438	Heavy duty macadam with AC 20 aggregate binder course				
14mm surface course PSV 60 surface course 50mm thick14mm surface course PSV 60 surface course 50mm thick100in carriageway, hardshoulder and hardstrip875m20Tack coat875m21438			m2		0
in carriageway, hardshoulder and hardstrip875m20Tack coat875m21438					
Tack coat         875         m2         1         438		875	m2		0
White linning 1 visit   1   Visit   0		875		1	438
	White linning 1 visit	1	Visit		0

Description         Qiv         Unit         Unit         Amount           Removal of temorary road         1         Item         0           Temporary Access M55 South	COS	<u>TAIN</u>			
Temporary Access M55 South         Haul road 700Im         Excavate acceptable material Class 5A outside the aarthworks outline       1417.5       m3       5       7,045         Excavate acceptable Class 2C material in cutting and other excavation       1260       m3       5       6,262         Imported acceptable material Class 6F2 in fill to structures       409.5       m3       27       10,885         Sub Base Type 1 (CL803): Thickness 450mm; In carriageway, hardshoulder and hardstrip       1900       m2       32       61,731         Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip       1900       m2       32       61,731         Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip       3150       m2       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, lardshoulder and hardstrip       3150       m2       1       1,575         Tack coat       1       1       Visit       1,500       1,500         Protection slab 1 culvert and 1 stream       1       nr       24,960       24,960         Sub Base Type 1 (CL803): Thickness 450mm; In carriageway       393.75       m3       5       1,957         Excavate acceptable material Class 5A outside the earthworks outline <th><u>Description</u></th> <th><u>Qty</u></th> <th><u>Unit</u></th> <th><u>Unit Cost</u></th> <th><u>Amount</u></th>	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>
Haul road 700Im	Removal of temorary road	1	Item		0
Excavate acceptable material Class 5A outside the garthworks outline         1417.5         m3         5         7,045           Excavate acceptable Class 2C material in cutting and other excavation         1260         m3         5         6,262           Imported acceptable material Class 6F2 in fill to structures         409.5         m3         27         10,885           Sub Base Type 1 (CLB03); Thickness 450mm; In carriageway         1417.5         m3         25         35,693           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         1900         m2         32         61,731           Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip         3150         m2         0           Tack coat         3150         m2         0         1.575           White limining 1 visit         1         Visit         1.500         1.500           Femoval of temorary road         1         nr         24,960         24,960           earthworks outline         393.75         m3         5         1.957           Excavate acceptable material Class 5A outside the earthworks outline         393.75         m3         5         1.957           Excavate acceptable Class 2C material in cutting and other excavation         157.5<					
earthworks outline         1417.5         m3         5         7,045           Excavate acceptable Class 2C material in cutting and other excavation         1260         m3         5         6,262           Imported acceptable material Class 6F2 in fill to structures         409.5         m3         27         10,885           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway, and shoulder and hardstrip         1417.5         m3         25         35,693           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         1400         m2         32         61,731           Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip         3150         m2         0         1           1417.5         m3         1         1,575         m3         1         1,575           White linning 1 visit         1         1         Visit         1,500         1,600         1           Excavate acceptable material Class 5A outside the earthworks outline         393.75         m3         5         1,957           Excavate acceptable material Class 6F2 in fill to structures         51.19         m3         27         1,361           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         177.19         m3         27					
Excavate acceptable Class 2C material in cutting and other excavation         1260         m3         5         6,262           Imported acceptable material Class 6F2 in fill to structures         409,5         m3         27         10,885           Sub Bass Type 1 (CLB03); Thickness 450mm; In carriageway         1417.5         m3         25         35,693           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         1900         m2         32         61,731           Heavy duty macadam with AC 20 aggregate binder course         70m         0         m2         0         0           70mm thick in carriageway, hardshoulder and hardstrip         3150         m2         0         0           71 Arm surface course FSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         3150         m2         1         1,575           Whele linning 1 visit         1         Visit         1,500         1,600         16,000         10,000         10,000           Prenoval of temorary road         1         nr         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000         10,000 <td></td> <td></td> <td>•</td> <td>_</td> <td>7.045</td>			•	_	7.045
other excavation         1260         m3         5         6,262           Imported acceptable material Class 6F2 in fill to structures         409.5         m3         27         10,885           Sub Base Type 1 (CL603); Thickness 450mm; In         arriageway         1417.5         m3         25         35,693           Heavy duty macadam with AC 32 aggregate base 130mm         m2         32         61,731           Heavy duty macadam with AC 20 aggregate binder course         m2         32         61,731           Heavy duty macadam with AC 20 aggregate binder course         m2         0         1           Tack coat         3150         m2         0         0           Tack coat         3150         m2         1         1,550           Removal of temorary toad         1         1         Visit         1,000         10,000           White linning 1 visit         1         nr         10,000         10,000         10,000           wheel was         1         nr         24,960         24,960         24,960           Excavate acceptable material Class 5A outside the earthworks outline         393.75         m3         5         1,957           Excavate acceptable Class 2C material in cutting and other earavate acceptable Class 2C in fill to structures<		1417.5	m3	5	7,045
Imported acceptable material Class 6F2 in fill to structures         409.5         m3         27         10,885           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1417.5         m3         25         35,693           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         1900         m2         32         61,731           Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip         3150         m2         0           14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         3150         m2         1         1,575           White linning 1 visit         1         Visit         1,500         1,500         1,600           Removal of temorary road         1         1         1         1,575         0         1,957           Excavate acceptable material Class 5A outside the earthworks outline         393.75         m3         5         1,957           Excavate acceptable material Class 6F2 in fill to structures         51.19         m3         27         1,361           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway, hardshoulder and hardstrip         177.19         m3         25         4,462           Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway,		1000		-	C 000
Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1417.5         m3         25         35,693           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         1900         m2         32         61,731           Heavy duty macadam with AC 20 aggregate binder course form thick in carriageway, hardshoulder and hardstrip         1900         m2         0         0           Tark coat         and shoulder and hardstrip         3150         m2         0         0           Tack coat         3150         m2         0         0         1,575         0           Meavy hardshoulder and hardstrip         3150         m2         1         1,575           White linning 1 visit         1         Visit         1,500         16,000         10,000           Peroval of temorary road         1         nr         10,000         10,000         10,000           whee was         1         nr         24,960         24,960         24,960           Excavate acceptable material Class 5A outside the earthworks outline         393,75         m3         5         1,957           Excavate acceptable Class 2C material in cutting and other excavation         157.5         m3         5         783           Imported acceptable materi	other excavation	1260	m3	5	6,262
carriageway         1417.5         m3         25         35,693           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         1900         m2         32         61,731           Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip         3150         m2         0           14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         3150         m2         1         1,575           White linning 1 visit         1         Visit         1,500         1,500           Removal of temorary road         1         Item         0         0           protection slab 1 culvert and 1 stream         1         nr         10,000         10,000           wheel was         1         nr         10,000         10,000           wheel was         1         nr         10,000         10,000           wheel was         1         nr         124,960         24,960           Excavate acceptable Class 5A outside the earthworks outline         393.75         m3         5         1,957           Excavate acceptable material Class 6F2 in fill to structures         51.19         m3         27         1,361           Sub Base Type 1 (CL803); Thickn		409.5	m3	27	10,885
Heavy duty macadam with AC 32 aggregate base 130mm       1900       m2       32       61,731         Heavy duty macadam with AC 20 aggregate binder course       7       7       7       7       7       7       7       7         Ideavy duty macadam with AC 20 aggregate binder course       7					
thick in carriageway, hardshoulder and hardstrip       1900       m2       32       61,731         Heavy duty macadam with AC 20 aggregate binder course       70mm thick in carriageway, hardshoulder and hardstrip       3150       m2       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       3150       m2       0         Tack coat       3150       m2       0       1       1,575         White linning 1 visit       1       Visit       1,500       1,500       1,500         Removal of temorary road       1       Item       0       0       0       0         wheel was       1       nr       24,960       24,960       24,960       24,960         Elel Mouth         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable material Class 6F2 in fill to structures       51.19       m3       27       1,361         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       875       m2       0       4,462         Heavy duty macadam with AC 32 aggregate	carriageway	1417.5	m3	25	35,693
70mm thick in carriageway, hardshoulder and hardstrip       3150       m2       0         14mm surface course FSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       3150       m2       0         Tack coat       3150       m2       1       1,575         White linning 1 visit       1       Visit       1,500       1,500         Removal of temorary road       1       Item       0       0         protection slab 1 culvert and 1 stream       1       nr       10,000       10,000         wheel was       1       nr       24,960       24,960         Eli Mouth       Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and other excavation       157.5       m3       27       1,361         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       875       m2       0       0         Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip       875       m2       0       0         Heavy duty macadam with AC 20 aggregate binder c		1900	m2	32	61,731
70mm thick in carriageway, hardshoulder and hardstrip       3150       m2       0         14mm surface course FSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       3150       m2       0         Tack coat       3150       m2       1       1,575         White linning 1 visit       1       Visit       1,500       1,500         Removal of temorary road       1       Item       0       0         protection slab 1 culvert and 1 stream       1       nr       10,000       10,000         wheel was       1       nr       24,960       24,960         Eli Mouth       Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and other excavation       157.5       m3       27       1,361         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       875       m2       0       0         Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip       875       m2       0       0         Heavy duty macadam with AC 20 aggregate binder c	Heavy duty macadam with AC 20 aggregate binder course				
14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       3150       m2       0         Tack coat       3150       m2       1       1,575         White linning 1 visit       1       Visit       1,500       1,500         Removal of temorary road       1       Item       0       0         protection slab 1 culvert and 1 stream       1       nr       10,000       10,000         wheel was       1       nr       24,960       24,960         Bell Mouth         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and other excavation       157.5       m3       5       783         Imported acceptable material Class 6F2 in fill to structures       51.19       m3       27       1,361         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       177.19       m3       25       4,462         Heavy duty macadam with AC 20 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       10       8,601         1 cark coat       875       m2       0       1       438         White linning 1 visit       1       Visit       1,500 </td <td></td> <td></td> <td>m2</td> <td></td> <td>0</td>			m2		0
Tack coat3150m211,575White linning 1 visit1Visit1,5001,500Removal of temorary road1Item0protection slab 1 culvert and 1 stream1nr10,000wheel was1nr24,96024,960Bell MouthExcavate acceptable material Class 5A outside the earthworks outlineBell MouthExcavate acceptable Class 2C material in cutting and other excavation157.5m351,957Excavate acceptable Class 2C material in cutting and other excavation157.5m35Tage acceptable material Class 6F2 in fill to structures51.19m3271,361Sub Base Type 1 (CL803); Thickness 450mm; In carriagewaycarriageway177.19m3254,462Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstripm2320Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip875m2108,601Tack coat875m21438White linning 1 visit1Visit1,5001,500Room thick in carriageway, hardshoulder and hardstrip0Tack coat875m2108,601 <t< td=""><td></td><td></td><td></td><td></td><td><u>_</u>_</td></t<>					<u>_</u> _
White linning 1 visit       1       Visit       1,500       1,500         Removal of temorary road       1       Item       0         protection slab 1 culvert and 1 stream       1       nr       10,000       10,000         wheel was       1       nr       24,960       24,960         Bell Mouth         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and other excavation       157.5       m3       5       783         Imported acceptable material Class 6F2 in fill to structures       51.19       m3       27       1,361         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       177.19       m3       25       4,462         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course       70m thick in carriageway, hardshoulder and hardstrip       875       m2       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       875       m2       1       438         White linning 1 visit       1       Visit       1,500       1,500       1,500	in carriageway, hardshoulder and hardstrip	3150	m2		0
Removal of temorary road1Item0protection slab 1 culvert and 1 stream1nr10,00010,000wheel was1nr24,96024,960Bell MouthExcavate acceptable material Class 5A outside the earthworks outline393.75m351,957Excavate acceptable Class 2C material in cutting and other excavation157.5m35783Imported acceptable material Class 6F2 in fill to structures51.19m3271,361Sub Base Type 1 (CL803); Thickness 450mm; In carriageway177.19m3254,462Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstripm2320Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip875m2014mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip875m21438White linning 1 visit1Visit1,5001,5001,500Removal of temorary road110000Excavate acceptable interial Class 5A outside the earthworks outline393.75m351,957Contemorary Access to site office0OTotack coat0Contemorary Access to site office0Contemorary Access to site office<	Tack coat	3150	m2	1	1,575
protection slab 1 culvert and 1 stream1nr10,00010,000wheel was1nr24,96024,960Bell MouthExcavate acceptable material Class 5A outside the earthworks outline393.75m351,957Excavate acceptable Class 2C material in cutting and other excavation157.5m35783Imported acceptable material Class 6F2 in fill to structures51.19m3271,361Sub Base Type 1 (CL803); Thickness 450mm; In carriageway177.19m3254,462Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstripm2320Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip875m2014mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip875m21438White linning 1 visit1Visit1,5001,5001,500Removal of temorary road1Item000Excavate acceptable material Class 5A outside the earthworks outline393.75m351,957Excavate acceptable line material class 5A outside the earthworks outline000Temporary Access to site office000Excavate acceptable material Class 5A outside the earthworks outline393.75m351,957Excavate acceptable material Class 5A outside the earthworks outline393.75m35<		1	Visit	1,500	1,500
wheel was       1       nr       24,960       24,960         Bell Mouth         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and other excavation       157.5       m3       5       783         Imported acceptable material Class 6F2 in fill to structures       51.19       m3       27       1,361         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       177.19       m3       25       4,462         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip       875       m2       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       875       m2       1       438         White linning 1 visit       1       Visit       1,500       1,500       1,500         Removal of temorary road       1       1       0       0       0         Tack coat       875       m3       5       1,957         0       1       0       0       0       0         Tack	Removal of temorary road	1	Item		0
Bell Mouth         Excavate acceptable material Class 5A outside the         earthworks outline       393.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and       0ther excavation       157.5       m3       5       783         Imported acceptable material Class 6F2 in fill to structures       51.19       m3       27       1,361         Sub Base Type 1 (CL803); Thickness 450mm; In       0       0       0       0         carriageway       177.19       m3       25       4,462         Heavy duty macadam with AC 32 aggregate base 150mm       m2       0       0         Heavy duty macadam with AC 20 aggregate binder course       77       m2       0         70mm thick in carriageway, hardshoulder and hardstrip       875       m2       0         14mm surface course PSV 60 surface course 50mm thick       1       1       8,601         Tack coat       875       m2       1       438         White linning 1 visit       1       Visit       1,500       1,500         Removal of temorary road       1       1       0       0         Temporary Access to site office       0       0       0         Excavate acceptable material Class 5A outside	protection slab 1 culvert and 1 stream	1	nr		
Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and other excavation       157.5       m3       5       783         Imported acceptable material Class 6F2 in fill to structures       51.19       m3       27       1,361         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       177.19       m3       25       4,462         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip       875       m2       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       875       m2       1       438         White linning 1 visit       1       Visit       1,500       1,500         Removal of temorary road       1       Item       0         Temporary Access to site office       0       0       0         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957	wheel was	1	nr	24,960	24,960
Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and other excavation       157.5       m3       5       783         Imported acceptable material Class 6F2 in fill to structures       51.19       m3       27       1,361         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       177.19       m3       25       4,462         Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip       875       m2       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       875       m2       1       438         White linning 1 visit       1       Visit       1,500       1,500         Removal of temorary road       1       Item       0         Temporary Access to site office       0       0       0         Excavate acceptable material Class 5A outside the earthworks outline       393.75       m3       5       1,957					
earthworks outline393.75m351,957Excavate acceptable Class 2C material in cutting and other excavation157.5m35783Imported acceptable material Class 6F2 in fill to structures51.19m3271,361Sub Base Type 1 (CL803); Thickness 450mm; In carriageway177.19m3254,462Heavy duty macadam with AC 32 aggregate base 150mm thick in carriageway, hardshoulder and hardstripm2320Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip875m20Imported course PSV 60 surface course 50mm thick108,6018,601Tack coat875m21438White linning 1 visit1Visit1,5001,500Removal of temorary road1Item00Temporary Access to site office000Excavate acceptable material Class 5A outside the earthworks outline393.75m351,957Excavate acceptable Class 2C material in cutting and393.75m351,957					
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earthworks outline393.75m351,957Excavate acceptable Class 2C material in cutting and	Temporary Access to site office				
Excavate acceptable Class 2C material in cutting and					
		393.75	m3	5	1,957
other excavation         350         m3         5         1,740	· · ·				
	other excavation	350	m3	5	1,740

DescriptionQtvUnitUnitUnitAmountImported acceptable material Class 6F2 in fill to structures113.75m3273,023Sub Base Type 1 (CL803); Thickness 450mm; In carriageway393.75m3259,915Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip2400m23277,976Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip2400m2001/mm surface course FSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip2400m2011/mm surface course FSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip2400m211.200White linning 1 visit1Visit1,5001,5001,5001,5001,500Removal of temorary coast1Item11112Temporary Access from Blackpool Road NorthHaul Road to Raitway crossing Darkinson Lane20m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m3247,590Heavy duty macadam with AC 32 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstripm2110Haur Road to Raitway crossing Darkinson tick in carriageway, hardshoulder and hardstripm2110Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstripm2100	COS	<u>TAIN</u>			
Sub Base Type 1 (CL803); Thickness 450mm; In         393.75         m3         25         9,915           Heavy duty macadam with AC 32 aggregate base 130mm         thick in carriageway, hardshoulder and hardstrip         2400         m2         32         77,976           Heavy duty macadam with AC 20 aggregate binder course         70mm thick in carriageway, hardshoulder and hardstrip         2400         m2         0           14mm surface course PSV 60 surface course 50mm thick         in carriageway, hardshoulder and hardstrip         2400         m2         0           Tack cost         1         1         Visit         1,500         1,500           Removal of temorary road         1         ttem         1         1         1           Temporary Access from Blackpool Road North         1         1         1         1         1           Haul Road to Railway crossing Darkinson Lane         1         1890         m3         5         9,393           Excavate acceptable material Class 5A outside the earthworks outline         1890         m3         25         47,590           Imported acceptable material Class 6F2 in fill to structures         1260         m3         25         47,590           Heavy duty macadam with AC 32 aggregate base 130mm         thick in carriageway, hardshoulder and hardstrip         m2 <th><u>Description</u></th> <th><u>Qty</u></th> <th><u>Unit</u></th> <th><u>Unit Cost</u></th> <th><u>Amount</u></th>	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>
Sub Base Type 1 (CL803); Thickness 450mm; In         393.75         m3         25         9,915           Heavy duty macadam with AC 32 aggregate base 130mm         thick in carriageway, hardshoulder and hardstrip         2400         m2         32         77.976           Heavy duty macadam with AC 20 aggregate binder course         70mm thick in carriageway, hardshoulder and hardstrip         2400         m2         0           14mm surface course PSV 60 surface course 50mm thick         1         1.200         1.1200           White linning 1 visit         1         1         Visit         1.500         1.500           Removal of temorary road         1         1         1         1         1.000         1.500           Removal of temorary road         1         1         1         1         1         1.000         1.500         1.500           Removal of temorary road         1         1         1         1         1         1         1         1.000         1         1.000         1         2.0         3.3         5         9.333         5         9.333         5         9.333         5         9.333         5         9.333         5         9.333         1.000         1         1.000         1.000         1.000         1.	Imported accortable material Class 6E2 in fill to structures	110.75		0	7 0.000
carriageway         393.75         m3         25         9,915           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         2400         m2         32         77,976           Heavy duty macadam with AC 20 aggregate binder course 70mm thick in carriageway, hardshoulder and hardstrip         2400         m2         0         1           I arms surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         2400         m2         0         1         1.200           White linning 1 visit         1         Visit         1,500         1,500         1,500           Temporary Access from Blackpool Road North         Haut 1         1         Visit         1,500         1,500           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, bardshoulder and hardstrip         1680         m3         5         9,393           Excavata coceptable material Class 5F2 in fill to structures         1260         m3         27         3,491           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway, hardshoulder and hardstrip         m2         1         0           Heavy duty macadam with AC 20 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         m2         1         0           Heavy duty macadam with AC 20 aggregate binder course 70mm thick in ca		113.75	113	21	3,023
thick in carriageway, hardshoulder and hardstrip         2400         m2         32         77,976           Heavy duty macadam with AC 20 aggregate binder course         2000         m2         0         0           Jmm surface course FS0 Surface course FS0m thick in carriageway, hardshoulder and hardstrip         2400         m2         0         0           Tack coat         1         Visit         1,500         1,500         1,500           Removal of temorary road         1         Item         1         1,200         1,300           Temporary Access from Blackpool Road North         Haul Road to Rallway crossing Darkinson Lane         Excavate acceptable material Class SA outside the arthworks outline         1890         m3         5         9,333           Excavate acceptable Class 2C material in cutting and other excavation         1680         m3         5         8,350           Imported acceptable Material Class 6F2 in fill to structures         1280         m3         25         47,590           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         m2         10         0           1 ack coat         m2         10         0         1         1         0           1 ack coat         m2         10         0         0         0 </td <td></td> <td>393.75</td> <td>m3</td> <td>25</td> <td>5 9,915</td>		393.75	m3	25	5 9,915
thick in carriageway, hardshoulder and hardstrip         2400         m2         32         77,976           Heavy duty macadam with AC 20 aggregate binder course         2000         m2         0         0           Jmm surface course FS0 Surface course FS0m thick in carriageway, hardshoulder and hardstrip         2400         m2         0         0           Tack coat         1         Visit         1,500         1,500         1,500           Removal of temorary road         1         Item         1         1,200         1,300           Temporary Access from Blackpool Road North         Haul Road to Rallway crossing Darkinson Lane         Excavate acceptable material Class SA outside the arthworks outline         1890         m3         5         9,333           Excavate acceptable Class 2C material in cutting and other excavation         1680         m3         5         8,350           Imported acceptable Material Class 6F2 in fill to structures         1280         m3         25         47,590           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         m2         10         0           1 ack coat         m2         10         0         1         1         0           1 ack coat         m2         10         0         0         0 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
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Tomm thick in carriageway, hardshoulder and hardstrip         2400         m2         0           14mm surface course PSV 60 surface course 50mm thick         m2         0         1,200           in carriageway, hardshoulder and hardstrip         2400         m2         1         1,200           Removal of temorary road         1         Item         1         1,000         1,500           Removal of temorary road         1         Item         1         1,000         1,500           Temporary Access from Blackpool Road North         Haul Road to Railway crossing Darkinson Lane         Excavate acceptable material Class 5A outside the         earthworks outline         9,393           Excavate acceptable material Class 6F2 in fill to structures         1260         m3         27         33,491           Sub Base Type 1 (CL803); Thickness 450mm; In         1890         m3         25         47,590           Heavy duty macadam with AC 23 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         m2         1         0           14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip         m2         10         0           70mm thick in carriageway, hardshoulder and hardstrip         m2         10         0         0           74mm surface course PSV 60 surface course 50mm thick </td <td>Thick in carnageway, hardshoulder and hardstrip</td> <td>2400</td> <td>1112</td> <td>32</td> <td>2 77,976</td>	Thick in carnageway, hardshoulder and hardstrip	2400	1112	32	2 77,976
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in carriageway, hardshoulder and hardstrip         2400         m2         1         1,200           Tack coat         1         Visit         1,500         1,500           Removal of temorary road         1         Item         1         1,500           Temporary Access from Blackpool Road North         Haul Road to Railway crossing Darkinson Lane         Excavate acceptable material Class 5A outside the         9           earthworks outline         1890         m3         5         9,393           Excavate acceptable material Class 6F2 in fill to structures         1260         m3         27         33,491           Sub Base Type 1 (CL803); Thickness 450nm; in         0         addition and acceptable material Class 6F2 in fill to structures         1260         m3         25         47,590           Heavy duty macadam with AC 32 aggregate base 130mm         m2         1         0         14mm surface course FXV 60 surface course 50mm thick         m2         1         0           Hards duty macadam with AC 20 aggregate base 130mm         m2         1         0         0           Heavy duty macadam with AC 20 aggregate base 130mm         m2         1         0         0           Heavy duty macadam with AC 20 aggregate base 130mm         m2         1         0         0         0		2400	m2		0
Tack coat         2400         m2         1         1,200           White linning 1 visit         1         Visit         1,500         1,500           Removal of temorary road         1         Item         1         1           Temporary Access from Blackpool Road North         Haul Road to Railway crossing Darkinson Lane         Excavate acceptable material Class 5A outside the         1         1           earthworks outline         1890         m3         5         9,393         5         8,350           Imported acceptable material Class 6F2 in fill to structures         1260         m3         27         33,491           Sub Base Type 1 (CL803); Thickness 450mm; In         27         33,491         32         47,590           Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip         m2         1         0           Heavy duty macadam with AC 20 aggregate binder course         70mm thick in carriageway, hardshoulder and hardstrip         m2         1         0           Heavy duty macadam with AC 20 aggregate binder course         70m thick in carriageway, hardshoulder and hardstrip         1         0           Tack coat         m2         1         0         0         0         0           RelMouth         Excavate acceptable material C		0.400	•		0
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Removal of temorary road       1       Item         Temporary Access from Blackpool Road North       Haul Road to Railway crossing Darkinson Lane         Excavate acceptable material Class 5A outside the       earthworks outline       1890       m3       5       9,393         Excavate acceptable Class 2C material in cutting and       0       1680       m3       5       8,350         Imported acceptable material Class 6F2 in fill to structures       1260       m3       27       33,491         Sub Base Type 1 (CL803); Thickness 450mm; In       carriageway       1890       m3       25       47,590         Heavy duty macadam with AC 32 aggregate base 130mm       thick in carriageway, hardshoulder and hardstrip       m2       11       0         11 mearriageway, hardshoulder and hardstrip       m2       11       0       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       m2       10       0         16k coat       Wisit       1,500       0       0         Removal of temorary road       1       Item       0       0         Removal of temorary road       1       1       0       0       0         14mm surface course PSV 60 surface course 50mm thick in carriageway, hardshoulder and hardstrip       m2					
Haul Road to Railway crossing Darkinson Lane         Excavate acceptable material Class 5A outside the         earthworks outline       1890       m3       5       9,393         Excavate acceptable Class 2C material in cutting and       0       m3       5       8,350         Imported acceptable material Class 6F2 in fill to structures       1260       m3       27       33,491         Sub Base Type 1 (CL803); Thickness 450mm; In       carriageway       1890       m3       25       47,590         Heavy duty macadam with AC 32 aggregate base 130mm       thick in carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course       70mm thick in carriageway, hardshoulder and hardstrip       m2       11       0         14mm surface course PSV 60 surface course 50mm thick       in carriageway, hardshoulder and hardstrip       m2       10       0         Tack coat       m2       1       0       0       0       0       0         Bell Mouth       Excavate acceptable material Class 5A outside the       393.75       m3       5       1,957         Excavate acceptable material Class 6F2 in fill to structures       113.75       m3       27       3,023         Sub Base Type 1 (CL803); Thickness 450mm; In       carriagewa	- · · · · · · · · · · · · · · · · · · ·			1,000	1,000
Haul Road to Railway crossing Darkinson Lane         Excavate acceptable material Class 5A outside the         earthworks outline       1890       m3       5       9,393         Excavate acceptable Class 2C material in cutting and       0       m3       5       8,350         Imported acceptable material Class 6F2 in fill to structures       1260       m3       27       33,491         Sub Base Type 1 (CL803); Thickness 450mm; In       carriageway       1890       m3       25       47,590         Heavy duty macadam with AC 32 aggregate base 130mm       thick in carriageway, hardshoulder and hardstrip       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course       70mm thick in carriageway, hardshoulder and hardstrip       m2       11       0         14mm surface course PSV 60 surface course 50mm thick       in carriageway, hardshoulder and hardstrip       m2       10       0         Tack coat       m2       1       0       0       0       0       0         Bell Mouth       Excavate acceptable material Class 5A outside the       393.75       m3       5       1,957         Excavate acceptable material Class 6F2 in fill to structures       113.75       m3       27       3,023         Sub Base Type 1 (CL803); Thickness 450mm; In       carriagewa	· · · · · · · · · · · · · · · · · · ·				
Excavate acceptable material Class 5A outside the       1890       m3       5       9,393         Excavate acceptable Class 2C material in cutting and       1680       m3       5       8,350         Imported acceptable material Class 6F2 in fill to structures       1260       m3       27       33,491         Sub Base Type 1 (CL803); Thickness 450mm; In       1890       m3       25       47,590         Heavy duty macadam with AC 32 aggregate base 130mm       m2       32       0         Heavy duty macadam with AC 20 aggregate binder course       70mm thick in carriageway, hardshoulder and hardstrip       m2       11       0         Thrms urface course PSV 60 surface course 50mm thick       m2       10       0         Tack coat       m2       1       0       0         Removal of temorary road       1       Item       0         Bell Mouth       27       3,023       5       1,957         Excavate acceptable material Class 5A outside the       293.75       m3       5       1,957         Excavate acceptable Class 2C material in cutting and       350       m3       5       1,740         Imported acceptable material Class 6F2 in fill to structures       113.75       m3       27       3,023         Sub Base Type 1 (CL803); Thi					
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	in carriageway, hardshoulder and hardstrip	875	m2	1(	0 8,601

Description         Qtv         Unit         Unit         Unit Cost         Amount           Tack coat         875         m2         1         438           White linning 1 visit         1         Visit         1,500         1,600           Bernoval of temorary road         1         Item         0           Haul Road - Rail South         Execavate acceptable material Class 5A outside the earthworks outline         1620         m3         5         8,051           Execavate acceptable material Class 6F2 in fill to structures         468         m3         27         12,439           Sub Base Type 1 (CLB03); Thickness 450mm; In carriageway         1620         m3         5         1,957           Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile / permanent home         393.75         m3         5         1,740           Sub Base Type 1 (CLB03); Thickness 450mm; In carriageway         393.75         m3         5         1,957           Excavate acceptable Class 2C material from stock pile to final placement         350         m3         5         1,957           Excavate acceptable Class 2C material from stock pile to final placement         350         m3         5         1,957           Excavate acceptable Class 2C material in cutting and other exca	<u>cos</u>	<u>TAIN</u>			
White Imming 1 visit         1         Visit         1,500         1,500           Removal of temorary road         1         Item         0           Haul Road - Rail South         Excavate acceptable material Class 5A outside the earthworks outline         1620         m3         5         8,051           Excavate acceptable Class 2C material in cutting and other excavation         1440         m3         5         7,157           Imported acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile/ permanent home         25         40,792           Bell mouth access         Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile/ permanent home         350         m3         5         1,957           Excavate acceptable Class 2C material from stock pile to final placement         350         m3         5         1,957           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         393.75         m3         25         9,915           Remove all of the above         1         Item         0         0         0           Readiarea         393.75         m3         5         1,957           Haul Road South of Canal         Excavate acceptable Class 2C material in cutting and other excavation         0         1         1	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>
White Imming 1 visit         1         Visit         1,500         1,500           Removal of temorary road         1         Item         0           Haul Road - Rail South	Tack coat	875	m2	1	438
Removal of temorary road       1       Item       0         Haul Road - Rail South         Excavate acceptable material Class 5A outside the earthworks outline         Excavate acceptable Class 2C material in cutting and other excavation       1440       m3       5       7,157         Imported acceptable Class 2C material in cutting and other excavation       1620       m3       25       40,792         Bell mouth access       Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile/ permanent home       1620       m3       5       1,957         Excavate acceptable Class 2C material from stock pile to final placement       350       m3       5       1,957         Excavate acceptable Class 2C material from stock pile to final placement       350       m3       5       1,957         Excavate acceptable Class 2C material in cutting and other excavatio acceptable Class 2A outside the earthworks outline       1       Item       0         Re-soil area       393.75       m3       5       1,957         Houl Road South of Canal       Excavate acceptable Class 2C material in cutting and other excavation       1440       m3       5       7,157         Imported acceptable Class 2C material in cutting and other excavation       1440       m3       5       1,857 <td></td> <td></td> <td></td> <td>•</td> <td></td>				•	
Haul Road - Rail South         Excavate acceptable material Class 5A outside the earthworks outline       1620       m3       5       8,051         Excavate acceptable Class 2C material in cutting and other excavation       1440       m3       5       7,157         Imported acceptable material Class 6F2 in fill to structures       468       m3       27       12,439         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       1620       m3       25       40,792         Bell mouth access       Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile / permanent home       393.75       m3       5       1,957         Excavate acceptable Class 2C material from stock pile to final placement       350       m3       5       1,740         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       933.75       m3       25       9,915         Haul Road South of Canal       Excavate acceptable Class 2C material in cutting and other excavation       1       1tem       0         Re-soli area       393.75       m3       5       1,517         Haul Road South of Canal       Excavate acceptable Class 2C material in cutting and other excavation       1       468       m3       27       12,439         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       16		•		1,000	
Excavate acceptable material Class 5A outside the earthworks outline         1620         m3         5         8.051           Excavate acceptable Class 2C material in cutting and other excavation         1440         m3         5         7.157           Imported acceptable Class 2C material in cutting and Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1620         m3         25         40.792           Bell mouth access         E         E         25         40.792         40.792           Bell mouth access         E         293.75         m3         5         1.957           Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile to final placement         350         m3         5         1.740           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         393.75         m3         25         9.915           Remove all of the above         1         Item         0         0         0         0           Re-soil area         393.75         m3         5         1.957         0         1.957           Haul Road South of Canal         E         E         E         2         9.915           Excavate acceptable Class 2C material in cutting and other excavation         1440         m3         5         1.95	- Tomoval of tomolary road	•	nom		0
Excavate acceptable material Class 5A outside the earthworks outline         1620         m3         5         8.051           Excavate acceptable Class 2C material in cutting and other excavation         1440         m3         5         7.157           Imported acceptable Class 2C material in cutting and Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1620         m3         25         40.792           Bell mouth access         E         E         25         40.792         40.792           Bell mouth access         E         293.75         m3         5         1.957           Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile to final placement         350         m3         5         1.740           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         393.75         m3         25         9.915           Remove all of the above         1         Item         0         0         0         0           Re-soil area         393.75         m3         5         1.957         0         1.957           Haul Road South of Canal         E         E         E         2         9.915           Excavate acceptable Class 2C material in cutting and other excavation         1440         m3         5         1.95					
earthworks outline         1620         m3         5         8,051           Excavate acceptable Class 2C material in cutting and other excavation         1440         m3         5         7,157           Imported acceptable material Class 6F2 in fill to structures         468         m3         27         12,439           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         1620         m3         25         40,792           Bell mouth access         Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile / permanent home         393,75         m3         5         1,957           Excavate acceptable Class 2C material from stock pile to final placement         350         m3         5         1,740           Sub Base Type 1 (CL803); Thickness 450mm; In carriageway         393,75         m3         25         9,915           Remove all of the above         1         Item         0         0         0           Re-soil area         393,75         m3         5         1,957           Haul Road South of Canal         Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile/ permanent home         1620         m3         5         8,051           Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary					
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Sub Base Type 1 (CL803); Thickness 450mm; In       1620       m3       25       40,792         Bell mouth access       25       40,792         Excavate acceptable Class 2C material in cutting and other excavation - cut and haul to temporary stock pile/ permanent home       393.75       m3       5       1,957         Excavate acceptable Class 2C material from stock pile to final placement       350       m3       5       1,740         Sub Base Type 1 (CL803); Thickness 450mm; In carriageway       393.75       m3       25       9,915         Remove all of the above       1       Item       0       0         Re-soil area       393.75       m3       5       1,957         Haul Road South of Canal       Excavate acceptable material Class 5A outside the earthworks outline       1620       m3       5       8,051         Excavate acceptable material Class 6F2 in fill to structures       468       m3       27       12,439         Sub Base Type 1 (CL803); Thickness 450mm; in carriageway       1620       m3       5       1,957         Bell mouth access       2       2       9,915       1,2439       25       40,792         Bell mouth access       2       1620       m3       25       40,792       1,157         Imported acceptable Class 2C	Imported acceptable material Class 6E2 in fill to structures	468	m3	27	12 439
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other excavation - cut and haul to temporary stock pile/ permanent home393.75m351,957Excavate acceptable Class 2C material from stock pile to final placement350m351,740Sub Base Type 1 (CL803); Thickness 450mm; In carriageway393.75m3259,915Remove all of the above1Item0Re-soil area393.75m351,957Haul Road North of CanalExcavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350					
permanent home393.75m351,957Excavate acceptable Class 2C material from stock pile to final placement350m351,740Sub Base Type 1 (CL803); Thickness 450mm; In carriageway393.75m3259,915Remove all of the above1Item0Re-soil area393.75m351,957Haul Road North of CanalExcavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350	· · ·				
Excavate acceptable Class 2C material from stock pile to final placement350 m351,740Sub Base Type 1 (CL803); Thickness 450mm; In carriageway393.75 m3259,915Remove all of the above1Item0Re-soil area393.75 m351,957Haul Road North of CanalExcavate acceptable material Class 5A outside the earthworks outline1890 m359,393Excavate acceptable Class 2C material in cutting and other excavation1680 m358,350				_	
final placement350m351,740Sub Base Type 1 (CL803); Thickness 450mm; In carriageway393.75m3259,915Remove all of the above1Item0Re-soil area393.75m351,957Haul Road North of CanalExcavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350		393.75	m3	5	1,957
Sub Base Type 1 (CL803); Thickness 450mm; In carriagewaycarriageway393.75m3259,915Remove all of the above1Item0Re-soil area393.75m351,957Haul Road North of CanalExcavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350			_	_	. –
carriageway393.75m3259,915Remove all of the above1Item0Re-soil area393.75m351,957Haul Road North of CanalExcavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350		350	m3	5	1,740
Remove all of the above1Item0Re-soil area393.75m351,957Haul Road North of CanalExcavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350					0.015
Re-soil area393.75m351,957Haul Road North of CanalExcavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350		393.75		25	
Haul Road North of CanalExcavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350		1		F	Ŷ
Excavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350	Re-soli area	393.75	m3	5	1,957
Excavate acceptable material Class 5A outside the earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350	Haul Road North of Canal				
earthworks outline1890m359,393Excavate acceptable Class 2C material in cutting and other excavation1680m358,350					
Excavate acceptable Class 2C material in cutting and other excavation1680m358,350		1890	m3	5	9.393
other excavation1680m358,350				0	0,000
i	· · ·	1680	m3	5	8,350
Imported acceptable material Class 6F2 in fill to structures 546 m3 27 14,513					,
	Imported acceptable material Class 6F2 in fill to structures	546	m3	27	14,513

COS	TAIN			
<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>
Sub Base Type 1 (CL803); Thickness 450mm; In				
carriageway	1890	m3	25	6 47,590
Hoovy duty moodom with AC 22 organizate base 120mm				
Heavy duty macadam with AC 32 aggregate base 130mm thick in carriageway, hardshoulder and hardstrip	4200	m2	32	136,458
and harden all and harden p				
Heavy duty macadam with AC 20 aggregate binder course				
70mm thick in carriageway, hardshoulder and hardstrip 14mm surface course PSV 60 surface course 50mm thick	4200	m2		0
in carriageway, hardshoulder and hardstrip	4200	m2	10	41,286
Tack coat	4200	m2	1	
White linning 1 visit	1	Visit	1,500	,
Removal of temorary road	1	Item		0
protection slab 1 culvert and 1 stream	1	nr	10,000	
wheel wash	1	nr	24,960	24,960
Bell Mouth				
Excavate acceptable material Class 5A outside the				
earthworks outline	393.75	m3	5	5 1,957
Excavate acceptable Class 2C material in cutting and			_	
other excavation	157.5	m3		5 783
Imported acceptable material Class 6F2 in fill to structures	51.19	m3	27	' 1,361
Sub Base Type 1 (CL803); Thickness 450mm; In	01.10	ino	Ľ,	1,001
carriageway	177.19	m3	25	5 4,462
Heavy duty macadam with AC 32 aggregate base 150mm	075		00	00.400
thick in carriageway, hardshoulder and hardstrip	875	m2	32	2 28,429
Heavy duty macadam with AC 20 aggregate binder course				
70mm thick in carriageway, hardshoulder and hardstrip	875	m2		0
14mm surface course PSV 60 surface course 50mm thick				
in carriageway, hardshoulder and hardstrip	875	m2	10	,
Tack coat White linning 1 visit	875 1	m2 Visit	1 1,500	
Removal of temorary road	1	Item	1,500	0
- Tomoral of tomoraly road	•	nom		
Darkinson Lane Plant Crossing				
protection slab 1 culvert and 1 stream	1	nr	10,000	
temp traffic lights		Item	15,600	0 0
Cottam Link				0
protection slab 1 culvert and 1 stream	1	nr	10,000	10,000
temp traffic lights	1	Item	15,600	
protection slab 1 culvert and 1 stream	1	nr	10,000	
temp traffic lights		Item	15,600	0 0
Cottam link roundabout main line to Barttle roundabout				
Sub Base Type 1 (CL803); Thickness 450mm; In				
carriageway	1822.5	m3	25	6 45,891
sub base top up required during duration of works				
including re-dressing	911.25	m3	25	5 22,945

COS	T <u>AIN</u>			
Description	Qty	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>
	<u></u>			
Bartle Roundabout to Bartle lane Sub Base Type 1 (CL803); Thickness 450mm; In				
carriageway	4860	m3		0
sub base top up required during duration of works	4000	1110		0
including re-dressing	2430	m3	25	61,187
	2400	110	20	01,107
Bartle Lane Plant Crossing				
protection slab 1 culvert and 1 stream	1	nr	10,000	
temp traffic lights		Item	15,600	0
Haul Road Bartle Lane to M55 Access				
Excavate acceptable material Class 5A outside the				
earthworks outline	2700	m3	5	13,419
Excavate acceptable Class 2C material in cutting and				
other excavation	2400	m3	5	11,928
			-	,
Imported acceptable material Class 6F2 in fill to structures	780	m3	27	20,732
Sub Base Type 1 (CL803); Thickness 450mm; In				
carriageway	2700	m3	25	67,986
sub base top up required during duration of works				,
including re-dressing	1350	m3	25	33,993
Re-soil area	2700	m3	3	
				.,
East West Link				
Bell Mouth				
Excavate acceptable material Class 5A outside the				
earthworks outline	180	m3	5	895
Excavate acceptable Class 2C material in cutting and				
other excavation	160	m3	5	795
Imported acceptable material Class 6F2 in fill to structures	52	m3	27	1,382
Sub Base Type 1 (CL803); Thickness 450mm; In				
carriageway	180	m3	25	4,532
Heavy duty macadam with AC 32 aggregate base 150mm				
thick in carriageway, hardshoulder and hardstrip	400	m2	32	12,996
Heavy duty macadam with AC 20 aggregate binder course				
70mm thick in carriageway, hardshoulder and hardstrip	400	m2	11	4,244
14mm surface course PSV 60 surface course 50mm thick				
in carriageway, hardshoulder and hardstrip	400	m2	10	3,932
Tack coat	400	m2	1	200
White linning 1 visit	1	Visit	1,500	
Removal of temorary road		Item	10,000	0
Haul Road - entire length of East West Link				
Excavate acceptable material Class 5A outside the				
earthworks outline	4455	m3		0
Excavate acceptable Class 2C material in cutting and				
other excavation	4590	m3		0
		-		
Imported acceptable material Class 6F2 in fill to structures	1491.75	m3		0
Sub Base Type 1 (CL803); Thickness 450mm; In				
carriageway	5163.75	m3	25	
Re-soil area	4455	m3		0

RWR & WTM

<u>CO</u>	<u>STAIN</u>			
Description	<u>Qty</u>	<u>Unit</u>	Unit Cost	Amount
East West Link Plant Crossing at roundabouts x 2				
protection slab 1 culvert and 1 stream	1	nr	10,000	10,000
temp traffic lights		Item	15,600	
protection slab 1 culvert and 1 stream	1	nr	10,000	
temp traffic lights		Item	15,600	
Wheel Wash Attendance		-		
2 men Plus van 2 years 3 days per week		Item	56,160	0
Removal of Old Footbridge over M55			25,000	
Removal of kerbs/tie ins Blackpool Road			25,000	0
Water Management				0
Ganger	104	week	880	91,520
Operative	104	week	880	91,520
Operative	104	week	880	91,520
Operative	104	week	880	91,520
Materials / equipment	1	lte	250,000	250,000
Temporary Roads				
Blackpool Road Temporary Road				
In Exc, capping, sub-base, Surfacing, road markings,				
Kerbs, removal, Filter drain to 1 side & re-topsoil.	1	item	160,084	160,084
Darkinson Lane				
In Exc, capping, sub-base, Surfacing, removal, & re-				
topsoil.	1	Item	37,746	37,746
Tom Benson way				
In Exc, capping, sub-base, Surfacing, removal, & re-				10.017
topsoil.	1	Item	18,647	18,647
Saddle Roundabout temp link				
In Exc, capping, sub-base, Surfacing, removal, & re-		<b>14</b> a .ea	7 404	7 404
topsoil.	1	Item	7,484	7,484
Sidgreaves Lane temp link				
In Exc, capping, sub-base, Surfacing, removal, & re-	4	ltana	10.047	10.047
topsoil.	1	Item	12,847	12,847
Kerb removal				
Kerb removal - various locations - Cottom, Blackpool				<b>-</b>
Road, Tabley & Tom Benson Way	3360	lm	12	39,682
Narrow widening details	162.7	m3	105	17,097
GS6 - Goal Posts required - with Temp fencing	1	item	30,650	30,650
were with rempresenting	I	item	00,000	00,000

To Collection 3,028,870

	COSTAIN								<u>RIDGE</u>	
Description	<u>Qtv</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>	RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	Difference	<u>COMMENT</u>
Preston Western Distibutor										
Fencing and gates throughout the main line	1	Item	362,710	) 362,710						Not identified in master plan please provide breakdown and reasoning
Temporay fencing required throughout the project	1	Item	91,164							Not identified in master plan to require a breakdown
East West Link										
Fencing to the East to West Link road	1	Item	157,891	157,891						Not identified in master plan to require a breakdown
			To Collection	611,765						

COST	AIN								R	RIDGE	
Description	<u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>		RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	<b>Difference</b>	<u>COMMENT</u>
Preston Western Distibutor	_										
Safety Barrier											
Safety barrier; Performance class N2; Working width											
class W2; Designed to be impacted on one side only;											
Straight or curved exceeding 120m radius		m	3	1	0						
Safety barrier; Performance class N2; Working width											
class W2; Designed to be impacted on one side only;											
Straight or curved exceeding 120m radius	8250	m	3	1 2	56,823		7107.75	31	221,264	-35,558	
							·				
Concrete Safety Barrier											
Concrete safety barrier; Performance class H2; Working											
width class W2; Designed to be impacted on both sides;											
Straight or curved exceeding 120m radius	3650	m	10	1 3	69,709		3159	101	319,975	-49,733	
Pavement; Concrete slab; for CSB base; 0.742mm wide											
by 100mm thick ST2 concrete; in carriageway,											
hardshoulder and hardstrip	3650	m	1	6	60,079		3159	16	51,997	-8,082	
Transitions											
Transition from parapet performance class N2 and											
working width W2 to safety barrier performance class N2											
and working width W2	34	no	1,09	7	37,313		34	1,097	37,313	0	
Transition from parapet performance class N2 and											
working width W2 to safety barrier performance class N2											
and working width W3	20	no	1,09	8	21,969		20	1,098	21,969	0	
<b>.</b>			1,00	<u> </u>	,===			,	,	-	
Terminals										_	
Leading Terminal (LT); Lateral displacement zone class D	1 28	no	6,06	4 1	69,800		28	6,064	169,800	0	
Leading Terminal (LT); Lateral displacement zone class D	1 16	no	2,35	3	37,651		16	2,353	37,651	0	
Leading Terminal (LT), Lateral displacement zone class D	1 10	110	2,30	0	57,001		10	2,000	57,001	U	
			To Collectio	n 9	53,342					-93,3	73
									Ridge Tota	859,9	59

Diamage	OSTAIN								RIDGE	
Description	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u> <u>A</u>	<u>mount</u>	RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	Difference	COMMENT
Preston Western Distibutor										
375mm internal diameter carrier drain specified design group 2 in trench depth to invert not exceeding 2m, average depth to invert 1.71 metres with Type S bed and surround to HCD F1	e 4200	m	108	452,642		5111	108	550,823	98,180	Rate higher than 450 diameter?
450mm internal diameter carrier drain specified design group 5 in trench depth to invert not exceeding 2m, average depth to invert 1.77 metres with Type S bed and surround to HCD F1	e 4200	m	107	448,056		5111	107	545,241	97,185	
Rodding eye specified design group LCC FL13 in central reservation with 225x225 rodding eye cover and frame Product HB031 Saint-Gobain or equivalent.	20	nr	149	2,977		20	149	2,977	0	
225mm internal diameter filter drain specified design group 2 in trench depth to invert not exceeding 2m, average depth to invert 1.29 metres with Type H bed and surround to HCC F2		m	79	98,824		1244.01	79	98,824	0	
Chamber specified design group 1200 dia Manhole Type A Chamber to LCC FL14; depth to invert exceeding 1m but not exceeding 2m with D400/M1 cover and frame with 675 x 675 clear opening to LCC FL10.	18	nr	1,149	20,683		18	1,149	20,683	0	
Envirokerb trapped outfall unit (plastic gully pot with insitu concrete surround) with Envirokerb gully over and frame.	21	nr	245	5,141		21	245	5,141	0	
225mm internal diameter carrier drain specified design group 5 in trench depth to invert not exceeding 2m, average depth to invert 1.41 metres with Type S bed and surround to HCD F1	140	m	60	8,420		140	60	8,420	0	
225mm internal diameter filter drain specified design group 2 in trench depth to invert not exceeding 2m, average depth to invert 1.29 metres with Type H bed and surround to HCE F2		m	79	667,296		10222	79	812,036	144,740	
Chamber specified design group 1200 dia Manhole Type A Chamber to LCC FL14; depth to invert exceeding 1m but not exceeding 2m with D400/M1 cover and frame with 675 x 675 clear opening to LCC FL10.	84	nr	1,149	96,519		102	1,149	117,201	20,683	
100mm internal diameter narrow filter drain specified design group 5 in trench depth to invert not exceeding 2m, average depth to invert 1 metres in verges, with Type 9 bed and surround to HCD F18 Constructions of decisions ditabilities D4 to LCC	8400	m	24	200,491		10222	24	243,979	43,487	
Construction of drainage ditch; Type D4 to LCC 11063/520/020 as stated in drawings 11063/500/001 to 38; depth not exceeding 1.0m.	8500	m	35	295,715		10222	35	355,623	59,908	
CULVERTS PWD										
Comm internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.42 metres with Type B bed and- surround to dwg B1082600/501/013. Excavation in- farmland.	-	m	<del>323</del>	θ				44.050	11 050	
750mm internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.59 metres with Type B bed and surround to dwg B1082600/501/013. Excavation in existing	103	m	616	63,443		129	323	41,650	41,650	why removed?
road 1200mm internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.42 metres with Type B bed and surround to dwg B1082600/501/013. Excavation in familand.	46	m	646	29,704		146 33	616	89,929 21,309	-8,395	No inclusion for mamal shelf please clarify
1400mm internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.42 metres with Type B bed and surround to dwg B1082600/501/013. Excavation in farmland.	27	m	753	20,341		47	753	35,408	15,067	Assumed this is watercourse diversior if so where is watercourse diversior to Cottam Way recorded?/ what has been allowed for this extra 4 tm?
675mm internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.59 metres with Type B bed and surround to dwg B1082600/501/013. Excavation in existing road	25	m	554	13,859		25	554	13,859	0	
675mm internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.42 metres with Type B bed and surround to dwg B1082600/501/013. Excavation in farmland.	40	m	363	14,529		84	363	30,511	15,982	
1050mm internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.42 metres with Type B bed and surround to dwg B1082600/501/013. Excavation in farmland.	60	m	565	33,901		75	565	42,376	8,475	
Rammand. 825mm internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.42 metres with Type B bed and surround to dwg B1082600/501/013. Excavation in farmland.	35	m	444	15,538		64	444	28,412	12,874	
Tarmiaub. 825mm internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.42 metres with Type B bed and surround to dwg B1082600/501/013. Excavation in farmland.	30	m	444	13,318		74	444	32,852	12,874	
definition internal diameter precast concrete culvert in trench depth to invert exceeding 2m but not exceeding 4m, average depth to invert 3.42 metres with Type B bed and surround to dwg B1082600/501/013. Excavation in farmland.	40	m	444	17,758		74	444	32,852	15,094	

<u>Qtv</u> 20 65	<u>Unit</u> m	<u>Unit Cost</u>	<u>Amount</u> 363		RAG	ΩΤΥ	<u>RATE</u>	<u>TOTAL</u>	<u>Difference</u>	<u>COMMENT</u>
20	m		363							
				7,264		98	363	35,596	28,332	
	m		538	34,977						Please identify location
48	m		807	38,744						
52	m		484	25,184		32	807	25,829	-12,915	
86	m		484	41,650		39	484	18,888	-6,296	
						84	484	40,681	-969	
e 6600	m		108	711,295		6726	108	724,874	13,579	Rate higher than 450 diameter?
e O	m		60	0						
10	nr		149	1,488				4 400		
h						10	149	1,488	U	
	m		79	12,710		110	79	8,738	-3,972	1nr roundabout in drg number 9 not 2
4	nr		1,149	4,596		1	1 1 40	1 140	2.447	1nr roundabout in drg
6	nr		245	1,469		3				number 9 not 2 1nr roundabout in drg number 9 not 2
e .o						5	240	704	704	Humber 9 Horz
40	m		60	2,406		20	60	1,203	-1,203	1nr roundabout in drg number 9 not 2
	m		79	524,304		6726	79	534,313	10,009	
66	nr		1,149	75,836		67	1,149	76,985	1,149	
d 6600	m		24	157,529		6726	24	160,536	3,007	
; 3300	m		35	114,807						
						-				
1 21	m		404	8,475						
						25	404	10,090	1,614	
23	m		565	12,995		26	565	14,690	1,695	
50	m		404	20,179						
						65	404	26,233	6,054	
22	m		404	8,879		30	404	12,107	3,229	Please identify location - could be the below
25	m		404	10,090		0				Please identify location - could be the above
20	m		616	12,319		26	610	00 474		
	48       1     52       2     86       1     86       1     6       1     10       1     160       1     160       1     6       1     6       1     6       1     6       1     6       1     6       1     6       2     3000       1     21       1     21       1     23       1     50       1     22       1     25	48     m       52     m       52     m       86     m       e     6600     m       10     nr       10     nr       10     nr       10     nr       10     nr       10     m       10     nr       11     6600     m       12     6600     m       13     6600     m       14     21     m       15     23     m       16     50     m       17     22     m       18     22     m	48       m         52       m         86       m         e       6600       m         10       nr         10       nr         10       nr         10       nr         6       nr         6       nr         6       nr         6       nr         6       nr         10       m         10       m         21       m         11       21         22       m         11       22         22       m         23       m	48       m       807         52       m       484         52       m       484         86       m       484         e       600       m       108         i       100       m       60         10       nr       149         0       160       m       79         10       100       m       79         10       6       nr       1,149         6       nr       1,149         6       nr       1,149         6       nr       1,149         1       6600       m       30         1       23       m       35         1       21       m       404         1       22       m       404         1       22       m       404	48       m       807       38,744         52       m       484       25,184         86       m       484       41,650         e       6600       m       108       711,295         e       0       m       60       0         10       rr       149       1,488 $n_{0}^{1}$ 160       m       79       12,710 $n_{1}^{1}$ 1,149       4,596       1,469 $n_{1}^{1}$ 1,149       4,596       1,469 $n_{1}^{1}$ 0       2,406       2,406 $n_{1}^{1}$ 0       2,406       2,406 $n_{1}^{1}$ 0       2,406       2,406 $n_{1}^{1}$ 0       2,406       2,406 $n_{1}^{1}$ 0       0       2,406 $n_{1}^{1}$ 0       0       2,406 $n_{1}^{1}$ 0       1,407       75,836 $n_{2}^{1}$ 0       0       2,406 $n_{1}^{1}$ 21       m       404       8,475 $n_{1}^{1}$ 23       m       565       12,995 $n$	48       m       807       38,74	48       m       807       38.744       32         52       m       484       25.184       39         86       m       484       41.650       44         6       m       108       711.295       44         10       m       108       711.295       10         10       m       149       1.488       10.1         10       m       79       12.710       10.1         10       m       79       12.710       10.1         10       m       79       12.710       10.1         6       nr       1.149       4.586       1.489         6       nr       1.149       75.836       1.60         6       nr       1.149       75.836       1.60         6       nr       1.149       75.836       1.60         10       m       35       114.807       1.60         10       m       35       114.807       1.60         10       m       35       114.807       1.60         10       m       35       12.95       1.60         121       m       404       8.875	48       m       867       38.744       1       32       807         52       m       484       25.184       1       39       484         26       m       484       41.690       1       1       1         9       6600       m       108       711.285       1       10       108       711.285       1       10       10       109       109       109       109       109       100	48       m       207       38,74       28,74       32       807       25,829         52       m       444       25,184       1       39       434       18,888         66       m       444       41,650       1       144       40,681         6       m       108       711,259       1       108       724,874         10       rr       149       1,488       100       100       149       1,488         10       rr       1,149       1,489       100       149       1,488         10       rr       1,149       4,598       100       1,499       1,488         10       rr       1,149       4,598       100       1,499       1,488         10       rr       1,149       1,489       100       100       1,499       1,488         10       rr       1,149       1,489       100       100       100       1,499       1,488         10       rr       1,149       7,548       100       100       100       100       100       100       100       100       100       100       100       100       100       100	48       m       807       38.74       20       97       25.829       112.915         52       m       4.94       25.18       99       4.94       18.88       -0.296         86       m       4.94       41.650       99       4.94       4.944       -0.99         a       0       m       101       711.29       10       -0.149       1.488       -0.295         a       0       m       60       0       0       10       -724.874       12.579         a       0       m       70       0.216

2	<u>COSTAIN</u>									<u>RIDGE</u>	
Description	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>		RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	<u>Difference</u>	<u>COMMENT</u>
DRY TUNNELS EWLR											
1000mm internal diameter precast concrete culvert in											
trench depth to invert exceeding 2m but not exceeding 4m average depth to invert 3.42 metres with Type B bed and	, 30	m		538	16,143						
surround to dwg B1082600/501/013. Excavation in											
farmland.							27	538	14,529	-1,614	
1000mm internal diameter precast concrete culvert in											
trench depth to invert exceeding 2m but not exceeding 4m average depth to invert 3.42 metres with Type B bed and	' 45	m		538	24,215						
surround to dwg B1082600/501/013. Excavation in farmland.							46	538	24,753	538	
							10	000	21,700	000	
Petrol Interceptors											
Interceptor/Pond Number											
1	1	nr		8,811	8,811		1	8,811	8,811	0	
2 3	1	nr nr		3,482 4,730	13,482 4,730		1	13,482 4,730	13,482 4,730	0	
4	1	nr	1	1,995 1,995	11,995		1	11,995	11,995	0	
6	1	nr nr	1	1,995 5,680	11,995 5,680		1	11,995 5,680	11,995 5,680	0	
7 8	1	nr		8,811 7,942	8,811 7,942		1	8,811 7,942	8,811 7,942	0	
9	1	nr nr		5.081	5,081		1	5,081	5,081	0	
10	1	nr nr		5,081 4.854	5,081 4,854		1	5,081 4,854	5,081 4,854	0	
EWLR 1	1	nr		8,811	8,811		1	8,811	8,811	0	
EWLR 2 EWLR 3	1	nr nr		5,081 7,202	5,081 7,202		1 1	5,081 7,202	5,081 7,202	0	
EWLR 4	1	nr		8,811	8,811		1	8,811	8,811	0	
Surface Water Channel											
Preston Western Distibutor											
SERIES 1100: KERBS, FOOTWAYS & PAVED AREAS							<u> </u>				
Kerbs, Channels, Edgings, Combined Drainage and Kerb											
Blocks and Linear Drainage Channel Systems Linear drainage channel systems; 1m wide surface water											
channel to dwg 2500316/Cos/S282 Rev A and detail to											
dwg named "Surface Water Channel - 1m wide" dated 2804/15; straight or curved exceeding 12m radius in centra	8400 al	m		62	518,700						
reservation							7220	62	445,835	-72,865	
Manholes and gratings for SWC											
Supply and installation of 2no KD19V chamaber grates as											
per detail 2500316/Cos/S282 Rev A; along length of surface water channel; including making good of surface	84	nr		1,985	166,735						
water channel Chamber specified design group 1200 dia Manhole Type							72	1,985	142,916	-23,819	
7A Chamber (surface water channel inline outlet) to LCC											
11063/SD/520/016; depth to invert exceeding 1m but not exceeding 2m with D400/M1 cover and frame with 675 x	84	nr		1,922	161,424						
675 clear opening to LCC FL10.							72	1,922	138,364	-23,061	
	8	nr		2,500	20,000						Can you clarify what
Programme sequencing visits											this item represents?
East-West Link											
SERIES 1100: KERBS, FOOTWAYS & PAVED AREAS											
Kerbs, Channels, Edgings, Combined Drainage and											
Kerb Blocks and Linear Drainage Channel Systems Linear drainage channel systems; 1m wide surface water	_										
channel to dwg 2500316/Cos/S282 Rev A and detail to	0000			<u></u>	000 775						
dwg named "Surface Water Channel - 1m wide" dated 2804/15; straight or curved exceeding 12m radius in centra	3300 al	m		62	203,775						
reservation Manholes and gratings for SWC							3336	62	205,998	2,223	
Supply and installation of 2no KD19V chamaber grates as											
per detail 2500316/Cos/S282 Rev A; along length of surface water channel; including making good of surface	33	nr		1,985	65,503						
water channel							33	1,985	65,503	0	
Chamber specified design group 1200 dia Manhole Type 7A Chamber (surface water channel inline outlet) to LCC							1				
11063/SD/520/016; depth to invert exceeding 1m but not exceeding 2m with D400/M1 cover and frame with 675 x	33	nr		1,922	63,417		1				
675 clear opening to LCC FL10.							33	1,922	63,417	0	
Supply and installation of 1no KD19V chamaber grates as per detail 2500316/Cos/S282 Rev A; along length of					]	]					
surface water channel; including making good of surface		nr		1,000	0		1				
water channel											
	3	nr		2,500	7,500						Can you clarify what
Programme sequencing visits											this item represents?
Headwalls - excluding Pond Headwalls Headwall in reinforced concrete, pipe exceeding 100mm							<u> </u>				
but not exceeding 300mm internal diameter (Precast	65	nr		690	44,838					_	
concrete headwall units) Gabion mattresses; 300mm thick 6I stone fill installed at 1	0	<u> </u>		170			65	690	44,838	0	
degree or less to the horizontal inlet/outlet.	260	m3		172	44,765		260	172	44,765	0	
Headwalls - for Filter Drains											
Headwall in reinforced concrete, pipe exceeding 100mm but not exceeding 300mm internal diameter (Precast	25	nr		690	17,246						
concrete headwall units)		nr	<u>.</u>	090	17,246		25	690	17,246	0	
Gabion mattresses; 300mm thick 6I stone fill installed at 1 degree or less to the horizontal inlet/outlet.	<sup>0</sup> 100	m3		172	17,217		100	172	17,217	0	
									113,11	~	
Preston Western Distibutor					]	$\vdash$	<u> </u>				
Attenuation Ponds Excavation of acceptable material in new watercourses	0	led in Ea	rthworks	Not priced							
			naiworKS				<u> </u>				
Lining of watercourses; (rawmat high density bentonite typ 2 pond liner or similar approved) to pond bed and side fac		m2		9	341,880		18,769.00	9	166,669	-175,211	Assumed depth 2.5m throughout
Attenuation pond sub-soil lining works	-	m2		6	0		. 5,7 55.00		,	113,011	
					-	-					

<u>C</u>	<u>OSTAIN</u>									<u>RIDGE</u>	
Description	<u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>		RAG	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>	Difference	<u>COMMENT</u>
Headwall in reinforced concrete, pipe exceeding 100mm but not exceeding 300mm internal diameter (Precast concrete headwall units)	7	nr	6	90	26,213		7	690	4,829	-21,384	
Gabion mattresses; 300mm thick 6I stone fill installed at 10 degree or less to the horizontal in pond inlet/outlet. 450mm internal diameter carrier drain specified design	112	m3	1	72	19,283		112.00	172	19,283	0	
group 9 in trench depth to invert exceeding 2m but not 4m, average depth to invert 3.11 metres with Type S bed and surround to HCD F1	140	m	1	23	17,165		140.00	123	17,165	0	
Chamber (for Hydrobrake) specified design group 1800 dia Type 3c to HCD F5; depth to invert exceeding 1m but not exceeding 2m with D400M1 cover and frame with 675 x 675mm clear opening to LCC FL10 with 35.6 Vs - 800mm hydrobrake	7	nr	4,1	83	29,281		7.00	4,183	29,281	0	
1.2m high post and wire fencing to HCD H13; with mesh type B8/80/30 with two strands of barbed wire (BS1722-2 Type SW120). (Type 1)		m		14	0						
Connection to existing 2100mm manhole; different diameters, depth to invert not exceeding 2m	7	nr	1,2	272	8,905		7	1,272	8,905	0	
Preston Western Distibutor Outfalls from/to ponds											
375mm internal diameter carrier drain specified design group 2 in trench depth to invert not exceeding 2m, average depth to invert 1.71 metres with Type S bed and surround to HCD F1	623	m	1	08	67,142		623	108	67,142	0	Rate higher than 450 diameter?
Chamber specified design group 1200 dia Manhole Type A Chamber to LCC FL14; depth to invert exceeding 1m but not exceeding 2m with 2400/M1 cover and frame with 675 x 675 clear opening to LCC FL10.	7	nr	1,1	49	8,043		7	1,149	8,043	0	
Preston Western Distibutor											
Surface water retention tank system 1; Excavation, installation and backfilling of two parallel runs of 1400mm diameter pipes (4.4m wide by 65m iong) depth to invert exceeding 2m but not exceeding 3m, average depth to invert 2.50 metres including two number 1200mm diameter inlet shafts and a flow regulator. Backfill detail to drawing 11063/500/101 C1	4	nr	86,3	350	345,399		4	86,350	345,399	0	
East-West Link							-				
Attenuation Ponds											
Excavation of acceptable material in new watercourses	Incl	uded in Ear	thworks	Not price	4						
Lining of watercourses; (rawmat high density bentonite type		m2		9	48,840						Assumed depth 2.5m
2 pond liner or similar approved) to pond bed and side face Attenuation pond sub-soil lining works		m2		6	40,040		4,156.00	9	36,905	-11,935	throughout
Headwall in reinforced concrete, pipe exceeding 100mm but not exceeding 300mm internal diameter (Precast concrete headwall units)	3	nr	6	690	26,213		3	690	2,069	-24,144	
Gabion mattresses; 300mm thick 6I stone fill installed at 10 degree or less to the horizontal in pond inlet/outlet.	48	m3	1	72	8,264		48.00	172	8,264	0	
450mm internal diameter carrier drain specified design group 9 in trench depth to invert exceeding 2m but not 4m, average depth to invert 3.11 metres with Type S bed and surround to HCD F1	60	m	1	23	7,357		45.00	123	5,517	-1,839	Assumed 15m
Chamber (for Hydrobrake) specified design group 1800 dia Type 3c to HCD F5: depth to invert exceeding 1m but not exceeding 2m with D400/M1 cover and frame with 675 x 675mm clear opening to LCC FL10 with 35.6 //s - 800mm hydrobrake	3	nr	4,1	83	12,549		3.00	4,183	12,549	0	
1.2m high post and wire fencing to HCD H13; with mesh type B8/80/30 with two strands of barbed wire (BS1722-2 Type SW120). (Type 1)		m		14	0						
Connection to existing 2100mm manhole; different diameters, depth to invert not exceeding 2m	3	nr	1,2	272	3,816		3	1,272	3,816	0	
Sandy Lane											
Chamber specified design group 1200 dia Manhole Type A Chamber to LCC FL14; depth to invert exceeding 1m but not exceeding 2m with D400M1 cover and frame with 675 x 675 clear opening to LCC FL10. 300mm internal diameter carrier drain specified design	4	nr	1,1	49	4,596		4	1,149	4,596	0	
group 5 in trench depth to invert not exceeding 2m, average depth to invert 1.1 metres with Type Z bed and surround to HCD F1 Inc saw cutting, subbase, Surfacing, Type z surround		m	2	216	64,841						
TM inc main allowances							300	216	64,841	0	
East-West Link Outfalls from/to ponds											
375mm internal diameter carrier drain specified design group 2 in trench depth to invert not exceeding 2m, average depth to invert 1.71 metres with Type S bed and surround to HCD F1	380	m	1	08	40,953		380	108	40,953	0	Rate higher than 450 diameter?
Chamber specified design group 1200 dia Manhole Type A Chamber to LCC FL14; depth to invert exceeding 1m but not exceeding 2m with D400/M1 cover and frame with 675 x 675 clear opening to LCC FL10.	4	nr	1,1	49	4,596		4	1,149	4,596	0	
Herringbone embankment drainage yetto be confirmed	0	item			119,000						
					.,						
		-									
			To Collect	ion	6,875,984		L			296,9	72
									Pidgo tota	7 172 9	

Ridge total 7,172,956

#### PRESTON WEST DISTRIBUTOR ROAD Kerbs and Footway

COSTA	<u>IN</u>								<u>RIDGE</u>	
Description	Qty	Unit	Unit Cost Amo	unt	RAG	QTY	RATE	TOTAL	Difference	COMMENT
Kerbing										
Kerbing						-				
Preston Western Distibutor						-				
SERIES 1100 KERBS, FOOTWAYS & PAVED AREAS										
Kerbs, Channels, Edgings, Combined Drainage and Kerb										
Blocks and Linear Drainage Channel Systems 305 x 100 x 12.5° (HB); Straight or curved exceeding 12										
metres radius	5000	m	26	127,700		4408.9	26	112,604	-15,096	
385 x 100 x 45º (Splayed) combined kerb drain; Straight or	0000		20	127,700		1100.0	20	112,001	10,000	
curved exceeding 12 metres radius	1244.01	m	76	94,968		1096.9	76	83,741	-11,227	
Rodding Access Unit for the combined kerb drains	18	No.	83	1,500		18.0	83	1,500	0	
Gully Top Cover and Base for the combined kerb drains	49.76	No.	200	9,939		49.8	200	9,939	0	
50 x 150 precast concrete footway edging to special detail	5700.05		7	00.140		5001.0	7	04 510	4.000	
BL2; Straight or curved exceeding 12 metres radius	5706.35	m	7	39,146		5031.8	7	34,518	-4,628	
East-West Link										
SERIES 1100 KERBS, FOOTWAYS & PAVED AREAS										
Kerbs, Channels, Edgings, Combined Drainage and Kerb										
Blocks and Linear Drainage Channel Systems										
305 x 100 x 12.5° (HB); Straight or curved exceeding 12										
metres radius	6600	m	26	168,564		11109.3	26	283,733	115,169	
385 x 100 x 45° (Splayed) combined kerb drain; Straight or	100		70	10.011			70	00 500	0.045	
curved exceeding 12 metres radius Rodding Access Unit for the combined kerb drains	160 10	m No.	76 83	12,214 834		269.3 10.0	76 83	20,560 834	8,345 0	
Gully Top Cover and Base for the combined kerb drains	6.4	No.	200	1.278		6.4	200	1.278	0	
Guily Top Cover and Base for the combined kerb drains	6.4	INO.	200	1,278		6.4	200	1,278	U	
50 x 150 precast concrete footway edging to special detail										
BL2; Straight or curved exceeding 12 metres radius	6600	m	7	45,276		11109.3	7	76,210	30,934	
,										
Preston Western Distributor										
Footways										
Subbase										
Sub Base Type 1; thickness 100mm;	2290.5	m3	41	92,948		2205.7	41	89,507	-3,441	
Footway comprising 20mm surface course (CL909), 60mm binder (CL912); surfaces sloping at 10 degrees or less to						1				
binder (CL912); surfaces sloping at 10 degrees or less to the horizontal	22905	m2	21	475,279		22057	21	457,683	-17,596	
400 x 400 buff blister tactile paving to 50mm thickness;	22303	1112	21	473,279		22031	61	407,000	-17,000	
Surfaces sloping at 10 <sup>o</sup> or less to the horizontal	800	m2	36	28,416		1102.85	36	39,173	10,757	
, , , , , , , , , , , , , , , , , , , ,				.,						
East-West Link										
Footways										
Subbase										
Sub Base Type 1; thickness 100mm; In footway	1000		44	00.005		0000.0		01.070	440	
construction design Type 6 Footway comprising 20mm surface course (CL909), 60mm	1992	m3	41	80,835		2002.9	41	81,278	442	
binder (CL912); surfaces sloping at 10 degrees or less to						1				
the horizontal	19920	m2	21	413,340		20029	21	415,602	2,262	
400 x 400 buff blister tactile paving to 50mm thickness;	15520	1112	61	+10,040		20020	- 1	+10,002	2,202	
Surfaces sloping at 10° or less to the horizontal	0	m2	36	0		0.0	36	0	0	
			To Collection	1,592,237					115,9	22
										_

Ridge Total 1,708,159

#### PRESTON WEST DISTRIBUTOR ROAD Pavements

	COSTAIN									RIDGE		
Description	<u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>		RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	Difference	COMMENT	
reston Western Distibutor												
ub Base												
Sub Base Type 1 (CL803); Thickness 450mm; In							-					
arriageway	59705.5	5 m3		30	1,801,913		51976.53	30	1,438,975	-362,939		
											Presumed % allowance for this circa 18%? Pleas	
Capping - 6F2 Thickness 600mm	10920	m3		32	348,348		8582.355	32	273,777	-74,571	provide reasoning	
ast -West Link							-					
Sub Base												
Sub Base Type 1 (CL803); Thickness 450mm; In												
arriageway	14490	m3		30	437.308		11263.05	30	339.919	-97.389		
anageway	14450	IIIO		00	407,000		11200.00	00	000,010	57,005		
urfacing												
reston Western Distibutor						1						
ERIES 700 - PAVEMENTS												
erformance Bond (Bituminous surfacing works)	1	ltem	21,	500	21,500							
chemical cond (bitaminous surracing works)		item	21,		21,500							
Heavy duty macadam with AC 32 aggregate base 240mm												
hick in carriageway, hardshoulder and hardstrip	132479	m2		32	4,304,243		119140	32	3,870,859	-433,384		
non in ournageway, naroshoulder and naroship	102-13	1112			7,007,240		110140	52	3,070,000	400,004		
leavy duty macadam with AC 20 aggregate binder course							1					
Omm thick in carriageway, hardshoulder and hardstrip	132479	m2		11	1,405,602		119140	11	1,264,075	-141,527		
4mm surface course PSV 60 surface course 50mm thick	1024/9	1112			1,+00,002		110140		1,207,073	171,321		
arriageway, hardshoulder and hardstrip		m2		10	0		1					
IRA 35/14mm 60 psv and chippings		1112		10	0							
n in oor i finn oo per and onippinge	132479	m2		13	1,739,449		119140	13	1,564,308	-175,141		
ack coat	264958			13	1,739,449		2119140	13	105,955	-26,524		
auroat	204300	1112		<u> </u>	152,479		211310		103,333	-20,024		
Plane & Overlay areas												
Ante & Overlay areas												
lotor way tie in												
filling of pavement	3979.86	6 m2		3	9,950		3979.86	3	9,950	0		
4mm surface course PSV 60 surface course 50mm thick	39/9.00	0 1112		3	9,950		3979.00	3	9,950	0		
a carriageway, hardshoulder and hardstrip	3979.86	6 m2			0		3979.86	0	0	0		
IRA 35/14mm 60 psv and chippings	3373.00	1112			0		3373.00	0	0	0		
ITA 33/141111 00 psv and chippings	3979.86	6 m2		13	52,256		3979.86	13	52,256	0		
	39/9.00	0 1112		13	52,256		3979.00	13	52,250	0		
Blackpool Road												
Ailling of pavement	9760	m2		3	24,400		9760	3	24,400	0		
4mm surface course PSV 60 surface course 50mm thick	3100	1112		5	24,400		3100	0	24,400	U		
n carriageway, hardshoulder and hardstrip	9760	m2			0		9760	0	0	0		
יו טעריאניאיז, וומיטאוטעועכו מוע וומיטאנויף	3100	1112			0		3100	J	v	U		
IRA 35/14mm 60 psv and chippings	9760	m2		13	128,149		9760	13	128,149	0		
TRA 33/1411111 60 psv and chippings	9760	1112		13	120,149		9760	13	120,149	0		
							1					
ast-West Link												
ERIES 700 - PAVEMENTS												
erformance Bond (Bituminous surfacing works)		ltem	21,	500	0							
enormance bond (bitunninous surracing works)		item	21,3	000	0							
leavy duty macadam with AC 32 aggregate base 130mm							1					
	32200	m2		32	1,046,178		25029	32	912 102	-232,986		
ick in carriageway, hardshoulder and hardstrip	32200	m∠		JE	1,040,178		20029	32	813,192	-232,980		
loover duty magadam with AC 00							1					
leavy duty macadam with AC 20 aggregate binder course	00000				044.049		05000		005 550	70.004		
Omm thick in carriageway, hardshoulder and hardstrip	32200	m2		11	341,642		25029	11	265,558	-76,084		
4mm surface course PSV 60 surface course 50mm thick	0005-	-			_		05000					
carriageway, hardshoulder and hardstrip	32200	m2			0		25029					
				13	422,786		25029	13	328,631	-94,155		
IRA 35/14mm 60 psv and chippings	32200	m2										
IRA 35/14mm 60 psv and chippings ack coat	32200 64400	m2 m2		1	32,200		50058	1	25,029	-7,171		
IRA 35/14mm 60 psv and chippings ack coat												
IRA 35/14mm 60 psv and chippings ack coat												

Ridge total 10,526,532

#### PRESTON WEST DISTRIBUTOR ROAD Traffic Signals

<u>co</u>	<u>STAIN</u>								RIDGE	
Description	<u>Qtv</u>	<u>Unit</u>	Unit Cost	<u>Amount</u>	RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	Difference	<u>COMMENT</u>
Preston Western Distibutor										
										Breakdown required as
Traffic Signals including ducting works and all associate electrical connections		Item	274,79	4 0						complex junction
Traffic Signals including ducting works and all associate	id ,		545 70							
electrical connections	1	item	515,79	4 515,794						
			To Collection	n 515 794						

To Collection 515,794

#### PRESTON WEST DISTRIBUTOR ROAD Traffic Signals

	COSTAIN								RIDGE	
<u>Description</u>	<u>Qtv</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>	RAG	<u>QTY</u>	RATE	<u>TOTAL</u>	<b>Difference</b>	<u>COMMENT</u>
Traffic Signs and Marker posts										
Traffic signs, marker posts including the removal of										Please provide a further
existing	1	Item	426,54	1 426	541					breakdown of allowances
Road Lighting						-				
										Appears reasonable at circa £80Im however require a
Road Lighting - including ducting and electrical works	1	Item	1,845,98	9 1,845,	989					further breakdown
				-425,	000					
						_				
						┥┝───				
L			To Collectio	n 1,847,	530					

### VERIFICATION REPORT

Preston West Distributor Road

### 6. APPENDICES

APPENDIX 2 - RIDGE PRELIMINARIES ANALYSIS

#### PWDR COST VERIFICATION EXERCISE: November 2017

Preliminaries Analysis

	(6	_	New	/ Build	Struct	ures	ŀ	Road type		e	Road Rate				БL	_	net		S
Project	Duration (Weeks)	Road Length	Bridges	Culverts	Retaining Walls	Gantries						Phase 1 Cost	ECI Phase 2- Supervision	Traffic Management	Total (excluding ECI)	% Prelims on Total	% prelims on r works	ECI	% ECI of works Total
1	103	7.7					D	2	Α	R	New Construction	1,168,319	646,387		37,156,565	26%	34%	1,814,706	5%
2	67	5					D	2	Α	R	New Construction	-	2,189,173	-	14,213,567	14%	16%	2,189,173	15%
3	104	3.8					D	2	Α	R	New Construction	435,000	435,000	-	14,042,000	13%	15%	870,000	6%
4	105	11.5					D	2	Α	R	New Construction	4,003,052	2,844,338	-	59,700,038	24%	31%	6,847,390	11%
5	105	1.8					D	2	A	R	New Construction	1,344,742	678,557	-	11,994,191	40%	68%	2,023,299	17%
6	87	7.64					D	2	Α	R	Major Maintenance	1,307,027	733,981	-	37,842,646	31%	46%	2,041,008	5%
7	77	5					D	2	Α	R	New Construction	3,635,266	150,315		28,497,915	32%	46%	3,785,581	13%
8	138	10.7	9.00	5.00	-	-	D	2	Α	R	New Construction		2,564,637	-	24,770,646	30%	43%	2,564,637	10%
9	157	24	24.00	3.00	-	-	D	2	A	R	Major Maintenance	-	-	636,691	91,659,595	33%	50%	-	0%
10	104	3	4.00	-	-	-	D	2	Α	R	New Construction	1,687,316	-	-	14,041,297	5%	5%	1,687,316	12%
11	69	3.0578					D	2	Α	R	Major Maintenance	-	-	13,083,176	52,867,476	7%	7%	-	0%
12	112	6.4	7.00	-	2.00	-	D	2	A	R	New Construction	-	-	1,342,960	27,696,484	22%	29%	-	0%
13	131	7.66	9.00	5.00	-	-	D	2	A	R	New Construction	2,414,355	3,632,378	187,598	27,340,717	8%	8%	6,046,733	22%
14	78	2.4	2.00	-	-	-	D	2	A	R	New Construction		-	1,593	5,557,899	37%	58%	-	0%
15	84	5.63	4.00	7.00	-	-	D	2	Α	R	New Construction	-	2,994,566	401,125	12,992,822	12%	13%	2,994,566	23%
16	41	4.5	14.00	4.00	8.00	-	D	2	Α	R	New Construction	2,592,264	5,478,318	420,599	43,645,646	16%	19%	8,070,581	18%
17	74	2.3	3.00	-	-	-	D	2	Α	R	Major Maintenance	935,152	-	-	10,447,946	14%	16%	935,152	9%
18	83	6.577	6.00	1.00	1.00	-	D	2	Α	R	New Construction	-	-	-	29,837,092	13%	15%	-	0%
19	255	4.359	3.00				D	2	Α	R	New Construction	-	-	-	12,570,282	31%	44%	-	0%
20	96	3.4815	4.00				D	2	Α	R	New Construction	2,319,067	-	-	19,092,552	12%	14%	2,319,067	12%
21	95	3					D	2	A	R	New Construction	-	-	2,728,912	45,359,998	24%	31%	-	0%
22	103	6.4	4.00	-	-	-	D	2	Α	R	General Widening	-	-	-	8,986,718	36%	55%	-	0%
23	98	9.9	7.00	1.00	-	-	D	2	Α	R	Major Maintenance	1,125,940	-	-	30,544,421	37%	58%	1,125,940	4%
24	103	2.6					D	2	Α	R	New Construction	-	-	137,546	8,511,598	20%	24%	-	0%
25	99	8.1					D	2	A	R	New Construction		-		18,577,312	11%	12%	-	0%
26	113	5.3					D	2	A	R	New Construction	-	-	-	44,265,571	14%	16%	-	0%
27	94	12.2					D	2	A	R	New Construction	-	-	-	25,914,477	18%	22%	-	0%
28	110	10.2					D	2	A	R	New Construction		-		28,850,044	10%	12%	-	0%
29	135	24					D	2	A	R	New Construction	-	-		140,144,756	9%	10%	-	0%
30	121	9.2					D	2	A	R	New Construction	-	-		24,829,898	7%	8%	-	0%
31	110	9					D	2	A	R	New Construction	-	-		23,164,947	10%	12%	-	0%
32	144	4.68					D	2	A	R	New Construction	-	-		24,338,469	18%	21%	-	0%
33	117	13.5					D	2	A	R	New Construction	-	-		110,784,192	36%	57%	-	0%
34	111	8.5					D	2	A	R	New Construction	-	-		49,090,498	15%	18%	-	0%
35	112	3.2					D	2	A	R	New Construction		-	-	39,053,296	21%	27%	-	0%
36	148	12.5					D	2	A	R	New Construction	-	-		62,052,000	14%	16%	-	0%
37	145	11.8					D	2	M	R	New Construction	-	-		107,705,434	19%	23%	-	0%
38	176	14.5					D	2	M	R	New Construction	-		-	109,042,814	5%	6%	-	0%
39	148	9.817	6.00	-	-	-	S	2	A	R	New Construction	-	8,446,038	227,193	35,403,335	5%	5%	8,446,038	24%
40	78	3.1	2.00	-	-	-	S	2	A	R	New Construction	-	-	1,372	4,787,930	37%	58%		0%
41	80	3.8624	I				S	2	A	R	New Construction	290,000		-	9,179,991	11%	13%	290,000	3%
42	135	18.5					S	2	A	R	New Construction	· · ·			32,997,443	11%	12%	-	0%
43	104	4.75	1				S	2	Α	R	New Construction	-	-	-	5,129,956	9%	10%	-	0%

Average 19% 26%

### VERIFICATION REPORT

Preston West Distributor Road

## 6. APPENDICES

APPENDIX 3 - RIDGE TRAFFIC MANAGEMENT ANALYSIS

#### PWDR COST VERIFICATION EXERCISE: November 2017

### Preliminaries Analysis

	<u>(</u>		New	Build	Struct	ures		Road	l typ	e	Road Rate			ent	ŋg	le	
Project	Duration (Weeks)	Road Length	Bridges	Culverts	Retaining Walls	Gantries						Phase 1 Cost	ECI Phase 2- Supervision	Traffic Manageme	Total (excluding ECI)	% TM on Total	% TM on net works
9	157	24	24.00	3.00	-	-	D	2	Α	R	Major Maintenance	-	-	636,691	91,659,595	1%	1%
11	69	3.0578					D	2	Α	R	Major Maintenance	-	-	13,083,176	52,867,476	25%	33%
12	112	6.4	7.00	-	2.00	-	D	2	Α	R	New Construction	-	-	1,342,960	27,696,484	5%	5%
13	131	7.66	9.00	5.00	-	-	D	2	Α	R	New Construction	2,414,355	3,632,378	187,598	27,340,717	1%	1%
15	84	5.63	4.00	7.00	-	-	D	2	Α	R	New Construction	-	2,994,566	401,125	12,992,822	3%	3%
16	41	4.5	14.00	4.00	8.00	-	D	2	Α	R	New Construction	2,592,264	5,478,318	420,599	43,645,646	1%	1%
21	95	3					D	2	Α	R	New Construction	-	-	2,728,912	45,359,998	6%	6%
24	103	2.6					D	2	А	R	New Construction	-	-	137,546	8,511,598	2%	2%
39	148	9.817	6.00	-	-	-	S	2	А	R	New Construction	-	8,446,038	227,193	35,403,335	1%	1%

Average	3.61%	7%
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### VERIFICATION REPORT

Preston West Distributor Road

## 6. APPENDICES

APPENDIX 4 - EARTHWORKS ANALYSIS

# **Cut/Fill Report**

Generated: 2017-12-01 10:13:22

By user: apresley

Drawing:N:\ST\ST16565 - Highways Scheme 3D Model\03 - Design\Civil 3D\DesignDrawing:Models\Surfaces\N:\ST\ST16565 - Highways Scheme 3D Model\03 -<br/>Design\Civil 3D\Design Models\Surfaces\Highway Box -Cut Fill.dwg

Volum	Volume Summary											
Name	Туре	Cut Factor	Fill Factor	2d Area (sq.m)	Cut (Cu. M.)	Fill (Cu. M.)	Net (Cu. M.)					
N-S Cut- Fill	full	1.000	1.000	183571.483	180296.728	341395.210	161098.482 <fill></fill>					
E-W Cut- Fill	full	1.000	1.000	104525.660	29769.463	24482.489	5286.974 <cut></cut>					

Totals				
	2d Area (sq.m)	Cut (Cu. M.)	Fill (Cu. M.)	Net (Cu. M.)
Total	288097.144	210066.190	365877.699	155811.509 <fill></fill>

\* Value adjusted by cut or fill factor other than 1.0