Wichelstowe Development - South Access

Summary

Works Cost Estimate

			£		£
1	Hay Lane / Wharf Road Junction including roundabout	£	2,377,800	£	4,745,230.18
2	Section 20 - Works from Chainage 50 - Chainage 500 (Western Alignment)	£	1,414,400	£	2,792,889.88
3	Section 21 - Works to Chainage 500 - Chainage 600; including tunnel & motorway works (Western Alignment)	£	5,717,700	£	13,358,583.08
4	Section 19a & Part 19b - Works to Chainage 600 - Chainage 1400 (Western Alignment)	£	1,911,000	£	3,521,517.17
5	Section Part 19b - Works to Chainage 1400 - 1700	£	2,036,600	£	3,752,968.02
	Sub Total	£	13,457,500		
7	Preliminaries	£	3,402,150		
8	Traffic Management (Item 1)	£	50,000		
9	Traffic Management (Item 3 Above - See tab M4 C/way TM)	£	2,022,226		
	Base Cost Estimate **Sub-Total**	**£**	**18,931,876**		
10	**Risk**				
	Risk Allowance Estimate 18%	£	3,407,737.64		
	Utilities (Applied to Items 1, 2 & 6)	£	500,000.00		
	Utilities (Motorway - Fibre Network & H/ways England Nert System)	£	800,000.00		
	Sub-Total	**£**	**23,639,613**		
11	**Forecast Up to 2019** 6.5%	£	1,536,575		
	Sub-Total	**£**	**25,176,188**		
12	**Employers Costs**	£	2,995,000		
	Cost (excl. VAT)	**£**	**28,171,188**	**£**	**28,171,188**

Wichelstowe Development - South Access

Employers Costs

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
1.00	**Employers Costs**					
1.01	Designers	1.00	Item	Incl. of Civils & Structural Design Works.	£ 700,000.00	£ 700,000.00
1.02	Design Fees to Date	1.00	Item	Actual Design Fees todate	£ 260,000.00	£ 260,000.00
1.03	Ecologist	1.00	Item	Allowance for regular inspection for duation.	£ 20,000.00	£ 20,000.00
1.04	Archeologist	1.00	Item	Allowance for 3 week Watch & Brief	£ 10,000.00	£ 10,000.00
1.05	Contract Administration	1.00	Item	Provision for Project Manager, Supervisor and Assisitants & QS.	£ 500,000.00	£ 500,000.00
1.06	Project Management	1.00	Item		£ 250,000.00	£ 250,000.00
1.07	Highways England Supervision	1.00	Item	Allowance for full time resource for duration of Works.	£ 180,000.00	£ 180,000.00
1.08	Legal Fees	1.00	Item	£30k allowance for both SBC and HE	£ 60,000.00	£ 60,000.00
1.09	Stakeholder / Public Comms	1.00	Item	events or website and updates	£ 50,000.00	£ 50,000.00
1.10	SBC Technical approval costs	1.00	Item		£ 300,000.00	£ 300,000.00
1.11	LEP Fees	1.00	Item		£ 20,000.00	£ 20,000.00
2.00	**Inspections / Surveys**					
2.01	Topographic Survey	1.00	Item		£ 15,000.00	£ 15,000.00
2.02	Asbestos Survey	1.00	Item		£ 10,000.00	£ 10,000.00
2.03	CCTV Survey	1.00	Item		£ 20,000.00	£ 20,000.00
2.04	Ground investigattion	1.00	Item		£ 100,000.00	£ 100,000.00
2.05	Ecology Pre-Works	1.00	Item		£ 200,000.00	£ 200,000.00
3.00	**Commuted Sums**					
3.01	Commuted Sums linked to Stucture	1.00	Item	this is based on the positive benefits of betterment provided by the scheme	£ 300,000.00	£ 300,000.00
					TO SUMMARY	2,995,000.00

Wichelstowe Development - South Access

Preliminaries

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
1.00	**Temporary Accommodation**					
1.01	Erection of offices and messes for the contractor	2.00	item		£ 60,000.00	£ 120,000.00
1.02	Servicing of offices and messes for the contractor	87.00	week		£ 35,000.00	£ 3,045,000.00
1.03	Dismantling of offices and messes for the contractor	2.00	item		£ 50,000.00	£ 100,000.00
2.00	**Information Board**					
2.01	Scheme information board	10.00	No.		£ 400.00	£ 4,000.00
2.02	Public information board	10.00	No.		£ 130.00	£ 1,300.00
3.00	**Progress Photographs**					
3.01	Sets of progress photographs in colour in digital picture file format	1.00	item		£ 4,350.00	£ 4,350.00
3.02	Sets of pre-start condition survey photographs in digital picture file format	1.00	item		£ 250.00	£ 250.00
3.03	Set of as-built condition survey photographs in digital picture file format	1.00	item		£ 250.00	£ 250.00
4.00	**Special Preliminary Items**					
4.01	Contractors attendance to meetings	1.00	Item		£ 87,000.00	£ 87,000.00
4.02	Liaison with stakeholders	1.00	Item		£ 18,000.00	£ 18,000.00
4.03	Co-ordination and attendance with utility companies	1.00	Item		£ 18,000.00	£ 18,000.00
4.04	Equipment for Engineer and Employer	1.00	Item		£ 2,500.00	£ 2,500.00
4.05	Production of the Construction Management Plan (CMP)	1.00	Item		£ 1,500.00	£ 1,500.00
5.00	**Other**					
					TO SUMMARY	3,402,150.00

Wichelstowe Development - South Access
Hay Lane / Wharf Road Junction including roundabout

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
1.00	**Series 200 - Site Clearance**					
1.01	General Site Clearance	2.61	Ha	The site boundary identified Arup dwg CX-15, has been used to derive the general site clearance, rate allows for works as prescribed in the item coverage under HWMM.	7,661.82	19,997.35
1.02	temp fences to work exclusion zones to trees / hedges	503.00	m		14.50	7,293.50
1.03	Sundry Items	1.00	item	Generally; existing services, obstructions, hardstanding's, drainage or the like	5,532.00	5,532.00
1.04	Tree Clearance & Removal	1.00	nr		176.00	176.00
1.05	Break out existing blacktop and kerbs to Hay Lane; protect services as required	1,323.00	m²	As shown on Arup CX-15	11.00	14,553.00
1.06	remove/relocate utility apparatus	5.00	nr	Assumed - Take up and left on site for later use.	1,950.00	9,750.00
1.07	remove existing bollards	3.00	nr	Assumed Concrete Bollards and tipped off-site	68.75	206.25
1.08	remove kerb outlets & frame	6.00	nr	Assumed - Take up or down and remove to tip off site	40.50	243.00
1.09	remove existing road gullies & frames; backfill	3.00	nr	Assumed - Take up or down and remove to tip off site gully grating and frame (Type 1)	91.50	274.50
1.10	Remove road signage	11.00	nr	Assumed removed to tip	226.00	2,486.00
1.11	Additional Items for - Breaking out / removal works required generally; cold planing m/s	1.00	Item	kerbs, channels, drainage, road signage, street lighting / furniture or the like	60,000.00	60,000.00
2.00	**Series 300: Fencing**					
2.01	Planting Works fencing Type 2	730.00	m	Highway construction details H39	16.25	11,858.85
2.02	Timber post & rail fence type 4	270.00	m	Highway construction details H3	25.19	6,800.46
2.03	Field gate	1.00	nr	Highway construction details H19	957.77	957.77
2.04	Badger & Newt fencing; 1850mm total high	460.00	m	As Arup dwg CX-25; 1850mm total high timber fence posts; 3nr timber rails & barbed wire; ppc aluminium sheeting; additional buried protection, weed barrier & gravel	100.00	46,000.00
2.05	Reptile Receptor Site	1.00	item	Nominal Allowance	2,500.00	2,500.00
3.00	**series 400: Road Restraint Systems**					
3.01	Vehicle Restraint System	375.00	m	No Spec details given - Assumed Vehicular/Pedestrian Parapet (Containment Performance Class N1) (Working Width Class W1)	263.57	98,837.48
4.00	**series 500: Drainage**			including all excavation, bedding and backfill		
4.01	Drainage as Arup drawings CD-01/02					
4.02	Clean out and reuse existing field ditch as swale	55.00	m		13.36	734.53
4.03	Divert existing field ditch	191.00	m		12.39	2,366.49
4.04	Form attenuation basin 1: 600m3; including forming 2nr sediment bays	1.00	item		3,792.00	3,792.00
4.05	Form drainage attenuation ditches	215.00	m	No Details, nominal allowance for 2m*1m, filled with pea shingle.	48.84	10,500.60
4.06	Form Flood storage area for extreme events; say 200m3	1.00	nr		8,513.56	8,513.56
4.07	150mm pipework	407.00	m		115.78	47,120.65
4.08	225mm pipework	333.00	m	Including excavation and backfilling as per MOM. No detail on piping and have assumed all pipes will be made from concrete. Average of 2m deep	115.78	38,553.26
4.09	300mm pipework	145.00	m		147.98	21,457.46
4.10	375mm pipework	49.00	m		184.98	9,063.93
4.11	600mm pipework	30.00	m		295.96	8,878.95
4.12	Form Headwall type A; including safety grill	1.00	nr	Arup dwg CD-08	1,567.50	1,567.50
4.13	Headwall type B; including safety grille	1.00	nr	Arup dwg CD-05	2,090.00	2,090.00
4.14	Headwall type C; including safety grille	7.00	nr	Arup dwg CD-09	2,612.50	18,287.50
4.15	Road gullies	59.00	nr	Arup dwg CD-05, Assumed allowance of 1200mm depth below formation	705.99	41,653.13
4.16	Manholes; type B	15.00	nr	Arup dwg CD-05, allowed manhole rings, base, engineering bricks, ladder, excavation and backfill. At an average depth of 3m	4,963.75	74,456.25
4.17	Manholes; type 900	1.00	nr	Arup dwg CD-06	2,110.90	2,110.90

Wichelstowe Development - South Access
Hay Lane / Wharf Road Junction including roundabout

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
4.18	Manholes; type C (modified); Flow Control Manhole	1.00	nr	Arup dwg CD-07 allowed, manhole rings, base, engineering bricks, ladder, excavation and backfill. At an average depth of 2m	3,918.75	3,918.75
4.19	Service ducts					
4.20	100mm ductwork	1.00	item	Incl. below within Section 1400	-	-
1.05	Allowance for Temporary Haul Road	1.00	Item		100,000.00	100,000.00
5.00	**series 600: Earthworks**					
5.01	Cut (Topsoil)	5,808.00	m³	Say 300mm deep over entire road/embankment footprint; store on site for reuse (Inc. Allowance for double handling).	13.36	77,566.42
5.02	Compaction; to formation under fill	19,360.00	m²	Compaction of road/embankment footprint after topsoil strip and prior to fill	0.77	14,971.09
5.03	Fill	23,154.00	m³	To make up levels under subbase/embankments - 6F2 Capping Layer.	22.90	530,226.60
5.04	Compaction; to embankment fill	13,577.00	m²		0.77	10,499.09
5.05	Capping layer	2,836.00	m³	6F2 capping layer	33.25	94,289.40
5.06	Compaction; to capping layer	5,647.00	m²		0.77	4,366.83
5.07	Installation of terram 2000	5,647.00	m²		2.56	14,432.51
5.08	Sub-base layer	846.00	m³	Type 1 granular material 150mm thick to clause 803 of SHW in carriageway	46.25	39,127.50
5.09	Compaction	5,640.00	m²		0.77	4,361.41
5.10	Trial pits	1.00	Item	No details, allowance made	3,000.00	3,000.00
6.00	**Series 700: Pavements**					
6.01	Base	4,727.00	m²	AC32 dense base 40/60 (2 layers) to EN13198-1 in carriageway, 200mm thick in layers max thickness 120mm	38.07	179,962.68
6.02	Binder	4,727.00	m²	AC 20 Dense BIN 40/60 to EN13108-1; 60mm thick in carriageway	12.12	57,267.98
6.03	Surface Course	4,727.00	m²	HRA 55/14 SURF 40/60 des to Clause 911 of SHW, minimum thickness 50mm	16.26	76,882.53
6.04	Surface Course; anti slip to roundabout approaches	917.00	m²	Epoxy resin	19.25	17,652.25
6.05	Joints	384.00	m	All Vertical Joints at interfaces with existing pavements and new pavements and kerbs to be cut to a vertical face, clear of trimmings and painted with 50 pen or 70 pen hot molten bitumen	6.27	2,407.68
6.06	Regulating to existing roads	38.58	Tonne	Nominal Allowance to existing roads, unsure of quality of existing C/way.	88.51	3,414.58
6.07	Bond Coat	912.00	m²	Assume require Bond coat on planed surfaces to clauses 920 of SHW with BBA HAPAS certificate.	0.33	302.71
6.08	Tack Coat	912.00	m²	Assume require Tack coat on planed surfaces to clause 920 and BS 594987	0.42	383.43
6.09	Full depth reconstruction to existing roads	512.00	m²	20mm Surface, 60mm Binder & 200mm base.	63.93	32,731.03
6.10	Forming footpaths to existing roads	400.00	m²	20mm Surface, 60mm Binder	56.01	22,402.39
	Cold Milling					
6.11	To create Hay Lane intersection (North)	327.00	m²	Plane off existing Surface Course; assumed 50mm	3.11	1,016.64
6.12	To create Hay Lane intersection (South)	342.00	m²		3.11	1,063.27
6.13	To create Wharf Road intersection	243.00	m²		3.11	755.48
7.00	**Series 1100: Kerbs, Footways and Paved Areas**					
7.01	New islands & roundabout; Full depth construction	608.00	m²	20mm Surface, 60mm Binder & 225mm sub-base.	63.93	38,868.10
7.02	SP Kerbs	1,277.00	m		25.23	32,213.99
7.03	BN25 Drop Kerbs	88.00	m		29.51	2,596.95
8.00	**Series 1200: Traffic Signs and Road Markings**			See Arup dwg CH-25		
8.01	Road Markings					
8.02	Road Markings - Broken	1,079.00	m			
8.03	Road markings - Solid	-	m	None shown		
8.04	Yellow Box Junctions	209.00	m			
8.05	Road Studs - surface mounted	-	m	No details on drawings; Assume None	1,121.25	4,485.00
8.06	Road Studs - click	-	m	No details on drawings; Assume None		
8.07	Arrows	9.00	nr			
8.08	Give way	2.00	nr			
8.09	Signage					

Wichelstowe Development - South Access
Hay Lane / Wharf Road Junction including roundabout

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
8.10	Non illuminated Signage					
8.11	small signs	3.00	nr	See Arup dwg Ch-25	553.20	1,659.60
8.12	medium signs	3.00	nr		1,106.40	3,319.20
8.13	large signs	3.00	nr		1,659.60	4,978.80
8.14	illuminated Signage					
8.15	Illuminated bollards	6.00	nr		3,123.53	18,741.16
8.16	Illuminated 750mm dia 40mph signs	8.00	nr	No Details Assumed - Lit Sign Unit sign face exceeding 1 square metre but not exceeding 2 square metres in area on two tubular steel post(s).	1,320.72	10,565.74
8.17	Illuminated give way signs	2.00	nr	No Details Assumed Lit Sign Unit sign face exceeding 0.50 square metre but not exceeding 0.75 square metre in area on two tubular steel post	1,048.28	2,096.57
8.18	Illuminated directional arrow signage on roundabout	3.00	nr	No Details Assumed Lit Sign Unit sign face exceeding 0.50 square metre but not exceeding 0.75 square metre in area on two tubular steel post	1,048.28	3,144.85
9.00	**Series 1300: Road Lighting Columns and Brackets, CCTV Masts and Cantilever Masts**					
9.01	Street lights	18.00	nr	As Arup dwg CH-22 - No details Assumed Road lighting column of 10m nominal height and with single bracket arm with a luminaire	2,591.28	46,643.04
10.00	**Series 1400: Electrical Works for Road Lighting and Traffic Signs**			No Details (Nominal Allowance Made Based on No. of Street Lights).		
10.01	Electrical Works	1.00	Item	Install new electrical services, include trenching cabling, ducting, draw pits, backfilling and reinstatement, cable joints and terminations, installation and supply of feeder pillars, earth electrodes and chambers to drawing no. 24023/018/1300	108,967.12	108,967.12
11.00	**Series 3000: Landscaping & Ecology**			From Arup dwg CX-20		
11.01	Tree / Whip planting	1,070.00	m²	Assumed spacing of 4 tree/ whips per Lin m.	10.84	11,600.00
11.02	e/o for 2nr trees / 100m	16.00	nr		553.12	8,849.96
11.03	Diverse Wildflower grass mix; to verges	5,241.00	m²	Grass seeding using conventional methods of sewing.	1.36	7,132.33
11.04	Ditto; to embankments	6,740.00	m²	Grass seeding using conventional methods of sewing.	1.36	9,172.28
11.05	Reedbeds	468.00	m²		11.74	5,493.81
11.06	Topsoil	4,060.50	m³	Allowance of topsoil to area's of embankment, verges, hedgerows, reedbeds & and tree/whip planting; take from on site spoil heaps; assumed 300mm thick	37.60	152,656.41
11.07	Stockpile remaining topsoil on site	1,747.50	m³	treat with weed killer as appropriate	2.32	4,060.21
11.08	Weed control	13,535.00	m²	Allowance of simazine to be applied to surfaces.	0.70	9,434.33
11.09	Tree & associated grass / topsoil to centre of roundabout	1.00	Item		5,500.00	5,500.00
11.10	Maintenance	1.00	Item	Allowance for maintenance of landscaping works during the defects correction period.	9,000.00	9,000.00
11.11	Protection of existing trees	1.00	Item	Nominal allowance for protection of trees as shown on site clearance drawings.	4,978.80	4,978.80
	Total				TO SUMMARY	2,377,800.00

Wichelstowe Development - South Access
Chainage 50 - 500

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
1.00	**Series 200 - Site Clearance**					
1.01	General Site Clearance	1.73	Ha	The site boundary has been assumed & used to derive the general site clearance, rate allows for works as prescribed in the item coverage under HWMM.	7,661.82	13,254.95
1.02	temp fences to work exclusion zones to trees / hedges	1,380.00	m	If not included in above	14.27	19,696.13
1.03	Sundry Items	1.00	item	Generally; existing services, obstructions, hardstanding's, drainage or the like	50,000.00	50,000.00
2.00	**Series 300 - Fencing**					
2.01	Planting Works fencing Type 2	910.00	m	Highway construction details H39	16.25	14,782.95
2.02	Badger & Newt fencing; 1850mm total high	910.00	m	As Arup dwg CX-25; 1850mm total high timber fence posts; 3nr timber rails & barbed wire; ppc aluminium sheeting; additional buried protection, weed barrier & gravel	100.00	91,000.00
2.03	Reptile Receptor Site	1.00	item	Nominal Allowance	2,500.00	2,500.00
3.00	**Series 400: Road Restraint Systems**					
3.01	Vehicle Restraint System	-	m	No details given	-	-
4.00	**Series 500: Drainage and service ducts**			including all excavation, bedding and backfill		
4.01	Drainage					
4.02	Divert existing field ditch	110.00	m		13.36	1,469.06
4.03	form 2.5m x 1m precast concrete culvert to ditto	1.00	nr		886.39	886.39
4.04	Form attenuation basin 2: 41m3; including forming 1nr sediment bay and 1nr overflow weir	1.00	item		3,526.00	3,526.00
4.05	Form drainage attenuation ditches	450.00	m	No Details, nominal allowance for 2m*1m, filled with pea shingle.	42.35	19,055.30
4.06	150mm pipework	180.00	m	Including excavation and backfilling as per MOM. No detail on piping and have assumed all pipes will be made from concrete. Average of 2m deep	115.78	20,839.60
4.07	300mm pipework	500.00	m		147.98	73,991.23
4.08	Headwall type C; including safety grille	5.00	nr	say	2,612.50	13,062.50
4.09	Road gullies	30.00	nr	Arup dwg CD-05, Assumed allowance of 1200mm depth below formation	705.99	21,179.56
4.10	Manholes; type B	9.00	nr	allowed manhole rings, base, engineering bricks, ladder, excavation and backfill. At an average depth of 3m	4,963.75	44,673.75
4.11	Service ducts					
4.12	100mm ductwork	1.00	item	no details; assume none as no street lights or luminated signage	See Below	See Below
4.13	Sundries					
4.14	Forming Wildlife tunnel	1.00	nr	As Arup dwg CX-26; 1.2m x 1.2m concrete culvert; concrete wing walls; grilles either end; granular material, filter fabric & topsoil soft invert	5,000.00	5,000.00
4.15	Forming culvert under road to existing field ditches	2.00	nr	1.2m diameter; concrete wing walls & grilles either end	2,500.00	5,000.00
5.00	**Series 600: Earthworks**					
5.01	Topsoil	2,970.00	m³	Say 300mm deep over entire road/embankment footprint; store on site for reuse (Allowance for double Handling)	13.36	39,664.65
5.02	Compaction; to formation under fill	2,400.00	m²	Compaction of road/embankment footprint after topsoil strip and prior to fill	0.77	1,855.92
5.03	Cut	2,635.00	m³	Excavation has taken areas identified as full depth construction and assumed a depth of 1060mm; store on site	6.68	17,595.34
5.04	Compaction; to formation	3,728.00	m²	Compaction of road/embankment footprint after topsoil strip / cut and prior to fill	0.77	2,882.86
5.05	Fill	3,589.00	m³	To make up levels under subbase/embankments	23.93	85,886.56
5.06	Compaction; to embankment fill	4,883.00	m²		0.77	3,776.02
5.07	Capping layer	2,436.00	m³	6F2 capping layer	33.25	80,990.47
5.08	Compaction; to capping layer	4,060.00	m²		0.77	3,139.60
5.09	Installation of terram 2000	4,060.00	m²		2.56	10,376.48
5.1	Sub-base layer	508.00	m³	Type 1 granular material 150mm thick to clause 803 of SHW in carriageway	48.33	24,552.28
5.11	Compaction	3,387.00	m²		0.77	2,619.17
5.12	Disposal	2,635.00	m³			-

Wichelstowe Development - South Access
Chainage 50 - 500

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
5.13	Stockpiling of material for Noise Bund	2,635.00	m³	Allowance for double handling	13.36	35,203.60
5.13	Extra over for Excavation in Hard material	263.50	m³	Nominal Allowance of 10% of the Excavation.	73.63	19,401.69
5.14	Trial pits	1.00	Item	No details, allowance made	3,000.00	3,000.00
5.15	Disposal of Hard excavation	263.50	m³	Quantity As above	57.23	15,081.33
1.05	Allowance for Temporary Haul Road	1.00	Item		100,000.00	100,000.00
6.00	**Series 700: Pavements**					
6.01	Base	3,385.00	m²	AC32 dense base 40/60 (2 layers) to EN13198-1 in carriageway, 200mm thick in layers max thickness 120mm	38.07	128,871.09
6.02	Binder	3,385.00	m²	AC 20 Dense BIN 40/60 to EN13108-1; 60mm thick in carriageway	12.12	41,009.55
6.03	Surface Course	3,385.00	m²	HRA 55/14 SURF 40/60 des to Clause 911 of SHW, minimum thickness 50mm	16.26	55,055.50
7.00	**Series 1100: Kerbs, Footways and Paved Areas**					
7.01	New footways; Full depth construction	1,575.00	m²	3.5m wide to one side of carriageway; 20mm Surface, 60mm Binder & 225mm sub-base.	63.93	100,686.27
7.02	EF Edging; assumed required for footpath verge	450.00	m		19.31	8,688.01
7.03	SP Kerbs	900.00	m		25.23	22,703.67
8.00	**Series 1200: Traffic Signs and Road Markings**					
8.01	Road Markings - Broken	450.00	m	Allowance for 2 no. Night Shifts	1,125.00	2,250.00
8.02	Road Studs - surface mounted	25.00	Item	No details on drawings; Nominal Allowance assumed 18m spacings	1,125.00	1,125.00
8.03	Non illuminated Signage	1.00	item	No details - Nominal Allowance	5,000.00	5,000.00
8.04	Illuminated Signage	1.00	Item	No details - Nominal Allowance	15,000.00	15,000.00
9.00	**Series 1300: Road Lighting Columns and Brackets, CCTV Masts and Cantilever Masts**					
9.01	Street lights	15.00	nr	No details allowance for street lights every 30m - Assumed Road lighting column of 10m nominal height and with single bracket arm with a luminaire	2,591.28	38,869.20
10.00	**Series 1400: Electrical Works for Road Lighting and Traffic Signs**			No Details (Nominal Allowance Made Based on No. of Street Lights).		
10.01	Street lights	1.00	Item	Install new electrical services, include trenching cabling, ducting, draw pits, backfilling and reinstatement, cable joints and terminations, installation and supply of feeder pillars, earth electrodes and chambers	44,175.23	44,175.23
11.00	**Series 3000: Landscape and ecology**			From Arup dwg CX-20		
11.01	e/o for 2nr trees / 100m	18.00	nr		553.12	9,956.21
11.02	Diverse Wildflower grass mix; to verges	3,150.00	m²	Grass seeding using conventional methods of sewing.	1.36	4,286.75
11.03	Ditto; to embankments	2,400.00	m²	Grass seeding using conventional methods of sewing.	1.36	3,266.09
11.04	Reedbeds	120.00	m²		12.57	1,508.11
11.05	Topsoil	1,706.40	m³	Allowance of topsoil to area's of embankment, verges, hedgerows, reedbeds & and tree/whip planting; take from on site spoil heaps; assumed 300mm thick	37.60	64,152.91
11.06	Stockpile remaining topsoil on site	1,263.60	m³	treat with weed killer as appropriate	2.32	2,935.90
11.07	Weed control	5,688.00	m²	Allowance of simazine to be applied to surfaces.	0.70	3,964.72
11.08	Maintenance	1.00	Item	Allowance for maintenance of landscaping works during the defects correction period.	9,957.60	9,957.60
11.09	Protection of existing trees	1.00	Item	Nominal allowance for protection of trees as shown on site clearance drawings.	4,978.80	4,978.80
	Total				TO SUMMARY	1,414,400.00

Wichelstowe Development - South Access
Chainage 500 - 600; including tunnel & motorway works

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
1.00	**Series 200 - Site Clearance**					
1.01	General Site Clearance	0.35	Ha	The site boundary has been assumed & used to derive the general site clearance, rate allows for works as prescribed in the item coverage under HWMM. (Inc. based on general clearance of major network).	7,661.82	2,681.64
1.02	Sundry Items	1.00	item	Generally; existing services, obstructions, hardstanding's, drainage or the like	80,000.00	80,000.00
2.00	**Series 300 - Fencing**					
2.01	Planting Works fencing Type 2	60.00	m	Highway construction details H39	16.25	974.70
2.02	Reptile Receptor Site	1.00	item	Nominal Allowance	2,500.00	2,500.00
3.00	**Series 400: Road Restraint Systems**					
3.01	Guardrails to tunnel wing walls	88.00	m	1.15m high to BS 7818	145.00	12,760.00
3.02	Connections & Terminals	1.00	Item	Nominal Allowance	7,000.00	7,000.00
4.00	**Series 500: Drainage and service ducts**			including all excavation, bedding and backfill		
4.01	Form drainage attenuation ditches	100.00	m	No Details, nominal allowance for 2m*1m, filled with pea shingle.	48.84	4,884.00
4.02	150mm pipework	46.00	m	Including excavation and backfilling as per MOM. No detail on piping and have assumed all pipes will be made from concrete. Average of 2m deep	115.78	5,325.68
4.03	300mm pipework	73.00	m		147.98	10,802.72
4.04	Headwall type C; including safety grille	4.00	nr	say	2,612.50	10,450.00
4.05	Road gullies	20.00	nr	Arup dwg CD-05, Assumed allowance of 1200mm depth below formation	£ 705.99	£ 14,119.71
4.06	Manholes; type B	6.00	nr	allowed manhole rings, base, engineering bricks, ladder, excavation and backfill. At an average depth of 3m	4,963.75	29,782.50
	Drainage to outside of tunnels					
4.07	Back of wall drainage	1.00	item	Assumed applied to either side, no details allowed for 150mm diameter perforated pipe filter drain laid on mass concrete bedding	3,417.15	3,417.15
4.08	225 perforated pipe laid in concrete bedding	150.00	m	assume also extends along wing walls	69.96	10,493.49
4.09	Adjustments to existing Motorway Drainage			As Arup dwg CD001 - 004		
4.10	Remove central reservation drainage, Protect existing manholes, Stop off existing drainage ditch each side of motorway, Remove associated drainage, Redirect drainage into drainage ditches, Drain highway ditch into temporary pipe outfall into existing drainage ditch, Reinstate central reservation drainage when tunnel complete, Provide replacement embankment drainage	1.00	item		172,440.00	172,440.00
4.11	New pumping station, attenuation pond, hydro brakes	1.00	item	No details, nominal allowance	340,000.00	340,000.00
	Service ducts					
4.11	100mm ductwork	1.00	item		See Below	See Below
5.00	**Series 600: Earthworks**					
5.01	Topsoil	270.00	m³	Say 300mm deep over entire road/embankment footprint; store on site for reuse (Allowance for double handling)	13.36	3,605.88
5.02	Cut	1,691.00	m³	Excavation has taken areas identified as full depth construction and assumed a depth of 1060mm; store on site	6.68	11,291.74
5.03	Ground Water Lowering	150.00	Days	Allowance for hire of pump, diesel and 150mm dia pump.	350.00	52,500.00
5.03	Compaction; to formation	804.00	m²	Compaction of road/embankment footprint after cut and prior to fill	0.77	621.73
5.04	Sub-base layer; to road outside tunnel	58.00	m³	Type 1 granular material 150mm thick to clause 803 of SHW in carriageway	48.33	2,803.21
5.05	Compaction	387.00	m²		0.77	299.27
5.06	Capping layer; to road outside tunnel	280.00	m³	6F2 capping layer	33.25	9,309.25
5.07	Compaction; to capping layer;	466.00	m²		0.77	360.36

Wichelstowe Development - South Access
Chainage 500 - 600; including tunnel & motorway works

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
5.08	Installation of terram 2000	466.00	m²		2.41	1,124.90
5.09	Disposal		m³	to be stockpiled		-
5.1	Stockpiling material for Noise Bund	1,691.00	m³	Allowance for Double Handling	13.36	22,583.47
5.10	Extra over for Excavation in Hard material	169.10	m³	Nominal Allowance of 10% of the Excavation.	73.63	12,450.95
5.11	Disposal of Hard excavation	169.10	m³	Quantity As above	57.23	9,678.38
5.12	Trial pits	1.00	Item	No details, allowance made	3,000.00	3,000.00
1.05	Allowance for Temporary Haul Road	1.00	Item		100,000.00	100,000.00
6.00	**Pavements**					
6.01	Base; outside tunnel	387.00	m²	AC32 dense base 40/60 (2 layers) to EN13198-1 in carriageway, 200mm thick in layers max thickness 120mm	38.07	14,733.01
6.02	Base; inside tunnel	343.00	m²	AC32 dense base 40/60 (2 layers) to EN13198-1 in carriageway, ad 100mm thick in layers max thickness 120mm	19.03	6,528.97
6.03	Binder	730.00	m²	AC 20 Dense BIN 40/60 to EN13108-1; 60mm thick in carriageway	25.80	18,834.75
6.04	Surface Course	730.00	m²	HRA 55/14 SURF 40/60 des to Clause 911 of SHW, minimum thickness 50mm	16.26	11,873.12
7.00	**Series 1100: Kerbs, Footways and Paved Areas**					
7.01	New footways; Full depth construction outside tun	186.00	m²	3.5m wide to one side of carriageway; 20mm Surface, 60mm Binder & 225mm subbase.	63.93	11,890.57
7.02	New footways; within tunnel	329.00	m²	3.7m wide to one side of carriageway & 3.3m wide to the other ; 20mm Surface, 60mm Binder & avg. 225mm basecourse.	63.93	21,032.24
7.03	EF Edging; assumed required for footpath verge	53.00	m		19.31	1,023.25
7.04	SP Kerbs; outside tunnel	106.00	m		26.71	2,831.10
7.05	125 kerb in tunnel	47.00	m		23.64	1,111.26
7.06	125 drainage kerb in tunnel	47.00	m		135.61	6,373.74
8.00	**Traffic signs and road markings**					
8.01	Road Markings - Broken	100.00	m			
8.02	Road Studs - surface mounted			No details on drawings; Assume None	1,125.00	1,125.00
8.03	Road Studs - click			No details on drawings; Assume None		
8.04	Non illuminated Signage	1.00	item	No details on drawings		
9.00	**Series 1400: Electrical Works for Road Lighting and Traffic Signs**			No Details (Nominal Allowance for LED Lighting through tunnel)		
9.01	Tunnel Lighting	1.00	Item	Install new electrical services, include trenching cabling, ducting, draw pits, backfilling and reinstatement, cable joints and terminations, installation and supply of feeder pillars, earth electrodes and chambers	53,449.08	53,449.08
9.02	Tunnel Lighting	2.00	Item	No details provided, Allowance for LED Lighting to throughout tunnel	54,901.78	109,803.56
10.00	**Forming tunnel; including temporary works**			From notes on PBA dwg Sk002		
10.01	widening existing embankment; including compaction; APPROXIMATE QUANTITIES	7,756.00	m³	Using class 6N/6P backfill material; to extend 130m either side of tunnel	33.92	263,115.16
10.02	Forming temporary - C/way Construction	1,662.00	m²	Say additional 6m wide	99.17	164,820.96
10.03	Forming temporary - Road Markings	2.00	Shifts		1,250.00	2,500.00
10.04	Forming temporary - Barriers	39.00	wk.		483.59	18,859.86
10.05	Ground preparation works	1.00	item		150,000.00	150,000.00
	Contiguous Piling					
10.06	Mobilisation of Piling Plant	2.00	No.		22,200.00	44,400.00
10.07	Bored Depth (1250 dia * 15m Depth)	60.00	No.		11,057.14	663,428.57
10.08	Steel Reinforcement	90.00	Tn		1,642.86	147,857.14
10.09	Foam Reinforcement to Piles	900.00	m		4.80	4,320.00
10.10	Integrity Testing	4.00	No.		420.00	1,680.00
10.11	Concrete Samples	60.00	No.		180.00	10,800.00
	Concrete Capping Beam					
10.12	Pile capping beam	300.00	m3		139.80	41,940.00
10.13	formwork to soffit of deck	405.00	m²		63.82	25,847.45
	Bridge Deck					
10.14	TY 8 Prestressed Beams	60.00	No.		4,692.00	281,520.00
10.15	Mobilisation of Plant	2.00	Items		4,600.00	9,200.00
10.16	Lifting TY 8 Beams	2.00	Items		22,375.00	44,750.00
10.17	Insitu Infill	465.75	m3		124.28	57,883.41
10.18	Waterproofing	1,161.00	m²		21.47	24,927.93

Wichelstowe Development - South Access
Chainage 500 - 600; including tunnel & motorway works

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
	Construction Excavation					
10.19	Tunnel Excavation	3,726.00	m³	Allowance for excavation in soft material, utilising mole hole exc. Inclusion of bracing during excavation.	137.50	512,325.00
10.20	Stockpiling of excavated material for Noise Bund	3,726.00	m³	Allowance for double handling	13.36	49,779.36
	Installation of Tunnel Walls					
10.21	Assumed Stone Panels 100mm thick	540.00	m²		72.83	39,328.20
	Tunnel Drainage					
10.22	Allowance for Drainage (to be specified)	1.00	Item		75,000.00	75,000.00
	Construction of RC Slab					
10.23	base; 300 mm thick	186.30	m³	Allowance for grade C40/50 concrete exposure class XD3/XF4	165.28	30,791.76
10.24	formwork to soffit of deck	621.00	m²		63.82	39,632.75
10.25	reinforcement to ditto	35.40	t	say 190kg/m3 of concrete.	1,174.27	41,565.51
	Temporary Sheet Piling					
10.26	Temporary sheet piling	675.00	m²	No Details - Assumed 15m Depth - PU 22; mass 143.6kg/m2; Including Driving Costs	193.43	130,566.54
10.27		1.00	Item	Nominal Allowance - Mobilisation	7,500.00	7,500.00
10.28	Installation of remaining ground anchors	72.00	nr	Approx. 4m c/c. (additional 3 no. rows of ground anchor's).	122.61	8,827.75
10.29	Mobilisation of Plant	3.00	Item		7,500.00	22,500.00
10.30	Remove sheet piling & ground anchors	1.00	item		7,107.00	7,107.00
10.31		40.00	Hrs		500.12	20,004.78
10.32	Removal of previous ground anchors	1.00	item	Plant Mob Cost Allowance	12,500.00	12,500.00
	Break Out C/Way					
10.33	Break out existing South carriageway; dispose off site	1,800.00	m²	including kerbs, drainage, safety barriers, services etc (Assumed 900mm depth)	31.03	55,861.02
10.34	Disposal of Hardbound Material	1,620.00	m³	including kerbs, drainage, safety barriers, services etc (Assumed 110mm to Sub-	60.60	98,168.00
10.35	Excavation to deck formation	2,160.00	m³		6.68	14,428.80
10.36	Stockpiling of material	2,160.00	m³	Allowance for double handling of material	13.36	28,857.60
	Reinstate C/way					
	Reinstate motorway carriageway; jointing to existing	1,800.00	m²			
10.37	600mm Capping	1,080.00	m³	6F2 capping layer	33.25	35,907.11
10.38	300mm Sub-base	540.00	m²	Type 1 granular material 300mm thick to clause 803 of SHW in carriageway	48.33	26,098.88
10.39	220mm Base Course	900.00	m²		44.45	40,005.72
10.40	60mm Binder Course	12,440.00	m²	ref. sketch issued 15/02/2018 - assumed additional area of C/way resurfacing.	19.52	242,797.21
10.41	50mm Thin Surface Course	12,440.00	m²	ref. sketch issued 15/02/2018 - assumed additional area of C/way resurfacing.	16.26	202,331.00
10.42	kerbs	90.00	m	to one side only	25.23	2,270.37
10.43	safety barriers	1,500.00	m	BOTH SIDES AND CENTRAL RESERVE	263.57	395,349.91
10.44	Reprofile embankment	288.00	m²		6.68	1,923.13
10.45	Backfill construction & embankment; including compaction	4,180.00	m³	Allowance for class 6N/6P backfill material	33.92	141,802.65
	Other Concrete Tunnel construction; Insitu works				-	
10.46	Blinding; 75mm thick	465.75	m³		143.34	66,758.90
	Forming wing walls					
10.47	Blinding; 75mm thick	56.00	m³		143.34	8,026.84
10.48	foundations; including excavations, cart away and the like	20.00	m³		165.28	3,305.61
10.49	Concrete Capping Beam	168.00	m³		139.80	23,486.40
10.50	to walls; 500mm thick	94.00	m³	Allowance for grade C40/50 concrete exposure class XD3/XF4	165.28	15,536.37
10.51	formwork to wall	372.00	m²		76.95	28,623.58
10.52	Formwork Ancillaries	372.00	m²		12.73	4,736.82
10.53	reinforcement to ditto	53.58	t	say 190kg/m3 of concrete.	1,174.23	62,915.42
10.54	Excavation, earthwork support & disposal of spoil to North embankment to enable construction of wing walls.	3,150.00	m³	Allowance for double handling of material to and from stockpile	13.36	42,068.57

Wichelstowe Development - South Access
Chainage 500 - 600; including tunnel & motorway works

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
13.00	**Series 3000: Landscape and ecology**					
13.01	e/o for 2nr trees / 100m	2.00	nr		553.12	1,106.25
13.02	Diverse Wildflower grass mix; to verges	279.00	m²	Grass seeding using conventional methods of sewing.	1.36	379.68
13.03	Ditto; to embankments	318.00	m²	Grass seeding using conventional methods of sewing.	1.36	432.76
13.04	Topsoil	179.70	m³	Allowance of topsoil to area's of embankment, verges, hedgerows, reedbeds & and tree/whip planting; take from on site spoil heaps; assumed 300mm thick	37.60	6,755.91
13.05	Stockpile remaining topsoil on site	90.30	m³	treat with weed killer as appropriate	2.32	209.81
13.06	Weed control	599.00	m²	Allowance of simazine to be applied to surfaces.	0.70	417.52
13.07	Maintenance	1.00	Item	Allowance for maintenance of landscaping works during the defects correction period.	9,000.00	9,000.00
13.08	Protection of existing trees	1.00	Item	Nominal allowance for protection of trees as shown on site clearance drawings.	4,978.80	4,978.80
	Total				TO SUMMARY	5,717,700.00

Wichelstowe Development - South Access
Chainage 600 - 1400

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
1.00	**Series 200 - Site Clearance**					
1.01	General Site Clearance	2.80	Ha	The site boundary has been assumed & used to derive the general site clearance, rate allows for works as prescribed in the item coverage under HWMM.	7,661.82	21,453.10
1.02	Sundry Items	1.00	item	Generally; existing services, obstructions, hardstanding's, drainage or the like	50,000.00	50,000.00
2.00	**Series 300 - Fencing**					
2.01	Planting Works fencing Type 2	1,600.00	m	Highway construction details H39	16.25	25,992.00
2.02	Reptile Receptor Site	1.00	item	Nominal Allowance	2,500.00	2,500.00
3.00	**Series 400: Road Restraint Systems**					
3.01	Vehicle Restraint System	-	m	No details given	-	-
4.00	**Series 500: Drainage and service ducts**			including all excavation, bedding and backfill		
4.01	Drainage					
4.02	Form drainage attenuation ditches	800.00	m	No Details, nominal allowance for 2m*1m, filled with pea shingle.	48.84	39,072.00
4.03	150mm pipework	324.00	m	Including excavation and backfilling as per MOM.	115.78	37,511.28
4.04	300mm pipework	960.00	m	No detail on piping and have assumed all pipes will be made from concrete. Average of 2m deep	147.98	142,063.15
4.05	Headwall type C; including safety grille	8.00	nr	say	2,612.50	20,900.00
4.06	Road gullies	54.00	nr	Arup dwg CD-05, Assumed allowance of 1200mm depth below formation	705.99	38,123.21
4.07	Manholes; type B	16.00	nr	allowed manhole rings, base, engineering bricks, ladder, excavation and backfill. At an average depth of 3m	4,963.75	79,420.00
4.08	Service ducts					
4.09	100mm ductwork	1.00	item	no details; assume none as no street lights or luminated signage	See Below	See Below
4.10	Sundries					
4.11	Forming Wildlife tunnel	1.00	nr	As Arup dwg CX-26; 1.2m x 1.2m concrete culvert; concrete wing walls; grilles either end; granular material, filter fabric & topsoil soft invert	5,000.00	5,000.00
4.12	Forming culvert under road to existing field ditches	3.00	nr	1.2m diameter; concrete wing walls & grilles either end	2,500.00	7,500.00

Wichelstowe Development - South Access
Chainage 600 - 1400

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
5.00	**Series 600: Earthworks**					
5.01	Topsoil	3,600.00	m³	Say 300mm deep over entire road/embankment footprint; store on site for reuse (allowance for double handling).	13.36	48,078.36
5.02	Cut	5,204.00	m³	Excavation has taken areas identified as full depth construction and assumed a depth of 1060mm; store on site	6.68	34,749.97
5.03	Compaction; to formation	9,600.00	m²	Compaction of road/embankment footprint after topsoil strip / cut and prior to fill	0.77	7,423.68
5.04	Fill	1,040.00	m³	To make up levels under subbase/embankments	23.93	24,887.72
5.05	Compaction; to embankment fill	2,080.00	m²		0.77	1,608.46
5.06	Capping layer	3,909.00	m³	6F2 capping layer - 600mm	33.25	129,963.77
5.07	Compaction; to capping layer;	6,515.00	m²		0.77	5,038.05
5.08	Installation of terram 2000	6,515.00	m²		2.56	16,650.93
5.09	Sub-base layer	876.00	m³	Type 1 granular material 150mm thick to clause 803 of SHW in carriageway	48.33	42,338.18
5.10	Compaction	5,840.00	m²		0.77	4,516.07
5.11	Disposal of material	5,204.00	m³			-
5.12	Stockpiling Material for Noise Bund	5,204.00	m3	Allowance for doubling handling of material	13.36	69,499.94
5.12	Extra over for Excavation in Hard material	520.40	m³	Nominal Allowance of 10% of the Excavation.	73.63	38,317.42
5.13	Disposal of Hard excavation	520.40	m³	Quantity As above	57.23	29,784.91
5.14	Trial pits	1.00	Item	No details, allowance made	3,000.00	3,000.00
1.05	Allowance for Temporary Haul Road	1.00	Item		100,000.00	100,000.00
6.00	**Pavements**					
6.01	Base	5,840.00	m²	AC32 dense base 40/60 (2 layers) to EN13198-1 in carriageway, 200mm thick in layers max thickness 120mm	38.07	222,335.95
6.02	Binder	5,840.00	m²	AC 20 Dense BIN 40/60 to EN13108-1; 60mm thick in carriageway	12.12	70,752.07
6.03	Surface Course	5,840.00	m²	HRA 55/14 SURF 40/60 des to Clause 911 of SHW, minimum thickness 50mm	16.26	94,984.97
7.00	**Series 1100: Kerbs, Footways and Paved Areas**					
7.01	New footways; Full depth construction	2,800.00	m²	3.5m wide to one side of carriageway; 20mm Surface, 60mm Binder & 225mm base.	63.93	178,997.82
7.02	EF Edging; assumed required for footpath verge	800.00	m		19.31	15,445.34
7.03	SP Kerbs	1,600.00	m		26.71	42,733.59
8.00	**Traffic signs and road markings**					
8.01	Road Markings - Broken	800.00	m	Nominal Allowance for two Night Shifts		
8.02	Road Studs - surface mounted			No details on drawings; Assume None	1,125.00	2,250.00
8.03	Road Studs - click			No details on drawings; Assume None		
8.04	Non illuminated Signage	1.00	item	No details on drawings	-	-

Wichelstowe Development - South Access
Chainage 600 - 1400

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
9.00	**Series 1300: Road Lighting Columns and Brackets, CCTV Masts and Cantilever Masts**					
9.01	Street lights	27.00	nr	No details allowance for street lights every 30m - Assumed Road lighting column of 10m nominal height and with single bracket arm with a luminaire	2,591.28	69,964.56
10.00	**Series 1400: Electrical Works for Road Lighting and Traffic Signs**			No Details (Nominal Allowance Made Based on No. of Street Lights).		
10.01	Street lights	1.00	Item	Install new electrical services, include trenching cabling, ducting, draw pits, backfilling and reinstatement, cable joints and terminations, installation and supply of feeder pillars, earth electrodes and chambers	71,870.00	71,870.00
11.00	**Series 3000: Landscape and ecology**			From Arup dwg CX-20		
11.01	e/o for 2nr trees / 100m	32.00	nr		553.12	17,699.92
11.02	Diverse Wildflower grass mix; to verges	5,600.00	m²	Grass seeding using conventional methods of sewing.	1.36	7,620.88
11.03	Ditto; to cuttings	400.00	m²	Grass seeding using conventional methods of sewing.	1.36	544.35
11.04	Topsoil	1,809.60	m³	Allowance of topsoil to area's of embankment, verges, hedgerows, reedbeds & and tree/whip planting; take from on site spoil heaps; assumed 300mm thick	37.60	68,032.77
11.05	Stockpile remaining topsoil on site	1,790.40	m³	treat with weed killer as appropriate	2.32	4,159.89
11.06	Weed control	6,032.00	m²	Allowance of simazine to be applied to surfaces.	0.70	4,204.50
11.07	Maintenance	1.00	Item	Allowance for maintenance of landscaping works during the defects correction period.	9,000.00	9,000.00
11.08	Protection of existing trees	1.00	Item	Nominal allowance for protection of trees as shown on site clearance drawings.	4,978.80	4,978.80
	Total				TO SUMMARY	1,911,000.00

Wichelstowe Development - South Access
Chainage 1350 - 800

Ref	Description	Indicative Measure	Unit	Information	Rate	Total
1.00	**Allowance for All Works**					
1.02	Assumed a 7.30m Wide C/way with footway - This assessment has Prorated Chainage 1400m to 1700m for the all works.					
1.03	Chainage 1400m to 1700m	300.00	m		2,388.75	716,625.00
1.05	Community street connection to CRHLL	1.00	no.	Nominal Allowance	150,000.00	150,000.00
1.05	Allowance for installation of Roundabout at Croft Road & Hay Link Road (Nominal Allowance for Site Clearance/Drainage/ Earthworks/Pavement Construction/ Kerbs & F/path/signals and lighting and signs.	1.00	no.	Nominal Allowance	1,170,000.00	1,170,000.00
	Total				TO SUMMARY	2,036,600.00

Wichelstowe Development - South Access

Traffic Management

	SERIES 100 PRELIMINARIES	Unit	Q	Rate	Value
	TRAFFIC SAFETY MEASURES				
	CARRIAGEWAY CLOSURES				
	Closure, lane				
0100.010.00	Erect and dismantle		12,874.72	52.63	677,637.73
0100.011.00	Maintain per 100m length	day	17,622.27	5.27	92,848.79
	Minimum 4 hours				
0100.014.00	Advance signing and Advance signing vehicle	hour	16.00	78.96	1,263.29
0100.015.00	Block vehicle	hour	16.00	40.94	655.01
	Supply, erect and remove road signs				
0100.024.00	Standard sign	no	40.00	57.70	2,308.15
0100.025.00	Purpose made/site specific sign	sq m	86.25	329.64	28,431.77
	Erect and remove	item	63.00	145.71	9,179.64
	Maintain				
0100.026.00	Each sign	day	34,492.50	18.62	642,156.28
	Conc Barrier				
	Install & remove	Mile	6,437.36	35.00	225,307.60
	Maintain	item	6,437.36	5.00	32,186.80
	Our of hours working Sunday to Saturday 19.00 to 07.00				
0100.073.00	General works	%	367,502.53	30%	110,250.76
					1,822,225.80
	Provision for		Miles		
	Motorway average speed cameras		2	100,000.00	200,000.00
					2,022,225.80