ACTIVITY SCHEDULE - MAIN WORKSWinterstoke Road Bridge Re-construction

(DRAFT)





HIGH LEVEL SUMMARY

Item	Description	Sub-total	TOTAL
А	Contractor Staff Costs		£0.00
В	Contractor Site Preliminaries		£0.00
С	The Works		£1,198,141.69
1	Series 100: Temporary Works	£1,188,141.69	
2	Series 200: Site Clearance	£0.00	
3	Series 300: Fencing	£0.00	
4	Series 400: Road Restraint Systems	£0.00	
5	Series 500: Drainage and Service Ducts	£0.00	
6	Series 600: Earthworks	£0.00	
7	Series 700: Pavements	£0.00	
8	Series 1100: Kerbs, Footways and Paved Areas	£0.00	
9	Series 1200: Traffic Signs and Road Markings	£0.00	
10	Series 1300: Road Lighting Columns and Brackets, CCTV Masts and Cantilever Masts	£0.00	
11	Series 1400: Electrical Work for Road lighting and Traffic signs	£10,000.00	
12	Series 1600: Piling and Embedded Retaining Walls	£0.00	
13	Series 1700: Structural Concrete	£0.00	
14	Series 1800: Steelwork for Structures	£0.00	
15	Series 1900: Protection of Steelwork against Corrosion	£0.00	
16	Series 2000: Waterproofing for Structures	£0.00	
17	Series 2100: Bridge Bearings	£0.00	
18	Series 2300: Bridge Expansion Joints & Sealing of Gaps	£0.00	
19	Series 2400: Brickwork, Blockwork and Stonework	£0.00	
20	Series 3000: Landscaping	£0.00	
D	Construction Risks		£0.00
Е	<u>Inflation</u>		£0.00
	TOTAL		£1,198,141.69

ACTIVITY SCHEDULE - MAIN WORKS

WINTERSTOKE ROAD BRIDGE RE-CONSTRUCTION

1.0 Preambles to the Activity Schedule

1.1 The measured work items and quantities contained within this document are only an approximate indication of the works envisaged. Anyone using this document is to undertake their own assessment of the Works and include any additional and/or adjustments to measured work items, together with their subsequent quantities

2.0 Assumptions / Clarifications

- 2.1 Only deck design option A is considered within the activity schedule, as this achieves the required clearance height for future electrification of the rail line.
- 2.2 Access to the bridge abutments and train lines will be provided through adjacent land (Persimmon Homes), together with an area for site welfare and compound.
- 2.3 All excavated material is assumed to be unacceptable for re-use into the works. This material is deemed to be inert (not contaminated) for the purposes of disposal off site to a licence tip. An allowance for contaminated material is to be included within your Construction Risk figure.
- 2.4 Demolition of the existing bridge will be undertaken during an abnormal weekend possession (48hrs). The existing structure is to be removed to 500mm below top of track ballast.
- 2.5 Pile lengths are currently unknown until further design is undertaken. It is for this reason the following lengths have been assumed for the purpose of the estimate.
 - 750mm diameter piles : 15 metres (south abutment)
 - 900mm diameter piles : 20 metres (north contiguous pile wall)
 - Steel sheet piles: 4 metres
- 2.6 Piles are indicated on the drawings under the foundations of the temporary bridges. It is assumed these piles will be approximately 500mm diameter and 7.5 metres in length. On removal of the temporary bridges the foundations will be removed but with the piles left in place. The cost of these piles are to be included within your Construction Risk, due to the unknown nature whether these piles will be required.
- 2.7 Steel reinforcement has been included at a weight factor of 140kg/m3 of concrete within the structural concrete

- 2.8 Structural steel members are assumed to be protected by grit blast and paint and not fabricated from weathered steel.
- 2.9 The centres of the structural steel cross beams have been assumed to be at 1.750 metre centres; identical to that of the web stiffeners spacing on the main beams.
- 2.10 The installation of the steel deck members and permanent formwork to the deck soffit will be undertaken during a weekend abnormal possession.
- 2.11 Although the proposed bridge deck is to maintain the existing road level, it has been assumed that the existing surface course of the road either side of the bridge will be replaced up to the limit of the side road / access junctions. The same assumption applies to kerbing and footpaths.
- 2.12 It has been assumed for the temporary diversion of utility services and reestablishment into their permanent location will be undertaken by the statutory service providers. The main contractor will only be responsible for excavation/backing service trenches or installing service duct routes.
- 2.13 All works to the south abutment will be classed as Network Rail green zone working, once track side vortox fencing is installed.
- 2.14 It is assumed that Network Rail will grant possessions, (including abnormals) to enable the works to be planned in an efficient and productive manner. It has therefore been assumed construction will be a continuous operation with no shutdown periods, other than national holiday periods.

ACTIVITY SCHEDULE Winterstoke Road Bridge Re-construction





A. CONTRACTOR STAFF COSTS

Name	Project Role	Grade	Qty	Rate (weekly)	Duration	Total	Comments
Project Management							
	Contracts Manager				5	£0.00	
	Project Manager				52	£0.00	
	Stakeholder Manager				26	£0.00	
	Programme Planner				13	£0.00	
	Quality System Manager				13	£0.00	
	Health & Safety Manager				26	£0.00	
	Health & Safety Co-ordinator				13	£0.00	
	Safety Officer				26	£0.00	
	Public Liaison Officer (PLO)				13	£0.00	
	Rail Posession Planner / Co-ordinator				13	£0.00	
	Utility Diversion Planner / Co-ordinator				13	£0.00	
Site Management							
	Site Agent				52	£0.00	
	General Works Manager				52	£0.00	
	Foreman				42	£0.00	
	Traffic Management Officer				26	£0.00	
Design							
	Design Manager				26	£0.00	
	Design Site Representative				42	£0.00	
	BIM Manager				13	£0.00	
	BIM Co-ordinator				13	£0.00	
	CAD / BIM Manager				13	£0.00	
	CAD / BIM Co-ordinator				13	£0.00	
Engineering							
	Site Engineer - Senior				42	£0.00	
	Site Engineer				42	£0.00	
Commercial					_		
	Commercial Manager				5	0.00	
	Quantity Surveyor - Senior				26	£0.00	
	Quantity Surveyor				26	0.00	
\ .d!							
Administration							
	Admin Support / Document Controller / Receptionist / Secretary				13	£0.00	
	Admin Support / Document Controller / Receptionist / Secretary				13	£0.00	
Annagoment o Com	inion during possession western						
nanagement & Superv	ision during possession working Management				26	£0.00	
	Supervision			†	52	£0.00	
	Engineers		 	<u> </u>	26	£0.00	
	Operatives				52	£0.00	
	оролантоо				0£	£0.00	
				 		20.00	
		Net Value	ı	l .		£0.00	
		Contractors Fee %			0	£ -	

ACTIVITY SCHEDULE Winterstoke Road Bridge Re-construction





B. SITE PRELIMINARIES

Element	Description	Supplementary information	Qty	Rate (Weekly)	Duration		Total	Comments
Site	Erection of principle offices for the	,,,		` '		,		
Accomodation	overseeing organisation			£ -	1	£	-	
Site Accomodation	Mainenance of principal offices			£ -	42	£	-	
Site	Removal of principal offices			£ -	1	£	_	
Accomodation	Erection of portable offices for the							
Site Accomodation	contracting organisation during the initial phase of the works			£ -	1	£	-	
Site Accomodation	Maintentance of the contracting organisation offices			£ -	10	£	-	
Site Accomodation	Removal of the contracting organisation offices			£ -	1	£	-	
Site Accomodation	Provision of Temporary Welfare Facilities			£ -	1	£	-	
Site Accomodation	Provision of Temporary Stores (as required)			£ -	1	£	-	
Site Accomodation	Delivery / Collection			£ -	1	£	-	
Site Accomodation	Furnishings			£ -	42	£	-	
Site Accomodation	Cleaning of temporary facilities			£ -	42	£	-	
Site Accomodation	Site Fencing & Access Gates			£ -	80	£	-	
Site Accomodation	Site Security			£ -	42	£	-	
Site Accomodation	Waste Skips			£ -	52	£	-	
Site Accomodation	Vehicles for the Overseeing Organisation			£ -	10	£	-	
Site Accomodation	Information Board			£ -	1	£	-	
PPE	Provision of PPE for Employers Team / Visitors			£ -	42	£	-	
IT	IT and Comms			£ -	42	£	-	
IT	Environmental Management System (EMS)			£ -	52	£	-	
IT	Project Management Software			£ -	52	£	-	
Plant	Telehandler - Operated			£ -	52	£	-	
Plant	Excavator - Operated			£ -	52	£	-	
Plant	Crane - Operated			£ -	52	£	-	
Plant	Dumper Truck			£ -	52	£	-	
Plant	Piling Plant 1			£ -	52	£	-	
Plant	Piling Plant 2			£ -	52	£	-	
Plant	Piling Plant 3			£ -	52	£	-	
Plant	Bomag Roller			£ -	52	£	-	
Plant	Transit Tipper			£ -	52	£	-	
Plant	Roadsweeper			£ -	52	£	-	
Plant	Jet Wash				52		-	
Plant	Lighting Tower			£ -	52	£	-	
Equipment	Small tools			£ -	52	£		
Labour	Attendant Labour				52 52	£		
Labour Labour	Gateman Storeman			£ -	52	£		
				£	52	£	<u>-</u>	
Labour	Security COSS			£ -	52	£		
Labour Labour	Rail ES			£ -	52 42	£		
Testing	Testing General			£ -	1	£	<u> </u>	
resung	resuring Gerieral			£ -	'	£	<u> </u>	
<u> </u>		Net Value				£		
		Contractors Fee %			0	£	-	

SCHEDULE OF COST COMPONENTS Winterstoke Road Bridge Re-construction

CONTRACTOR ST	TAFF COSTS	rates 2020	Annual CPI 2021 uplifted	Annual CPI 2022 uplifted	Annual CPI 2023 uplifted
Including management,	supervisory, commercial and non-productive	Baseline WEEKLY COST £	0.00% WEEKLY COST £	0.00% WEEKLY COST £	0.00% WEEKLY COST £
	In the total	COSTE			
Name	Project Role				
Project Management	Contracts Manager				
	Contracts Manager		-	-	-
	Project Manager		-	-	-
	Stakeholder Manager		-	-	-
	Programme Planner		-	-	-
	Quality System Manager		-	-	-
	Health & Safety Manager		-	-	-
	Health & Safety Co-ordinator		-	-	-
	Safety Officer		-	-	-
	Public Liaison Officer (PLO)		-	-	-
	Rail Possession Planner / Co-ordinator		-	-	-
	Utility Diversion Planner / Co-ordinator		-	-	-
	Other - please specify		_	_	-
	Other - please specify		_	_	_
Site Management	Caron produce opening				
ono management	Site Agent				
	General Works Manager		-	-	-
	Foreman		-	-	-
	Traffic Management Officer		-	-	-
	Other - please specify		-	-	-
	Other - please specify		-	-	-
Design					
	Design Manager		-	-	-
	Design Site Representative		-	-	-
	BIM Manager		-	-	-
	BIM Co-ordinator		-	-	-
	CAD / BIM Manager		-	-	-
	CAD / BIM Co-ordinator		-	-	-
	Other - please specify		_	_	_
	Other - please specify			-	_
Engineering	Other - please specify		-	-	-
Engineering	01. 5				
	Site Engineer - Senior		-	-	-
	Site Engineer		-	-	-
	Other - please specify		-	-	-
	Other - please specify		-	-	-
Commercial					
	Commercial Manager		-	-	-
	Quantity Surveyor - Senior		-	-	-
	Quantity Surveyor		-	-	-
	Other - please specify		-	-	-
	Other - please specify		-	-	-
Administration					
	General Clerk		-	-	-
	Document Controller		-	-	-
	Secretary		-	-	-
	Receptionist		-	-	-
	Other - please specify		-	-	-
	Other - please specify		-	-	-
	-				

ACTIVITY SCHEDULE Winterstoke Road Bridge Re-construction





C. THE WORKS

Item	Description	Quantity	Unit	Rate	TOTAL
	Series 100: Temporary Works				
	Temporary Works				
	Temporary Works				
100.01	Supply and install a temporary footbridge, including for all associated works;				
	- Enabling works				-
	- Groundworks - Piling	1	item		-
	- Foundations				-
	- Building works - Services				-
	- Testing				-
100.02	Supply and install temporary lighting along the temporary footpath and service bridge;				
	- Temporary ligting to temporary footpath	1	item		-
	- Temporary ligting to temporary service bridge				-
100.03	Carry out temporary service diversions as required in agreement with Utility Companies;				
	- Gas	1	sum	85,000.75	85,000.75
	- Water Main - BT	1	sum sum	24,566.00 1,078,574.94	24,566.00 1,078,574.94
	- Other - please specify	1	sum	1,070,074.04	-
100.04	Supply and install a temporary service bridge, including for all associated works;				
	- Enabling works				-
	- Groundworks - Piling	1	item		-
	- Foundations		itom		-
	- Building works - Services				-
	- Testing				-
100.05	Construction of temporary crane platforms.	1	item		-
100.06	Carry out Traffic Management during potential Road Closures.				-
	- Road Closure 1 - please specify	12	wks		-
	- Road Closure 2 - please specify - Road Closure 3 - please specify	12 12	wks wks		-
	- Road Closure 4 - please specify	12	wks		-
100.07	Carry out temporary protection of Network Rail cables - lift and shift under supervision.	2	no		-
100.08	Supply and install temporary vortok fencing for protection of workforce against moving trains.	1	item		
100.09	Supply and install Heras Fencing and Gate Access for securing closure of the road and rail access.	1	item		-
100.10	Supply and install Pedestrian Barriers.	1	item		_
100.11	Carry out track monitorig during all demolition and piling operations, including pre and post monitoring periods;				
		16	wks		
	Track monitoring pre construction works Track monitoring during construction works				-
	- Track monitoring post construction works				-
			1	Sub-total	£ 1,188,141.69
	Series 200: Site Clearance				
	Site Clearance				
200.01	Carry out General Site Clearance and dispose off site.	1	ha		_
					·
200.02	Carry out demolition of the Existing Bridge Structure and dispose off site.	1	item		-
200.03	Carry out demolition of any other structures or materials and dispose off site.	1	item		-
		1		Sub-total	£ -

	Series 300: Fencing				
	Fencing, Gates and Stiles				
300.01	Supply and install permanent barrier fencing.	472	m		-
				Sub-total	£ -
	Series 400: Road Restraint Systems				
	Safety Barriers				
400.01	Supply and install safety barriers.	155	m		-
400.02	Transition from H4A to W3 Safety fence	4	item		
	<u>Terminals</u>				
400.03	Supply and install terminal sections.	4	no		-
	Vehicle Parapets				
400.03	Supply and install vehicle parapets.	140	m		-
		<u> </u>		Sub-total	£ -
	Series 500: Drainage and Service Ducts				
500.01	Carry out Drainage improvement works to approaches as necessary.	1	item		
	Supply and install new ducting over the new bridge structure for the following utilities as required in				
500.02	agreement with Utility Companies;				
	- Gas	1	item		-
	- Electric - Water Main	1	item item		-
	- BT - Virgin	1	item item		-
	- Other - please specify	1	item		-
				Sub-total	£ -
	Series 600: Earthworks				
	Excavation				
600.02	Carry out excavation and disposal of accepted material.	50	m3		-
600.03	Carry out excavation and disposal of unaccepted material.	1076	m3		-
600.04	Provision of Stockpiling of excavated topsoil to spoil heaps for later re-use as required.	1	item		-
600.05	Carry out backfill and compaction with selected material as required.	1	item		-
600.06	Topsoil taken from stock piles and backfill where necessary.	1	item		-
	Imported Fill				
600.07	Supply and install imported acceptable material in fill to structures.	1859	m3		-
	Other				
-	Filling of voids below structual foundations with insitu concrete grade ST2	50	m3		-
		<u> </u>	1	Sub-total	£ -

	Series 700: Pavements					
	Sub-base					
700.01	Supply and install sub-base in carriageway, hardshoulder and hardstrip and all other areas as necessary.	30	m3			-
	<u>Pavement</u>					
700.02	Supply and install paving to all necessary areas including for but not limited to carriageway, bridge, hardshoulder, hardstrip etc; including					
	- Base course	120	m2			
	- Binder course	462	m2			
	- Surfacing - Tack Coat	2151 1689	m2 m2			
	- Milling	1689	m2			
				Sub-total	£	-
	Series 1100: Kerbs, Footways and Paved Areas					
	<u>Kerbs</u>					
1100.01	Supply and install kerbs, channels and edging as necessary including for;					-
	- Groundworks	576	m			
	- Drainage	376	""			
	Kerb foundation Installation of Kerbs, channels, edging etc					
	Footways and Paved Areas					
1100.02	Supply and install footways to all areas as necessary.	1400	m2			-
				Sub-total	£	-
	Series 1200: Traffic Signs and Road Markings					
1200.01	Supply and install all Traffic Signs as necessary.	1	item			-
1200.02	Supply and install all Road Markings as necessary.	1	item			_
1200.02	Supply and models as not one mannings at not obtained.			Sub-total	£	
				Sub-total	L	
	Series 1300: Road Lighting Columns and Brackets, CCTV Masts and Cantilever Masts					
1300.01	Supply and install all Road Lighting Columns and Brackets as necessary.	1	no			-
1300.02	Supply and install all CCTV Security systems as necessary.	1	no			-
				Sub-total	£	-
	Series 1400: Electrical Work for Road lighting and Traffic signs					
	Trench for Cable or Duct					
1400.01	Excavate trench for electrical ducts where required.	516	m			
1400.01		310				_
	Cable and Duct					
1400.02	Supply and install all cable and ducts as necessary.	370	m			-
	Road Lighting : Cables and Terminations					
1400.03	Supply and install electric cabling including terminations and testing to road lighting columns as necessary.	1	no	10,000.00	10,0	000.0
				Sub-total	£ 10,0	0.000

			1			\neg
	Series 1600: Piling and Embedded Retaining Walls					
	Piling					
1600.01	Carry out piling works where required; including reinforcement and all required testing.	82	no		_	_
1000.01	carry out piling works where required, including reinforcement and all required lessing.	02	110	0.1.1.1		
				Sub-total	t.	-
	Series 1700: Structural Concrete					
	In Situ Concrete					
1700.01	Carry out the construction of the in situ concrete structure;					
	- Foundation	177	m3			-
	- Abutments (beams and walls) - Bridge Deck	337 112	m3 m3		-	-
1700.02	Carry out the surface finish of concrete formwork.	753	m2			
1700.02		755	IIIZ			-
	Steel reinforcement for Structures					
1700.30	Supply and install reinforcement for the bridge structures;					
	- Foundation	25	tonnes			-
	- Abutments (beams and walls)	47	tonnes		-	-
	- Bridge Deck	17	tonnes			-
				Sub-total	£	-
	Series 1800: Steelwork for Structures					
	Fabrication of Steelwork					
1800.01	Fabrication of main members comprising plating girders; edge beams and stiffeners.	65	tonnes			-
1800.02	Fabrication of main members comprising plating girders; transverse beams.	136	tonnes			-
	Erection of Steelwork					
1801.03	Permanent erection of superstructure.	201	tonnes			-
1802.04	Trial erection.	201	tonnes		-	-
		I		Sub-total	£	-
	Series 1900: Protection of Steelwork against Corrosion					
	Protective System					
1900.01	Provision of steel protective system.	788	m2			-
		<u> </u>	<u> </u>	Sub-total	£	_
	Carico 2000: Wetaman fine for Chrystuse					
	Series 2000: Waterproofing for Structures					
	Waterproofing	1		1		
2000.01	Supply and install waterproofing system.	773	m2			-

	Series 2100: Bridge Bearings						
	<u>Bearings</u>						
2100.01	Supply and install bridge bearings as necessary.	4	no				
				Sub-total	£		
	Series 2300: Bridge Expansion Joints & Sealing of Gaps						
2300.01	Supply and install expansion joints and sealants.	1	no				
		 	1 1	Sub-total	£		
	Series 2400: Brickwork, Blockwork and Stonework						
	<u>Brickwork</u>						
2400.01	Carry out all brickwork, blockwork and stonework as necessary;						
	- Brickwork - Blockwork - Stonework	375	m2				
				Sub-total	£		
	Series 3000: Landscaping						
3000.01	Carry out landscaping as necessary.	1	item				
3000.02	Allowance for landscape maintenance requirements.	1	item				
	Sub-tota						
	TOTAL						