NATIONAL WATER CONSERVATION AND PIPELINE CORPORATION

TENDER NOTICE

TENDER FOR FINANCE DESIGN AND BUILD FOR ISIOLO DAM WATER SUPPLY PROJECT

Tender No. NWC/RT/010/2017-2018

ADDENDUM NO 2.

National Water Conservation and Pipeline Corporation wishes to make the following amendments to the above mentioned tender.

1. Grand summary bill: Replace the page with this one.

ISIOLO DAM
NATIONAL WATER CONSERVATION AND PIPELINE CORPORATION
CONTRACT NO. NWC/RT/010/2017-2018
BILL OF QUANTITIES
GRAND SUMMARY

BILL NO.	DESCRIPTION	AMOUNT Kshs.
	BILL A: DAM COMPONENT	
1	PRELIMINARY AND GENERAL ITEMS	
2	RIVER DIVERSION	
3	DAM EMBANKMENT	
4	INTAKE TOWER	
5	SPILLWAY	
6	SPILLWAY BRIDGE	
7	INSTRUMENTATION	
8	ELECTRICAL WORKS	
9	ROAD WORKS	
10	RAW WATER MAIN	
11	SCHEDULE OF DAY WORKS	
	Sub- Total	

BILL NO.	DESCRIPTION	AMOUNT Kshs.
	BILL B: WATER SUPPLY COMPONENT	
2.0	TREATMENT WORKS	
3.0	WATER TREATMENT PLANT WORKS	
4.0	GRAVITY MAIN TO ISIOLO	
5.0	TRANSMISSION LINE TO KIPSING	
6.0	GRAVITY TO ISIOLO WEST/MLANGO	
7.0	RISING MAIN TO OLDONYIRO	
8.0	RISING MAIN TO MUSUL	
9.0	GRAVITY MAIN TO WAMBA	
10.0	500M3 TANK OLDONYIRO TOWN	
11.0	400M3 ELEVATED STEEL TANK MLANGO TOWN CENTER	
12.0	200M3 ELEVATED STEEL TANK LONGOPITO TOWN CENTER	
13.0	1000M3TANK AT MUSUL	
14.0	KIPSING 15000m3 RESORVIOR TANKS, BUILDING AND SITE WORKS	
15.0	2000M3 TANK AT WAMBA	
16.0	ELECTRO-MECHANICAL WORKS	
17.0	MINI HYDROPOWER	

BILL NO.	DESCRIPTION	AMOUNT Kshs.
	SUB TOTAL = C (BILL A +BILL B)	
	ADD 10% of Subtotal C for Contingencies = D	
	ADD 10% of Subtotal C for Variation of Proces(VOP) = E	
	SUBTOTAL (C+D+E)	
	ADD 16% VAT	
	GRAND TOTAL	

2. The un-named item ' Removal and alteration of services' between 1.39 and 1.41, name it 1.40. This is a 'Provisional sum' of Kshs. 20,000,000

3. Item 3.9.5 "Supply, place and compact drainage to embankment foundations, as per the Specification" - **Unit is M^3 and Quantity 3,500**

4. Bill no. 1 Preliminaries and general items add Item 1.75 as a provisional sum

" Allow for a sum of **Ksh. 2,000,000**for exclusive use by the Technical Planning and Design Department of employer for continuous reviewing of the final design reportsand verification on site".

5. Bill no. 1 Preliminaries and general items add Item 1.76 "Include percentage of item 1.75 for contractor's overheads and profit.

6. Bill of quantities B: Water supply, Bill No.18 add Item 8.11

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
Musul hill Pump unit:-					
8.11.1	Supply, Install, test and commission surface water pump of duty point Q=75m3/hr and and H=425m complete with appropriately 50hz sized 3 phase motor and 318-415V, and electronic control panel units for monitoring and protection. The protection to include for: dry run, under or over voltage, phase failure, motor temperature, motor defect. The panel to have Starter ON/OFF selector switch, all faults indicator lights. Include for low level and high level floats/probes and all accessories to automate the operation of the pumps.	Nr.	2		

WATER KIOSK					
Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
8.11.2	Provide all materials and construct typical water kiosk as detailed in the standard drawing NWCPC/ISL/WS/SD/011and as directed by the Engineer. Rate should be inclusive of connection to the transmission main, all protection works, drainage works, labeling and plumbing works. The water kiosk to have a 5m3 plastic tank on the reinforced roof of the water kiosk with a guard to protect the tank.	Nr	100		

CATTLE WATER TROUGHS					
Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
8.11.3	Construct a water trough in accordance to drawings and as directed by the engineer	Nr	75		

7. Bill of quantities B: Water supply, Add bill no.18

	BILL NO.18 TANK 400m³ Kipsing TOWN				
ITEM No.	DESCRIPTION	UNIT	QUANTITY	RATE Kshs	AMOUNT Kshs
18.1.1	GENERAL ITEMS				
18.1.1.1	Allow for cleansing and sterilization of Reservoir in accordance with specifications	Item	L.S		
18.1.1.2	Allow for pressure testing, cleansing and sterilization of Pipework in accordance with specifications	Item	L.S		
18.1.1.3	Allow a P.C. Sum of Kshs.60,000 for ground investigation below the final surface	Item	P.C		
18.1.1.4	Allow % for profit, administration, attendance upon overheads etc. (% to be as per Appendix to Form of Tender)	%			
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.2	CLASS E: EARTHWORKS				
	The rates shall include for all strutting, shuttering, stabilizing the excavation faces, and keeping the excavation free of water by pumping, bailing or other means Bulk excavations and top soil stripping for all structures are measured under Bill No. 20 (Site & Ancillary Works). Excavate below stripped level to formation level in common material, part backfill after construction and remainder, cart away to tips or use as fill on site, all as directed by the Engineer.				
18.1.2.1	Maximum depth n.e. 1.0 m	m^3	144		
18.1.2.2	-Ditto- but maximum depth 1.0 m to 2.0 m	m^3	241		
18.1.2.3	-Ditto- but maximum depth 2.0 m to 3.0 m	m^3	240		
18.1.2.4	-Ditto- but maximum depth 3.0 m to 4.0 m	m^3	240		
18.1.2.5	-Ditto- but maximum depth exceeding 4.0 m	m^3	48		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.2.6	Transport approved excavated material from site and use as fill and compact in 200 mm layers as specified on site as and where directed by the Engineer. Compaction tests to be done and rates to include for this	m^3	144		
18.1.2.7	Provide approved hardcore material and compact in layers of 200 mm, blinded with final material 25 mm thick	m^3	45		
18.1.2.8	Extra over Items 2.1 to 2.2 for excavation in rock Class 'A', blasting not permitted (Provisional)	m^3	80		
18.1.2.9	-Ditto- for excavation in rock Class 'B', blasting not permitted (Provisional)	m^3	50		
18.1.2.10	-Ditto- for excavation in rock Class 'C', blasting not permitted (Provisional)	m^3	10		
18.1.3	CLASS F: IN SITU CONCRETE				
	Provision of Concrete				
	Provide materials and mix concrete to the specified class; cement to BS 12				
18.1.3.1	Designed mix; Grade C15; 40mm aggregate	m^3	45		
PAGE TOTAL CARRIED TO COLLECTION SHEET					-

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.3.2	Designed mix; Grade C25; 20mm aggregate	m^3	167		
	Placing of Concrete				
	Place, vibrate and cure concrete in the following elements of the structure as per details on drawings				
	Mass Concrete; Class 15/20				
18.1.3.3	Blinding under base slab; thickness 75mm	m^2	100		
	Reinforced Concrete; Class 25/20				
	Bases, Footings, Pipe Caps, and Ground Slabs; >150 Thickness <300mm				
18.1.3.4	Base slab laid to slopes	m^3	47		
18.1.3.5	columns and columns footings	m^3	2		
18.1.3.7	Base to overflow chamber	m^3	1		
	Suspended Slabs; Thickness >150 <300mm				
18.1.3.9	Top slab including all upstands	m^3	20		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
	Walls; Thickness >150 <300mm				
18.1.3.10	Main external walls	m^3	47		
8.1.3.12	Walls - washout sump	m^3	1		
	-				
88.1.3.13	Walls - overflow chamber	m^3	1		
	Walls; Thickness >300 <500mm				
18.1.3.14	Main external walls	m^3	83		
	Columns; Cross-Sectional Area >0.03 <0.1m²				
18.1.3.15	Columns excluding top flared heads	m^3	6		
18.1.4	CLASS G: CONCRETE ANCILLARIES				
	Dimensions as per details on Specific Structural Drawings				
	Formwork: Rough Finish; Plane Vertical				
18.1.4.1	External sides of base slab; width >0.2 ≤0.4m	m^2	21		
18.1.4.3	External sides of washout sumps: width exceeding 1.22m	m^2	4.5		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
	Formwork: Fair Finish; Plane Horizontal				
18.1.4.4	Soffit of overflow chambers; width >0.4 ≤1.22m	m^2	1.5		
18.1.4.5	Soffit of suspended slab; width exceeding 1.22m	m^2	158		
	Formwork: Fair Finish; Plane Sloping				
	(Provisional Items - Only if no-recoverable formwork is required)				
18.1.4.6	Splay in wall at overflow chamber; width >0.1 ≤0.2m	m	0.5		
18.1.4.7	Splay out base slab; width >0.2 ≤0.4m	m^2	21		
18.1.4.8	Splay in wall; width >0.2 ≤0.4m	m^2	816		
18.1.4.9	Splay at column heads; width >0.4 ≤1.22m	m^2	12		
	Formwork: Fair Finish; Plane Vertical				
18.1.4.10	Internal sides of washout sumps; width >0.4 ≤1.22m	m^2	2.5		
18.1.4.11	Inner sides of access manholes; width >0.4 ≤1.22m	m^2	5		
18.1.4.12	Both sides of overflow chamber; width exceeding 1.22m	m^2	55		
18.1.4.13	Outer side of access manholes upstands 300mm high; width exceeding 1.22m	m^2	7		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.4.14	Inner side of roof upstands 300mm high; width exceeding 1.22m	m^2	12		
18.1.4.15	Outer side of roof upstands 300mm high; width exceeding 1.22m	m^2	15		
	Walls				
18.1.4.15	External side	m^2	200		
18.1.4.16	Internal side; wall thickness 500mm	m^2	440		
18.1.4.17	Internal side; wall thickness 300mm	m^2	460		
18.1.4.18	Both sides of baffle walls	m^2	240		
	Formwork: Fair Finish; For Voids				
18.1.4.19	Large void depth n.e. 0.5m; 150mm dia. void for overflow	Nr	1		
	Formwork: Fair Finish; Concrete Components of Constant Cross-section				
	Columns				
18.1.4.20	Sides of columns; 450mm x 450mm - 25 No. columns	m	248		
	Other Members				
18.1.4.21	Sides of column bases; 1500mm x 1500mm - 25 No. bases	m	13		
18.1.4.22	50mm x 50mm rebates for manhole covers	m	8		
18.1.4.23	-Ditto but for overflow chamber cover	m	2		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.4.24	12mm dia. half round fillet for drip mould round soffit of roof slab overhang	m	21		
18.1.4.25	Fillet to form 25mm x 25mm chamfer for all roof slab upstands & manhole upstands	m	150		
18.1.4.26	Boxing out 1400mm x 1150mm holes in concrete wall of tank for inlet	Nr	1		
18.1.4.27	-Ditto - but size 1000mm x 350mm for overflow	Nr	1		
18.1.4.28	Boxing out 250mm dia. hole in concrete wall of sump in tank & making good after installation of pipework	Nr	1		
18.1.4.29	-Ditto - but size 400mm dia. hole in base of overflow chamber	Nr	1		
18.1.4.30	-Ditto - but size 1020mm x 1020mm hole in roof slab of tank	Nr	4		
	<u>Reinforcement; Deformed High Yield Steel Bars to BS4449</u>				
	Rate to include for cutting, bending, supporting, trying and securing reinforcement				
18.1.4.31	Normal size 8mm	Kg	839		
18.1.4.32	Normal size10mm	Kg	2012		
18.1.4.32	Normal size 12mm	Kg	5031		
18.1.4.33	Normal size 16mm	Kg	939		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.4.34	Normal size 20mm	Kg	4025		
18.1.4.35	Steel fabric to BS4483: A252 square mesh; nominal mass 3 - 4 kg/m²	m²	158		
	Construction Joints				
	Provide and install the following waterstops in construction joints including all surface treatment, formwork, forming of rebate and sealing of rebate with polysuphide sealant, all as per drawings and specification				
18.1.4.36	Open surface with filler; average width n.e. 0.5m	m²	52		
18.1.4.37	Formed surface with filler; average width n.e. 0.5m	m²	45		
18.1.4.38	Plastic horizontal water stops; rear guard type, width 200mm	m	500		
18.1.4.39	Plastic vertical waterstops, width 200mm	m	410		
18.1.4.40	Sealed 20mm x 20mm rebates with polysuphide joint sealant	m	850		
	Miscellaneous Work(including provision and laying)				
	-				
18.1.4.41	500 gauge polythene sheeting on blinding below base slab	m²	110		
	-				
18.1.4.42	Average 150mm thick layer of pumice on roof slab	m²	105		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.5	CLASS H: PRECAST CONCRETE				
	Precast concrete Class 25/20 finished fair on all surfaces and reinforced with one layer steel mesh fabric reinforcement BRC No. A141. Provide and fix:				
18.1.5.1	75mm thick cover slab size750mm long x 400mm wide including 2nr mild steel key holes cast with slab constructed as per details on Drg. IS/WS/CT/002	Nr	12		
	-				
18.1.6	CLASS J: PIPEWORK - FITTINGS AND VALVES				
	Supply, Transport to Site & Store in Secure Place Including Jointing Material, Bolts, Gaskets, Packing, Jointing Glues, etc., As Applicable				
	All Diameters are Nominal				
	Ref Drgs Nos. IS/WS/CT/003				
	Approved Lined Ferrous Pipes Fittings to NP 16				
	INLET PIPE WORK - Ferrous Pipes Fittings & Valves				
	-				
18.1.5.1	200mm All flanged Tee with Puddle Flange (Mark 1)	Nr	1		
	-				
18.1.6.2	200mm dia. 90° double flanged bendswith puddle flange 200mm from one end (Mark 2)	Nr	1		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.6.3	200mm dia. double flanged pipe, length 2900mm (Mark 3)	Nr	1		
18.1.6.4	200mm dia. 90° double flanged bends with duck foot band (Mark 4)	Nr	1		
18.1.6.5A	200mm Flanged Spigot Pipe with puddle flange 1890mm from flanged end.(Mark 5)	Nr	1		
18.1.6.5	200mm dia. flange adaptor (Mark 6)	Nr	1		
18.1.6.6	200mm dia. double flanged Sluice valve, to BS 5163 - hand operated, EUROPAM Series 302 or approved equivalent (In chamber) (Mark 7)	Nr	1		
18.1.6.7	200mm dia. flanged Spigot pipe, 3900mm long with puddle flange at 1620mm from spigot end (Mark 8)	Nr	1		
18.1.6.8	200mm dia. couplings (Mark 9)	Nr	1		
	<u>Overflow Ferrous Pipe Fittings</u>				
18.1.6.9	200mm dia. flanged spigot pipe 420mm length, with puddle flange at 120mm from spigot end (Mark A)	Nr	1		
18.1.5.10	200mm dia. 45° double flanged bend (Mark B)	Nr	1		
18.1.5.11	200mm dia. flanged spigot pipe 2000mm length, with spigot end beveled. (Mark C)	Nr	1		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
	Washout Ferrous Pipe Fittings				
18.1.5.12	150mm dia. flanged spigot pipe 6200mm length, with puddle flange at 120mm from spigot end (Mark D)	Nr	1		
18.1.5.13	150mm dia. double flanged gate valve,hand operated to BS 5163, EURO 20 Type 23 (short face to face) or approved equivalent (Mark E)	Nr	1		
18.1.5.14	150mm dia. single flanged 90^0 bend (Mark F)	Nr	1		
	Transport From Site Store, Install, Test & Commission. Include for Excavation & Backfilling of Pipe Trenches Where Applicable.				
	Outlet Ferrous Pipes Fittings & Valves				
18.1.5.15	200mm dia. special flanged bellmouth with puddle flange 425mm from the bellmouth end (Mark 1)	Nr	1		
18.1.5.16	200mm dia. 90° double flanged bends (Mark 2)	Nr	1		
18.1.5.17	200mm dia. double flanged pipe, length 5300mm (Mark 3)	Nr	1		
18.1.5.18	200mm dia. flanged spigot pipe, length 1865mm, with puddle flange at 1260mm from spigot end (Mark 4)	Nr	1		
18.1.5.19	200mm dia. flange adaptors (Mark 5)	Nr	1		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.6.20	200mm dia. double flanged sluice valve, to BS 5163 - hand operated, EURO 20 Type 23 (short face to face) or approved equivalent (In chamber) (Mark 6)	Nr	1		
18.1.6.21	200mm dia. flanged Spigot pipe, 3900mm long with puddle flange 1620mm from spigot end (Mark 7)	Nr	1		
18.1.6.22	200mm dia. couplings (Mark 8)	Nr	1		
	Overflow Ferrous Pipe Fittings				
18.1.6.23	200mm dia. flanged spigot pipe 420mm length, with puddle flange at 120mm from spigot end (Mark A)	Nr	1		
18.1.6.24	200mm dia. 45° double flanged bend (Mark B)	Nr	1		
18.1.6.25	200mm dia. flanged spigot pipe 2000mm length, with spigot end beveled. (Mark C)	Nr	1		
	Washout Ferrous Pipe Fittings				
	-				
18.1.6.26	150mm dia. flanged spigot pipe 6200mm length, with puddle flange at 120mm from spigot end (Mark D)	Nr	1		
18.1.6.27	150mm dia. double flanged gate valve,hand operated to BS 5163, EUROPAM Series 302 or approved equivalent (Mark E)	Nr	1		
	-				
18.1.6.28	150mm dia. single flanged 90^0 bend (Mark F)	Nr	1		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
18.1.7	PIPEWORK - SUPPORTS AND PROTECTION, ANCILLARIES TO LAYING AND EXCAVATION				
	Provide and place:				
18.1.7.1	Mass Concrete Class 15/20 surround to washout pipe diameter 150mm to pipes; pipe nominal bore 300mm - 600mm	m	2.5		
18.1.7.2	-Dito - but outlet pipe, diameter 200mm	m	2.1		
	Concrete Class 20/20 in Stools and Thrust blocks				
18.1.7.3	Nominal bore 200 - 600mm; volume n.e. 0.1m³	Nr	2		
18.1.8	CLASS N: MISCELLANEOUS METALWORK				
	Rate to include supply and fixing, inclusive of foundations where applicable				
18.1.8.1	Galvanised mild steel internal ladders with stringers returned to form handrails as per detail on Drg No,IS/SD/015	m	12		
18.1.8.2	Lockable mild steel checkered plate covers for access manholes as per detail on Drg No. IS/SD/015	Nr	2		
18.1.9	CLASS X: MISCELLANEOUS WORK				
18.1.9.1	Provide and fix vent pipes as shown on the drawings	Nr	6		
18.1.9.2	Provide & lay 300mm wide x 12mm thick rubberoid layer between wall & roof slab.	m	85		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
	Provide the following to allow accessibility to the tank site;				
18.1.9.3	Gravel access road 3m wide 0.15m Gravel on 0.5m base.	km	1		
	Fencing				
	_				
18.1.9.4	Provide all materials and construct acess gate and chainlink fence around the storage tank site . Include for straining at every third post.	m	225		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

8. Bill of quantities A: Dam component, Add bill no.12 as below.

BILL No. 12: INTAKE TOWER FOOT BRIDGE

ITEM	DESCRIPTION	UNIT	QTY	RATE (Ksh.)	AMOUNT (Ksh.)
12.1	**CLASS E: EARTHWORKS**				
	The rates shall include for all strutting, shuttering, stabilizing the excavation faces				
	Excavate from formed level to formation level in material, S(see specifications)part backfill after construction and remainder, cart away to tips or use as fill on site, all as directed by the Engineer.				
12.1.1	Maximum depth n.e. 1.0 m	m^3	1500		
12.1.2	-Ditto- but maximum depth 1.0 m to 2.0 m	m^3	750		
12.1.3	-Ditto- but maximum depth 2.0 m to 3.0 m	m^3	750		
12.1.4	Transport approved excavated material from site and use as fill and compact in 200 mm layers as specified on site as and where directed by the Engineer. Compaction tests to be done and rates to include for this	m^3	150		
12.2	**CLASS F: IN SITU CONCRETE**				
	Provision of Concrete				
	Provide materials and mix concrete to the specified class; cement to BS 12				
	Placing of Concrete				
	Place, vibrate and cure concrete in the following elements of the structure as per details on drawings				
	Mass Concrete; Class 15/20				
12.2.1	Blinding under column footing thickness 75mm	m^3	38		
12.2.2	Blinding under abutment and wing wall footing thickness 75mm	m^3	5		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
	Reinforced Concrete; Class 25/20				
	Footings				
12.2.3	Bases to columns	m^3	450		
	Columns				
12.2.4	Columns including top flared heads	m^3	650		
	Abutment				
12.2.4	Abutment including top flared heads	m^3	30		
	-				
12.3	**CLASS G: CONCRETE ANCILLARIES**				
	FORMWORK - F3 FINISH				
	Provide and fix shuttering including propping, strutting and striking all to F3 finish as per the specification				
	Vertical Formwork- Columns				
	(i) Formed surface F3				
12.31.	Sides of Column footings	m^2	180		
12.3.2	Sides of Columns	m^2	1350		
	(ii) Unformed surface F3				
12.3.3	Columns	m^2	20		
12.4	**Reinforcement**				
	Reinforcement; Deformed High Yield Steel Bars to BS4449				
	Rate to include for cutting, bending, supporting, trying and securing reinforcement				
12.4.1	Normal size up to 12mm	Kg	115500		
12.4.2	Normal size above 12mm	Kg	49500		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
12.5	**Construction Joints**				
	Provide and install the following waterstops in construction joints including all surface treatment, formwork, forming of rebate and sealing of rebate with polysuphide sealant, all as per drawings and specification				
12.5.1	Open surface with filler; average width n.e. 0.5m	m^2	45		
12.6	**FOOT BRIDGE STEEL FITTINGS**				
	Fabrication, shop painting, delivery to site and installation of structural steelwork complete with splicing joints, plates, bolts, angles and welds as shown on drawings the following:-				
12.6.1	Fabricate, shop paint, deliver to site, and install 250 x 150 x 10mm Rectangular Hollow Section (RHS).	Ton	36		
12.6.2	Fabricate, shop paint, deliver to site, and install 457 x 191 x 82mm Universal Beam (UB).	Ton	27		
12.6.3	Fabricate, shop paint, deliver to site, and install 203x152mm joist.	Ton	30		
12.6.4	Fabricate, shop paint, deliver to site, and install Chequered plate 10mm thick.	Ton	42		
12.6.5	Fabricate, shop paint, deliver to site, and install 120 x 120 x 4mm RHS.	Ton	6		
PAGE TOTAL CARRIED TO COLLECTION SHEET					

Item No.	DESCRIPTION	Unit	Qty	Rate	Amount
	BILL NO 12 COLLECTION				
	BILL No. 12: TOTAL CARRIED FORWARD TO GRAND SUMMARY				