

JAPAN INTERNATIONAL COOPERATION AGENCY

THE GOVERNMENT OF THE HASHEMITE KINGDOM OF JORDAN THE MINISTRY OF TOURISM AND ANTIQUITIES THE MINISTRY OF PLANNING

DRAFT
TENDER DOCUMENTS
FOR
CONSTRUCTION

OF

DEAD SEA PARKWAY SUB-PROJECTTHE TOURISM SECTOR DEVELOPMENT PROJECT

PRICED BILL OF QUANTITIES

August 2000

Pacific Consultants International Yamashita Sekkei Inc.

BILL OF QUANTITIES

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PREAMBLE PRELIMINARIES BILL OF QUANTITIES

PREAMBLE

Preamble to Bill of Quantities

- 1. The Bills of Quantities shall be read in conjunction with the Instructions to Tenderers, Conditions of Contract, Technical Specifications, Drawings and all other Contract Documents.
- 2. The Contractor has to take into consideration that detailed Geotechnical Investigation is to be carried out by him as shown in the Design Drawings to cover the first 5.5km of the road, Bridges and all other structures' locations to fully satisfy himself of the nature of the area and to the approval of the Engineer. The Contractor and based on the results of the Geotechnical Investigations has to prepare detailed shop drawings (and re-design if necessary) showing all revised cut and fill slopes, protection measures needed, re-alignment of the route (if found necessary) and all other design parameters all to the approval of the Engineer. The Contractor shall not be paid for all the above as it will be considered subsidiary works the cost of which shall be deemed by other pay items in the Bills of Quantities. Furthermore, the Contractor shall not have the right to claim for changes in paid items quantities as he will be paid only for the new measured quantities resulting from the revised design drawings (if needed) and field measurements.
- 3. The quantities given in the Bill of Quantities are estimated, and are given to provide a common basis for bidding. The basis of payment will be actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rate and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
- 4. Without affecting the generality of the foregoing provision, the rates and prices entered in the Bill of Quantities shall include the cost of the following:
 - (i) The provision, storage, transport, use and maintenance of all materials, equipment, machinery and tools.
 - (ii) The provision of all staff and labour including provision and maintenance of their accommodation, transport etc. and other requirements.
 - (iii) Setting out, measuring, inspection and supervision.
 - (iv) The provision, transport, use and maintenance of all consumable stores, fuel, water, drainage, electricity and telephones, including those required under the Contract by the Engineer and his staff.
 - (v) Damage caused to the Works under construction, plant, materials and consumable stores by weather conditions.

- (vi) The provision, erection and removal of all the Contractor's offices, plant, yards, stores and temporary works, including fencing, watching, lighting, and all site restrictions.
- (vii) Repairs to the Works during the Defects Notice Period.
- 5. A rate or price shall be entered against each item in the priced Bill of Quantities, where quantities are stated. The cost of items with quantities against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
- 6. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related items of work.
- 7. The Contractor must not price any item for which no quantity is assigned.
- 8. General directions and description of work and materials are not necessarily repeated nor summarised in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering prices against each item in the priced Bill of Quantities.
- 9. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part or not at all at the direction and discretion of the Engineer.
- 10. The Employer will correct any arithmetical errors in computation or summation as follows:
 - (i) where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and
 - (ii) where there is a discrepancy between the unit rate and total amount derived from the multiplication of the unit rates and the quantity, the unit rate as quoted will govern, unless in the opinion of the Employer, there is an obviously gross misplacement of the decimal point in the unit rate, in which event the total amount as quoted will govern and the unit rate will be corrected.
- 11. All items of work indicated in the Bill of Quantities shall be valued by measuring net, in the units of the Bill of Quantities such actual quantities of the Permanent Works as have been executed strictly in accordance with the Tender Documents or further instructions issued in writing by the Engineer. No works shall be valued which have been executed in excess of the dimensions shown on the Drawings or ordered by the Engineer.
- 12. It is required that all roadways be kept open and access to private properties maintained at all times for the duration of construction, and the Contractor

should have allowed for this in his rates.

13. In the Bill of Quantities, additional haulage will only be certified for those items expressly specified. All other haulage will be deemed to be included in the unit rates.

14. Abbreviations for units of measurement used herein shall have the following meanings:

Abbreviation	Meaning
mm	Millimetre
cm	Centimetre
m	Metre
km	Kilometre
m ² or sq.m.	Square metre
m ³ or cu.m.	Cubic metre
kg	Kilogramme
ton	Metric tonne (1000 kg)
No.	Number
Ltr.	Litre
L.S.	Lump Sum
P.S.	Provisional Sum
P.C.	Prime Cost

THE TOURISM SECTOR DEVELOPMENT PROJECT DEAD SEA PARKWAY SUB-PROJECT **PRELIMINARIES** Item Description of Work Unit Quantity Rate Amount BILL NO. 1 PRELIMINARIES FOR THE WORK **GENERAL PRINCIPLES** A The descriptions of work and the like descriptive items given throughout the Bill of Quantities must not be construed as being construed as being complete but must be taken only as an indication of the extent of such work. The Contractor shall be deemed to have also read all other related documents, schedules, specifications, amendments and all available drawings and sketches such as to be fully aware of the full extent of the Works. B All clauses in this Preliminaries Bill apply to the whole of the Works contained in these Bill of Quantities and the Contractor's prices shall be deemed to apply to the whole of the Works executed under the Contract including all variations to the Contract. C The Contractor shall be deemed to have allowed in his Tender for all costs in respect of all items described in this Preliminaries Bill. D In the absence of a price against any clause in this Preliminaries Bill, any costs in connection therewith shall be deemed to have been included elsewhere in the Contract Price. E In the computation of the Final Contract Price, following completion of the Works, no adjustment to the pricing will be made for items in this Preliminaries Bill. Any price entered in this Preliminaries Bill shall be at the sole risk of the Contractor. No claim shall be considered for additional Preliminaries items due to variations even when an extension of time has been granted. In the event that no amount is inserted for any given clause in this Preliminaries Bill, then nothing will be specifically included in any payment certificates in respect of such clause. The Contractor will be required to provide an itemized breakdown for items in this Preliminaries Bill in the event that a lump sum has been tendered against this section.

Total to Preliminaries for the Work Collection Page

<u> </u>		77			MINARIES
Item	Description of Work	Unit	Quantity	Rate	Amount
В	GENERAL PRINCIPLES (cont'd) That proportion of any amount entered against an item in this Preliminaries Bill in respect of which substantial or whole payment might normally fall upon Contract commencement but which cannot be substantiated by the Contractor will be distributed evenly over the period within which the Works are to be completed. The price entered against items in this Preliminaries Bill involving continuous expenditure or time-related cost (plant, supervision, etc) will be certified for payment over the period within which the Works are to be completed in direct proportion to the value of the Contractor's measured work certified (ie, the value of work executed less Preliminaries, Prime Cost and Provisional Sums)				
С	Documents forming the Contract are to be taken as mutually explanatory; the amounts entered against the Preliminaries items and the measured work sections of the Bills of Quantities shall be deemed to fully allow for complying with all the requirements of the Conditions of Contract, Drawings, Specifications, and Bills of Quantities.				
	Pricing generally				
D	The rates and prices in the Bill of Quantities shall be deemed to include, but not be limited to the cost of all labour (including future wage increases other than Government mandated wage increases), materials, goods and equipment all cutting and waste, duties, royalties, packing, freight, shipping insurances, warehousing or other storage cost, delivery to the Site, hoisting and fixing in the required position, plant, supervision, increased costs, currency exchange rate fluctuations, profit and all else necessary for the carrying out of all the Contract requirements including the timely and satisfactory completion of the entire Works contained, both expressly and implicitly, within the Contract.				
Е	The Contract shall be deemed to include for all Government taxes and import duties, fees, License Total to Preliminaries for the Work Collection Page				

Item	Description of Work	Unit	Quantity	Rate	Amount	
Rom	Deben phon of West					
	GENERAL PRINCIPLES (cont'd)					
	,					
Α	For the avoidance of doubt, no claim shall be considered					
	which arises from increases in the wages and / or other					
	emoluments and expenses of any kind payable to workmen					
	(other than Government-mandated wage increases), or					
	from the increased cost of such increases coming into					
	effect after the acceptance of the Contractor's Tender.					
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	To all'Allende Ale Conservation the Contractor shall be decome					
В	In addition to the foregoing the Contractor shall be deemed					
	to have satisfied himself prior to submitting his Tender, as					
	to the meaning and import of every item of work included			<u> </u>		
	in these Bill of Quantities, and the rates and prices inserted by him shall be deemed to cover the entire cost of all his					
	obligations and liabilities under the Contract and all				·	
	matters and things necessary for the proper construction,	l				
	completion and maintenance of the Works including but					
	not by way of limitation, all temporary work required					
	(including any that may be required by Sub-Contractors,					
	Nominated or otherwise); the provision and use of all					
	mechanical and non-mechanical plant required for the					
	expeditious carrying out of the Works in their proper					
1	sequence, shifting, altering and adapting such temporary	İ				
	work and plant as may be required during the progress of					
	the Works, removing at completion and making good any					
	work disturbed,					
	all necessary guarantees and bonds, the cost of preparing					
	the Tender, the work in connection with measurement,	İ				
	remeasurement and computation of the Final Contract					
1	Price, other establishment charges and on costs.	1				
_						
C	The Tenderer must price each and every item and clause it	1				
	the Bill of Quantities which he considers has a value. If					
	any items or clauses are not priced, it shall be deemed that					
	they have no value or, that their value has been spread					
	throughout the rates and prices for other items and clauses	1				
	No claim for payment in respect of unpriced items or					
	clauses will be admitted.					
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	Total to Preliminaries for the Work Collection Page					

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Item	Description of Work	Unit	Quantity	Rate	Amount
	GENERAL PRINCIPLES (cont'd)				
A	After having been awarded the Contract, the selected Contractor will be required to provide the Engineer with a full and detailed breakdown of the Contract Price. The Contract Price breakdown is to show the actual calculations of the Preliminaries pricing and the labour, plant and material cost of the Works, together with a build up for each of the key measured rates in each trade, element or section, and showing all on-costs, overheads and profit and any other allowances used to arrive at the Contract Price.				
В	Any unauthorized alterations made to the text or to any quantity in these Bills of Quantities will be ignored and the original text or quantity shall prevail in all cases of unauthorized alteration.				
С	The descriptions included in the Bill of Quantities in respect of the workmanship and materials requirements are not necessary complete. Tenderers are referred to the Drawings, Specifications, Conditions of Contract and other documents and information for further details concerning the Works and for specific requirements in respect of any given item of work. No claim or variation will be admissible on accoun of the Contractor's misunderstanding in connection with the foregoing or for any error in his Tender or for his failure to acquaint himself or to have acquainted himself with such other documents and information as are referred to above.				
	Total to Preliminaries for the Work Collection Page				

Item	Γ	Description of Work	Unit	Quantity	Rate	MINARIES Amount
	CON	NDITIONS OF CONTRACT				
	PAR	<u>т I & П</u>				
A	1.1	Definitions				
В	1.2	Headings and Marginal Notes				
С	1.3	Interpretation				
D	1.4	Singular and Plural				
E	1.5	Notices, Consents, Approvals, Certificates and Determinations				
F	2.1	Engineer's Duties and Authority				
G	2.2	Engineer's Representative				
Н	2.3	Engineer's Authority to Delegate				
I	2.4	Appointment of Assistants				
J	2.5	Instructions in Writing				
K	2.6	Engineer to Act Impartially				
L	3.1	Assignment of Contract				
M	4.1	Subcontracting				
N	4.2	Assignment of Subcontractor's Obligations				
0	5.1	Languages and Law				
P	5.2	Priority of Contract Documents				
Q	6.1	Custody and Supply of Drawings and Documents				
R	6.2	One Copy of Drawings to be kept on Site				
S	6.3	Disruption of Progress				
Т	6.4	Delays and Cost of Delay of Drawings				
U	6.5	Failure by Contractor to Submit Drawings				
V	7.1	Supplementary Drawings and Instructions				
	Tota	l to Preliminaries for the Work Collection Page				l

Item	Description of Work	Unit	Quantity	Rate	Amount
	CONDITIONS OF CONTRACT PART I & II (CONT'D)				
A	7.2 Permanent Works Designed by Contractor				
В	7.3 Responsibility Unaffected by Approval				
С	8.1 Contractor's General Responsibilities				
D	8.2 Site Operations and Methods of Construction				
E	9.1 Contract Agreement				
F	10.1 Performance Security				
G	10.2 Time Allotted for Submission				
н	10.3 Claims under Performance Security				
I	11.1 Inspection of Site				
J	12.1 Sufficiency of Tender				
K	12.2 Adverse Physical Obstructions or Conditions				
L	13.1 Work to be in Accordance with Contract				
М	14.1 Programme to be Submitted				
N	14.2 Revised Programme				
0	14.3 Cash Flow Estimate to be Submitted				
P	14.4 Contractor not Relieved of Duties or Responsibilities				
Q	15.1 Contractor's Superintendence				
R	16.1 Contractor's Employees				
s	16.2 Engineer at Liberty to Object				
Т	17.1 Setting-Out				
U	18.1 Boreholes and Exploratory Excavation				
V	19.1 Safety, Security and Protection of the Environment				
w	19.2 Employer's Responsibilities				
	Total to Preliminaries for the Work Collection Page				

Item	Description of Work	Unit	Quantity	Rate	MINARIES Amount
Hem	CONDITIONS OF CONTRACT	Omi	Quantity		
	PART I & II (CONT'D)				
Α	20.1 Care of Works				
В	20.2 Responsibility to Rectify Loss or Damage				
С	20.3 Loss or Damage Due to Employer's Risks				
D	20.4 Employer's Risks				
Е	21.1 Insurance of the Works and Contractor's Equipment				
F	21.2 Scope of Cover				
G	21.3 Responsibility for amounts not received				
Н	21.4 Exclusions				
I	22.1 Damage to Persons and Property				
J	22.2 Exceptions				
K	22.3 Indemnity by Employer				
L	23.1 Third Party Insurance (including Employer's Property)				
М	23.2 Minimum Amount of Insurance				
N	23.3 Cross Liabilities				
0	24.1 Accident or Injury to Workmen				
P	24.2 Insurance Against Accident to Workmen				
Q	25.1 Evidence and Terms of Insurances	·			
R	25.2 Adequacy of Insurances				
S	25.3 Remedy on Contractor's Failure to Insure				
Т	25.4 Compliance with Policy Conditions				
U	26.1 Compliance with Statutes, Regulations				
V	27.1 Fossils				
w	28.1 Patent Rights				
	Total to Preliminaries for the Work Collection Page				

Item	Description of Work	Unit	Quantity	Rate	MINARIES Amount
Item	CONDITIONS OF CONTRACT PART I & II (CONT'D)				
A	28.2 Royalties				
В	29.1 Interference with Traffic and Adjoining Properties				
С	30.1 Avoidance of Damage to Roads				
D	30.2 Transport of Contractor's Equipment or Temporary Works				
E	30.3 Transport of Materials or Plant				
F	30.4 Waterborne Traffic				
G	31.1 Opportunities for Other Contractors				
Н	31.2 Facilities for Other Contractors			7	
I	32.1 Contractor to Keep Site Clear				
J	33.1 Clearance of Site on Completion				
K	34.1 Engagement of Staff and Labour			-	
L	34.2 Supply of Water				
M	34.3 Observance by Sub-Contractors				
N	35.1 Returns of Labour and Contractor's Equipment				
0	36.1 Quality of Materials, Plant and Workmanship				
P	36.2 Cost of Samples				
Q	36.3 Cost of Tests				
R	36.4 Cost of Tests not Provided for				
S	36.5 Engineer's Determination where Tests not Provided for				
Т	37.1 Inspection of Operations				
U	37.2 Inspection and Testing				
V	37.3 Dates for Inspection and Testing				
	Total to Preliminaries for the Work Collection Page				

Ţ.	Description of Work	Unit	Quantity	Rate	MINARIES Amount
Item	Description of Work	Ont	Qualitity	Nate	Anodik
	CONDITIONS OF CONTRACT PART I & II (CONT'D)				
A	37.4 Rejection				
В	37.5 Independent Inspection				
С	38.1 Examination of Work before Covering up				
D	38.2 Uncovering and Making Openings				
Е	39.1 Removal of Improper Work, Materials or Plant				
F	39.2 Default of Contractor in Compliance				
G	40.1 Suspension of Work				
Н	40.2 Engineer's Determination following Suspension				
I	40.3 Suspension Lasting more than 84 Days				
Ј	41.1 Commencement of Works				
K	42.1 Possession of Site and Access Thereto				
L	42.2 Failure to Give Possession				
M	42.3 Wayleaves and Facilities				
N	43.1 Time for Completion				
0	44.1 Extension of Time for Completion				
P	44.2 Contractor to Provide Notification and Detailed Particulars				
Q	44.3 Interim Determination of Extension				
R	45.1 Restriction on Working Hours				
s	46.1 Rate of Progress				
Т	47.1 Liquidated Damages for Delay				
U	47.2 Reduction of Liquidated Damages				
V	48.1 Taking-Over Certificate				
w	48.2 Taking-Over of Sections or Parts				
x	48.3 Substantial Completion of Parts				
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Item	Description of Work	Unit	Quantity	Rate	Amount
	CONDITIONS OF CONTRACT PART I & II (CONT'D)				
A	48.4 Surfaces Requiring Reinstatement				
В	49.1 Defects Liability Period				
С	49.2 Completion of Outstanding Work and Remedying Defects				
D	49.3 Cost of Remedying Defects				
Е	49.4 Contractor's Failure to Carry Out Instructions				
F	50.1 Contractor to Search				
G	51.1 Variations				
Н	51.2 Instructions for Variations				
I	52.1 Valuation of Variations				
J	52.2 Power of Engineer to Fix Rates				
K	52.3 Variations Exceeding 20 percent				
L	52.4 Daywork				
M	53.1 Notice of Claims				
N	53.2 Contemporary Records				
0	53.3 Substantiation of Claims				
P	53.4 Failure to Comply				
Q	53.5 Payment of Claims				
R	54.1 Contractor's Equipment, Temporary Works and Materials; Exclusive Use for the Works				
s	54.2 Employer not Liable for Damage				
Т	54.3 Customs Clearance				
U	54.4 Re-export of Contractor's Equipment				
V	54.5 Conditions of Hire of Contractor's Equipment				
w	54.6 Costs for the Purpose of Clause 63				
x	54.7 Incorporation of Clause in Subcontracts				
	Total to Preliminaries for the Work Collection Page				

Item	Description of Work	Unit	Quantity	Rate	Amount			
	CONDITIONS OF CONTRACT PART I & II (CONT'D)							
A	54.8 Approval of Materials not Implied							
В	54.9 Contractor's Equipment, Temporary Works, Plant and Materials after Completion of the Works							
С	55.1 Quantities							
D	56.1 Works to be Measured							
E	57.1 Method of Measurement							
F	57.2 Breakdown of Lump Sum Items							
G	58.1 Definition of "Provisional Sum"							
Н	58.2 Use of Provisional Sums							
I	58.3 Production of Vouchers							
J	59.1 Definition of "Nominated Subcontractors"							
K	59.2 Nominated Subcontractors; Objection to Nomination	1						
L	59.3 Design Requirements to be Expressly Stated		-					
M	59.4 Payments to Nominated Subcontractors							
N	59.5 Certification of Payments to Nominated Subcontractors							
0	60.1 Monthly Statements							
P	60.2 Monthly Payments							
Q	60.3 Payment of Retention Money							
R	60.4 Correction of Certificates							
S	60.5 Statement at Completion							
Т	60.6 Final Statement							
U	60.7 Discharge							
V	60.8 Final Certificate							
w	60.9 Cessation of Employer's Liability							
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Item	Description of Work	Unit	Quantity	Rate	Amount
	CONDITIONS OF CONTRACT PART I & II (CONT'D)				
A	60.10 Time for Payment				
В	60.11 Advances on Contractor's Equipment, Plant and Materials				
С	61.1 Approval only by Defects Liability Certificate				
D	62.1 Defects Liability Certificate				
Е	62.2 Unfulfilled Obligations				
F	63.1 Default of Contractor				
G	63.2 Valuation at Date of Termination				
Н	63.3 Payment after Termination				
I	63.4 Assignment of Benefit of Agreement				
J	64.1 Urgent Remedial Work				
K	65.1 No Liability for Special Risks				
L	65.2 Special Risks				
М	65.3 Damage to Works by Special Risks				
N	65.4 Projectile, Missile				
0	65.5 Increased Costs arising from Special Risks				
P	65.6 Outbreak of War				
Q	65.7 Removal of Contractor's Equipment on Termination				
R	65.8 Payment if Contract Terminated				
S	66.1 Payment in Event of Release from Performance				
Т	67.1 Engineer's Decision				
U	67.2 Amicable Settlement				
V	67.3 Amicable Settlement				
w	67.4 Failure to Comply with Engineer's Decision				
	Total to Preliminaries for the Work Collection Page				

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Item	Description of Work	Unit	Quantity	Rate	Amount
	CONDITIONS OF CONTRACT PART I & II (CONT'D)	·			
A	68.1 Notice to Contractor				
В	68.2 Notice to Employer and Engineer				
С	68.3 Change of Address				
D	69.1 Default of Employer				
Е	69.2 Removal of Contractor's Equipment				
F	69.3 Payment on Termination		·		
G	69.4 Contractor's Entitlement to Suspend Work				
Н	69.5 Resumption of Work				
I	70.1 Increase or Declease of Cost				
J	70.2 Subsequent Legislation				
K	70.3 Official Changes in Price of Materials				
L	70.4 No Compensation				
M	71.1 Currency Restrictions				
N	72.1 Rates of Exchange				
0	72.2 Currency Proportions				
P	72.3 Currencies of Payment for Provisional Sums				
Q	73.1 Structural Warranty				
R	74.1 Use of Explosives				
S	75.1 Income Tax and Other Dues				
Т	75.2 No Exemption from Dues				
U	76.1 Bribery				
V	77.1 Import and Customs Laws and Regulations				
w	78.1 Privacy of Information				
X	79.1 Exemptions and Temporary Entry				
Y	80.1 Termination for Convenience of the Employer				
-	Total to Preliminaries for the Work Collection Page	1	<u> </u>	1	
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Item	Description of Work	Unit	Quantity	Rate	Amount
	<u>SPECIFICATIONS</u>				
	Standard Specifications (Highway and Bridge Constru	 ction) 			
Α	Part 1 General Provisions				
В	Part 2 Earthworks				
С	Part 3 Sub-base and Base Courses				
D	Part 4 Bituminous Construction				
E	Part 5 Concrete, Steel and Structures				
F	Part 6 Lighting, Traffic Signals & Electrical Installations				
G	Part 7 Land Scaping & Irrigation				
Н	Part 8 Incidental Construction				
	Special Specifications				
I	Part 1 General Provisions				
J	Part 2 Earthworks				
K	Part 3 Sub-base and Base Courses				
L	Part 4 Bituminous Construction				
М	Part 5 Concrete, Steel and Structures				
N	Part 7 Landscaping and Stone Assemblies				
0	Part 8 Incidental Construction				
	Total to Preliminaries for the Work Collection Page				

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Item		Unit	Quantity	Rate	Amount
	SITE AND INSPECTION				
	A				
	Access and restrictions				
١.					
Α	The Contractor shall be solely responsible for all matters				
	regarding access to the Site including making his own				
	arrangements for same; the Employer is unable to				
	guarantee the availability of any particular access route to				
l	or any particular access point into the Site.				
1					
В	The access ways are to be kept clear and free from				
	obstructions and the Contractor shall be deemed to have				
	allowed in his Tender for repairing at his own expense, on				
	completion of the Works, any damage to the existing				
	entrance, pavement, etc.				
	entrance, bavement, etc.				
l c	Equipment and materials required for use on the Site may				
ľ	not be parked, stored or left in or over the streets adjacent				
	to the Site.				
	to the Site.				
D	Where pollution could result from the carrying out of the				
"	Works, suitable damping or other effective measures are to				
			-		
	be taken to prevent the spread of same beyond the Site		1		
	boundaries.		1		
Б	A account of the City shall be limited as dimested by the				
E	Access to the Site shall be limited as directed by the				
	Engineer, the Employer or their authorized				
	representatives.				
	No other entry points will be allowed. Delivery schedules				
	shall be submitted for approval to the Engineer prior to				
	any delivery of materials, goods, and equipment being				
1	made.	1			
	The Contractor shall also take care during the loading of				
	debris / waste, etc or unloading of materials for the Works				
	to ensure that areas are not obstructed or traffic impeded,	l			
	and he must comply with the instructions given in this	1			
	respect by the Engineer, Employer, and their authorized				
	representatives.				
F	The Contractor shall be responsible for making his own		Į		
	arrangements for access to the Site and he shall deemed to				
	have allowed for any disruption, restriction on access to				
	the areas and / or access point to the Site, temporary road	l			
	closures, re-routings or diversions or any other matter				
	which may arise in connection with access.				
	· ·]
	No claims for additional expenses or extension of time wi	}			
	be entertained in connection with the foregoing. will be				
	entertained in connection with the foregoing. The				
1	Tenderers particular attention is drawn to the fact that no				
	queuing of the Contractor's traffic will be allowed and that	1			
	all existing roads are common access roads and shall be				
	shared with the general public.	}			
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L	Total to Preliminaries for the Work Collection Page				L

T4 .	Description of Wal-	I In:	Quantity	Rate	MINARIES Amount				
Item	Description of Work Site visit	Unit	Quantity	Rate	Aillouit				
	SITE ATOIT								
$ _{\mathbf{A}} $	Tenderers are advised to visit the Site of the Works and								
	make themselves thoroughly acquainted with the location,								
	general Site conditions, type of soil to be excavated,								
	accessibility storage space, restrictions for loading and off								
	loading materials etc and any other conditions which may								
	affect their Tender.								
	affect their relider.								
В	Tenderers are advised to pay particular attention to the								
	extent of the Works to be executed on the Site.								
	No claim for extra payment or extension of time for								
	completion of the Works will be allowed on the grounds o								
	ignorance of the conditions under which the Works of								
	ignorance of the conditions under which the Works are to								
	be carried out nor that the Authorities have imposed								
	certain conditions on the carrying out of the Works.								
	Sub-soil conditions and Site investigation reports								
			'						
С	Any Site investigation reports, bore log records or other								
	information which may be available to the Contractor are								
	given in good faith as a guide only but without assurance								
	as to their accuracy or applicability and without prejudice								
	to the Contractor's liability under the Contract.								
D	The Tenderer shall be deemed to have been aware of to								
	have accepted all risks arising out of any unfavorable or								
	difficult sub-soil conditions, presence of existing								
	reinforced concrete foundations, services, ordinance or any								
	other obstructions whether foreseeable or unforeseeable,								
	and the Contractor shall not be entitled to any extension of								
	time or extra payment as compensation in respect thereof.								
	Site levels								
Е	The Contractor shall, if required by the Engineer, establish								
	his own bench mark using a nearby Government Bench								
	Mark to be approved by the Engineer, all at the								
	Contractor's own expense.								
	Contractor's responsibility to check Site conditions								
F	The Contractor shall be deemed to have made himself								
1	thoroughly acquainted with the location and nature of the								
	Site and its surroundings, the access to the Site, storage								
	and working space and all aspects of the Site and the								
	Works which might affect his working, and to have								
	allowed for the costs of all these in his Tender.								
	Total to Preliminaries for the Work Collection Page								

					MINARIES
Item	2000	Unit	Quantity	Rate	Amount
	Contractor's responsibility to check Site conditions (con	<u>t'd)</u>			
Α	No claim by the Contractor for additional monetary				
	compensation or any extension of time shall be allowed or				
	the grounds of any misunderstanding or allowed on the		1		
	grounds of any misunderstanding or misapprehension in				
	respect of the matters referred to in respect of the				
	foregoing or on the grounds that incorrect or insufficient				[
	information was given to in respect of the foregoing or on				
					1
	the grounds that incorrect or insufficient information was				
	given to him by any person whether or not in the employ of				
	the Employer, or that the Contractor failed to obtain				[
	correct and sufficient information; nor shall the Contractor		ļ		
	be relieved of any risk or obligation imposed or			1	
	undertaken by him under the Contract on any such ground			1	
	or on the grounds that he did not or could not have				
	foreseen any matter which may in fact affect or have				
	affected the execution of the Works or compliance with hi				1
1.	other obligations under the Contract.			1	
1				1	
1				1	
	Contractor to accept Site as found				
В	The Contractor shall accept the Site as found and take				
	possession and maintain it in good order as from actual			1	
	date of possession of those areas.				
		!			
C	The Employer assumes and shall have no responsibility fo	1			
	any change in the conditions of the Site after the date fixed			1	
	for the Tender submission.			1	
				1	
D	Any information which may have been available to the			[
	Tenderer shall be deemed to have been given in good faith			(
	as a guide only and no responsibility will be taken by the			1	
	Employer for its accuracy or for its applicability over the]	1	
1	whole Site.				
E	No claim for a variation in the Contract Price or extension			l	
	of time will be allowed on the grounds of ignorance of the				
	conditions under which the Works are to be carried out.				
	SITE CLEARANCE WORKS				
F	The Contractor shall employ and be fully responsible the				
1	services of a fully experience and competent specialist				
	sub-contractor to remove and safety dispose of all				
1					
	ordinance and Archaeological remains on the Site.				
			1		
				1	
-			L.	L	
	Total to Declining also for the World Callegier Dans				
L	Total to Preliminaries for the Work Collection Page				

	PRELIMINARIES						
Item	Description of Work	Unit	Quantity	Rate	Amount		
A	SITE CLEARANCE WORKS (Cont'd) The Contractor shall be fully responsible to properly coordinate and Programmed these Works within the Construction Programmed and shall take all necessary measures to ensure the Works are carried out safely and to the appropriate regulations.						
	Soil erosion and sedimentation						
В	The Contractor shall be fully responsible for the complete design and provision of all Temporary Works necessary to control soil erosion and sedimentation on Site. The Contractor shall submit to the Engineer or his authorized Representative for approval his design and soil erosion and sedimentation plan for these Works. These Temporary Works shall be removed from Site upon completion of the Works unless otherwise directed by the Engineer.						
	Preliminary details of these Works shall be submitted as part of Enclosure Number 4 with the Tender Documents.						
	<u>Damage by erosion</u>						
С	The Contractor shall be responsible for containment of the Site including temporary access roads. In the Site including temporary access roads. In the event of any erosion, washout or collapse, he shall reinstate the Site at his own expense. Should any spoil or debris from the Site or from other areas affected by the Works be eroded and washed down or collapse onto Government land or private property, the Contractor shall at his own expense comply with any Government Department's instructions or the Engineer's instructions as to the removal of such spoil and debris and the carrying out of any remedial work and he shall indemnify the Employer against any expense, liability, loss, claim or proceedings arising out of any damage or nuisance caused by such erosion, washing down or collapse.						
	Protection Works	-					
D	The Contractor shall amply protect all work and the Work including his own and that of all Subcontractors. No protection shall be removed until the approval of the Engineer or his authorized Representative has been obtained and it shall be the Contractor's sole responsibility for all damage sustained due to early removal and inadequate protection.						
	Total to Preliminaries for the Work Collection Page						

					IMINARIES			
Item	Description of Work	Unit	Quantity	Rate	Amount			
	Protection Works (cont'd)							
A	The Contractor shall be fully responsible for the complete design and provision of temporary protection works to protect the harbor and sea water area from the effects of any soils or materials that may be washed off the Landwar Side of the Site and from any of the effects caused by the dredging and reclamation Works. It is envisioned that the Contractor will have to design and supply silt fencing which will be moved as the Works progresses. The Contractor shall submit for approval of the Engineer or his authorized Representative his complete design for such protection works. These Temporary Works shall be removed from Site upon completion of the Work or as further directed by the Engineer. Preliminary details of these Works shall be submitted as part of Enclosure No. 8 with the Tender Documents.							
	Other Temporary Works							
В	The Contractor shall provide all other Temporary Works items and / or carry out all other temporary work not specifically mentioned within the Contract Documents but which are / is inherently required and necessary for the execution, completion and maintenance of the Works, all of which shall be deemed to have been included in the ntractor's Tender Price.							
	Removal of Temporary Works							
С	The Contractor shall completely remove all Temporary Works items when their use is no longer required and clean up and repair all damage caused by installation or use of temporary facilities.							
	Total to Preliminaries for the Work Collection Page							
L	Total to Preliminaries for the Work Collection Page							

	PRELIMINARIES								
Item	Description of Work	Unit	Quantity	Rate	Amount				
	Walkie Talkies								
A	Provide and maintain 6 sets of walkie-talkie, 3 sets as a minimum for the use of the Main Contractor and 3 sets for the use of Engineer's Site supervisory staff; arrange for licenses and pay all license fees and charges in connection therewith.								
В	Upon completion of the Contract, the aforesaid 3 sets of walkie-talkie shall become the property of the Employer and shall be returned refurbished and handed over to the Employer in good working condition.								
	Protective Clothing etc.								
С	The Contractor shall provide at no extra cost 12 number hardhats and 12 pairs of safety boots for the use of the Engineer, his staff and visitors to the Site.								
	CO-ORDINATION WITH OTHER								
	Archaeological Preservation								
D	The Contractor shall incorporate within his overall Construction Programme the Works as included in the Tender Documents, of the Archaeological Contractor. The provision of Clause 27.1 of the Contract Conditions shall apply. The Contractor shall co-ordinate and co-operate with the Archaeological Specialist during the course of the Work.								
	•								
L	Total to Preliminaries for the Work Collection Page								

Thomas	Description of Work	Unit	Quantity	Rate	MINARIES Amount				
Item	Description of Work	Onit	Quality	Nate					
	PRELIMINARIES FOR THE WORK								
	COLLECTION								
A	Total Page No. 1/21								
В	Total Page No. 2/21		'						
С	Total Page No. 3/21								
D	Total Page No. 4/21								
Е	Total Page No. 5/21								
F	Total Page No. 6/21								
G	Total Page No.7 /21								
Н	Total Page No. 8/21								
I	Total Page No. 9/21								
J	Total Page No. 10/21								
K	Total Page No. 11/21								
L	Total Page No. 12/21								
M	Total Page No. 13/21								
N	Total Page No. 14/21								
0	Total Page No. 15/21								
P	Total Page No. 16/21								
Q	Total Page No. 17/21								
R	Total Page No. 18/21								
s	Total Page No. 19/21								
Т	Total Page No. 20/21								
	Total to GENERAL SUMMARY								
<u></u>	(Carry to Appendix E Column (1) of Instructions to Tenderers)								

CONSTRUCTION COST

GENERAL SUMMARY

DEAD SEA PARKWAY SUB - PROJECT VOLUME (III) BILL OF QUANTITIES

GENERAL SUMMARY

Bill No.	Description	SUB-TOTAL PRICE J.D.
1-	GENERAL PROVISIONS	386,000
2-	EARTHWORKS	3,722,500
3-	PAVEMENTS AND BITUMINOUS CONSTRUCTION	991,875
4-	DRAINAGE	1,014,750
5-	STRUCTURES	
	a) RETAINING WALLS	928,500
	b) WADI ABU EL - ASAL BRIDGE	513,650
	c) WADI HIMARA BRIDGE	847,000
6-	LANDSCAPING FOR PARKWAY FACILITY	20,330
7-	MISCELLANEOUS	332,550
(Ce	TOTAL arry to Appendix E Column (1) of Instructions to Tenderers)	8,757,155

BILL OF QUANTITIES

BILL NO. 1 : GENERAL PROVISIONS

Spec. No.	Item No.	Description	Unit	Quantity	Rate J.D.	Total J.D.
1.06	1.01 1.01.1	Supervision Staff Offices Housing and Facilities. Provision of Supervision staff buildings and utilities for the whole contract period plus				
		two months, as described in the Specifications.	L.S.	-	-	20,000
	1.01.2	Provision of office furniture and equipment as described in the Specifications.	P.S.	-	-	20,000
	1.01.3	Maintenance, cleaning, security and provision of all utility services and other supplies for the supervision staff offices for the whole contract period plus two months, as described in the Specifications.	Months	26	350	9,100
	1.01.4	Provision of Supervision Staff Residence and utilities for the whole contract period plus two months, as described in the Specifications (Rental). Including utility services for the initial services and for the whole contract period plus two months	P.S.	-	-	35,000
	1.01.5	Provision of Residence furniture and equipment, as described in the Specifications.	P.S.	-	-	20,000
1.08		Maintenance of Buildings and utility Services.				
	1.02.1	Maintenance, cleaning, security(including watchman) provision of all utility services and other supplies for the supervision staff Residence for the whole contract period plus two months, as described in the Specifications.	House- Month	52	250	13,000
1.09	1.03	Provision of Workmen to Assist the Engineer's Representative				
		Provide two semi skilled workmen for the whole contract period plus two months.	Man-Month	52	175	9,100
			Carried	forward		126,200

BILL OF QUANTITIES

BILL NO. 1 (Cont'd)

Spec. No.	Item No.	Description	Unit	Quantity	Rate J.D.	Total J.D.
110.	110.	General Provisions:- (Cont'd)	Total	brought forw		126,200
1.10	1.04	Provision of Vehicles for Use by Supervision Staff				
	1.04.1	Provision of 2 No. four-wheel drive vehicle (2800 cc).	No. (Prime Cost)	2	25,000	50,000
	1.04.2	Provision of 3 No. four-wheel drive double cabin pick-up vehicle (2800 cc).	No. (Prime Cost)	3	20,000	60,000
	1.04.3	Expenses, overheads and profit on items 1.04.1 and 1.04.2.	%	5	-	5,500
	1.04.4	Operation, maintenance, insurance and registration of vehicles for item 1.04.1 for the whole contract period plus two month	Vehicle- month	52	300	15,600
	1.04.5	Operation, maintenance, insurance and registration for item 1.04.2 for the whole contract period plus two months.	Vehicle- month	78	200	15,600
	1.04.6	Provision of drivers	Man-Month	52	275	14,300
1.15	1.05	Geotechnical Investigation				
	1.05.1	Confermation Boring 1 = 600m	No.	40	1940	77,600
	1.05.2	Seismic Prospecting Investigation 1 = 3,000m	No.	20	1060	21,200
1.03.17		Sub-total Bill No. 1 General Provisions carried to Summary				386,000

BILL OF QUANTITIES

BILL NO. 2: EARTHWORKS

Spec. No.	Item No.	Description Description	Unit	Quantity	Rate J.D.	Total J.D.
2.03.3(1)	2.01	Unclassified Highway Excavation.	Cu.m.	1,260,000	2	2,520,000
2.06.5(1)	2.02	Embankment Construction.	Cu.m.	560,000	2	1,120,000
2.07.4(1)	2.03	Subgrade layer (topping).	Cu.m.	33,000	2.5	82,500
		Sub-total Bill No. 2. Earthworks carried to Summary.				3,722,500

BILL OF QUANTITIES

BILL NO. 3: PAVEMENTS AND BITUMINOUS CONSTRUCTION

Spec. Item No. No.	Description Description	Unit	Quantity	Rate J.D.	Total J.D.
3.02.8(1) 3.01	Granular Sub-base Course.	Cu.m.	42,000	4.5	189,000
3.03.8(1) 3.02	Aggregate Base Course.	Cu.m.	40,000	6	240,000
4.02.6(1) 3.03	Bituminous Prime Coat (MC-70).	Ton	310	125	38,750
4.02.6(2) 3.04	Bituminous Tack Coat (RC-250).	Ton	65	125	8,125
4.05.12(1) 3.05	Bituminous Binder Course (5.0 cm compacted thickness).	Sq.m.	153,000	2	306,000
4.05.12(1) 3.06	Bituminous Wearing Course (5.0 cm compacted thickness).	Sq.m.	105,000	2	210,000
	Sub-total Bill No. 3. Pavements and Bituminous Construction Carried to Summary.				991,875

BILL OF QUANTITIES

BILL NO. 4 : DRAINAGE

Spec. No.	Item No.	Description	Unit	Quantity	Rate J.D.	Total J.D.
5.13.4(1)	4.01	R.C Single Pipe Culvert Dia. = 750 mm.	L.m.	330	75	24,750
5.13.4(1)	4.02	Ditto, Dia. = 900mm.	L.m.	360	90	32,400
5.13.4(1)	4.03	R.C Double Pipe Culvert Dia. = 900mm	L.m.	125	160	20,000
5.14.4(2)	4.04	Catchpit (drop inlet).	No.	15	300	4,500
5.01	4.05	Concrete Class C25 for Culverts, Headwalls, Endwalls, Wingwalls, Appron Slabs and Walls for stilling basin, Channels and check dams.	Cu.m.	1800	80	144,000
5.01	4.06	Concrete Class C15 in blinding for Box Culverts and the other works of item No. 4.05.	Cu.m.	160	50	8,000
8.03.4(1)	4.07	Mortared Stone Riprap (15 cm thick) Channel and Ditch Lining.	Sq.m.	60,000	6	360,000
8.03.4(2)	4.08	Energy Dissipators	L.m	130	60	7,800
5.03.4(2)	4.09	High tensile steel bars reinforcement (grade 60) for box culvert, and the other works of item No. 4.05.	Ton	150	425	63,750
8.05.4(2)	4.10	Mortared Stone Riprap (for embankment, steps and culvert protection).	Cu.m.	4650	35	162,750
8.05.4(6)	4.11	Gabions for slope protection	Cu.m.	1260	30	37,800
2.09.4(1)	4.12	Unclassified structural excavation for works of item No. 4.05.	Cu.m.	16,000	5	80,000
8.05.4(1)	4.13	Loose Stone Riprap - used for check dams and protection works -	Cu.m.	4600	15	69,000
		Sub-total Bill No. 4. Drainage carried to Summary.				1,014,750

BILL OF QUANTITIES

BILL NO. 5 : STRUCTURES

Spec. No.	Item No.	Description Description	Unit	Quantity	Rate J.D.	Total J.D.
	A)	Retaining Walls (other than in bridges):-				
2.09.4(1)	5.A1	Unclassified Structural Excavation.	Cu.m.	9,000	5	45,000
5.01	5.A2	Concrete Class C30 for retaining walls.	Cu.m.	7,200	90	648,000
5.01	5.A3	Concrete Class C15 in blinding of retaining walls.	Cu.m.	460	50	23,000
5.03.4(2)	5.A4	High tensile steel bars reinforcement (grade 60) for retaining walls.	Ton	500	425	212,500
		Sub-total Bill No. 5-A. Retaining Walls carried to Summary.				928,500

BILL OF QUANTITIES

BILL NO. 5 : STRUCTURES

Spec. No.	Item No.	Description	Unit	Quantity	Rate J.D.	Total J.D.
	B)	Wadi Abu El - Asal Bridge:-				
2.09.4(1)	5.B1	Unclassified Structural Excavation for the bridge, wing walls and retaining walls works.	Cu.m.	1,800	8	14,400
5.01	5.B2	Concrete Class C15 in blinding for the bridge, wing walls and retaining walls.	Cu.m.	80	50	4,000
5.01	5.B3	Concrete Class C30 sub-structure (including piers, cap beam, wing walls, retaining walls, abutments and approach slabs).	Cu.m.	1200	90	108,000
5.01	5.B4	Concrete Class C30 superstructure (including bridge slab deck, sidewalks, hunches, diaphragms and parapets)	Cu.m.	550	100	55,000
5.07.8(1)	5.B5	Prestressed Girders (30m span)	No.	18	13000	234,000
5.03(.2)	5.B6	High tensile steel bars reinforcement (grade 60) for deck slabs, diaphragms, abutments, approach slabs and all works of items 5.C3 and 5.C4.	Ton	190	425	80,750
5.19.8(2)	5.B7	Elastomeric Bearing 600 x 300 x 46	No.	36	50	1,800
5.18.5(1)	5.B8	5.5cm Expansion Joint (4.0cm movement).	L.m	50	200	10,000
5.20.4(2)	5.B9	Steel bridge railing	L.m	190	30	5,700
		Sub-total Bill No. 5-B. Wadi Abu El - Asal Bridge carried to Summary				513,650

BILL OF QUANTITIES

BILL NO. 5 : STRUCTURES

Spec. No.	Item No.	Description	Unit	Quantity	Rate J.D.	Total J.D.
	C)	Wadi Himara Bridge:-				
2.09.4(1)	5.C1	Unclassified Structural Excavation for the bridge, wing walls and retaining walls works.	Cu.m.	4,700	8	37,600
5.01	5.C2	Concrete Class C15 in blinding for the bridge, wing walls andretaining walls.	Cu.m.	120	50	6,000
5.01	5.C3	Concrete Class C30 sub-structure (including piers, cap beam, wing walls, retaining walls, abutments and approach slabs).	Cu.m.	2700	90	243,000
5.01	5.C4	Concrete Class C30 superstructure (including bridge slab deck, sidewalks, hunches, diaphragms and parapets)	Cu.m.	725	100	72,500
5.07.8(1)	5.C5	Prestressed Girders (30m span)	No.	24	13000	312,000
5.03(.2)	5.C6	High tensile steel bars reinforcement (grade 60) for deck slabs, diaphragms, abutments, approach slabs and all works of items 5.C3 and 5.C4.	Ton	360	425	153,000
5.19.8(2)	5.C7	Elastomeric Bearing 600 x 300 x 46	No.	48	50	2,400
5.18.5(1)	5.C8	5.5cm Expansion Joint (4.0cm movement).	L.m	65	200	13,000
5.20.4(2)	5.C9	Steel bridge railing	L.m	250	30	7,500
		Sub-total Bill No. 5-C. Wadi Himara Bridge carried to Summary				847,000

BILL OF QUANTITIES

BILL NO. 6: LANDSCAPING FOR PARKWAY FACILITY

Spec.	Item	Description	Unit	Quantity	Rate	Total
No.	No.				J.D.	J.D.
7.02	6.01	Flush Concrete Curb (Edge Beam) 15cm x 30cm.	L.m.	230	5	1,150
7.02	6.02	Rough Cut Stone on Compacted Earth 8cm - 10cm Thick.	Sq.m.	235	15	3,525
7.02	6.03	Rough Big Cut Stone (Rock Forming)	Cu.m	30	50	1,500
7.02	6.04	Basalt Karak and Yellow Stone Floor Tiles. 25cm x 25cm x 4cm Thick.	Sq.m.	370	25	9,250
7.02	6.05	Basalt Black Stone Seating with Concrete Backing.				
		a) 50cm x 50cm x 45cm.	No.	8	60	480
		b) Ditto, but Triangular Shape	No.	6	50	300
7.01	6.06	Agricultural Soil 40cm Thick.	Sq.m.	1,900	2	3,800
7.01	6.07	Planting Big Trees				
		a)Ice Plant Shrubs	No.	65	5	325
		Sub-total Bill No. 6. Landscaping for Parkway Facility Carried to Summary.				20,330

BILL OF QUANTITIES

BILL NO.7: MISCELLANEOUS

Spec. No.	Item No.	Description	Unit	Quantity	Rate J.D.	Total J.D.
8.01.4(2)	7.01	Precast Concrete Curb (mountable type).	L.m.	850	8	6,800
8.01.4(7)	7.02	Precast Concrete Tiling.	Sq.m.	950	8	7,600
8.11.4(1)	7.03	Small signs. (not exceeding 1 Sq.m. area).	No.	510	35	17,850
8.11.4(2)	7.04	Large Ground Mounted Signs. (Exceeding 1 Sq.m. area).	Sq.m.	60	35	2,100
8.11.4(4)	7.05	Single Post Sign Supports.	No.	330	65	21,450
8.11.4(6)	7.06	Multiple Post Sign Supports Assemblies.	No.	35	150	5,250
8.12.5(1)	7.07	Painted Pavement Lines (TRP) 15 cm wide. white (Class A).	L.m.	4,000	1	4,000
8.12.5(1)	7.08	Ditto but 10cm wide.	L.m.	16,000	0.75	12,000
8.12.5(1)	7.09	Ditto but yellow, 15cm wide (Class B).	L.m.	25,000	1	25,000
8.12.5(2)	7.10	Painted Pavement Marking for Hatching (TRP) Yellow (Class B).	Sq.m.	500	6	3,000
8.12.5(3)	7.11	Direction Arrows.	No.	800	7	5,600
8.12(6)	7.12	Cat-eyes pavement studs.	No.	3,500	5	17,500
8.16.5(1)	7.13	Steel Guardrail.	L.m.	7,300	28	204,400
		Sub-total Bill No. 7. Miscellaneous carried to Summary.				332,550

VOLUME III

PART: 2

Item Description of Work

GENERAL

The Engineer, if in his opinion it is necessary or desirable, issue an instruction that any varied work shall be executed on daywork bases. The Contractor shall then be paid for such work under the terms set out in the daywork schedule included in the Contract and at the rates and price affixed thereto by him in the Tender.

The Contractor shall furnish to the Engineer such receipts or other vouchers as may be necessary to prove the amounts paid and, before materials, shall submit to the Engineer quotations for the same for the Engineer's approval.

In respect of such of the Works executed on a daywork basis, the Contractor shall, during continuance of such work, deliver each day to the Engineer an exact list in duplicate of the names, occupation and time of all workmen employed on such work and a statement, also in duplicate, showing the description and quantity of all materials and Contractor's Equipment used thereon or therefore than Contractor's Equipment which is included in the percentage addition in accordance with such daywork schedule. One copy of each list and statement will, if correct, or when agreed, be signed by the Engineer and return to the Contractor.

At the end of each month the Contractor shall deliver to the Engineer a priced statement of the labor, materials and Contractor's Equipment, except as aforesaid, used and the Contractor shall not be entitled to any payment unless such list and statements have been fully and punctually rendered. Provided always that if the Engineer considers that for any reason the sending of such lists or statements by the Contractor, in accordance with the provision of the Conditions of Contact, was impracticable he shall nevertheless be entitled to authorize payment for such work, either as daywork, on being satisfied as to the time employed and the labor, materials and Contractor's Equipment used on such work, or at such value thereof as shall, in his opinion, be fair and reasonable.

PREAMBLES FOR DAYWORK

- A The Contractor shall insert in this Schedule the Daywork rates which the Engineer may choose to apply.
- B The Contractor shall give notice to the Engineer prior to commencement and upon completion of any work which the Contractor considers falls within the definition of Daywork.
- C Claims for payment for work on a Daywork basis must be accompanied by time sheets and materials and goods vouchers, to be endorsed by the Engineer or the Engineer's vouchers, to be enclosed vouchers, to be endorsed by the Engineer or the Engineer's Representative. Such endorsement will not bind the Engineer to value the work as Daywork.

 If required the Contractor will also produce original copies of his receipt bills and wages books in support of his accounts.
- D Time sheets must be submitted to the Engineer or his representative for endorsement not later than the day following that day in which the work was carried out.
 - Claims accompanied by late time sheets and vouchers will be rejected by the Engineer at his discretion.
- E Rates quoted will be deemed to be fully inclusive of all necessary costs and expenses, overheads and profit and shall fully cover the Contractor's obligations under the Conditions of Contract.
- Rates inserted in this schedule will be taken into consideration by the Engineer when comparing Tenders. Establishment charges will be deemed to be included in the rates and such rates shall be inclusive of all Contractor's Site and head and other office administrative charges and arrangements, constructional plant (except plant employed exclusively on daywork), Contractor's facilities and Temporary works.

Item	Description of Work					
	<u>LABOR</u>					
A	Rates will be held to include :					
a	Wages and all allied costs in connection therewith and any items of expenditure which are not allowed for elsewhere, accommodation and messing costs, fares, any costs due to importing labor from other district etc., bonuses, additional amounts for working in dirty or hazardous conditions and including preparatory and temporary work, for delays due to wet or inclement weather, for working including weather, for working in shifts and / or overtime and allowances paid to operatives directly engaged on daywork (including those operating mechanical plant and transport) in accordance with the appropriate employment agreement or, where no such agreement exists, the actual payments made to the work people concerned.					
b	All Site supervision, foremen and staff.					
c	Provision and use of all standing scaffolding, walkways, ramps, etc.					
d	Non-powered hand tools such as picks, shovels, barrows, saws, chisels, etc.					
e	Protective clothing, and other special apparatus and all consumable.					
f	Standing time and traveling time.					
В	Only actual net time to the nearest hour spent working upon daywork will be considered for payment.					
	MATERIALS : Percentage Addition :					
	(* To be Inserted by Tenderer)					
(Sig	gnature)					
(Na	nme of Tenderer)					
(C c	ompany Stamp)					
(((Company Stamp)					

Item	Description of Work
	<u>MATERIALS</u>
	The following percentage addition (to be inserted by the Tenderer) for materials used in Daywork, shall apply to the net invoiced costs of approved material after the deduction of all discounts and will include :
	a. Delivery to Site;
	b. Unloading, Storing, Protecting and Waste in Storage; and
	c. Establishment charges, insurances, overheads and profit.
	MATERIALS : Percentage Addition :
	(* To be Inserted by Tenderer)
(Sig	gnature_)
(Na	nme of Tenderer)
(Co	ompany Stamp)

Item	Description of Work
	CONTRACTOR'S EQUIPMENT
A	Rates will apply to both owned equipment or hired in equipment.
В	Plant rates generally will include all accessories e.g. hoses, breakers bits, vibrators heads, pipes, grabs, skips, slings, burners etc.
С	Rates will further be held to include:
a	a. Mobilization and demobilization
b	All consumables (including fuel, lubricants, electrodes, gases, welding rods, drill bits and heads, dollies, sawing and grinding discs, blades etc.;
С	All maintenance, sharpening and grinding of tools, repairs and spares.
d	Standing time.
e	Temporary tracks, sleepers etc.; and
f	Establishment charges, insurances, overheads and profit.
D	Only time actually spent upon daywork at the units contained in the schedule will be considered for payment. Minimum hire periods will not apply.
(Si	gnature)
(Ne	ome of Tandarar)
(146	ame of Tenderer)
(Co	ompany Stamp)

LAB	<u>LABOR</u>						
item	Description of Work	DAYWORK HOU	Foreign Labor (JD)				
		Local Labor					
Note	CONTRACTOR TO ENTER HERE HIS LABOR CATEGORIES (TRADES) FOR SKILLED AND UNSKILLED WORKMEN. USE ADDITIONAL PAGES IF REQUIRED.	(JD)	(JD)				
1.	Foreman						
2.	Skilled operator						
3.	Semi-skilled operator						
4.	Driver						
5.	Mechanic						
6.	Skilled workman						
7.	Ordinary workman						
8.	Site surveyor						
9.	Tunnel Shift Boss						
10.	Tunnel workman						

MA	MATERIALS & PLANT						
item	Description of Work	DAYWORK HOURLY Local Material For					
		UNIT	Local Material (JD)	Foreign Material (JD)			
Note	CONTRACTOR TO ENTER HERE MATERIALS OF THE USE ADDITIONAL PAGE IF REQUIRED.		(3D)	(35)			
1.	Portland cement	Bag (50kg)					
2.	Portland cement	Metric Tonne (bulk)					
3.	Natural sand (e.g. Suweilah)	m3					
4.	Crushed fine aggregate	m3					
5.	Crushed coarse aggregate	m3					
6.	Deformed high-tensile steel	MT					
7.	Deformed mild steel	MT					
8.	Asphalt MC-70	MT					
9.	Asphalt RC-250	MT					

CON	CONTRACTOR'S EQUIPMENT							
item	Description of Work		DAYWORK HOURLY RATE					
		Consoity	Local Equipment (JD)	Foreign Equipment (JD)				
Note	CONTRACTOR TO ENTER HERE CONSTRUCTION EQU BE USED ON THE WORKS. USE ADDITIONAL PAGE IF		(3D)	(3D)				
1.	Bulldozer	Over 300 HP						
2.	Bulldozer	200-300 HP						
3.	Bulldozer	120-200 HP						
4.	Bulldozer	100-150 HP						
5.	Bulldozer	Under 100 HP						
6.	Wheel tractor - scraper comb	Over 15 m3						
7.	Wheel tractor - scraper comb	Under 15 m3						
8.	Motor grader	Over 115 HP						
9.	Motor grader	110-115 HP						
10.	Motor grader	85-100 HP						
11.	4-wheel tractor	Farm Type Heavy Du	ity 					
12.	Self-propelled pneumatic roller	12.5 tonnes						
13.	Rubber-tyred roller	10 tonnes						
14.	Vibrator Compactor	Over 3 tonnes						
15.	Vibrator Compactor	Under 3 tonnes						
16.	Sheeps-foot roller	3/60-inch drums						
17.	Sheeps-foot roller	2/60-inch drums						
18.	Self propelled 3-steel wheel roller	Over 10 tonnes						
19.	Mechanical tamper	Heavy						
20.	Mechanical tamper	Light						
21.	Tractor loader	Over 2 m3						
22.	Tractor loader	1-2 m3						
23.	Tractor loader	Under 1 m3						
24.	Bituminous hot plant	Over 80 tonnes/hr.						
25.	Asphalt Distributor	Over 4,000 litres						

CONTRACTOR'S EQUIPMENT							
item	Description of Work		DAYWORK HOUR Local Equipment	RLY RATE Foreign Equipment			
		Capacity	(JD)	(JD)			
Note	CONTRACTOR TO ENTER HERE CONSTRUCTION EQU BE USED ON THE WORKS. USE ADDITIONAL PAGE IF						
26.	Water truck	4-6 m3					
27.	Water truck	6-10 m3					
28.	Dump truck	2-4 m3					
29.	Dump truck	4-6 m3					
30.	Dump truck	6-9 m3					
31.	Air compressor	Over 400 cfm					
32.	Air compressor	Under 400 cfm					
33.	Power broom	Over 2 metres					
34.	Water pump	4 inches					
35.	Water pump	6 inches					
36.	Concrete mixer	Under 0.5 m3					
37.	Concrete mixer	0.5-1.0 m3					
38.	Power plant	4HP					
39.	Power plant	1.50 KW					
40.	Power plant	2.50 KW					
41.	Power plant	5.00 KW					
42.	Pickup truck	0.50-1 tonnes					
43.	Wagon drill	Heavy					
44.	Jackhammer						
45.	Power shovel	1 yeard3					
46.	Power shovel	1.25 yeard3					
47.	Rubber - mounted backup	0.75 yeard3					
48.	Crushing and screening plant	200 tonnes/hr					
49.	Automatic kerbing machine						
50.	Rock drill and Airleg						
		<u> </u>	1	<u> </u>			

CONTRACTOR'S EQUIPMENT							
item	Description of Work	DAYWORK HOURLY RATE					
		Local Equipment	Foreign Equipment				
	CONTRACTOR TO ENTER HERE CONSTRUCTION EQUIPMENT TO BE USED ON THE WORKS. USE ADDITIONAL PAGE IF REQUIRED.	(JD)	(JD)				
51.	Rock splitting equipment						
52.	Shotcrete equipment including pump						
53.	Grouting equipment including pump & mixer						
54.	Tunnel mucker						
55.	Mobile (tracked) rock drill, rods & bits						
56.	Mobile platform						
57.	Large Hydraulic Breaker Mobile						
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