



Issued to M/s: _____

Date : _____

Issued By : _____

GWADAR DEVELOPMENT AUTHORITY (GDA) BALUCHISTAN

NAME OF PROJECT

**REHABILITATION OF OLD TOWN OF GWADAR
(PHASE-I)**

ROAD WORKS

**(CONSTRUCTION /BLACKTOPPING OF USTAD ABDUL MAJEED GWADARI
ROAD FROM JAVID COMPLEX TO MARINE DRIVE)**

PACKAGE - 01B

BIDDING DOCUMENTS (VOLUME - IV)

BILL OF QUANTITIES

FEBRUARY 2022

CONSULTANT



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1. BILL OF QUANTITIES

BILL OF QUANTITIES

BILL OF QUANTITIES**A. Preamble**

1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications, Drawings and General Notes of the Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer and valued at the rates and prices entered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix in accordance with provisions of the Contract.
3. The rates and prices entered in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract include all costs of Contractor's plant, labour, supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Furthermore all duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to deadline for submission of Bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.
4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor will have failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
5. 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 the Works.
6. 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 Bidding Documents shall be made before entering prices against each item in the priced Bill of Quantities.
7. Provisional sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clause 58.2 of Part I, General Conditions of Contract.
8. All wood and doors joinery will be used after application of termite proofing chemical as approved by the Engineer.
9. All steel work will be coated with 2 coats anti-rust paint prior to installation.
10. SBR or equivalent compound will be used (for repair/ new work) at concrete/ plaster surface.
11. The rates and prices for concrete work of UG/ OH water tank includes, water proofing as specified.
12. Cost of Dewatering is to be included within the relevant item of Bill of Quantities.

BILL OF QUANTITIES

SUMMARY

Client/ Owner : Gwadar Development Authority (GDA) Baluchistan.

Name of Project : Rehabilitation of Old Town Gwadar (Phase-1) - Road works (Package-1B)

Name of Work : Construction / Black Topping of Ustad Abdul Majeed Gwadari Road From Javid Complex to Marine Drive

Sub Head	Description	Amount (Rs)
A	ROADS	
Grand Total (Rs.)		

(Rupees _____)

In Words

CONTRACTOR

GWADAR DEVELOPMENT AUTHORITY (GDA)

BILL OF QUANTITIES**General Note:-**

- 1 *Fairface steel formwork is to be used in all the items of R.C.C / as per the direction of the Engineer.*
- 2 *SR Cement is to be used in all items of cement concrete in contact with earth.*
- 3 *Excavation of trenches for foundation of building, laying of sewer lines, Well, Water supply lines or Storm Water Drains will be carried out as per the drawings and specification. Payment of trench volume will be paid strictly as per the drawings and specifications.*
- 4 *The item rates of excavation deemed to include cost of dewatering (if required) during execution of work.*
- 5 *The work of trench excavation consist of furnishing all plant, labour, equipment, appliances and materials etc.*
- 6 *The water pumped and drained from trenches shall be disposed off in a manner approved by the Engineer. The contractor shall build all temporary drains and do ditching required in this connection and shall also take necessary pre-cautions against flooding at no extra cost.*
- 7 *The excavated trenches will be backfilled in layers not exceeding 6" (compacted) / as per Drawings and directions of the Engineer.*
- 8 *The Contractor should ensure that there is no standing water in the trenches during operation of the work i.e concreting or laying of pipes.*
- 9 *The contractor should submit the methodology of dewatering of water from trenches for approval of the Engineer. It may also be noted that approval of the methodology will not relieve the contractor from any of his responsibilities/ obligations.*
- 10 *Contractor is required to submit Concrete Mix Design for Engineer's approval prior to start of works. All Concrete to be used in this project to be ready mix from approved batching plant.*

BILL OF QUANTITIES

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Name of Work : Construction / Black Topping of Ustad Abdul Majeed Gwadari Road From Javid Complex to Marine Drive

S. No	Item Ref.	Description	Qty	Unit	Rate (Rs)		Amount (Rs)
					In Figure	In Words	
Part A - Schedule Items							
Earthwork							
1	21-1a	Excavation or cutting to a required grade, camber and side slopes including dressing top and sides and disposal of excavated material within a lift of 5ft (1.5m) and lead upto 100 ft. (30m) In all kinds of soil except gravelley, murum, wet silt, clay or mud.	4,396	Cum.	258.25		1,135,267
2	21-1f	Extra if excavated earth is required to be filled in road embankment by placing it in layers not exceeding 9" (230mm) in depth including dressing top and sides of the bank.	4,396	Cum.	102.10		448,832
3	21-6a +1-1 (1a+1b+ 1c+1d+1 e)	Making earthen embankment with earth taken from approved borrow pits including cost of excavation, placing in layers not exceeding 9" (230mm) in depth including dressing top and sides of the bank with all lift including carriage of earth within 5km of Project premises. (excluding compaction) In all kinds of soil except gravelley, murum,	709	Cum.	492.02		348,842
4	21-9-1	Compaction of earthen embankments to full depth and width below sub-grade level by mechanical means in layers not exceeding 8" (200mm) in depth at optimum moisture content including watering and mixing by mechanical means. The sub-grade embankments shall be compacted to at least 95% modified AASHTO maximum dry density for their full depth and width.	5,094	Cum.	208.10		1,060,061
5	21-10 (a)	Preparation and compaction upto 95% modified AASHTO of natural ground upto a depth of 8" (20mm) in ordinary soil.	1,253	Sqm.	20.15		25,248
6	21-11	Preparation of subgrade over top of compacted embankment to at least 95% modified AASHTO maximum dry density with required dressing including cutting to required grade, camber and side slopes and disposal of surplus material within a lead of 90m.	335	Sqm.	47.05		15,762
7	21-12-1	Preparation of sub-grade over bottom of excavation with required dressing to required grade, camber and side slopes including cutting to required depth and breaking clods, watering and consolidation with suitable mechanical means to attain maximum density of 95% modified AASHTO for top 6" (150mm) layer including disposal of surplus earth within a lead of 90m.	6,371	Sqm.	214.40		1,365,942

S. No	Item Ref.	Description	Qty	Unit	Rate (Rs)		Amount (Rs)
					In Figure	In Words	
Pavement Structure							
8	21-15-b	Providing and laying pitrun gravel in sub base or base course of any thickness to required grade and camber including watering and compacting with road roller with all lead and lift. (compacted thickness to be measured)	3,079	Cum.	1,001.00		3,082,079
9	21-17-1	Providing and laying graded aggregate base course of crushed stone of approved quality, including placing, mixing, spreading, watering and compacting base course to required depth, camber and grade to achieve 100% max. modified AASHTO dry density conforming to AASHTO specifications T -180, with mechanical means and with all lead and lift. (Carriage of crushed stone is included in the rate, within 150km of Project premises).	2,567	Cum.	2,952.95		7,580,223
Surface Finishing							
10	21-23-1a	Providing and applying prime coat of liquid asphalt (cut back) of any approved grade using asphalt (cut back) including cleaning and brooming of road surface. 1.07 kg. per sq.m.	10,269	Sqm.	226.45		2,325,415
11	21-32c	Providing and laying hot-mix bituminous concrete in road pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, rolled hot with different types of rollers complete as per specifications and job-mix formula and design in single layer 2" (50 mm) thick	11,000	Sqm.	1,319.20		14,511,200
Kerb Block & Footpath							
12	21-40-1	Providing and laying 1:4:8 cement concrete in any thickness using 1-1/2" (37mm) and down gauge stone ballast of approved grade and quality over prepared sub-grade or sand cushion in roads, paths crete-ways laid to required gradient and camber including cost of necessary formwork and its removal compacting with vibrators including curing.	1,783	Cum.	5,770.00		10,287,910
13	5-11b	Providing and laying in situ cement concrete using approved coarsesand and crushed aggregate having maximum size upto 1-1/2" (38mm) and down gauge in foundation including formwork and its removal, compaction and curing Ration 1:3:6	230	Cum.	7,926.25		1,823,038

S. No	Item Ref.	Description	Qty	Unit	Rate (Rs)		Amount (Rs)
					In Figure	In Words	
14	21-60a	Providing and laying road kerb of precast cement concrete 24"x6"x12" (600mm x150mm x300mm) using crushed aggregate, formwork and its removal, compacting and curing laid in cement mortar 1:4 & cement plaster 1:4 neatly finished including cost of excavation, backfilling of excavated stuff & its disposal within 30m lead. Road kerb of precast cement concrete 1:2:4	5,841	Rm.	805.05		4,702,297
15	21-61a	Providing and laying road kerb 4" wide and 12" deep (100mm x 300mm) cast in situ, of cement concrete using crushed aggregate, formwork and its removal, compacting and curing, filling joints with bitumen, cement plaster 1:4 neatly finished including cost of excavation, backfilling of excavated stuff and its disposal with 30m lead. Road kerb of precast cement concrete 1:2:4	4,323	Rm.	387.00		1,673,001
16	21-44-1	Providing and spreading coarse sand to template in paths and drive ways including watering and rolling with hand roller complete,	1,060	Cum.	1,731.95		1,835,867
17	21-91-1	Supply and Fixing of Concrete pavers on 3" thick sand cushion of different designs having thickness of 80 mm, mechanically compressed, minimum strength of 7000 psi after laboratory testing at factory and random testing at site as and when desired by the Engineer incharge complete in all respects. (No PCC work is permitted underneath this item of work)	6,809	Sqm.	1,586.65		10,803,500
Road Furniture							
18	21-86a	Reflectorized Plastic Pavement Stud (Raised Profile Type - Single)	5,530	Nos.	386.25		2,135,963
19	21-86b	Reflectorized Plastic Pavement Stud (Raised Profile Type - Double)	9,651	Nos.	416.25		4,017,229
20	21-86c	Reflectorized Plastic Pavement Stud (Flushed Profile Type - Single)	394	Nos.	356.25		140,363
21	21-86d	Reflectorized Plastic Pavement Stud (Flushed Profile Type - Double)	790	Nos.	416.25		328,838
22	17-50-1	P/L road marking with T.P (Thermoplastic) reflective paint 5" wide. Complete in all respect.	8,781	Rm.	393.60		3,456,202

S. No	Item Ref.	Description	Qty	Unit	Rate (Rs)		Amount (Rs)
					In Figure	In Words	
23	21-84-1	Providing and fixing road sign boards such as caution etc as approved by the Engineer with reflective paints, having superficial area of 1.125 sq.m including cost of post etc.	48	Each	2,930.17		140,648
Dismantling & Scarification							
24	4-45A)	Dismantling and removing road metalling	1,981	Cum.	354.00		701,274
25	4-45B)	Dismantling and removing road pavement, etc. including screening and stacking of by product upto 100 ft. (30 m.) lead.	6,877	Cum.	479.00		3,294,083
26	21-89-1	Scarification of existing road pavement.	1,215	Sqm.	21.60		26,244
27	4-14A	Dismantling cement block masonry upto 8" width (For Kerb Block)	195	Cum.	890.40		173,628
28	4-19B	Dismantling plain cement concrete 1 : 3 : 6	48	Cum.	2,190.00		105,120
29	4-19C	Dismantling plain cement concrete 1 : 4 : 8 & leaner mixes	644	Cum.	3,285.50		2,115,862
	4-19 A	Dismantling plain cement concrete 1 : 2 : 4 & richer mixes	209	Cum.	3,210.00		670,890
Sub-Total (A) Schedule Items							80,330,828
Schedule Items Rs. 80,330,828 x _____ % above / Below							
Total Amount of Part A (Schedule Items)							

S. No	Item Ref.	Description	Qty	Unit	Rate (Rs)		Amount (Rs)
					In Figure	In Words	
31	NSR	Providing and laying road drain/gutter kerb of precast cement concrete size & shape as per drawings using crushed aggregate, formwork and its removal, compacting and curing laid in cement mortar 1:4 & cement plaster 1:4 neatly finished including cost of excavation, backfilling of excavated stuff & its disposal within 30m lead. Road drain / gutter kerb of precast cement concrete 1:2:4	270	Rm.			
32	NSR	Providing and fixing road sign boards such as caution etc as approved by the Engineer with reflective paints, having superficial area of Upto 2.25 sq.m including cost of Single post etc.	17	Sqm.			
33	NSR	Providing and fixing road sign boards such as caution etc as approved by the Engineer with reflective paints, having superficial area of Upto 5 sq.m including cost of Double post etc.	17	Sqm.			
Sub-Total (B) (Non-Schedule Items)							
Total Amount of Roads (Part A + Part B)							

(Rupees _____) In Words

CONTRACTOR

GWADAR DEVELOPMENT AUTHORITY (GDA)