

**Government of Pakistan
Ministry of Communications,
NATIONAL HIGHWAY AUTHORITY**



Bill of Quantity (BOQ) FOR
Routine Maintenance Work

Region:	<u>Maintenance Region M-4 Faisalabad</u>
Nature of Work:	<u>Routine Maintenance Work</u>
Contract No:	<u>RM-M4-402-2020-21</u>
Route No:	<u>Motorway M-4</u>
Direction:	<u>North & South Bound</u>
Chainage:	<u>From (Km) 14+00 To (Km) 28+00</u>
District:	<u>Multan (CSR-2014)</u>
Amount Allocation:	<u>Rs.4,425,391.00</u>

Prepared by: _____

Checked by: _____

NATIONAL HIGHWAY AUTHORITY

OFFICE OF THE DIRECTOR (MAINT) M-4

SUMMARY OF BILL OF QUANTITIES **ROUTINE MAINTENANCE WORK** **(Km 14+00 to Km 28+00)**

Bill No	DESCRIPTION OF BILLS	Amount (Rs.)
1	EARTH WORK	
2	SUB BASE & BASE	
3	SURFACING	
4	STRUCTURES	
5	DRAINAGE & EROSION WORKS	
6	ANCILLARY WORKS	
	TOTAL	

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SUMMARY OF BILL OF QUANTITIES

ROUTINE MAINTENANCE WORK

(Km 14+00 to Km 28+00)

BILL NO.1 EARTH WORKS

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs)
106a	EXCAVATE UNSUITABLE COMMON MATERIAL	CM	363.11	-	-
106c	EXCAVATE SURPLUS COMMON MATERIAL	CM	325.41	-	-
107a	STRUCTURAL EXCAVATION IN COMMON MATERIAL	CM	362.80	-	-
107d	GRANULAR BACKFILL	CM	1,531.61	-	-
107e	COMMON BACKFILL	CM	253.01	-	-
108a	FORMATION OF EMBANKMENT FROM ROADWAY EXCAVATION IN COMMON MATERIAL	CM	399.86	-	-
108c	FORMATION OF EMBANKMENT FROM BORROW EXCAVATION IN COMMON MATERIAL	CM	448.54	-	-
NSI-1	CUT VEGETATION	SM	1.00	-	-
	TOTAL				-

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SUMMARY OF BILL OF QUANTITIES
ROUTINE MAINTENANCE WORK
(Km 14+00 to Km 28+00)

BILL NO.2 SUB-BASE AND BASE

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs)
201	GRANULAR SUB-BASE	CM	1,937.75		
202	AGGREGATE BASE COURSE	CM	2,275.02		
203a	ASPHALTIC BASE COURSE PLANT MIX (CLASS-A)	CM	18,744.95		
203b	ASPHALTIC BASE COURSE (CLASS-B)**	CM	19,158.48		
206b	WATER BOUND MACADAM BASE WITH COURSE AGG.CLASS B	CM	2,221.64		
207a	DEEP PATCHING (0-15cm)	SM	127.24		
207b	DEEP PATCHING (15-30cm)	SM	127.24		
209a	BREAKING OF EXISTING ROAD PAVEMENT STRUCTURE	CM	609.80		
209b	SCRAIFICATION OF EXISTING ROAD PAVEMENT	SM	68.09		
			TOTAL		-

**** Contractor has to submit original bitumen purchase invoice from approved source like NRL, ARL & PARCO
alongwith the IPC's**

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ROUTINE MAINTENANCE WORK
(Km 14+00 to Km 28+00)

BILL NO.3 SURFACING

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs)
302a	CUT-BACK ASPHALT FOR BITUMINOUS PRIME COAT	SM	123.59	-	-
302b	EMULSIFIED ASPHALT FOR BITUMINOUS PRIME COAT	SM	108.37	-	-
303a	CUT-BACK ASPHALT FOR BITUMINOUS TACK COAT	SM	49.50	-	-
303b	EMULSIFIED ASPHALT FOR BITUMINOUS TACK COAT	SM	43.21	-	-
304a	SINGLE SURFACE TREATMENT	SM	233.07	-	-
304b	DOUBLE SURFACE TREATMENT	SM	474.28	-	-
304c	TRIPPLE SURFACE TREATMENT	SM	567.51	-	-
305a	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS-A)	CM	19,814.67	-	-
305b	ASPHALTIC CONCRETE FOR WEARING COURSE (CLASS-B)**	CM	20,725.14	-	-
307a	DENSE GRADED HOT BIT-MAC	CM	14,390.97	-	-
307b	OPEN GRADED HOT BIT-MAC	CM	14,027.90	-	-
309a	COLD MILLING, 0-30 MM	SM	110.31	-	-
309b	COLD MILLING, 0-50 MM	SM	183.85	-	-
309c	COLD MILLING, 0-70 MM	SM	275.78	-	-
			TOTAL		-

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SUMMARY OF BILL OF QUANTITIES
ROUTINE MAINTENANCE WORK
(Km 14+00 to Km 28+00)

BILL NO.4 STRUCTURES

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs)
401a1i	CONCRETE CLASS-A1 (UNDERGROUND)	CM	10,355.49	-	-
401a1ii	CONCRETE CLASS-A1 (ON GROUND)	CM	11,215.66	-	-
401a1iii	CONCRETE CLASS-A1 (ELEVATED)	CM	11,660.11	-	-
401a2i	CONCRETE CLASS-A2 (UNDERGROUND)	CM	10,753.15	-	-
401a2ii	CONCRETE CLASS-A2 (ON GROUND)	CM	11,613.20	-	-
401a2iii	CONCRETE CLASS-A2 (ELEVATED)	CM	12,057.49	-	-
401a3i	CONCRETE CLASS-A3 (UNDERGROUND)	CM	11,147.48	-	-
401a3ii	CONCRETE CLASS-A3 (ON GROUND)	CM	12,007.53	-	-
401a3iii	CONCRETE CLASS-A3 (ELEVATED)	CM	12,426.87	-	-
401b	CONCRETE CLASS-B	CM	8,192.95	-	-
401ci	CONCRETE CLASS-C (UNDERGROUND)	CM	10,055.90	-	-
401cii	CONCRETE CLASS-C (ON GROUND)	CM	10,915.95	-	-
401ciii	CONCRETE CLASS-C (ELEVATED)	CM	11,360.40	-	-
401d	CONCRETE CLASS D1	CM	15,244.22	-	-
401e	CONCRETE CLASS Y	CM	10,975.61	-	-
401f	LEAN CONCRETE	CM	6,367.18	-	-
401h	PLUM (CYCLOPEN/RUBBLE) CONCRETE (2:1CONC.STONE RATIO)	CM	7,326.26	-	-
404a	REINFORCEMENT AS PER AASHTO M.31 GRADE-40	TON	111,352.95	-	-
404b	REINFORCEMENT AS PER AASHTO M.31 GRADE-60	TON	116,602.95	-	-
410	BRICK WORK	CM	7,299.97	-	-
411a	STONE MASONRY RANDOM DRY	CM	2,855.56	-	-
411b	STONE MASONRY RANDOM WITH MORTAR	CM	4,780.39	-	-
411g	ROLL POINTING	SM	295.19	-	-
412a	STONE MASONRY DRESSED COURSED WITH MORTOR	CM	5,953.44	-	-
			TOTAL		-

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SUMMARY OF BILL OF QUANTITIES

ROUTINE MAINTENANCE WORK

(Km 14+00 to Km 28+00)

BILL NO.5 DRAINAGE WORKS

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs)
507a	STEEL WIRE MESH FOR GABIONS	Kg	169.30	-	-
507b	ROCK FILL IN GABIONS	CM	1574.49	-	-
509h	FILTER LAYER OF GRANULAR MATERIAL	CM	1681.22	-	-
510	DISMANTLING OF STRUCTURES AND OBSTRUCTIONS	CM	1614.63	-	-
511a1	DRY STONE PITCHING (15-20 CM THICK)	SM	697.89	-	-
511a2	DRY STONE PITCHING (20-25 CM THICK)	SM	893.30	-	-
			TOTAL		-

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ROUTINE MAINTENANCE WORK
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BILL NO.6 ANCILLARY WORKS

Code	Description	Unit	Rate (Rs.)	Quantity	Amount (Rs)
601ai	RCC NEW JERSY BARRIER (IN-SITU) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	10,929.33	-	-
601di	RCC NEW JERSY BARRIER (PRECAST) FOR MEDIAN DOUBLE FACE (INCL. REINFORCEMENT)	M	11,605.98	-	-
601dii	PRECAST CURB IN CONCRETE CLASS A-1 OF SIXE 450X150 MM INCL. BEDDING & HAUNCHING	M	1,105.52	-	-
604a	METAL BEAM GUARD RAIL	M	4,129.08	-	-
604b	METAL GUARD RAIL END PIECES	Each	5,439.46	-	-
604d	STEEL POST FOR METAL GUARD RAIL	Each	4,958.79	-	-
605a	CONCRETE BEAM GUARDRAIN (INCL.REINFORCEMENT)	CM	23,992.03	-	-
605c	CONCRETE POST FOR GUARDRAIL (INCL. REINFORCEMENT)	CM	22,198.49	-	-
607a	TRAFFIC ROAD SIGN CATEGORY - 1	Each	15,365.94	-	-
607b	TRAFFIC ROAD SIGN CATEGORY - 2	Each	18,751.31	-	-
607c	TRAFFIC ROAD SIGN CATEGORY - 3(a)	Each	29,521.11	-	-
607d	TRAFFIC ROAD SIGN CATEGORY - 3b	Each	54,125.37	-	-
607e	TRAFFIC ROAD SIGN CATEGORY - 3c	SM	24551.07	-	-
607f	ADDITIONAL PANEL SIZE 60 cm x 30 cm	Each	4,023.85	-	-
607g	ADDITIONAL PANEL SIZE 90 cm x 30 cm	Each	5,754.10	-	-
608b1	PAVEMENT MARKING IN NON-REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	44.07	-	-
608b2	PAVEMENT MARKING IN NON-REFLECTIVE TP PAINT FOR LINES OF 15 cm WIDTH	M	87.69	-	-
608h1	PAVEMENT MARKING IN REFLECTIVE CR PAINT FOR LINES OF 15 cm WIDTH	M	61.41	-	-
608h2	PAVEMENT MARKING IN REFLECTIVE TP PAINT FOR LINES 15cm WIDTH	M	165.73	-	-
609c	REFLECTORIZED ALLUMINIUM PAVEMENT STUED (RAISED PROFILE TYPE SINGLE)	Each	693.68	-	-
609ci	REFLECTORIZED PLASTIC PAVEMENT STUED (RAISED PROFILE TYPE SINGLE)	Each	276.26	-	-
610c	KILOMETER POST (NHA STANDARD DRAWINGS P-152)	Each	3,953.32	-	-
610d	TEN KILOMETER POST (NHA STANDARD DRAWINGS P-153)	Each	9,927.13	-	-
611a	GALVANIZED WIRE MESH FENCE 1500 MM HIGH INCL. PRESTRESSED & RCC POSTS COMPLETE IN ALL RESPECTS AS PER M-2 STANDARD	M	1,960.69	-	-
1051	LABOUR (MANDAYS)	No.	600.00	-	-
3005	FRONT END LODER 2.5 CUM.	Hour	4,416.20	-	-
3008	GRADER 140 H.P.	Hour	4,083.38	-	-
3022	TRACTOR 80 H.P.	Hour	1,456.95	-	-
3032	DUMPER 18 T.	Hour	2,842.06	-	-
3047	EXCAVATOR (TRACK TYPE) 100 H.P.	Hour	2,689.06	-	-
3121	ASPHALT CUTTER	Hour	400.26	-	-
3196	TRACTOR TROLLEY	Hour	1,053.60	-	-
			TOTAL		-

Estimated Cost: Rs. 4,425,391.00

%age Above/Below: _____

Bid Cost (Rs): Rs. _____

(In Words _____)