


VOLUME - II	Construction of Creek Bridge Connecting Ghansoli - Airoli along Palm Beach Road at Ghansoli, Navi Mumbai on EPC mode.		1
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# **Navi Mumbai Municipal Corporation**

**C.B.D. Belapur, Navi Mumbai**

**TENDER**

**EPC /NMMC/ CITY ENGINEER /\_ \_/2023 – 2024**

**Tender for the work of**

**“Construction of Creek Bridge Connecting Ghansoli - Airoli along Palm Beach Road at Ghansoli, Navi Mumbai on EPC mode.”**

**Tender Notice for the work of**


**BID DOCUMENT**

**VOLUME II**

**BILLING SCHEDULE**

**Navi Mumbai Municipal Corporation**


**Plot No.1& 2, Sect.15A, C.B.D., Belapur, Navi Mumbai**

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**“Construction of Creek Bridge Connecting Ghansoli - Airoli along Palm Beach Road at Ghansoli, Navi Mumbai on EPC mode.”**

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**SECTION- VI Form of Bid**

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## FORM OF BID

### NAME OF CONTRACT:

### Construction of Creek Bridge Connecting Ghansoli - Airoli along Palm Beach Road at Ghansoli, Navi Mumbai on EPC mode.

To:  
 CITY ENGINEER  
 Navi Mumbai Municipal Corporation,  
 2nd Floor, Sec.15, Plot No. 1 & 2,  
 C.B.D., Belapur, Navi Mumbai -400 614.


Dear Sir,

- In accordance with the Conditions of Contract, Specification, Drawings, and Schedule of Variation and Addenda's for the execution of the above-named Works, we, the undersigned, offer to carry out Engineering, Procurement & Construction and install such Works and remedy any defects therein in conformity with the Conditions of Contract, Particular Conditions, Appendix to Tender Specifications, Drawings, Billing Schedule, Provisional Sums, Variation and Addenda for the sum mentioned by us in the form of Financial Bid in e-tender format and in the table given below.

Name of Work	Cost in Rs. (Excluding GST & Provisional sum)	Basic	Amount in Rs.	
			In Fig.	In Words
Construction of Creek Bridge Connecting Ghansoli - Airoli along Palm Beach Road at Ghansoli, Navi Mumbai on EPC mode.	411,51,12,400/-	Lump Sum		

Signature \_\_\_\_\_ in the capacity of \_\_\_\_\_  
 duly authorized to sign bids for and on behalf of \_\_\_\_\_

*[in block capitals or typed]*


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Address: \_\_\_\_\_

Witness: \_\_\_\_\_

Address: \_\_\_\_\_

Occupation \_\_\_\_\_

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**Billing Schedule, Schedule of Variations**



### Billing Schedule


The Bidder shall submit a detailed billing schedule for interim payments for the work executed along with his tender. The billing schedule shall be subjected to the following overall limitations:

Particulars	Percentage of Contract price	% Quoted by Bidder
A) On completion and or approval of following items		
(i) Survey, Geotechnical investigations, utility diversion plan		
(ii) Marking alignment / setting out plan, Design and working Drawings for road and structural work and proof checking from IIT		
(iii) Construction of Site office and Laboratory at site		
(iv) Barricading & Traffic diversion / management plan with approval from Traffic Police / Branch in Navi Mumbai.	0.85%	
B) Site clearance including tree cutting / transplantation, removal of electric poles, signals and signage, demolition of existing CC pavement, footpath, side drains, removal of all structures affecting and disposal of the same etc as indicated by Engineer's Representative.		
C) Foundation		
(i) Pile foundations including Testing of Test piles and submission of report of testing.	6.00%	
(ii) Pile caps	3.50%	
D) Sub Structures		
(i) Piers and Abutments	6.00%	
(ii) Pier caps	2.00%	
E) Super Structure		
PSC Cast-in-situ Box Girder / Segmental Girder		
(i) Staging and shuttering	1.00%	
(ii) Concreting (Segment, Soffit, Diaphragms & Webs)	21.00%	



Particulars	Percentage of Contract price	% Quoted by Bidder
(iii) Prestressing and grouting	8.00%	
F) Steel Girders		
(i) Procurement of structural steel for steel girders in the fabrication yard.	6.00%	
(ii) Fabrication of structural steel for girders in the fabrication yard.	3.00%	
(iii) Shifting and launching of steel girders in position.	0.25%	
(iv) Construction of Interchange	7.50%	
G) Fixed items		
(i) Bearings	0.50%	
(ii) Expansion Joints	0.50%	
(iii) RCC Anti Crash Barriers, Approach slab & Railing	1.10%	
(iv) Painting all components of structures	0.05%	
(v) Deck wearing coat	3.50%	
(vi) Down take pipes, chambers	0.15%	
(vii) Carrying out Load Test of superstructures	0.05%	
H) Retaining structure for approach ramp including fill material and pavement.		
(i) Casting of RE Wall panels and fixing in position and providing and laying Geogrid	2.50%	
(ii) Removing unsuitable/slushy, granular, layer and providing and laying earth work for embankment.	1.50%	
(iii) Pavement Crust (GSB)	2.00%	
(iv) Pavement Crust (DLC, PQC)	4.00%	
I) Street lighting with electrical works including tubular poles, Cables, Panels etc	1.00%	
J) Landscaping in median & footpath etc.	0.05%	




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Particulars	Percentage of Contract price	% Quoted by Bidder
K) Providing Road signage's boards, Thermoplastic paints, Cat eyes, Gantry sign boards etc.	1.00%	
L) Submission of 1 set of soft copy (AutoCAD + PDF) of all "As – Build" drawings and 4 sets of hard copy of the same	1.50%	
M) Construction of Slip Road	2.50%	
N) Construction of Roadside drain.	1.50%	
O) Construction of Footpath	1.00%	
P) Aesthetics (Viewing Gallery & other structural elements)	1.00%	
Q) Compliance of Environmental conditions prescribed in various permission letters of Forest, MCZMA, /SEIAA, TCF ESZ, Stage -I etc	5.00%	
R) Construction of Utility Duct	0.50%	
S) Third party Audit (Technical Audit) after completion.	4.00%	
Total	100%	

Note: a) The above percentage does not include the % earmarked for advance envisaged in the Conditions of Contract.

**Items under Provisional Sums**


- a) Utility identification & shifting/relocation (Water supply, SWD, Electrical HT/LT lines, Telephone lines, OFC etc.)
- b) Any other Contingency work to main work as directed by Engineer in charge.

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## Schedule of Variations

Preamble: During the Course of execution notwithstanding the provision in Clause.13 of GCC Employer /Contractor in the interest of completion of work may be required to execute, the items of work not fully covered by the Contractor Design, the anticipated items of work which may be required to vary are listed below.

1. Extra or additional work likely to crop up is included in schedule of items (Schedule of Variation).
2. Rates for all rebates arising out of deletion / reduction in scope of Design-Build & Trunkey Construction part of work shall be 100% of the rate of extra work, when a certain item / component is deleted / reduced.
3. Rebate in case of deletion of any item / component in full or part which is replaced or submitted by another item / component, due to requirements of the corporation shall be 100% of the rate extra work for the item deleted partially / fully.
4. Any item not covered by schedule of variation shall be paid as extra items and for such items no escalation will be paid. The rate for such items shall be worked out based on the current Schedule of rates i.e. relevant current NMMC, and in case items not available in this Schedule then PWD/ MJP /NHAI/MIDC/MCGM/ Schedule of Rates applicable. No additional design charge etc. shall be applicable while considering these rates. Design & its approval of all variation items involved in the work is responsibility of the contractor.
5. The rates for Items not covered by the Schedule of variation or current DSR or above mentioned schedules of rates shall be worked out from actual expense, adding 8% thereof for overheads and profit. In such cases the contractor shall submit his account of actual expenses duly countersigned periodically in the form and manner directed by the Engineer-in-charge. The Engineer-in-charge may call for contractor's books of accounts for verification at any time. No additional design charge etc. shall be applicable while considering these rates. Design & its approval of all variation items involved in the work is the responsibility of the contractor.

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6. For Controlled Concrete Mix, for which the rates are not provided in schedule of variation shall be derived from corresponding rates for nearest designated mixes by linear interpolation.

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**SCHEDULE OF RATES FOR Variation in work**  
(RATES ARE TO BE QUOTED BY THE BIDDER ALONG WITH BID)

**Details of variation for the items covered under Lump Sum quoted Cost due to change in actual execution**


Sr. No.	Item of Work	Unit	Rate in Rupees	
			Figures	Words
1	<b>Variation in Depth of pile foundation</b> of Piers/Abutments/Both legs of Portal including cost of Steel, Concrete of any grade, steel liner, boring in all type of strata etc. complete. For lowering of pile foundation level per of Piers/Abutments/Both legs of Portal Piers. <b>For- 1200 mm dia. Piles.</b> <b>Average pile length of the group of pile cap is considered for the scope of work from 12M to 16M.</b> <b>*Pile length shall be measure from pile cut-off length to founding level.</b>			
	<b>A) Six Lane (for 27.6m Carriageway)</b>	Per Metre Per Foundation	Rs. 5,30,620.00	Rs. Five Lakhs Thirty Thousand and Six Hundred Twenty Only.
	<b>B) Four Lane (for 17.2m Carriageway)</b>	Per Metre Per Foundation	Rs. 3,53,750.00	Rs. Three Lakhs Fifty Three Thousand Seven Hundred Fifty Only.
	<b>C) Two Lane (for 8.5m Carriageway)</b>	Per Metre Per Foundation	Rs. 1,99,650.00	Rs. One Lakhs Ninety Nine Thousand Six Hundred Fifty Only.

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Sr. No.	Item of Work	Unit	Rate in Rupees	
			Figures	Words
2	<p><b>Variation in height of substructure</b> from top of pile cap/footing up to top of pier cap for Piers/Abutments/Both legs of Portal of Flyover including cost of concrete of any grade, steel, shuttering etc complete the work in all respects.</p> <p>i) For raising level per pier/Abutment/ Both legs of Portal pier.</p> <p><b>Height of Pier is considered for the scope of work 3 to 18 mtrs. from Pile cap top to Pier cap top.</b></p>			
	<b>A) Six Lane (for 27.6m Carriageway)</b>	Per Metre	Rs. 3,42,450.00	Rs. Three Lakhs Forty Two Thousand Four Hundred Fifty Only.
	<b>B) Four Lane (for 17.2m Carriageway)</b>	Per Metre	Rs. 2,89,440.00	Rs. Two Lakhs Eighty Nine Thousand Four Hundred Forty Only.
	<b>C) Two Lane (for 8.5m Carriageway)</b>	Per Metre	Rs. 1,87,470.00	Rs. One Lakhs Eighty Seven Thousand Four Hundred Seventy Only.

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Sr. No.	Item of Work	Unit	Rate in Rupees	
			Figures	Words
3	<b>Variation in the area of viaduct portion</b> more than those shown in the approved drawing. The rate shall include all the items such as waterproofing of deck, wearing coat, crash barrier, bearings, expansion joint, Electrical poles, cabling and all the items of work covered under the tender to complete the foundation, substructure & superstructure work in all respects.			
	<b>A) Six Lane (Only PSC Segment/Girder Span for 27.60m Carriageway)</b>	Per Sq. Metre	Rs. 41,970.00	Rs. Forty One Thousand and Nine Hundred Seventy Only.
	<b>B) Four Lane (Only PSC Segment/Girder Span for 17.20m Carriageway)</b>	Per Sq. Metre	Rs. 41,120.00	Rs. Forty One Thousand and One Hundred Twenty Only.
	<b>C) Two Lane (Only PSC Segment/Girder Span for 8.50m Carriageway)</b>	Per Sq. Metre	Rs. 29,920.00	Rs. Twenty Nine Thousand Nine Hundred and Twenty Only.
4	<b>Variation in the area of viaduct portion</b> more than those shown in the approved drawing. The rate shall include all the items such as waterproofing of deck, wearing coat, crash barrier, bearings, expansion joint, Electrical poles, cabling and all the items of work covered under the tender to complete the foundation, substructure & superstructure work in all respects. <b>D) Only Structural Steel Girder Span (for 8.5m Carriageway)</b>	Per Sq. Metre	Rs. 122,650.00	Rs. One lakh Twenty Two Thousand and Six Hundred Fifty Only

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Sr. No.	Item of Work	Unit	Rate in Rupees	
			Figures	Words
5	<b>Variation in area of solid approaches</b> including road crust, crash barrier-for 33.10m Carriageway, Median friction slab, embankment work, wearing coat, retaining wall on either side of embankment at approaches and all other items considered covered under tender for completion of approaches. i) For increase in area of approaches			
	<b>A) Six Lane (for 33.10m Carriageway)</b>	Per Sq. Metre	Rs. 10,700.00	Rs. Ten Thousand and Seven Hundred Only.
	<b>B) Four Lane (For 17.20m Carriageway)</b>	Per Sq. Metre	Rs. 15,530.00	Rs. Fifteen Thousand and Five Hundred Thirty Only.
	<b>C) Two Lane (For 7.00m Carriageway)</b>	Per Sq. Metre	Rs. 21,350.00	Rs. Twenty One Thousand and Three Hundred Fifty Only.
6	Carrying out the <b>load test on any span completed</b> as directed by the Engineer on tonnage basis.	Per Test	Rs. 1,46,400.00	Rs. One Lakh Forty Six Thousand Four Hundred Only.

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**Model of Measurement and Preparation of IPC**

In respect of variation the Contractor shall record all the measurements as per NMMC/MOST/ PWD/CPWD practice and shall submit in soft (CD) and hard copy along with each interim bill.