

SABARMATI RIVER FRONT DEVELOPMENT



**Sabarmati River Front Development
Corporation Limited**

**1st Floor, Inside Health Development
Dr. Ramanbhai Patel Bhavan,
West Zone Office, AMC,
Usmanpura, Ahmedabad**

BID DOCUMENT

**CONSTRUCTION OF SERVICE
ROAD WITH HIGH STRENGTH
PAVER BLOCKS WITH RCC
DUCT FOR CABLES INCLUDING
WATER SUPPLY, SEWERAGE,
STORM WATER DRAINAGE AND
ELECTRICAL WORK FROM
GANDHI BRIDGE TO NEHRU
BRIDGE ON WEST BANK OF
SABARMATI RIVER FOR SRFD
PROJECT**

Contract Package: SRFDCL/Service Road

VOLUME- 03

V) Form of Bid

VI) Bill of Quantities



SECTION V
FORM OF BID



Contractor's Bid

Description of the Works: _____

BID for

To _____ : The Chairman,
Sabarmati River Front Development Corporation Limited
Address _____ : 1st Floor, Dr. Ramanbhai Patel House, West Zone Office, Ahmedabad
Municipal Corporation, Usmanpura, Ahmedabad 13

Gentlemen,

Having examined the bidding documents including addendum, visited the site of works, we offer to execute the Works described above in accordance with the Conditions of Contract, Specifications, Drawings and Bill of Quantities accompanying this Bid at the quoted percentage above/below* the contract price mention in Bid BOQ at arrived contract Price of _____ [in figures]
(_____) [in letters]¹.

The advance Payment required is: Rupees _____.

This Bid and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any Bid you receive.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of agent	Amount	Purpose of Commission or gratuity
_____	_____	_____
_____	_____	_____
_____	_____	_____

(if none, state "none")

We hereby confirm that this Bid complies with the Bid Validity and Bid Security required by the Bidding documents.

*: **Strike out which is not applicable.**

We attached herewith proof of submission of income tax returns along with profit & loss statement attached with tax returns.

Yours faithfully,

Authorised Signature _____:

Name & Title of Signatory _____:

Name of Bidder _____:

Address _____:

¹ To be filled in by the Bidder, together with his particulars and date of submission at the bottom of the Form of Bid.



SECTION VI BILL OF QUANTITIES



MEASUREMENT PREAMBLE

1. All quantities in the Bill of Quantities are estimated quantities. For all payment purposes measurements, as prescribed in the contract document shall be taken and quantities shall be computed from such measurements.
2. The inclusions and exclusions from quoted rates are specified in the details of each item of work in the specifications and the Bill of Quantities. In case there is no specific mention of a particular detail, the mode of measurements as prescribed in MORTH specifications or other standard specification for such an item shall be followed.
3. In the event of contradiction between the MORTH specifications or other standard specification referred to above and this Contract document, the provisions of this Contract document shall prevail.

SECTION VI BILL OF QUANTITIES

CONSTRUCTION OF SERVICE ROAD WITH HIGH STRENGTH PAVER BLOCKS WITH RCC DUCT FOR CABLES INCLUDING WATER SUPPLY, SEWERAGE, STORM WATER DRAINAGE AND ELECTRICAL WORK FROM GANDHI BRIDGE TO NEHRU BRIDGE ON WEST BANK OF SABARMATI RIVER FOR SRFD PROJECT

SUMMARY SHEET

Section	Amount
Sub Section : 6.1 Road Work	3,79,88,254
Sub Section : 6.2 Water Supply Work	53,97,625
Sub Section : 6.3 Sewerage Work	74,43,075
Sub Section : 6.4 Storm Water Drainage Work	70,48,680
Sub Section : 6.5 Electrical Work	21,69,080
Grand Total	6,00,46,714

I / We am / are willing to carry out work at _____ % above / below* percent (should be written in figures and words) of the estimated cost, as mentioned above. Amount of my / our tender works out for Rs. _____ (in figures)

Rupees _____ (in words)

Note : * Please strike out above or below, whichever is not applicable.

1. No extra payment shall be paid for material testing, soil testing and any other tests as required.
2. The unidentified utilities shall be shifted or reconstructed as per prevailing S.O.R rates of Ahmedabad Municipal Corporation.

SUB SECTION 6.1 - ROAD WORKS & CIVIL WORKS**BILL OF QUANTITIES**

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
1	2	3	4	5	6
6.1 ROAD WORKS & CIVIL WORKS					
1	Cleaning, removing and disposing of debris etc from site and disposing the same as directed by engineer in charge with all lead and lift and stacking of useful material as per MORT&H specification.	150	Cum.	135	20,240
2	Dismantling of structure. The contractor rate includes all necessary machinery, labour for dismantling, constructing of ring bund, shoring, strutting, dewatering, finishing the broken edges, etc. complete as instructed by engineer In charge including disposing of dismantled material with all lead and lift.				
3	a) PCC/DLC	50	Cum.	387	19,342
4	b) RCC	50	Cum.	672	33,583
5	c) Masonry-(Brick/stone)	50	Cum.	349	17,473
6	d) Steel Structures/ works	50	Kg	3	152
7	e) Flexible pavement	50	Cum.	223	11,167
8	Dismantling tiled, paved floors, stone floors laid in mortar including stacking of serviceable material and disposal of unserviceable material with all lead and lifts	50	Sqmt.	30	1,515
9	Earthwork in excavation necessary for construction of roadway/shoulder/verge/median/footpath/service lane, foundation of structure ,guide wall etc. in all types of soil for all lift to the required lines, grades and cross-sections shown in the drawings or as directed by the Engineer including stacking the required and suitable material and disposal of unwanted materials for lead of 50 m etc. complete. a) 0 to 1.5 m	2,475	Cum.	87	2,15,009
10	Transportation of materials such as murrum, earth, kapchi, gravel, brick bats, kankar, sand, debris etc. from the site to approved location, including loading, unloading, stacking and spreading etc. complete. i) 0 to 2 Km.	1,980	Cum.	133	2,64,231
11	Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material with all lifts and lead.	100	Sqmt.	25	2,525
12	Spreading blindage or road crust filling the gaps in metal and levelling to camber and gradient as directed (i) Murrum	100	Cum.	94	9,393
13	Rolling and consolidating of soiling including filling in depression which occurs during the process with power roller 8 tonne to 12 tonne.	100	Cum.	57	5,656
14	Construction of sub grade and earthen shoulder satisfying the requirements of minimum soaked CBR value of 7 with approved material obtained from borrow area with all lifts and lead and rolling, watering all complete as per Technical Specification.	100	Cum.	295	29,492
15	GSB: -Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401	1,037	Cum.	1,374	14,24,399

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
16	WMM (Wet Mix Macadam): Providing , laying and compacting clean, crushed, graded aggregate and granular material, premixed with water, to a dense mass on a prepared subgrade/sub-base/base in accordance with the requirements of these Specifications. The material shall be laid in 100 mm layers to lines, grades and cross-sections shown on the approved drawings or as direction by the Engineer. The contractor unit rate includes furnishing all materials to be incorporated in the work including all royalties, fees, rents where necessary and all leads and lifts, all labour, tools, equipment and incidentals to complete the work to the Specifications,)carrying out the work in part widths of road where directed; and carrying out the required tests for quality.	1,037	Cum.	1,519	15,74,709
17	Primer Coat - Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means.	100	Sqmt.	26	2,626
18	DBM - Providing and laying dense graded bituminous macadam with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 4.0 to 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 504 complete in all respects.	10	Cum.	7,535	75,346
19	Tack Coat - Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at the rate of 0.20 kg per sqm on the prepared bituminous/granular surface cleaned with mechanical broom.	100	Sqmt.	9	909
20	Bituminous Concrete (Asphaltic Concrete) - Providing and laying bituminous concrete with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 per cent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects	10	Cum.	8,246	82,456
21	Providing and laying of dry lean cement concrete (DLC) of M15 grade below concrete pavement, cycle track and footpath and compacting the same with 8 to 10 Tone vibratory roller as per the specifications and as per drawing and as directed by the Engineer. Rate shall include cost of formwork if any.	24	Cum.	2,690	64,551
22	Road work : construction of unreinforced, dowel jointed, 300 mm thick M30 grade plain cement concrete pavement as per Specifications and in conformity with the lines, grades and cross sections shown on the drawings. The work shall include furnishing of all plant and equipment, materials and labour and performing all operations in connection with the work, as approved by the Engineer. The unit rate also includes full costs of contraction, expansion, construction and longitudinal joints. It shall also includes joint filler, keys, caulking rod, debonding strip, sealant primer, joint sealant, dowel bar and tie rod, Broom Finish. And it shall also includes cutting and making of groove in cement concrete floor as per the drawing. For construction of road TRIMIX vacuum dewatering system shall be used.(Sample to be approved)	50	Sqmt.	1,507	75,346

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
23	Construction of unreinforced, dowel jointed, M25 grade plain cement concrete flooring (broom finish) for cycle track, footpath, side walk, central verge etc. as per Specifications and in conformity with the lines, grades and cross sections shown on the drawings. The work shall include furnishing of all plant and equipment, materials and labour and performing all operations in connection with the work, as approved by the Engineer. The unit rate also includes full costs of contraction, expansion, construction and longitudinal joints. It shall also includes joint filler, keys, caulking rod, debonding strip, sealant primer, joint sealant, dowel bar and tie rod. And it shall also includes cutting and making of groove in cement concrete floor as per the drawing. For construction of concrete flooring TRIMIX vacuum dewatering system shall be used. (Sample to be approved)	36	Cum.	5,496	1,97,871
24	Paver Block - Heavy duty Providing and laying shot blasted interlocking/non interlocking paver blocks of high density 80 mm thick M-40 grade for footpath, parking areas, service lanes, road junctions and other areas as mentioned in the drawing. Including providing and laying 50 to 80 mm thick average bedding layer of coarse sand below paver block as per required grading and specification. Laid paver block shall be mechanically compacted. The work of the paving blocks shall be executed in line and level by skilled mason of flooring work only. It should be laid in such a way that the no cutting of the paver block to be necessary. Cutting of paver block by machine cut only and laying to be done by skilled flooring mason. The Finished surface of the Paver Block shall have Coarse Sand Texture Finish. Paver blocks shall be compacted and shall be re-laid if necessary.	6,520	Sqmt.	903	58,87,513
25	PCC and RCC Work Providing and laying cement concrete 1:3:6 (1 cement : 3 coarse Sand :6 hand broken stone aggregate 40 mm nominal size) and curing etc. complete excluding cost of form work in foundation and plinth.	89	Cum.	3,185	2,84,506
26	Providing and laying controlled cement concrete M 25 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in slabs, up to floor two level.	165	Cum.	4,375	7,20,657
27	Providing and laying controlled cement concrete M 25 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in Wall from Top of foundation level up to floor two level.	122	Cum.	4,777	5,80,442
28	Supplying, erecting, placing, lowering in position by suitable method HYSD (TMT) Fe 500/500D Reinforcement conforming to IS 1786 of all categories of RCC works as per design at all levels including transporting steel to the work site, handling, decoiling, cutting, bending, cranking, fabricating to required shape, placing in position and tying / binding the system with 18 gauge annealed (with two strands) wires, welding if necessary etc. complete as per specifications and as directions by the Engineer-in-charge. Measurement will be made on the length basis and converted into weight by using standard co-efficient (rolling margin's and wastage shall not be paid). The quoted rate should be inclusive the cost of Binding wire, laps, chairs, hooks for lifting, spacers etc and the same will not be measured and paid separately.	10	Tonne	45,450	4,54,500
29	Providing and laying Brickwork using common burnt clay building brick conforming to IS 1077-1992 having compressive strength not less than 35 kg/cm ² in any shape and all depth including curing, scaffolding etc. in cement mortar 1:4 etc complete	17	Cum.	2,748	46,644
30	Providing and applying cement plaster 15 mm thick in cement mortar 1:3 including necessary finishing, curing, scaffolding required(if any) etc complete	60	Sqmt.	112	6,727
31	Providing and applying 20 mm thick inside cement plaster consisting of 12 mm thick backing coat of CM 1:3 (1 cement : 3 sand) and 8 mm thick finishing coat of CM 1:1 (1 cement : 1 sand) etc complete including necessary finishing, curing, scaffolding required (if any) etc. complete.	500	Sqmt.	191	95,445

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
32	Providing and fixing FRP steps of size 500 mm x 150 mm x 25 mm etc complete as per drawing.	75	Nos.	303	22,725
33	Providing & fixing fiber reinforced concrete Heavy Duty manhole cover precast M20 Grade as per drawing having opening of 50 cm with lifting arrangements including reinforcement, loading, carting, unloading, stacking, etc. complete with fixing in cement concrete of 1:2:4.	15	Nos.	1,327	19,907
34	Structural Steel for Grating Structural steel work in riveted, bolted or welded in built up sections, trusses and framed work including supplying, fabricating, cutting, assembling, hoisting and fixing in position at all heights of all shapes and size with all leads and lifts of YST 310 grade as per latest IS 4923, IS 1161, IS 806 for the work of Railing, Handrail, flag fixing sleeve pole, garbage box, Street furniture and similar works etc. including cutting and welding the members as per detailed drawing and design. The rate shall include sand blasting, degreasing (wet cleaning) & preparation of rust free surface manually or mechanically, metal putty to make the surface even and smooth, 1 coat of epoxy primer of 50 to 60 micron DFT (dry film thickness) and 2 top coats of Metal PU Paint of having DFT 40 to 50 micron of approved shade of MRF or equivalent paint as per manufacture's specification over all the surfaces of the steel sections or as specified in the drawing. (Only standard measurements will be paid for as actual cut length used at site). Shop drawings for the connection details shall be prepared for the approval of the architect. Rate shall be inclusive of cutting, wastage, welding, bending (shop at site), and bolting wherever necessary, in position welding of required length, grinding, finishing edges, and filling the welded spots with metal putty. Rate shall be inclusive of 5 years guarantee against corrosion. The fabrication work shall start after approval of finished sample as per drawing by Architect. Rolled steel sections (equal and unequal angles, square or round bars, flats, angles, tees, channels, plates of different sizes etc.), bars ,RHS, SHS, tubular hollow sections of specified thickness & yield strength of TATA or equivalent as approved by engineer in charge & as per drawing. (Sample to be approved)	1,277	Kg	76	96,718
35	Providing, laying and joining RCC NP2 Hume pipe of various diameter with socket spigot joint with "O" ring. Rate shall also include freight, taxes, insurance, laying, jointing, testing , as per site condition etc. complete and as instructed by Engineer in charge.(Conforming to IS 458:)			-	-
36	a) 150 mm dia	150	Rmt	189	28,331
37	b) 250 mm dia	150	Rmt	281	42,117
38	Providing & doing Rendering to the existing concrete surface as per drawing or as directed by engineer in charge with required proportion of grey and white cement including needed curing as per specification and making the surface finish acceptable to the satisfaction of the Client/ Consultants. The cost includes chipping out, concrete and making the surface smooth as well as filling the holes in the concrete with arrangement of required scaffolding at any level and curing as per the specification.	250	Sqmt.	104	26,008
Electrical Duct					
39	Earthwork in excavation necessary for construction of roadway/shoulder/verge/median/footpath/service lane, foundation of structure ,guide wall etc. in all types of soil for all lift to the required lines, grades and cross-sections shown in the drawings or as directed by the Engineer including stacking the required and suitable material and disposal of unwanted materials for lead of 50 m etc. complete. a) 0 to 1.5 m	4,719	Cum.	87	4,09,892
40	b) 1.5 to 3 m	3,775	Cum.	94	3,55,367
41	Transportation of materials such as murrum, earth, kapchi, gravel, brick bats, kankar, sand, debris etc. from the site to approved location, including loading, unloading, stacking and spreading etc. complete. i) 0 to 2 Km.	7,220	Cum.	133	9,62,580

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
42	PCC and RCC Work Providing and laying cement concrete 1:3:6 (1 cement : 3 coarse Sand :6 hand broken stone aggregate 40 mm nominal size) and curing etc. complete excluding cost of form work in foundation and plinth.	303	Cum.	3,185	9,63,320
43	Providing and laying controlled cement concrete M 25 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in slabs, up to floor two level.	1,449	Cum.	4,375	63,39,770
44	Providing and laying controlled cement concrete M 25 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in Wall from Top of foundation level up to floor two level.	1,089	Cum.	4,777	52,02,480
45	Supplying, erecting, placing, lowering in position by suitable method HYSD (TMT) Fe 500/500D Reinforcement confirming to IS 1786 of all categories of RCC works as per design at all levels including transporting steel to the work site, handling, decoiling, cutting, bending, cranking, fabricating to required shape, placing in position and tying / binding the system with 18 gauge annealed (with two strands) wires, welding if necessary etc. complete as per specifications and as directions by the Engineer-in-charge. Measurement will be made on the length basis and converted into weight by using standard co-efficient (rolling margin's and wastage shall not be paid). The quoted rate should be inclusive the cost of Binding wire, laps, chairs, hooks for lifting, spacers etc and the same will not be measured and paid separately.	227	Tonne	45,450	1,03,17,150
46	Providing and laying Half Brick masonry in common burnt clay building brick having crushing strength not less than 35 kg/sq. cm. in Cement Mortar 1:4 in foundation and plinth	726	Sqmt.	374	2,71,306
47	Providing and applying cement plaster 15 mm thick in cement mortar 1:3 including necessary finishing, curing, scaffolding required(if any) etc complete	4,356	Sqmt.	112	4,88,351
48	Providing and fixing FRP steps of size 500 mm x 150 mm x 25 mm etc complete as per drawing.	564	Nos.	303	1,70,892
49	Providing & fixing fiber reinforced concrete Heavy Duty manhole cover precast M20 Grade as per drawing having opening of 50 cm with lifting arrangements including reinforcement, loading, carting, unloading, stacking, etc. complete with fixing in cement concrete of 1:2:4.	47	Nos.	1,327	61,865
50	Reinstatement of paver blocks including carrying out necessary excavation, preparing sub base with old material, rolling, watering, laying and fixing the paver block in line level on 50 to 80 mm thick average bedding layer of coarse sand below paver block as per required grading and specification. (New material), compacting the same, filling joint etc complete as per drawing and as directed by engineer in charge. Laid paver block shall be mechanically compacted. The work of the paving blocks shall be executed in line and level by skilled mason of flooring work only. Paver blocks shall be compacted and shall be re-laid if necessary.	50	Sqmt.	101	5,050
Sub Total of Subsection 6.1					3,79,88,254

SUB SECTION 6.2 - WATER SUPPLY WORKS**BILL OF QUANTITIES**

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
1	2	3	4	5	6
6.2 WATER SUPPLY WORKS					
1	Excavation for trenches including all safety provisions, stacking excavated stuff up to a lead of 90 m, cleaning the site etc. complete with all lifts and leads. The excavation shall be carried out in stable slope and shoring strutting. No extra payment shall be made for stable slope and shoring, strutting. a) 0.0 to 1.5 m	2,205	Cum.	89	1,95,980
2	b) 1.5 to 3 m	100	Cum.	98	9,797
3	Providing, supplying, lowering, laying & jointing DI K-9 grade pipe for following nominal bore diameter with internal cement mortar lining including all taxes, insurance, transportation, freight charges, Octroi, inspection charges, loading unloading, conveyance to stores, stacking etc. complete as per IS 8329-2000. a) 80 mm dia. DI pipe (K-9)	150	Rmt.	1,034	1,55,136
4	b) 150 mm dia. DI pipe (K-9)	720	Rmt.	1,467	10,55,894
5	c) 200 mm dia. DI pipe (K-9)	310	Rmt.	1,911	5,92,385
6	d) 250 mm dia. DI pipe (K-9)	250	Rmt.	2,550	6,37,563
7	e) 300 mm dia. DI pipe (K-9)	100	Rmt.	3,205	3,20,473
8	Providing and laying cement concrete M20 for thrust block including formwork but excluding the cost of reinforcement with curing etc. complete, as directed.	1	Cum.	3,852	4,237
9	Providing and laying cement concrete 1:2:4 (1 cement : 2 coarse Sand :4 Graded stone aggregate 20 mm nominal size) and curing etc. complete excluding cost of form work.	1	Cum.	3,185	3,185
10	Providing and laying cement concrete 1:3:6 (1 cement : 3 coarse Sand :6 hand broken stone aggregate 40 mm nominal size) and curing etc. complete excluding cost of form work in foundation and plinth.	20	Cum.	2,435	48,702
11	Providing and laying cement concrete 1:4:8 (1 cement : 4 coarse Sand :8 hand broken stone aggregate 40 mm nominal size) and curing etc. complete excluding cost of form work in foundation and plinth.	5	Cum.	2,184	10,918
12	Providing and laying controlled cement concrete M 200 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in Walls, from top of foundation level upto floor two level.	35	Cum.	5,036	1,76,255
13	Providing and laying controlled cement concrete M 200 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in slabs, upto floor two level.	20	Cum.	4,193	83,850
14	Providing and laying controlled cement concrete M 250 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in slabs, upto floor two level.	13	Cum.	4,375	56,879
15	Providing and laying controlled cement concrete M 250 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in Wall from Top of foundation level upto floor two level.	11	Cum.	4,777	52,550
16	Providing TMT Bar Fe-500/500D reinforcement bars for R. C. C. work including bending, binding and placing in position complete upto floor two level.	20	MT	45,450	9,09,000
17	Providing 15 mm thick cement plaster in single coat on Rough (similar) side of single or half brick walls for plastering upto floor two level and finished even and smooth in (i) Cement mortar 1:3 (1 cement:3sand)	205	Sqmt.	112	22,983

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
18	Providing and fixing plastic moulded reinforced steps with 10 mm TOR steel bar with plastic polyproylene (P.P.) material (virgin) as per drawing attached.	238	Nos.	76	18,029
19	Providing, supplying & fixing ISI mark CI D/F sluice valves of following class and diameter including all taxes, insurance, transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to departmental stores, stacking etc. complete. PN-1 with hand wheel /cap operated (PD type short body) a) 80 mm	15	Nos.	2,935	44,026
20	b) 300 mm	1	Nos.	20,449	20,449
21	Providing and fixing double acting kinetic air valves with isolation valve of following dia. including fixing, nut, bolts etc. complete, as directed. 80 mm dia	1	No.	10,522	10,522
22	Refilling the pipeline trenches including ramming, watering, consolidating disposal of surplus stuff as directed within a radius of 3 Km.	2,270	Cum.	22	50,439
23	Manufacture, supply, delivery of Ductile Iron flange socket spigot bends, tees, reducers of any other specials as per BS-EN-545/1995 class-A series K12 suitable for use with DI pipes manufactured per IS 8329/1994 delivery of specials is to be made to Store or site of works any where including all taxes, loading, unloading, carting, stacking, insurance, inspection charges, octroi etc. complete. For 80 to 300 mm dia	760	Kg	127	96,718
24	F.R.C. Extra Heavy Duty (EHD-35) Manhole Covers & Frames Cover: 728mmø & 100 mm thick circular cover, 35.00MT load design, 100 x 2mm MS flat all round, 16mm ø plain round bar for lifting the cover & should be fitted with plastic cups. Frame: 560mm ø clear opening, -888 x 888 x 175mm. On the upper periphery of frame 25x3 mm wide MS flat should be well embed in concrete to protect the edges of frame. FRCE.H.D.-35 manhole cover & frame described as above.	19	Nos.	1,555	29,553
25	Transportation of materials such as murrum, earth, kapchi, gravel, brick bats, kankar, sand, debris etc. from the site to approved location, including loading, unloading, stacking and spreading etc. complete. i) 0 to 2 Km.	145	Cum.	133	19,348
26	Laying 0.9 m. dia. RCC NP4 pipe (by pushing method) of required length including open excavation for thrust bed necessary form work, concreting, curing, vibrating, pushing etc. complete as per contractor's own design approved by competent authority based on approved GAD by competent authority. This item includes: a) Providing and laying M-25 grade for cast in situ thrust bed and thrust wall with necessary excavation with shoring and strutting, formwork, curing, vibrating as per contractor's own design approved by Authority b) Providing and fixing TMT-Fe-500 bars for RCC pipe including thrust bed and thrust wall including supplying, cleaning, cutting, bending and placing in position, lapping, binding with 16 SWG soft iron wire irrespective of locations and levels c) Providing front shield, intermediate shield, jointing, jacking rigs, sliding channels spacers etc. All the structural steel used except intermediate shields will be ownership of contractor after pushing work is completed. d) Pushing with hydraulic jack without disturbance to pavement including all necessary excavation for thrust bed and thrust wall, necessary shoring and strutting required, necessary dewatering required if any, excavation within the Pipe with all necessary refilling upto ground level after pushing work completed including carting of extra earth upto a lead of 5 Kms. This also includes necessary labour cost for pushing and including necessary cost of hydraulic pipe and oil for hydraulic jacks including necessary depreciation cost of jack.				

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
	e) Applying 2 coats of approved quality epoxy painting on precast units after casting work completed including necessary grouting with cement between two precast units after pushing work is completed.				
	a) 900 mm dia	25	Rmt.	22,543	5,63,580
27	Providing and laying cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing with a floating of neat cement etc. complete laid in one layer finished including necessary curing and with ordinary Portland cement. 40 mm thick.	22	Sqmt.	191	4,200
28	Providing and fixing water tight construction or expansion joints 150 mm. dia. Wide thin ribbed PVC.	5	Rmt.	317	1,586
29	Manufacturing, testing, supplying, loading, transporting to worksite, unloading RCC NP4 class pipes with socket and spigot joint as per IS 458-2003 with ISI Mark including EPDM Rubber ring as per IS 5382-1985 etc. comp. As directed by Engineering in charge. RCC NP4 Pipe (with OPC Cement) a) 900 mm dia	25	Rmt.	3,569	89,234
30	Providing, supplying, lowering in pipe, laying & jointing DI K-9 grade pipe for following nominal bore diameter with internal cement mortar lining including all taxes, insurance, transportation, freight charges, Octroi, inspection charges, loading unloading, conveyance to stores, stacking etc. complete as per IS 8329-2000. a) 300 mm dia DI K-9 Pipe	25	Rmt.	4,566	1,14,155
	Sub Total of Subsection 6.2				53,97,625

SUB SECTION 6.3 - SEWERAGE WORKS**BILL OF QUANTITIES**

Sr. No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
1	2	3	4	5	6
6.3 SEWERAGE WORKS					
1	Excavation for sewer trenches including barricading (to be kept till refilling trenches) with all safety provisions using site rails, shoring, strutting, dewatering and stacking excavated stuff up to a lead of 90 m, cleaning the site etc. complete with all lifts, leads for all types of soil. The excavation shall be carried out in stable slope for which no extra payment will be made etc. complete as directed.				
2	a) 0.0 to 1.5 m.	6,562	Cum.	116	7,62,147
3	b) 1.5 to 3.0 m.	2,896	Cum.	131	3,80,251
4	c) 3.0 to 4.5 m.	140	Cum.	144	20,220
5	Extra rate over item No.1 for excavation is to be done in wet condition or in sub soil water inclusive of bailing out of water, dewatering the trenches by well points system as required according to site condition, is to be done during excavation as per requirement on site and as per directed by Engineer-in-charge.	850	Cum.	20	17,170
6	Manufacturing, testing, supplying, loading, transporting to worksite, unloading, lowering in trenches, laying and jointing RCC NP4 class pipes with socket and spigot joint as per IS 458-2003 with ISI Mark including EPDM Rubber ring as per IS 5382-1985 etc. comp. As directed by Engineering in charge. RCC NP4 Pipe a) 450 mm dia	1,350	Rmt.	918	12,39,422
7	Providing and laying cement concrete 1:4:8 (1 cement : 4 coarse Sand :8 hand broken stone aggregate 40 mm nominal size) and curing etc. complete excluding cost of form work in foundation and plinth.	109	Cum.	2,184	2,38,015
8	Brick work using common burnt clay building bricks having crushing strength not less than 35kg / Sq. C. M. in ramp, steps and Foundation & Plinth in cement mortar 1:5 (1 cement : 5 coarse sand) including racking out joints, curing, scaffolding required if any etc. complete, as directed.	297	Cum.	2,649	7,86,821
9	Providing and laying controlled cement concrete M 250 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in slabs, upto floor two level.	28	Cum.	4,375	1,22,509
10	Providing and laying controlled cement concrete M 250 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in Wall from Top of foundation level upto floor two level.	34	Cum.	4,777	1,62,428
11	Providing and laying controlled cement concrete M 150 and curing complete excluding the cost of form work and reinforcement for reinforced concrete work in slabs, upto floor two level.	18	Cum.	3,485	62,721
12	Providing and laying controlled cement concrete M 150 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in slabs, upto floor two level.	74	Cum.	3,808	2,81,770
13	Providing TMT Bar Fe-500/500D reinforcement bars for R. C. C. work including bending, binding and placing in position complete upto floor two level.	15	MT	45,450	6,81,750
14	Providing and applying 20 mm thick inside cement plaster with water proofing agent on inside of sump consisting of 12 mm thick backing coat of CM 1:3 (1 cement : 3 sand) and 8 mm thick finishing coat of CM 1:1 (1 cement : 1 sand) etc. complete including necessary curing, scaffolding required if any etc. complete.	689	Sqmt.	251	1,73,277
15	Providing 15 mm thick cement plaster in single coat on Rough (similar) side of single or half brick walls for plastering upto floor two level and finished even and smooth in (i) Cement mortar 1:3 (1 cement:3sand)	385	Sqmt.	112	43,162

Sr. No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
16	Providing and fixing plastic moulded reinforced steps with 10 mm TOR steel bar with plastic polypropylene (P.P.) material (virgin) as per drawing attached.	450	Nos.	76	34,088
17	F.R.C. Extra Heavy Duty (EHD-35) Manhole Covers & Frames Cover: 728mmø & 100 mm thick circular cover, 35.00MT load design, 100 x 2mm MS flat all round, 16mm ø plain round bar for lifting the cover & should be fitted with plastic cups. Frame: 560mm ø clear opening, -888 x 888 x 175mm. On the upper periphery of frame 25x3 mm wide MS flat should be well embed in concrete to protect the edges of frame. FRCE.H.D.-35 manhole cover & frame described as above.	47		1,555	73,104
18	Transportation of materials such as murrum, earth, kapchi, gravel, brick bats, kankar, sand, debris etc. from the site to approved location, including loading, unloading, stacking and spreading etc. complete. i) 0 to 2 Km.	1,060	Cum.	133	1,41,437
19	Refilling the pipeline trenches including ramming, watering, consolidating disposal of surplus stuff as directed within a radius of 3 Km.	8,674	Cum.	23	2,01,497
20	Making connection to the ex. M.H. in running sewer incl. Dewatering and other required machinery etc. of following dia pipe at any convenient time. All damaged work shall be well repaired as per instructions etc. complete. i) For 450 mm dia pipe	4	No.	2,525	10,100
21	Laying 1.2 m. dia. RCC NP4 pipe (by pushing method) of required length including open excavation for thrust bed necessary form work, concreting, curing, vibrating, pushing etc. complete as per contractor's own design approved by competent authority based on approved GAD by competent authority. The item includes a) Providing and laying M-25 grade for cast in situ thrust bed and thrust wall with necessary excavation with shoring and strutting, formwork, curing, vibrating as per contractor's own design approved by Authority. b) Providing and fixing TMT-Fe-500 bars for RCC pipe including thrust bed and thrust wall including supplying, cleaning, cutting, bending and placing in position, lapping, binding with 16 SWG soft iron wire irrespective of locations and levels. c) Providing front shield, intermediate shield, jointing, jacking rigs, sliding channels spacers etc. All the structural steel used except intermediate shields will be ownership of contractor after pushing work is completed. d) Pushing with hydraulic jack without disturbance to pavement including all necessary excavation for thrust bed and thrust wall, necessary shoring and strutting required, necessary dewatering required if any, excavation within the Pipe with all necessary refilling upto ground level after pushing work completed including carting of extra earth upto a lead of 5 Kms. This also includes necessary labour cost for pushing and including necessary cost of hydraulic pipe and oil for hydraulic jacks including necessary depreciation cost of jack. e) Applying 2 coats of approved quality epoxy painting on precast units after casting work completed including necessary grouting with cement between two precast units after pushing work is completed.				
	i) 1200 mm dia pipe	55	Rmt	27,492	15,12,071
22	Providing and laying cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing with a floating of neat cement etc. complete laid in one layer finished including necessary curing and with ordinary Portland cement. 40 mm thick.	64	Sqmt.	191	12,217
23	Providing and fixing water tight construction or expansion joints 150 mm. dia. Wide thin ribbed PVC.	12	Rmt	317	3,806

Sr. No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
24	Manufacturing, testing, supplying, loading, transporting to worksite, unloading RCC NP4 class pipes with socket and spigot joint as per IS 458-2003 with ISI Mark including EPDM Rubber ring as per IS 5382-1985 etc. comp. As directed by Engineering in charge. RCC NP4 Pipe (with OPC Cement) a) 1200 mm dia	55	Rmt	6,346	3,49,021
25	Manufacturing, testing, supplying, loading, transporting to worksite, unloading, lowering in pipe , laying and jointing RCC NP4 class pipes with socket and spigot joint as per IS 458-2003 with ISI Mark including EPDM Rubber ring as per IS 5382-1985 etc. comp. As directed by Engineering in charge. a) 450 mm dia. RCC NP4 Pipe	55	Rmt	1,928	1,06,045
26	Providing & applying Coal Tar Epoxy of approved make like Dr. Fixit (Pidilite), Fosroc, clean coats, Sika, two component epoxy coating in two coats as per the mixing and application procedure suggested by manufacturer on the concrete surfaces. Coverage recommended is 3.0 – 4.0 m ² Per litre for two coat application at the coverage rate of approx. 250 - 300 micron DFT.	75	Sqmt	374	28,028
	Sub Total of Subsection 6.3				74,43,075

SUB SECTION 6.4 - STORM WATER DRAINAGE WORKS**BILL OF QUANTITIES**

Sr. No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
1	2	3	4	5	6
6.4 STORM WATER DRAINAGE WORKS					
1	<p>Laying 1.2 m. dia. RCC NP4 pipe (by pushing method) of required length including open excavation for thrust bed necessary form work, concreting, curing, vibrating, pushing etc. complete as per contractor's own design approved by competent authority based on approved GAD by competent authority.</p> <p>The item includes</p> <p>a) Providing and laying M-25 grade for cast in situ thrust bed and thrust wall with necessary excavation with shoring and strutting, formwork, curing, vibrating as per contractor's own design approved by Authority.</p> <p>b) Providing and fixing TMT-Fe-500 bars for RCC pipe including thrust bed and thrust wall including supplying, cleaning, cutting, bending and placing in position, lapping, binding with 16 SWG soft iron wire irrespective of locations and levels.</p> <p>c) Providing front shield, intermediate shield, jointing, jacking rigs, sliding channels spacers etc. All the structural steel used except intermediate shields will be ownership of contractor after pushing work is completed.</p> <p>d) Pushing with hydraulic jack without disturbance to pavement including all necessary excavation for thrust bed and thrust wall, necessary shoring and strutting required, necessary dewatering required if any, excavation within the Pipe with all necessary refilling upto ground level after pushing work completed including carting of extra earth upto a lead of 5 Kms. This also includes necessary labour cost for pushing and including necessary cost of hydraulic pipe and oil for hydraulic jacks including necessary depreciation cost of jack.</p> <p>e) Applying 2 coats of approved quality epoxy painting on precast units after casting work completed including necessary grouting with cement between two precast units after pushing work is completed.</p>				
	i) 1200 mm dia pipe	50	Rmt	27,401	13,70,065
2	<p>Excavation for sewer trenches including barricading (to be kept till refilling trenches) with all safety provisions using site rails, shoring, strutting, dewatering and stacking excavated stuff up to a lead of 90 m, cleaning the site etc. complete with all lifts, leads for all types of soil. The excavation shall be carried out in stable slope for which no extra payment will be made etc. complete as directed.</p> <p>a) 0.0 to 1.5 m</p>	2,361	Cum.	87	2,04,873
3	b) 1.5 to 3 m	1,395		94	1,31,290
4	c) 3 to 5 m	482		101	48,682
5	d) 5 to 6.5 m	306		114	35,017
6	e) 6.5 to 8 m	220		128	28,131
7	f) 8 to 9.5 m	148		141	20,912
8	g) 9.5 to 11 m	90		155	13,926
9	h) 11 to 12.5 m	44		168	7,399
10	i) 12.5 to 14 m	10		182	1,816
11	<p>Extra rate over item No. for excavation is to be done in wet condition or in sub soil water inclusive of bailing out of water, dewatering the trenches by well points system as required according to site condition, is to be done during excavation as per requirement on site and as per directed by Engineer-in-charge.</p>	29	Cum.	20	586

Sr. No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
12	Providing and laying cement concrete 1:4:8 (1 cement : 4 coarse Sand :8 hand broken stone aggregate 40 mm nominal size) and curing etc. complete excluding cost of form work in foundation and plinth.	74	Cum.	2,184	1,62,068
13	Providing and laying controlled cement concrete M 150 and curing complete excluding the cost of form work and reinforcement for reinforced concrete work in slabs, upto floor two level.	4	Cum.	3,485	14,635
14	Providing and laying controlled cement concrete M 150 and curing complete including the cost of form work and reinforcement for reinforced concrete work in slabs, upto floor two level.	53	Cum.	3,808	2,01,237
15	Providing and laying controlled cement concrete M 250 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in slabs, upto floor two level.	42	Cum.	4,375	1,83,763
16	Providing and laying controlled cement concrete M 250 and curing complete including the cost of form work and excluding cost of reinforcement for reinforced concrete work in Wall from Top of foundation level upto floor two level.	22	Cum.	4,777	1,05,101
17	Providing and laying controlled cement concrete M30 for water retaining structures with vibrating, curing etc. complete including the cost of form work but excluding the cost of reinforcement for RCC work stated below etc. complete at any height as directed.				
18	a) R.C.C. Raft and footings	14	Cum.	4,351	60,919
19	b) R.C.C. walls	135	Cum.	5,340	7,20,869
20	c) Top Slab of Sump	4	Cum.	4,478	17,912
21	Providing TMT Bar Fe-500/500D reinforcement bars for R. C. C. work including bending, binding and placing in position complete upto floor two level.	24	Kg	45,450	11,08,764
22	Providing and applying 20 mm thick inside cement plaster with water proofing agent on inside of sump consisting of 12 mm thick backing coat of CM 1:3 (1 cement : 3 sand) and 8 mm thick finishing coat of CM 1:1 (1 cement : 1 sand) etc. complete including necessary curing, scaffolding required if any etc. complete.	525	Sqmt.	251	1,32,032
23	Providing and applying 15 mm thick cement plaster in single coat on brick / concrete work for plastering upto floor any level finished even and smooth in Cement mortar 1:3 (1 cement : 3 sand) including racking out joint curing, scaffolding required if any, with necessary cement finishing etc. complete as directed.	565	Sqmt.	112	63,342
24	Providing 10mm thick cement plaster in single coat on brick/concrete walls for interior plastering upto floor two level and finished even and smooth in (i) Cement mortar 1 :3	140	Sqmt.	82	11,453
25	Providing and laying cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing with a floating of neat cement etc. complete laid in one layer finished including necessary curing and with ordinary Portland cement. 40 mm thick.	76	Sqmt.	191	14,508
26	Brick work using common burnt clay building bricks having crushing strength not less than 35kg / Sq. C. M. in ramp, steps and Foundation & Plinth in cement mortar 1:5 (1 cement : 5 coarse sand) including racking out joints, curing, scaffolding required if any etc. complete, as directed.	228	Cum.	2,649	6,04,024
27	Providing F.R.C. MH seat cover incl. carting to the work site etc. comp. Directed. F.R.C. Extra Heavy Duty (EHD-35) Manhole Covers & Frames Cover: 728mmø & 100 mm thick circular cover, 35.00MT load design, 100 x 2mm MS flat all round, 16mm ø plain round bar for lifting the cover & should be fitted with plastic cups. Frame: 560mm ø clear opening, -888 x 888 x 175mm. On the upper periphery of frame 25x3 mm wide MS flat should be well embed in concrete to protect the edges of frame. FRCE.H.D.-35 manhole cover & frame described as above.	44	No	1,555	68,438

Sr. No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
28	Providing and fixing water tight construction or expansion joints 150 mm. dia. Wide thin ribbed PVC.	11	Rmt	317	3,552
29	Providing and fixing plastic moulded reinforced steps with 10 mm TOR steel bar with plastic polyproclene (P.P.) material (virgin) as per drawing attached.	510	No	76	38,633
30	Manufacturing, testing, supplying, loading, transporting to worksite, unloading RCC NP4 class pipes with socket and spigot joint as per IS 458-2003 with ISI Mark including EPDM Rubber ring as per IS 5382-1985 etc. comp. As directed by Engineering in charge. RCC NP4 Pipe (with OPC Cement) a) 300 mm dia	1,040	Rmt.	801	8,32,967
31	b) 1200 mm dia.	60	Rmt.	6,346	3,80,750
32	Manufacturing, testing, supplying, loading, transporting to worksite, unloading, lowering in pipe, laying and jointing RCC NP4 class pipes with socket and spigot joint as per IS 458-2003 with ISI Mark including EPDM Rubber ring as per IS 5382-1985 etc. comp. As directed by Engineering in charge. a) 600 mm dia. RCC NP4 Pipe	60	Rmt.	4,718	2,83,063
33	Refilling the trenches including ramming, watering, consolidating disposal of surplus stuff as directed within a radius of 3 Km.	4,367	Cum.	23	1,01,448
34	Demolition and dismantling works Dismantling existing plain or reinforced concrete by Vibration free cutting to shape and size for RCC wall , thickness may vary as per drawing using "Hydraulic Wall saw system or wire saw system" with complete mechanical, electrical and control system including site inspection, planning as per approved working method; executing work at site by authorized and trained applicator of the manufacturer of the above equipment, applicator guaranting successful execution of work, including all necessary tools and tackles; checking for safety of all working men and existing structures all complete as per direction of engineer-in-charge. The mode of measurement for Dismantling will be actual cross section of cut made by the hydraulic wall saw system.(Length x Thickness of piece which has been cut by blade).Rate shall also include lifting of concrete without effecting / disturbing the existing retaining wall and unloading the concrete piece within the range of 100mtrs from the cutting area as per directions of engineer in charge. Minimum weight for lifting is 2.5 Ton.	5	Sqmt.	12,777	63,883
35	Dismantling existing plain or reinforced concrete by Vibration free cutting to shape and size for RCC floor cutting , thickness of any size using "RCC floor saw" with complete mechanical, electrical and control system including site inspection, planning as per approved working method; executing work at site by authorized and trained applicator of the manufacturer of the above equipment, applicator guaranting successful execution of work, including all necessary tools and tackles; checking for safety of all working men and existing structures all complete as per direction of engineer-in-charge. The mode of measurement for Dismantling will be actual cross section of cut made by the hydraulic wall saw system.(Length x Thickness of piece which has been cut by blade).Rate shall also include lifting of concrete without affecting / disturbing the existing structure and unloading the concrete piece within the range of 100mtrs from the cutting area as per directions of engineer in charge. Minimum weight for lifting is 2.5 Ton.	10	Rmt	1,263	12,625
	Sub Total of Subsection 6.4				70,48,680

SUB SECTION 6.5 - ELECTRICAL WORKS**BILL OF QUANTITIES**

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
1	2	3	4	5	6
6.5 ELECTRICAL WORKS					
1	9.0 LT Cabling: Supply, testing and Laying XLPE steel/GI wire/flat armoured / Un armoured cable of 1100 V grade of Aluminium / Copper Conductor of following sizes buried in ground or in Pre laid Conduits or mounted on wall with necessary clamping arrangement or in pre-laid RCC hume pipe. The vertical cable on wall shall be drawn in pre laid conduit for vertical mechanical support. 9.1 6 Sq.mm x 4c Cu. Cable	150	Rmt.	495	74,235.00
2	10.0 Cable Termination: 10.1 Supplying & fixing double compression weather proof glands (CMRI Approved) making joint with necessary bi metallic crimping socket of long neck type connecting the same to various equipment/panel/DB etc. for the following sizes: 10.1 6 Sq.mm x 4c Cu. Cable	4	No.	40	161.60
3	Cable Lugs: Supplying & making joint with necessary bi metallic crimping socket of long neck type connecting the same to various SFP's/PP/Poles etc. for the following sizes for all cores at end as specified. Copper Cables: 6 sq.mm x 4 c Cu.	80	No.	8	646.40
4	DWC Pipes 16.3 Supplying and laying following sizes Double walled corrugated HDPE pipes confirming IS 14930 Part 1 & Part 2 of approved make in open / concealed in manner including excavation and back filling (if required) as per layout and drawing and re-filling the trenches etc. complete as directed. (NP Class) 90 MM OD DWC Pipe	150	Rmt.	217	32,572.50
5	17.0 External Lighting- Street Light Pole Supply & Installation of GI Pole made out of B CLASS ERW G.I. PIPE for road having Height - 7.5 metre having thickness of 4.5 mm, with base plate of 450 x 450 x 16 mm with stiffener plate with integral type junction box , with complete concrete foundation with necessary reinforcement, j bolt, necessary hardware as per detail , with necessary Reducer / Coupler / for fixing of light fixtures & Hinged access door with welded chain between pole and hinged door with Allen key require to access the integral junction box (effective length should be 7500mm above GF) 1) with necessary 6 way connector, 1 No. / 2 Nos. 2A SP MCB with din rail channel, 8mm thk. Hylem sheet, 12x2 mm thk. GI Patti Clamp, with necessary required hardware, necessary welding & Fabrication work (if required) complete in all respect. 2) 40 mm diameter pipe for each cable entry . 3) Wiring up to the light fixture from the junction box using 3nos x 1.5 sq.mm. flexible copper wires of specified make for each fixture. 4) Concrete foundation with base plate.5) Excavation for erection of poles as per drawing complete in all respect.	4	No.	23,711	94,843.04
6	17.2 Street / Decorative light LED tiltable fixture: Supplying of following type Street Light LED tiltable Fixture with all necessary Hardware, Internal Wiring with Lamp, Ballast etc. all required accessories Complete in all respect.: Street light LED fixture with lumens greater than or equal to 9000 (maximum 90 W) with system efficacy - Lumen per watt 25c amb should be greater than or equal to 100 suitable for side mounting, having minimum IP 66 rating complete in all respect (Make Philips/GE/Schreder/Bajaj/Crompton with LED of Philips/CREE/NISCHIA/OSRAM). The contractor has to provide 5 year replacement guarantee for the fitting and contractor has to supply 5% additional fittings to AMC store for the maintenance purpose. The rate is inclusive of the cost of additional fittings to be supplied to the AMC.	145	No.	12,120	17,57,400.00

Sr.No.	Item of Work	Quantity estimated but may be more or less	Unit	Estimated Rate (In figures) (In Rs.)	Total amount according to estimated quantities (In Rs.)
7	Structural Steel Structural steel work in riveted, bolted or welded in built up sections, trusses and framed work including supplying, fabricating, cutting, assembling, hoisting and fixing in position at all heights of all shapes and size with all leads and lifts of YST 310 grade as per latest IS 4923, IS 1161, IS 806 for the work of Railing, Handrail, flag fixing sleeve pole, garbage box, pole bracket, Street furniture and similar works etc. including cutting and welding the members as per detailed drawing and design. The rate shall include sand blasting, degreasing (wet cleaning) & preparation of rust free surface manually or mechanically, metal putty to make the surface even and smooth, 1 coat of epoxy primer of 50 to 60 micron DFT (dry film thickness) and 2 top coats of Metal PU Paint of having DFT 40 to 50 micron of approved shade of MRF or equivalent paint as per manufacture's specification over all the surfaces of the steel sections or as specified in the drawing. (Only standard measurements will be paid for as actual cut length used at site). Shop drawings for the connection details shall be prepared for the approval of the architect. Rate shall be inclusive of cutting, wastage, welding, bending (shop at site), and bolting wherever necessary, in position welding of required length, grinding, finishing edges, and filling the welded spots with metal putty. Rate shall be inclusive of 5 years guarantee against corrosion. The fabrication work shall start after approval of finished sample as per drawing	2,000	Kg	76	1,51,500.00
8	Dismantling & removing of single Arm bracket & Light Fixture from existing Light pole and reinstalling Light fixture on New Double arm bracket. (Dismantling and removing of single arm bracket and other relevant material, hand over the material to the client's store. Extra care should be taken while removing/dismantling of material to protect it from damages complete in all respect as per instruction of engineer in charge. Scope includes stack the material in proper manner inside the store and prepare a list of item removed as per instruction of engineer in charge)	45	No.	505	22,725.00
9	Supply & installation of 1.5 sqmm 3 core round flexible wire from Existing pole junction box to light fixture and 1 No. 2A SP MCB on existing Junction box including Lugs, Ferruling with necessary required hardware.	90	No.	389	34,996.50
Sub Total of Subsection 6.5					21,69,080