

### INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY ESTATE OFFICE, POWAI, MUMBAI, MAHARASHTRA – 400 076

TEL. 022 2576 4995 E-mail: drestate@iitb.ac.in

IIT Bombay invites digitally signed Technical Bid & Financial Bid for following work from the contractors having **similar** experience in Central Government Departments / State Government Departments / Central or State Autonomous Bodies / State or Central Public Sector Undertakings & Large Private Organizations. The detail of work is given below:

Sr. No.	Name of Work	Estimated Cost (In Rs.) Incl. 18% GST	EMD (Rs.)	Time Limit	RFX No.
	Providing and laying sewer network from Hostel No. 12 and 13 upto pumping station behind Hostel No. 08, IIT Bombay Campus. EO/A/INFRA/WKS-41/25-26		Rs.1,30,000/-	04 months	6100002292

Intending bidders needs to be register themselves on IIT Bombay portal i.e. <a href="https://portal.iitb.ac.in/vrp/index.jsp">https://ep.iitb.ac.in/irj/portal</a> Please visit https://portal.iitb.ac.in/vrp/vrp\_srm\_docs.jsp for configuration process and user manual. Queries regarding to vendor registration please contact on 022 – 2159 3001(ASC Help-desk) and queries regarding to online Bid submission please contact to +91 82915 56277/6377 or mail us at <a href="mailto:srm@iitb.ac.in">srm@iitb.ac.in</a>

Date and time of submission of tender documents digitally are from 14.08.2025 to 22.08.2025 till 11:15 a.m. Date of opening of Technical Bid will be 22.08.2025 at 11:30 a.m. and Financial Bid 26.08.2025 (Tentative)

Interested contractors/agencies are requested to upload Technical bid and Financial bid on the SRM tendering portal of IIT Bombay.

- (A) All contractors/agencies should upload technical bid with the following documents on SRM tendering portal, failing to which their tender will be summarily rejected from the tendering process:
  - 1) i. Experience of having successfully completed works during the last 7 years ending last day of the month previous to the one in which applications are invited:
    - Three **similar completed works** costing not less than the amount equal to 40% of estimated cost put to tender, OR
    - Two **similar completed works**, costing not less than the amount equal to 50% of the estimated cost put to tender Or
    - One **similar completed work** of aggregate cost not less than the amount equal to 80% of the estimated cost. AND
    - ii. One completed work of any nature (either part of (i) or a separate one) costing not less than the amount equal to 40% of the estimated cost put to tender with some Central Government Departments / State Government Departments / State or Central Autonomous Bodies / State or Central Public Sector undertakings.
  - 2) Detail statement for work completed, work in hand including balance commitment of work should be enclosed for last three year commencing from 1<sup>st</sup> April and ended with 31<sup>st</sup> March and contractor should submit his details as per Annexure'A' format with support of xerox copies of work order and work completion certificates, otherwise the bid capacity will not be calculated and his technical bid will be summarily rejected, and no Financial Bid will be opened. (All contractors/agencies are hereby informed that they should upload Technical bid as per format of Annexure "A", changing in format is not allowed).
  - 3) Upload a scan copy of the information in respect of **manpower/mandays** for above said work must be given **in undertaking** with official signature and seal/stamp, otherwise tender will be **rejected**.
  - 4) Bank Solvency certificate 40% of estimated amount issued within one year from any Nationalized / Schedule Bank from the date of publishing of Tender.
  - 5) P. F. registration certificate.
  - 6) P. F. challans of last 12months.
  - (i) ESIC registration certificate and copies of ESIC challans of last 12months.
    - (ii) Contractors' all risks insurance (CAR policy) / Mediclaim policy.
  - 8) PAN card.
  - 9) GST registration certificate.
  - 10) Income Tax Return for last 03 years i.e. of 2022-23, 2023-24 and 2024-25.
  - 11) List of Equipment's, Machinery, Tools.
  - 12) List of Technical Staff with copies of their Degree/diploma certificate.

- 13) The contractors who were empanelled under Estate Office under (2018-23) list need not have to upload Demand Draft. The contractors other than empanel list that are applying for tender need to upload a scan copy of Demand Draft / Pay Order for Rs.1,30,000/-(EMD amount) drawn in favour of "The Registrar, IIT Bombay" on online Tendering Portal.
- 14) Power of Attorney, if any.
- 15) Proof of Constitution: An affidavit in case of Sole Proprietorship, Partnership Deed in case of Partnership Firm, Article of Association in case of Private / Public Limited Companies.
- 16) **Litigation history** of the agency is required to be submitted along with the application. A tender would not be awarded if any inquiry proceeding / criminal case is found pending against the agency.

#### Note:

Those contractors who do not have documents mentioned above from <u>Sr. No. 1 to 16</u> need not apply as it is mandatory documents to qualify in technical bids.

Upload all your relevant documents in the serial order mentioned above. It is advisable not to make more than 03 folders of 5MB while uploading documents.

The work will be executed with lowest bidder as per the terms and conditions of work order and tender documents signed by the owest bidder. (All agencies are requested to upload a scan copy of Terms and Conditions with official signature and seal/stamp on SRM online tendering portal)

The validity of the bids will be valid for 6 months from the date of opening of tender.

If agency fails to submit the above mentioned documents by uploading to the online portal, their technical bid may be rejected.

Litigation history of the agency is required to be uploaded along with the application. Tender would not be awarded if any inquiry proceeding / criminal case is found pending against the agency.

No work will be subleted to third party. If found payment of final bill will not be processed and the contractor's name will removed from the enlistment without giving him further notice.

Contractor's/Agencies/Proprietor's are requested to give Power of Attorney to your representative to deal any matter with any Officers or Staff of IIT Bombay on behalf of you or your agency.

Rates of the estimate are based on CPWD DSR 2021 and rate analysis.

The contractor have to quote his own rates online against each item of work and need to select N5 tax code thereafter.

Scan and upload all the above mentioned documents in "C folder" of online SRM tendering protal.

IIT Bombay reserve its rights to reject any or all tenders without assigning any reason and without any reference.

No queries will be entertained within 24 hours prior to the opening of the tender. We kindly request all contractors to upload their quotations well in advance of the submission deadline to ensure a smooth and timely process,

IIT Bombay reserves the right to request a detailed justification of the quoted rates from the lowest bidder, if deemed necessary by the Engineer-in-Charge. Should the justification provided by the bidder be considered unsatisfactory or unsubstantiated, the Engineer-in-Charge shall have full authority to reject the bid, irrespective of it being the lowest.

Superintending Engineer (I/C)

## TO BE UPLOADED ON SRM TENDERING PORTAL WITH FINANCIAL BID

# ANNEXURE 'A' (FORMAT) TECHNICAL BID

File No.: EO/A/INFRA/WKS-41/25-26

Name of Work: Providing and laying Sewer network from Hostel 12 & 13 upto pumping station behind Hostel 8, IITB Campus.

Name of the Contractor ------

Sr. No.	Name of Client	Name of Works			2024-2025 (In Lakhs)	2025-2 (In La	
						Completed	Balance
Portogram Review Contraction Contraction			-	-	Na.	-	<b></b>
			***************************************				
			-	-	-	-	-
		Total Amount (In Lakhs)	-		-	-	

Note: Contractor must submit his details as per Annexure 'A' with declaration stating that he is possessing all the original copies of work orders and experience certificates, it will be produced as and when required to IIT Bombay. However, if it is found false at later stage, the contractor will be debarred or blacklisted. Whereas, if information is not submitted as per Annexure 'A' format his bid capacity will not been calculated and his tender will be summarily rejected.

Superintending Engineer (I/C)

Signature of Contractor Name & Address in full

#### **WORKS UNDERTAKING**

#### EO/A/INFRA/WKS-41/25-26

To, Superintending Engineer (I/C) Indian Institute of Technology, Powai, Mumbai – 400 076.

Sub: Providing and laying Sewer network from Hostel 12 & 13 upto pumping station behind Hostel 8, IITB Campus.

Dear Sir,

We are hereby quoting all the rates for the attached schedule of short tender of the above mentioned job.

We hereby accept & signed all the General Terms and Conditions and special Conditions of Contract.

The work will be completed within specified time limit of 04 months as mentioned in the notice inviting for short tenders.

The following information is required to be provided.

I / We agree to keep the tender open for One Hundred and Eighty (180) days from the due date of its opening / One Hundred and Eighty days from the date of opening of financial bid in case tenders are invited on 2/3 envelope system and not to make any modification in its terms and conditions.

	Male	Female
No. of Unskilled casual labour to be required per day.		
No. of Skilled casual labour to be required per day.		
Total Mandays required for completion of work.		

Thanking you,

Yours faithfully,

Signature of the Contractor With official Seal / Stamp of the firm

# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI, MAHARASHTRA - 400 076

EO/A/INFRA/WKS-41/25-26

ESTATE OFFICE

Name of work: Providing and laying Sewer network from Hostel 12 & 13 upto pumping station behind hostel 8, IITB Campus.

#### Schedule of Work

Sr. No.	Description of work	Qty.	Unit
1	Excavation for foundation, trenches, Roadway etc. in earth, soil of all types, sand, gravel, soft and hard murum, soft rock etc. including removing the excavated materials up to a distance of 50 meters beyond the site of work and lift up to 1.50 meters, stacking and spreading as directed preparing the bed for the foundation and necessary dewatering using pump, backfilling, ramming, watering, including shoring and strutting, providing necessary barricading around excavated area etc. complete.	1388.00	m3
2	Excavation for foundation, trenches, Roadway etc. in earth, soil of all types, sand, gravel, loose boulders, soft and hard murum, soft rock etc. beyond 1.50 meter and upto 3.00 meter depth including removing the excavated materials up to a distance of 50 meters beyond the building area, stacking and spreading as directed including dewatering using pumps, preparing the bed for the foundation and necessary backfilling, ramming, watering complete including shoring and strutting, providing necessary barricading around excavated area etc. complete	250.00	m3
3	Excavation work in Hard rock (blasting prohabited) by mechanical means (Hydraulic excavatory) manual means in foundation trenches or drains including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.	278.00	m <sup>*</sup> 3
4	Excavation work in Hard rock (blasting prohabited) by mechanical means (Hydraulic excavatory) manual means in foundation trenches or drains including dressing of sides and ramming of bottoms, beyond 1.5m upto 3.0m including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.	50.00	m3
5	Laying dry trap / rubble stone soling of required thickness including hand packing and compacting etc. complete using IITB stone including trasporting stone from various locations from IIT campus to Paspoli area up to working site and cutting the stone in required size as per requirement.	191.00	m3
6	Providing and laying in position 1:11/2: 3 (M20) grade cement concrete excluding the cost of centering and shuttering, using sand as fine aggregate and graded stone aggregate 20mm maximum size for foundation, coping and bedding, levelling, encasing of pipe, dewatering by any means, compaction, finishing curing including scaffolding etc. complete all as directed.	30.00	m3
7	Providing and casting in position ready mixed or machine batched M-20 grade cement concrete (Min cement content 270Kg/Cum) for foundation, coping and bedding etc. as per approved excluding shuttering, including compaction, finishing, curing etc. including cost of admixtures in recommended proportions as per relevant IS code to accelerate/ retard setting of concrete,improve workability without impairing strength and durability as per direction of the Engineer-in-charge including casting cubes and testing.	30.00	m3
8	Providing and fixing Centering and shuttering including strutting, propping etc. and removal of form for all heights : Foundations, footings, bases of columns, coping, raft etc.	690.00	m2

	9	Providing and fixing Centering and shuttering including strutting, propping etc. and removal of form for all heights: Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.		m2
1	.0	Providing and fixing Centering and shuttering including strutting, propping etc. and removal of form for all heights :Suspended floors, roofs, landings, balconies and access platform		m2
1	.1	Dismantling plain cement concrete work including breaking concrete by chiselling, wedging etc., and stacking the debris upto a distance of 50 metres or spreading as directed.		m3
1	.2	Removing soling without dust nuisance including sorting out the stone chips and debris separately and stacking upto distance of 50 metres as directed.	4.00	m3
1	3	Pulling down stone masonry in cement mortar with plaster / pointing without dust nuisance including sorting out the stone chips and debris separately and stacking upto distance of 50 metres or spreading the debris as directed.	3.00	m3
1	4	Dismantling burnt brick masonry (in cement mortar) with plaster including sorting out serviceable bricks and lowering down debrises, stacking the same and debris separately upto a distance of 50 meters or spreading the debris as directed.	5.00	m3
1	С	Providing uncoursed rubble masonry (using IITB stones) of trap stones in cement mortar 1:6 (Cement:sand/grit) including racking out joints when plastering is to be done, striking out joints, watering and pointing with cement mortar 1:3 on outside exposed faces, including providing header stones @ 1 header per sqm. to the full thickness of wall, providing weep holes, with 100mm dia A. C. pipes including collecting and transporting stone stacked near Surovar Garden located in Lakeside area, cutting stones/ bouldres in piceses as per requirement, scaffolding etc. complete as directed.	26.00	m3
1	6	Providing and fixing in position tor steel TMT bar Fe 500 reinforcement of various diameters for R.C.C. beams, columns, chajjas, lintels, pardies, etc. as per detailed designs, drawings and schedules including cutting, bending, hooking the bars, binding with wires or tack welding and supporting including scaffolding as required complete.	609.00	Kg
1	7	Providing and casting in position ready mixed M-30 grade cement concrete manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade excluding shuttering, including compaction, finishing, curing etc. including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer-incharge including casting cubes and testing and excluding shuttering and reinforcement.	6.00	m3
1	8	Providing internal cement plaster 20mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete or brick surfaces in all positions with the use of step ladder and curing complete.	15.00	m2

19	Constructing conical manhole of size 900mm internal diameter at bottom and 525mm internal diameter at top up to depth 1500 mm with brick masonry circular wall 340mm thick in cement mortar 1:6 over a bed of 230mm thick cement concrete M-20 (1:1½:3) foundation square shape in plan with 150mm minimum offset beyond masonry wall plastering with cement mortar 1:4, 20mm thick on internal, external and all exposed faces, finished with floating coat of neat cement, including necessary cement concrete M-20 (1:1½:3) for forming benching and channel, providing and fixing C.I. steps weighing not less than 3.50 Kg. fixing top one at 450mm from top level and remaining steps at 300mm vertical spacing in staggered fashion, including providing and fixing precast R.C.C. frame and cover of thickness 100/150mm, heavy duty, manufactured by K.K.Manholes or equivalent as approved by Engineer Incharge and fixing with cement concrete coping M-20 (1:1½:3) and plastering complete including necessary dewatering etc.all complete as directed by Engineer In-charge.	43.00	No.
20	Extra over item No. 19 for depth beyond 1500mm in cylindrical shape of 900mm diameter with 340mm thick brick masonry wall in cement mortar 1:6 providing and fixing C.I. steps, plastering, finishing, dewatering etc. all as directed.	20.00	Rmt
21	Constructing conical manhole of size 1500mm internal diameter at bottom and 525mm internal diameter at top in conical shape upto 1500mm depth with brick masonry circular wall 340mm thick and below 1500mm to 1800mm depth in cylindrical shape wall with 450mm thick in cement mortar 1:6 over abed of 230mm thick cement concrete M-20 (1:1½:3) foundation square shape in plan with 150mm minimum offset beyond masonry wall plastering with cement mortar 1:4, 20mm thick on internal, external and all exposed faces, finished with floating coat of neat cement, including necessary cement concrete M-20 (1:1½:3) for forming benching and channel, providing and fixing C.I. steps weighing not less than 3.50 Kg. fixing top one at 450mm from top level and remaining steps at 300mm vertical spacing in staggered fashion, including providing and fixing precast R.C.C. frame and cover of thickness 100/150mm, heavy duty, manufactured by K.K.Manholes or equivalent as approved by Engineer Incharge and fixing with cement concrete coping M-20 (1:1½:3) and plastering complete including necessary dewatering etc.all complete as directed by Engineer In-charge. for Man holes of depth up to 1800mm.		Nos
22	Extra over item No. 21 for depth beyond 1500mm in cylindrical shape of 1500mm diameter with 340mm thick brick masonry wall in cement mortar 1:6 providing and fixing C.I. steps, plastering, finishing, dewatering etc. all as directed.	5.00	Rmt
23	Making necessary connection / disconnection to existing chamber / branch line / tank or as specified etc. with making necessary hole / cutting etc. & remaking the same etc.all competed as directed by Engineer In-charge.	4.00	No.
24	Providing supplying and laying HDPE double wall corrugated pipe of size 300mm ID (SN8) of make Crown, Mohindra, Aarkay, Keshav kripa polyplast, Berlia, Supreme for non pressure underground drainage and sewerage with smooth internal & corrugated external surface confirming to IS 16098:Part-2 2013 with spigot or plain end with necessary jointing material adhesive, coupler, rubber to form a monolithic & leak proof joint including carrying out smoke test to check the joint. complete including all materials, labours as directed by engineer - in - charge.	307.00	Rmt
25	Providing supplying and laying HDPE double wall corrugated pipe of size 400mm ID (SN8) of make Crown, Mohindra, Aarkay, Keshav kripa polyplast, Berlia, Supreme for non pressure underground drainage and sewerage with smooth internal & corrugated external surface confirming to IS 16098:Part-2 2013 with spigot or plain end with necessary jointing material adhesive, coupler, rubber to form a monolithic & leak proof joint including carrying out smoke test to check the joint. complete including all materials, labours as directed by engineer - in - charge.	147.00	Rmt

26	Providing supplying and laying HDPE double wall corrugated pipe of size 500mm ID (SN8) of make Crown, Mohindra, Aarkay, Keshav kripa polyplast, Berlia, Supreme for non pressure underground drainage and sewerage with smooth internal & corrugated external surface confirming to IS 16098:Part-2 2013 with spigot or plain end with necessary jointing material adhesive, coupler, rubber to form a monolithic & leak proof joint including carrying out smoke test to check the joint. complete including all materials, labours as directed by engineer - in - charge.	190.00	Rmt
27	Providing supplying and laying HDPE double wall corrugated pipe of size 600mm ID (SN8) of make Crown, Mohindra, Aarkay, Keshav kripa polyplast, Berlia, Supreme for non pressure underground drainage and sewerage with smooth internal & corrugated external surface confirming to IS 16098:Part-2 2013 with spigot or plain end with necessary jointing material adhesive, coupler, rubber to form a monolithic & leak proof joint including carrying out smoke test to check the joint. complete including all materials, labours as directed by engineer - in - charge.	33.00	Rmt
28	Providing and laying HDPE pipes 150mm dia. having wall thickness of 9mm to 14mm of CPI/Noble/Berlia make with ISI mark laying in trenches in proper line and level with all required fittings, connecting all joints with fusion butt welding by using hot plate or fixing on walls with necessary fittings, clamps etc. complete as directed.	10.00	Rmt
29	Providing and fixing precast RCC slab for drain cover and chember cover of required size with M-25 grade concrete and reinforced with 10mm dia main steel bars (along shorter span) and 8mm. dia distribution bars (along longer span) at 100mm center to center including making steel form work, making temporary concrete platform for casting, compaction using surface vibrator, with two lifting hooks of 6mm dia / holes of 25mm dia finishing the surface with smooth cement finish curing, placing the precast slab in proper position etc. complete as directed.	1.00	m3
30	Providing and fixing 900mm x 600mm rectangular Heavy duty Composite FRP manhole covers with frame for inspection chamber / manhole / gulley trap/ over storm water drain and other required places manufactured by M/s.KK or IITB approved make etc. all complete as directed.	5.00	Each
31	Providing and fixing 900mm x 450mm rectangular Heavy duty Composite FRP manhole covers with frame for inspection chamber / manhole / gulley trap/ over storm water drain and other required places manufactured by M/s.KK or IITB approved make etc. all complete as directed.	5.00	Each
32	Construction of granular sub-base, Grade-V having gradation as per MORTH table 400-1 (size range 75 mm to 0.425 mm) by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material using machinary to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge, collecting samples, testing as per section 900 of MORTH and submitting reports etc. completed as directed. (Note: The mix design with all relevant data to be submitted & prior approval is to be obtained from IIT Bombay. Compacted thickness will be taken for payment.)	8.00	m3
33	Providing lowering, and laying 300mm dia NP2 class R.C.C. spun pipes conforming to IS 458 of 300 mm dia (n.b) with necessary collars, laid to correct grade, alignment and levels at all depth including cutting to required length, jointing with hemp yarn and cement mortar 1:2 caulking the joints, finishing, curing etc. complete as directed.	10.00	Rmt
34	Dismantling Reinforced cement concrete work including breaking concrete by chiselling, wedging including scaffolding, covering area with jute kantan to avoid spreading of dust etc., stacking the debris upto a distance of 50 metres as directed.	1.00	m3

the members completely and stacking the same as directed by Engineer-in- charge all complete as directed. (Recovery of wood scrap will be done @ Rs. 25 per kg, aluminium scrap will be done @ Rs. 120 per kg and structural steel	5.00	m2
for the purpose of repairing the wall including fixing in position with nut bolt	5.00	m2
and of desired height for fencing including welding the chain link fencing with	F 00	m2
channels, angles, tees, hollow sections and any other required sections etc. as per detailed designs & drawings for supports, rafters, purlins, railing, staircase and any other work including fixing in position with connecting plates, braces	50.00	kg
thick cement concrete M-20 (1:1½:3) foundation with 150mm minimum offset beyond masonry wall plastering with cement mortar 1:4, 12mm thick on internal, external and all exposed faces, finished with floating coat of neat cement including providing and fixing FRP cover with frame, heavy duty, manufactured by KK Industries as approved by Engineer Incharge all complete	1.00	Nos
Providing and constructing brick mansonry inspection chamber 900mm x 450 mm and 45cm to 90 cm in depth including cement concrete in M-20 foundation, PCC 10 cm thick channels, brick masonry, plastering on inside and outside as required in cement mortar 1:6, providing and fixing FRP cover with frame, heavy duty, manufactured by KK Industries etc all complete as directed bt Engineer In charge.	1.00	No.
Providing and laying in position machine batched and machine mixed design mix M-25 (1:1:2) grade cement concrete for all work above plinth level upto any floor level for reinforced cement concrete work, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge including compacting, roughening the surface if special finish is to be provided, casting cubes and testing etc. completed as directed.	1.00	m3
Cutting of road surfaces manually including bituminous macadam, soling etc. including stacking the debris upto a distance of 50 metres or spreading as directed.	100.00	m3
Laying old cement cocrete interlocking paver blocks of any design/shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the department free of cost).	20.00	m2
Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	20.00	m2
	the members completely and stacking the same as directed by Engineer-incharge all complete as directed. (Recovery of wood scrap will be done @ Rs. 25 per kg, aluminium scrap will be done @ Rs. 120 per kg and structural steel will be done @ Rs. 20 per kg from Item of work agains actual weigth if material taken outside campus)  Removing and refixing any type of fencing from the structural steel frame work for the purpose of repairing the wall including fixing in position with nut bolt purpose of repairing the wall including fixing in position with nut bolt purpose of repairing the wall including fixing in position with nut bolt governed height, site welding etc complete.  Providing and fixing G. I. chain link fencing 50mm x 50mm x 8 guage thick and of desired height for fencing including welding the chain link fencing with G.I. pipes or M.S. angle frames / flats, applying one coat of metal primer and two coats of synthetic enamel paint of approved colour / brand etc. complete.  Providing and fabricating structural steel works in rolled sections like joists, channels, angles, tees, hollow sections and any other required sections etc. as per detailed designs & drawings for supports, rafters, purilins, railing, staircase and any other work including fixing in position with connecting plates, braces and welding, riveting, bolting as necessary including painting, scaffolding etc. complete.  Constructing chambers of internal clear dimensions 900mm x 900mm with 230mm thick brick masonry wall plastering with cement mortar 1:6 over abed of 150mm thick cement concrete M-20 (1:1½3) foundation with 150mm minimum offset beyond masonry wall plastering with cement mortar 1:4. 2 turn hick on internal, external and all exposed faces, finished with floating coat of neat cement including providing and fixing FRP cover with frame, heavy dury manufactured by KK Industries as approved by Engineer Incharge all complete as directed by Engineer Incharge all complete as directed by Engineer Incharge all myling from the providing and const	2.5 per kg, aluminum scrap will be done (g/ks. 120 per kg and structural steed will be done (g/ks. 20 per kg from Item of work agains actual weigth if material taken outside campus)  Removing and refixing any type of fencing from the structural steel frame work for the purpose of repairing the wall including fixing in position with nut bolt arrangement, welding, riveting, bolting connecting plates, brasess Scaffolding upto required height, site welding et complete.  Providing and fixing G. I. chain link fencing 50mm x 50mm x 8 guage thick and of desired height for fencing including welding the chain link fencing with G.I. pipes or M.S. angle frames / flats, applying one coat of metal primer and two coats of synthetic enamel paint of approved colour / brand etc. complete.  Providing and fabricating structural steel works in rolled sections like joists, channels, angles, tees, hollow sections and any other required sections etc. as per detailed designs & drawings for supports, rifters, purlins, railing, staircase and any other work including fixing in position with connecting plates, braces and welding, riveting, bolting as necessary including painting, scaffolding etc. complete.  Constructing chambers of internal clear dimensions 900mm x 900mm with 230mm thick brick masonry wall in cement mortar 1:4, 12mm thick on internal, external and all exposed faces, finished with floating cost of near cement including providing and fixing FRP cover with frame, heavy duty, manufactured by KK Industries as approved by Engineer Inchange all complete including an excessary dewatering, if required etc. for chambers 900mm x 450 mm and 45cm to 90 cm in depth including cement concrete in M-20 foundation, PCC. 10 cm thick channels, brick masonry, plastering on inside and outside as required in cement mortar 1:6, providing and fixing FRP cover with frame, heavy duty, manufactured by KK Industries etc all complete as directed by Engineer in charge.  Providing and constructing brick mansonry inspection chamber 900mm x 450 mm and 45cm

45	Providing second class burnt brick masonry with IS approved quality well burnt bricks having in cement mortar 1:6 in superstructure including striking joints, racking out joints, watering and scaffolding complete.	2.00	m3
46	Carefully removing the existing G.I. pipe 12mm to 50mm diameter from floor / walls / slab etc. with out damaging the structures and taking out the same outside campus including scaffolding etc. completed as directed. (5% cost will be deducted from item of work for material taken outside IIT Campus)	10.00	Rmt
47	Providing and laying integral cement based treatment for waterproofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of: i) Ist layer of 22mm to 25mm thick approved and specified shahabad stone slab over a 25mm thick base of cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound 2% by weight of cement conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement: 3 coarsesand) mixed with water proofing compound in recommended proportions. As directed by Engineer Incharge.	4.00	m2
48	Providing and laying integral cement based treatment for waterproofing on vertical surface by fixing rough shahabad stone slab 22mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportion with a gap of 20mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 Cement : 3 coarse sand) 20mm thick with neat cement punning mixed with waterproofing compound in recommended proportion complete at all levels and as directed by Engineer in charge.	12.00	m2
49	Disposing debris, loose stones, boulders, concrete pieces broken etc. collected and stacked as directed including loading in trucks, transporting out of IIT Campus including obtaining approval from Government/ private land owners for disposing off on to their approved location. The contractor will be solely responsible for disposing debrises out of campus and the debris are to be removed from site within 72 hours from stacking (30% voids will be deducted from actual measurement for debris, loose stones, boulders, concrete pieces).	75.00	m3
50	Removing excavated earth or debris including loading in trucks and conveying to approved dumping point in HTB campus unloading spreading etc. complete. 30% voids will be deducted in case of truck measurement.	5.00	m3
51	Laying dry trap / rubble stone soling of required thickness including hand packing and compacting in proper level all complete as directed by Engineer-in-charge.	19.00	m3
52	Providing uncoursed rubble masonry of trap stones in cement mortar 1:6 (Cement:sand/grit) including racking out joints when plastering is to be done, striking out joints, watering and pointing with cement mortar 1:3 on outside exposed faces, including providing M-20 grade concrete block header @ 1 header per sqm. to the full thickness of wall, providing weep holes with 100mm dia P.V.C pipes etc. all complete as directed.	10.00	m3
53	Providing and laying in trenches 500mm dia (I.D), L.A class spigot & socket type Ductile (spun) Iron pipes, K-9 class, suitable for Push-on-Rubber gasket joints, in accordance with ISO 2531: 2006 specification including unloading & stacking at site, lowering down and jointing the pipes in trenches with proper alignment and level including jointing the pipe with rubber gasket ring with all tools & equipments etc. all complete as directed by Engineer In-charge. Note: All pipes and fittings shall be hydrostatically tested for 5 Mpa pressure after laying and jointing. Pressure shall be applied internally & shall be steadily maintained for 10 seconds. The pipes and fittingsshall withstand the pressure test & shall not show any sign of leakage, sweating or any kind of defects.	15.00	Rmt

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	54	Providing and laying in trenches 500mm dia (I.D), flanged type pipes Ductile (spun) Iron pipes, K-9 class, suitable for Push-on-Rubber gasket joints, in accordance with ISO 2531: 2006 specification including unloading & stacking at site, lowering down and jointing the pipes in trenches with proper alignment and level including jointing the pipe with rubber gasket ring with all tools & equipments etc. all complete as directed by Engineer In-charge. Note: All pipes and fittings shall be hydrostatically tested for 5 Mpa pressure after laying and jointing. Pressure shall be applied internally & shall be steadily maintained for 10 seconds. The pipes and fittingsshall withstand the pressure test & shall not show any sign of leakage, sweating or any kind of defects.	5.00	Rmt
	55	Providing and fixing mild steel fabricated specials with approximately 10mm thick plate, cutting the plates, bending, welding (making from seamless pipe), fabricating in required size and shape with necessary flanges etc. with all joints water tight, providing and applying anticorrosive painting, fixing in proper line and level complete including testing hydraulically with a pressure upto 10 kg / sq. cm. etc. complete.		kg
		Providing and laying water quality Duct iron specials and fittings like tees, bends, collars, reducers, tail pieces etc. for pressure pipes conforming to IS: 1538, laying in correct position and alignment etc. all complete as directed by Engineer In-charge. (flanged type and S.S. type) (Joints will be paid separately) Note: All pipes and fittings shall be hydrostatically tested for 5 Mpa pressure after laying and jointing. Pressure shall be applied internally & shall be steadily maintained for 10 seconds. The pipes and fittingsshall withstand the pressure test & shall not show any sign of leakage, sweating or any kind of defects.	100.00	Kg.
	57	Providing, fabricating and fixing Chequred Plate of required thickness for steps and any other work including in required size, welding, fixing necessary supporting M.S frame work with the plate including one coat of steel primer and two coat of SEP etc. completed as directed. (M.S work will be paid separately)	200.00	Kg
	58	Providing and making Butt Fusion weld joint of HDPE pipe of any diameter, jointing by heating to the ends of pipes with the help of teflon coated electric heater to the required temperature and then pressing the ends together against each other to form a monolithic & leak proof joint by thermosetting process. The pressing may be done with jacks/ hydraulic jacks/ butt fusion machine etc. all complete as directed.	10.00	Nos.

1) Note: This schedule of work is given for reference purpose only. Contractors are requested to quote your rates online in financial bid.

2) If you will engage labourer 20 or more any day, you have to get labour licence as per contract Regulation & Abolition Act 1970 Rule 1971, and also, you have to keep all such recored for inspection to the Principal Employer. If you will engage labour up to 10 Nos. per day, you have to file returns after completion of work as per Building & Construction Act to the Office of Regional Labour Commissioner (Central), Sion, Mumbai.

3) This work is to be executed as per the the clauses mentioned in the tender document signed by you. In addition to the existing safety clause of the tender document a penalty of Rs.5,000/- per case will be recovered from the bills of the particular works, in case any such safety violations are noticed.

4) 01% amount will be deducted from the bills for safety related measures which will be reimburse along with the final bill.

5) Taxes as per government notification time to time.

6) Contractor must pay GST Taxes to concern authority within 30 days time limit after receipt of payment from IIT Bombay & said record must be submitted to IIT Bombay Accounts Section, otherwise action will be taken as deemed fit.

7) If any malpractices / fraud / negligent professional behaviour or any discrepancy / inconsistency / disparity / deviation / disagreement / dissimilarity / mismatch noticed, their contract will be terminated by issuing one month notice by following legal procedure and will be blacklisted and informed to all Government Authorities and Organisations.

Superintending Engineer (I/C)

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