

DNT

Name of work:-Operation and maintenance of .99 MLD STP at Mela ground Bhunter with its complete net work of Zone A&D under sewerage scheme Bhunter Town in Tehsil Bhunter Distt. Kullu.

Estimated Cost 492000
 Earnest money 9840
 Time: 3 Month

S.No	Description of items	Quantity	Unit	Unit	Amount
1	Operation,repair and maintenance of Sewage Treatment and all civil works and electro-mechanical equipments , sewerage network , main trunk sewers, man holes and entire sewer net work of zone A&D by deploying Assistant Plant manager ,Process Engineer, Junior Engineer (Civil),Supervisor, Electricians,Operators,Chemist,Assistant Chemist, Sewer men, Casual Labourer, Watchman, Fitter, plumber Sewer men, Casual Labourer, Watchman, Gardener,Fitter, plumber, etc. relating to sewerage system of Bhunter Town which consist of sewage treatment plant of 0.99 MLD capacity, in all respect to the entire satisfaction of Engineer-in-charge. Firm should do comply the stringent effluent standards laid down by HP Pollution control board and terms and conditions as per annexure A to M alongwith other general terms and conditions.	1 Job	Job for 3 Month		
			Total:-	Total:-	0
Operation, repair and maintenance shall cover following components					
Sr. No.	Unit	Nos.	Size/ Capacity	MOC	
0.99 MLD capacity zone A&D					
A Sewer Network					
1	Complete sewer network length	8250 mtr.	DI pipe 150mm to 400mm	DI	
2	No of manholes	271 Nos	Various sizes	RCC/masonry	
B Civil Unit					
1	Inlet Chamber	1 No	1.50x1.40x1.40	RCC	
2	Manual Screen Channel	2	2x0.27x0.160x+0.30 FB	RCC	
3	Manual grit chamber	2	5.80x0.52x0.68+0.30 FB	RCC	
4	Extended Aeration Tank	2	12 mtr diax3.50+0.50 FB	RCC	
5	Secondary Clarifier		11.4x7.60x1.50+0.30	RCC	
6	Lab Building	1 No	10x6.60	RCC/masonry	
7	Dry well /Wet well		6 mtr diax9.00 mtr	RCC	
8	Parshal flume	1 No	2.30x0.27	RCC	
9	Chlorine contact Tan k	1 NO	5.50x3.50x2.20+0.30 FB	RCC	
10	Pump House	1 No	5.30x5.00x3.00	RCC/masonry	
11	Sludge thickener	1 No	2.30 dia, 3 mtr height	RCC	
12	Sludge drying beds	4 Nos	12.50 x6.25	RCC	
13	Filtrate sump	1 No	1.75x1.40x1.50	RCC	
C Mechanical Units					
1	CI gates	1 No		MS	
2	Manual bar screens	2 Nos	-	MS epoxy painted	
3	Fixed type slow speed aerators	2 Nos	12.50 HP	MS epoxy painted	
4	Sludge Agitator	1 No	2 HP	SS 316	
5	Sludge Recycle pumps	1 No	2 HP	As per manufacturer recommendati on.	
6	Raw sewage pumps	2 Nos	5 HP		
7	Dry well/wet well	2 Nos	3 HP		
		1 No	5 HP		
		1 No	2 HP		
8	Campus lighting	Job			

812800

Executive Engineer
 IPH Division No.II
 Kullu at Bhunter

TERMS AND CONDITIONS

Name of work:- A/R & M/O of Sewerage system to Bhunter town in Tehsil & Distt. Kullu HP. (SH:- I O&M of 0.99 MLD Zone A-D including sewer network																				
The Contractor/Firm shall be responsible for operating the plant properly as per CPHEEO manual on operation and maintenance of Sewerage and Sewage Treatment System for achieving the desired results given as under :-																				
a)	BOD5 at 5 days at 20 degree centigrade Less than 20mg/Liters.																			
b)	Suspended solids. Less than 30mg/Liters																			
c)	PH value. 6.5 to 8																			
d)	Oil & Grease Less than 10 mg/liters.																			
e)	COD value less than 250 mg/L																			
The contractor/firm or applicable during operation shall be solely responsible for any violation of the Water (Prevention & Control of Pollution) Act, 1974 and any other law of the State due to negligence on his part in properly running the STP & the sewer network and comply with the above parameters. The contractor shall also follow the guidelines of NGT (National Green Tribunal) and HP state pollution board received from time to time. As operation and maintenance of Sewage treatment Plant is governed by the Water (Prevention & Control of Pollution) Act, 1974, which may attract legal implication and any other penalty for violation of norms and if during operation such legal and penalty is levied by the Himachal Pradesh State Pollution Control Board or National Green Tribunal or any agency authorised to do so, the firm/contractor shall be responsible the same. The penalty so imposed for violation shall be borne by the firm/contractor except for the period when influent received is more than designed capacity.																				
1																				
2 The Contractor/Firm shall be responsible for proper housekeeping of Sewage Treatment Plant during all time.																				
3 Contractor shall engage staff in STP with sufficient experience in handling sewage treatment plant as per following qualification :																				
Sr.No	Manpower	Qualifications																		
1	Assistant Plant Manager	B.E. Civil																		
2	Process Engineer	B.Tech. in Environmental Engineering																		
3	Junior Engineer	Diploma in Civil																		
4	Chemist	MSc in Microbiology /Biotechnology																		
5	Assistant Chemist	BSc Medical																		
6	Operator (Electrical and Mechanical)	ITI certificate holder																		
7	Electrician	ITI certificate holder																		
8	Fitter	ITI certificate holder																		
9	Sewerman/Sweeper																			
10	Casual labour																			
11	Chowkidar/watchman																			
12	Gardener																			
The contractor/firm will conduct interview for all staff to be deployed in STP and shall supply their appointment order and qualification to Executive Engineer (S.P. H. Division No.II Kullu at Bhunter before taking over the scheme for operation and maintenance. The contractor having professional degree shall not be considered himself in the list of staff deployed for O&M. If during O&M period any staff deployed in STP leaves his job with one or other reason the contractor/firm shall deploy another staff of equivalent capacity by adopting the same procedure as earlier and submit his appointment order within seven days to the Engineer-in-charge. The staff deployed should be able to understand the advice of consultant/IPH department.																				
4 All staff deployed in STP shall have to record their shift wise daily attendance at the beginning and leaving their duties failing which deduction shall be made in bills.																				
5 The contractor /firm shall quote his firm rate for every year keeping in view the future escalation in material and labour. Therefore, no escalation for material and labour shall be allowed during the contract period.																				
6 Any increase in labour rates during O& M period will be paid extra to the contractor .																				
7 The Contractor/Firm shall be responsible for maintaining the following:-																				
Daily log book. The logbook should contain daily flow of influent, treated effluent, amount of chemicals consumed per day, Number of energy units consumed daily. Test report of samples. This needs to be mailed to the Executive Engineer daily.																				
a)	Maintenance record of all equipment's on the proforma SHOULD BE KEPT AS PER DIRECTIONS OF Engineer-in-charge.																			
b)	Oil refilling schedule.																			
c)	Inventory of Chemicals.																			
d)	Inventory of spares.																			
e)	Inventory of Laboratory chemicals and glassware.																			
f)	Analysis/results of samples collected at inlet & outlet. The record of COD, PH, and Suspended solids, total dissolved Solids, Oil & Grease and BOD to be maintained.																			
g)	Laboratory of STP.																			
h)	In addition to above record as per daily record book maintained by the contractor/Firm .																			
8 The energy charges for operation of plant /equipment's and water bill will be borne by the department. However, the firm has to bear the energy charges on account of electricity bills in respect of staff accommodation at the said plant.																				
9 The STP shall be inspected by the Contractor/Firm before submitting their offer and in case of any defect/shortcoming the same shall be elaborated by the contractor in his offer and suggest solution for the same.																				
10 The contractor/firm will enable the department to get the consent of HPPCB and its renewal thereafter for operation of the STPs. The department will deposit the fees for its renewal.																				
11 All the chemicals and lubricants shall be brought to the STP on the prior approval of the Engineer-in-Charge and the same shall be got entered into the stock register of the Engineer-in-Charge. The Chemicals needed for smooth running of STP can be had from department at the prevailing store issue rate.																				
12 The contractor/ firm can use the accommodation available at site after taking permission from the department. The department will charge @ Rs. 1000/per month per set wherever applicable.																				
13 The firm will arrange itself all spares, consumable items, lubricants, oil, grease & treatment chemicals, alum, polyelectrolyte, lime & laboratory testing chemicals and nothing extra shall be paid to the firm. Change of oil & grease will be done by the contractor in the presence of IPH																				
Deptt. Representative as per manufacturer's periodical maintenance schedule. The contractor/firm shall have to satisfy the Engineer-in-Charge with respect to the quality of these items and if need be the contractor/firm shall have to produce Manufacturer Test Certificate or Third Party Inspection Certificate from approved Certification agencies like DNV, LLOYDS & RITES. Minimum Inventory & its register of all these items shall be maintained at all times as per direction of the Engineer-in-Charge.																				
14 The Contractor/Firm will be responsible for maintaining the existing and newly laid sewer lines of the zone contributing sewage to the plant from common point/ manhole as decided and mutually agreed. To repair and rectify the leakages and chocking in the Sewerage Network, if any, will be the responsibility of the contractor. The department will take care of all permissions, if any, required for undertaking the repair from any department / agency, on the written request of the contractor. New pipes, if required, shall be supplied by the department free of cost to the nearest point on road head.																				
15 In case, if there is any disruption in the operational process of smooth running of the STP and functioning of the sewerage system, the contractor will be solely responsible. The contractor will ensure to remove/ rectify the defects on priority and make the system functional. If he fails to do so, the department will have the liberty to rectify the defects and make the system functional at Contractor's risk & cost. An inconvenience charge of Rs. 10,000/- per day shall be levied for such intervention in addition to the cost borne by the Department to rectify the defect.																				

16	The contractor shall have to arrange himself adequate tools and plants required for operation and maintenance of STP/Network.													
17	(A) The contractor shall setup a 24 hours complaint redressal system with at least 1 dedicated landline telephone/mobile for attending of Consumer Complaints. Every Consumer should be allotted a complaint No. for future reference. The cost of installation and the monthly bills of telephone shall be borne by the contractor/Firm.													
	(B) The contractor/firm will maintain the register of daily complaints which should indicate name of complainant, complaint No, nature of complaint, location/area in respect of leakages, choking, overflow from manhole etc. or other related components of the STP & network. The daily report of the complaints shall be intimated to the Engineer-in-charge at 10.00 AM through mail/fax, failing which a penalty @ Rs.100/- per day shall be imposed on the contractor, if the complaint lodged is not attended within 24 hours of the receipt. Inconvenience charges @ Rs. 1000/- per day shall be charged from the contractor, if the complaint remains unattended and the same shall be rectified at the risk and cost of the contractor.													
18	The department shall be at liberty to extend the sewer line/ providing civil structures/ providing new sewer connection/ extension of sewerage network and expenditure of the same shall be borne by the department. However the maintenance of same shall be responsibility of the contractor/ firm.													
19	The contractor/ firm shall have to provide protective gear like gloves and gum boots, masks etc. to the worker deployed for STP/ sewerage network & necessary uniform and badges should be provided to the worker for their identification. No employee engaged in STP shall be allowed to work without uniform.													
20	Prequintes maintenance of all equipments shall be done on the weekly basis to minimise wear and tear in the STP .Wear & tear of all mechanical and electrical equipment, burning of motor , repair of pump and motor including allied accessories, civil structure and pipe lines during the contract period to be borne by the firm/contractor and nothing extra shall be paid on this account including those pointed in inspection note of inspection officers and any such defect shall be rectified within 24 hours.													
21	The Contractor/Firm shall be responsible for undertaking all kinds of repairs, if any to electrical and mechanical equipment and structures including preventive maintenance during the contract period. The contractor shall engage experienced vendor for maintenance of equipment and shall get the vendor approved from the department before undertaking repairs in writing.													
22	The contractor/ firm shall engage minimum labour to achieve the desired results and shall submit weekly labour return categories wise so engaged, failing which penalty as specified under the Minimum Wages by the Govt. for that particular category or equivalent shall be levied for breach of this condition. Monthly information w.r.t. the staff deployed at STP shall be submitted in Format. In case non-compliance to deposition of EPF amount/payment the department liberty to pay the same in addition to penalizing the contractor by forfeiting the performance bond, security amount and penalty upto 10% of total awarded amount.													
Name of STP: - ----- Month----- Name of firm/contractor-----														
S.N	Name of employee	Qualification	Designation	Permanent	Correspondence	EPF No. of	Amount de	Remarks						
23	The contractor/ firm will collect the samples at inlet and final discharge point of STP and shall test the sample in laboratory available at the STP for the parameters specified in condition No.1. The contractor will maintain regular record of results. The daily result should be mailed /faxed to the Assistant Engineer/Executive Engineer and also displayed on the notice board at the S.T.P for public view.													
24	The contractor/firm will submit the weekly report of test results and performance of plant and machinery on the proforma supplied by the department to the concerned Assistant Engineer.													
25	The disposal of screening, grit & wet or dry sludge will be contractor's responsibility. The contractor will dump screening, grit at the location suggested by Engineer-in-charge/ Department with in STP boundary limits and shall maintain the records of quantity removed/ collected and same shall be displayed on the board daily at plant. The contractor shall make arrangement for packing of the sludge/manure in gunny bags of approximately left size and stack it properly within the STP boundary limits.													
26	The quarterly payment will be made to the Contractor within 15 days after submission of bill by the Contractor subject to successful performance/ desired results of treated effluent failing which no payment shall be admissible. The monthly bill should be submitted along with attested copy of monthly record as mentioned in condition No. 2, 14 B, 18, 19, 20. The bill should be supported by Employee Challan No. or any other information as desired by the Engineer-in-charge related to the STP & Network. The payment to the workers and staff deployed by the contractor shall be paid before 7th of each month.													
27	The plant & equipment shall be operated strictly as per O & M manual supplied by the department and as per the direction of Engineer-in-charge. The O & M manual shall always be readily available in the plant & made available to the officials & public for viewing.													
28	The Contractor/Firm shall be responsible for evaluation of performance of STP units as and when required, as per the direction of Engineer-in-charge if any defects noticed in the process of any unit shall be rectified by the contractor/firm.													
29	The Contractor/Firm shall be responsible for the gardening and maintaining the plants/trees and nothing extra shall be payable for the same. Fresh plantation consultation with department shall be appreciated. If contractor fails to maintain campus of STP do not make proper gardening the Site Engineer/ Assistant Engineer can impose monthly basis penalty for poor performance. Department will take photograph of Plant and Campus before handing it to contractor.													
30	The contractor/firm should submit the implementation plan for operation and maintenance of STP & sewerage network to department.													
31	The contractor/firm will not be allowed to sublet the work after award of work, failing which the agreement shall be rescind immediately and security deposit will be forfeited.													
32	There might be increase in sewerage network of the zone as indicated in the schedule of quantity aspect of operation & maintenance. The firm will be responsible for maintaining these additional sewer lines.													
33	The contractor/firm shall be responsible for any labour complaints and he shall be solely liable for the penal action if any under the labour laws of the State.													
34	The removal of minor slip within the plant boundary will be the responsibility of the contractor/firm or any damage caused to sewer line due to these slips, the maintenance of sewer line will be firm's responsibility.													
35	The contractor/firm shall fulfill/ satisfy all the conditions of labour department as per labour laws.													
36	The contractor/firm shall arrange cement, steel, aggregate, sand for minor repairing/ maintenance of civil structures at its own cost.													
37	The contractor/firm shall arrange rubber gaskets of reputed make D.I. pipes fittings and manhole covers for maintenance of sewer lines of the zone at its own cost.													
38	The deposition of service tax will be firm/contractors responsibility.													

	GENERAL TERMS & CONDITIONS:													
1	The contractor shall submit monthly bill before 5th of every month along with all returns as per annexure "L to N and deduction as per Annexure C"													
2	The contractor shall be responsible for maintaining the Schedule of preventing maintenance (centrifugal pumps) Annexure "J"													
3	The contractor shall be responsible for maintaining the Schedule of preventing maintenance (motors) Annexure "K"													
4	The contractor shall be responsible for maintaining the Schedule of preventing maintenance (SST and Aeration tank) Annexure "L"													
5	The contractor shall be responsible for maintaining the doses of various chemicals used in the STP as per Annexure "M" unless variation is required owing to specific site conditions.													
6	The contractor shall be responsible for maintaining the Inventory of chemicals, spares and glassware.													
7	The contractor will obtain the consent for submission to HPPCB and its renewal thereafter. The department will deposit the fees for its renewal.													
8	The power failure record should be maintained by the contractor and Engineer-in-charge will tally the same with HPSEB.													
9	The firm will arrange itself all consumable items spares, lubricants, oil, grease and treatment chemicals, alum, poly electrolytes, lime and laboratory testing chemicals and nothing extra shall be paid to the firm. Change of oil and grease will be done by the contractor in the presence of IPH representative as per manufacturer's periodical maintenance schedule.													
10	The contractor will be responsible for maintaining the newly laid sewer lines contributing sewage to the plant. To repair and rectify the leakages and choking of the sewerage network, if any will be the responsibility of the contractor. The department will take care of all permissions, if any required for under taking of repair from any department/contractor on request of contractor. Pipes, if required shall be supplied by the department free of cost from IPH Division store at Shamshi.													
11	The contractor shall have to arrange at his own cost adequate tools and plants required for operation & maintenance of STP/Network.													
12	The department shall be at liability to extend the sewer line / providing structure/ providing new sewer connection/extension and expenditure shall be borne by the department. However the maintenance of same shall be responsibility of the contractor without any extra cost.													
13	The contractor shall have to provide uniform to the worker deployed, for the STP / Sewerage network and necessary badges should be provided to the worker for their identification.													
14	All wear & tear of all mechanical equipment, structures i/c pipe lines to be borne by the contractor and nothing extra shall be paid on this account.													
15	The contractor shall be responsible for undertaking all kinds of repair, i/c those pointed out in inspection note of inspecting officers in electrical & mechanical equipments and structure i/c preventive maintenance. The contractor shall engage experienced vendors for maintenance of equipments and shall get the vendors approved from department before under taking repairs in writing.													
16	The contractor will collect the samples at inlet, aeration tank, SST & final discharge point and test the samples in the Laboratory available at the STP and maintain regular record of results.													
17	The disposal of screening, grit & sludge will be contractor's responsibility. The contractor will dump screening, grit & the sludge at the location suggested by the Engineer-in-Charge/ department within the STP boundary limits and shall maintain the record of quantity removed collected and same shall be displayed on the board daily at plant.													
18	The quarterly payment will be made to the contractor based on monthly bill prepared by the engineer-in-charge after making all deductions as per annexure "G" within 15 days after submission of bill by the contractor subject to successful performance / desired results of treated effluents failing which no payment shall be admissible.													
19	The contractor will be responsible for evaluation of performance of each unit of STP as and when required as per the direction of Engineer-in-Charge.													
20	The contractor will be responsible for gardening and maintaining the plants/ trees and nothing extra shall payable for same. Fresh plantation in consultation with department can be made.													
21	The contractor should submit the implementation plan for operation and maintenance of STP and sewerage network.													
22	The removal of slips and landslides in the plant boundary as well as in the sewerage network will be firm's responsibility upto Rs 15000 per year. Any damage caused to sewer lines due to landslides / slips the maintenance of sewer line will be firm's responsibility.													
23	Cement and steel shall be issued by the department at store issue rate to be specified in the DNIT and maintain its proper record by the Engineer-in-charge.													
24	The contractor shall arrange at its own cost rubber gaskets of reputed make, lead valves / DI pipe fitting and manhole covers for maintenance of sewer lines.													
25	The deposition of service tax will be firm /contractor's responsibility. The awarded rate is inclusive of service tax.													
a.	The cost of employee's provident fund (EPF) & employee state insurance (ESIC) is i/c in the awarded amount. The deposition of same will be firm / contractor's responsibility.													
26	The contractor will be responsible for any theft of material of STP/ Sewerage network. In case of such incident he shall immediately inform the department and lodge FIR with the Police station concerned.													
27	The contractor will be responsible for painting of all equipments i/c epoxy painting, buildings annually.													
28	The department will one time supply the laboratory Glass ware and laboratory Equipments and an inventory of same be made at the time of handing over the plant to the firm. This inventory will be checked at the time of taking over the plant from the firm at the end of O&M contract. All the equipments should be well kept and maintained and firm shall be responsible for the same during O&M period.													
29	The contractor shall take all precautions to avoid all incidents by exhibiting necessary caution board, day and night speed limit board, red flags, red light wherever required. He shall be responsible for all damages and accidents caused due to negligence on his part, no hindrance shall be caused to traffic during the maintenance period. The contractor has to take all insurance cover.													
30	The contractor shall motivate public for getting sewer connections and the work of making sewer connection of respective users shall be done under supervision of contractor / department after getting sanction from the competent authority and he should get the work of new connections done mentioned as per specifications and nothing extra shall be payable. However list / details of sewer connections done in each month shall have to be furnished to department.													
31	The contractor shall be wholly responsible for the safety of sewer network and STP's from any type of damages.													
32	The firm agreed to deploy manpower having requisite minimum academic and technical qualification as required under R&P rules of IPH Department.													
33	If any term and condition is contradictory to each other then the decision of Engineer-in-charge will be final and binding upon the contractor.													

DNIT

Name of work:-Providing LIS Neol Noutod in Tehsil Bhuntrar Distt. Kullu HP. (SH:- C/O water intake structure at Garsa Nallah)		Estimated Cost	0	
		Earnest money	0	
		Time	6 months	
S.No.	Description of items.	Quantity	Unit	Amount
1	Excavation in foundation trenches etc. in earth work lift up to 1.5 mtrs. Stacking the excavated soil not more than 3 metres away from the edge of excavation and then returning the stacked soil in 15 cm layers when required in to plinth and sides of foundations, consolidating each deposited layer by ramming, watering and then disposing of all surplus excavated earth as directed with in a lead of 20 metres in pick lumper work.	18.45	Cum	
2	Providing and laying cement concrete 1:3:6(1cement:3 sand: 6 graded stone aggregate 20 mm nominal size) and curing complete excluding the cost of form work in foundation and plinth.	1.35	Cum	
3	Providing and laying cement concrete 1:1 1/2 :3 (1cement: 1 1/2 sand: 3graded stone aggregate 20 mm nominal size)and curing complete excluding the cost of form work and reinforcement in:-			
	i) Foundation and plinth.	33.65	cum	
4	Providing tor steel reinforcement for RCC work including bending, binding and placing in position complete up to floor two level.	1177.75	Kg	
5	Prov. Form work with steel plates 3.15mm thick welded with angle iron in frame 30x30x5mm so asto give a fair finish including centring , shuttering, strutting & propping etc. with wooden battens & ballies , height of propping & centring below supporting floor to ceiling not exceeding 4 mtrs.& removal of the same for insitu reinforced concrete & plain concrete work in:-			
5	Vertical surface such as walls(any thickness but not less than 0.1 mtr thickness) attached pilasters, buttresses, plinth and string courses etc. from top of foundation level up to floor two level.	11.76	sqm	
		Total:-		

TERMS AND CONDITIONS:-

- The work will be carried out as per HPPWD/IPH specification relevant IS/BIS-code & CPHEEO Manual to be satisfaction of the Engineer-in-
- The rates of all items should be inclusive of carriage of all material with in all leads and lifts to the site of work by all means of
- Cement and steel will be issued @ Rs. 298 /- per bag & steel will be issued @Rs.4600 per qtl. from sub Divisional store Shamshi for which recovery shall be made from each bill.
- 1% Labour cess will be deducted on gross amount from each bill besides other deductions such as income Tax, Surcharge on Income Tax and Sales Tax etc.

Executive Engineer,
IPH Division No. II
Kullu at Bhuntrar.