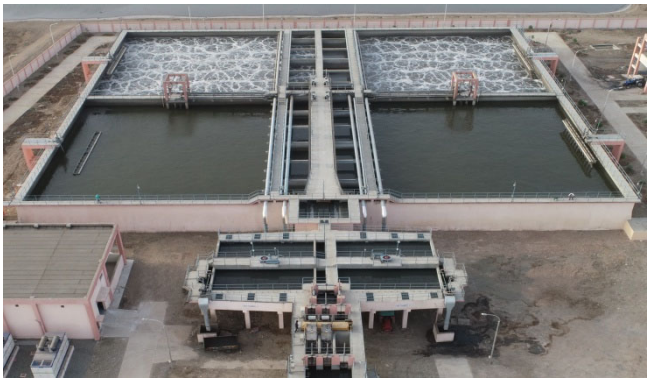
Company Brochure



SAPIENT
TECHNO CONSULTANS

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COMPANY BROCHURE

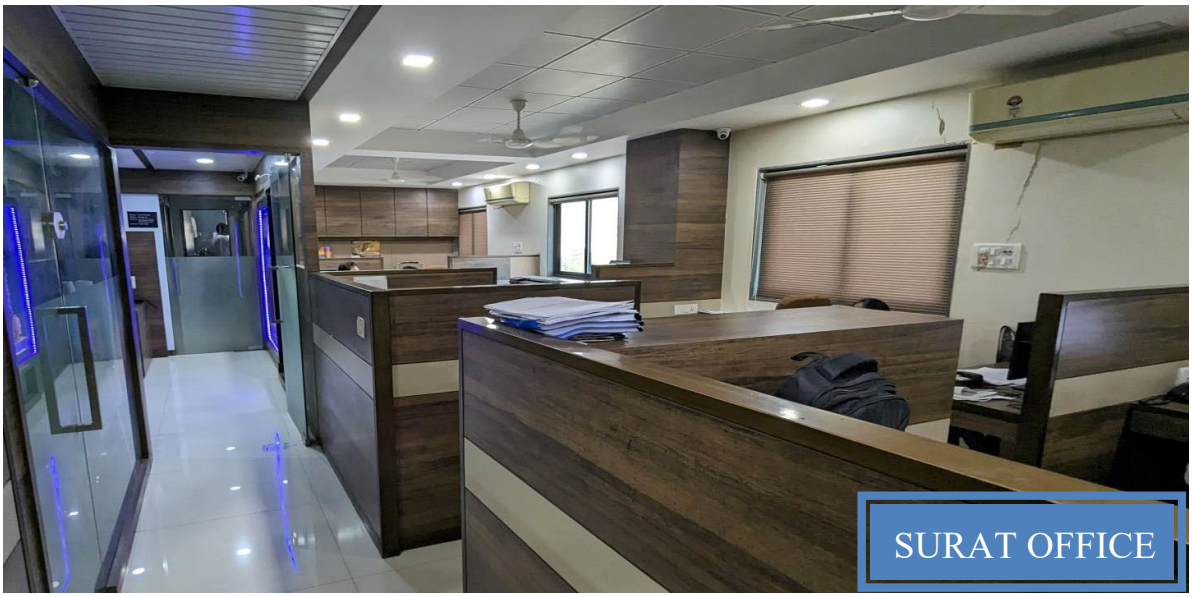
CAPABILITIES & INFRASTRUCTURE

SAPIENT TECHNO CONSULTANTS is a fast growing multi disciplinary consulting engineering firm based at Surat and having offices at Surat, Ahmedabad and Vadodara. The company, formed by a group of technocrats, specializes in providing design, engineering and project management consultancy services in following areas of interest:

- Water & Waste Water Management
- Water Recycle & Re-use
- Environmental engineering
- Infrastructure - Water & Sewerage Network, Industrial Parks / SEZ, etc.
- Civil Engineering – Land Survey, Geo-technical investigations, etc.
- Bio-gas based power generation
- Electrical Power Distribution (LT/MV)
- Electrical Sub Stations (up to 66KV)
- Instrumentation, Automation and SCADA Solutions
- Water Audit & Leak Detection Services

We would humbly put forward that this is an opportunity for us to help conserve scarce resources and serve society and we are committed to this cause.

Established in the year 2006, within a short span the company has emerged as an innovative and cost effective solution provider and having adequate infrastructure to sustain the growth in coming times.



We are a team of experts having rich and varied experience in multidisciplinary fields in similar industry working for several reputed organizations and have contributed in execution of several prestigious projects successfully within the country for various corporate clients, government and municipal bodies. The team is ably supported by subordinate engineering staff, CAD & Computer operators.

The confidence placed in us by our clients can be judged from the fact that within a short span we have successfully completed more than 150 projects including water supply, treatment and distribution schemes; sewage treatment plants, sewerage network & sewage pumping stations, storm water drains, industrial / common effluent treatment plants, water recycling / re-use, process automation for water and waste water treatment, water audit, etc.

The company established since 2006, having rich experience of more than 15 year of relevant experience in the field, our expertise & experience in design and handling various process technologies include the most basic to the advanced state-of-the-art process as under:

- **Sewage Treatment**
  - ✓ Sequential Batch Reactor (SBR) Process
  - ✓ Moving Bio Batch Reactor (MBBR) Process
  - ✓ Anaerobic, Anoxic & Oxic (A2O) Activated Sludge Process for BNR
  - ✓ Conventional Activated Sludge Process
  - ✓ Upflow Anaerobic Sludge Blanket (UASB) Process
  - ✓ Extended Aeration Process
  - ✓ Bio-gas based Power Generation

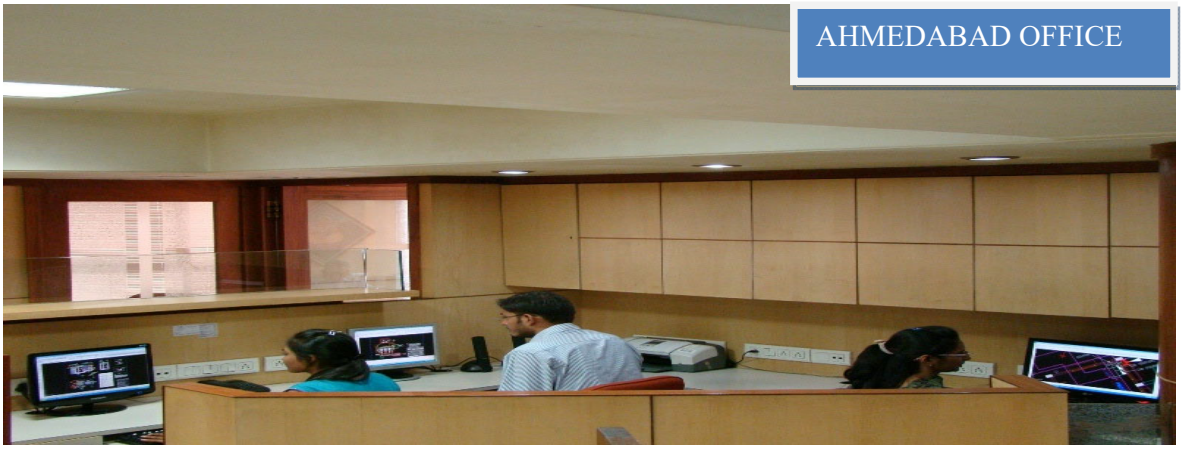
- **Water Treatment**
  - ✓ Clari-flocculator
  - ✓ Reactor Clarifier
  - ✓ Tube Settler / Lamella Clarifier
  - ✓ Rapid Gravity sand Filtration

- **Re-Use & Recycle**
  - ✓ Media Filtration (PDF/ACF/DMF, Cloth/Screen Filter, RGSF, etc.)
  - ✓ Ultra-Filtration (UF)
  - ✓ RO Membrane (TDS Removal)

In short, we can provide ***comprehensive multi-disciplinary consultancy*** for a project right from conceptualization and technical feasibility to project planning, survey and investigation, basic design & cost estimation, detailed design & engineering, contract documents, construction supervision, Inspection and quality control, project management, and commissioning of project - ***All under one roof***.

Infrastructure

Well-furnished offices at Surat, Ahmedabad& Vadodara
Combined Office space of approx. 6500 Sq. ft
Having more than 30 computers with networking facility
Plotting & Printing facilities (up to A0 size)
CAD Software for Drawing Generation
High Speed Internet facility



Registration / Empanelment as Approved Vendor

- Ahmedabad Municipal Corporation
- Bhavnagar Municipal Corporation
- Gujarat Police Housing Board
- Gujarat Rural Housing Board
- IIT, Gandhinagar
- IIT, Roorkee
- Nashik Municipal Corporation
- Rajkot Municipal Corporation
- Surat Municipal Corporation
- Tamilnadu Urban Infrastructure Financial Services Limited
- Vadodara Municipal Corporation

LIST OF SOME MAJOR CLIENTS

Government Sector

- ✓ Vadodara Municipal Corporation
- ✓ Surat Municipal Corporation
- ✓ Ahmedabad Municipal Corporation
- ✓ Gujarat State Electricity Corporation Ltd.
- ✓ Bhavnagar Municipal Corporation
- ✓ Rajkot Municipal Corporation
- ✓ Nashik Municipal Corporation
- ✓ Public Works Department, Daman
- ✓ Gujarat Industrial Development Corporation
- ✓ Gwalior Municipal Corporation
- ✓ CEPT University
- ✓ Municipal Corporation of Jalandhar, Punjab (MCJ)
- ✓ IIT Roorkee
- ✓ IIT Kanpur
- ✓ Greater Noida Industrial Development Authority (GNIDA)

Public & Private Sector

- ✓ Fairdeal Textile Park
- ✓ ITDC Limited
- ✓ Doshion Veolia Water Solutions Pvt. Ltd.
- ✓ Subhash Projects & Marketing Ltd.
- ✓ Jyoti Buildtech Pvt. Ltd
- ✓ Triveni Engineers (I) Ltd.
- ✓ Vibhor Vaibhav Infrastructure P. Ltd.
- ✓ Gujarat Eco Textile Park.
- ✓ Avadh Developers Pvt. Ltd.
- ✓ Rajkamal Builders Infrastructure Pvt. Ltd.
- ✓ HCP Designs & Proj. Mgmt. P. Ltd.
- ✓ Balotra Water Pollution Control & Research Foundation Trust, Balotra, Rajasthan
- ✓ Pali Water Pollution Control, Treatment & Research Foundation, Pali, Rajasthan
- ✓ Jasol Water Pollution Control Treatment & Reverse Osmosis Pvt. Ltd., Jasol, Rajasthan
- ✓ Tata Project Limited

LIST OF MAJOR PROJECTS EXECUTED TYPE & TECHNOLOGY WISE

SEWAGE TREATMENT PLANT

Sequential Batch Reactor (SBR) Process

- ✓ 84 MLD Sewage Treatment Plant at Ataladra, Vadodara for VMC
- ✓ 100 MLD Sewage Treatment Plant at Tarsali, Vadodara for VMC
- ✓ 130 MLD Sewage Treatment Plant at Gajrawadi, Vadodara for VMC
- ✓ 45 MLD Sewage Treatment Plant at Bhayli, Vadodara for VMC
- ✓ 78 MLD Sewage Treatment Plant at Rajivnagar, Vadodara for VMC
- ✓ 80 MLD Sewage Treatment Plant at Madharpar, Rajkot for RMC
- ✓ 100 MLD STP including bio-gas based power generation at Vinzol, Ahmedabad for AMC
- ✓ 45 MLD Sewage Treatment Plant near Excel Industry, Bhavnagar for BMC
- ✓ 60 MLD Sewage Treatment Plant at Kapurai, Vadodara for VMC
- ✓ 60 MLD Sewage Treatment Plant at Jalvihar, Ahmedabad for AMC
- ✓ 50 MLD Sewage Treatment Plant at Chhani, Vadodara for VMC
- ✓ 45 MLD Sewage Treatment Plant at Bhayli, Vadodara for VMC
- ✓ 50 MLD Sewage Treatment Plant near Excel Industries, Bhavnagar for BMC
- ✓ 13 MLD Sewage Treatment Plant at Vemali, Vadodara for VMC
- ✓ 32 MLD STP Sewage Treatment Plant & 55 MLD Sewage Pumping Station at Pimpalgaon Khamb in Nashik City for NMC.
- ✓ 10 MLD Sewage Treatment Plant at Sargasan, Gandhinagar for R&B Dept., Capital Project Divn.-3, Gandhinagar (GOG) (With Recycling of treated sewage for gardening / horticulture purpose)
- ✓ 56 MLD Sewage Treatment Plant at Bapudham & at Govindpuram, Ghaziabad for GDA
- ✓ 50 MLD Sewage Treatment Plant at Noida for New Okhla Indl. Devp. Authority
- ✓ 36 MLD Sewage Treatment Plant at Agra for Agra Development Authority
- ✓ 10 MLD Sewage Treatment Plant at Sargasan for R&B Dept., Capital Project Divn.-3, Gandhinagar (GOG) (With Recycling of treated sewage for gardening / horticulture purpose)

SEWAGE TREATMENT PLANT

- ✓ 4 MLD STP followed by Tertiary Treatment (UF) at Shantigram Township, Ahmedabad for ATRECO including Recycling for non-potable use
- ✓ 3 MLD Tertiary Sewage Treatment Plant with Recycling for non-potable use at IIT, Roorkee

SEWAGE TREATMENT PLANT

A_2O Process
(Biologoical Process for Nutrient Removal)

- ✓ 20 MLD Sewage Treatment Plant including Ultra-filtration based Tertiary Treatment (for BOD<2 mg/L, TSS < 2 mg/L) at Hyderabad, for HMDA
- ✓ 30 MLD Sewage Treatment Plant including RGSF based Tertiary Treatment (for BOD < 5 mg/L, TSS < 5 mg/L) at Hyderabad, for HMDA

Upgradation of Existing STP

- ✓ Up gradation and Automation of 8.5 MLD STP at Sayaji Garden, Vadodara for VMC
- ✓ Up gradation of 110 MLD STP including PLC/SCADA at Agartakali, Nashik for NMC
- ✓ Up gradation of 139 MLD STP including PLC/SCADA at Tapovan, Nashik for NMC
- ✓ Up gradation of 42 MLD STP at Chehadi , Nashik of NMC
- ✓ Up gradation of 60.5 MLD STP at Panchak , Nashik of NMC

SEWAGE TREATMENT PLANT

Conventional Activated Sludge Process


- ✓ 240 MLD Sewage Treatment Plant at Vasna, Ahmedabad for AUDA
- ✓ 180 MLD Sewage Treatment Plant at New Pirana, Ahmedabad for AMC
- ✓ 66 MLD Sewage Treatment Plant at Dindoli, Surat for SMC
- ✓ 60 MLD Sewage Treatment Plant under UIDSSMT at Gwalior for GMC
- ✓ 42 MLD Sewage Treatment Plant at Kanpur for U.P. Jal Nigam
- ✓ 60 MLD Sewage Treatment Plant at Old Pirana, Ahmedabad for AMC
- ✓ 35 MLD Sewage Treatment Plant at Vasna, Ahmedabad for AMC
- ✓ 70 MLD Sewage Treatment Plant at Vinzol, Ahmedabad for AUDA
- ✓ 30 MLD Sewage Treatment Plant at Gajadharpura, Jaipur for JDA
- ✓ 30 MLD Sewage Treatment Plant at Ralawata, Jaipur for JDA

Upflow Anaerobic Sludge Blanket (UASB) Process


- ✓ 43 MLD Sewage Treatment Plant at Ataladra, Vadodara for VMC
- ✓ 10 MLD WWTP for Paper Mill-3, Al Hoty Stanger Ltd., Jeddah, Saudi Arabia
- ✓ 43 MLD Sewage Treatment Plant at Kapurai, Vadodara for VMC
- ✓ 30 MLD Sewage Treatment Plant at Nari Road, Bhavnagar for BMC

SEWAGE TREATMENT PLANT

Bio-Gas based Power Generation

- ✓ 43 MLD Sewage Treatment Plant at Ataladra, Vadodara for VMC
- ✓ 66 MLD Sewage Treatment Plant at Dindoli, Surat for SMC
- ✓ 60 MLD Sewage Treatment Plant at Gwalior for GMC
- ✓ 42 MLD Sewage Treatment Plant at Kanpur for U.P. Jal Nigam
- ✓ 100 MLD STP at Vinzol, Ahmedabad for AMC

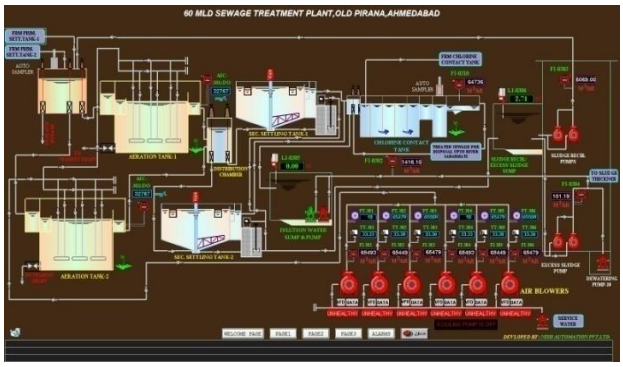
Extended Aeration (ASP) Process

- ✓ 22.5 MLD Sewage Treatment Plant at Ankleshwar for GIDC

Moving Bio Batch Reactor (MBBR) Process

- ✓ 25 MLD Sewage Treatment Plant at Khajod for Surat Municipal Corporation
- ✓ 15 MLD Sewage Treatment Plant at Vesu for Surat Municipal Corporation

Water Re-Use / Recycle Projects



- ✓ 42 MLD Tertiary Treatment Plant for supplying of Treated Waste Water from proposed Chhani Sewage Treatment Plant to nearby Industries (GSFC, GACL, GIPCL) for reuse in industry-Disc Filtration, Membrane Filtration.(UF+RO)
- ✓ 40MLD Plant for Treated Sewage at BLTPS, Padva site for CW Make up for GSECL-Disc Filtration, Membrane (UF Filtration)
- ✓ 78 MLD Sewage Treatment Plant at Rajivnagar, Vadodara for VMC including water re-use for crocodile park & Vishwamitri River Front Project.
- ✓ 60MLD TTP for supply of Treated Sewage Water from existing Rajivnagar STP to IOCL, Rajivnagar for Re-use in industries-Media Filtration & Softening
- ✓ Development of Tertiary Treatment Plant of 8 MLD Capacity at Raiyadhar 56 MLD STP Campus for Rajkot Smart City for RSCDL/RMC – Disc Filtration , Membrane (UF Filtration) & UV Disinfection.
- ✓ Lender's Independent Engineering services for Development of Sewage Treatment Plant at Mathura developed by Mathura Wastewater Management Pvt Ltd.- Supply to IOCL, Mathura for Water Re-use.
- ✓ 30 MLD Sewage Treatment Plant at Hyderabad, for HMDA
- ✓ 20 MLD Sewage Treatment Plant at Hyderabad, for HMDA
- ✓ 4 MLD STP followed by Tertiary Treatment (UF) at Shantigram Township, Ahmedabad for ATRECO including Recycling for non-potable use
- ✓ 1.2 MLD Tertiary Treatment (UF) at IIT Gandhinagar including Recycling for non-potable use
- ✓ 3 MLD Tertiary Sewage Treatment Plant with Recycling for non-potable use at IIT, Roorkee.

Industrial Waste Water (Effluent)

- ✓ 18 MLD ZLD Plant with Solar Ponds for Textile CETP under IPDS Scheme at Balotara for Balotra Water Pollution Control Treatment & Reverso Osmosis Pvt. Ltd.
- ✓ 12 MLD capacity ZLD plant with RO reject treatment for Textile CETP under IPDS Scheme at Punayata Industrial Area (Unit-6) for PTCETP at Pali,Rajasthan-(UF+R0+MEE)
- ✓ 12 MLD capacity ZLD plant with RO reject treatment for Textile CETP at Punayata Industrial Area (Unit-4) for Common Effluent Treatment Plant (CETP) Foundation at Pali, Rajasthan (DBFOT Basis) – (UF+RO+MEE)
- ✓ 7 MLD capacity CETP with ZLD facility along with RO reject treatment for Textile Effluent at Industrial Area I&II –(Unit-7) for Industrial Area (CETP) Foundation at Pali, Rajasthan-(CETP+UF+RO+MEE)
- ✓ 25 MLD ZLD Plant with MEE for Textile CETP at Palsana, Surat for Gujarat Eco Textile Park
- ✓ 2.5 MLD ZLD Facility with Solar Ponds for Textile CETP under IPDS Scheme at Jasol for Jasol Water Pollution Control Treatment & Reverso Osmosis Pvt. Ltd.
- ✓ 30 MLD ZLD plant at Sayan, Surat for Weave Water Engineering Pvt. Ltd.
- ✓ 30 MLD Recycling plant including CETP and ZLD along with conveyance netwotk at Parab Umbhel region for Kadodara Aqua Solution Pvt. Ltd.
- ✓ 30 MLD CETP for textile effluent at Danilimda for AMC
- ✓ 10 MLD ZLD Plant with CETP along with UF+RO+MEE at Mega Textile Park, Warangal, Telangana under IPDS scheme, for Telangana State Industrial Infrastructure Corporation Ltd.(TSIIC) through IL&FS.
- ✓ 10 MLD Effluent Treatment Plant at Fairdeal Textile Park
- ✓ Waste Water Treatment Plant with Tertiary Treatment of output capacity of 79 MLD (46 +33 MLD) for Vizag for Tata Projects Ltd- Membrane Filtration (UF+RO).
- ✓ 63 MLD Effluent Treatment Plant for Ash Water and Other Drain Water Reclamation & Recirculating system for GSECL-UKAI
- ✓ 2.5 MLD TTP at Kejriwal

- ✓ 1.5 MLD CETP ZLD (Acid stream) at Jodhpur for RSSRA Pollution Control and research Foundation

- ✓ Upgradation for Exsiting 18.5 MLD CETP with ZLD (Alkaline stream) at Jodhpur for Jodhpur Pollution Control and Research Foundation, (JPCRF).

WATER TREATMENT PLANT

Conventional with Clariflocculator

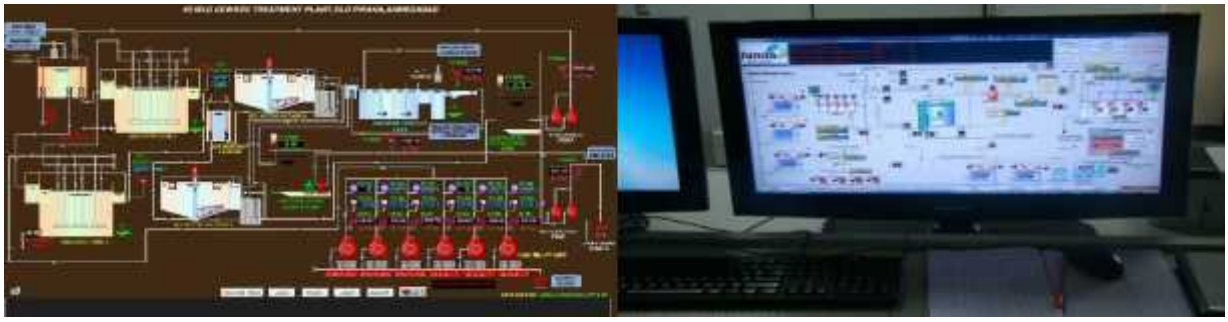
- ✓ 200 MLD WTP at Raska, Ahmedabad for AMC
- ✓ 90 MLD WTP at Kosad & 32 MLD at Mota Varachha for North zone, SMC
- ✓ 78 MLD WTP at Dindoli for New SE Area, SMC
- ✓ 119 MLD at Biliya, 3.2 MLD at Ajasar & 3.1 MLD WTP at Nachana for PFBS Lift Project, PHED Rajasthan
- ✓ 18.16 MLD WTP at Kalol based on Narmada Canal based Water Supply Scheme for Iffco
- ✓ 210 MLD WTP at Variav, Surat for SMC
- ✓ 90 MLD WTP at Sarthana, Surat for SMC
- ✓ 19.2 MLD WTP at Sanand for AMC
- ✓ 200 MLD WTP at Kotarpur, Ahmedabad for AMC
- ✓ 100 MLD WTP at Sanchore for SPML
- ✓ 19 MLD WTP at Gagreen for SPML
- ✓ 7 Nos. WTPof various capacities (200 m^3/hr to 700 m^3/hr) at Agartala for ITD-ITDCEM JV
- ✓ 300 MLD WTP at Kotarpur for AMC
- ✓ 210 MLD WTPat Greater Noida for GNIDA
- ✓ 120 MLD WTP incl. ZLD system for 198 MLD Cap. WTP Waste Water at Dindoli for SMC
- ✓ 50 MLD WTP at Nr. Getco Chokdi, Mavdi Area for RMC
- ✓ 120 MLD WTP at Firozabad, U.P. of U.P. Jal Nigam

Conventional with Lamella Clarifier

- ✓ 50 MLD WTP at Nimeta for Vadodara Municipal Corporation
- ✓ 40 MLD WTP at Shivpuri, M.P. on PPP basis
- ✓ 150 MLD at Katargam, 150 MLD at Sarthana & 50 MLD at Jahangirabad WTP for SMC
- ✓ 144 MLD WTP incl. ZLD system for 590 MLD Cap. WTP Waste Water at Sarthana for SMC

OTHERS

Automation & SCADA Projects



- ✓ SCADA based controls old drainage network comprising of 6 STPs & 23 Nos. SPS for Surat Municipal Corporation
- ✓ SCADA / Telemetry & integration of Tube wells in Jalandhar City for MCJ
- ✓ Water supply Pipe Line SCADA (Pokran to SantraBhakhri), Water supply SPR-2A & 2B Package of PHED, Rajasthan for SPML
- ✓ Electrical & Instrumentation with PLC & SCADA works for 30 MLD CETP for Bhatgam Washing Ghat Suddhikaran Yojna Pvt. Ltd. (A SPV of Jetpur Dyeing and Printing Association) at village Bhat., Dist. Junagadh
- ✓ Electrical & Instrumentation with PLC & SCADA works for Water supply Scheme from Dhanki to Navada, NC-26 Package of GWIL for SPML
- ✓ Electrical & Instrumentation with PLC & SCADA works for Water supply Scheme from Dhanki to Ratanpur, NC-32 Package of GWIL for SPML
- ✓ Instrumentation, Automation/SCADA work for 51 Nos. WDS for AMC
- ✓ Electro-Mechanical & Instrumentation with PLC & SCADA for 3 Nos. WDS, 10 Nos. ESR and distribution network for East & South East Zone for 24x7 Water Supply System under Smart City Mission for SMC.
- ✓ Work of A) Electromechanical Valve with PLC/ RTU Based for all ESR B) SCADA Automation System for all WDS, Booster and Intake well & C) Integration of all existing PLC Based SCADA system of Water works, French Well, WDS with Centralized SCADA System of Surat City Under Smart City scheme for Surat Municipal Corporation
- ✓ Automation & SCADA for various WDS, ESR and WTP etc. for BMC.

Water Audit

- ✓ Water Audit work of Kalol City for CEPT University, Ahmedabad
- ✓ Water Audit work for the towns of Santrampur, Morbi, Palitana, Navsari & Bardoli, for CEPT University, Ahmedabad

Infrastructure Projects

- ✓ 34 MLD Water supply scheme consisting of Intake work, Water treatment plant, UGSR, ESR & Piping distribution network at Daman.
- ✓ 85 cusec Capacity Water Treatment plant at Greater Noida for Greater Noida Industrial Development Authority (GNIDA)
- ✓ Infrastructure Development of Kaliabid Area which consist of 40 km drainage network, 85 km storm drain network, 85 km water supply network and 80 km length for road network for Bhavnagar Municipal Corporation
- ✓ Up- gradation of for Drainage Network, Sewage Pumping Station, Rising Main & Sewage Treatment Plant for Bhavnagar Municipal Corporation
- ✓ Infrastructure Development of Fairdeal Textile Park which consist of drainage network, strom drain network, water supply network, Fire Water network & RO network for Fairdeal Textile Park
- ✓ Landfill closure & cover for secured landfill sites for hazardous waste at Vapi for Vapi Waste & Effluent Management Co. Ltd.
- ✓ Infrastructure Development of Drainage network, Storm drain network, Water supply network, Fire Water network & RO network for Kejriwal Textile Park.
- ✓ Infrastructure works for Raw Water Intake Jack Well cum Pumping Station,10 MLD WTP,Clear Water Pump House at Vikram Udyogpuri near Ujjain,MP under Smart City Project.
- ✓ Project Management Consultancy services for construction work for covering various Storm Water Drainage System in Vadoara City for VMC
- ✓ Project Management Consultancy services for construction of RCC Storm Water Drain to Divert Strom Water Entering into Vadodara City from National High-way from Darjipura Culvert to Vishwamitri River for VMC
- ✓ Up gradation and retrofitting of existing 5 Nos.of STP's of various capacities with new technology to achieve latest norms of CPCB/MPCB/CPHEEO (Total 342.5) MLD & Network in newly develop area (80km) in Nashik City for NMC
- ✓ Up gradation for Existing Drainage Network for Phase- I & Phase-II Part-I for RMC.

PUMPING STATION

Intake Well / Water Distribution Station

- ✓ Intake Well & 7 Nos. Water Distribution Stations for New East and South East area for SMC Surat
- ✓ Intake Well and 8 Nos. Water Distribution Station for New West and South West Area for SMC
- ✓ Intake Well at Durgapur for Matix Fertilizer & Chemicals Ltd.
- ✓ Intake Structure & 3 Nos. pump house each at Karannagar, Dhadhusan and Red Laxmipura
- ✓ Water supply Scheme from Dhanki to Navada, NC-26 Package of GWIL for SPML
- ✓ Water supply Scheme from Dhanki to Ratanpur, NC-32 Package of GWIL for SPML
- ✓ Intermediate Pumping Station, Sauni Yojna Link 2, Package3 near Bhimdad Reservoir for SPML
- ✓ Intermediate Pumping Station, SauniYojna Link 2, Package3 near Goma Reservoir for Eassar projects
- ✓ 850 MLD Raw Water Pumping Station at Kotarpur for AMC
- ✓ Refurbishment of Pumping machinery of Clear Water Pumping Station at Kotarpur Water Works for AMC
- ✓ Refurbishment of Electrical & Mechanical Equipment of Booster-2 of Dudheshwar Water Works for AMC
- ✓ New Water Distribution Pumping Station at Bapunagar for AMC
- ✓ New Water Distribution Pumping Station at Bapunagar for New West Zone of AMC
- ✓ Refurbishment of Pumping Machinery at Chandlodia Talav WDS for AMC
- ✓ Up-gradation & Augmentation of Electrical & Mechanical Equipment at 200 MLD WTP Raska
- ✓ New Water Distribution Pumping Station at Vatva for AMC
- ✓ New Water Distribution Pumping Station at Kargil Gota Ward for AMC
- ✓ New Water Distribution Pumping Station at Nirnaynagar for AMC
- ✓ New Water Distribution Pumping Station at Ranip for AMC

PUMPING STATION

Sewage Pumping Station

- ✓ 285 MLD Sewage Pumping Station at Vasna, AUDA
- ✓ 102 MLD Sewage Pumping Station at Vinzol, AUDA
- ✓ Sewage Pumping Station at Motera, AMC
- ✓ 200 MLD Sewage Pumping Station at Jamalpur for AMC
- ✓ 4 Nos. Sewage Pumping Station at Gandhinagar, GUDA
- ✓ 4 Nos. Sewage Pumping Station at Bhavnagar, BMC
- ✓ 11 Nos. Sewage Pumping Station at Rajkot for RMC
- ✓ Refurbishment of Pumping machinery at New Chamanpura SPS for AMC
- ✓ Up-gradation of Vasna Pirana Terminal Sewage Pumping Station for AMC
- ✓ Refurbishment of Pirana GIDC Effluent Pumping Station for AMC
- ✓ Up-gradation of Pirana Terminal Sewage Pumping Station for AMC
- ✓ Up-gradation of Pirana GIDC Effluent Pumping Station and Behrampura Sewage Pumping Station for AMC
- ✓ Up gradation of existing 6 Nos.Sewage Pumping Stations of RMC
- ✓ Up gradation for Existing Drainage Network for Phase- I & Phase-II Part-I including Popatpara SPS upgrade for RMC.
- ✓ Various SPS at TP-13 Chhani, Kalyannagar, Bahuchraji,Tarsali at Vadodara for VMC

PROJECT DESCRIPTION SHEETS

SEWAGE TREATMENT PLANT
SBR TECHNOLOGY
80 MLD,RMC,MADHPAR,RAJKOT

Client	Rajkot Municipal Corporation, Rajkot, Gujarat
Project Cost	INR 45,74,48,454/-
Scheme	AMRUT
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin with Turbo Blowers ✓ Disinfection: Chlorine Contact Tank ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Design and Engineering Consultancy services including PMC for 80 MLD Capacity Sewage Treatment Plant at Madhapar for Rajkot Municipal Corporation.. • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant based on SBR Technology, etc.

BOD :	≤ 10mg/L	TP :	≤ 2mg/L
TSS :	≤ 10mg/L	TN :	≤ 10mg/L
COD :	≤ 50mg/L		

TERTIARY TREATMENT PLANT
(MEMBRANE FILTRATION)
8 MLD,RSCDL,RAIYADHAR,RAJKOT

Client	Rajkot Smart City Development Ltd
Project Cost	INR 17.45 Crore
Scheme	-
Status	Work in progress
Salient Features	• Major Units of TTP comprises of ✓ Polishing Treatment Unit – Cloth Filter ✓ UF Feed Sump & Pumps ✓ UF Building incl. UF system and Main LT Room & Control Room ✓ Disinfection : UV Disinfection followed by Chlorine Dosing ✓ UF Backwash & UF Reject Water Tanks ✓ Plant Operation with PLC/SCADA System ✓ All civil work for ultimate demand of 16MLD
Services Provided	• Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant of 8 MLD Capacity at Raiyadhar 56 MLD STP Campus of Rajkot City. • This includes Preparation of DPR, Tender document, Evaluation of Tender, Review & Approval of Design & Engineering Documents, providing PMC services including day to day construction supervision and inspection of bought-out items, etc.

UPGRADATION OF EXISTING 12 MLD CETP & PROPOSED ZERO LIQUID DISCHARGE PLANT AT PALI UNIT - 6

Client	Pali Textile Common Effluent Treatment Plant
Project Cost	INR 100 Cr
Status	Completed
Salient Features	✓ Up-gradation of existing 12 MLD CETP (SBR and Aeration Tank) ✓ Polishing Treatment ✓ TTP comprises of : ✓ Filtration (Multigrade Filter + Glass fibre, ACF) ✓ UF treatment followed by three stage RO system ✓ NF system ✓ Thermal treatment
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

COMMON EFFULENT TREATMENT PLANT OF 18 MLD AT BALOTRA

Client	Balotra Water Pollution Control, Treatment and Reverse Osmosis Pvt. Ltd.
Project Cost	INR 128.24 Cr
Status	Completed
Salient Features	• Major Units of TTP comprises of ✓ UF- RO (3 stage) ✓ NF Treatment ✓ Thermal treatment MEE ✓ Solar Evaporation ponds
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant of • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

2.5 MLD ZERO LIQUID DISCHARGE PLANT AT JASOL

Client	Jasol Water Pollution Control Treatment And Reverse Osmosis Pvt. Ltd.
Project Cost	28 Crore
Status	Completed
Salient Features	✓ TTP comprises of : ✓ Filtration (DMF, MGF) ✓ UF –RO (3 stage) ✓ NF system ✓ Thermal Treatment ✓ Solar Evaporation Ponds
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

SEWAGE TREATMENT PLANT
SBR TECHNOLOGY 60 MLD,VMC,KAPURAI,
INCLUDING SEWERAGE NETWROK,
PUMPING STATION, VADODARA

Client	Vadodara Municipal Corporation, Rajkot, Gujarat
Project Cost	INR 73.11 Cr.
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin with Turbo Blowers ✓ Disinfection: Chlorine Contact Tank ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ STP Plant Operation • Terminal Pumping Station – 66 mld • Rising Main :- DI K9 1100 Dia 3300 m length • Sewerage Network – 5725 m Length
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant

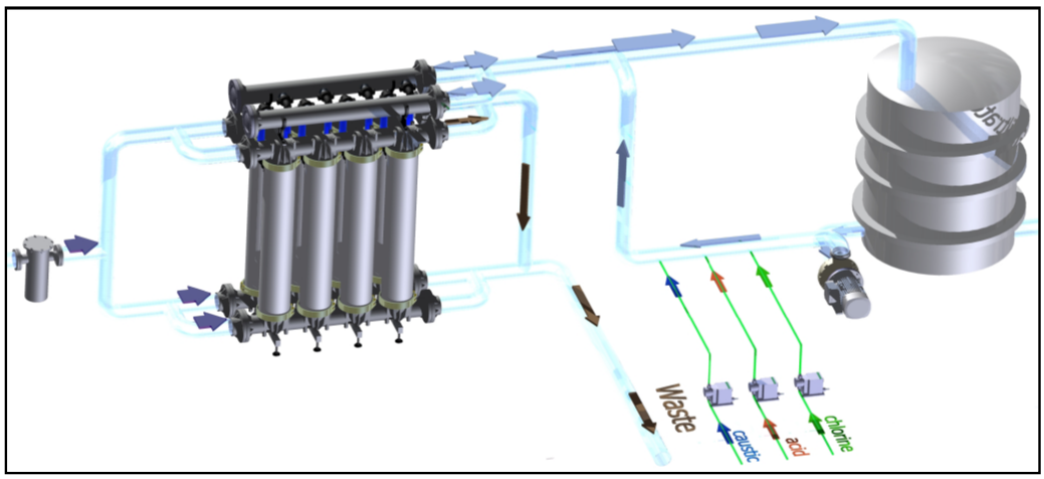
SEWAGE TREATMENT PLANT
SBR TECHNOLOGY
50 MLD,BMC,NEAR EXCEL INDUSTRIES,BHAVNAGAR

Client	Bhavnagar Municipal Corporation
Contractor	Rajkamal Builders Infrastructure Pvt. Ltd.
Project Cost	INR 48.27 Cr.
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin with Turbo Blowers ✓ Disinfection: Chlorine Contact Tank ✓ Sludge Sump & Pump House ✓ Sludge Thickener ✓ STP Plant Operation
Services Provided	• Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

UPGRADATION OF EXISTING 60 MLD CETP WITH NEW 25 MLD ZERO LIQUID DISCHARGE PLANT AT GETP, PALSANA, SURAT

Client	Gujarat Eco Textile Park
Project Cost	INR 142.62 Cr.
Status	CETP- 100 % COMPLETED, ZLD- 100% COMPLETED
Salient Features	✓ Up-gradation of existing 25 MLD CETP followed by polishing treatment ✓ UF treatment followed by three stage RO system ✓ Thermal treatment
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

40 MLD TERTIARY TREATMENT PLANT ALONGWITH POTABLE WATER SCHEME AT BHAVNAGAR THERMAL POWER STATION PADVA

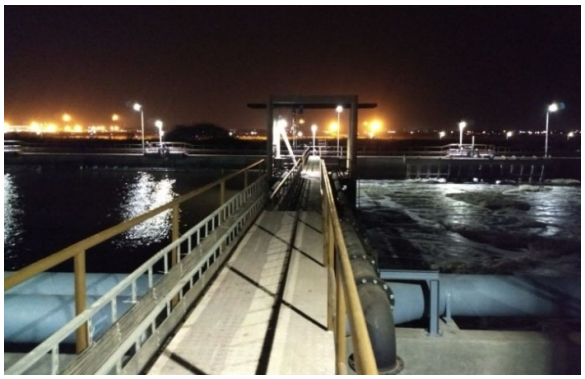


Client	Gujarat State Electricity Corporation Limited
Project Cost	INR 23.42 Cr.
Status	Completed
Salient Features	✓ 40 MLD Polishing Treatment, followed 36 MLD is used for Cooling Tower ✓ 3 MLD – UF - RO ✓ 1.5 MLD Potable Water Scheme
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

12 MLD CAPACITY ZLD PLANT AND UP -GRADATION OF EXISITING CETP AT PALI UNIT - 4 FOR CETP AT PUNAYATA INDUSTRIAL AREA, PALI (UNIT -4)

Client	Pali Textile Common Effluent Treatment Plant
Project Cost	INR 169.95 Cr
Status	CETP- COMPLETED ZLD:-
Salient Features	✓ Up-gradation of existing 12 MLD CETP (2 stage biological Treatment with Bio tower and MBR) ✓ TTP comprises of : ✓ Polishing Treatment ✓ UF treatment followed by three stage RO system ✓ Thermal treatment
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

SEWAGE TREATMENT PLANT
SEQUENTIAL BATCH REACTOR (SBR / CASP) PROCESS
50 MLD, VMC, CHANNI, VADODARA

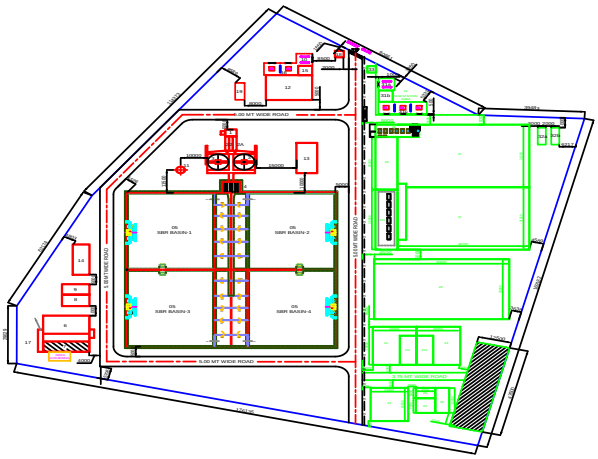


Client	Vadodara Municipal Corporation, Vadodara, Gujarat
Contractor	Rajkamal Builders Infrastructure Pvt Ltd
Project Cost	INR 939.27 Million
Scheme	AMRUT
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin ✓ Chlorine Contact Tank+ chlorination Room ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Survey, Soil Investigation, Data Collection for Preparation of Detailed Project Report (DPR), Tender Documents, Bid Evaluation and Review and Approval for Basic & Detailed Engineering drawings/documents carried out by contractor. • Providing Project Management Consultancy during execution of work services including day to day Site Supervision, Bill Certification, and Third Party Inspection of various bought-out items. The treatment plant is based on SBR Technology with Biological Nutrient Removal (BNR) System for achieving BOD<5 mg/L & TSS<5 mg/L)

AUTOMATION & SCADA WORK FOR VARIOUS WTP, BOOSTER, WDS AND ESR OF SMC, SURAT

Client	Surat Municipal Corporation, Surat, Gujarat
Project Cost	INR 24.88 Crores
Scheme	-
Status	Completed
Salient Features	• Hook up of all facilities (WTP / Booster / WDS / ESR) with Central SCADA based monitoring provides Transparent Overview of entire Treatment & Transmission facility from Single Location for Quantity & Quality of Water Produced / supplied • Flow monitoring at various stages - Raw Water Feed, Water Produced & Transmitted (upto ESR) • Helps in achieving equitable water flow distribution • Water Quality (Free Chlorine & Turbidity) Checks at various stages - Raw Water Feed, Water Produced & Transmitted (Booster / WDS) • Level interlocked Motorized Valve at ESRs to help prevent overflow losses at ESR • Energy and Equipment (Pump) Status monitoring to assist in preventive maintenance scheduling, energy optimization • Supply and Fault data transmission at various Levels at SCADA and through SMS with Mobile App for effective information dissemination and prompt corrective action
Services Provided	• Preparation of Detailed Project Report (DPR) • Conceptualize, prepare Detailed Design and BOM for the proposes automation and control system • Prepare Bid Documents • Evaluation of Bid Documents • Providing PMC services including Site Supervision, assistance to SMC during execution of Work, inspection of bought-out items, etc.

42 MLD CHANNI TTP AND SUPPY OF TREATED SEWAGE TO GSFC, GACL AND GIPCL THROUGH PRESSURE LINE



Client	Vadodara Jal Sanchay Pvt. Ltd.
Project Cost	INR
Status	Under Tendering process
Salient Features	✓ TTP comprise of : ✓ Fiber Disc Filter ✓ Followed by UF – RO ✓ Treated Water Tank ✓ RO Reject fed to Fiber Disc Filter again for treatment
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

AUXILLARY PUMPING STATION
BAHUCHARAJI NAGARWADA, VADODARA

Client	Vadodara Municipal Corporation, Vadodara, Gujarat
Contractor	Nand Infrastructure & Projects
Project Cost	INR 990.62 Lacs
Scheme	AMRUT
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Sewage Pumping Station ✓ Gravity Line with Pushing Method ✓ Rising Main
Services Provided	• Survey, Soil Investigation, Data Collection for Preparation of Detailed Project Report (DPR), Tender Documents, Bid Evaluation and Review and Approval for Basic & Detailed Engineering drawings/documents carried out by contractor. Providing Project Management Consultancy during execution of work services including day to day Site Supervision, Bill Certification, and Third Party Inspection of various bought-out items.

AUXILLARY PUMPING STATION
INDRAPURI (HARNI), VADODARA

Client	Vadodara Municipal Corporation, Vadodara, Gujarat
Contractor	Aakar Construction
Project Cost	INR 791.0 Lacs
Scheme	AMRUT
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Upgradation of Old Sewage Pumping Station ✓ Gravity Line with Pushing Method ✓ Pressure Main
Services Provided	• Survey, Soil Investigation, Data Collection for Preparation of Detailed Project Report (DPR), Tender Documents, Bid Evaluation and Review and Approval for Basic & Detailed Engineering drawings/documents carried out by contractor. Providing Project Management Consultancy during execution of work services including day to day Site Supervision, Bill Certification, and Third Party Inspection of various bought-out items.

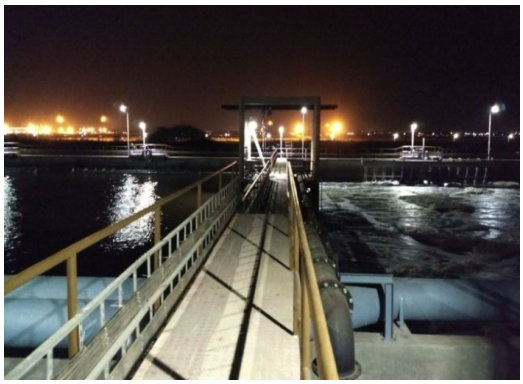
DRAINAGE NETWORK FOR EAST ZONE AREA OF VUDA TO 60 MLD STP AT KAPURAI OF VADODARA, KHATAMBA APS"

Client	Vadodara Urban Development Authority
Project Cost	INR 7.99 Cr.
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber) ✓ Raw water sump and pumps ✓ Rising main
Services Provided	• Survey, Soil Investigation, Data Collection for Preparation of Detailed Project Report (DPR), Tender Documents, Bid Evaluation and Review and Approval for Basic & Detailed Engineering drawings/documents carried out by contractor. • Providing Project Management Consultancy during execution of work services including day to day Site Supervision, Bill Certification, and Third Party Inspection of various bought-out items.

SEWAGE TREATMENT PLANT
SEQUENTIAL BATCH REACTOR (SBR / CASP) PROCESS
84 MLD, VMC, ATLADARA, VADODARA

Client	Vadodara Municipal Corporation, Vadodara, Gujarat
Contractor	Rajkamal Builders Infrastructure Pvt Ltd
Project Cost	INR 146.89 CR.
Scheme	JnNURM
Status	Work in Progress
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin ✓ Disc Filter ✓ Chlorine Contact Tank+ chlorination Room ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Survey, Soil Investigation, Data Collection for Preparation of Detailed Project Report (DPR), Tender Documents, Bid Evaluation and Review and Approval for Basic & Detailed Engineering drawings/documents carried out by contractor. • Providing Project Management Consultancy during execution of work services including day to day Site Supervision, Bill Certification, and Third Party Inspection of various bought-out items. The treatment plant is based on SBR Technology with Biological Nutrient Removal (BNR) System for achieving BOD<5 mg/L & TSS<5 mg/L)

SEWAGE TREATMENT PLANT
SEQUENTIAL BATCH REACTOR (SBR / CASP) PROCESS
100 MLD, VMC, TARSALI, VADODARA



Client	Vadodara Municipal Corporation, Vadodara, Gujarat
Contractor	Enviro Control Pvt. Ltd
Project Cost	INR 157.92 CR.
Scheme	JnNURM
Status	Work In Progress
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin ✓ Disc Filter ✓ Chlorine Contact Tank+ chlorination Room ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Survey, Soil Investigation, Data Collection for Preparation of Detailed Project Report (DPR), Tender Documents, Bid Evaluation and Review and Approval for Basic & Detailed Engineering drawings/documents carried out by contractor. • Providing Project Management Consultancy during execution of work services including day to day Site Supervision, Bill Certification, and Third Party Inspection of various bought-out items. The treatment plant is based on SBR Technology with Biological Nutrient Removal (BNR) System for achieving BOD<5 mg/L & TSS<5 mg/L)

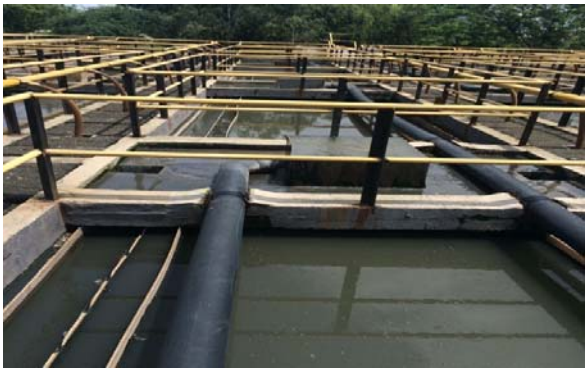
30 MLD CAPACITY CETP WTIH ZLD PLANT AT SAYAN FOR WEAVE WATER ENVIRO PVT. LTD.

Client	Weave Water Enviro Pvt. Ltd.
Project Cost	INR 144.58 Cr
Status	Work In Progress
Salient Features	CETP comprises of : ✓ Primary treatment. ✓ MBR Process (Biological + tertiary) ✓ Sludge Dewatering treatment
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

7 MLD CAPACITY CETP WTIH ZLD PLANT, FOR INDUSTRIAL AREA CETP FOUNDATION, PALI (UNIT -7)

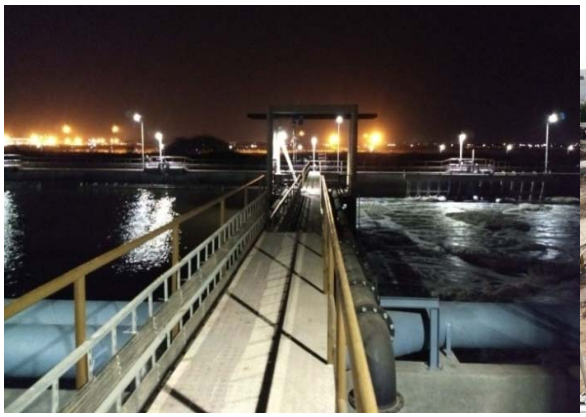
Client	Industrial Area CETP Foundation
Project Cost	INR 167.50 Cr
Status	DPR approved & Tender in process
Salient Features	CETP comprises of : ✓ Primary treatment. ✓ 2 stage Biological treatment ✓ 3 stage RO system ✓ Thermal treatment
Services Provided	• Preparation of DPR and Tender • Providing Design and Engineering Consultancy Services including PMC Services for Development of Tertiary Treatment Plant • Scope of work includes review and approval of Design and Engineering documents, Monitoring of Implementation and Execution of work, inspection of bought-out items, supervision of Testing and Commissioning including performance guarantee and acceptance of Treatment Plant.

SEWAGE TREATMENT PLANT
UPGRDATION FROM 15 MLD TO 30 MLD,STP BMC, KUMBHARWADA, INCLUDING SEWERAGE NEWTORK, PUMPING STATIONS AT BHAVNAGAR



Client	Bhavnagar Municipal Corporation, Bhavnagar,Gujarat
Project Cost	INR 61.058 Cr.
Scheme	SJMMSVY
Status	Completed year 2020
Salient Features	(a) Sewerage network / Gravity Mains of about 91 km. length with pipe sizes ranging from 150mm to 1600mm dia. Includes Ruva Tarsamia gravity network phase II, Chitra-Fulsar gravity network Phase I & II, Disposal Gravity main from existing disposal point near Deepak chawk to 45 MLD STP near Excel industries. (b) Seven nos. sewage pumping stations. (c) Rising mains for various pumping stations of about 4.0 km. length with pipe sizes ranging from 200mm to 800mm dia., (d) Upgradation of existing 15 MLD capacity STP to 30 MLD capacity Sewage Treatment plant based on UASB technology at Kumbharvada.
Services Provided	• Survey, Soil Investigation, Data Collection for Preparation of Detailed Project Report (DPR), Tender Documents, Bid Evaluation and Review and Approval for Basic& Detailed Engineering drawings/documents carried out by contractor. The treatment plant is based on UASB Technology

SEWAGE TREATMENT PLANT
SEQUENTIAL BATCH REACTOR (SBR / CASP) PROCESS
78 MLD,VMC, RAJIVNAGAR, VADODARA



Client	Vadodara Municipal Corporation, Vadodara,Gujarat
Project Cost	INR 885 Million
Scheme	AMRUT
Status	Completed year 2018
Salient Features	• Major Units of STP comprises of ✓ Terminal Sewage Pumping Station with design flow 78 MLD (156 MLD Peak Flow) ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin ✓ Media Filtration (Disk Filters) ✓ Disinfection: UV System + Hypo-Chlorite Dosing System ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Survey, Soil Investigation, Data Collection for Preparation of Detailed Project Report (DPR), Tender Documents, Bid Evaluation and Review and Approval for Basic & Detailed Engineering drawings/documents carried out by contractor. • Providing Project Management Consultancy during execution of work services including day to day Site Supervision, Bill Certification, and Third Party Inspection of various bought-out items. The treatment plant is based on SBR Technology with Biological Nutrient Removal (BNR) System for achieving BOD<5 mg/L & TSS<5 mg/L)

SEWAGE TREATMENT PLANT
A_2O ACTIVATED SLUDGE PROCESS - ULTRAFILTRATION
20 MLD, HMDA, HYDERABAD

Client	Hyderabad Metropolitan Development Authority, Hyderabad
Contractor	Triveni Engineering & Industries Ltd.
Project Cost	INR 280.0 Million
Scheme	JICA
Status	Completed
Salient Features	• Anaerobic, Anoxic & Oxic Activated Sludge process for biological nutrient removal followed by Membrane Filtration (UF System) & Disinfection • Plant designed to achieve treated sewage parameters as under for discharge in to Hussain Sagar Lake: BOD : < 2 mg/L. COD : < 70 mg/L TSS : < 2 mg/L. Turbidity: < 2 mg/L. TN : < 10 mg/L • Plant Operation with PLC/SCADA System
Services Provided	• Preparation of Basic Engineering Design (Process & Hydraulic) • Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works

SEWAGE TREATMENT PLANT
A_2O ACTIVATED SLUDGE PROCESS - SAND FILTRATION
30 MLD, HMDA, HYDERABAD

Client	Hyderabad Metropolitan Development Authority, Hyderabad
Contractor	Triveni Engineering & Industries LTD.
Project Cost	INR 625 Million
Scheme	JICA
Status	Completed
Salient Features	• Anaerobic, Anoxic & Oxic Activated Sludge process for biological nutrient removal followed by Rapid Gravity Sand Filtration & Disinfection • Plant designed to achieve treated sewage parameters as under for discharge in to Hussain Sagar Lake: BOD : < 5 mg/L COD : < 70 mg/L TSS : < 5 mg/L Turbidity : < 5 mg/L TN : < 10 mg/L TP : < 0.5 mg/L • Major Units of STP comprising of ✓ Inlet Sewage Works (SPS) ✓ Inlet Unit (Stilling Chamber, Mechanical Fine Screen Chamber, Mech. Grit chamber, Flow Measuring Channel) ✓ Anaerobic, Anoxic and Oxic (A_2O) activated sludge process ✓ Coagulant addition ✓ Secondary Clarification / Sedimentation ✓ Rapid Sand Filtration & Disinfection ✓ Sludge Sump & Pump House ✓ Mechanical Sludge Dewatering • Plant Operation with PLC/SCADA System
Services Provided	• Preparation of Basic Engineering Design (Process & Hydraulic) • Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works

SEWAGE TREATMENT PLANT
SEQUENTIAL BATCH REACTOR (SBR / CASP) PROCESS
45 MLD,BMC, NEAR EXCEL INDUSTRIES, BHAVNAGAR

Client	Bhavnagar Municipal Corporation, Bhavnagar,Gujarat
Project Cost	INR 432 Million
Scheme	SJMMSVY
Status	Completed YEAR 2017
Salient Features	• Major Units of STP comprises of ✓ Terminal sewage pumping station (180 MLD Ultimate peak flow) ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Survey, Soil Investigation, Data Collection for Preparation of Detailed Project Report (DPR), Tender Documents, Bid Evaluation and Review and Approval for Basic& Detailed Engineering drawings/documents carried out by contractor. • Providing Project Management Consultancy during execution of work services including day to day Site Supervision, Bill Certification, and Third Party Inspection of various bought-out items. The treatment plant is based on SBR Technology with Biological Nutrient Removal (BNR) System for achieving BOD<10 mg/L & TSS<10 mg/L)

SEWAGE TREATMENT PLANT
CONVENTIONAL ACTIVATED SLUDGE PROCESS
240 MLD, AUDA, VASNA, AHMEDABAD

Client	Ahmedabad Urban Development Authority, Ahmedabad, Gujarat
Project Cost	INR 842 Million
Scheme	Under JnNURM
Status	Completed
Salient Features	• Modular Design (4 x 60 MLD Streams) • Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mechanical Fine Screen Chamber, Mech. Grit chamber, Flow Measuring Channel) ✓ Primary Clarifier ✓ Aeration Tank (With Diffuser Aeration System) ✓ Secondary Clarifier ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Pump Houses – Primary Sludge, Return Activated / Excess Sludge, Thickened Sludge, Digested Sludge ✓ Sludge Thickener ✓ Sludge Digester ✓ Mechanical Dewatering system (Belt Filter Press) ✓ Gas Flaring System • Plant Operation with PLC/SCADA System
Services Provided	As associate Consultants for: • Preparation of Detailed Project Report (DPR) • Preparation of Bid Documents (on EPC basis) • Bid Evaluation • Review & Approval for Design & Engineering Drawings / Docu. • Project Management Consultancy (PMC) Services including ✓ Project Monitoring / Progress Review ✓ Construction Supervision ✓ Quality Audit and Material Inspection

TERMINAL SEWAGE PUMPING STATION
285 MLD, AUDA, VASNA, AHMEDABAD

Client	Ahmedabad Urban Development Authority, Ahmedabad, Gujarat
Project Cost	INR 275.63 Million
Scheme	Under JnNURM
Status	Completed
Salient Features	• Civil Works for 285 MLD Avg. Flow, Peak Factor 2.0 • Electro-mechanical Works for 300MLD Peak flow at present with provision to upgrade for 570MLD peak flow in future • Major Equipment of TSPS for present requirement comprises of ✓ Vertical Centrifugal Pumps, Non-clog type, 3125 m3/hr @ 25m head, 315KW Motor Rating, 6 Nos. (4W + 2S) ✓ Electric Actuator operated delivery valves ✓ Mechanical Rake Type Bar Screen, 20mm opening ✓ Grit Mechanism with 1 m^3 bucket capacity ✓ 11KV Switchyard ✓ 11/0.433KV, 2000 KVA Distribution Transformers, 2 nos. (1W + 1S) ✓ LT panel with Soft Starters for Sewage Pumps ✓ PLC for Level based Auto operation of Pumps ✓ SCADA System with remote connectivity to PLC/SCADA at 240MLD STP at Vasna site
Services Provided	As associate Consultants for: • Preparation of Detailed Project Report (DPR) • Preparation of Bid Documents (on Item Rate basis) • Bid Evaluation • Design & Issue of Construction Drawings • Review & Approval for Vendor Drawings / Documents • Project Management Consultancy (PMC) Services including ✓ Project Monitoring / Progress Review ✓ Construction Supervision ✓ Quality Audit and Material Inspection

SEWAGE TREATMENT PLANT
CONVENTIONAL ACTIVATED SLUDGE PROCESS
70 MLD, AUDA, VINZOL, AHMEDABAD

Client	Ahmedabad Urban Development Authority, Ahmedabad, Gujarat
Project Cost	INR 287.5 Million
Scheme	Under JnNURM
Status	Completed
Salient Features	• Modular Design (2 x 35 MLD Streams) • Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mechanical Fine Screen Chamber, Mech. Grit chamber, Flow Measuring Channel) ✓ Primary Clarifier ✓ Aeration Tank (With Diffuser Aeration System) ✓ Secondary Clarifier ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Pump Houses – Primary Sludge, Return Activated / Excess Sludge, Thickened Sludge, Digested Sludge ✓ Sludge Thickener ✓ Sludge Digester ✓ Mechanical Dewatering system (Belt Filter Press) ✓ Gas Flaring System • Plant Operation with PLC/SCADA System
Services Provided	As associate Consultants for: • Preparation of Detailed Project Report (DPR) • Preparation of Bid Documents (on EPC basis) • Bid Evaluation • Review & Approval for Design & Engineering Drawings / Docu. • Project Management Consultancy (PMC) Services including ✓ Project Monitoring / Progress Review ✓ Construction Supervision ✓ Quality Audit and Material Inspection

TERMINAL SEWAGE PUMPING STATION
102 MLD, AUDA, VINZOL, AHMEDABAD

Client	Ahmedabad Urban Development Authority, Ahmedabad, Gujarat
Project Cost	INR 111.27 Million
Scheme	Under JnNURM
Status	Completed
Salient Features	• Civil Works for 102 MLD ultimate Avg. Flow, Peak Factor 2.0 • Electro-mechanical Works for 136MLD Peak flow at present with provision to upgrade for 204MLD peak flow in future • Major Equipment of TSPS for present requirement comprises of ✓ Vertical Centrifugal Pumps, Non-clog type, 2 nos. (1W + 1S) 2835 m3/hr @ 16m head, 200KW motor 2 Nos. (2W) 1420 m3/hr @ 16m head, 95KW motor raitng ✓ Electric Actuator operated delivery valves ✓ Mechanical Rake Type Bar Screen, 20mm opening ✓ Grit Mechanism with 1 m^3 bucket capacity ✓ 11KV Switchyard ✓ 11/0.433KV, 1000 KVA Distribution Transformers, 2 nos. (1W + 1S) ✓ LT panel with Soft Starters for Sewage Pumps ✓ PLC for Level based Auto operation of Pumps ✓ SCADA System with remote connectivity to PLC/SCADA at 70MLD STP at Vinzol site
Services Provided	As associate Consultants for: • Preparation of Detailed Project Report (DPR) • Preparation of Bid Documents (on Item Rate basis) • Bid Evaluation • Design & Issue of Construction Drawings • Review & Approval for Vendor Drawings / Documents • Project Management Consultancy (PMC) Services including ✓ Project Monitoring / Progress Review ✓ Construction Supervision ✓ Quality Audit and Material Inspection

SEWAGE TREATMENT PLANT
CONVENTIONAL ACTIVATED SLUDGE PROCESS
180 MLD, AMC, PIRANA, AHMEDABAD

Client	Ahmedabad Municipal Corporation, Ahmedabad, Gujarat
Project Cost	INR 241.1 Million
Scheme	Under JnNURM
Status	Completed
Salient Features	• Modular Design (3 x 60MLD Streams) • Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mechanical Fine Screen Chamber, Mech. Grit chamber, Flow Measuring Channel) ✓ Primary Clarifier ✓ Aeration Tank (With Diffuser Aeration System) ✓ Secondary Clarifier ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Pump Houses – Primary Sludge, Return Activated / Excess Sludge, Thickened Sludge, Digested Sludge ✓ Sludge Thickener ✓ Sludge Digester ✓ Mechanical Dewatering system (Belt Filter Press) ✓ Gas Flaring System • Plant Operation with PLC/SCADA System
Services Provided	As associate Consultants for: • Preparation of Bid Documents (on EPC basis) • Bid Evaluation • Review & Approval for Design & Engineering Drawings / Documents

SEWAGE TREATMENT PLANT
CONVENTIONAL ACTIVATED SLUDGE PROCESS
60 MLD, AMC, OLD PIRANA, AHMEDABAD

Client	Ahmedabad Municipal Corporation, Ahmedabad, Gujarat
Project Cost	INR 598.7 Million
Scheme	Under JnNURM
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mechanical Fine Screen Chamber, Mech. Grit chamber, Flow Measuring Channel) ✓ Primary Clarifier ✓ Aeration Tank (With Diffuser Aeration System) ✓ Secondary Clarifier ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Pump Houses – Primary Sludge, Return Activated / Excess Sludge, Thickened Sludge, Digested Sludge ✓ Sludge Thickener ✓ Sludge Digester ✓ Mechanical Dewatering system (Belt Filter Press) ✓ Gas Flaring System • Plant Operation with PLC/SCADA System
Services Provided	As associate Consultants for: • Preparation of Bid Documents (on EPC basis) • Bid Evaluation • Review & Approval for Design & Engineering Drawings / Documents

SEWAGE TREATMENT PLANT
CONVENTIONAL ACTIVATED SLUDGE PROCESS
35 MLD, AMC, VASNA, AHMEDABAD

Client	Ahmedabad Municipal Corporation, Ahmedabad, Gujarat
Project Cost	INR 159.1 Million
Scheme	Under JnNURM
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mechanical Fine Screen Chamber, Mech. Grit chamber, Flow Measuring Channel) ✓ Primary Clarifier ✓ Aeration Tank (With Diffuser Aeration System) ✓ Secondary Clarifier ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Pump Houses – Primary Sludge, Return Activated / Excess Sludge, Thickened Sludge, Digested Sludge ✓ Sludge Thickener ✓ Sludge Digester ✓ Mechanical Dewatering system (Belt Filter Press) ✓ Gas Flaring System • Plant Operation with PLC/SCADA System
Services Provided	As associate Consultants for: • Preparation of Bid Documents (on EPC basis) • Bid Evaluation • Review & Approval for Design & Engineering Drawings / Documents

SEWAGE TREATMENT PLANT
UPFLOW ANAEROBIC SLUDGE BLANKET (UASB)
43 MLD, VMC, ATALADRA, VADODARA

Client	Vadodara Municipal Corporation, Vadodara, Gujarat
Contractor	Rajkamal Builders Infrastructure Pvt. Ltd., Ahmedabad
Project Cost	INR 186.7 Million
Scheme	JnNURM
Status	Completed
Salient Features	• Treatment - UASB process followed by Extended Aeration • Bio-gas based power generation (330KWe gas engine) • Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mechanical Fine Screen Chamber, Mech. Grit chamber, Flow Measuring Channel) ✓ UASB Reactor ✓ Pre-Aeration & Aeration Tank ✓ Secondary Clarifier ✓ Return Activated Sludge sump & Pump Houses ✓ Sludge Thickener ✓ Gas Holder, Gas Flaring System & Gas Engine ✓ Refurbishing of existing SPS, providing 1800 m3/hr @19.1m TDH Submersible Non-clog sewage pumps, 135KW motor rating, 6 Nos. (4W + 2S) ✓ PLC based controls for Level based auto operation of Sewage Pumps at SPS & for Captive Power Generation Plant • VMC received JnNURM award for being the best city for project implementation of STP at Ataladra – one of the few projects in the country completed successfully on UASB and generating bio-gas based power resulting in cost saving for VMC
Services Provided	• Preparation of Basic Engineering Design (Process & Hydraulic) • Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works • PMC Services including Supervision over Construction, Testing & Commissioning of Bio-Gas based Captive Power Generation Plant

SEWAGE TREATMENT PLANT
UPFLOW ANAEROBIC SLUGE BLANKET
43 MLD, VMC, KAPURAI, VADODARA

Client	Vadodara Municipal Corporation, Vadodara, Gujarat
Contractor	Rajkamal Builders Infrastructure Pvt. Ltd., Ahmedabad
Project Cost	INR 255.5 Million
Scheme	JnNURM
Status	Completed
Salient Features	• Treatment - UASB process followed by Extended Aeration • Major Units of STP comprises of ✓ Terminal Sewage Pumping Station comprising of 900 m3/hr Submersible Non-clog sewage pumps, 67KW motor rating, 6 Nos. (4W + 2S) ✓ Inlet Unit (Stilling Chamber, Mechanical Fine Screen Chamber, Mech. Grit chamber, Flow Measuring Channel) ✓ UASB Reactor ✓ Pre-Aeration & Aeration Tank ✓ Secondary Clarifier ✓ Return Activated Sludge sump & Pump Houses ✓ Sludge Thickener ✓ Gas Holder & Gas Flaring System ✓ PLC based controls for Level based auto operation of Sewage Pumps at SPS & for Captive Power Generation Plant
Services Provided	• Preparation of Basic Engineering Design (Process & Hydraulic) • Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works

SEWAGE TREATMENT PLANT
SEQUENTIAL BATCH REACTOR (SBR / CASP) PROCESS
56 MLD, GDA, BAPUDHAM, GHAZIABAD

Client	Ghaziabad Development Authority, Bapudham, Ghaziabad, U.P.
Contractor	Vibhor Vaibhav Infra Pvt. Ltd
Project Cost	INR 650 Million
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Preparation of Basic Engineering Design (Process & Hydraulic), Structural drawing etc. • Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works

SEWAGE TREATMENT PLANT
SEQUENTIAL BATCH REACTOR (SBR / CASP) PROCESS
56 MLD, GDA, GOVINDPURAM, GHAZIABAD

Client	Ghaziabad Development Authority, Govindpuram, Ghaziabad, U.P.
Contractor	Vibhor Vaibhav Infra Pvt. Ltd
Project Cost	INR 650 Million
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Preparation of Basic Engineering Design (Process & Hydraulic) • Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works

SEWAGE TREATMENT PLANT
SEQUENTIAL BATCH REACTOR (SBR / CASP) PROCESS
50 MLD, NOIDA, U.P.

Client	New Okhla Industrial Development Authority, Noida, U.P.
Contractor	Jyoti Build Tech (P) Ltd.
Project Cost	INR 680 Million
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Sump & Pump House ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Preparation of Basic Engineering Design (Process & Hydraulic) • Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works

SEWAGE TREATMENT PLANT
SEQUENTIAL BATCH REACTOR (SBR / CASP) PROCESS
10 MLD, AT SARGASAN, GANDHINAGAR FOR R&B DEPT.

Client	Road & Building Department, Capital Project Division-3, Gandhinagar
Contractor	Rajkamal Builders Infrastructure Pvt. Ltd.
Project Cost	INR 990 Lacs.
Scheme	-
Status	Completed
Salient Features	• Major Units of STP comprises of ✓ Inlet Unit (Stilling Chamber, Mech. & Manual Fine Screen Chamber, Mech. Grit chamber) ✓ SBR Basin ✓ Chlorine Contact Tank & Chlorination Room ✓ Sludge Sump & Pump House ✓ Blower Area ✓ Mechanical Dewatering system (Centrifuge) ✓ Plant Operation with PLC/SCADA System
Services Provided	• Preparation of Basic Engineering Design (Process & Hydraulic) • Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works

WATER TREATMENT PLANT
CONVENTIONAL WATER TREATMENT PROCESS
200 MLD, AMC, RASKA, AHMEDABAD

Client	Ahmedabad Municipal Corporation, Ahmedabad, Gujarat
Project Cost	INR 325.15 Million
Scheme	Under JnNURM
Status	Completed
Salient Features	• Major Units of WTP comprises of ✓ Raw Water Sump & Pump House ✓ Inlet Unit (Stilling Chamber with Pre-Chlorination, Flow Measuring Channel, Alum Mixing Unit – Hydraulic Jump) ✓ Clari-flocculator ✓ Aeration Tank (With Diffuser Aeration System) ✓ Rapid Gravity Sand Filter (Variable Declining Rate) ✓ Clear Water Sump with Post-Chlorination ✓ Chlorination / Chlorine Tonner Room ✓ Treated Water Sump & Pump House (Existing) ✓ Spent Backwash Recycling System ✓ Sludge sump & Pump House ✓ Chemical House • Plant Operation with PLC/SCADA System
Services Provided	As associate Consultants for: • Preparation of Bid Documents (on EPC basis) • Bid Evaluation • Review & Approval for Design & Engineering Drawings / Documents

WATER TREATMENT PLANT
CONVENTIONAL WATER TREATMENT PROCESS
50 MLD, VMC, NIMETA, VADODARA

Client	Vadodara Municipal Corporation, Vadodara, Gujarat
Contractor	Rajkamal Builders Infrastructure Pvt. Ltd., Ahmedabad
Project Cost	INR 70.20 Million
Scheme	JnNURM
Status	Completed
Salient Features	• Major Units of WTP comprises of ✓ Flow Measurement, Stilling Chamber & Flash Mixer ✓ Flocculator ✓ Sludge Blanket Lamella Clarifier (Tube Settler) ✓ Rapid Gravity Sand Filters (Declining Rate) ✓ 4ML capacity Clear Water Reservoir ✓ Dirty Backwash Recycling System
Services Provided	• Preparation of Basic Engineering Design (Process & Hydraulic) • Detailed Engineering including Preparation of G.A. Drawings & Civil Design, Piping, Electro-mechanical & Instrumentation Works

Pokran-Falsund-Balotra-Siwana (PFBS) lift project to meet Drinking Water Demands based on Indira Gandhi Main Canal (IGMC) for PHED, Rajasthan

Client	Public Health Engineering Department, Rajasthan
Project Cost	INR 311.64 Crores
Status	Completed
Salient Features	Major Units project comprises of ✓ Raw Water Pump House with Vertical Turbine Pumps at Head Works(HW)-1,2 & 3 at Nachana, Ajasar & Biliya respectively as under: a. HW-1: 5 nos.(3W+2S), 2728.80 m³/hr @84m head (850 kW motor rating) b. HW-2: 5 nos.(3W+2S), 2728.80 m³/hr @84m head (850 kW motor rating) c. HW-3: 2 nos.(1W+1S), 5655.60 m³/hr @34m head (425 kW motor rating) ✓ 119 MLD capacity Water Treatment Plant at Biliya, 3.1 MLD capacity Water Treatment Plant at Ajasar & 3.2 MLD capacity Water Treatment Plant at Nachana Based on conventional water treatment process: Clariflocculator + Rapid Gravity sand filter ✓ PLC/SCADA based control for all Head Works & Water Treatment Plants ✓ 33 kV Switch yard with HV & MV power distribution at HW-1, 2 & 3.
Services Provided	• Preparation of basic engineering package comprising of process & hydraulic design for treatment plants • preparation of G.A. Drawings and detailed engineering for Piping, Mechanical, Electrical & Instrumentation with PLC based Automation Works

545 MLD Water Supply Scheme
NC-32 From Dhanki To Ratanpar

Client	Gujarat Water Infrastructure Limited, Gandhinagar
Project Cost	INR 246.07 Crores
Status	Completed
Salient Features	• Major Project Component include: ✓ Pump House with, a. Vertical Turbine Pump (Main pump), 8 nos. (6W+2S), 3800 m³/hr @83 m head (6.6KV, 1200 kW motor rating. b. Submersible Pump (Trimmer pump), 2 nos. (1W+1S), 1900 m³/hr @83 m head (6.6KV, 600 kW motor rating) ✓ PLC/SCADA based control system ✓ 6.6KV HV & MV power distribution
Services Provided	• Preparation of Design Philosophy / Conceptual Design Report for Electrical, Instrumentation & Automation works • Detailed engineering for Electrical & Instrumentation with PLC based Automation Works • Technical specifications and Evaluation of vendor offers / drawings

553 MLD Water Supply Scheme
NC-26 from Dhanki to Navada

Client	Gujarat Water Infrastructure Limited, Gandhinagar
Project Cost	INR 267.21 Crores
Status	Completed
Salient Features	• Major Project Component include: ✓ Pump House with Submerged Centrifugal Pump, 11 nos. (8W+3S), 2880 m³/hr @69 m head (6.6KV, 700 kW motor rating) at Dhanki ✓ PLC/SCADA based control system ✓ 66 kV Switch yard with 6.6KV HV & MV power distribution
Services Provided	• Preparation of Design Philosophy / Conceptual Design Report for Electrical, Instrumentation & Automation works • Detailed engineering for Electrical & Instrumentation with PLC based Automation Works • Technical specifications and Evaluation of vendor offers / drawings

AUTOMATION & CONTROL BASED ON PLC WITH SCADA
6 NOS. STP AND 23 NOS. PUMPING STATIONS

Client	Surat Municipal Corporation, Surat, Gujarat
Project Cost	INR 306.34 Million
Scheme	JnNURM
Status	Completed
Salient Features	• To implement SCADA System for monitoring along with latest Instrumentation and Automation with PLC based controls for existing 23 nos. Sewage Pumping Stations and 6 nos. Sewage Treatment Plants with emphasis on: ✓ Quality treatment deploying latest technologies ✓ Improve process / equipment efficiency and reliability ✓ Adopting measures for lowering the cost of treatment and maintenance • The 23 nos. pumping stations and 6 nos. treatment plants forming part of sewerage system for Old City of Surat were proposed to be provided with seamless connectivity over dedicated communication network and with facility to monitor and store data for all these plants at Central Control Room of SMC and Zonal Data to be monitored at respective Zonal Treatment Plant.
Services Provided	• Preparation of Detailed Project Report (DPR) • Conceptualize, prepare Detailed Design and BOM for the proposes automation and control system • Prepare Bid Documents • Evaluation of Bid Documents • Routine Site Visit / Assistance to SMC during execution of Work, as required by client

WATER AUDIT
KALOL, SANTRAMPUR, MORBI, PALITANA, NAVSARI, BARDOLI


Client	CEPT University, Ahmedabad, Gujarat
Project Cost	INR 2.59 Million
Scheme	Bill and Melinda Gates Foundation
Status	Completed
Salient Features	• Water audit carried out for the cities of Kalol, Santrampur, Morbi, Palitana, Nasvsari and Bardoli • Flow measurement carried out using Portable Flowmeter for pipeline & water meters for household connection • Kalol City Water Supply-17.26 MLD, Population-1,50,000 (2010 Census) • Santrampur Town Water Supply-2.27 MLD, Population-19,468 (2011 Census) • Morbi City Water Supply-35.37 MLD, Population-1,94,129 (2011 Census) • Palitana City Water Supply-19.37 MLD, Population-63,540 (2011 Census) • Navsari City Water Supply-43.58 MLD, Population-1,60,100 (2011 Census) • Bardoli City Water Supply-20.25 MLD, Population-60,824 (2011 Census)
Services Provided	• Site Survey – Understanding of water supply system • Household Survey • Quantity Measurement ✓ Water Produced at Source ✓ Estimating Water Supply per Day ✓ Measurement of Water Supply from Treated Water Mains ✓ Estimating Treated Water Conveyance Losses ✓ Measurement of Water Supply received at WDS ✓ Measurement of Water Supplied from WDS ✓ Estimating Losses at WDS ✓ Measurement of Consumption (Household) with Water Meter ✓ Analysis of Data and Computation of NRW