



# aarvee associates

architects engineers & consultants pvt. ltd.

AN ISO 9001:2015 CERTIFIED COMPANY



ARCHITECTS | ENGINEERS | CONSULTANTS

# About Us

Aarvee Associates Architects Engineers & Consultants Pvt Ltd is a premier ISO 9001:2015 certified multi-sectorial Infrastructure consultancy established in 1989 in Hyderabad, India. Aarvee has a global presence with subsidiary companies in Australia and United Kingdom and branch offices in Tanzania, Kenya, Ethiopia, Mozambique, Uganda and Kazakistan. Within India, we have branch offices in Ahmedabad, Bengaluru, Bhubaneshwar and New Delhi.

We have successfully carried out over 2,000 assignments in India, Australia, Bangladesh, Botswana, DR Congo, Djibouti, Ethiopia, Gabon, Honduras, Kazakistan, Kenya, Mozambique, Nigeria, PNG, Rwanda, South Africa, Sudan, Sri Lanka, Tanzania, Uganda and Zambia. We continue to work on projects funded by various international agencies, including the World Bank, the Asian Development Bank (ADB), the Japan International Cooperation Agency (JICA), the African Development Bank (AfDB), the New Development Bank, the Asian Infrastructure Investment Bank and the EXIM Bank of India.

With over 3,000 highly qualified and experienced staff, our expertise spans over all the major civil engineering disciplines and infrastructure sectors. We also have a full-fledged material investigation laboratory and excellent in-house survey capabilities, which add considerable value to our work.

With a single-minded focus on exceeding client expectations, our work is characterized by unwavering commitment, utmost reliability, exceptional quality, and on-time delivery.



# & RAIL METRO RAIL

In the face of increasing energy prices, railways has re-emerged as a relatively attractive means to transport both passengers and freight. Growth in this sector has also been fuelled by the growth of the extraction and processing industries, and developments in the power sector. Having planned and designed over 10,000km of railway lines and overseen the development of another 3,000km of railway track from concept to commissioning, we are one of the few wholistic railway consulting firms in India. In addition to civil infrastructure for Metro Rail, Heavy Haul Freight Rail and High-Speed Rail projects in India and overseas, we also have expertise in signalling and tele-communication, overhead electrification and loco and wagon related services.

## Services

### Passenger, Freight, High Speed and Metro Rail:

Master Planning/Feasibility Studies (FS)/Viability Studies

Detailed Project Reports (DPR)

Pre-bid and Detailed Engineering Services for PPP/BOT/EPC Projects

Project Management Consultancy (PMC) and General Consultancy Services (GC)

Detailed Design - Alignment, Track, Civil Works (Viaducts, Bridges, Stations & Buildings), Signalling & Telecommunication Systems, Electrical & Traction Systems

Loco and Wagon Related Services

## Key Projects

DPR and Final Location Survey for 4500km for East Coast, East West and North South Sub-Corridors of DFCCIL, India.

PMC for Mumbai Ahmedabad High Speed Rail Corridor for National High Speed Rail Corporation, India

Final Alignment Design for New High Speed Rail Corridors: Delhi - Varanasi & Lucknow – Ayodhya, Delhi – Amritsar & Sangrur – Chandigarh, and Chennai - Bangalore - Mysuru for NHSRCL, India

Detailed Design, Construction Support and As-built Engineering support for Carmichael Rail Network design of a 200-kilometer-long narrow-gauge rail network, Bravus Mining & Resources, Queensland, Australia

GC for Lucknow Metro Rail Project for Lucknow Metro Rail Corporation, Uttar Pradesh, India

GC for Corridor 3 & 5 (JICA Portion) of Chennai Metro for CMRL, Tamil Nadu, India

Detailed Design Consultancy for Phase II of Chennai Metro for CMRL, Tamil Nadu, India

Technical assistance study for instrumentation of new proposed Vaitarana Bridge and one major bridge with open web steel girder for MRVC, India

FS, Detailed Design, Tendering Services and Construction Supervision for Dual Gauge Railway Line from Bogura to Shahid M. Mansur Ali Station of Bangladesh Railway (EXIM Bank of India Funded)



# RAILWAYS & METRO RAIL

## Services

### Concept Planning / Feasibility Studies

- Study of Serving Station Layout/Sectional Capacity
- Reconnaissance and Topographic surveys
- Multi-criteria Analysis for identifying most suitable alignment.
- Development of Route Conceptual Plan
- Master Planning for Industrial in-plant Yards Layouts, Cement, Steel, Power, Port and Logistics
- Development of Junction Arrangements and Engineering Scale Plan with Indian Railways
- Preliminary Cost estimates
- Traffic forecast and revenue forecast
- Financial and Economic Feasibility
- Preparation of Feasibility Report
- Overall Liaison stakeholders and Obtaining Approvals from Railways

### Detailed Project Reports

- Detailed Topographical and Geotechnical Surveys
- Detailed Traffic Surveys and Traffic Forecast
- Detailed Alignment Design
- Designs for Structures (Bridges, Buildings etc.)
- Preparation of Engineering Scale Plan, Signal Interlocking Plans, OHE Layouts & General Electrical Schemes
- Detailed Cost Estimates
- EIA-SIA studies
- Financial and Economic Appraisal
- Preparation of DPR and overall liaison with Railways for Approval

### Detailed Design

- Study, Assessment and Review of Existing Structures
- Hydrological and Hydraulic Studies, Propose Waterway/Openings, Type, Span and Other
- Detailed Survey and Geotechnical Investigations
- Detailed Designs of all Components of Bridges/Viaducts/Stations/Other Utilities and Proof Checking
- Construction support including review of working drawings/ shop drawings and design support during construction
- Obtaining Approvals from Railways
- Preparing Tender Documents
- Assistance in Bid Finalisation for the Client including Shortlisting of Vendors/ Suppliers/ Executing Agencies

### Detailed Engineering

- Preparing Detailed Structural Designs & Drawings for Bridges, Buildings, Structures etc.
- Engineering – Embankment, Alignment and Permanent Way
- Over Head Electrification
- Signalling and Telecommunication

### Project Management & Construction Supervision

- Review of Contractor's Schedules, Resources Deployed and Work Methodologies
- Construction Supervision and Quality Assurance
- Project's Physical, Financial Progress monitoring and MIS Reporting
- Certification of Contractors' payments
- Contract Administration and Dispute Resolution
- Testing and Inspections for certification of Works
- Assistance in Final Testing and Commissioning
- Preparation and Certification of 'As – Built' Drawings

### Loco and Wagon Related Services

- Study and Assessment of Loco and Wagon Requirement
- Preparation of Procurement Specifications and Assistance in Procurement Process
- Stage wise Inspection during Procurement till Commissioning
- Operation and Maintenance Assistance

### Transaction/ Project Advisory Services

- Review of DPRs/ FSRs
- Review of Detailed Cost Estimates
- Preparation of Tender Documents
- Assistance in Bid Finalisation for the Client including reply to bid queries for the Client including Shortlisting of Vendors/Suppliers/Executing Agencies

### Special Services

- S&T Design
- OHE Design
- Operational Modelling & Simulation
- Master planning, Architecture and DPR preparation for stations
- Master Planning and DPR Preparation for for Inter-modal Stations
- Structural Health Monitoring and Instrumentation
- BIM

## Key Projects - National

### HIGH SPEED RAIL CORRIDORS



Location	: India
Client	: National High Speed Rail Corporation
Completion	: Delhi varanasi - 2022 Other routes 2023*
Scope of Work	: Final Alignment Design for New NHSRCL High Speed Rail Corridors
Other Information	: Delhi – Varanasi & Lucknow – Ayodhya - 945 km Route Length Delhi – Amritsar & Sangrur – Chandigarh 525 km Route Length Chennai – Mysore - 450 km Route Length

### Mumbai Ahmedabad High Speed Rail Corridor

Location	: Mumbai - Ahmedabad
Client	: National High Speed Rail Corporation Limited
Completion	: 2025 *
Scope of Work	: Project Management Consultant
Other Information	: Route Length : 510 km (approx.)



### Elevated Stations - North South Corridor - Ahmedabad Metro



Location	: Ahmedabad, Gujarat State, India
Client	: Gujarat Metro Rail Corporation (GMRCL) Limited
Completion	: 2022
Scope of Work	: Detailed Design Consultancy services for Civil, Architectural and Building Services including E & M works for 5 Elevated Metro-Rail stations - Viaduct Portion within the station and Transition Spans on either side of the Station on North-South Corridor of Ahmedabad Metro Rail Project
Other Information	: 16T loading and Standard gauge : Third Rail 750 V DC Traction and SCADA System

\* Planned completion

# RAILWAYS & METRO RAIL

## Key Projects - National

### Phase II of Chennai Metro Rail Limited (CMRL)



Location	: Chennai
Client	: Chennai Metro Rail Limited
Completion	: 2025 *
Scope of Work	: Detailed Design Consultancy Services
Other Information	: 16 kms Route length 18 stations (13 Island stations including 4 double decker stations, 5 Side platforms)

### CMRL - Corridor 3 & 5 (JICA Portion)

Location	: Chennai
Client	: Chennai Metro Rail Limited
Completion	: 2028 *
Scope of Work	: General Consultancy Services
Other Information	: Elevated: 14 km Underground: 38 km 58 Stations Route length 52 km



### LUCKNOW METRO RAIL PROJECT



Location	: Lucknow
Client	: Lucknow Metro Rail Corporation
Completion	: August 2020
Scope of Work	: General Consultancy Services
Other Information	: 22.8km Route Length 19.4kmElevated, 3.4 km underground stations : 21 (17 elevated, 4 underground)

\* Planned completion



## Key Projects - National

### DFCCIL East Coast, East West and North South Corridors



Location	: India
Client	: DFCCIL
Completion	: 2023 *
Scope of Work	: Preparation of Detailed Project Report and Final Location Survey for DFCC corridors
Other Information	: East Cost Corridor - 1115km East West Corridor - 1868km North South Corridor - 931km Route Length

### DFCCIL Eastern Corridor Sahnewal to Pilkhani

Location	: Sahnewal, Punjab to Pilkhani, Uttar Pradesh
Client	: GIL - TPL JV
Completion	: 2023*
Scope of Work	: Design of Track, Formation, Bridges and other related infrastructure works
Other Information	: Route Length: 175km Gauge: Broad Gauge Loading Standard: 32.5T Important Bridges: 2 Nos. Bridge Over River Yamuna: 7x 61.0 m Bridge Over River Markanda: 6 x 45.7 m Major Bridges: 46 Nos. Minor Bridges & RUBs: 148 Nos. Stations: 14 Nos.



### GRIDE



Location	: Gujarat
Client	: Gujarat Rail Infrastructure Development Corporation (G-RIDE)
Completion	: September 2021
Scope of Work	: General Consultancy Services
Other Information	: Katosan Road - Ranuj Gauge Conversion projects 1 nos. (65 km) Port connectivity projects 3 nos. (26.75+3+36.68 km) MBSIR cluster A & B (8.5 + 9.87 km) Rajkot Ahmedabad SHS - 225 km

\* Planned completion

# RAILWAYS & METRO RAIL

## Key Projects - National

### RVNL - Kolkata Metro Signalling & Telecommunication Systems

Location	: Kolkata
Client	: Rail Vikas Nigam Limited
Completion	: 2025*
Scope of Work	: General Consultancy Services
Other Information	: Route Length: 42.5 km Stations - 30 (elevated) & 1 (Underground) CBTC signalling Mobile train radio communication AFC system & PSD facilities



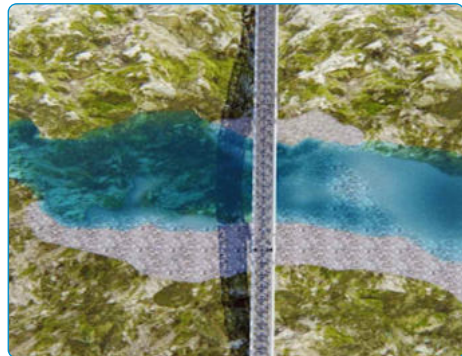
### RVNL - Doubling between Bina and Kota



Location	: Bina, Madhya Pradesh to Kota, Rajasthan
Client	: Rail Vikas Nigam Limited
Completion	: 2023*
Scope of Work	: Construction Supervision
Other Information	: Route Length: 283km Gauge: Broad Gauge Loading: 25 Tons No of Important Bridge: 12 No of Major Bridge: 30

### BRIDGE - RIVER ALAKANANDA

Location	: Lachmoli
Client	: RVNL
Completion	: 2022*
Scope of Work	: Detailed Design Consultancy Services
Other Information	: 3X90m Span 276.2m Length 40m Pier Height



\* Planned completion



## Key Projects - International

### Carmichael Coal - North Galilee Basin Rail



Location	: Queensland, Australia
Client	: Adani Mining Pty. Ltd.
Scope of Work & Completion	: Multiple Corridor Assessment : Jan2013 Conceptual Design : June 2013 Front End Engineering Design: April 2014 Detailed Design: June 2018
Other Information	: Gauge: Standard Gauge Track Length: 389km Design Traffic: 100MTPA Loading Standard: 32.5T No. of Major Bridges: 42

### Carmichael Rail Network

Location	: Australia
Client	: Adani Mining Pty. Ltd.
Completion	: 2021
Scope of Work	: Detailed Design
Other Information	: Track Length: 200 km Design traffic: 60 MTPA Design load: 32T



### Rail Maintenance Yard



Location	: Queensland, Australia
Client	: Bowen Rail Company
Completion	: 2022*
Scope of Work	: Rail Maintenance Yard - Detailed design, RFI Support and As-built Engineering
Other Information	: <ul style="list-style-type: none"> <li>• Geometric design of Provisioning, Shunting and Maintenance Rail lines</li> <li>• Design of Yard Access Road from Bruce Highway</li> <li>• Culvert structures design</li> <li>• Hydrology and Hydraulic study</li> <li>• Design of Rail Service Track</li> </ul>

\* Planned completion

# RAILWAYS & METRO RAIL

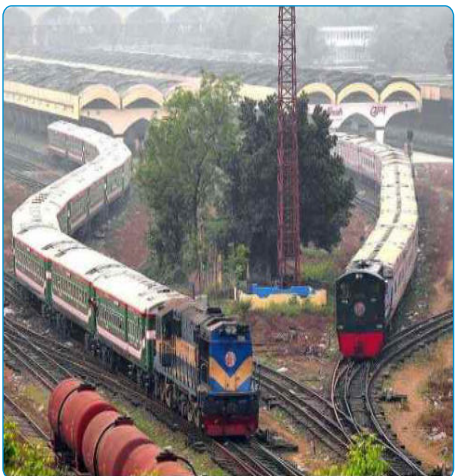
## Key Projects - International

### Khulna Darsana

Location	: Bangladesh
Client	: Bangladesh Railway
Completion	: 2028*
Scope of Work	: Feasibility Study, Detailed Engineering Design, Bidding services and Construction Supervision
Other Information	Construction of Double Line Track Between Khulna-Darsana Junction Section of Bangladesh Railway Length - 126.25 km Gauge – Broad Gauge



### Bogura Sirajganj



Location	: Bangladesh
Client	: Bangladesh Railway
Completion	: 2026*
Scope of Work	: Feasibility Study, Detailed Engineering Design, Mathematical modeling, Tendering Services and Construction Supervision
Other Information	Construction of Dual Gauge Railway Line from Bogura to Shahid M. Mansur Ali Station Length - 75 km Dual Gauge main and 11km Dual Gauge Y connection Gauge – Dual Gauge (MG and BG)

### Parbatipur Kaunia

Location	: Bangladesh
Client	: Bangladesh Railway
Completion	: 2028*
Scope of Work	: Feasibility Study, Detailed Engineering Design, Bidding services and Construction Supervision
Other Information	Conversion of Meter Gauge Line into Dual Gauge from Parbatipur to Kaunia Section of Bangladesh Railway Length - 57 km Main Line and 9.85 km Loop Line Gauge – Dual Gauge (MG and BG)



\* Planned completion

## Major Key Projects

FS, Aerial Survey and DPR for land acquisition in connection with construction of new electrified BG Rail line from Jagannathpur to Rairakhol in the state of Odisha in the Jurisdiction of East Coast Railway using Aerial Lidar Technology to ORIDL, Jagannathpur to Rairakhol.

FS, Drone Survey and DPR for Igatpuri-Manmad 3rd line or 3rd and 4th line for about 124 Kms length to Maharashtra Rail Infrastructure Development Ltd., Igatpuri-Manmad.

PMC for Kochi Metro Rail Project Phase-1 Extension from Petta to Trippunithura Terminal Covering a Distance of 3 km including Panamkutty River Bridger for Kochi Metro Rail Ltd., Kerala.

FS, DPR and Land Acquisition works in connection with New Electrified BG Rail Line from Jharsuguda in Odisha to Raipur via Baloda Bazar in the state of Chhattisgarh in the Jurisdiction of SEC Railways (Km 270) for Chhattisgarh Railway Corporation Ltd., Jharsuguda in Odisha to Raipur via Baloda Bazar.

FS and DPR for various projects in Haryana Rail Infrastructure Development Corporation Ltd. (HRIDC), Haryana.

PMC for Rail Land Development Authority (RLDA), Surat.

PMC for Major Up gradation of Gaya Railway Station in Pt. Deen Dayal Upadhyaya Division of East Central Railway on Engineering, Procurement and Construction (EPC) basis., Gaya.

FS and DPR and providing all other documents required for major upgradation of Vijayawada Railway Station of Vijayawada division, South Central Railway for Rail Land Development Authority (RLDA), Vijayawada.

PMC for Signaling and Telecommunication work for proposed private siding of Mormugao Port Trust at Goa, India.

FLS and DPR for Proposed Common Coal Transportation Scheme between the Parsa-Kante Coal Mine and Surajpur RS on SEC Railway for Adani Mining Pvt. Ltd., Chhattisgarh, India.

Detailed Design of Maintenance Yard for Adani Mining, Australia.

Design (Formation, Drainage), Topographical survey for DFCC Eastern Corridor Mughalsarai to Sonenagar., Mughalsarai, Uttar pradesh to Sonenagar, Bihar .

Detailed Design including preparation of estimate and BOQ for inplant EI work (ELECTRONIC INTERLOCKING) of UAIL siding taking off from Tikiri railway station under Waltair Division of E.Co.R. for serving its 1.5 MTPA Refinery at Tikiri, Raygada Dist, Odisha.

Ohe Detailed Design including Preparation & Submission and Approval of LOP, CSD, SED, AED Preparation of Profile Drawings, Bonding Plans, SP, SSP, TSS to the Railway Electrification work of GR-257 project of Guwahati-Lamding Section of Northeast Frontier Railway in Lumbdin, Assam (180KM/303TKM), Lumding, Assam.

FSR, DPR & PMC Services for railway sliding to ICP Petrapole , ICP Raxaul & ICP Jogbani for Land Port Authority of India (LPAI), West Bengal and Bihar.

FLS - Final Location Survey, DPR - Detailed Project Report, FS - Feasibility Study, DE - Detailed Engineering, RS - Reconnaissance Survey, PMC - Project Management Consultant, CP - Conceptual Plan



# & HIGHWAYS BRIDGES

A modern and efficient road network is an essential component of a nation's infrastructure, and an important prerequisite for sustained economic growth. Many countries have been making great strides in improving their highway infrastructure, and we have been participating in different stages of this transformative process for many years. In the last twenty years, we have provided consultancy services in more than 150 highways projects with a total road length of over 20,000km in India, Bangladesh, Australia, East African Countries such as Djibouti, Ethiopia, Kenya, Mozambique, Rwanda, Tanzania, Uganda and Zambia.

## Services

- Feasibility Studies (FS) and Detailed Engineering Services
- Construction Supervision (CS)
- Independent Engineer's Services (IE)
- Pre-bid and Detailed Engineering Services for PPP/BOT/EPC Projects
- Lenders Engineering Services (LIE)
- Authority Engineer's Services (AE)
- Detailed Project Reports (DPR)

## Key Projects

- Detailed Engineering Services for the Hyderabad Outer Ring Road, Telangana, India
- DPR for work of Construction of Two Interchanges at Amra Marg with NH-4B near Gavhan Phata and at Karal Junction with NH-4B and SH-54 in Mumbai in Maharashtra, India
- DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana for Surat – Nashik – Ahmednagar – Solapur – Akalkot – KN/TS Border (750 km) section under Surat - Chennai Corridor, India
- DPR for construction of 6 lane Cable Stayed bridge across Mir Alam tank connecting Bangalore National Highway to Chintelmet Road, Telangana, India
- Improvement-Development and Management of New Indian Bridge Management System for all type of bridge structures on National Highways in the Country, India
- AE for Six Laning of Km. 192.000 to Km. 198.000 between Vadodara–Surat section of NH-8 including construction of a new four lane Extra Dosed Bridge across river Narmada in the State of Gujarat, India
- IE services for 4-laning of Beawar-Pali-Pindwara on of NH-14 (244km) under NHDP Phase-III on Design, Build, Operate and Transfer (Toll) basis in Rajasthan, India

# AIRPORTS

With air travel becoming a key factor for the growth of our economy, it is essential to ramp up airport infrastructure in the country to cater the growing demand in the market. Our multi sectorial expertise enables us to undertake the complex interfaces between city side, air side and terminal infrastructure.

## Services

Feasibility Study (FS) / Technoeconomical Feasibility Study

Detailed Project Reports (DPR) / Detailed Design Consultan (DDC)

Project Management (PMC) / Authority's Engineer (AE)

## Key Projects

PMC for Development of Operational Area of the New Green Field Airport at Dholera for Dholera International Airport Corporation Limited (DIACL) Gujarat, India

DDC for cargo food court, Gate No:8, Cargo fire tank, Cargo, Landslide road, Cargo compound wall and reconstruction of Roda at gate No:6 Chatrapati Shivaji Maharaj International Airport, Mumbai, Maharashtra, India

Design Services for Hangar for BSF at Swami Vivekananda Airport, Raipur, Chhattisgarh, India

# ROPEWAYS

Ropeways are a highly efficient and environmentally friendly mode of transportation, particularly in areas with steep terrain or difficult-to-reach locations. We bring a wealth of multi-sectorial expertise and strategic partnerships to provide comprehensive services for ropeway projects. We offer end-to-end consultancy services to navigate the complexities of ropeway projects and ensure their success and sustainability.

## Services

Pre Feasibility / Techno-economic Viability Studies

Feasibility Studies (FS)/Detail Project Report (DPR)

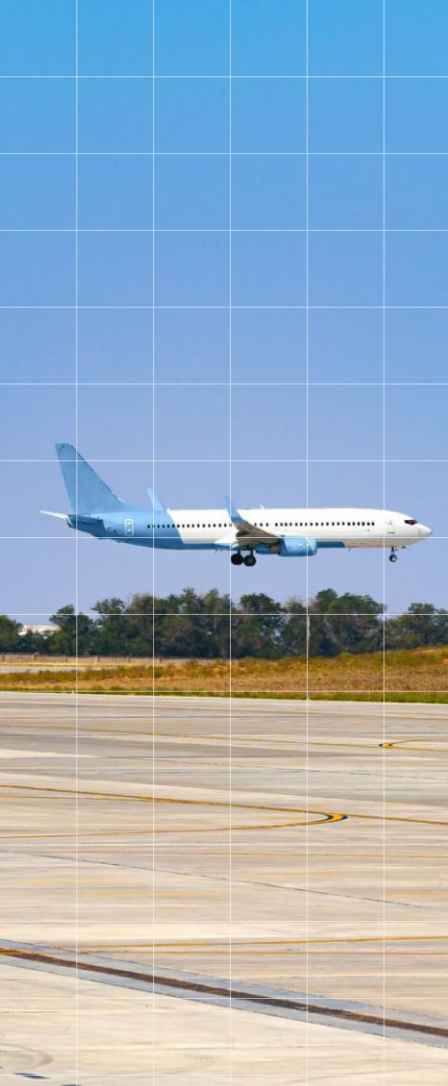
Authority's Engineer (AE) / Construction Supervision (CS)

Feasibility Projects Mention

## Key Projects

Pre-feasibility study for Development of Ropeway Projects under Parvatmala Program, 3 projects for Assam and 2 projects for Arunachal Pradesh, India

Pre-feasibility study for Development of Ropeway Projects under Parvatmala Program, 2 projects for Uttar Pradesh and 2 projects for Madhya Pradesh, India



# PORTS

Most of the movement of commodities and manufactured goods between countries takes place over the sea, making well-designed and efficient ports critical to a country's industrial growth. The Government of India has recognized the crucial role that ports play in facilitating international trade and commerce, and is actively pursuing the upgradation of the country's existing ports, and the creation of new ones.

Our expertise in the ports sector includes port and terminal feasibility studies, port planning, and container terminal planning and design.

## Services

Feasibility Studies

Detailed Project Reports

Independent Engineer (IE) & Lender's Engineer Services (LE)

Construction Supervision/Project Management Consultancy (PMC)

Technical Advisor Services (TA)

Transaction Advisory Services (TAS)

## Key Projects

LE for a Solid Cargo Port Terminal Project at Dahej, Gujarat, India

Techno-Economic Feasibility Report for the Development of Port at Astaranga Area in Puri District, Orissa, India

Detailed Design and Project Management Consultant for the construction of RoRo cum General Cargo Berth at Kamarajar Port, Tamilnadu, India

IE and operational Auditor for the construction of Gangavaram Port, Andhra Pradesh, India

Technical advisor for Providing Technical Services for construction of Oil Jetty No.7 at Old Kandla Port, Gujarat, India

Survey of Krishnapatnam Port Co. Ltd., Andhra Pradesh, India

LE for Development of Liquid Cargo Berth EQ-10 at Vizag Port, Andhra Pradesh, India

Consultancy Services for Appointment of Project Management Consultant for the Development of RORO cum General Cargo Berth at Kamarajar Port, Tamilnadu, India

Technical Advisor for providing Technical Services for the work Construction of Oil Jetty No.7 of old Kandla, Gujarat, India

TAS for selection of Port Developer for Nargol and Bhavnagar Ports, Gujarat, India





# & WATER RESOURCES & IRRIGATION

In a country where the majority of the population makes a living from agriculture, it is difficult to overstate the importance of irrigation. With changing weather patterns and climatic conditions, agriculture is one of the most affected sectors. Traditional irrigation schemes are no longer enough to provide constant reliable water supply for farmer's needs. From massive lift irrigation projects with tunnels and underground pump houses to modernisation studies of major dams, we have been at the forefront of coming up with innovative designs to meet the ever changing needs of the sector.

We provide consultancy services in the execution of large irrigation and hydropower projects involving the construction of canals, barrages, pipelines and other associated structures.

## Services

Feasibility Studies (FS) and Conceptual Designs

Detailed Project Reports (DPR)

Detailed Engineering Services

Design Proof Checking

Construction Supervision/Project Management Consultancy (PMC)

Lender's Engineering Services

Pre-Tender Engineering Services

## Key Projects

PMC, PEC & TPI covering Planning, Design Review, Quality Assurance, Monitoring and Supervision Services for 52 no of Barrages and Under Ground Pipeline system (40,000Ha) under WRD, Govt of Odisha, India.

Palamuru Rangareddy Lift Irrigation Scheme-Conducting Detailed survey & Investigations including preparation of designs, drawings and estimates upto Field channels for developing irrigation in 6,26,000 acres under Package-2, 4 & 6 and Detailed Engineering Services for Lift-1 and 4, Telangana, India

Detailed Engineering Services for Kaleshwaram Project: Package-6 (BRAPCSSP) comprising Twin tunnels of 10 m dia, 9.5km length with underground Surge Pool, Pump House, Karimnagar, Telangana, India

Final Designs for Kabuyanada Irrigation Scheme: Design of Dam and Piped Distribution Network including Socio-economic, Agro-economic & Techno-economic studies in Uganda

Concurrent Evaluation Study of Subernarekha Multipurpose Project comprising of 2 Dams, 2 barrages and 8 canal networks to irrigate a Gross Command area of 1,54,000 Ha in Jharkhand, India.

DPR for Comprehensive safety of TB Dam, Remodelling of TBP LLC Main Canal, Hydrographic survey and Sediment Analysis of TB Reservoir, Karnataka, India

Making adequate quantities of clean and safe water available to a rapidly growing population is one of the greatest challenges faced by India's central and state governments and local bodies in this century. At the same time, they must also work to minimize or mitigate the detrimental impact of industrial development and population growth on the environment

Understanding the scope and magnitude of the problem, we have built up significant expertise and experience in these sectors over the years, and are now able to formulate reliable, innovative, sustainable and in some cases, award-winning solutions to these problems. We provide consultancy services in water supply, waste water treatment and water recycling projects, and also offer services in Environmental engineering, risk management and disaster management

We provide consultancy services in water supply, waste water management, treatment and reuse, storm water management and also offer services in Environmental Services like EIA, EMP, Risk management and Disaster Management.

## Services

Conceptual Design Reports, Master Plans and Detailed Project Reports (DPR)

Project Management Unit (PMU)

Independent & Authority Engineer Services

Project Development & Management Consultant (PDMC)

Project Management Consultancy (PMC) and Construction Supervision

Third Party Quality Assurance & Control (TPQA&C)

Environmental Services including lake and river conservation studies

## Key Projects

Planning, Design, DPR and Bid Document for Comprehensive Storm Water Drainage system for Patna Nagar Nigam, Khagaul, Danapur, Phulwarisharif, Bihar, India

Setting up of a PMU in State Water and Sanitation Mission (SWSM) of 09 Revenue Divisions-Ayodhya, Azamgarh, Basti, Devi Patan, Gorakhpur, Lucknow, Prayagraj, Varanasi and Vindhyachal, Uttar Pradesh, India

PDMC for AMRUT -2.0 in Southern Zone Jabalpur and Shahdol Division's of UADD in Madhya Pradesh, India

PMC to Design, Develop, Manage and Implement Smart City Projects under Smart City Mission in Karimnagar, Telangana, India

Third Party Inspection and Monitoring of Physical and Financial Progress of Rural Water Supply Projects 18 Districts in the state of Uttar Pradesh, India

TPQA&C Consultant for Water supply, Sewerage and Green Space & parks Works taken up under AMRUT in 12 ULBs under Telangana Urban Finance & Infrastructure Development Corporation Ltd. (TUFIDC), Telangana, India





# URBAN DESIGN

Increasing urbanisation has led to emphasis on creation of Sustainable Smart Urban Infrastructure. Through our extensive multi-sectorial experience, we are equipped to provide comprehensive solutions to prevalent demands of urban development. We undertake design of new cities and townships from planning to commissioning and give innovative solutions for upgrading existing cities to Smart Cities.

## Services

- Concept Design
- Feasibility Study (FS)
- Detailed Project Report (DPR)
- Tender Support
- Detailed Design of Urban Utilities
- Construction Supervision
- Project Management Consultancy (PMC)

## Key Projects

DPR and Tender Support for Shendra Industrial Smart City in the Delhi Mumbai Industrial Corridor, DMICDC, Aurangabad, Maharashtra, India

Preparation of first stage proposals for Allahabad Municipal Corporations as a part of Smart City Mission by Ministry of Urban Development, Uttar Pradesh, India

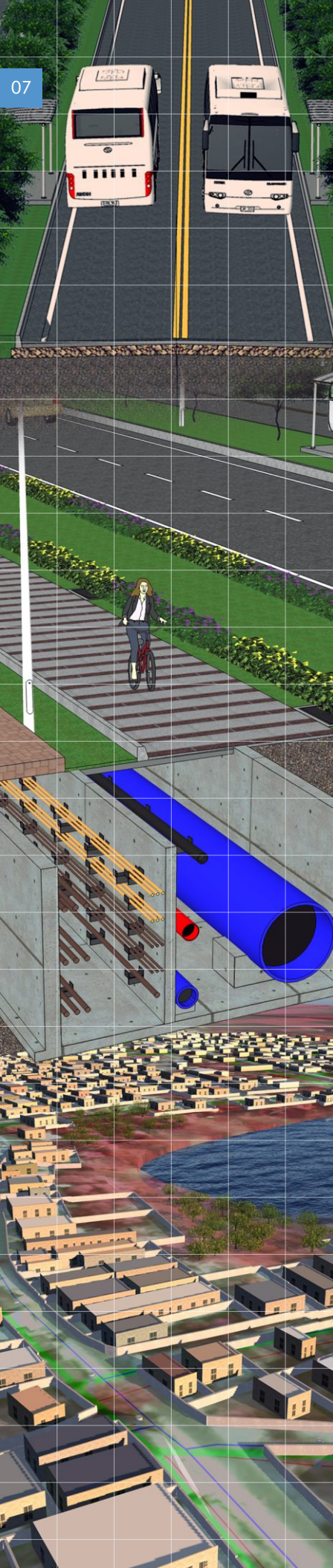
Preparation of first stage proposals for Aligarh Municipal Corporations as a part of Smart City Mission by Ministry of Urban Development, Uttar Pradesh, India

Preparation of Smart Integrated Infrastructure Master Plan and DPR for Phase-I works at Amaravati capital city area (217.00 Sq.km) for APCRDA, Andhra Pradesh, India

Preliminary Design Report for Roads and Services/Utilities and CBD for Phase-I of Shendra – Bidkin Industrail Area, Aurangabad, India

PMC to Design, Develop, Manage and Implement Smart City Projects under Smart City Mission (SCM) in Prayagraj, Uttar Pradesh, India

PMC to Design, Develop, Manage and Implement Smart City Projects under Smart City Mission (SCM) in Karimnagar, Telangana, India





# URBAN PLANNING

With more and more people migrating to urban areas, the infrastructure in India's towns and cities is coming under increasing strain. Increasing urbanization also creates its own share of environmental and ecological challenges. In this context, the consultancy services we provide to the central and state governments and various local bodies are critical in ensuring the healthy and well-planned growth of our urban agglomerations.

Our urban planning division offers planning solutions, using the latest geospatial tools and techniques, to meet the basic development requirements of government agencies and urban local bodies.

## Services

GIS based Master Plan / Development Plan

GIS based Zonal Development Plan (ZDP)

City Development Plan (CDP)

Regional Plan & District Development Plan

Comprehensive Traffic & Transportation Study (CTTS)

Comprehensive Mobility Plan (CMP)

Traffic Impact Assessment (TIA)

Industrial Estate Master Plans

## Key Projects

Detailed Master Plan and Zonal Development Plan for the Andhra Pradesh Capital Region Development Authority (APCRDA) Region (about 8500 sq.kms), the 2nd largest Capital Region Master Plan in India, Andhra Pradesh, India

Development Plan for Madhava Rao Counter Magnet, Special Development Authority (SADA) area, Gwalior, Madhya Pradesh, India

Master Plan for Kathua and its 5km vicinity, Jammu Division, Jammu & Kashmir, India

Master Plan for Kurnool Municipal Corporation Area and its 5km Vicinity, Andhra Pradesh, India

CDPs for 7 towns in Jabalpur, Katangi Districts, Madhya Pradesh, India

GIS based Master Plan for Siddipet Urban Development Authority (SUDA), Telangana, India

GIS based Master Plan for Nizamabad Urban Development Authority (NUDA), Telangana, India

Perspective Plan, Master Plan and Zonal Development Plan for Nellore Urban Development Authority (NUDA) Region, Andhra Pradesh, India



# & ARCHITECTURE & BUILDINGS

Buildings are integral part of the urban environment. At Aarvee, functional requirements are given priority duly addressing environmental concerns while designing every building. We focus on the characteristics of the site, incorporate elements of local architecture and adopt contemporary design principles.

Over the years we have been providing consultancy services for several institutional, residential, industrial, healthcare, sports, entertainment, educational and commercial Sectors. Our work showcases our attention to detail and the importance we give to quality.

## Services

Architectural Design	Feasibility Studies (FS)
Structural Design	Detailed Project Reports (DPR)
MEP Design	Pre-Tender Services
BIM Modelling	Detailed Design
Survey & Field Investigation	PMC / CS
Master Planning	Design Proof Checking

## Key Projects

Design for International Standard Shooting Range and Rehabilitation of Existing Stadia at Different Locations in Hyderabad, Telangana, India

Design and PMC Services for AC Auditorium at Vizag Port for VPT, Andhra Pradesh, India

Design for IT Incubation Center at Tirupati for APIIC, Andhra Pradesh, IT Tower for TSIIIC In Nalgonda & Ramagundam in Telangana, India

Design for Area Hospitals at Chirala, Kuppam and Guduwada for APMSIDC, Andhra Pradesh, India

Design and PMC services for Academic block and Hostel block for Osmania University, Telangana, India

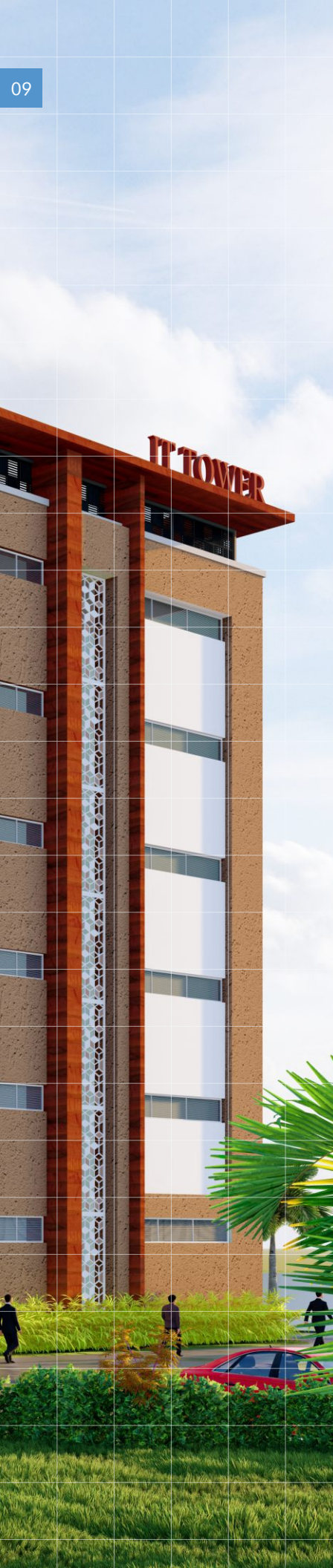
Master planning and Feasibility Report for Integrated Sports Stadia in Vizag & Tirupati for INCAP, Andhra Pradesh, India

Design Services for 1200 bedded Super Specialty Hospital Telangana Institute of Medical Sciences (TIMS) Alwal, Medchal-Malkajgiri District under BPC mode in Telangana, India

Design services for Nursing College, ITI College and CHC in Telangana for TSMSIDC, Telangana, and APMSIDC For Andhra Pradesh, India

FS, Detailed Master Planning, Urban Designing, Engineering and DPR for Major Upgradation of Vijayawada Railway Station, Andhra Pradesh, India

District Hospitals, Teaching Hospitals, Critical Case Hospitals





# GEOSPATIAL SERVICES

We offer a wide range of geospatial services to both government and private sector clients. Our expertise in the conceptualization, design and development of robust, scalable and customized geospatial solutions has made us a preferred service provider in various engineering verticals.

## Services

Interpretation of Satellite Imagery

Creation of Base Maps and Land Use Maps

Development of Web-GIS Applications and Customization of GIS Applications

Digital Photogrammetry

Network Models, Digital Cost Models, TIN and GRID Analysis

Cadastral Mapping and Land Information Systems

3D GIS

Property surveys and Digital Door numbering

## Key Projects

GIS Base Maps for 31 ULBs of Visakhapatnam & Rajahmundry Region APMDP, Andhra Pradesh (World Bank Funded), India

District Rural Road Plan (DRRP) in GIS Platform (PMGSY) for five districts of Kerala, India

Integrated Water Supply System Simulation and Design for HMWS&SB, 12 Outer Municipalities, Hyderabad, using GIS, EpaNET and Google Earth Pro, Telangana, India

GIS-based Master Plan for Sri Satya Sai Urban Development Authority, Andhra Pradesh, India

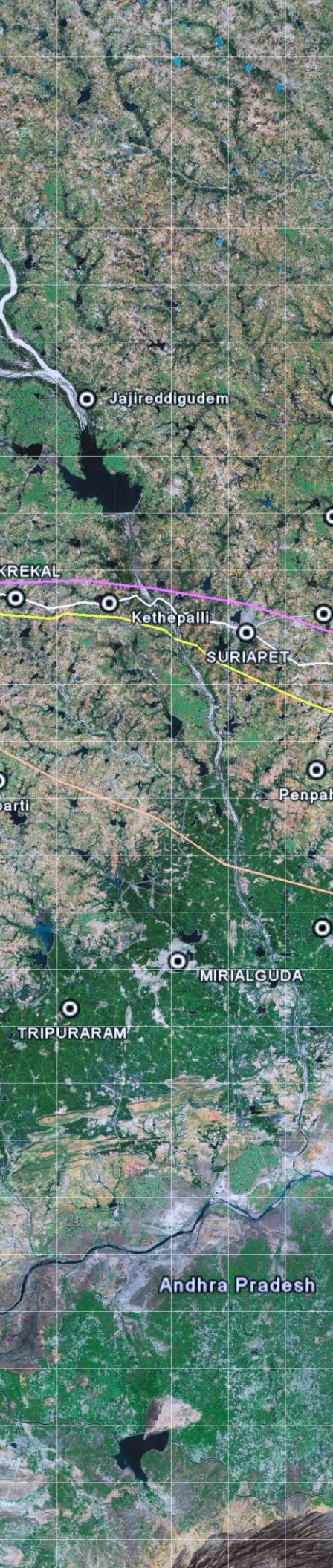
GIS-based Decision Support System for the Nagarjunasagar Command Area including the Left and Right Banks, Andhra Pradesh, India

Conducting detailed Investigation including survey of the entire catchment area of Kondaveeti vagu and its in falling drains in Guntur district, Andhra Pradesh, India

GIS Base maps of 14 Towns of Bihar, India

GIS base map, Revenue database updation survey and Rationalization of House Numbering (Digital Door numbering) 75 ULBs, Andhra Pradesh, India

GIS Basemap preparation and Formulation of GIS-based Master Plan for Cluster 8, West Bengal, India.





# POWER

The energy sector holds the key to accelerating the growth of the Indian economy. Power demand in the country is increasing rapidly due to increasing demand from the Agricultural, Industrial and Infrastructure sectors. To meet this rising demand, the Government of India is facilitating large scale additions to power generating capacity through public and private investments.

We have expertise in conducting Feasibility Studies, preparing Detailed Project Reports and providing Detailed Engineering and Project Management services.

## Sectors

Hydro Power	Hydro Pumped Storage
Solar Power	Distribution Network
Thermal Power	Transmission Lines & Substations

## Key Projects

Preliminary and Detailed Surveys of about 1200km lengths of Double & Multi circuit Transmission lines and 30km lengths of Pole type distribution lines in the states of Telangana, Andhra Pradesh, Karnataka, Madhya Pradesh, India under TSTRANSCO, APTRANSCO, KPTCL and MPPTCL, India (respectively)

Identification of site, Feasibility study and Detailed Project Reports for establishment of Pumped Storage hydro electric Projects (PSP) and Hydro Power Projects including topographical surveys, Geological & Geo-technical Investigations, Seismic Studies, EIA & EMP Studies, SIA Studies for :

- Pinnapuram PSP (Andhra Pradesh) – 1200MW
- Saundatti PSP (Katakana) – 1260MW
- MP30 Gandhisagar PSP (Madhya Pradesh) – 1440MW
- Chitravathi PSP (Andhra Pradesh) – 500MW
- Yerrvaram PSP (Andhra Pradesh) – 1200MW
- Bhavali PSP (Maharastra) – 1500 MW
- Gujjili PSP (Andhra pradesh) – 1500 MW
- Chitterwalasa PSP (Andhra Pradesh) – 1000 MW
- Vempalli PSP (Andhra Pradesh) – 1500 MW
- Veeraballi PSP (Andhra Pradesh) – 1800 MW
- Ranapur PSP (Telangana) – 1200 MW
- Pane PSP (Maharastra) – 900 MW
- Kandhaura PSP (Uttar Pradesh) – 1200 MW
- Nagarjuna Sagar PSP (Andhra Pradesh) – 240MW
- Upper Sileru PSP (Andhra Pradesh) – 900MW
- Pulichintala HPP (Andhra Pradesh) – 60MW



# SURVEY

Reconnaissance survey – Walk through /Inventory

Engineering Survey – Roads, Rail, Irrigation, Power, Water Supply & Sewerage, Buildings

Topographical Survey – Collection of Ground Features / Grid Levels

Catchment Survey – Contours , Ridges and Valleys demarcation

Command area Survey – Grid Levels, Ground Features, Ridges and Valleys demarcation

Cadastral Survey – Land acquisition Survey and Land Parcel mapping

Asset mapping survey - Measurement and Mapping of Physical features

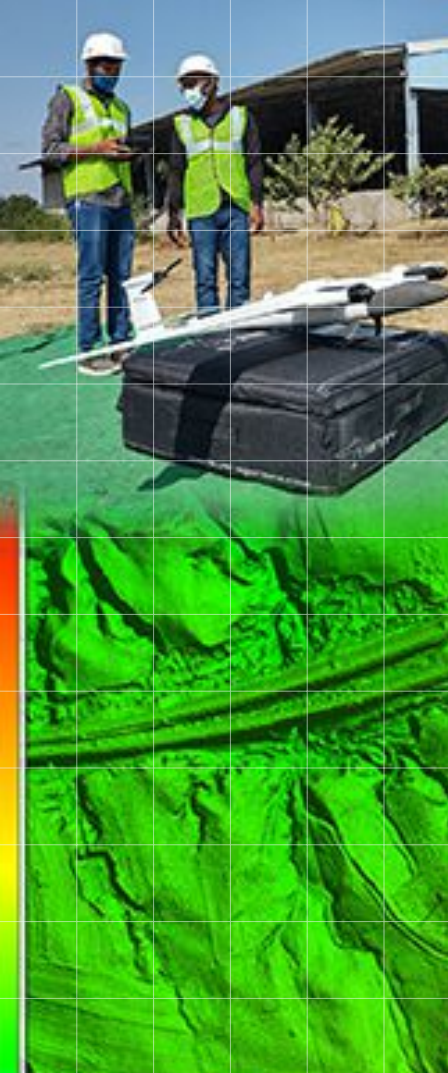
Hydrographic/Bathymetric Survey – River/Reservoirs under water survey

Final Location Survey – Alignment Stakeout

Aerial LiDAR Survey – Roads , Rail, irrigation, Catchment , Command area

Aerial Photography/ Videography by UAV/Aircraft – Corridor mapping, Large scale mapping, Progress monitoring.

Mobile LiDAR Survey – Road, Rail, Telecommunications



## GEOTECHNICAL & MATERIAL TESTING



We have a wide range of testing facilities for Soil, Rock, Cement, Concrete, Coarse & Fine Aggregate, Fly ash and Bitumen, fulfilling most civil engineering requirements including Shear Parameters, Consolidation parameters, Permeability and Swelling characteristics of different types of soil. We also undertake Geophysical Investigations (SRT & MASW) and Ground Penetrating Radar (GPR) for utility engineering purpose are also available.

Field investigations comprising of Pavement Structural Strength using FWD/ BBD; Road Roughness using Fifth-wheel Bump Integrator/Laser Profilometer; Road Geometry, Inventory, Pavement Condition using Network Survey Vehicle (ROMDAS), Retrorefletometer (RRM) for measurement of Reflectivity of Road Signs and Pavement markings; ATCC for classified traffic counts on highways.

All test procedures and techniques adhere to IS, BS, AASHTO & ASTM standards.



# EMPANELMENT

We are empaneled with various government and other agencies.

Allahabad Bank	Ministry of Housing & Urban Poverty Alleviation, Govt. of India
Andhra Pradesh Capital Region Development Authority	Maha Metro
Andhra Pradesh Industrial Infrastructure Corporation Limited	Nagpur Improvement Trust
Dedicated Freight Corridor Corporation India Ltd	Odisha Urban Infrastructure Development Fund
Department of Tourism & Culture, Odisha	Odisha Construction Corporation Limited
Department of Urban Development, Housing and Local Self Government, Rajasthan	Osmania University, Hyderabad
Directorate of Urban Administration and Development, Madhya Pradesh	Panchayat Raj Engineering Department, Karnataka
Directorate of Town & Country Planning, Andhra Pradesh	Public Works Department, Maharashtra
Environmental Planning & Coordination Organisation, Madhya Pradesh	Punjab Remote Sensing Centre
EXIM Bank of India	Rail Vikas Nigam Limited
Gujarat Infrastructure Development Board	Rail Land Development Authority (RLDA)
Gujarat Maritime Board	Rural Water Supply & Sanitation, Odisha
Indian Ports Association	State Bank of India
Indian Railways	State Institute of Town Planning, Madhya Pradesh
Irrigation & CAD Department, Andhra Pradesh	Tamil Nadu Infrastructure Development Board
Irrigation & Water Resources Department, Haryana	Tamil Nadu Urban Infrastructure Financial Services Limited
Karnataka Industrial Area Development Board	Telangana State Medical Services & Infrastructure Development Corporation
Karnataka Neeravari Nigam Limited	Telangana State Police Housing Corporation Limited
Madhya Pradesh Jal Nigam Maryadit	Uttarakhand State Infrastructure Development Corporation Limited
Maharashtra Rail Infrastructure Development Limited	Uttar Pradesh State Bridge Corporation Limited
Ministry of Housing & Urban Affairs, Govt. of India	Yadagirigutta Temple Development Authority
Ministry of Urban Development, Govt. of India	Ministry of Urban Development, Govt. of India

## GLOBAL PRESENCE





# SELECTED CLIENTELE

## INDIAN

Adani Group
Andhra Pradesh Capital Regional Development Authority (APCRDA)
Andhra Pradesh Urban Finance & Infrastructure Development Corporation Limited (APUFIDC), Hyderabad
Andhra Pradesh Industrial Infrastructure Corporation (APIIC)
Central Organization for Railway Electrification (CORE)
Central Public Works Department (CPWD), New Delhi
Chhattisgarh Rail Corporation Limited
Dedicated Freight Corridor Corporation of India Limited, New Delhi
Department of Water Resources, Government of Orissa
Directorate of Town and Country planning, Telangana
Directorate of Town and Country Planning, Government of Andhra Pradesh
Greater Hyderabad Municipal Corporation, Hyderabad
Hyderabad Growth Corridor Limited, Hyderabad
Hyderabad Metro Water Supply & Sewerage Board (HMWS&SB), Hyderabad
IRCON International Limited, New Delhi
Irrigation & CAD Department, Government of Andhra Pradesh
Jindal Steel & Power Limited, Orissa
KMC Constructions Limited, Hyderabad
Lucknow Metro Rail Corporation Limited (LMRCL)
Maharashtra Rail Infrastructure Development Limited (MRIDL)
Ministry of Road Transport & Highways (MoRTH), New Delhi
Nagarjuna Construction Company Limited, Hyderabad
National Highways Authority of India (NHAI), New Delhi
Navayuga Engineering Company Limited, Hyderabad
Public Health Engineering Department, Bhopal, Madhya Pradesh
Punjab Land Records Society, Chandigarh
Rail Vikas Nigam Limited, New Delhi
SEW Infrastructure Limited, Hyderabad
Sports Authority of Andhra Pradesh, Vijayawada
Survey Settlements and Land Records, Andhra Pradesh
Tata Projects Limited
Urban Administration and Development Department, Government of Madhya Pradesh

## INTERNATIONAL

Administracao Nacional de Estradas (ANE), Mozambique	Fulton Hogan, Australia
Bangladesh Railway	Kenya Railways
Ethiopian Roads Administration	Ministry of Water and Environment, Uganda
Ethiopian Railways Corporation	Tanzania National Roads Agency
Energy Water & Sanitation Authority (EWSA), Rwanda	Uganda National Roads Authority



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