
PROPOSED POSITION :
NAME OF FIRM :
NAME OF STAFF : **R. PANNIRSELVAM**
PROFESSION : Urban Infrastructure Specialist
DATE OF BIRTH : 10th June 1941
YEARS WITH FIRM / ENTITY : Associate **NATIONALITY:** Indian

EDUCATION

Degree : Ph.D
Specialization : Civil Engineering
Year of Passing : 2016
University : Anna University

Degree : Master of Engineering, First Class & First Rank
Specialization : Public Health Engineering
Year of Passing : 1980
University : Madras University

Degree : Bachelor of Engineering; First Class with Distinction
Specialization : Civil Engineering
Year of Passing : 1977
University : Madras University

Degree : L.C.E. Diploma in Civil Engineering; First Class
Specialization : Civil
Year of Passing : 1962
University : Tamil Nadu State Board of Technical Education

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KEY QUALIFICATIONS :

Mr. R. Pannirselvam is an Environmental Engineer with civil engineering background and Environmental Engineering specialization. He has about 60 years of experience, of which 25 years are in planning, execution, operation and maintenance of water supply, and sewerage projects, and about 2 years in Environmental quality planning, and Environmental Impact Assessment of River basins and Irrigation system in Tamil Nadu under World Bank assisted Water Resources Consolidation Project. He has also about 27 years of teaching and research experiences in the field of environmental engineering including Water and Wastewater Management, Air Pollution, Solid Waste Management and Environmental Quality Modeling and Management, and Operation and Maintenance of Water Supply and Sewerage Projects, for Graduate and Post-graduate courses at Anna University.

Membership

He is a Life Fellow of Indian Water Works Association (IWWA), Life Fellow of Institute of Public Health Engineers (IPH) and Life Member of Society of Energy Engineers and Managers (SEEM).

Project Name: Preparation of DPR for Ring Main Project for Chennai city

Location : Tamil Nadu

Year : 2021 - 2023

Position Held : Water Supply Expert

Exact Duties: Responsible for the design of ring main system, preparation of detailed drawings and cost estimate.

Project Name: JABIC funded Hogenakkal Water supply and Fluoride Mitigation Project

Location : Tamil Nadu

Year : 2008 - 2009

Position Held : Design Engineer (Hydraulics)

Exact Duties: Responsible for the checking and updating the designs of the transmission and distribution mains of Hogenakkal Water Supply Project.

Project Name: World Bank funded Andhra Pradesh Rural Water Supply and Sanitation Project

Location : Andhra Pradesh

Year : 2008

Position Held : Team Leader

Exact Duties: Responsible for the preparation of 'Environmental Management Framework' to address the environmental issues related to the project. This is an externally funded project.

Project Name: Preparation of 'Guidelines for Sanitation to the Permanent Shelters to the Tsunami Affected People' to the Disaster Management and Mitigation Department, Revenue Administration, Tamil Nadu as per G.O. Ms. No. 531 Revenue NC IV (I) Dept. Dated 14.08.06.

Location : Tamil Nadu

Year : 2007

Position Held : Independent Consultant

Exact Duties: Review of various sanitation options and developing Algorithm for the selection of appropriate sanitation technology for the coastal areas.

Project Name: Comprehensive Storm water drainage, Sanitation and Sewerage study for Karimnagar Municipal Corporation

Location : Andhra Pradesh

Year : 2006-07

Position Held : Team leader

Exact Duties: Planning the investigation, coordinating survey and collection of data, design of sewerage system, storm water drainage system for Karimnagar and preparation of project report.

Project Name: Updating Hogenakkal Water Supply and Sanitation Project (108 MLD)

Location : Tamil Nadu

Year : 2006

Position Held : Consultant

Exact Duties: Responsible for Review and redesign of Hydraulics of transmission mains, branch main and internal transmission system and updating the Project Report for Hogenakkal Water Supply and Sanitation Project 108 MLD capacity.

Project Name: Preparation of Sanitation facilities for the permanent housing for Tsunami affected people

Location : Tamil Nadu

Year : 2006

Position Held : Consultant

Exact Duties: Responsible for Preparation of Sanitation facilities for the permanent housing for Tsunami affected people, at Pillumedu habitation in Killai Special Village Panchayat, Tamil Nadu (for CREED).

Project Name: Preparation of Business Plan for Avadi, Tirunelveli, Cuddalore, Namakkal, Tiruchengodu and Kodaikanal towns in Tamil Nadu

Location : Tamil Nadu

Year : 2005

Position Held : Consultant

Exact Duties: Responsible for preparation of Business Plan for Avadi, Tirunelveli, Cuddalore, Namakkal, Tiruchengodu and Kodaikanal towns in Tamil Nadu Tamilnadu Urban Infrastructure Financial Services Ltd.

Project Name: Preparation of Feasibility reports for Sewerage Projects for Eight ULBs around Bangalore City

Location : Bangalore

Year : 2005

Position Held : Team Leader

Exact Duties: Preparation of Feasibility reports for Sewerage Projects for Eight ULBs around Bangalore City, for KUIDFC

Project Name: Water Supply to Madurai Corporation – Improvement works and system improvement

Location : Tamil Nadu

Year : 2003

Position Held : Team Leader

Exact Duties:

The above study involves identification of problems in the existing water distribution system and suggesting remedial measures. It also involves evaluation of the performance of **50MLD water treatment plant, and treated water main for a length of 67 Km.** Evaluation and problem identification in the existing water supply treatment and transmission systems. (TNUDP)

Project Name: DPR for various water supply projects in Tamil Nadu

Location : Tamil Nadu

Year : 2003

Position Held : Team Leader

Exact Duties: Responsible for the following projects;

- Team Leader - Detailed Project Report for the underground Sewerage Scheme for Pallavapuram Municipality (Tamilnadu Urban Infrastructure Financial Services Ltd.)
- Team Leader - Detailed Project Report for the underground Sewerage Scheme for Madhavaram Municipality (Tamilnadu Urban Infrastructure Financial Services Ltd.)
- Team Leader - Detailed Project Report for the underground Sewerage Scheme for Tuticorine Municipality (Tamilnadu Urban Infrastructure Financial Services Ltd.)
- Team Leader - Detailed Project Report for the underground Sewerage Scheme for Theni Municipality (Tamilnadu Urban Infrastructure Financial Services Ltd.)
- The above studies are carried out on behalf of Wilbur Smith Associates, involve detailed planning, designing the sewerage system and sewage treatment plants, Costing and Preparing Bid documents.

Project Name: Rehabilitation and refurbishment of Tirupur water supply system

Location : Tamil Nadu

Year : 2002

Position Held : Team Leader

Exact Duties: The above study involves the rehabilitation of the existing water supply scheme from the source to the distribution system. The study has the following components like Source adequacy analysis, improvement to the existing treatment works 48 MLD capacity, improvements to the pumping stations, pump efficiency study for the existing pumps, water balance study, leak detection for the distribution system and the feeder mains, existing inventory for the water supply infrastructure in Tirupur Municipality and rain water harvesting. The scope involves detailed analysis and cost estimates for the above study. (New Tirupur Area Development Company Limited)

Project Name: Prevention of entry of sillage and sewage into the irrigation canals, environmental improvement and promote CANAL NAVIGATION in Vijayawada City

Location : Andhra Pradesh

Year : 2002

Position Held : Team Member

Exact Duties: Study involves identification of various pollution sources and suggesting remedial measures to prevent the entry of sewage and sillage into the canals, cost effective sewage treatment plant and promote Canal Navigation. Involved in identification of pollution sources and suggesting cost effective sewage treatment plant.

Project Name: Water Supply to Virudhunagar Municipality

Location : Tamil Nadu

Year : 2002

Position Held : Team Leader

Exact Duties: Planning and designing of Improvement system including Water Treatment Plant 3 MLD capacity and Transmission main (Tamilnadu Urban Infrastructure Financial Services Ltd.) (TNUDF)

Project Name: Water Supply to Sivakasi Municipality

Location : Tamil Nadu

Year : 2002

Position Held : Team Leader

Exact Duties: Planning and designing of Improvement system including Water treatment and Water Distribution System (Tamilnadu Urban Infrastructure Financial Services Ltd.) (TNUDF).

Project Name: Water Supply to Srivilliputhur Municipality

Location : Tamil Nadu

Year : 2002

Position Held : Team Leader

Exact Duties: Planning and designing of Improvement system including Service Reservoirs and Water Distribution System (Tamilnadu Urban Infrastructure Financial Services Ltd.) (TNUDF).

Project Name: New Veeranam Water Supply Project (180 MLD)

Location : Tamil Nadu

Year : 1995 - 1996

Position Held : Executive Engineer (Consultancy Co-ordination), TWAD Board

Exact Duties: Site verification of data, evaluating condition of existing intake structure, raw water pumping station, water treatment plant, treated water pumping station. Critical review of designs of the New Veeranam Project WTP and MS transmission mains of 180 MLD capacity, cost estimation, preparation of bid documents & bid evaluation.

Project Name: Implementation of three major combined water supply projects in Tamil Nadu

Location : Tamil Nadu

Year : 1991-94

Position Held : Executive Engineer, TWAD Board

Exact Duties: Implementation of following **three major combined water supply projects**

- For Sriperumbudur & 13 villages: Est. Rs.2.5 crores

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- For Acharapakkam, Melmaruvathur & 5 villages: Est. R.2.0 crores
 - For Nandivaram, Guduvancheri & 30 villages: Est. Rs.3.5 crores

Project Name: Operation and Maintenance of three Combined Water Supply Schemes in Tamil Nadu

Location : Tamil Nadu

Year : 1991-94

Position Held : Executive Engineer, TWAD Board

Exact Duties: In-charge of Operation and Maintenance of the following three Combined Water Supply Schemes:

- Alandur, Pallavaram Water Supply Scheme, 22.5 MLD capacity,
- Water Supply to Avadi Heavy Vehicle Factory, 15MLD capacity,
- Maraimalai Nagar and MEPZ, 13.5MLD capacity.

Project Name: Dindugul Town Water Supply Project and Water Supply to Heavy Alloy Project at Trichy

Location : Trichy (T.N)

Year : 1985-86

Position Held : Assistant Executive Engineer (Designs), TWAD Board

Exact Duties: Involved in design of Dindugul town water supply project and Water supply to Heavy Alloy Project at Trichy.

Project Name: 'Investigation and design of Transmission main 101 MLD capacity Siruvani Water Supply Scheme' to augment water supply to Coimbatore City.

Location : Tamil Nadu

Year : 1975-76

Position Held : Junior Engineer, TWAD Board

Exact Duties: Involved in investigation, data collection and design 1000 mm PSC pipeline and preparation of DPR.

Publications and Paper presented in Seminars/Workshop

- Paper on “Appropriate Sanitation Technologies” presented at the “National Workshop on Environmental Planning Framework for Water Resources Management in Tamil Nadu” organised by State PWD and WBI at Chennai on 23-24, November, 2000
- “External Assistance of Water Supply Projects in Tamilnadu” paper published in IWWA Journal, April – June 1987
- Paper on “Cost Benefit analysis and Environment” presented in the Seminar on Environmental aspects of Geology, held on 26 to 28, November 1984 at Trivandrum
- “An overview of Heavy Metals Removal from Wastewater effluents” paper presented in the Seminar on “Status and Impact of Heavy Metal Pollution in India” held at Anna University, Madras, 1982
- “Instream Aeration a means for Water Pollution Control” paper presented in the Seminar on “Environmental Management” @ Government Engineering College, Trichur, Kerala, 1982
- “Water Supply Plumbing in Multi-Storied Buildings” paper published IWWA Journal, 1980
- “Environmental Aspects of linking of rivers” in the Seminar on “Expediting Interlinking of Indian Rivers” at Anna University, Chennai, organized by Alumni Association, College of Engineering, Guindy, Chennai on 1st March, 2003.
- Paper on ‘Rural water supply and Rural sanitation’ at the National Symposium on Empowering Rural Population for Economic development through transfer of Technology’ organized by National Institute of Technical Teachers Training & Research, Chennai, 19 – 21 January, 2005
- “Quality control in Rehabilitation of Traditional Rainwater Harvesting Structures” in the State level Workshop on Traditional Rainwater Harvesting Systems in Tamil Nadu, held in Coimbatore, from 7th – 9th December 2005.
- Paper on Modification made in Part 9 Plumbing Services of ‘National Building Code of India 2005’ at the National Workshop on National Building Code of India 2005 organized by Association of Consulting Civil Engineers (India) and Bureau of Indian Standards at Banagalore on 28th & 29th July 2006.

Publication

- **Pannirselvam, R**, 1987, “External Assistance of Water Supply Projects in Tamilnadu” paper published in IWWA Journal.
- **Pannirselvam, R** & Guruswamy, R, 1980, “Water Supply Plumbing in Multi-Storied Buildings” paper published IWWA Journal.
- **Pannirselvam, R** & Navaneetha Gopalakrishnan, A 2015, ‘Development of Cost Functions for Sewage Treatment Plants based on Conventional Activated Sludge Process’, Indian Journal of Science and Technology, vol.8, no.30, pp. 1-7. DOI: 10.17485/ijst/2015/v8i1/76062.
- **Pannirselvam, R**, Ibrahim, Y & Navaneetha Gopalakrishnan, A 2015, ‘Simultaneous Carbon and Nutrient Removal from Dairy Wastewater in Sequencing Batch Reactor’, Global Nest Journal, vol. 17, no.3, pp.628-636.
- **Pannirselvam, R** & Navaneetha Gopalakrishnan, 2017, “Development of Cost Functions and Cost Indices for Predicting Cost of Sewage Treatment Plants”, Journal of Indian Water Works Association, Vol. XXXIX No. 3, pp.205-211.

Author for the following Books

He is the Author and Publisher of the following books:

- Environmental Engineering Volume I – Water supply and Water Treatment, R. Pannirselvam, Published by SPGS Publishers, Chennai, 2004
- Environmental Engineering Volume II – Sewerage and Sewage Treatment, R. Pannirselvam, Published by SPGS Publishers, Chennai, 2004
- Environmental Impact Assessment, R.Pannirselvam and Mr. S.Karthigeyan Published by SPGS Publishers, Chennai, 2005.
- Principles of Environmental Science and Engineering, R.Pannirselvam and A.Navaneetha Gopalakrishnan, Published by SPGS Publishers, Chennai, 2005.
- Design Hand Book for the Public Health Engineers, R. Pannirselvam. Published by SPGS Publishers, Chennai, 2007.
- Water Supply Engineering, Published by SPGS Publishers 2017.
- Wastewater Engineering, Published by SPGS Publishers, 2017.

- Environmental and Social Impact Assessment, with Dr. A.Navaneetha Gopalkrishnan as co-author, Published by SPGS Publishers, 2016.

EMPLOYMENT RECORD

(a)	From Position Held Employer	2008 Design Engineer Nippon Koei, Japan & Shah Technical Consultant, Chennai	To	2009
(b)	From Position Held Employer	2008 Team Leader Samaj Vikas, Hyderabad	To	2008
(c)	From Position Held Employer	2006 Team Leader WilburSmith Associates, Bangalore.	To	2007
(d)	From Position Held Employer	2005 Freelance Consultant Various organizations.	To	2006
(e)	From Position Held Employer	2004 Environmental and Infrastructure Consultant Samaj Vikas and CRISIL	To	2005
(f)	From Position Held Employer	2002 Senior Consultant Wilbur Smith Associates, Chennai	To	2004
(g)	From Position Held Employer	Aug. 2000 Environmental Planner Water Resource Organization, PWD, Government of Tamil Nadu	To	Mar. 2003
(h)	From Position Held Employer	Jun. 2002 Visiting Faculty College of Engineering, Anna University	To	Till Date
(i)	From Position Held Employer	Aug. 1996 Deputy Chief Engineer (Quality Assurance) TWAD Board	To	Jun. 1999
(j)	From Position Held Employer	Nov. 1995 Executive Engineer (Consultancy Coordination) TWAD Board	To	Aug. 1996
(k)	From Position Held Employer	Nov. 1990 Executive Engineer TWAD Board	To	Aug. 1995
(l)	From Position Held Employer	Apr. 1989 Assistant Executive engineer (training) TWAD Board	To	Nov. 1990

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| (m) | From
Position Held
Employer | Nov. 1977
Assistant Executive Engineer (designs)
TWAD Board | To | Apr. 1989 |
| (n) | From
Position Held
Employer | Oct. 1980
Lecturer
Anna University | To | May. 1988 |
| (o) | From
Position Held
Employer | Dec. 1962
Junior Engineer
TWAD Board | To | Nov. 1977 |

LANGUAGES	:	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
	English	Excellent	Excellent	Excellent
	Tamil	Excellent	Excellent	Excellent

CERTIFICATION :

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describes me, my qualifications and my experience.

[Signature of staff member and authorized representative of the Firm]

Day/Month/Year

Full name of staff member: R. Pannirselvam

Full name of authorized representative: