

*CHAPTER 03 –SERVICES &*

*JOB RESPONSIBILITIES*



Dhaka WASA is a service oriented public, autonomous authority, which as a part of Local government division provides services of Water supply and Sewer waste water disposal. Dhaka WASA did not collect any service charge for providing Storm Drainage services. Dhaka WASA received drainage development fund and only a part of operation cost from LGRD&Co ministry. Dhaka WASA is not a business oriented profit focused organization.

Service at various divisions and job responsibilities: -

**3.1 Drainage Operation and Maintenance works:**

**3.1.1** At the start of my work at DWASA, on 2010 November - I was posted as Assistant Engineer at Drainage (Electrical & Mechanical) Division. That Drainage (E & M) division was created on 2008 and was responsible to mainly operating and maintenance of 4 permanent and various seasonal or temporary storm water pumping facility at various places of Dhaka City.

**Job Responsibilities:**

1. Worked at Various Pumping /Lifting Stations of Canals and Many more Temporary/Mobile Pumping Facilities of Dhaka city under Electrical and Mechanical division at Dhaka Drainage Network Operation and Maintenance division.
2. There were permanent pumping stations at Old Dhaka -Mill Barakh Dholaikhal-Burigangah point; Janapath-Titipara- Maniknagar area Pumping station on the Segunbagicha Canal, Rampura Pumping station on east side of Rampura bridge on Begunbari canal, another pumping station at Kallianpur regulating pond area pumping out to Turag river. I mainly looked after Titipara -Maniknagar and Rampura -Begunbari Pumping stations. There were 20 to 25 temporary pumping stations established during rainy seasons, at various points and at the edge of Dhaka City to drain out storm water. We had to visit those sites regularly during rainy season.
3. Planning, Tendering, Evaluating, Procurement or Purchase for Drainage Electrical-Mechanical Operations and Maintenance Works.
4. Supervise over DWASA staff and contractors at work and quality control.
5. There were Electric motor driven pumps and Diesel Engine driven pumps. But mostly electric ones were used where there was electricity available. Diesel pumps were problematic and operational cost was high .Also operation and maintenance of a truck mounted crane which helped in various lifting works at DWASA.

**3.1.2** Sub-Divisional Engineer (Operation & Maintenance) Division-1, Drainage System of Dhaka city (March 2013). There were 10 kilometers of Open Canals and Box-culvert and 190 km pipe storm sewer drain line and more than 2000 manholes to maintain under this division, Drainage Operation and Maintenance – 1 (Operation and Maintenance of Pipe Drainage, Box-Culverts and Canals network of Dhaka to keep the water flowing specially during rainy season).

**Job Responsibilities:**

1. Planning, Budgeting, Tendering, Evaluating, Procurement or Purchase for Drainage Operations and Maintenance Works.
2. Supervise over DWASA staff and contractors at work and quality control. Plan and schedule cleaning activities for DWASA cleaners to clean all drainage units- pipe lines, box culvert, canals, manholes, pits etc.
3. Excavation and Re-excavation of canals.
4. Eviction of illegal structures canal land or other property of Dhaka WASA drainage facilities.
5. Manual tendering, evaluation, Notification award, contracting- system was being phased out and paperless, web portal based time and work saving- tendering system were being introduced. I was the first person in my division to implement e-GP and also, I trained other colleagues to work with that system.

**3.1.3** Sub-Divisional Engineer, UDDP - Urban Dredging Demonstration Project. (Operation and Maintenance of Pipe Drainage and Canals network of Dhaka) With co-operation of Vitens Evides International – Dutch water Operators (Netherlands) and Water operators partnership /WOP, based upon MOU with Dhaka WASA.

**Job Responsibilities:**

1. Urban Drainage / cleaning of Pipes, Box Culverts and Canals dredging and Sediment deposition and removal monitoring management with online/web-server base WIT software and mechanized equipment (floating bulldozer, Excavator etc) and drainage inventory/asset management software system.
2. Attempts were taken to modernize, mechanize and automate drainage works.
3. Introduction of digital GIS system and software.
4. Working to gather information previously unknown or not used. Example – Waste water sample collection, water testing to determine content, mobile gas analyzer, sedimentation data collection and digitization for storing etc.
5. This project also tried to popularize mechanization and Automation at various levels of our work by arranging various meetings and seminars which I also attended.

**3.1.4** Executive Engineer (Dec 2018 - Jun 2019). Five Canal Development Project by Land Acquisition of Manda, Baishteki/Journalist colony, Kurmitola, Hazaribagh, Begunbari Canals with Excavation and Re-excavation.

**Job Responsibilities:**

1. Preparing various documents maps, drawing, list of land owner related to land acquisition work,
2. Contacting with related stakeholders, government authorities, local people related to project site.
3. Planning, Tendering, Evaluating, Procurement or Purchase for Drainage Electrical-Mechanical Operations and Maintenance Works.
4. Excavation and Re-excavation of canals.
5. Eviction of illegal structures canal land or other property of Dhaka WASA drainage facilities.
6. Budgeting, Financial management of project funds.
7. Easy and time saving Automated web portal-based file, note, reporting, letter drafting & distribution system was introduced. I also updated my work and also improved my skills.

**3.2 Sewer Projects Works**

**3.2.1** Executive Engineer, Sewer (R & D) Project Executive Engineer, Sewer (R & D) Project, (Nov 2017 - Jul 2019) Sewerage System Rehabilitation and Development Project works for Dhaka city.

**Job Responsibilities:**

* 1. Planning, Tendering, Evaluating, Procurement or Purchase for Drainage Electrical-Mechanical Operations and Maintenance Works.
  2. Managing Construction works of pipe sewer lines and manholes at old Dhaka area.
  3. Ensuring safety and security of the workers and the people or property nearby the work site, as the sewer lines were being constructed at more than 10- 15 feet deep trenches.

**3.2.2** I was also responsible as an Executive Engineer (Additional charge) Jan 2021 - Apr 2021 · 4 months, at Dhaka Sanitation Improvement Project. Working on improvement of Sanitation system- Sewer network and Lifting stations and Pagla sewerage treatment plant at Narayanganj. Upgrading the Pagla STP from 120 mld to 600 mld capacity (mld = million liters per day) was the main focus. Almost 15 KM trunk main sewer line construction was also planned. Construction of pipe sewer collection network was also part of the project.

**Job Responsibilities:**

1. I was mainly involved in the preparation phase of this project. My main duty was to help the project director with preparation of Tender documents, technical documents of large packages.
2. I also prepared documents for required land acquisition for a sewer lifting station at Golaphbagh, Dholaipar area.
3. I also helped the project team to prepare documents, specifications and BOQ for small office restoration and reconstruction civil works, vehicle procurement, office equipment and procurement of Computers and related equipment.

**3.3 Planning and Design Division Works**

3.3.1 Executive Engineer at P & D (E & M) Division. Planning and Design works related to Electrical and Mechanical equipment.

**Job Responsibilities:**

1. Planning Electrical & Mechanical works as needed by various divisions of Dhaka WASA.
2. Drawing, Designing, preparing specification, tender evaluation for Electrical & Mechanical works or supplies.
3. Inspection & Testing for Quality assurance of various works and supply.
4. Supervision, Inspection and Management of Work-site and Office works.
5. Inspection of various works related to implementation of automation for water production and distribution system. Example – SCADA, VFD, PLC, HMI, Sensors etc were specified and inspected for quality control.

**3.5 Training received from DWASA:**

During past 10 years of my work at Dhaka WASA, I have received many trainings related to work. Some of the trainings I received are listed below: -

1. At the start of my job at Dhaka WASA, I was placed in an orientation training course and was informed about overall structure and scope of work and business process, DWASA Act 1996 and DWASA regulations 2010 by DWASA.
2. Public Procurement Act 2006 and Public Procurement Rules 2008 by DWASA training center.
3. Office management, Leadership, Staff management trainings by DWASA and training center.
4. Project planning, management and implementation by training center.
5. Web and Computer based E-GP and digital web-based file/Nothi management by DWASA.
6. Microsoft office suite software package by DWASA and training center.
7. Budget planning, budget management and implementation by training center.
8. Planning, Modeling and Designing of Draining system by Vitens Evides International and training center.
9. Asset and Inventory management by software-based systems by Vitens Evides International, Vei-Dutch Water Operators and DWASA.
10. Water distribution network - design, operation and maintenance by Water Operators Partnership.
11. Gender role in Water policy making by Water Aid Bangladesh, Water & Gender Alliance.
12. Procurement management, PPR PPA, local and international bidding, vendor management, contract management – 21day training hosted by Engineering Staff College.
13. Office manner, staff development, personal skill development by training center.
14. Time management and Emotional Intelligence by training center.
15. Personal and Official financial management by training center.
16. Divisional procedures by training center.
17. Non-revenue water management and implementation of SCADA by training center.
18. Organization management and Leadership Training by WOP and MDF consultant & Training center.