**Tauqir A. Bhatti**

**822 Gehrig Ave, Franklin Square, NY 11010**

**Cell: 516-455-9313, Home: 516-561-3156**

**Email:** [**btauqir@hotmail.com**](mailto:btauqir@hotmail.com)

**Profile:**

* 21 years of professional experience in construction projects, estimates/change orders preparation, construction management, field inspections, testing and commissioning of equipment/systems, Office engineering, quality control, and project management assignments for MTA, LIRR, , TBTA, DEP NYCT and Port Authority projects in boroughs of New York City.
* Experienced to prepare cost estimates and supervise/inspect installation and commissioning of HVAC, Plumbing, Fire protection systems and Elevators/Escalators/mechanical equipment for buildings, plants, stations and facilities as per contract documents, approved submittals, check lists and building codes/standards.
* Prepared daily progress reports and assisted Resident Engineers in maintaining/updating records of partial payments, RFIs, submittals, subcontractors, quality audits and office work documentation. Skilled in coordinating and monitoring of Subcontractors and vendors/suppliers.
* Worked as Senior Mechanical Estimator/Inspector/MEP Engineer/Quality Control Manager for various mechanical, electrical, civil, and communication projects with various companies in New York City. Experienced in cost estimating and change orders preparation, negotiations, and cost management of projects.
* 18 years of experience in planning, design, construction, commissioning, operations, estimating, costing and budgeting of natural gas distribution and transmission pipelines projects and systems as per pipelines design and safety codes and standards (API, ASTM, ASME) in Sui Northern Gas Pipelines Ltd, Lahore, Pakistan
* Objective is to utilize my experience and skills to achieve a position for profession growth.

**Qualifications:**

* MS Mechanical Engineering, Texas A & M University, TX USA----1990
* BS Mechanical Engineering, University of Engineering and Technology, Lahore, Pakistan---- 1980

**Professional Experience and Projects Details:**

**JCMS INC, NJ/JACOBS, NY(Prime) July 2020 to February 2023**

**Lead Mechanical Engineer**

**Contract: CS 179-Systems Facilities Package 1-East Side Access (ESA) Manhattan/Queens, NY**

* Witnessed and lead field testing and commissioning of Automatic Temperature Control (ATC) /HVAC Systems, Chilled Water system, Fire Alarm Systems, Clean Agent(FM-200) Systems, Smoke Purge Panels Systems, Tunnel Ventilation Axial and Booster Fans, Track Drainage Pumps and Fire Stand Piping systems, and SCADA system PLCs as per approved test procedures for LIRR/MTA Substations/TV Fans Facilities along 63 St. Tunnel between Manhattan and Queens, NY at various substations.
* Prepared and submitted field test reports with photos, field observations and discrepancies to Managers.

**JCMS INC, NJ/JACOBS, NY(Prime) April 2018 to July, 2020**

**Sr. Field Engineer/Cost Estimator**

**Contract: P-3643-Canarsie Tunnel Rehabilitation and Core Capacities Improvements in Brooklyn/Manhattan, NY-1ST AVE and Bedford AVE Stations. Project Cost: $500 Million**

* Performed duties of EIC on MTA General Orders (GO) work and monitored construction activities of field engineers as per schedules for rehabilitation work on Q2/Q1 Tracks of Canarsie Tunnel, Bedford AVE Station in Brooklyn and 1ST AVE Station in Manhattan. Prepared and submitted shift summary reports to Construction Managers and Resident Engineers. Performed field inspections and prepared change order estimates for civil, mechanical, electrical and communication installations and renovations work for Canarsie Tunnel Project.
* Inspected and prepared change order estimates for construction of 24” and 42” ductile iron sewers, manholes and 10” dia. Micro Piles on E14 Street between 1st AVE and AVE A in Manhattan as per submittals.
* Performed inspections and change order estimates for predrilling and jet grouting of drilled columns as per approved drawings, submittals and check lists. Witnessed load testing of tie-down anchors as per approved submittals on E14 Street Between 1stAVE and AVE B sites.
* Inspected installation of 1” to 4” dia. RGS conduits and rack hangers supports for feeder cables for lighting, communication and fiber optic systems at Bedford AVE and 1st AVE Stations in Brooklyn and Manhattan. Checked mock –up for temporary lighting system in Canarsie tunnel. Inspected installation of temp. Lighting system cables, fixtures, panels, and receptacles on Q1/Q2 tracks in Canarsie Tunnel.
* Performed inspections and change order estimates for building new Station Entrances, elevators at E14 Street/AVE A and structural construction of new underground Substation at E14/AVE B, installation of Plumbing system, HVAC system/exhaust fans, Fire Protection system, Electrical lighting system, transformers, rectifiers, switchgears, power panels, conduits, cables, fixtures and track power system cables and CBH.

**Haider Engineering, P.C. /HNTB, NY(Prime)**

**Sr. MEP Inspector/Estimator May 2017 to March 2018**

Contract: A36622A-Enhanced Stations Initiative-Package-I Project Cost: $150 Million

Renovations of 3 Stations (Bay Ridge Ave, 53 Street and Prospect Ave Station) in Brooklyn, NY.

* Responsible to perform field inspections and change order estimates for construction activities comprising demolition of old and installation of new floors, walls, stairs treads, railings, plumbing and HVAC systems, station lighting and communication systems fixtures and equipment.
* Performed field inspections and monitored quality for installation and finishing of new granite floor tiles, ADA tiles, glazed ceramic wall tiles and masonry work for walls at three stations as per contact specs and approved shop drawings. Inspected installation of steel reinforcement for walls, slabs and sidewalks. Witnessed pouring and field testing of 5000 psi concrete.
* Inspected repaired structural steel work for columns and beams as per approved shop drawings and witnessed testing and torqueing of high strength bolts for beams and columns. Inspected installation of anchor bolts and installation of pedestals for canopies at subway entrances.
* Inspected repairs of spalled concrete and water proofing of walls/ceilings of platforms. Inspected painting of beams, columns, ceilings, rooms and tactiles at three stations as per contract specifications and schedules.
* Inspected and documented installation of new hot and cold copper water piping systems, new sanitary waste and vent piping system, 2” discharge piping and duplex sump pumps systems, electric water heaters and fixtures for scrubber rooms at three stations. Witnessed hydrostatic tests for water piping systems and head tests for sanitary/vent piping systems.
* Inspected installation and testing of HVAC systems new exhaust fans, duct work, fire dampers, louvers, exhaust and supply air grilles for station rooms
* Inspected installation and testing of new LED Lighting systems, DC lighting system, comprising installation of new Wireways, new circuit breaker panels for lighting and power circuits, new LED lighting fixtures on platforms and in various rooms as per approved shop drawings. Inspected installation of conduits, pulling and termination of cables for various circuits and equipment as per approved shop drawings. Inspected wiring for speakers, dashboards , AFC systems, CIS and totems at three stations. Witnessed meggering of power cables and landing of feed and ground cables to circuit breakers from EDR and reserve EDR rooms.
* Covered and inspected construction activities on various weekend and night General Orders (G.O.). Worked as EIC on some G.O.s.
* Prepared and submitted daily reports using Constructware. Assisted Resident Engineer for partial payments and monitoring of subcontractors.

**JCMS, INC. New Jersey January 2016 to February 2017**

**Sr. Mechanical Inspector/MEP Engineer/Estimator**

**Contract: C-26010-2B—2Avenue, 96 Street Station Entrances, Ancillaries, Station**

**Finishes and MEP Systems**

**HVAC Systems**

* Responsibly performed field inspections as per contract and approved shop drawings and specifications for installation and testing of HVAC equipment comprising 30 tons chillers , air handling Units, chilled water, condenser water and glycol pump motor sets, chilled water and condenser water piping, valves, dry coolers, cooling dowers, fan coil units (Williams), heat exchangers, strainers, instrumentations and controls for station/building heating and cooling systems in North and south chiller rooms of Station.
* Inspected installation and testing of supply/return/exhaust air duct systems, diffusers, grills, fire dampers and motorized isolation dampers, supply and exhaust fans of various capacities and duct heaters at 96 Street Station and Ancillary Buildings 1 and 2.
* Inspected and tested installation of Tunnels and Station Smoke Ventilation systems comprising four horizontal and four vertically installed axial fans (CLAIRAGE), sound attenuators, motorized dampers, VFDs and control panels in Ancillary Buildings of station.

**Plumbing and Track Drainage systems**

* Responsibly performed field inspections as per contract and approved shop drawings, specifications and checked for non- conformances for installation of plumbing systems comprising domestic copper water piping (3/4” to 4”), valves, 4” RPZ, water meters, clevis hangers and supports, bath room fixtures, and hot water heaters at 96 street station and ancillary buildings.
* Performed inspections for installation of sanitary, vent and storm drain piping systems, pneumatic and electric sewage ejectors, pneumatic piping, valves, hangers and supports, floor drains, sump pumps of various capacities for all levels of 96 street Station and associated rooms and Ancillary 1 and 2 buildings.
* Inspected installation and testing of track drainage system comprising 8” pump car manifold piping, fittings, valves, supports and hangers, in North and South Tunnels from 86 Street to 105 Street Inspected and tested installation of 200 and 1500GPM (FLYGT) submersible pump motor sets and associated control panels for track drainage system in pump room.

**Fire Suppression systems**

* Performed field inspections and hydrostatic testing of fire suppression systems comprising 1” to 4” sprinkler piping system and 4”/6”dry fire stand piping system, SIAMESE connections, check valves, valves and fittings, hangers and seismic supports for sprinkler and dry fire stand piping systems at various levels of 96 Street station, north and south tunnels and in Ancillary Buildings.
* Inspected installation of Clean Agent (INERGEN) fire suppression system for signal, radio, and communication rooms for station.
* Inspected and tested installation of stainless steel water mist piping system, valve assemblies, water booster pumps for fire suppression as per contract and approved shop drawings and specifications for traction power rooms, elevators and escalators at 96 street station.

**Escalators and Elevators** :

* Responsibly performed field inspections as per contract and approved shop drawings, and contract specifications for assembling, installation and field testing of eight escalators (KONE) and two hydraulic elevators at 96 street station.

**Haider Engineering P.C./AECOM (Prime) September 2013 to May 2015**

**Farmingdale, New York**

**Sr. Mechanical Inspector/MEP Engineer**

**Contract**: **HH-88A, Administration and Maintenance Building Utilities and MEP Rehabilitation at Henry Hudson Bridge and construction of ORT Toll Gantries and Infrastructure at Upper and Lower Levels of Henry Hudson Bridge, Manhattan**

**Client: TBTA Project Cost: 20 Million Dollars**

* Inspected civil works pertaining to new toll gantries comprising demolition of existing concrete and asphalt pavements, infrastructure and construction

of new pavements as per contract specifications and contract drawings.

Excavation/demolition of rocks along sides of upper and lower level PKWY to

build foundations for gantries and preparation of steel reinforcement cages

for foundation.

* Inspected installation and hydrostatic testing of 8” Ductile Iron water main, water hydrants, tapping sleeves, valves, fittings, manholes excavation and backfilling of water main trench, compaction testing and restoration of asphalt and concrete pavements over water main trench. Installation of electrical conduits duct bank and electrical manholes in Maintenance building premises and at upper level of PKWY.
* Inspected demolition of existing concrete retaining walls and excavation/removal of rock from lawn area to build new retaining walls for Electrical Enclosure. Removal of old drainage pipes, light poles and conduits during excavation activities.
* Inspected removal of old HVAC Equipment(AC units, hot water heaters and exhaust fans, supply and return air ducts), power and control wiring, panels of HVAC units. Demolition of electrical wiring

**Contract: RK-65R, Central Maintenance North Facility Workshop Building at Randall’s Island, Manhattan September 2013 to February 2015**

**Client: TBTA Project Cost: 20 Million Dollars**

* Performed construction inspections and monitored quality of work as per contract drawings, specifications, approved submittals, check lists, and shop drawings for installation and testing of decentralized air conditioning units(Mitsubishi City Multi ceiling mounted units 1 to 5 tons) , CRAC units(5 Tons, Schneider Electric), Heating and Ventilation Units, Air Handling Unit, Energy Recovery Unit, Condensers, Exhaust fans and motorized dampers, radiant tube heaters, air supply/return ducts systems, registers, grilles, refrigeration piping and insulations, control panels and wiring for HVAC systems on 1st and 2nd floors of workshop building. Inspected installation and testing of hydraulic elevator(ThyssenKrupp) in building.
* Prepared daily progress reports and checked non-conformances. Attended progress meetings and assisted RE for progress payments.
* Inspected installation of fire sprinkler piping, sprinkler heads, fire stand piping and valves, main fire pump and jocky pump, valves and fittings, check and zone control valves supports and hangers. Witnessed air and hydrostatic testing of sprinkler and standpipe piping systems, flow testing of main fire pump. Installation and testing of fuel oil, natural gas and compressed air piping in workshop building.
* Inspected installation and testing of plumbing system waste and vent piping, domestic water piping and supports, valves, fittings, water booster pumps and plumbing fixtures as per contract drawings, specifications and submittals.

**Project 2: Montague Tube Rehabilitation Project , Manhattan**

**Client: MTA**

* Responsible to perform inspections and monitor quality of construction work as per contract drawings, specifications, approved submittals and shop drawings for installation of new 4” FRE conduits, and reinforced concrete duct banks along inner/outer walls of N and R trains in tunnels from Whitehall/Broad Street Stations in Manhattan to Court Street/Jay Street stations in Brooklyn
* Performed inspections and monitored demolition and removal of old tunnel lighting conduits, cables, fixtures, 2000 KCMIL power and communication cables, panels, junction boxes, circuit breakers and electrical equipment by TC Electric electricians. Inspected installation of temporary and permanent lighting cables, conduits, lighting fixtures, receptacles, junction boxes, panel boards, circuit breakers, transformers and electrical equipment in Montague tunnel from Whitehall/Broad Street Stations to Court Street and Jay Street Stations
* Inspected installation/pulling of 2000KCMILcables through FRE duct banks, installation of fiber optic and antenna cables. Witnessed meggering, termination and testing of 2000 KCMIL and lighting system cables and circuits. Prepared daily reports, checked non-compliances and documented work.

**SI ENGINEERING, P.C. March 2010 to August 2013**

**New York City, NY**

**Sr. MEP Engineer/Estimator Change**

**Project: Condition Survey of Port Authority Buildings at Newark Air Port, New Jersey July 2013 to August 2013**

**Client: Port Authority of New York and New Jersey**

* Inspected and checked conditions of existing floors, walls, ceilings, roofs, bolted and welded connections of steel frames, beams and columns for

structural integrity of various buildings at Newark Air Port, New Jersey to

prepare cost estimates for repairs and rehabilitation. Prepared reports for repairs, or replacement of damaged and deteriorated items.

**Project: Grit Chamber, Bronx, New York March 2012 –June 2013**

**Client: DEP, New York City**

* Performed construction inspections as per shop/ contract drawings, submittals, and specifications and implement quality control procedures for civil, mechanical, and electrical construction work in Grit Chamber Building at Bronx, comprising installation of HVAC equipment, ducts, plumbing, sprinkler and fire protection systems, process piping, mechanical equipment, submersible pumps, boilers, grit collection/removal systems and bar screens. Inspected steel reinforcement and pours for concrete walls, slabs, stop logs, installation of masonry walls, terrazzo tiles for walls, floor tiles and painting of walls and piping systems in the building.

**Project: Jerome Park Reservoir, Bronx, NY, November 2011 to March 2012**

**Client: DEP New York City**

* Inspected and monitored installation of temporary bulkhead in water tunnel, demolition of old 72" sluice gates, actuators, steel frames, and concrete/ brick foundations at Gate House # 1 in Bronx.
* Performed inspections and quality control work for installation of 48" diameter water pipeline with steel reinforcement and concrete encasement at Jerome Park Reservoir, Bronx.

**Project: Croton Water Filtration Plant March 2010 - October 2011**

**Bronx, NY**

**Client: DEP, New York City**

* Inspected and monitored installation of several carbon steel and FRP chemical storage tanks at water treatment plant as per specifications and approved shop drawings. Witnessed hydrostatic testing of tanks.

Inspected installation of mechanical equipment for water treatment plant comprising flocculators, skimmers, rapid mixers, raw and treated water vertical turbine pumps, metering pumps and motors as per manufacturers recommendations and approvedsubmittals.

* Inspected installation of carbon steel, stainless steel, copper, and PVC piping systems, process valves and piping supports. Checked embedment of anchor bolts before installation of tanks, piping supports and mechanical equipment. Witnessed torqueing of stud bolts for 6” to 48” dia. flanges of water/air pipes and valves for pipes, anchor bolts as per recommended values.
* Prepared daily inspection reports and reported construction deficiencies and non-conformances to Lead Mechanical Engineer.
* Assured quality of work as per contract specifications and quality control procedures and building codes.

**Quality Control Manager**

**JUDLAU CONTRACTING INC. August 2009 to February 2010**

**Flushing, New York**

**Project: ESA Manhattan Structures- 1, Manhattan, New York**

**Client: MTA, New York City**

* Implemented MTA’s Quality Control Procedures quality and performed field inspections as per approved shop drawings, and contract specifications. Prepared check lists during construction of mini-pile foundations, erection of structural steel frames for load transfers, and fireproofing of steel columns and beams.
* Performed inspections and testing of rock anchors, rock bolts, reinforcement of shotcrete and concrete for shafts and well ways for elevators and escalators.
* Conducted external audits of subcontractors, suppliers, soil and concrete testing labs to ensure compliance with quality control procedures.

**Senior Mechanical Inspector/ Estimator April 2009 to June 2009**

**TECHNO CONSULT, INC. NJ/**

**SHAW ENVIRONMENTAL, INC.**

**Project: Powell’s Cove Pumping Station, Queens, New York**

**Client: DEP, New York City**

* In order to perform construction inspections at Powell’s Cove Pumping Station at

Tallman Island WPCP, Queens, studied detailed contract specifications and drawings for

removals and installations of three (3) vertical centrifugal sewage pump motor sets

(50 HP each), piping, valves and related instrumentation.

* Assisted Resident Engineer in preparation of preconstruction documentation. Cost estimates for change order and assisted in progress payments.

**Sr. Construction inspector**

**SAVIN ENGINEERS, P.C.**  **July 2006 to Januar**y **2009**

**Pleasantville, NY**

**Project: Waste Water Plant Up-Grading, Bowery Bay, Queens, New York**

**Client: DEP, New York City**

* Performed construction inspections and ensured quality of work in installation/testing of underground and above ground water, gas, and plant piping systems at Waste Water Treatment Plant at Bowery Bay, Queens, New York.
* Witnessed hydrostatic/air pressure tests for hot water supply and return piping systems

for 750 HP boilers, hydrants, gas meter pad piping, plumbing and fire protection systems piping.

* Inspected installations and testing of main sewage pump(1250 HP), seal water and submersible pumps, air compressors and motors. Inspected installation of Electro-hydraulic actuators(Trident) and control panels for scum skimming system at Bowery Bay Water Pollution Control Plant (WPCP) in Queens.
* Performed installation inspections and commissioning of HVAC equipment comprising \Air Handling Units, CRAC Units, H&V Units, convectors, unit heaters, and exhaust fans in Main Building and Substations at Bowery Bay WPCP. Inspected installation of insulations on hot water supply and return piping for boilers. Inspected installation of instrumentation and control devices, control panels, conduits and control wiring for 750 HP hot water boilers and circulating pumps in Main Building. Prepared Daily Inspection Reports
* Assisted Resident Engineer at Bowery Bay WPCP, Queens, and managed the responsibilities of Lead Mechanical Engineer for one year. Maintained records of quantities of materials and equipment installed. Coordinated for progress payments, change orders work, and monitoring of subcontractors.

**Mechanical Estimator**

**AFC ENTERPRISES INC.** **Glendale, NY** **October 2004- April 2006**

**Glendale, Queens, New York**

**Clients: MTA, DEP, NHA, PANY &NJ**

* Prepared material take-offs and cost estimates for HVAC systems, Plumbing systems,

Fire Protection systems for new MTA stations and NHA buildings, DEP plants, and Port Authority of New York airports development projects and for private contractors.

Prepared estimates for civil, structural, finishes and electrical lighting systems.

* Reviewed contracts specifications for materials and equipment. Contacted various

Vendors and suppliers of construction materials and equipment to obtain quotations for

preparing cost estimates. Experienced in estimates for change orders and bids preparation

**Quality Assurance Engineer February 2004-October 2004**

**TOTAL SAFETY CONSULTING**

**Staten Island, New York**

**Project: Fan Plant Rehabilitation, Manhattan, New York**

**Client: MTA, New York**

* Acquired training, monitored and implemented quality control procedures, quality work plans, hold points, inspection check lists for all construction activities for Fan Plant Rehabilitation Project of Transit Authority in Manhattan. Checked and ensured that subcontractors also implement quality work plans during construction.
* Controlled and assured quality of construction materials to comply with the contract specifications and designated standards. Performed shop and field inspection of structural steel and other construction materials. Documented work pertaining to quality assurance procedures such as transmittals/submittals logs, non-conformances as per MTA’s QA/AC procedures.

**Assistant Project Manager May 2000 – January 2003**

**INTEGRAL PLANNING AND MANAGEMENT**

**College Point, Queens, NY**

**Projects: Survey and estimation of Underground Conduit Systems for Cables**

**Client: Time Warner Cable, New York City**

* Planned, surveyed, selected routes and designed conduits for underground coaxial and fiber optic cable systems for Time Warner Cable in Queens and Brooklyn. Prepared construction drawings using AutoCAD.
* Prepared construction estimates, work orders, Coordination and liaison with DOT, New York City for permits.

**SUI NORTHEN GAS PIPELINES LTD.** **1981 - 1999**

**Lahore, Pakistan**

**Senior Distribution Engineer(Sub-Area Manager)**

* As SDE of Sub Regional Offices in the cities of Lahore, Taxila and Wah Cantt in Pakistan, managed and supervised construction for several projects of gas distribution pipelines. Managed subcontractors and a staff of 30 workers. Controlled operations of distribution piping systems for various towns in Lahore, Taxila and Wah Cantt.
* Performed estimation, budgeting and scheduling of turnkey natural pipelines construction projects in Head Office. Prepared specifications of materials, and arranged procurement of pipelines construction materials and equipment.
* Designed new gas transmission pipelines networks, gas sales and metering stations and related facilities, compressor stations for new and enhancing capacities of existing pipelines systems. Experienced and conversant with API, ASME, ANSI, gas transmission and distribution pipelines design and safety Codes and Standards.
* Planned, performed preventive and corrective maintenance and overhauling of gas

turbines and centrifugal compressor sets of M/S. SOLAR GAS TURBINES INC. USA.

**Computer Software Skills:**

* MS Word, MS Office, MS Excel, Outlook, Constructware, AutoCAD , Outlook,
* Corel Paradox, SharePoint, ASite, ORACLE Primavera Unifier

**PROFESSIONAL AFFILIATIONS**

* Member of American Society of Quality Engineers, USA.

**TRAINING:**

* Training acquired in Quality Control/Quality Assurance Management Course for MTA’s

Construction projects.

* External audits course with SAI GLOBAL, Ohio

**Safety** **Training**:

OSHA 30 Hours, OSHA 10 Hours, Confined Space and Fall Protection, Lockout/Tagout Training, OSHA 30 Hours Outreach in 2014, Track Safety Training - MTA valid till July 2021.