

# Sabbir Hasan, MAsC, EIT

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## Associate – Civil Engineer, Structural and Building Science

Ambitious engineer with over three years of broad expertise collaborating with cross-functional internal and external stakeholders. Analytical problem-solver working with BIM, structural, architectural, and mechanical drawings in high-stress environments. Detail-oriented team leader and adaptable team player with proven success managing multiple simultaneous tasks and projects. Disciplined quick learner with exceptional collaboration and communication skills.

### Professional Summary

- Design, research and project work in the field of civil engineering in Canada
- Technical analysis and design, CAD drafting, Report preparation, Cost estimating, project planning and management, Preparing and reviewing drawings, construction quality control and quality assurance, site inspection and surveying.
- Civil3D, AutoCAD, Revit, ArcGIS, ETABS, STADPro, MicroStation and Excel
- Design and reinforcement steel detailing and cost estimation of high-rise buildings
- Hand-on experience in road design, drainage design and earthworks.
- Environmental impact assessment of civil engineering project, including surveying, data collection, mapping, drawing, analysis, abstraction, and reporting
- Ability to communicate technical issues to co-professionals, contractors and Clients
- Excellent report writing skill – a campaigner of publishing noteworthy technical works
- Passed PPE Exam, P.Eng application in process. Permanent Resident of Canada.
- Certification of Completion, Autodesk Revit Training, REDCAGE
- Certification of Completion, BIM Intro Course, Procad Consultants
- Certificate of Course Completion, Revit MEP Specialized Modules, Imperial Solutions

### Education & Training

- **Master of Applied Science (MAsC), Civil Engineering**, Concordia University, Canada. Research study in “Abrasion on concrete surfaces of hydraulic structures by water-borne particle.” Coursework includes testing of pavement design, hydrology, durability of concrete, and soil properties. Earned Merit Scholarship, 2013 (CGPA 3.93/4.30);
- **Bachelor of Science (BSc), Civil Engineering**, Bangladesh University of Eng. & Tech (BUET), Bangladesh. University of Information Technology and Sciences (UITS) Talent Award, 2007; and Chittagong Education Board Scholarship, 2005-2006.
- **Engineer-In-Training (EIT)**, Professional Engineers Ontario (PEO), Membership #100503434. Eligible for PEng.
- Proficient skill in Civil3D, ArcGIS ArcMap, SketchUp etc.
- Gained knowledge of Canadian & US steel design codes and Ontario building codes
- Membership, American Society of Civil Engineers (ASCE) & Canadian Society of Civil Engineering (CSCE)
- Elected as Director of Social Affairs of BUET Alumni Association Canada (BAAC)

### Career Overview

*Rebar Enterprise Inc. Oakville, 2016 – Present*

#### **Structural Detailing Engineer**

- Works in conjunction with team of 40 detailers, interfacing with professional engineers regarding design structure, drawing interpretations, and any issues. Reads and understands blueprints for highly-complex projects.
- Develops clear, detailed, and accurate AutoCAD shop drawings for fabrication and installation of all millwork based on information taken from structural and architectural drawings, notes, and verbal instructions. Interprets drawing markups and implements drawing revisions provided by design engineer.

- Uses AutoCAD, RebarCAD and Revit to execute drafting assignments from design worksheets and calculations according to procedures established by project manager.
- Assists with maintaining and updating company drawing files and data according to company standards.
- Managing contract specifications/documentation.

*HNS Engineering Inc. Toronto, 2016*

**CAD Designer (Engineer-In-Training)**

- Created architectural designs, associating engineering details manually and/or using AutoCAD and Revit. Met project objectives and client requirements by providing alternative design concepts.
- Developed accurate 2D drawings from project BIMs, including sheet management tasks, annotations, dimensions, notes and all visibility settings
- Followed BIM content standards and development procedures
- Conducted detailed site visits, sketching, and manual measurement of on-going projects. Reviewed design layouts to identify and resolve non-conformity involving compatibility with basic design concepts.
- Analyzed building codes and interpreted zoning by-laws, space planning, and technical work.

*Concordia University, Montreal, 2013 – 2015*

**Graduate Research Assistant**

- Developed and implemented new methodology for evaluating concrete abrasion using **ArcGIS, Revit** and 3D technology. Developed MATLAB code for data reduction/analysis, conducting experiments and analyzing data.
- Reduced cost and time of lab experiments by using reusable design and solving technical problems; and successfully accomplished primary objective of research with satisfactory outcome.

**Graduate Teaching Assistant & Lab Demonstrator**

- Demonstrated lab experiments of engineering materials, mechanics of materials, hydrology and soil mechanics courses with creative, unique, and impactful presentations utilizing multimedia and popular culture.
- Increased student understanding of course materials, teaching diverse classes of 15 to 25 undergrad students in interactive learning medium.

*SMEC, Bangladesh, 2013*

**Junior Transportation Engineer**

- Designed the realignment of an overcrossing, reset the profile, and widened the existing cross section to accommodate sidewalks at Dhaka.
- Designed the geometry of bridge approaches for the replacement of a Bridge at Dhaka, prepared stage construction strategy and temporary easement map, project report, plans, cost estimation, and preliminary environmental impact assessment especially due to noise and vibration from pile driving and structure demolition on historic Store and air quality of the surrounding area

*Premium Assets Ltd., Bangladesh, 2011 – 2012*

**Site Supervisor**

- Supervised residential building's construction project from start to finish, slashing production costs 20% by negotiating pricing and fees while ensuring continuation and enhancements of project.
- Supervised construction of paved roads and earthworks.
- Ensured teams are working together with the sole objective of completing a project while adhering to deadlines, specifications and codes
- Negotiated contracts with vendors, contractors and sub-contractors
- Evaluated and estimated working day work, labor, and material requirements, and labor and materials cost.