AHMED MOTARA STRUCTURAL ENGINEER CURRICULUM VITAE





AHMED MOTARA CV



PROFILE

With over 13 years' experience within the industry, Ahmed has enjoyed working as a Structural Engineer within multi-disciplinary consultancies in New Zealand.

Ahmed has been involved in a diverse range of projects including high-end residential, low rise structures, educational facilities, industrial structures, retaining walls and liquid retention structures. Ahmed was involved in the Christchurch earthquake recovery where he carried out numerous condition assessments and repair strategies for residential structures.

Ahmed is currently persuing a Masters degree at the University of Auckland focusing on Structural and Seismic Engineering.

QUALIFICATIONS

BE(Hons) – Bachelor of Civil Engineering, University of Auckland Member of Engineering New Zealand (MEngNZ)

Member of New Zealand Structural Engineering Society (SESOC)

CAREER HISTORY

2023 - Present, Structural Engineer – Structus Consulting Limited

2016–2023, Structural Engineer – Chester Consultants Limited

2015–2016 Civil/Structural Engineer, Blue Barn Consulting Limited

2011 – 2013 Structural Engineer, Harris Foster Consulting Group

TECHNICAL SKILLS

- Experience in structural design incorporating seismic design of low-rise buildings in timber, steel and concrete construction
- Knowledge of New Zealand Design Standards and Codes
- Investigation, assessment, remediation of existing structures.
- Analysis using engineering software including Spacegass and Etabs.
- Construction monitoring, Construction RFI management and engineering advice during construction.



PROJECT EXPERIENCE

SEISMIC ASSESSMENTS

Marist College Science Hub DSA, Auckland, 2023

Detailed Seismic Assessment of two storey reinforced concrete frame classroom buildings constructed in the 1970's. Ahmed completed the structural assessment and proposed concept strengthening recommendations.

6 Antares Place DSA, Auckland, 2023

Detailed Seismic Assessment of a two-storey plus basement concrete precast panel commercial building constructed circa 2004. Ahmed completed the structural assessment including advanced modelling of the building and concrete floor diaphragms.

COMMERCIAL PROJECTS

Countdown Waimakariri, Canterbury, 2021-2023, \$12m

New Countdown supermarket building consists of 4,000m² retail space, office area, instore pharmacy, online click and collect space and external pick-up zone, loading bay and on grade carparking. Sustainability, environmental consideration and Greenstar initiatives are incorporated into design and build. Structural engineering design, 3D revit documentation and construction monitoring. Ahmed's role involved construction monitoring and providing design advice during construction.

RESIDENTIAL PROJECTS

West Coast Road House, Auckland, 2018

New tiered multi-level dwelling on a sloping site. The design featured 5m high masonry retaining structures incorporate into the dwelling with concrete mid-floors and composite steel beams. Ahmed completed design and drafting of the building and seismic design of retaining walls utilising Spacegass for modelling.

Franklin Road House, Auckland, 2020

Structural renovation to a single story Villa. The development included an open plan concrete block basement excavated under the existing dwelling with a bespoke two-storey addition at the rear of the property. Ahmed as involved in design, drafting and construction monitoring for the renovations..

Palisade Walls, Auckland, 2019-2020

Concrete palisade walls for residential land developments throughout the Auckland region, works included determining design actions for the walls or working from the geotechnical engineer's analysis and carrying out concrete pile designs. Ahmed completed the structural design and construction monitoring and acted as client relationship manager throughout the project.

Canterbury Earthquake Recovery, Christchurch, 2011-2013

Building assessment of over 50 residential homes during the Christchurch Earthquakes. Ahmed's role included the initial condition assessment, repair methodology and structural engineering design for remedial work working directly with Homeowners, Construction supervisors, Architects.

EDUCATION

St Ignatius Secondary School, Auckland, 2021–2023, \$25 million (Stage 1)

A new secondary school with works over 3 Stages. The masterplan for the site includes Residential, Secondary School, Primary and



Early Childcare facilities. Structus has been engaged for Stage 1-3 structural engineering concept and preliminary design for the Secondary School, and full design and construction monitoring services on Stage 1. Ahmed's role involved construction monitoring and providing design advice during construction.

Warkworth School Administration Block, Auckland, 2018

A new single storey administration block at Warkworth school. Works included detailed design of DHS purlins, steel beams, columns and bracing design including portal frames and light timber framed braced walls. Foundations included shallow reinforced concrete pad and strip footings. Ahmed completed the concept design for building consent..

Kauri Flats School Teaching Blocks, Auckland, 2022

A new teaching block consisting of 3 no new single-story school blocks. Works included sizing of timber rafters, LVL portal frames, bracing design including portal frames and light timber framed braced walls. Foundations included shallow reinforced concrete pad and strip footings. Ahmed was involved in the preliminary, developed and detail design phases through to building consent issue.

INDUSTRIAL

Karaka Waste Water Treatment Plant, Auckland, 2022

New in-ground reinforced concrete tanks on shallow foundation for above ground water reservoir at the proposed Karaka waste water treatment plant. Design included seismic loads, earth pressures, and liquid retention. Ahmed was the project engineer for the design.

Lake Hawea Waste Water Treatment Plant Upgrades, Lake Hawea, 2021

Upgrades to the Lake Hawea waste water treatment plant. Structural design and detailing for a reinforced concrete foundation on deep piles and a structural steel working platform. Ahmed was the structural engineer during design phase.





