





# **Contents**

ABOUT	3
STRUCTURAL ENGINEERING CAPIBILITY	4
CURRICULUM VITAE	6
PROJECT LIST	8
RESIDENTIAL	
LUXURY HOUSES	39
EDUCATIONAL	45
INDUSTRIAL	46
TEMPORARY WORKS	47



## **ABOUT**

Stronghold Engineers, a leading engineering consultancy with a focus on commercial fitouts, structural engineering, stormwater management, façade design, remediation, and project management. Our expertise lies in shaping residential apartments and mixed-use buildings, ranging from 2 to 20 stories and up to 250 units. Our designs are not only innovative and efficient but also comply fully with the DBP Act 2021, ensuring quality and safety.

We are proud to say that our work undergoes rigorous auditing by NSW Fair Trading, affirming our commitment to excellence. Our specialization extends to providing structural advice for commercial fit-out projects, where we have successfully completed hundreds of stores annually, collaborating with renowned brands like Westfield and other major shopping centres across Australia.

Additionally, we offer structural consulting and documentation for new offices and bank fitouts. Our portfolio of repeat clients, including MPA, Built, Scentre Group, Westpac, St George Bank, and National Australia Bank, speaks to the trust and reliability we bring to every project.

At Stronghold Engineers, we are committed to being leaders in the engineering consulting field by focusing on our core values – quality, efficiency, and innovation.



## STRUCTURAL ENGINEERING CAPIBILITY

#### **Our Core Vales**

Quality, Efficiency and Innovation

#### **Commercial fit out**

With over 10 years of experience, we specialize in structural and mechanical design for commercial fit-outs, serving clients across Australia. Our expertise extends to major banks and commercial fit out of brand new and existing building, helping more than 4,000 shops and office renovation meet compliance standards in the last eight years.

### **Residential and Commercial building**

Our portfolio showcases a wide range of residential and commercial projects, from intimate 5-story buildings to towering 50-story edifices, and from developments of 20 units to expansive 2,000-unit complexes, demonstrating our versatile expertise and commitment to excellence.

### **Remedial Engineering**

Our extensive expertise across all engineering disciplines enhances our proficiency in remedial services for residential and commercial buildings, particularly in areas like waterproofing and concrete repair. This solid background ensures we deliver superior solutions, upholding the highest standards of quality and durability in every project.

### **Design Review**

Leveraging our extensive expertise in building design, we specialize in identifying and addressing potential long-term design flaws and remedial defects at their inception. Our review process includes offering advisory services to builders and developers, aimed at achieving substantial long-term savings on remedial work. This proactive approach not only minimizes future building remediation expenses but also significantly reduces strata costs for apartment owners, ensuring the highest quality of structural design for the end-user.



### Temporary work

We have solid experience for formwork, scaffolding design, inspection, sign off, also experience in temporary loading platform, heritage façade retention, underpinning

### **Luxury housing**

Our expertise in remedial work and design, particularly in structural detailing and waterproofing, guarantees that luxury homes are constructed to the highest standards. This commitment to quality has been recognized with two MBA Housing Awards, showcasing our ability to deliver award-winning design projects.

#### Alternation and addition

We have more than 15 years of experience in alteration and addition for residential housing

# **ACCREDITATION AND QUALIFICATION**

- Australian Society of Building Consultants Membership
- Engineers Australia









## **CURRICULUM VITAE**



### Eric W.H Wu

Engineering Project Director -General Manager

FIEAust EngExec NER 2844494, RPEQ 19939, DEP0000007

Bachelor of Engineering Honours (Civil), Bachelor of Commerce

Eric Wu has been designing structures for over 20 years and has experience with a wide array of projects. His experience includes hundreds of commercial, residential, entertainment, educational projects, Sydney Train and RMS approval design

throughout Australia. Eric's versatile skills allow him to provide services cover all stages of design development - costing and financial planning, design and preparation of documents and certificates, site supervision. As a structural engineer, he designs the 'bones and muscles' that create the form and shape. He not only achieves design goals but also ensure the safety and comfort of users or occupants.



### **Declan O'Connor**

BIM Manager

Architectural Technology/Technician, Bachelor of Applied Science (BASc), Architectural Technology/Technician

Declan brings over 25 years of experience in the construction industry to the table, beginning his career as a formwork foreman. Throughout his career, he has amassed extensive experience in complex formwork, steel bar detailing, and the assembly of intricate structures using both his

hands and tools. His proficiency in Revit/BIM was developed on-site, further enhanced by continuous training with Autodesk, leading him to master advanced skills in Revit.

Subsequently, Declan transitioned into a BIM technician role within some of Australia's leading engineering consultancies, including Meinhardt, Bonacci, and Meriton. In January 2022, he joined Stronghold Engineering, where he has been instrumental in converting all documents to BIM and refining detailing to align with the standards of top-tier consultants in Australia.





**Terry Wu** 

Principal Civil Engineer

MIEAust NER 4448937, DBP Class 2: DEP0000252

Bachelor of Civil Engineering, Master of Civil Engineering, Master of Project Management

Terry Wu holds master's degrees in civil engineering and project management from the University of New South Wales. With 10 years of combined working experience in Civil/Traffic, Stormwater Engineering, Terry has accumulated

substantial expertise and proficiencies, including Onsite Stormwater Detention (OSD) System Design, Hydraulic Grade Line (HGL) Analysis, Water Sensitive Urban Design (WSUD), Civil/Road Design and Traffic Assessment. His background encompasses comprehensive involvement in diverse developments. Throughout his career, Terry Has been involved in a wide range of projects, ranging from residential, commercial, industrial to large scale sub-division developments.



## **NSW CLASS 2,3,9C**

## **PROJECT LIST**

- Post office St, Carlingford, 125 apartment, 5 storey, 2 basement, 40m construction
- Roxy Place, Lindfield, 54 units, 7 townhouse, 1 basement, \$30m construction
- 2-4 Eton Road, Lindfield, 10 units, 6 townhouse, 1 basement \$15m construction
- 454 Forest Rd, 50unit, 12 story apartment, 4 basement, \$10m construction
- 2 Canberra Ave, St Leonards, 2 basement, 50 units, \$10m construction
- 84-90 Gordon Cresent, Lane Cove, 190 Luxury Apartment, 2 Basements, \$60M
  Construction
- 11-13 Hinkler Avenue Caringbah, 30 Luxury Apartment, 2 Basements, \$10M
  Construction
- 52-54 Copeland Street, Liverpool, 30 Luxury Apartment, 2 Basements, \$10M construction, RMS Approval, Sydney Water Approval
- 51-53 Howarth Street, Wyong, 40 Luxury Apartment, 1 Basement, \$12M Construction
- 49-51 Veron Street, Wentworthville, 40 Luxury Apartment, 2 Basements, \$13M
  Construction, Sydney Train Approval, Sydney Water Approval
- 29-31 Moree Street, Gordon, 15 High-End Townhouse Development, 2 Basements, \$8M Construction
- Fairway Residence, 88 Cenenary Drive, Strathfield, NSW, 53 2-3 Storey
  Townhouse Design and Inspection of Steel Framing
- The Adeline, 5-7 Telegraph Road, Pymble, NSW, Large Overhang Roof Design and Inspection
- The Herron, 43 Cranbrook Street, Botany, NSW, 3 Storey Light Gauge Steel Structure Detailing
- Nepean Christian School, 836 Mulgoa Road, Mulgoa, NSW, Structural Steel and Cold Formed Steel Design
- Mountain View Adventist College, 41 Doonside Road, Doonside, Scissors Design and Inspection
- Bankstown City Aged Care, 34 Hydrae Street, Reversby, NSW, Top Floor Framing Design and Inspection
- AVACS Aged Care, 783-785 The Horsley Drive, Smithfield, NSW, Framing Design and Inspection
- Pacific Lodge Aged Care, 8 Homestead Avenue, Collaroy, NSW, Truss Design and Inspection
- Tilly's Childcare, 71 Mustang Drive, Rutherford, NSW, Timber Frame to Steel Frame Conversion, Steel Frame Inspection
- JP500 Phase 2A Electronic Warfare Operational Support, SA, Internal and External Stud Framing Design



## **RESIDENTIAL**













**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia











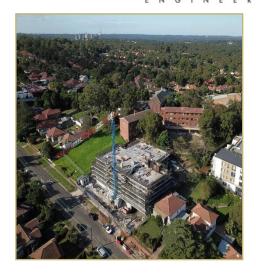




**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia

















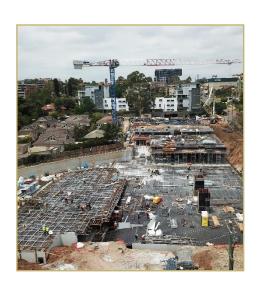
**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia











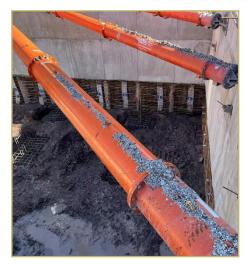


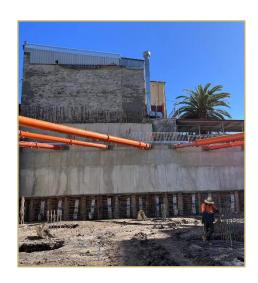


**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia











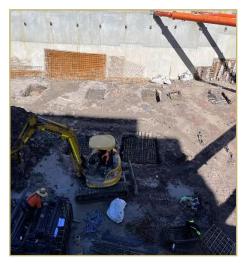




**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia













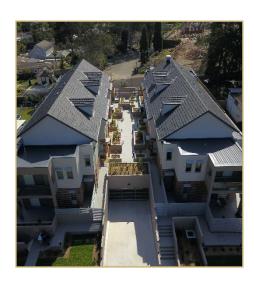


**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia











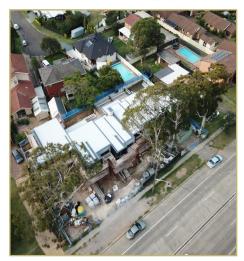




**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia









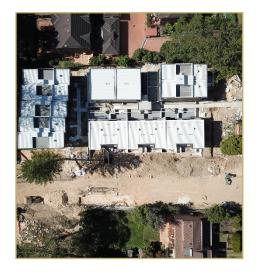






**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia



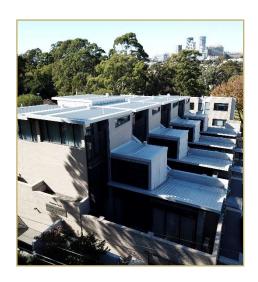










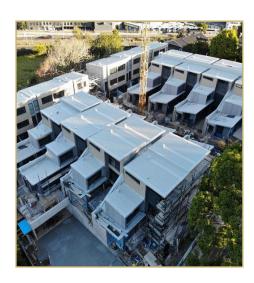


**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















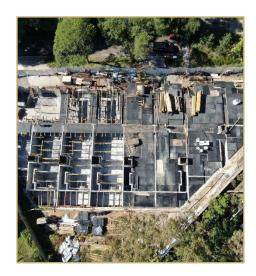
**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia













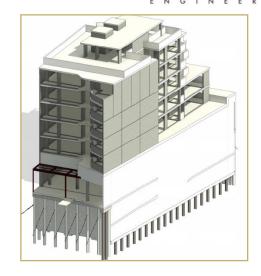


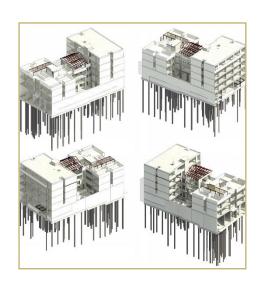


**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia



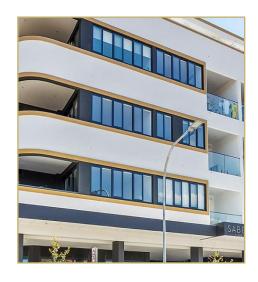












**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia











## **LUXURY HOUSES**













**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















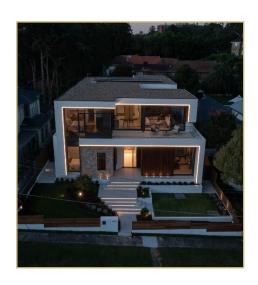
**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia









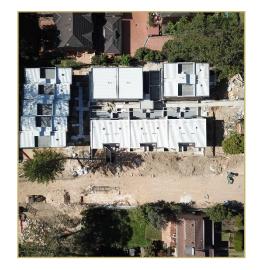






**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia















**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia













**E**: admin@shens.com.au **P**: 02-6100 1148 **W**: www.shens.com.au **A**: Suite 65,89-97 Jones St, Ultimo, Sydney, NSW, Australia



# **EDUCATIONAL**



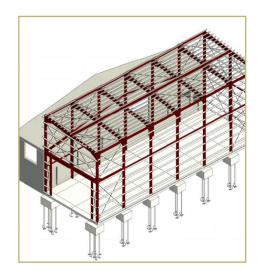






## **INDUSTRIAL**









## **TEMPORARY WORKS**

