



ABN: 29 154 320 653

# **SPAN CONSULTING ENGINEERS PTY LTD**

**Structural Engineering Design Services and Inspection Services** 

6 Davies Court Baulkham Hills NSW 2153

P: 02 9639 6789

M: 0413 789 639

E: info@spance.com.au sshah@spance.com.au

www.spance.com.au



# 1. TABLE OF CONTENTS

1)	Table of contents	1
2)	Statement of confidentiality and non disclosure	2
3)	Executive Summary	3
4)	Area of expertise  a. Residential  b. Commercial  c. Industrial	4 5 6
5)	Services  a. Structural design services  b. Inspection services	7
6)	Structural damage	8
7)	Personnel Profiles	10
8)	Conclusion	12



#### 2. STATEMENT OF CONFIDENTIALITY AND NON DISCLOSURE

This document contains proprietary and confidential information. All data in this document is provided in reliance upon its consent not to use or disclose any information contained herein except in the context of its business dealings with Span Consulting Engineers Pty Ltd.

The recipient agrees to instruct its officers, employees, agents, solicitors and advisers that they must not disclose any information concerning this document to others except to the extent those matters are generally known to, and are available for use by, the public. The recipient also agrees not to duplicate or distribute or permit others to duplicate or distribute any material contained herein without Span Consulting Engineers Pty Ltd express written consent.

Despite the above, Span Consulting Engineers Pty Ltd retains all title, ownership and intellectual property rights to the material and trademarks contained herein, including all supporting documentation, files, marketing material, and multimedia.

info@spance.com.au www.spance.com.au 2



## 3. EXECUTIVE SUMMARY

This document contains proprietary and confidential information. Span Consulting Engineers Pty Ltd (SpanCE) is pleased to express the interest to provide structural engineering services to you/your company. We understand our responsibility to deliver project in time during the preliminary, tender and construction stages. We constantly work towards the solution to provide practical cost effective engineering solutions in time and in budget for our client. As we are a firm that is experienced and capable of attending to such matters we will be demonstrating our;

- Social responsibilities,
- Capabilities,
- Resources and,
- Past project experience

We believe that we have the experience and expertise in our specified fields and that enable us to deliver the project most effectively within the nominated cost and time frame.



## 4. AREA OF EXPERTISE

SpanCE is a Structural Engineering and Building Diagnostic firm, practicing across a wide range of specialty areas. We provide specialized advice in relation to structural design - documentation for new verities of structures but not limited to the following:

### a. Residential

Span Consulting Engineers provide structural services to full range of residential projects as below.



- New Residential Multi-Unit Developments
- Multistory Residential Development
- Design Check and Certification
- Shoring Wall Design
- Development Applications and Tendering
- Building Structural Inspection

- Town House Developments
- New Residential Dwelling
- Renovations and Additions
- Retaining Structure
- · Concrete Footing Design
- Dilapidation Report



# b. Commercial

SpanCE has the experience to assist with all of your commercial structural engineering needs as below.



- Multistory Commercial Development
- New Commercial Buildings
- Commercial Fit-out and Alteration
- Structural assessment for compactus loads.
- Development Applications
- Renovations and Additions
- Commercial Signage Design
- Commercial Awning Design
- Construction Certification
- Dilapidation Reports



# c. Industrial

SpanCE provide structural engineering design for verities of industrial projects from small to large size.



- Industrial Building Concrete Structure
- Industrial Steel Structure
- Industrial Warehouse
- Monorail Design
- Crane Beam Design
- Structural assessment for load rezoning
- Building Structural Inspection
- Construction Certification
- Dilapidation Report



## 5. SERVICES

# a. Structural Design Services

Our structural engineers are Chartered Professional Engineers (CPEng), National Professional Engineers Register (NPER) and skilled designers in concrete, steel, timber and masonry structure. Consulting our team will lead to innovative yet simple design solutions that are buildable and cost effective.

- Concrete Framed Buildings
- Steel Framed Buildings
- Post-tensioned Concrete Buildings
- Precast Concrete Buildings
- Concrete Swimming Pools
- Load Bearing Masonry Buildings
- Façade Design Including Glass Steel and Aluminium Design
- Cold Formed Steel and Aluminium Product Specifications
- Structural Documentation and Certification
- Structural Feasibility Study
- Structural Inspection Services
- Engineering Drafting Services

## b. Inspection Services

SpanCE provides engineering and building diagnostic services to Building Strata, Property Management Service Industry, Construction Industry and Private Property Owners. Our business is about forensic engineering and finding innovative solutions to buildings that have deterioration, damage, stability, durability and permeability problems.

- Design Check and Certification of Temporary Structure
- Design Check and Certification of Permanent Structure
- Pre-purchase Structural Inspection Report
- Structural Defect Report
- Structural Feasibility Report
- Dilapidation Report
- Structural Adequacy Report



#### 6. STRUCTURAL DAMAGE

### a. Steel Corrosion / Rust Damage



Steel is popular in construction industries for its strength, construction simplicity, time and cost benefits. Despite of its benefit, steel has a major problem of corrosion. It corrodes in about all the environments. The rate of corrosion and rust damage is depending on type of environment. For comprehensive professional report, please contact Span Consulting Engineers on (02) 9633 2280 (o) or 0413 789 639(M).

### b. Cracking of wall



Masonry walls are used in almost all low rise buildings. Either they are used a primary structural elements or partition walls. Cracking of masonry wall is one of the most common problems in Australia. There are number of different reasons for cracking of walls. Most common reasons are reactive clay type and ground movements, corrosion of reinforcement used in the wall, under designed footing, etc... For comprehensive professional report, please contact Span Consulting Engineers on (02) 9633 2280 (o) or 0413 789 639 (M).

## c. Tree root damage



When masonry building is situated near a big tree, it is susceptible to get damaged by tree roots. Often serious damage caused by the tree roots can mean thousands of dollars in repair costs to buildings, foundations, backyards, pavements and plumbing systems.

For a comprehensive professional report, please contact Span Consulting Engineers on (02) 9633 2280 (O) 0413 789 639 (M).



## d. Concrete Spalling



Concrete Spalling is caused when the steel reinforcing within a concrete slab begins to rust. As steel rusts it can expand 5 to 7 times its original size causing the surrounding concrete to crack and become flaky. As the steel pushes the concrete away, more water gets to the steel expediting the process. The process is often referred to as concrete cancer. For comprehensive professional report, please contact Span Consulting Engineers on (02) 9633 2280 or 0413 789 639 (M).

# e. Dilapidation report (Building condition report)



A Dilapidation report is an inspection carried out, at a specific point in time, in order to assess the condition of a building, land and/or property prior to proposed building or infrastructural work. The report is generated through photographs and observation and will contain text describing the condition, identifying any defects and damages. For comprehensive professional report, please contact Span Consulting Engineers on (02) 9633 2280 or 0413 789 639 (M).

#### f. Removal of wall



The existing houses are based on old architectural concept having numerous walls, dividing house in different area for privacy purposes. Oppose to that the new architectural concept of open living area the owners and building users are require to remove those walls to convert the house interiors in the open area. For comprehensive professional report, please contact Span Consulting Engineers on (02) 9633 2280 or 0413 789 639 (M).



#### 7. PERSONNEL PROFILE

### Swetal Shah (Principal Engineer)

### Swetal Shah | Principal Engineer

#### Qualifications

BE(Civil)
ME (Struct) (Distinction)
Diploma in Business Management
CPEng
NPER

#### **Affiliations**

Member Institute of Engineers, Australia Chartered Professional Engineer (CPEng) National Professional Engineers Register (Structural) Member of Master Builder Association Australia (MBA)

#### **Career Overview**

Swetal has completed Master of Engineering Degree from University of Technology Sydney with Distinction in 2003. Prior to finishing Master Degree in Engineering, he has completed Bachelor of Engineering Degree in Civil and Diploma in Business Management.

Swetal has 20 years total with 15 years of local experience in Sydney ranging from 100K to multi-million-dollar projects within public and private sectors. His involvement in the project from start to finish enabled him to understand the design and on-site buildability and simplifying the construction process. This experience helped him to deliver cutting edge solutions whilst achieving architectural intent within budget and time.

Early in his career, he worked five years on-site as Project Manager for multistoried projects and also worked as Government approved contractor for Public Works Department helped him to gain on site construction experience which reinforced his engineering design expertise.

In the past, Swetal has been associated with AECOM, Meinhardt, Henry & Hymas, K.F. Williams, Bonacci Group, Sinclair Knight Merz (now Jacobs), Bonacci Rickard etc..

Swetal has the following skills in engineering software.: RAPT, Stand7, RAM Concept, RAM Struct System, Etabs, Microstran, Spacegass, AutoCAD.

Swetal is currently providing structural engineering consulting services for Span Consulting Engineers Pty Ltd.



Span Consulting Engineering providing services in structural engineering design and certification for Residential, Commercial and Industrial structures. SpanCE's current clients ranging from Architects, Builders, private clients to government bodies and contractors like various councils, Department of Education, Sydney water, Suez, etc.

#### **Project experience**

- City of Canterbury Bankstown (Council): Design, Certification and Safety Inspection for Storage Racks for Roseland Depot, Greenacre Depot and Panania Depot.
- City of Canterbury Bankstown (Council): Design and Certification on Sydney Water Culvert Design
- Sydney Water West Camden Biosolids Treatment Plant: 2tonne Monorail design for equipment handling
- ❖ Department of Education: Central Coast School Projects
  - Alstoneville High School
  - Tweed River High School
  - Kingcliff High School
  - Evan River Community School
  - South Grafton High School
- Industrial Warehouse Design:
  - Unit 7/15 Tucks Road Seven Hills NSW 2147
  - Unit 30/160 Gilba Road Girraween NSW 2145
  - Schweppes Warwick Farm steel structure.
  - Access Platform Design (Master Fabrications)
  - SUEZ Prospect Water Treatment Plant



### **SpanCE**

#### Commercial:

- Shop 39 Station Street Wentworthville NSW 2145
- 13 Joyce Street Pendle Hill NSW 2145

#### \* Residential

- 11 Shorter Avenue Roselands NSW 2196
- LOT 1545 Mellish Street Marsden Park NSW 2765
- 217 Windsor Road Northmead NSW 2152
- 4 Thomas Icely Avenue Bungarribee NSW 2767
- 7 Cobble Street, The Ponds NSW 2769
- 38 Edinburgh Place Winston Hills NSW 2153
- 8 Mataro Place Eschol Park NSW 2553
- 7 Kirby Street Rydlemere NSW 2116
- 16 Ellis Street Merryands NSW 2160

#### The Following are a few other projects that Swetal has completed.

- Blacktown TAP: Swetal has been involved in design of new link bridge between existing station and Richmond node. He has developed strand 7 models for the bridge and carried out design for lateral stability and also involved in detail design of the bridge component i.e. pile caps, bridge pier, hollow core plants etc...
- Cerberus HMAS: This was a defense job in Victoria. The project was to extend the training facility in their existing HMAS site. He has designed Dynamic Leak Stop Repair Unit (DLSRU) & Gas and Dieses Fire Fighting Unit (GDFFU). Swetal was looking after three engineers and four draftees
- Madeira Street Sylvania \$10M QY Group: Coordination and design of complete project with Architect and builder from Concept to Construction Stage.
- Travel Lodge 7M Paynter Dixon: Coordination and design of steel roof and PT slab system.
- Flinder Centre Bankstown \$25M Paynter Dixon:
   Coordination, design and managing 10 storied office building over the four-storied car park building.
- Residential Apartment 10M Calder Flower Architect): Coordination, design and managing full project from concept to construction stage.
- Norwest Private Hospital (Façade HPI Architect):
   Project comprises façade detail design for the Building. Swetal has coordinated project with Architect and designed light weight steel structure to support Exotec Façade Panels for four storied structure.
- Oran Park Town Centre (\$40M) Greenfield
  Development) Project comprises three storied
  retail + commercial building with one basement
  parking and adjacent public road structure.

- Pacific Point Apartments (\$20M Denham Constructions)
   Project comprises 13 storied residential + 3 storied basement parking.
- Northpoint Tower Façade, Lovington Zauner Constructions: I have designed and signed off entire Glass + Aluminum Façade for five storied residential building.
- Australia Post Distribution Centre Alexandria Adco Construction it was two large steel warehouse structure with approximate 10,000m2 area each. I have designed all the steel structure including 90m propped portal frame and slab on ground.
- Australia Towers, Sydney Olympic Park \$80M Billbergia Group: It is 24 storied residential + commercial building. I have carried out design of footings, all vertical elements, PT floors including transfer floor using RAM Concept.
- 4-14 Merriwa Street & 3 22 McIntyre Street Gordon (\$55M MERITON): It includes couple of nine storied residential buildings. I have looked after this project from preliminary design stage to the final construction stage.
- 118 Alfred Street Milsons Point \$ 35M Australand St Hilliers
  - I have managed this 15-storied building from preliminary design to construction stage.
- Project: Bobbin Head Marinas \$5M Empire Marinas:
   The Bobbin Head Empire Marina has 165 floating marina berths and 44 swing moorings along with a boatshed and service facilities. This project comprises an extension of existing car park, pedestrian access facilities, a steel shed, hardstand and finger piers for travel lift to replace the existing slipways.
- Recycling Water Treatment Plant Rouse Hill Sydney 5M
   John Holland: This project comprises design of Idals and
   Equalization Basin about 6 meters in height and combined
   about 150 meter long with additional detention tanks and
   sump pits. I had also been involved in the development of
   Finite Element Model in Strand 7.
- The Dalgety Townsville 30M Parkview Construction:
   This project comprises 21 levels of residential floors in
   Townsville and separate 9 levels of a car park building.
- Cammeray Apartments (A.V. Jennings) (Project cost AUS\$ 16M): This project comprises 69 residential apartments, which includes two levels of basement parking, ground and three levels of residential floors with structural steel roof.
- 21 Knowlman Avenue Pymble \$15M Genesis Prime
  Development: The project comprises 12 two storied
  brick houses with one floor conventional concrete slab
  and the second floor designed with Ultrafloor slab
  system.
- Caroma Industry Warehouse \$15M St Hilliers
   Construction: It is a large industrial steel shed with one level of basement, gate house and inbuilt office area. It has 58m spanned 22 steel portal frames at about 9m spacings.



#### 8. CONCLUSION

Span Consulting Engineers are constantly working towards the goal to achieve practical and yet economical – cost effective design solution. We provide tailored design solutions to suit particular site condition and considering practical buildability issues.

SpanCE works on very competitive price with the quality of service. We always look forward to help our customers even after design phase to sort out any onsite problems during construction. When combining above, SpanCE comes very close to providing unbeatable value. Our engineers are always on standby to provide design solutions and meet with our potential clients without any initial costs, which will then enable us to readily provide a fair estimate for the work involved.

Our designers are motivated to apply innovative principles and incorporate new products & materials. Developing buildable and cost effective design solutions for clients is a result of our high value engineering standard, designing in safety and constructability.

If required, we would be pleased to meet future clients to discuss our services further. Should you wish to discuss our submission further or if you require any further assistance at this time please do not hesitate to contact the undersigned.

We very much look forward to your response with the view of helping to facilitate the successful delivery of projects.

Yours Sincerely, Swetal Shah Principal Engineer BEcivil, MEstruct MIEAust CPEng NPER







**Span Consulting Engineers Pty Ltd** (trading as Span Consulting Engineers)

ABN: 29 154 320 653 ACN: 154 320 653 (O)+61 2 9639 6789 (M) +61 413 789 639

- ✓ STRUCTURAL ENGINEERING DESIGN
- ✓ RESIDENTIAL, COMMERCIAL, INDUSTRIAL PROJECTS
- ✓ CONCRETE AND STEEL STRUCTURE
- ▼ FACADE ENGINEERING DESIGN
- CONSTRUCTION DOCUMENTS
- ☑ BUILDING INSPECTION REPORT
- ✓ STRUCTURAL CONDITION REPORT
- DILAPIDATION REPORT
- ✓ PRE-PURCHASE INSPECTION REPORT
- ☑ BUILDING DIAGNOSTICS
- ✓ DRAFTING SERVICES



# SPAN CONSULTING ENGINEERS PTY LTD

**Structural Engineering Design Services and Inspection Services** 

ABN: 29 154 320 653

6 Davies Court Baulkham Hills NSW 2153.

P: 02 9639 6789 / M: 0413 789 639 / E: info@spance.com.au