

Loganathan Nagendran (Logan)

Technical Executive- Tunnel at WSP | Parsons Brinckerhoff - Australia

[Sydney, Australia](#)

[Civil Engineering](#)

Current

1. [WSP | Parsons Brinckerhoff - Australia](#)

Previous

1. [Parsons Brinckerhoff](#),
2. [University of Sydney](#),
3. [Dames and Moore \(URS\)](#)

Education

1. [University of Sydney](#)

Background

Summary

Logan has extensive international and local experiences in underground constructions and geotechnical engineering. His experience in underground constructions and design includes tunnel boring machine (TBM) bored tunnelling (including geotechnical assessment, segment lining design, TBM performance assessment etc.), New Austrian tunnelling method (NATM) excavations (including geotechnical assessment, excavation sequences, temporary support designs etc.), instrumentation monitoring and interpretations, deep excavations, and retention systems designs for cut-and-cover tunnels. Logan also specialises in tunnel construction–induced impact assessment on adjacent structures and he established closed-form solutions and design charts to assess the tunnelling induced risk of adjacent structures. Recently he has published a Monograph titled “An Innovative Method For Assessing Tunnelling-Induced Risks to Adjacent Structures”.

His experience in geotechnical engineering includes preparation of Geotechnical Baseline Reports (GBR), deep excavations, road embankments, slope stability and landslides, shallow and deep foundations and ground improvement methods.

Experience

Technical Executive- Geotechnics/Tunnel

[WSP | Parsons Brinckerhoff - Australia](#)

January 2015 – Present (1 year 10 months) Sydney, Australia

Technical executive- Geotechnics/Tunnel

[Parsons Brinckerhoff](#)

July 2003 – December 2014 (11 years 6 months) Sydney, Australia

(Open)2 projects

Principal Geotechnical/Tunnel Engineer

Parsons Brinckerhoff

March 2000 – June 2003 (3 years 4 months)Singapore

PHD Reserach

University of Sydney

June 1997 – February 2000 (2 years 9 months)Sydney

Senior Geotechnical Engineer

Dames and Moore (URS)

January 1996 – May 1997 (1 year 5 months)Sydney/Brisbane

Senior Geotechnical Engineer

HSSI/HALCROW JV

March 1992 – September 1995 (3 years 7 months)Kuala Lumpur, Malaysia

Research Associate

Asian Institute of Technology (AIT)

September 1989 – February 1992 (2 years 6 months)Bangkok, Thailand

Geotechnical Engineer

NBRO

March 1986 – July 1989 (3 years 5 months)Colombo, Sri Lanka

Projects

Parramatta to Epping Rail Link, Sydney

July 2002 – February 2005

Major Design and Construct Railway project for the State Government of NSW. New underground rail alignments between Epping and Chatswood with possible future extension onto the existing Carlingford Line.

Senior project draftsman for PB, based on site throughout the Design & Construct stage of

the project. Assisting with the very complex quality assurance procedure as required by the clients....[more](#)

Epping to Chatswood Rail Link

January 2002 – September 2004

4 team members

Lane Cove Tunnel

October 2004 – February 2007

PB is the lead consultant of the project, Part of the Major Design and Construct team that connect the Gore Hill Freeway with the M2. It is the final link in the Sydney's orbital motorway network. It consists of two vehicular tunnels, with over 9km of tunnel in all.

Cathy's role includes:

4 design review of cut and cover tunnels

4 design review of retaining walls

4 design review of structure...[more](#)