

FELIPE RAMIREZ

RAIL PLANNING SERVICES, CONSTRUCTABILITY
ADVISOR

PROPOSED ROLE: STAGING DEVELOPER

PROFILE

Felipe is a qualified Architect with 16+ years' experience in design, construction and build information management (BIM) on projects in America, Europe and Australia.

Felipe has recently developed Construction Staging Methodologies including definition of base logic, construction methodology reports, staging diagrams, construction programs (Primavera P6) and 3D-4D-5D modelling and analysis (integrating 3D modelling, Primavera P6 Programs and construction cost estimations) for diverse projects across Australia (NSW/QLD/WA) and

RELEVANT EXPERIENCE

Felipe is currently acting as a Constructability Advisor for Transport for NSW (MTMS TfNSW). He has worked on various projects in multiple roles during his work with RPS.

- Constructability Advisor (2017-2019): Part of the team in charge of the constructability, disciplines, design and tender review. Producing Constructability reports, Staging diagrams and construction programs of projects with a combine value of +5billion, including MTMS Stages 2, 3 & 4; Lithgow Yard Remodelling; Thornleigh to Hornsby Third Track; Cross River Rail (QLD); T4 Upgrade Constructability Consultant; Sydney Gateway; Westmead Overbridge Options; Sydney Metro Sydenham Stabling & SWCSW; SMTF Expansion Cudgegong Rd.
- Staging Coordinator (2015-2016): Part of the team in charge of the constructability review, producing Staging diagrams for Sydney Metro City and Southwest; NIF SSEW (New Intercity Fleet Station and Signalling Enabling Works – 20 Stations); Inner West Light Rail (Central to Dulwich Hill), Illawarra Rail Corridor Study (Hurstville to Sutherland QUAD; Long NIF platform extensions; STAR (Sydney Terminal), Wyong Station; NIF platform extension, Hornsby Junction Remodelling (Constructability Staging & Risk Analysis); Auburn to Westmead Possession Planning Program.
- CAD Manager (2013-2015): Assist with the producing of 2D Staging Diagrams for Sydney Rapid Transit; Clyde Junction; Technical Advisor Support for Substations (Chalmers St and Guilford St SS); OHW Removal Support PBRL

Prior to this, Felipe has held the position of Project Manager for Insesa Ingenieria, Australia – Chile, part of a team delivering 800Tn of steel works a month with an estimated value of 20mill USD/year and working on projects including the Pueblo Viejo República Dominicana (3.8 billion) - Fluor Canada, Koniambo New Caledonia (6.3 Billion) - Hatch Australia, Los Bronces (2.8 billion) - Kupfer/Bechtel, Codelco Gaby (18 billion) – FMC and Los Pelambres (1 billion) – Bechtel. Felipe's duties included programming, estimates, stage, develop designs and construction and delivery for these projects.



QUALIFICATIONS / AFFILIATIONS

- Diploma of Management, APC (2015)
- Advanced Diploma of Marketing, Australian Pacific College (2013)
- Diploma in Innovation Management, University Alberto Hurtado (2011)
- Diploma in Conservation and Restoration of Heritage, University Católica Chile (2007)
- Architect (Maximum Distinction), University Finis Terrae Chile (2006)
- Bachelor of Architecture, University Finis Terrae Chile (2005)
- Certified Autodesk Autocad Professional (429486)
- Certified Primavera P6 15.2 Professional Advanced (Sydney)
- Certified Revit user
- Certified Synchro 4D user
- Certificate IV in Training and Assessment (Current)

KEY EXPERTISE

- Ability to rationalise complex problems using past experience and the skills of the team around me.
- Demonstrated ability to develop, analyse, model and construct design projects
- Specialist on CAD/BIM modelling/analysis focused in design development of construction projects

WORK HISTORY

2013 – Present	Rail Planning Services
2018 – Present	FR2 Pty Ltd
2005 – Present	Insesa Ingenieria
2005 – Present	R+D OXER Engineering



FELIPE RAMIREZ

RELEVANT PROJECTS

More Trains More Services Stage 2 TfNSW - Stages 3 & 4 Mott MacDonald / SMEC
[Constructability Advisor and Base Logic Developer 2017 – Present](#)

Responsibilities:

Develop construction methodologies including construction base logic, staging, constructability reports and P6 programs for various projects on the Illawarra and Airport Lines. This also included a major track rationalisation at Central Station. A series of P6 programs -including all the major activities- was prepared to detect potential clashes and optimise the resource utilisation. Participation in several construction, costs & risks workshops between stakeholders (TfNSW, RPS, Technical advisors) to develop construction methodology and reduce associated impacts/costs/requirements. Assist with the tender and contract evaluation panel.

Cross River Rail - North & South Portals, Mayne Yard. Cross River Rail Development Authority
[Constructability Advisor and Base Logic Developer 2018 - 2019](#)

Responsibilities:

Prepare, in conjunction with a group of SMEs, construction base logic, construction methodologies to integrate the Cross-River Rail Tunnel at the interface of the existing Brisbane rail network at the north and south portals of the tunnel. This includes a preparation of a 3D & 4D model in conjunction with a P6 program to validate the assumptions defined for the construction methodology. Assist with the tender and contract evaluation panel.

Various Projects, TfNSW

[Constructability Advisor – Digital Engineering Manager 2013 – Present](#)

Responsibilities:

Manage the Digital Engineering team consisting of 4 professional staff and support the Project Management roles delivering highly detailed construction sequences for several projects in conjunction with the production of Constructability Reports, Construction Staging Diagrams, Construction matrixes, Draft designs and 3D/4D Models as part of TfNSW design review to deliver projects on time, with lower costs and reducing the requirement of possessions and closedowns

Development of concept designs for TfNSW for Station Upgrades, Stabling Yards, trackwork upgrades and Roads/Bridges Upgrades, reducing the timeframe between workshops by 25% and enabling the discussion between stakeholders

Rationalisation of design, resources and construction sequences to coordinate construction requirements across multiple disciplines and contractors; detecting and analysing clashes to minimise delays and risks during design and delivery phases; the result is generally a reduction of requirements of the original construction sequences by 20%, reducing the number of structures, works and possessions/closedowns requirements (Civil, Electrical, Track and Sigs/Coms)

Detect opportunities in complex projects to effectively reduce future impacts into possession, costs, resources and time planning and requirements. Developing and maintaining construction programs (Primavera P6 – Microsoft Project), with the aim to reduce, optimise and rationalise the works during possession works/closedowns. In the case of Hornsby closedown Felipe Produced an hour by hour construction sequence which was delivered to TfNSW in conjunction with a risk analysis report. Assist with the tender and contract evaluation panel.

Brisbane Live, Cross River Rail Development Authority

[Constructability Advisor and Base Logic Developer 2018](#)

Responsibilities:

Develop construction methodologies for several design options for a proposed Arena over Roma Street Railway Station. Additionally, the substructure was modelled using CAD tools and 3D printed to clarify structural requirements and potentiate the discussion between the Development Authority and the designers. I was able to demonstrate possible scenarios to reduce the construction sequence from 2 years (using conventional possession planning) to 90 days (utilising 3 types of closedown, minimising customer experience impacts and optimising the resource usage). Assist with the tender and contract evaluation panels.

REFEREES

Chris Rutherford
Senior Project Engineer
Futureways Infrastructure and
Services - Transport for NSW
M: 0419 612 307

Anthony Di Giacomo
Project Manager - Rail
Infrastructure, Rail Program
Delivery
M: 0411 370 475

