

**QUALIFICATIONS**

- ▶ Bachelor of Engineering (Civil)
  - Queensland University of Technology (QUT)



**PROFESSIONAL AFFILIATIONS**

- ▶ Member – Institution of Engineers Australia – MIE Aust

**EXPERTISE & INDUSTRY SECTORS**

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| <ul style="list-style-type: none"> <li>• Project Delivery</li> <li>• Project Management</li> <li>• Study and Design Management</li> <li>• Project Controls</li> <li>• Independent Peer Review</li> </ul> | <ul style="list-style-type: none"> <li>• Dams</li> <li>• Bulk earthworks</li> <li>• Remote Projects</li> <li>• Civil Infrastructure</li> <li>• Resource Infrastructure</li> </ul> |
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**IN BRIEF:**

- ▶ 20 years' experience in both private and public sectors across major civil infrastructure and resource projects. Ben's roles have involved working multidisciplinary teams with exposure to a substantial range of work practices across challenging project backgrounds and locations. Experienced with a wide range of procurement and delivery models including Design and Construct, Managing Contractor, ECI, GMP, Alliances and EPCM
- ▶ Ben provides assistance and advice to clients in the following aspects of project delivery including; project reviews, project assessment and evaluation, risk management and analysis, design management, construction methodology development, schedule development, cost estimation and project controls.
- ▶ The key driver for Ben's work as a consultant have been the focus on complex project delivery success in the most efficient manner.

**RECENT PROJECTS INVOLVING BEN'S EXPERTISE INCLUDE**

- **Goro Nickel Mine (New Caledonia), Vale Inco.** Project Execution Plan for initial Lined Tailings Storage Facility and subsequent involvement with FEL 2 and 3 Studies for Life of Mine (LOM) tailings storage facility. Detailed assessments and peer reviews for trade off study, execution plan, schedule and cost estimates.
- **Kapit Development Project, Newcrest (Lihir).** Development of PFS for Newcrest expansion of Lihir Island Resource. Developed project delivery strategy, construction methodology and CAPEX generation from multiple engineering consultants.
- **Tonkolili Iron Ore Project (Sierra Leone) – Phase 2, African Minerals Limited.** Area Manager Infrastructure for accelerated PFS phase for 25Mtpa expansion project in Sierra Leone involving new tailings dam developments and Non-process infrastructure.
- **Washplant PFS Project, Ensham Resources (Bowen Basin).** Study Manager for 2Mt Washplant PFS as part of business opportunity for diversification of operations.
- **Wiggins Island Coal Terminal [WICT] (Gladstone),** Capital Cost Estimate Review for Queensland Treasury and Gladstone Ports Corporation.

## **OVERVIEW OF CONSULTANT EXPERIENCE AND EXPERTISE:**

### **Mining and Resources**

- **Tonkolili Iron Ore Project (Sierra Leone) – Phase 2, African Minerals Limited.** Area Manager Infrastructure for accelerated PFS phase for 25Mtpa expansion project in Sierra Leone.
- **Washplant PFS Project, Ensham Resources.** Study Manager for 2Mt Washplant PFS as part of business opportunity for diversification of operations.
- **Trial Underground Mine Development, Ensham Resources.** Involvement from Feasibility Study through to Construction Execution for establishment of new underground mining operations for Ensham Coal Mine
- **Goro Nickel Mine (New Caledonia), Vale Inco.** FEL 2 Study for selected Life of Mine (LOM) tailings storage facility for the Goro Nickel Project Study requiring trade off study execution plan, schedule and cost estimate comparison for options relating to at KO4 valley.
- **Wafi Golpu Project, Morobe Mining Joint Venture (MMJV).** Development of PFS Cost Model and integrated delivery strategy for site access and roads and pads to facilitate project early works.
- **Kapit Development Project, Newcrest.** Development of PFS for Newcrest expansion of Lihir Island Resource. Developed project delivery strategy, construction methodology and CAPEX generation from multiple engineering consultants.
- **Xstrata Copper.** Independent Peer Review for Prefeasibility and Feasibility Studies being undertaken by Xstrata Copper. Infrastructure Capital Cost including estimate basis, process, schedule, design, constructability and execution strategy.
- **Goro Nickel Mine (New Caledonia), Vale Inco.** Prefeasibility Study for optimum Life of Mine (LOM) tailings storage facility selection for the Goro Nickel Project Study requiring consolidation of various alternatives at different stages of development.
- **Cavil Ridge Coal Mine, BMA.** Peer review of development of the scope works for the EPCM contract.
- **Goro Nickel Mine (New Caledonia), Vale Inco.** Member of “Owners Team” fulfilling the Project Engineer role for Earthworks. Areas of responsibility included; design review, construction methodology, selection of mobile equipment, subcontract packaging, organizational structure, schedule, risk identification and management and cost control reporting.
- **Tampakan Copper Project, Parsons Brinckerhoff / Xstrata.** (\$US5B) Team member for the preparation of Project Execution Plan, Schedule and Cost estimate for the Tampakan Copper Mine Pre Feasibility Study in the Philippines
- **Goro Nickel (Mine New Caledonia), Vale Inco.** Project Execution Plans for 7.5Mm<sup>3</sup> Lined Tailings Storage Facility (Dam) for Goro Nickel Project. Scope included construction methodology, selection of mobile equipment, organizational structure, project schedule, estimates and budget generation, risk identification, management and analysis and works packaging.
- **Mine Flood Rehabilitation Project, Ensham Resources.** Responsible for developing and maintaining schedule for Ensham Resources Coal Mine following inundation by floodwaters from severe rain event to the main operational mining pits. Included major dewatering operations, infrastructure repairs and dragline rebuild.

## Infrastructure

- **West Pilbara Infrastructure Project, Aurizon.** Project developed with API JV for new Mine, Rail and Port Project for initial 40Mtpa. Project Manager for Site Geotechnical and Hydro-geotechnical Investigation program to support the development of the IFS stage.
- **Surat Basin Rail, SBR Pty Ltd.** Transaction Coordinator for dual ECI (dECI) procurement phase. Management of Technical phase of ECI procurement for Client during interactive development of offers.
- **Gateway Bridge Duplication Project, QML.** Member of successful proposal team. Prepared traffic management component.
- **Surat Basin Rail Line, Parsons Brinckerhoff.** Construction methodology review and advice for prefeasibility study/EIS.
- **North South Bypass Tunnel, BCC.** Member of successful proposal team. Prepared tunnel spoil management component and surface works integration.
- **Bribie Island Aquifer Project, Caboolture Water.** Development of concept business case for Bribie Island Aquifer project for Caboolture Water in response to extended drought conditions.

## Contractual Advice

- **Goro Nickel (Mine New Caledonia), Vale Inco.** Contractual Claims advice for VNC from International Contractor completing 7.5Mm<sup>3</sup> Tailings Dam with lined Storage Facility for Goro Nickel Project. Developed negotiation strategy for closing out independent expert assessments between parties.
- **Airport Link, BrisConnections.** Force Majeure Claim review for 2011 floods impact to project contractor.
- **Abbot Point X50, Clayton Utz.** Schedule assessment of contractual claim to provide independent advice for legal party for dispute between Tier 1 and Tier 1 Contractors.
- **Ensham Mining Prestrip Contract, Ensham Mining.** Annual review of rates and renegotiation of rates for the coming year.

## Cost and Time Analysis

- **Hunt8r Alliance (John Holland Group, GHD & ARTC) Third Track Upgrade Newcastle.** Preparation of a structures estimates and methodology for project.
- **Wiggins Island Coal Terminal (WICT), +\$2B Capital Cost Estimate Review** for Queensland Treasury and Gladstone Ports Corporation.
- **JAX -Trial Coal Mine, Salmon Earthmoving.** Preparation of a competitive tender for the mining contract.
- **Hay Point Coal Terminal, BMA (Walz Marine).** Detailed annual shutdown schedule for fender system asset management.
- **Gladstone Fitzroy Pipeline, Gladstone Area Water Board.** Advisor to Gladstone Fitzroy Pipeline for the Gladstone Area Water Board with regard to early works “re-start schedules” for project reactivation.

## Management Consulting

- **Ausenco.** External support for various project proposals with a focus on optimising project delivery for Ausenco Program Management Business Unit.
- **Western Corridor Recycled Water Supply Scheme, SEQWater.** Project Coordinator for SEQ Water asset operations business and separate integrated project delivery team.

## **OVERVIEW OF CONTRACTING EXPERIENCE AND EXPERTISE:**

### **Leighton: 2005 – 2006**

- Gateway Upgrade Project: D&C Tender Submission. Gateway Duplication approach road works.
- North South Bypass Tunnel PPP Submission: 4.7km twin tunnel North-South Bypass Tunnel

### **Belmadar Constructions: 2005**

- Jindabyne Dam Upgrade Project: Upgrade of existing dam structure, fuse gate system, new intake tower structure and tunnel aqueduct.

### **Lend Lease (Abigroup Contractors): 2000 – 2004**

- Cultural Centre Busway Station Redevelopment Alliance.
- Northern Bowen Basin Rail Link: 47 km railway line central QLD for Hail Creek Coal Mine.
- Oaky Creek Coal Mine Diversion Project.
- Nundah Bypass Project: Cut and cover tunnel and approach works.

### **Thiess: 1996 – 2000**

- Bookham Bypass Project: 15km Upgrade of Hume Highway.
- Bulahdelah-Coolongook Deviation Project: 24km Greenfield's Pacific highway project.
- Work Package 3 Homebush Bay Project: Arterial service roads for the Olympic Stadium.
- Engineering and Estimating & Project Services Departments for QLD/NT Business Unit.

## **MAJOR PROJECTS**

Throughout Ben's career in construction he has gained a wide range of experience and held senior roles responsible for project success on major projects including:

- ▶ West Pilbara Infrastructure Project
- ▶ Kapit Development Project
- ▶ Surat Basin Rail Project
- ▶ Goro Nickel Project
- ▶ Ensham Mine Project
- ▶ Upgrade of the Jindabyne Dam
- ▶ North Bowen Basin Rail Link (Hail Creek Mine)
- ▶ Nundah Bypass Tunnel
- ▶ Pacific and Hume Highway Projects (NSW)
- ▶ Sydney Olympic Stadium Infrastructure
- ▶ Burton Coal Mine