

## Contract Administration Services (CAS) SEIE01 – Technical Brief – Site Engineer (Electrical and ITS) Level 1 Qualifications and Experience

To be considered for the Contract Administration Services (CAS) prequalification levels, applicants must satisfy the mandatory qualification, prerequisite level and mandatory experience requirements.

### Academic / Professional Qualifications – Mandatory

- A degree in Electrical Engineering or an equivalent Electrical Engineering qualification, which is accepted by the Institution of Engineers Australia as a full Member (MIEAust).

### Prerequisite level

- Nil.

### Academic / Professional qualifications – desirable

- Registration as a Registered Professional Engineer of Queensland (RPEQ).

### Roles and responsibilities

#### Role:

The Site Engineer (Electrical and ITS) role contributes to, or provides, a range of professional services to support the delivery of major infrastructure projects to time, cost and quality criteria, under supervision of the Project Manager / Contract Manager and/or Administrator. The Site Engineer also assists in the development and implementation of new Electrical and ITS projects, including managing construction of electrical and ITS projects and provides advice to the Project/Contract Manager and/or Administrator on project related issues and initiatives.

There are two Site Engineer (ITS / Electrical) related roles to select from (defined by different levels of experience). The scope, value and complexity of the infrastructure contract must be considered when selecting a Site Engineer (ITS / Electrical) and Principal's should take care to ensure CAV teams are not comprised entirely of entry level positions. The below table provides some guidance on the selection of a Site Engineer (ITS / Electrical).

Level	Class of Work Description
SEIE01	<ul style="list-style-type: none"> <li>• Low to medium value design and construct contracts with an ITS / Electrical component value (construction cost) less than \$2M), and</li> <li>• Low complexity works (i.e. street lighting only)</li> </ul>
SEIE02	<ul style="list-style-type: none"> <li>• High value design and construct contracts with an ITS / Electrical component value (construction cost) greater than \$2M), and/or</li> <li>• Medium to high complexity works (i.e. Managed Motorways)</li> </ul>

#### Responsibilities:

- Contribute to the effective management of electrical and ITS projects in accordance with designated time, cost and quality objectives.



- Evaluate project constructability and propose proactive strategies for implementation in the management of existing and/or emerging project risks.
- Monitor and report on progress, foreseeing problems and implementing corrective action to maintain objectives.
- Establish project quality standards in consultation with clients, and monitor the quality of project inputs.
- Make timely decisions, and provide professional advice, based on appropriate technical, commercial, operational and risk factors in a professional manner.
- Manage project budgets, cash flows and funding arrangements.
- Undertake detailed project and resource scheduling.
- Implement appropriate procurement strategies as necessary to effectively deliver projects.
- Develop and implement new project management systems, policies and procedures.
- Contribute to a safe and healthy work environment, free from discrimination and harassment by working in accordance with legislative requirements, the Code of Conduct and departmental human resource policies, including the Workplace Health and Safety requirements.

### **Experience – Mandatory**

- A minimum of one years of experience in the construction, commissioning and maintenance of ITS elements e.g. cameras, loop detectors, ramp metering, Variable Message Signs (VMS), enhanced VMS (eVMS), Lane Use Management (LUMS), Variable Speed Limit (VSL) signs, and road lighting on road infrastructure projects.

### **Experience – Desirable**

- Knowledge of AS 2124 *General Conditions of Contract* and Transport and Main Roads' policies, standards, and specifications.
- Experience in project development, contract management and/or delivery of electrical and ITS projects.
- Demonstrated knowledge of the principles of electrical and ITS: design, construction, maintenance and materials.
- Demonstrated interpersonal and communication skills, verbal and written, including the ability to establish good working relationships with customers and stakeholders at all levels, and deal with situations requiring consultation, negotiation and conflict resolution.
- Proven commitment to the principles and practice of:
  - Ethical conduct, Equity and Diversity, and Workplace Health and Safety
  - Customer Service
  - Quality management and client-oriented service, and
  - Risk management.

- Knowledge of:
  - AS 2124 style of contracts such as:
    - Transport Infrastructure Contracts - Construct Only (TIC-CO), and
    - Transport Infrastructure Contracts – Sole Invitee (TIC-SI),
  - AS 4300 style of contracts such as:
    - Transport Infrastructure Contracts – Design and Construct (D&C)
    - Relational contracts
    - Collaborative Project Agreements (CPA), or
    - Alliance.

### **Information Required**

- Your CV as a minimum, should provide details of skills, experience and key achievements from your last three projects that pertain to **this** engagement.

