Specification

Design for potable water filling stations at various locations
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1 Introduction

The Principal requires an experienced and competent engineering Consultant to undertake site investigations, prepare design documentation and detailed design for the upgrade of 12 potable water filling stations (PWFS) located in the City of Gold Coast. Location and full site descriptions are included in Attachments 1 and 6.

2 Background

The Principal currently operates a number of designated PWFS throughout the Gold Coast. These PWFS are currently utilised to provide access to potable water to supply domestic customers outside the Principal’s potable water reticulation supply network.

The Principal engaged consultants Newell Consulting Engineers in August 2015 (Attachment 10) to identify and assess risk, and present findings from an audit of each PWFS. The audit recommendations included increasing the number of hydrants at specific sites due to demand, all sites to be upgraded with exception of one site which was made redundant and removed as a PWFS.

The Principal engaged consultants Calibre Consulting in August 2016 (Attachment 11) to undertake a detailed planning report for the 12 PWFS adding to the investigations undertaken by Newell. The report provided concept design drawings, capital expenditure budgets, typical filling station design including raising the hydrants, new lighting and provision for future works. The report recommendations included identifying key risks to water quality, traffic management and traffic safety, pedestrian safety, and operational safety.

In review of the recommendations, the Principal decided to exclude the upgrade of Site N5 (Beattie Road, Coomera) as its design conflicts with 2018 Commonwealth Games preparations. Following completion of the detailed planning report, new Site N5 – Entertainment Road, Oxenford was identified to replace Beattie Road and therefore, new Site N5 does not currently have a concept design.

In addition, Site N8 – Sports Drive, Runaway Bay was identified to support potable water demand for north east Gold Coast area and the Southport region. Site N8 does not currently have a concept design.

In all, there are now 12 designated PWFS that require detail design and supporting design documentation.

3 Scope of Services

The Principal is seeking design solutions generally in accordance with the design concepts prepared to date that are founded around the following:

- Effective mitigation of risks identified through previous investigations
- Ensuring protection of water quality
- Ensuring safety of filling station customers and the public
- Cost effective functional solutions that utilise the remaining life of existing pavement areas where appropriate
- Cost effective solutions to minimise pavement widening but is sufficient for PWFS pavement area use.
- Ensuring design solutions contribute towards encouraging walking, cycling and use of private vehicles away from or around each of the sites in a safe and efficient manner.
- Ensuring all codes and regulations are met and identify any deviations or recommendations.

Provide the following services for each of the 12 water filling station sites;

1. Prepare a consultancy delivery program
2. Undertake traffic safety audit
3. Undertake site investigations including potholing, geotechnical, pavement condition assessment and engineering survey
4. Prepare preliminary detailed designs, specifications and design report
5. Identify, prepare and lodge Department of Transport and Main Roads (TMR) approvals
7. Prepare detailed construction cost estimates
8. Consult with project stakeholders and incorporate design changes arising from design review workshops
9. Prepare final detailed designs, specifications and design report
10. Provide consultancy support services during construction if required.
4 Milestones

4.1 Milestone One – Preliminaries

For payment purposes this milestone is claimable for 100% of its value on completion. The Consultant’s value for Milestone One will not exceed 10% of the total Lump Sum amount of the Services.

Provide a delivery program and undertake a traffic safety audit in accordance with the following:

4.1.1 Program

Provide a detailed delivery program in Gantt chart (*.MPP) for all tasks, workshops and milestones, including links, float, critical path and showing milestone dates for all identified deliverables.

4.1.2 Traffic Safety Audit

Undertake a Traffic Safety Audit for each of the 12 PWFS upgrades as detailed in Attachments 1 and 6. The Traffic Safety Audit must review the proposed upgrades against the requirements of the City Plan, all relevant legislation and road planning guidelines. As a minimum it would be expected that the traffic safety audit would consider but not be limited to:

- Geometric design
- Intersections and crossings
- Drainage design
- Roadside design, safety and barriers
- Pedestrian and cyclist paths

The findings of the Traffic Safety Audit will be included in a report clearly detailing:

- The aspects safety status of proposed upgrades and
- Where non-compliances exist, measures to be taken to bring the proposal to an acceptable standard.

Indicative costs must be included in the report for any identified additional traffic safety rectification actions.

The Traffic Safety Audit must be signed off by an RPEQ.

Milestone One is a Hold Point and the hold point release is acceptance in writing by the Principal.

Milestone One Deliverables

Deliverables for Milestone One are as follows:

- Consultancy Delivery Program
- Traffic Safety Audit
4.2 Milestone Two – Investigations

For payment purposes this milestone is claimable for 100% of its value on completion. The Consultant’s value for Milestone One will not exceed 10% of the total Lump Sum amount of the Services.

Undertake project approvals and pre-design investigations as described below:

4.2.1 Project Approvals

City Approvals

The Principal will assist the Consultant with the delivery of relevant park and traffic City approvals. Provide deliverables to the Principal. The Principal will prepare, lodge documentation and obtain approvals including Gold Coast Water and Waste and City Infrastructure.

TMR Roads Approval

A number of sites (SCR as listed in Attachment 1) will require TMR approval for any changes within the TMR corridor. Consult, prepare, lodge documentation and obtain approvals from TMR.

4.2.2 Pre-design Investigations

Engineering Survey:

Undertake survey and incorporate the information into design drawings. The survey must be prepared in accordance with the following:

- AHD unless otherwise advised in writing
- Connect to at least three suitable survey control marks that comprise of:
  - PSM adequate to complete the work and submit to mapping grid of Australia 1994 zone 56 (MGA94), of at least 4th order, Class D accuracy (as defined by the ICSM and Practices for Control Surveys) and 4th Order, Class D heights on AHD. Connection to the defined points of cadastre adjacent to the site of each PWFS.
  - If no suitable permanent marks are available, contact CoGC City Survey Services for details of suitable City Survey Control marks.
- The origin of all levels and details of all survey control points are to be noted on the drawings
- Inclusion of all features (services, trees, pits, posts, kerbs) from property boundary to property boundary
- Provide survey control comprising as a minimum:
  - Details of existing or newly constructed permanent reference marks from which the new infrastructure can be referenced.
  - Connection to the defined points of cadastre for the boundary of site.
- Where design drawings have incorporated survey information, drawings must be certified by a Registered Surveyor under the provisions of the Surveyors Act 2003. The following certification statement (or similar to the satisfaction of the Principal) must be included a minimum of once on each drawing set:
Potholing, Feature Survey and Services Detection:

Undertake potholing investigations at each site necessary for detailed design and construction delivery of proposed and future works.

Provide to the Principal prior to undertaking service location potholing plans showing as a minimum;

- Locality including dimensioning and
- Unique identity number.

The intent of the investigation is to ensure that all PUP service location and any issues that may have an impact on the design are adequately investigated and that appropriate information and advice is provided for incorporation into the design and construction specification.

Supply all labour, supervision, materials, plant and equipment required to complete a survey to accurately identify existing services in accordance with the requirements of the Contract.

As a minimum, be familiar with;

- PWFS relevant DBYD datasets. The DBYD datasets are the Consultant’s responsibility to source.
- GIS information provided by the Principal.

To identify existing services adopt the following hierarchy:

- Undertake electronic service detection works.
- Survey surface features and service details including, but not limited to, manholes, pits, electrical boxes, water meters, footpaths, poles (ie. light, power), kerb / channel, and provide a firm indication of the service alignments.
- Use non-destructive electronic service detection techniques where surface features are not available or are too distant from the area of interest.
- Pothole to physically identify the service to confirm results of the electronic detection works.
- Where required, pothole to physically identify the service where electronic detection is not available, not accurate, or not reliable.

Record and survey all services located and the method of identification (e.g. pothole and/or electronic detection)

Data to be recorded must include:

- Service type and size identified.
- Natural surface level in AHD.
- Depth to service.
- X, Y and Z co-ordinates.
- Points marking the locations of all positions where services have been detected.
- Written notes of observations made during service detection works (e.g. “splay” of multiple conduit services such as bundled telecommunications cables between pits).

Allow for the following quantity of service location potholing;
• Three per site or 33 potholes in total, and
• Five strip potholes to three lineal meters.

**Geotechnical Report**

Undertake geotechnical investigations at each site and provide a Geotechnical Report necessary for detailed design and construction delivery of proposed and future works.

Provide as a minimum the following:

• Location of each test pit
• Depth of each borehole
• Engineering design parameters
• Key soil characteristics
• Condition of existing pavement and subgrade.

Test methods for the above are to be in accordance to relevant Australian, Austroad and NATA Standards.

Allow for one borehole investigation to a maximum depth of two meters in a location agreed with the Principal.

**Pavement Condition Assessment**

Undertake a pavement condition assessment at each location to determine if the pavement is acceptable or requires partial repair or full replacement.

To establish pavement profile, the following testing must be undertaken as a minimum;

• GPR, and
• FWD,
• Pavement borehole to confirm GPR and FWD findings.

The condition assessment must review the existing condition of pavement and make recommendations to repair or renew the pavement including a cost estimate for the following design life:

• Less than five years,
• Between five years and up to 10 years,
• Greater than 10 years

A concrete hardstand / tanker stand may be required in the loading zone area(s) of each PWFS to accommodate tanker loads and meet design life. Make a recommendation to the Principal based on the pavement condition assessment.

Allow for the quantity of tests per site;

• Two runs / lane / 10m for all Ground Penetrating Radar,
• Two runs / lane / 10m for all Falling Weight Deflection,
• Two pavement boreholes or 22 pavement boreholes in total to a maximum depth of two meters.

**Milestone Two Deliverables**

Deliverables for Milestone Two are as follows:

• Project Approvals
• Engineering Survey
• Feature Survey and Services Detection
• Geotechnical Report
• Pavement Condition Assessment.

**4.3 Milestone Three – 30% Complete Design**

For payment purposes this milestone is claimable for 100% of its value on completion inclusive of the scheduled Workshop and progress report.

Provide the following deliverables for a 30% design complete Design Review Workshop:

• Design drawings (Draft to 30%)
• Construction Specification (Draft)
• Construction Environmental Management Plan (Draft)
• Construction Cost Estimate (Draft)
• Design Report (Draft)

Further details of the above deliverables are described in Cl 6.1 Design Deliverables

4.4 Milestone Four – 85% Complete Design

For payment purposes this milestone is claimable for 100% of its value on completion inclusive of the scheduled progress report.

Provide the following deliverables for a 85% design complete Design Review Workshop:

• Design drawings (85% Final Draft)
• Construction Specification (Final Draft)
• Construction Environmental Management Plan (Final Draft)
• Construction Cost Estimate (Draft)
• Design Report (Final Draft)

Further details of the above deliverables are described in Clause 6.1 Design Deliverables

4.5 Milestone Five – 100% Complete Design

For payment purposes this milestone is claimable for 100% of its value on completion.

Provide all deliverables listed in the contract. All documents will be issued for final approval by the Principal as IFA. On approval the Consultant will issue all IFC documents.

4.6 Provisional Items

A Provisional Sum has been allowed to capture potential additional work required during the design and construction phase of the project. Nominate rates in the Price Submission for the following:

• Investigations - which are over and above the allowance nominated in the milestones, including:
  o Potholing to identify services.
    ▪ 20 potholes at 2m deep
    ▪ five strip potholes to 2m deep.
  o Geotechnical investigations and the associated boreholes to verify ground conditions.
    ▪ five boreholes at 2m deep.
• Construction Support – provide hourly rates for multiple key personnel.
  o 40 hours support which will extend for two years from the date of engagement.
5 Implementation schedule

<table>
<thead>
<tr>
<th>Milestone One:</th>
<th>Preliminaries</th>
<th>4 weeks from contract award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milestone Two:</td>
<td>Investigation</td>
<td>8 weeks from contract award</td>
</tr>
<tr>
<td>Milestone Three:</td>
<td>30% Complete Design</td>
<td>12 weeks from contract award</td>
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<tr>
<td>Milestone Four:</td>
<td>85% Complete Design</td>
<td>16 weeks from contract award</td>
</tr>
<tr>
<td>Milestone Five:</td>
<td>100% Complete Design</td>
<td>20 weeks from contract award</td>
</tr>
<tr>
<td>Provisional Items:</td>
<td>Borehole and Potholing</td>
<td>12 weeks from contract award</td>
</tr>
<tr>
<td></td>
<td>Construction Support</td>
<td>104 weeks from contract award</td>
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</tbody>
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6 General requirements

6.1 Design Deliverables

6.1.1 Design Drawings

Typical detailed drawings in accordance with Attachment 2 include, but not limited to;

- Hydrant (Filling station point of supply).
- RPZD.
- Sampling tap and footing.
- Lighting and the associated pole (6m hinged and 7.5m hinged).
- Loading zone concrete hardstand / tanker stand details.

Provide deliverables for each site including, but not limited to;

- General Arrangement
  - Prepare a General Arrangement drawing in a layout comparable to SEQ-WAT-1101-2 and provide sections and detail drawings including notations for survey, civil, water and electrical reticulation, stormwater, signage and future works.

- Water Reticulation
  - Prepare the piping drawings complete with long section, plan, materials take off, trench, connection details and future works. Drawing quality and content to be comparable to SEQ-WAT-1302-1, SEQ-WAT-1201-1, SEQ-WAT-1309-1

- Electrical
  - Prepare electrical schematic or diagrams to illustrate the requirements from the point of supply to the ATM and lighting. Include all future electrical work, cable specification (lighting), connection details, pit or cabinet details, conduit, and trench details.

6.1.2 Construction Specification

Provide a construction specification to address all technical, safety and environmental aspects of the works to enable a construction contractor to tender and construct all elements of the construction.

Specify all products, materials, equipment, site investigations, excavation, site preparation, trench details, construction requirements and reference all relevant codes and standards required to deliver the construction works.
Include drawings with standard construction details and construction notes to compliment the construction specification. An example of this type of drawing is SEQ-SEW-1101-3 (http://static1.1.sqspcdn.com/static/f/1424737/26971164/1460594715127/2016-04-07-SEQ_Sewerage_Drawings.pdf?token=ky08hfWqVbjRw2jLd1RXYxroSXQ%3D).

The specification will address, as a minimum, the following: civil, pavement, stormwater, piping, electrical works, concrete hardstand / tanker stand, road furniture, and road safety.

6.1.3 Draft CEMP

Provide the draft CEMP in accordance with the guidelines in Attachment 4 ‘Specification for Draft Construction Environmental Management Plan’.

6.1.4 Construction Cost Estimate

Provide current construction cost estimates for each of the 12 sites and include as a minimum:

- Class 2 estimate (-10% to +10%),
- Cost breakdown to include as a minimum;
  - Cost of each trade, contingency, risk, and escalation
- Certified by a registered quantity surveyor
- Cost assumptions

6.1.5 Design Report

The Design Report must contain the following as a minimum:

- Basis of design information including all design assumptions, codes, and standards for detail design and specification inclusive of future scope works.
- Safety in design outcomes addressing construction, operational and maintenance.
- Risk assessment identifying potential construction, operational and maintenance hazards and risk mitigation measures for each proposed potable water filling station. Place emphasis on hazards that will be engineered out through the detailed design and specification process.
- Attachments including: Geotechnical Investigation, Pavement Condition Assessment, Drawing deliverables do not need to be included in the report; however, a list must be included.

6.2 Technical Requirements

6.2.1 Civil, Pavement and Road Design:

Design to be in accordance with the Concept Design, City Plan and MUTCD requirements, including (but not limited to):

- Bicycle and pedestrian footpaths
- Earthworks
- Concrete hardstand / tanker stand
- Stormwater
- Road and pavement
- Road furniture, bollards and barriers
- Pavement marking and signage

6.2.2 Hydrant and Piping Design:

Design to be in accordance with the Concept Design and SEQ Water Supply and Sewerage Design & Construction Code (SEQ Code) requirements, including:
• Hydrants (Filling station point of supply)
• RPZD
• Sampling tap
• Piping and trenching

6.2.3 Electrical Design

Design will be in accordance with the Concept Design, City Plan and Attachment 7: Supplementary Mechanical and Electrical requirements, including:

• Lighting (noting local lighting is only to be provided as per the concept design)
• Cables, conduits and trenching
• Draw cores to be specified for future cable specification

6.2.4 Drawings and Report

The preliminary and detailed design drawings must be in the format as per Attachment 5. The electronic copy (PDF format) of all reports must include all attachments, appendices, sketches and drawings, as a single seamless file with all pages being in the same sequence as the hard copy of the respective report.

Project deliverables must be submitted in compliance with the following requirements:

• Construction specifications must conform to Attachment 12.
• All drawings must be designed in accordance with SEQ Code WS&S, D&C Code’s Asset Information Specification to include ADAC schema products to enable ADAC files to be submitted in XML format).
• All drawings prepared must use the standard template drawings having the same layout and format (i.e. titles, logos, drawing numbers.). The standard drawing template will be provided by the Principal.
• Show approved street names and correct lot numbers.
• Where the design requires any of the Principal’s assets to be decommissioned, these assets must be clearly marked on the IFC drawing by labelling the asset ‘To Be Decommissioned’.
• Supply two paper copy draft reports, presentations, drawings, final reports and tender documentation, all bound complete with all attachments and appendices
• Supply one seamless electronic file in PDF format of each report, complete with all attachments and appendices.
• Supply electronic files for all reports, presentations, working files, design drawings and tender documentation, in the format by which the respective documents were prepared (e.g. MS Word, MS Excel, MS PowerPoint, AutoCad) in an external hard drive.
• All electronic supplied drawings must be provided with the following naming convention:
  o “Project Title - drawing #” – GENERAL ARRANGEMENT – SITE XX (sheet “x” of “x”).dwg
  o “Project Title - drawing #” – TYPICAL XXXX DESIGN (sheet “x” of “x”).dwg
  o “Project Title - drawing #” – LONG SECTION (sheet “x” of “x”).dwg
• Versions of all drawings must be submitted for the review and acceptance by the Principal.
• Should any amendments be required by the Principal to any of the submitted information, the Principal will provide notification of the required amendments within five business days of receipt of the drawings. Such amendments must be made and resubmitted at no cost borne to the Principal.
• Do not include any security settings or password protection, so that electronic submissions are directly accessible by the Principal.
• Copyright statement must be included in reports and must be assigned to the Principal.

Note that draft designs and documents are required to be sufficiently developed, to a level considered to exceed the concept design detail so that only minor comments/mark-ups may be identified. A high level of industry standard and detail is therefore expected within all the draft documents submitted. Any documents lacking detail and substance will be immediately returned with comments from the Principal to be resubmitted within one (1) week at no cost borne to the Principal.
6.2.5 Certification of the Design

Comply with the requirements of the Queensland Professional Engineers Act as follows:

- Ensure that design is supervised at all relevant times by a designer who is a RPEQ experienced in work similar to the work under the Contract.
- Provide RPEQ certified deliverables.

Comply with the requirements of the SEQ Code as follows:

- Provide RPEQ certified deliverables.

6.3 Project Management Requirements

6.3.1 Progress Report

Provide a fortnightly progress report. The report will include:

- Details on progress achieved; pending actions, issues and potential delays and progress compared against planned work for each discipline.
- Deliverable list complete with each deliverable name, % complete, current revision and due date for each revision for 30% review, 85% review, final IFA drawings and final IFC drawings.

6.3.2 Progress Meetings

Allow two hours duration and conduct a start-up meeting with the Principal’s representatives at the Nerang Administration Centre upon commencement of the Contract to establish primary contacts, receive / request project information to assist in design, establish protocols in relation to future meetings and status reports, and clarify scope of services and key stakeholder requirements.

Attend monthly progress meetings with the Principal's representatives at the Nerang Administration Centre until completion of the Final Design. Issue minutes of the meeting complete with notes, actions and due dates for completion within one working day of the meeting.

6.3.3 Design Review Workshop

Two design review workshops will be held during design development for all 12 sites, the first at 30% design complete and at 85% design complete. Design review workshops will be held at the Principal’s Nerang office and will involve all identified key stakeholders. Details on the workshops are below:

- Allow two hours duration for each workshop.
- Issue documents via email to the Principal one week prior to the workshops.
- Provide an agenda, attend with key design lead engineers and “Chair” the meeting.
- Brief participants on the design, assumptions, options and value for money, and how the design was derived.
- Provide five complete hard copies of the design on the day of the workshop.
- Record actions and provide minutes of the workshop.
- Manage closeout of actions.

7 Work Health and Safety (WHS)

General

Be responsible for undertaking activities in accordance with the Work Health and Safety Act 2011 and Regulation 2011 (collectively known as ‘the Act’). Have a documented WHS management system in place.
In accordance with the Work Health and Safety Act 2011, a Safety in Design on the health and safety aspects of the design must be included in the Design Report. The report will include a risk assessment which addresses construction, operational and maintenance risks and mitigations.

Consultant or nominated sub-consultants will be the person conducting a business or undertaking (PCBU) for field investigation works.

Traffic Management
All investigations will be undertaken in accordance with Queensland safety and environmental legislation and regulations.

Traffic Management may be required to undertake the investigations. Seek approval from CoGC Transport and Traffic Branch and/or The Department of Transport and Main Roads.

TMPs and TGSs in accordance with procedures set out in MUTCD Part 3 to be provided to the Principal prior to the investigation works. The Principal will facilitate approval from CoGC Transport and Traffic Branch only (in accordance to Attachment 1).

Safety Management Plan and Safe Work Method Statement’s to be provided to the Principal for approval prior to the site works.

Inductions
Prior to attending a Principal’s PWFS site, all personnel must complete and provide evidence of the following inductions as appropriate for the specific site work:

- Construction Industry General Safety Induction (White Card)
- General Induction to Gold Coast Water (Compulsory for all of the Principal’s operational sites)

The inductions will inform workers of potential risks that they may encounter when undertaking work at a Principal’s operational site. They also outline the required safety expectations and the responsibilities of workers when on a Principal’s operational site.

To arrange for the on-line induction process to be completed please contact GCWtraining@goldcoast.qld.gov.au and provide them with the following information:

- Name of company
- Name of primary company contact
- Email of primary company contact
- ABN of company
- Names of people to be inducted
- Contact in Gold Coast Water / Council Contract Representative or Principals Representative
- Sites inductees will be required to access
- Name of induction/s to be completed of the following
  - General Induction to Gold Coast Water.
  - Induction to Itinerant and Construction Sites.
  - Induction to Reservoirs, Pump Stations and Other sites.

Individual passwords will be provided for each worker to complete the required inductions. A record of the inductions completed will be printable for each worker. It may be prudent for you to request access for all workers who could potentially attend an operational site, rather than the minimum number of workers who will attend site. This will facilitate a faster provision of access for your workers if your resourcing requirements suddenly change.

If the required inductions have not been completed and copies supplied to the Principal prior to the date of possession of site, access to any PWFS site will be denied until the relevant inductions have been completed.

Known Risks
In accordance with the Work Health and Safety Act 2011 the known hazards for this project identified by the Principal are listed below:

- Animals including insects, snakes and spiders that bite or sting.
• UV radiation exposure longer than 15 minutes.
• There may be physical injury and microbiological contamination of persons coming into contact with ponding water if the works are not properly managed or controlled, or if personal hygiene procedures are not followed.
• PUP and other services may exist at or adjacent to each Works site. Ground water in soils of low stability may be present.
• Site is located along roadside with reasonably heavy traffic.
• Safety of ‘others’.
• Biological hazards (substances which consist of, or which may contain micro-organisms or non-viable products of living matter, which can create a risk to health e.g. virus, bacteria. Examples – HIV, Hepatitis (A, B and C), Avian Influenza (Bird Flu), tetanus, typhoid fever, Q fever, Hendra Virus.
• Presence of hazardous airborne contaminants (e.g. gases and vapours or dusts like lead, silica or pesticides).
• Underground or overhead utilities (gas, water, electricity).
• Fall from heights.
• Working in excavation or trenching.
• Working near water or liquid that poses a risk of drowning.
• Accessibility of site to public.
• Overhead and underground electrical conductors

8 Quality Assurance (QA)

Maintain a quality assurance system (QAS) for the duration of the Contract and ensure the prescribed quality outcomes are achieved throughout the Contract period. The QAS will align with AS/NZS ISO 9001.

9 Standard and Specifications

Unless specifically amended in this documentation, undertake design and reference where applicable, the requirements of the current edition of the following Drawings, Standards and Specifications:

• City of Gold Coast As Constructed Data Capture Guidelines V1.2 2016 (refer to Attachment 5).
  o Documents will not be As Constructed. However, all documents will meet the requirements of the guideline including drawing format, ADAC data.
• Australian Standards / British Standards / American National Standards / Institute Standards.
• Current Manufacturer’s Standards and Specifications.

10 Supporting Documents

The Principal will provide access to and utilise its GIS and data information subject to the successful Consultant’s agreement to the Principal conditions pertaining to the supply and use of such information. Any such information must only be used for the purposes of this project only. Existing as-constructed details, where available, will be provided to the successful Consultant by the Principal.

Request in writing the GIS layers required to undertake the commission.
11 Attachments

Unless specifically amended in the documentation, all services must be undertaken in accordance with the requirements of the current edition of the below specifications, drawings and documents:

Attachment 1  Potable Water Filling Station Upgrade Project Overview (1 sheet)
Attachment 2  Typical Filling Station Layout and Details (2 sheets)
Attachment 3  Typical Future Automated Filling Station (2 sheets)
Attachment 4  Specification for Draft Construction Environmental Management Plan
Attachment 5  CoGC, As-Constructed Data Capture Guidelines
Attachment 6  Locality Plan and Drawing Index (1 sheet).
Marked up Calibre Concept sketch and Clarification Sketch for each site (22 sheets):
   1. Site N1 – Angel Road, Stapylton
   2. Site N2 – Tillyroen Road, Ormeau Hills
   3. Site N3 – Kerkin Road North, Pimpama
   4. Site N5 – Entertainment Road, Oxenford
   5. Site N6 – Tamborine-Oxenford Road, Upper Coomera
   6. Site N7 – Maudsland Road, Maudsland
   7. Site N8 – Sports Drive, Runaway Bay
   8. Site S8 – Yarrimbah Drive, Nerang
   9. Site S9 – Worongary Road, Worongary
  10. Site S10 – Gold Coast Springbrook Road, Mudgeeraba
  11. Site S11 – Hardys Road, Mudgeeraba
  12. Site S12 – Tallebudgera Connection Road, Tallebudgera
Attachment 7  CoGC, Sewerage Network Water Supply Network, Supplementary Mechanical & Electrical Specification, July 2017 V1.03
Attachment 8  Rural Fire Services Qld (RFSQ) transmittal with conditions
Attachment 9  Seqwater transmittal with conditions
Attachment 10 Newell 2015 (Rev A), Audit Report, Audit of Potable Water Filling Stations
Attachment 11 Calibre 2016 (Rev C), Detailed Planning Report, Detailed Planning of Potable Water Filling Stations
Attachment 12 Specification Development Requirements
12 Glossary

(*.MPP) – Microsoft Project file extension
AC – Asbestos Cement
ADAC – Asset Design and As Constructed
AHD – Australian Height Datum
ATM – Automated Transaction Managers
AutoCAD – Automated Computer Aided Design
BoD – Basis of Design
CCR – Council Contract Representative, the person nominated by the Principal to exercise the functions of the Principal relating to the Contract, or other person nominated from time to time by the Principal.
CEMP – Construction Environmental Management Plan
DAF – Department of Agriculture, Fisheries and Forestry (Qld)
DBYD – Dial Before You Dig
DEHP – Department of Environmental & Heritage Protection
DERM – Department of Natural Resources and Mines
EPBC – Commonwealth Environment Biodiversity Conservation Act
FWD – Falling Weight Deflection
FSL – Finished Surface Level
GA – General Arrangement (drawings)
GCWW – Gold Coast Water and Waste
GIS – Geographic Information System
GPR – Ground Penetrating Radar
HDD – Horizontal Directional Drilling
IFA – Issued for Approval
IFT – Issued for Tender
IFC – Issued for Construction
I/O – Input / Output
ITP – Inspection and Test Plan
LV – Low Voltage
MCA – Multi Criteria Assessment
MNES – National Environmental Significance (MNES)
MSCL – Mild Steel Cement Lined
NCA – Nature Conservation Act
O&M – Operation and Maintenance
PCBU – Principal Control of a Business Undertaking
PSM – Permanent Survey Marker
PUP – Public Utility Plant
QR – Queensland Rail
RFI – Request for Information.
RPEQ – Registered Professional Engineer of Queensland
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>RPZD</td>
<td>Reduced Pressure Zone Device</td>
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<tr>
<td>RW</td>
<td>Recycled Water</td>
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<tr>
<td>SCADA</td>
<td>Supervisory Control And Data Acquisition</td>
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<tr>
<td>SCR</td>
<td>State Controlled Roads</td>
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<tr>
<td>SEQ</td>
<td>South East Queensland</td>
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<tr>
<td>SPA</td>
<td>Sustainable Planning Act</td>
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<td>SPT</td>
<td>Standard Penetration Test</td>
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<td>SPS</td>
<td>Sewerage Pumping Station</td>
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<td>Sewer Rising Main</td>
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<td>STP</td>
<td>Sewage Treatment Plant</td>
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<td>Traffic Guidance Scheme</td>
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<td>Traffic Management Plan</td>
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<td>TMR</td>
<td>Department of Transport and Mains Road</td>
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<tr>
<td>UCS</td>
<td>Unconfined Comprehensive Strength</td>
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