Specifications - AS2124

LG314/1211/19/165

Minor Miscellaneous Works At Water And Waste Facilities
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1. **Interpretation**

Further to Clause 2 of the General Conditions of Contract and except where the context otherwise requires, the following are applicable:

- ‘give notice’, ‘submit’, ‘furnish’ and similar expressions means give notice, submit, furnish and the like to the Principal or the Superintendent (as the case may be).
- ‘inspection’ and similar expressions have the same meaning as examination and testing.
- ‘responsible authority’ means a local government or any government (state or federal) department or other agency charged with the responsibility of administering or enforcing a Legislative Requirement; and
- ‘Works Inspector’, ‘Principal’s Inspector’ and ‘Job Inspector’ means a duly authorised person required to enter onto the Site to inspect and/or measure some aspect associated with or effected by the Works on behalf of a government or statutory authority or organisation approved by the Superintendent.

1.1 **Definitions**

In this document, except where the context otherwise requires:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction &amp; commissioning plan</td>
<td>The purpose of the <strong>commissioning plan</strong> is to provide direction for the <strong>commissioning</strong> process during <strong>construction</strong>, providing resolution for issues such as scheduling, interaction with other infrastructure, roles and responsibilities, lines of communication and reporting, approvals, and coordination.</td>
</tr>
<tr>
<td>draft</td>
<td>the stage where a task has been completed and the results submitted for approval (not for checking or verification) by the Principal or the Superintendent (as the case may be), and where the originator is satisfied that it is a fair representation of the intended outcome.</td>
</tr>
<tr>
<td>equipment</td>
<td>any tools, items of plant, apparatus or machinery used to carry out and complete the scope of work.</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan (inclusive of Construction and Environmental Management Plan(CEMP)). A site or project specific plan developed to ensure the appropriate environmental management practices are followed during the construction and/or operation of a project.</td>
</tr>
<tr>
<td>experienced</td>
<td>trained, competent, and having a minimum of 1000 hours of on-the-job current industry experience.</td>
</tr>
<tr>
<td>Hold Point</td>
<td>the stage that the Works has reached, such that it requires a review, comments, action or instruction from the Principal or the Superintendent prior to work continuing.</td>
</tr>
<tr>
<td>maintenance</td>
<td>is the repair, replacement and upkeep of existing assets. Maintenance work keeps an asset functioning in its current operational state and does not enhance or change the initial design or function of the asset without extending its useful life.</td>
</tr>
<tr>
<td>materials</td>
<td>any consumables used to carry out and complete the scope of work.</td>
</tr>
<tr>
<td>MUTCD</td>
<td>Manual of Uniform Traffic Control Devices</td>
</tr>
<tr>
<td>preliminary</td>
<td>the stage where a task has been partially or wholly completed, but the results have not been fully checked / verified, and the desired outcome has not been achieved or determined.</td>
</tr>
<tr>
<td>qualified</td>
<td>Having undergone formal training.</td>
</tr>
<tr>
<td>RWTP</td>
<td>Recycled Water Treatment Plant</td>
</tr>
<tr>
<td>STP</td>
<td>Sewage Treatment Plant</td>
</tr>
<tr>
<td>SWMS</td>
<td>Safe Work Method Statements</td>
</tr>
<tr>
<td>WHS</td>
<td>Work Health Safety</td>
</tr>
</tbody>
</table>
2. Scope of the Works

To create a panel of preferred suppliers who are suitably qualified, experienced and competent in undertaking construction and ancillary works associated with minor civil works, repairs and maintenance services, and the replacement and or refurbishment of a range of non-administrative building installations and facilities at Sewage Treatment Plants, Pump Stations, Network Assets, Landfills and Waste Recycling Centres. Works will include the supply of materials, plant, equipment, labour and services.

Works as required will include but not be limited to general refurbishment or repairs and maintenance; minor building works; safety rectification works such as metalwork, handrails, stairs, access areas; roofing repairs and maintenance; painting; carpentry; concreting; minor roadworks. The required activities associated with the Works described above include, but are not limited to, the following:

- Approximately 100 Request for Works may be issued for quotation to Panel members annually ranging from $10,000 to $100,000.
- Site establishment and disestablishment.
- Location of services.
- Supply and installation of all materials necessary to undertake and complete the Works, except those materials that may be specified as being supplied by the Principal.
- Refurbishment and/or repair works as specified.
- Supervision and coordination of the Site Works.
- Maintaining services to the Principal’s customers throughout the Works.
- Communication with all stakeholders.
- Traffic control as specified by the Superintendent.
- Transport and disposal of materials.
- Restoration of the Sites impacted by the Works.

Acceptance to this panel of preferred suppliers does not guarantee allocation of Works. The Principal reserves the right to request and accept tenders or quotations from outside this panel.

3. Selection of a Contractor for a Specific Project

The Principal may appoint a single contractor for each individual project. Depending on the value and complexity of an individual project the Principal may call quotes from one or more members of the panel on a Lump Sum or Schedule of Rates basis. The offer most advantageous to the Principal may then be selected.

The extent of the Works is the complete and professional undertaking of the specified and issued Request for Works in accordance with the contract documents including all services, maintenance, construction, restoration and rectification necessary.
4. Ordering of Work

4.1 Raising a direction from the Office of the Superintendent

The Request for Works will be issued by the Superintendent electronically as required. Subject to a direction by the Superintendent, the work to be performed under this Contract comprises the provision of all plant, equipment and labour relevant to the nature of and the performance of all operations of whatever kind necessary to carry out maintenance and/or construction works on the Principal's water, sewage, landfill and waste recycling infrastructure.

Request for Works will be in writing, and will include the following details.

- The name and address of the Contractor.
- The contract number.
- The project number.
- Date the Works must be completed by.
- Site address.
- Brief description of Works.
- The Superintendents Representative name and contact details.

Unless prior approval is sought from the Superintendent, Works are to commence within 10 working days of the Contractor receiving the Request for Works. Where emergency work is required a shorter response time will be required and the Contractor's prioritisation of such emergency Request for Works is expected.

4.2 Notification to the Superintendent

The Contractor shall notify the Superintendent immediately if during any stage of the Works, conditions are identified that prevent the Contractor from executing the requirements of this specification and/or the Request for Works. The Contractor shall include in the notification a proposal for alternative actions for consideration by the Superintendent.

On arrival at Site, if it is found that there is additional works required not specified in the Request for Works, stop work and notify the Superintendent immediately by phone and provide a written summary of the additional works required. Do not progress with works unless given approval by the Principal in writing to proceed. Any additional works not specified in the Request for Works must be approved by the Principal before works can commence.

5. Working hours

The hours of work are defined in the Contract Header, as Monday to Friday between 7.00am and 3.40pm excluding public holidays. Should the Superintendent, upon written application to do so, permit work to take place outside of these hours, comply with the clause ‘General Environmental Duty’ as contained in the Environmental Protection Act 1994.

6. Site Location and Limits

Where applicable, there will be a joint inspection of the respective Site of the Works to fully assess all specific site requirements.

Works will be generally issued at various locations within the local government areas of the City of Gold Coast. The site of the works is restricted to the following:

- In undeveloped road reserves. Where undeveloped road reserves are adjacent to private property, a 4 metre setback to allow for private lot access will be maintained.
• In developed road reserves as approved for each Site by the Superintendent.
• Private property not allowed unless by written authorisation is obtained by the Principal.
• Easements not more than the extent of the easement as dedicated and approved.

The above limits may only be altered with the written approval of the Superintendent.

Contractor’s shall not enter onto the Principal’s workplace other than to undertake the works assigned to the Contractor.

6.1 For Works Within Water Storage Reservoir, Sewage Treatment Plant, Pumping Station or Waste Facility Sites (Together ‘The Sites’)

It is a requirement that all persons successfully complete the relevant induction for the Principal’s Water and Waste sites prior to being permitted to access to that site. Accordingly, all of the Contractor’s personnel and their sub-contractors will be required to be inducted to the Sites prior to being provided access to the Sites.

All of the Sites are fully operational facilities, and any works are to be performed in a manner such as to minimise any disruption or hindrance to current operational or maintenance activities. The limits of the site area and Contractor’s work area may only be altered with the written approval of the Superintendent. Contractors shall not enter onto the Principal’s workplace other than to undertake the works assigned to the Contractor.

Access to the site shall be permitted by arrangement with the Superintendent. A protocol for access to each site shall be determined and approved by the Superintendent prior to commencement of the Contract Works.

The Contractor shall be responsible for the management and/or storage of all materials and equipment, both on and off the site, so as to prevent damage and to minimise hazards to the persons, materials, equipment and the environment. The Principal will not allow storage of materials, plant or equipment at any of the Principal’s facilities without prior approval by the Superintendent.

Prior to commencement of work the Contractors personnel, including subcontractors engaged by the Contractor, operators of vehicles undertaking delivery/pick-up or unloading/loading of goods on behalf of the Contractor, and any person attending the site as visitors to the Contractors works area must have completed the appropriate induction(s) prior to entering the site – refer to Clause 20.3 Principal Inductions.

A site specific induction is also required prior to undertaking works, and will be facilitated by the respective STP/RWTP Plant Supervisor, of the relevant site safety and emergency evacuation plan, requirements and protocols. The Contractor shall maintain a list of personnel who have completed the site specific induction, and ensure that throughout the term of the Contract any new personnel also undergo all of the stated inductions prior to entering and/or undertaking any activities on Site.

All internal roadways within the STPs, Sewerage Pump Stations, Water Pump Stations, Landfills and Waste Recycling Centres are to be kept clear and accessible at all times. Parking of the Contractor's vehicles or equipment within existing roadways shall only be permitted for short-term loading or unloading of equipment or facilities, and only with the prior approval of the Superintendent. All other vehicles, including vehicles used by personnel to commute to the site for meetings, site inspections, etc. shall be parked within the respective car parking areas or subject to written agreement of the Superintendent.

6.2 Access to private property

Where access to private property is required do not enter the private property unless:
• The Superintendent has given notice of the requirement to access the private property;
• The person proposing to enter onto private property has been appointed by the Principal as an authorised person (Local Government Worker) in accordance with the Local Government Act 2009 (Qld); and
• Entry is necessary in order to undertake work on that property.

Make every effort to minimise obstruction to private property. Vehicular access may only be denied for a maximum of 12 hours. Provide temporary vehicular and pedestrian access if permanent access cannot be provided within this time.

Maintain safe and reasonable personal access to properties at all times.
Further to Clause 29.3A of the General Conditions of Contract, the following information must be recorded:

- The Act applying to the instrument of appointment.
- The commencement date of the appointment.
- The expiry date of the appointment.
- The date the training was completed.
- Reference number for issued documents.
- The issue date of the identification card.
- The expiry date of the identification card.
- The date all documents and identification cards returned to the Principal.

6.3 Contractor’s site area

Access onto and around the Site, and the use of the Site, for temporary works and construction plant, including working and storage areas, locations of offices, workshops, sheds, roads access routes, parking and the like, must be restricted to those areas shown on any drawings or approved by the Superintendent and subject to such conditions as are stated in the Contract or imposed by the Superintendent.

6.4 Temporary services

Provide all temporary services required to undertake the Works.

6.4.1 Temporary power supply

Upon request to the Superintendent and where available, the Principal may provide a limited power supply from existing facilities, with the cost of providing this power appointed to the account of the Contractor. Provide fused and earth leakage protected distribution board as the interface to the Principal’s power supply and the board will be installed by the Principal’s electricians who will establish the current load. Any costs associated with the installation and later disconnection of the board by the Principal’s electricians will be to the Contractor’s account. The provision of this power is not guaranteed. Any inadequacy in supply e.g. interruptions, voltage, current does not relieve the Contractor of their responsibilities under this Contract.

Where portable power generation devices are used, such devices will be fitted with emission control devices to comply with local and/or statutory regulations and Legislative Requirements. The permitted times of use of such equipment may also be restricted by local and/or statutory regulations, comply with all such regulations and Statutory Requirements.

6.4.2 Temporary water supply

If available, water for construction purposes may be drawn from the existing metered supply. At the discretion of the Superintendent, if water is being wasted or more water than is necessary is being used, the Superintendent may curtail supply or impose a water charge.

If there is a water reticulation system, but no existing metered connection, arrange for a metered standpipe from the Principal. Contact the Customer Service Centre on 1300 000 928 for information on security deposits, hire charges, cost of water, payment arrangements, and to arrange for standpipe(s) as required.

Pay for installation and use of water used from the Principal’s supply reticulation system for the Works at the current rate stipulated in the register of general charges. Be responsible for the adequacy of quality and flow quantities for the intended use.

Supply may be drawn from the existing supply at locations as / if indicated on any drawings. Otherwise determine the location and delivery method for water required for the Works direct from the Principal.

Should the water available from the Principal’s existing reticulation supply system not be at a suitable pressure and/or flow as required, any additional works to boost the pressure and/or flow will be at the Contractor’s expense.
If through drought, fire or any cause whatever, a delay occurs, due to cessation or temporary failure of the water supply, the Principal will not be held responsible in any way and the Contractor will have no right to compensation or to claim for damages on account of any loss which they may deem to be occasioned thereby.

Comply with requirements of the Principal for taking of water from fire hydrants.

Recycled water is available within nominated treatment plant sites for all uses, except for potable or ancillary applications. Use of recycled water is therefore the preferred source of water for pressure testing of mains, provided the Contractor has assessed and considered that the quality of the recycled water is acceptable and suitable for its proposed use and application. Use of recycled water must comply in all regards with statutory requirements and in accordance with policies and procedures of the Principal.

Disposal of waste recycled water used for pressure testing must be in accordance with the Environment Management Plan.

Use of water from private residential water services is not permitted, irrespective of whether approval is obtained for the use of such services.

7. Site Restoration

For the purpose of this Contract, restoration works are defined as restoration of all areas, surfaces, plantings and structures disturbed, damaged or removed during the Works to pre-existing conditions.

 Undertake a survey and compile a detailed report (including photographs) of pre-existing site conditions of fences, landscaping, buildings etc. before commencing Works. The survey should include, but not be limited to, the following:

- Each property abutting the area of works.
- Nearby roadway, kerbs, gutters and footpaths.
- Nearby existing vegetation.
- Road crossings.
- All nearby existing structures.

The information included in this survey or other relevant information shall be utilised by the Superintendent in assessing the standard of restoration required. Where sufficient information has not been recorded by the Contractor to allow the Superintendent to determine the pre-existing conditions, the Contractor shall be held responsible for full restoration costs as claimed by the affected parties.

The Contractor, to the satisfaction of the Superintendent, shall undertake any remedial works, which are necessary to return the site to its original condition.

It is a requirement of this Contract for the Contractor to fully restore any roadways, road shoulders and footpath verges disturbed during construction to a condition at least equal to their original condition, in accordance with Council’s Standard Specifications – refer to Clause 25 Standard Specifications.

8. Notification of Residents, Local Businesses, Property Occupiers and Authorities

Liaise with the Superintendent in relation to the following public relations prior to commencement of Request for Works and / or prior to commencement of any specific activities likely to involve a disruption of service to the Principal’s customers.

8.1 Notification of Proposed Works or Expected Disruption to Service

Liaise with the Superintendent in relation to public relations prior to commencement of the Works and prior to commencement of any specific activities likely to involve a disruption of service to the Principal’s customers or the general public.
All residents and businesses in the vicinity of the Works who will be, or have the potential to be, affected by the Works, including being affected by the noise of the Works, must be notified by a ‘Notification of Proposed Works Notice’.

Proposed Works Notices are required to be distributed not less than seven business days prior to the proposed commencement of the Works referred to within the notice.

Where the Superintendent permits works to be undertaken involving a disruption to the provision of a service to the Principal’s customers or the general public, all residents and businesses who will be affected by the works must be notified by a shutdown notice’.

Details of the Works and format of the proposed shutdown notice must be forwarded in writing to the Superintendent no less than 14 Business days in advance of the intended date for commencement of the proposed Works, or 7 business days in advance of the intended date for the commencement of the expected disruption to service. The draft notice must as a minimum include details of the following:

- Description of Work to be done.
- Expected date(s) and times for the Work to be undertaken.
- Details of service expected to be disrupted, and duration of disruption.
- Access requirements to site if interfacing with public or private areas.
- Contractor’s contact name and telephone number.

The proposed shutdown notice must be finalised no less than 10 Business days prior to the commencement of the relevant Work, together with agreement on the distribution area, number of copies and proposed distribution date, prior to delivery of the notice.

The Superintendent will arrange for the production of letters on the Principal’s letterhead and will advise when the copies of the notice are available for pick-up, at least three days prior to the proposed notice distribution date.

Shutdown notices are required to be distributed not less than 48 hours prior to the proposed commencement of the Works referred to within the notice.

Within 24 hours of the completion of the distribution of the notices submit to the Superintendent, a statement confirming:

- The date and time of completion of the distribution of the notice.
- The date or dates upon which the notices were distributed.
- The number of notices issued and distribution area.
- Any issues arising during the process of the distribution of notices and processes proposed to improve distribution of any future notices.

The Contractor is not permitted to amend any details within the notice without the prior agreement of the Superintendent. Should the proposed Works be rescheduled for any reason by either party a new notice will be required and the process and associated timelines as described above will recommence. The Contractor shall only be entitled to an extension of time or associated direct or indirect costs as a variation to the contract if the proposed Works are rescheduled by the Principal.

8.2 Interruption and/or Diversion Services

Aspects of Works may impact on the Principal’s ability to maintain required levels of service to the public and may impact adversely in respect to critical issues such as safety, environmental or other outcomes not acceptable to the Principal if not addressed adequately or if not appropriately coordinated with the Principal’s resources where they also need to be involved.

Details of draft proposals for Works requiring interruptions and/or diversions of services are to be provided to the Superintendent for information and coordination aspects to be addressed. Until the Principal advises that it
has no objection to the proposal, then this is a nominated Hold Point for the relevant Works. Works then require the Superintendent’s Direction to proceed. Note that it is the intention that in this process, the outcome of the proposal is defined by the Principal, and the responsibility for delivery, in areas of the site under the control of the Contractor, remains with the Contractor.

The following details as a minimum are to be provided by the Contactor for the specified Works:

- A narrative of the work and how the work shall be carried out (and accompanied by a Gantt Chart Program depicting activity durations, activity dependencies and the critical path) with nominated staff roles and responsibilities (including any Principal roles), critical times nominated and a schedule of labour, materials, plant and sundries for each activity along with evidence of any possible preliminary work (eg. location and levels for existing services, materials sourcing, prefabrication etc.) in order to minimise service interruptions to less than five hours.
- Proposals for community consultation arrangements for Contractor and Principal.
- Evidence of the competence and experience of the nominated key Contractor’s staff and/or subcontractors proposed.
- Contingency Plans based on risk assessment including relevant standby resources.
- Nomination of Principal / Contractor as having possession of site or nominated parts of site where the Principal is also involved in site work (for clarification of Safety and Environmental liability issues).

8.3 Dilapidation survey

Undertake a dilapidation survey before commencing Works on site to establish the existing condition of the Site.

Take a sufficient number of colour photographic records to document all potentially affected areas. Ensure that the photographic records identify the location of the photograph relative to identifiable Site features. The photographs must contain some reference measure to allow the scale of the feature to be determined. Include photographs with the dilapidation report.

Record all observed defects, deformations, out of plumb elements, bows, distortions, damage and the like which are not readily captured / identifiable in photographs. Provide also any other notes considered appropriate to assist in the identification of the defect.

Photographs must be taken using a digital camera having a minimum resolution of 12 megapixels. Ensure that the time and date stamps for images and files are set to the correct time and date. Save all photographs at the original resolution (un-compressed) in JPEG format.

The dilapidation survey must be undertaken by a Registered Surveyor under the provisions of the Surveyors Act 2003 (Qld).

8.4 Encroachments

Do not demolish or damage adjoining property. Should the Works reveal encroachments of adjoining property on to the site or encroachments of existing site structures on to adjoining property, and should such encroachments not be referred to in the Contract, obtain instructions from the Superintendent immediately.

8.5 Continued operation of existing facilities

Ensure that minimal disruption to existing services and to the operation of the Site occurs. Liaise with the Superintendent to be proactive in avoiding disruption, and reactive in attending to conflict situations.

Where public utilities or other Principal’s facilities, whether overhead, at the surface, underground or in conduits, exist at the site, or in the vicinity of the site, take all care necessary to protect such facilities from damage. In the case of any damage occurring to such facilities as a result of the work completed by the Contractor, the Contractor must report the matter immediately to the Department, Public Authority or Company concerned and to the Superintendent. The cost of any necessary repairs and/or renewals will not be borne by the Principal.

Do not lop the branches of any trees or shrubs and damage any trees of significance, either located on a public road, public area or privately owned land except with the approval of the Superintendent and then only in
accordance with Gold Coast City Council Local Laws and any further conditions as stipulated by the Superintendent.

9. **Supervision by Contractor**

The Contractor shall provide a full time competent and experienced Technical Site Representative (Supervisor) and Project Manager, for the duration of the Contract. Full details, including name and contact telephone numbers (working hours, after hours and mobile phone), of the proposed Supervisor and Project Manager shall be supplied in writing to the Superintendent prior to commencement of the Contract.

The Supervisor and Project Manager’s mobile telephone shall be equipped with a message service which the is checked and cleared hourly. Respond to all calls on an hourly basis and urgent calls immediately upon receipt.

10. **Materials Supplied by the Contractor**

Unless otherwise specified, the Contractor is to supply all materials necessary to undertake and complete the Works. Where supplementary materials or hire of specialist services are required to undertake the work then a copy of the invoice or receipt is to be provided with the claim as evidence of the supply of these specialist services or materials.

11. **Temporary Diversion of Flows**

All temporary diversions of flows and shutdowns will be undertaken by the Principal or representative prior to the commencement of Works.

12. **Disposal of Contaminants and/or Rubbish/Spoil**

Be responsible for the disposal of the following:

- Solid, liquid and gaseous contaminants.
- Rubbish / spoil in accordance with all statutory and contractual requirements.

All costs associated with the disposal of contaminants and / or rubbish / spoil shall be borne by the Contractor. Contaminated spoil will be directed to the local Councils holding facilities for treatment prior to disposal. All spoil / rubbish disposals shall be disposed of in accordance with all statutory and contractual requirements.

13. **Proprietary Items**

A proprietary item is any item identified by graphic representation on any drawings, or by naming one or more of the following: manufacturer, supplier, installer, trade name, brand name, catalogue or reference number and the like.

The identification of a proprietary item must not necessarily imply exclusive preference for the item so identified, but must be deemed to indicate the required properties of the item. An alternative item with the required properties may be considered for acceptance at the Superintendent's discretion.

When submitting an alternative item for approval, submit sufficient information to permit evaluation of the proposed alternatives, including evidence that the performance is equal to or greater than that specified. If requested, obtain and submit reports on relevant tests by an independent testing authority. State whether the use of the alternative will require alteration to any other part of the Works.

14. **Examination and Testing**

No claim for delay will arise from the giving of insufficient or unreasonably short notice in respect of inspections, examinations and testing. The minimum notice considered to be reasonable by the Superintendent to undertake an inspection is two Business days.
14.1 Quality Assurance

Maintain a documented Quality Assurance System (QAS) for the duration of the Contract to ensure that prescribed quality outcomes are achieved.

The QAS must include Inspection and Test Plan (ITP) and procedures and identify Hold Points to meet the minimum requirements of the deliverables specified in Clause 2 Scope of Works. Modify the QAS to meet any changes to the Works.

Notify the Superintendent prior to testing a minimum of 24hrs or as advised by the Superintendent. Test results must be submitted within 14 Business days following the date of testing. In the event that test results indicate non-compliance with quality targets, notification of non-compliances are to be notified to the Superintendent within 24 hours of the time of the test results being available.

Maintain a QAS for the duration of the contract and ensure that appropriate site conditions (both on-site and off-site as applicable) and plant requirements are provided and maintained to ensure that prescribed quality outcomes are achieved throughout the contract period. The Principal prefers that this QAS be in accordance with AS/NZS ISO 9001.

Be responsible for the quality of all products and services supplied under the Contract, and provide all necessary facilities and resources to perform the inspection and tests required to achieve the specified quality.

All inspection and test procedures must be submitted to the Superintendent within 21 calendar days of the date of the Acceptance of Offer letter, or not less than 14 calendar days prior to any proposed testing whichever is the earlier, to allow the Superintendent to comment. Any additional testing required will, as a result of the Superintendent’s comments, be reflected in the testing and at no additional cost to the Principal.

- Placement of steel reinforcement.
- Placement and securing of formwork and/or false work.
- Pouring of concrete and/or placement of render.
- Preparation of bedding for pipe laying.
- Construction of thrust blocks including preparation of surfaces for bearing area.
- Installation of dewatering systems.
- Installation of valves and fittings.
- Surface preparation for coating systems.
- Application of primer coats, each subsequent layer (as appropriate) and upon completion of any applied coating system.
- Completion of fixing of reinforcement for structures/switchboard plinths.

For the purposes of this Contract, inspection, testing and commissioning must include, but not be limited to, the satisfactory completion of the following activities:

- Visual inspections and physical testing (e.g. paint thickness testing) of all materials and workmanship, during the execution of the works and at their completion, to ensure that the works are to the specified standards and are ‘fit for purpose’.
- Submission of final drawings and/or information defined in as constructed.

Tests undertaken throughout the duration of the Contract must be submitted to the Superintendent not more than two working days following the date of testing. In the event that test results indicate non-compliance with quality targets, notification of non-compliances are to be notified to the Superintendent within not more than 24 hours of the time of the test.

Prepare and submit all necessary documentation and records as verification that installation, testing and commissioning has been successfully completed. All of the above requirements are to be satisfied before the issue of the Certificate of Practical Completion by the Superintendent for any portion of the Works.
In the event that any part of the works performed under this Contract fail to meet the specified product or performance requirements, carry out all necessary remedial works at no further cost.

Give sufficient notice to the Superintendent to enable any materials or workmanship to be examined prior to incorporation into the finalised works and must give sufficient notice to the Superintendent to enable sighting of any test results required by the Contract or ordering of any test results prior to incorporation of materials or workmanship into the finalised works.

Unless otherwise specified, all testing to be carried out must be performed by an approved member of the National Association of Testing Authorities.

In the event that any part of the works performed under this contract are found to be defective following the issue of a Certificate of Practical Completion and during the 12 month Warranty Period, carry out all necessary remedial works at no further cost. Following completion of the remedial works all works are subject to a 12 month Warranty Period from the date of completion of the remedial works.

14.2 Testing

Any sampling and testing required to be undertaken by an independent testing authority must be carried out by an authority registered with the National Association of Testing Authorities to perform the specified sampling and testing.

15. Claim for Payment

Submit payment claims for payment at the completion of the Request for Works. This request may be as a Lump Sum Fixed Payment or as a Milestone Sum Fixed Payment, or unless otherwise specified. Payment claims are valid only if lodged with the Superintendent and accompanied by reports or ancillary records as evidence of the Works undertaken and completed. Minimum reporting requirements required for each payment claim are:

- Signed and witnessed Statutory Declaration – Annexure to the Australian Standard General Conditions of Contract.
- Photographic evidence of works completed demonstrating original site, site establishment, any incidents, and site restoration and rectification.
- Copy of the Job Site Safety Assessments completed prior to the works commencing.
- Sighting or supply of progressive mud map as-constructed or digital AutoCAD as-constructed drawings and other relative documentation as required.

The Superintendent cannot approve payment unless all minimum requirements have been met.

15.1 Risk Assessments and Work Method Statements

Submit the completed risk assessments and / or work method statements along with the completed Request for Works or as required by the Superintendent.

These documents form an integral part of the documentation for verification of your payment claim, and must be received before payment will be made.

15.2 Certificates, Compliance Forms, Electrical Testing and Commissioning Checklist

Provide all applicable statutory Certification and Compliance forms such as Certificate of Testing and Compliance / Testing and Safety and / or Electrical Testing and Commissioning Certification and any other certification as required.

Submit these documents along with the completed Work Request as required by the Superintendent.
15.3 Measurement and Payment

Supply labour, plant, equipment and materials to carry out the described Works. During the Contract Term, the Principal may issue a Request for Works directly to a single Contractor, or the Principal may invite one or more Contractors to Offer on a project or package of Works. The Principal may select the most advantageous Offer and issue a Request for Works.

Unless otherwise specified, travel time to and from Site is deemed to be included in the Invitation to Quote and the Schedule of Rates or Request for Works.

Although it is envisaged that works undertaken pursuant to this Contract will involve the preparation of a specific works project brief for which the Contractor shall be invited to submit a written quotation, smaller projects may be able to be undertaken pursuant to the rates provided in the Schedule of Rates.

Schedule of Rates Pay Items 1.001 to 14.003 – Hourly Rates

Where requested pay items must include all costs associated with the hourly rate for the provision of a tradesperson, labourer, 1\textsuperscript{st} year to 2\textsuperscript{nd} year apprentice, 3\textsuperscript{rd} year to 4\textsuperscript{th} year apprentice. The costs must include, but not limited to, labour, transport to and from site, equipped tool truck, and expenses. The rates are inclusive of the nominated number of people requiring a competent and experienced Supervisor and members including appropriate work vehicle and construction tools, rates also include attendance at site, markups, profit, travel to and from site, call outs and anything else in order to perform the Works.

Schedule of Rates Pay Items 15.001 to 16.005 – Additional for Plant

Where requested supply all plant and equipment, with competent operator/s, necessary to complete the Works. Any additional hired plant, equipment and resources as approved by the Superintendent, outside of the awarded Schedule of Rates, is to be claimed at cost plus an additional 10\% mark-up. Any additional plant, equipment and resources outside of the awarded rates that is owned by the Contractor is to be claimed at day rates and will not incur an additional 10\% mark-up. Equipment and services may be required, but not limited to, services associated with excavation for site investigation purposes, or levelling or preparation of sites in readiness for ancillary construction activities.

Schedule of Rates Pay Items 17.001 to 18.003 – Materials

Where requested pay items are for the provision of further materials.

16. Excavation

Take all necessary precautions and review work practises to ensure that all excavations on the Site are undertaken in a safe and appropriate manner. Ensure that any excavation undertaken does not affect adjoining structures or services. Be responsible for the repair of any damage caused as a result of any excavation or backfilling performed by the Contractor.

17. Service Location

Take full responsibility for locating and avoiding services.

Where public utilities or other Principal’s services, whether overhead, at the surface, underground or in conduits, exist at the site, or in the vicinity of the site, take all care necessary to protect such services from damage. In the case of any damage occurring to such services as a result of the Works, report the matter immediately to the Department, Public Authority or Company concerned and to the Superintendent. The cost of any necessary repairs and / or renewals will be borne by the Contractor.

Do not lop branches of trees or shrubs or damage trees of significance, either located on a public road, public area or privately owned land except with the approval of the Superintendent. Vegetation management shall be undertaken in accordance with the requirements of the City of Gold Coast - Management of Trees on Council Controlled Land Policy, and any further conditions as stipulated by the Superintendent.

The following underground services must be considered prior to any excavation activity where relevant:

- Dial Before You Dig 1100.
Specifications - AS2124

- Power / Gas Energex 131253.
- Power (Council Properties) City of Gold Coast Council (07) 5581 7905.
- Sewer - Water and Waste (Private Properties) 1300 366 692.
- Telecommunication Telstra, Optus 1100.
- Stormwater Engineering Services – Mapping (07) 5581 6609.
- Water and Sewer (Council Properties) City of Gold Coast Council (07) 5581 7905.
- Tree Roots (avoid excavation within two metres of trees).

Service location maps are generally available from the relevant service provider. However, the accuracy of such maps is known to vary widely. Where potentially hazardous services are involved (eg. power or gas), soil above a suspected underground services should be excavated manually.

Record the ‘Dial Before You Dig’ enquiry number for each use of the service and include this with the Claims for Payment. Where appropriate engage an accredited Plant / Service Locator to determine the positions of the underground services, in the ground, prior to commencing excavations. Be responsible for providing the Plant / Service Locator full setting-out or reference details.

18. Existing Public Utilities

Consult with and manage all interfaces with service authorities controlling facilities in the vicinity of the Works. These authorities include but are not limited to communications, gas and power.

Prepare a Service Plan for the information of the Superintendent prior to commencing construction at any of the Works Sites. The Plan must include measures proposed by the Contractor to ensure the integrity of all services throughout the duration of the Works. Provide confirmation of level and location of all services prior to construction commencing within the work area to ensure protection.

In the case of any damage occurring to such utilities, the matter must be immediately reported to the Department, Public Authority or Company concerned and to the Superintendent. The cost of any necessary repairs and/or renewals will be borne entirely by the Contractor. Any PUP damaged or interfered with during the works is to be restored to its previous condition at the earliest possible opportunity, in accordance with the requirements of the respective asset owner. Failure to arrange/undertake such repairs as required by the asset owner, then the Superintendent may arrange for the repairs and the Superintendent has the right to deduct the costs incurred from monies or securities otherwise owing or held.

19. Control of Traffic

For any sites requiring traffic control on Principal controlled roadways, prepare and submit a traffic management plan to the Superintendent with a minimum of one weeks’ notice and in accordance with the MUTCD Part 3 ‘Works on Road’ for approval that will facilitate all associated Works detailed within the scope of Works for that particular site;

Where Works are to be undertaken within TMR controlled roadways and/or within the GCLRC, prepare a traffic management plan in accordance with TMR and GCLRC requirements and MUTCD Part 3 ‘Works on Road’ that will facilitate all associated Works and submit to the relevant departments. Approvals for the prepared traffic management plan must be gained before commencement of any Works. Consider and implement the current versions of these and any other relevant acts or regulations.

Provide for continuous operation of normal traffic along all public and private roads, walkways and pedestrian and vehicular access to properties included in the Request for Works or intersected by roads or drains included in the Request for Works.

Be entirely responsible for the control and safety of all pedestrian and vehicular traffic at or near the workplace.

All signs, barriers, lights and other devices used on site for the purpose of this clause shall, as a minimum standard, conform to the requirements of the current MUTCD. Engage licensed traffic controllers to manage and provide temporary traffic sign posting to ensure the safety of the Works, pedestrians and traffic.

Obtain and comply with the requirements of all permits and/or approvals necessary for traffic control.

Do not close or partially close any street or road without prior written approval of the Superintendent. Give the Superintendent a minimum of three weeks’ notice of any proposed closure or partial closure of any road.

### 19.1 Vehicle detection units

If Works are planned to be undertaken within areas that have numbered parking bays and/or parking sensors, contact the Superintendent immediately to confirm sensor placement and arrange for their removal and correct reinstallation. If the Contractor damages the parking sensors all reinstatement costs will be borne by the Contractor.

### 19.2 Signage

Principal supplied signage must be displayed on Site for the duration of the Works.

### 19.3 Pedestrian and traffic management

Provide pedestrian and traffic management for continuous operation of normal traffic along all public and private roads, walkways and pedestrian and vehicular access to properties or intersected by roads or drains included in the Request for Works. Be entirely responsible for the control and safety of all pedestrian and vehicular traffic at or near the Site.

All signs, barriers, lights and other devices used must, as a minimum, conform to the requirements of the current MUTCD.

Traffic Management Plans (TMP) and Traffic Guidance Schemes (TGS) must be prepared by persons with traffic management design qualification. TGS must be implemented by persons with traffic management implementation qualification. Submit a copy of all applications and approvals to the Superintendent prior to commencing work.

### 20. Work Health and Safety

#### 20.1 Safe Work

Ensure that all WHS requirements are met and all workers and subcontractors are supervised at all times while performing the Works. Ensure systems for monitoring of documented work practices (including subcontractors documented work practices) are implemented and maintained throughout the course of the Works. Prior to commencement of Works, ensure all workers (including workers employed by subcontractors) receive training in WHS and risk management specific to the Site and Works activities.

Provide the below documents to the Superintendent at any time during the course of the Works:

- SWMS and/or safe systems of work incorporating site specific workplace hazards risks and controls.
- Designers safety report identifying hazards incorporated in any aspect of any design, including temporary Works.
- WHS Management Plan relative to Site construction activities being undertaken, addressing at least the following aspects of the Works;
the names, positions and health and safety responsibilities of all persons whose positions or roles involve specific health and safety responsibilities;
o arrangements in place for managing any work health and safety incidents that occur at the Site;
o Site specific health and safety rules, and the arrangements for ensuring that all persons at the Site are informed of these rules;
o arrangements for the collection and any assessment, monitoring and review of SWMS;
o arrangements for consultation, cooperation and coordination;
o process for management of subcontractors;
o workers have appropriate licences and training;
o the safe use and storage of plant;
o the development of a construction project TMP;
o obtaining and providing essential services information;
o compliance with this Clause.

20.2 Communication, consultation and coordination

Before commencing Works and then on an ongoing basis, or in relation to any WHS matters arising out of or in connection with works under the Contract, consult, cooperate and coordinate with;

- The Superintendent.
- Workers (including workers employed by Subcontractors) who are or are likely to be directly affected.
- Relevant suppliers, contractors and other third parties.
- All other duty holders as defined within Work Health and Safety Law.

20.3 Principal inductions

Undertake Site specific inductions at commencement of the Works and/or prior to being granted access to the Site. The inductions inform of potential hazards that may be encountered when undertaking the Works and outline specific safety requirements when on the Site.

To perform work within a Water and Waste facility, mandatory completion of the online safety induction and possession of a current induction card is required before presenting to the facility, and include:

- General Induction to Gold Coast Water ([https://www.onlineinduction.com/goldcoast/](https://www.onlineinduction.com/goldcoast/))
- Induction to Itinerant and Construction Sites ([https://www.onlineinduction.com/goldcoast/](https://www.onlineinduction.com/goldcoast/))
- Induction to Reservoirs Pump Stations and Other Sites ([https://www.onlineinduction.com/goldcoast/](https://www.onlineinduction.com/goldcoast/))
- Induction to Treatment Plants ([https://www.onlineinduction.com/goldcoast/](https://www.onlineinduction.com/goldcoast/))
- Face to Face Induction to Waste and Recycling Centres (Nerang Office – Southport Nerang Road, Nerang)
- Site Specific Induction (Various Sites)

The Contractor and any subcontractors must self-register and create their own passwords to complete the required online inductions.

Failure to produce a current induction card will result in removal from and/or loss of access to a Water and Waste facility.

Face to Face Inductions to Waste and Recycling Centres occur every working Thursday at 8.30am.

20.4 High Risk Construction Work

The high risk construction activities identified by the Principal are listed below. This assessment is not exhaustive and excludes activities generated by individual work process. Prepare SWMS for all high risk construction activities incorporating Site specific workplace hazards risks and controls prior to the commencement of the Works. Ensure SWMS address all relevant aspects of the activities and all high risk construction work is carried out in accordance with the SWMS.
• Involves a risk of a person falling more than 2m.
• Involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure.
• Involves, or is likely to involve, the disturbance of asbestos.
• Involves structural alterations or repairs that require temporary support to prevent collapse.
• Is carried out in or near a confined space.
• Is carried out in or near a shaft or trench with an excavated depth greater than 1.5m; or a tunnel.
• Is carried out on or near pressurised gas distribution mains or piping.
• Is carried out on or near chemical, fuel or refrigerant lines.
• Is carried out on or near energised electrical installations or services.
• Is carried out in an area that may have a contaminated or flammable atmosphere.
• Involves tilt-up or precast concrete.
• Is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians.
• Is carried out in an area at a workplace in which there is any movement of powered mobile plant.
• Is carried out in an area in which there are artificial extremes of temperature.
• Is carried out in or near water or other liquid that involves a risk of drowning.

20.5 Known Hazards

The known hazards and risks at / or in the vicinity of the Site identified by the Principal are listed below. Prior to the commencement of the Works identify all hazards and risks that are present.

The Principal advises that maintenance and operational access is required to all new and existing infrastructure and further discloses, for the purpose of design, that the purpose(s) of the proposed infrastructure are:

• Treatment and / or transportation of sewerage or recycled water.
• Transportation of potable water.
• Dewatering of sludge.
• Storage of potable water (Reservoir).

The Principal further discloses, for the purpose of design that the following hazards and risks shall be taken into account during the design process:

• Difficult access off major and public roadways.
• Presence of biological contaminants.
• Existing facilities to remain in operation at all times.
• Restricted access to the Principal’s properties and associated works sites.
• There may be physical injury and microbiological contamination of persons coming into contact with the sewerage if the works are not properly managed or controlled by the Contractor on site, or if personal hygiene procedures are not followed.
• There may be electric shock / burn injuries if the Contractor on site does not observe the organisational / statutory requirements for the works.
• There may be manual handling injuries to the Contractor’s employees if the Contractor on site does not comply with the Queensland Workplace Health & Safety Act and any specific manufacturer’s installation procedures are not followed.
• There may be risk of asphyxiation or other serious injuries if the Contractor on site does not comply with ‘Safe Entry to Confined Spaces’ Regulations and adhere to standard operating procedures.
• There may be chemicals, gases, heat and dangers working near and / or adjacent to on site structures that may cause injury / harm to the contractor’s employees.
• A building permit may be required from the City of Gold Coast.
- The construction site may be contaminated and it is the Contractors responsibility to obtain such information.

- The Principal has undertaken public consultation for this project and details can be sought from the Principal.

- The Contract works are located in an identified slip risk area and specific safety precautions must be undertaken.

- The physical working environment, for example the potential for electric shock, immersion or engulfment, fire or explosion, slips, trips and falls, people being struck by moving plant, exposure to noise, heat, cold, vibration, radiation, static electricity or a contaminated atmosphere.

- The sites of work may comprise operating Landfills, Waste Recycling Centres, Reservoirs, Treatment Plants and/or Pump Stations.

- Site Operations will take priority over maintenance activities associated with this Contract and as such, some points may be unavailable for survey.

- Certain plant and equipment can only run subject to coastal tide conditions.

- Certain plant and equipment can only run subject to system and pump station load.

- Necessary portions of the sites will be relinquished for the Contractors work at mutually agreed times between the Contractor, Superintendent and/or the Plant Supervisor.

- All works are to be carried out with the minimum disruption to plant operation or access.

- All Sewage Treatment Plants are only accessible during the hours of 0700 to 1530 Monday to Friday.

- The Sewage Treatment Plant Supervisors are to be informed when the Contractor's tradesmen are on site.

- The Contractor's tradesmen are to report and sign in on arrival on site and report and sign out when leaving.

- The Contractors tradesmen are to respond to any warning or evacuation procedures relevant to that site.

- The Sewage Treatment Plant Supervisors are to be kept informed of the job status.

- The Sewage Treatment Plant Supervisors are to be warned of any activity that may cause interference to the operation of the Plant of its equipment.

- Before any work may commence, the Superintendent is to be notified that access to site is required. The minimum period of notification may vary from site to site, however if not stated elsewhere the minimum notification period shall be five working days.

- Access gates, in particular those at Sewage Treatment Plants, may be linked to site security systems. On arrival at a site gate, the visiting Contractor shall press the 'Plant Operators Mobile' button on the communications box.

- Before any work may commence on a site, the Contractor's field staff are to be inducted for the site.

- All works are to be programmed to ensure minimal disruption to the plant and pump station operation and power supply to each site.

The Principal has disclosed further details in the Schedules at the Workplace Health & Safety Schedule and at the Environmental Protection Schedule.

- Animals including insects, snakes and spiders that bite or sting.

- Extremes of heat, or cold (extreme in temperature caused by operating machinery or artificial environments such as cold rooms).

- UV radiation exposure longer than 15 minutes.

- The assets may overflow and surcharge causing safety risks and environmental damage if the interference / isolation is not properly managed and controlled by the Contractor on site.
• Serious personal injuries may transpire if the Contractor on site does not install the equipment in accordance with the specific manufacturer’s installation procedures.

• There may be physical injury and microbiological contamination of persons coming into contact with the wastewater if the works are not properly managed or controlled by the Contractor on site, or if personal hygiene procedures are not followed.

• There may be electric shock / burn injuries if the Contractor on site does not observe the organisational / statutory requirements for the works.

• The Contract Works are located in an area identified where ground water in soils of low stability may be present and specific safety precautions must be undertaken.

• Site is located along roadside with reasonably heavy traffic, traffic management required.

• Presence of biological contaminants.

• Pumping stations to remain in operation at all times.

• Electrical and / or mechanical services safety.

• Working with live utilities.

• 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 eg. virus, bacteria. Examples – HIV, Hepatitis (A, B and C), Avian Influenza (Bird Flu), tetanus, typhoid fever, Q fever, Hendra Virus, dermatitis etc.).

• Demolition work to be undertaken by a registered demolition contractor only.

• Fall from heights (by a person from one level to another that is reasonably likely to cause injury to the person or any other person).

• Falling, flying objects or debris (eg. demolition work or high rise construction).

• Hazardous atmospheres (eg. land fill sites and confined spaces where gases, vapours or mist may be hazardous).

• Use, handling and storage of hazardous chemical / dangerous goods.

• Inadequate lighting (including work completed at night as well as inadequate task lighting, inadequate access and stair lighting and inadequate emergency lighting).

• Excessive noise for long periods (eg. piledriver and jackhammer).

• Operation of high risk plant and equipment (eg. air conditioner, cooling towers, lifts).

• Presence of hazardous airborne contaminants (eg. gases and vapours or dusts like lead, silica or pesticides).

• Restricted walkways and working platforms (temporary structure specifically erected to support access or working platforms).

• Rigging work (eg. structural steel erection, hoists, pre-cast concrete members of a structure and safety nets and static lines, mast climbing work platforms, perimeter safety screens and shutters).

• Scaffolding work including modular or pre-fabricated scaffolds, barrow ramps and sloping platforms.

• Slips, trips and falls (eg. unstable, wet, slippery surfaces, excavation, exposed reo bars and posts / pegs).

• The presence of asbestos.

• Tunnelling work.

• Under ground or overhead utilities (gas, water, electricity etc.).

• Use of explosives or explosive tools (eg. explosive charged power tools used to fasten construction materials to brick, steel or concrete).

• Violence and aggression (verbal / physical abuse from members of the general public).

• Work completed outside of normal operational hours (work extending or scheduled outside core business hours that may lead to fatigue).
• Working in excavation or trenching.
• Work involving structural alterations or repairs that require temporary support to prevent collapse.
• Work on or near chemical, fuel or refrigerant lines.
• Working near water or liquid that poses a risk of drowning.
• Work in remote or isolated areas.
• Unskilled labour (use of day labour).
• It is the Contractors responsibility to ascertain if site contamination exists.
• Electrical and / or mechanical services safety.
• The assets may overflow and surcharge if the interference / isolation is not managed and controlled in accordance with the Principals requirements.
• Potential of asphyxiation or other serious injuries due to the Works requiring entry to confined spaces.
• The Works are located in an area identified where ground water in soils of low stability are present.
• The potable water main nominated for cut in has been identified as a material containing AC.

20.6 Personal Protective Equipment (PPE)

Ensure the following minimum PPE is provided and worn at all times:

• Long sleeved high visibility shirt, or a long sleeved shirt with a high visibility vest.
• Full length trousers.
• Broad brimmed, bucket or legionaries style hat and / or safety helmet with broad brim.
• Steel capped work boots.

Inclusive of the above, during low light and night time works, fluorescent and/or reflective PPE must also be worn. All PPE must meet minimum standards nominated within applicable Legislative Requirements.

Ensure controls are implemented utilising a risk based approach for all work activities and where identified, additional/alternate PPE is provided and worn as required.

In addition to the above minimum PPE, when working within any Water and Waste operational and construction Site the following PPE will also be a requirement of Works:

• Safety helmet with broad brim.
• Ankle length lace up or zip up safety boots.
• Safety glasses.
• Gloves when conducting manual tasks.

The minimum WHS standard must be maintained at all times. Diligent adherence is required to all legislative WHS requirements for all persons on all work sites at all times. Consider UV exposure as a hazard and propose suitable controls, which at a minimum, will include PPE standards such as broad brimmed hats, long sleeves and trousers for any worker that is exposed to UV for greater that 15 minutes, unless a risk assessment exemption is approved.

20.7 Asbestos and other hazardous material

Notwithstanding any other provisions of this document regarding asbestos and other hazardous material, if material that might contain asbestos or other hazardous substances is discovered, the Contractor must:

• In the event asbestos material is encountered, cease work and notify the Superintendent.
• Comply with all applicable obligations and restrictions imposed by any applicable Legislative Requirements.
• In accordance with the requirements of the Work Health and Safety Act, an asbestos register has been made available for contractors to view, by contacting the Superintendent.
20.8 Alcohol and Other Drugs

The Contractor’s workers (including workers employed by subcontractors), whilst engaged in the Works, must not be under the influence of any alcohol and / or other drugs (AOD).

All workers must maintain a Breath Alcohol Concentration (BrAC) reading of 0.000% and in respect of drugs including but not limited to opiates, THC, cocaine, amphetamine and benzodiazepines, maintain levels not in excess of those prescribed by AS 4760 - Procedure for specimen collection and the detection and quantification of drugs in oral fluid.

The Principal may arrange for random AOD testing at any time. The Contractors workers must participate in testing through a random selection process.

The Contractor must ensure:

- All workers are aware that they must participate in a random AOD test when requested.
- All workers comply and participate in the random AOD test.
- All workers cease work and leave the site if:
  - they refuse to submit a sample for testing purposes;
  - a non-negative drug test result is returned; or
  - a positive alcohol test is returned.

A worker may only return to the Site subject to the Contractor providing evidence of a confirmed negative test result.

20.9 Reporting and Incident Investigation

Provide WHS performance reports specific to the Site and Works in accordance with Clause 22 of this document or as otherwise directed.

Notify the Superintendent immediately after becoming aware of any of the following:

- A failure to comply with any requirement of this Clause.
- Any accident, incident or near-miss incident.

The initial notification may be verbal or in writing, and must contain the full details of:

- The location and nature of the event.
- The nature and extent of any harm and any other impacts that have occurred or may occur.
- How the Contractor is managing the event.
- Any other information required by any Regulatory Authority.

If the initial notification is verbal, it must be followed by written notification as soon as practicable.

Further to the requirement of the WHS Management plan, investigate the root cause of the accident, incident or near-hit incident as soon as practical and provide the results, any learning or recommendations and any progress reports on corrective actions taken to the Superintendent.

The Principal may by notice in writing to the Contractor, participate in any investigation or review the Contractor undertakes.

Failure to comply with this Clause, the Principal may by notice in writing to the Contractor conduct its own investigation into any accident or incident in relation to the Works.
21. Environmental Management

21.1 Environmental Management Plan (EMP)

Be considered independent, and not a servant or agent of the Principal, for the purposes of complying with the Environmental Protection Act 1994 (Qld).

Engage a suitably qualified environmental consultant to prepare an EMP aligned with Site conditions, Works and work methodologies, and submit in accordance with Clause 14H and 27.1(d) of the General Conditions of Contract and when any amendments are made and at any time during the course of the Works.

The EMP must demonstrate that all reasonable and practicable measures have been taken to prevent or minimise environmental harm during the course of the Contract in compliance with the Environmental Protection Act 1994 and other applicable environmental matters.

Ensure all Work complies with the EMP. The EMP must include as a minimum the following:
- Company structure and responsibility for specific actions.
- Assignment of responsibility for environmental controls.
- Communication and reporting.
- Arrangements for consultation, cooperation and coordination.
- Compliance with the requirements of all environmental laws.
- Environmental commitments.
- Environmental training plan.
- Appropriate licences and training including site induction training for environmental aspects of the works.
- Incorporate the Principal’s conditions of all approvals, licences and permits.
- Process for management of subcontractors.
- Site-specific environmental requirements.
- Identification of environmental issues and potential impacts.
- Locations of environmental controls and environmentally sensitive areas.
- Control measures to minimise likelihood of environmental harm.
- Contingency plans and emergency procedures including response time.
- Managing the risks posed by fire ants.
- Manage Acid Sulphate Soil.
- Treatment of Acid Sulphate Soil (if found).
- Monitoring containment releases.
- Arrangements for managing incidents.
- Corrective actions.
- Periodic review of environmental performance.
- Record keeping and environmental auditing for continual improvement.
- Maintain an incident register for non-compliance reporting and provide a copy to the Superintendent following any significant incidents during the Works.

In addition to the above, provide details of potential environmental issues, impacts and associated control measures for implementation for issues including but not limited to:
- Noise control and monitoring.
- Minimise disruption to flora and avoid spread of any noxious weeds and disruption to fauna habitat.
- Conservation of protected species.
- Identify fauna species and arrange relocation.
- Prepare and implement a species management plan as required.
- Engage a suitably qualified fauna spotter during clearing.
- Relocate fauna during clearing of vegetation.
- Engage an ecological consultant to undertake appropriate assessment.
- Restore habitat following Works.
- Manage collect and dispose all waste from the Works including regulated waste.
- Controlled activities and waste management.
- Manage air quality emissions from all equipment within legal limits.
• Manage materials handling and store dangerous goods off Site and handle safely on site.
• Manage erosion and sediment control in accordance with the International Erosion Control Association best practice guidelines.
• Prevent erosion by using appropriate erosion and sediment control devices.
• Undertake works in such a way to prevent unreasonable amounts of dust and other airborne matter impacting on adjacent properties.
• Control soil erosion and prevent sediment in run off.
• Contain and treat any contamination of run off.
• Assessment of Acid Sulphate Soil.
• Disposal of Acid Sulphate Soil.
• Preservation of trees and other habitats.
• Impacts to plant communities.
• Impacts to individual native plants.
• Gold Coast City vegetation assets.
• Disturbance to stream bank and bed as a result of rock installation (and reclamation) for access / working platforms.
• Disturbance to the stream bank and bed resulting in disturbance to aquatic fauna through short term changes to hydrology (e.g. turbidity of water).
• Conservation of heritage values.
• Preservation of visual amenity.
• Manage record and report the prescribed information about the trackable waste in accordance with the requirements of the Environmental Protection (Waste Management) Regulation 2000.
• Building waterway barriers.
• Riverine Protection.
• Catchment Management.
• National Environmental Significant Sites.

21.2 Environmental Management - water based impacts

21.2.1 Working in Tidal Areas

• Provide details of any bund proposed to allow Works within the tidal range, including material types. Bunding Works must comply with all Legislative Requirements.
• Ensure full consideration has been given to the impact of wave actions from vessels passing the Site.
• Ensure full consideration has been given to the behaviour of foundation materials in excavations within such zones.
• Ensure any floating equipment may operate adequately and legally within the confines of the adjacent harbour.
• Coordinate and program the Works making allowance for the actions of the tides.
• Make allowance for removal of all materials from the Site not incorporated in the Works or shown on the drawings.
• Ensure consideration has been given to the diversion or treatment of stormwater runoff which may enter the Site from the existing stormwater flow paths.
• Ensure consideration has been given to prevention of failure or critical loading situations to bunds and / or retained works from all tide levels within the Contract which may be determined from tide charts. The Contractor is not required to consider storm surge actions above the absolute charted tide levels.

Reference Charts
Determine all tide levels from the most recent publication of 'The Official Tide Tables and Boating Safety Guide' by TMR (Maritime Safety Queensland). All heights and levels in discussion and correspondence are to be referred to Australian Height Datum.
21.3 Environmentally Relevant Activity

Some of the Work may be an ‘environmentally relevant activity’ under the Environmental Protection Act 1994 (Qld), and is required to be undertaken under an environmental licence. Information about acquiring an environmental licence is available from the Department of Environment and Heritage Protection. Obtain an environmental licence to undertake these items prior to commencement of Work.

No work will commence until evidence of the appropriate environmental licence is presented to the Principal.

21.4 Red Fire Ants

Moving restricted items from or within fire ant restricted areas must be in accordance with all legislative requirements. This includes managing the risks of spreading fire ants. Refer to the Department of Agriculture and Fisheries for more information. [https://www.daf.qld.gov.au/business-priorities/plants/weeds-pest-animals-ants/invasive-ants/fire-ants](https://www.daf.qld.gov.au/business-priorities/plants/weeds-pest-animals-ants/invasive-ants/fire-ants)

21.5 Transport of materials

Convey soils, earth, sand, loose debris and similar loose materials to or from the Site in a manner that will prevent dropping of materials. Cover all loads to ensure no loss of load or dust. Ensure that the wheels, tracks and body surfaces of all vehicles and plant leaving the Site are free of mud, and that mud is not carried on to adjacent paved streets or other areas.

21.6 Incident reporting and investigation

Notify the relevant administering agency and the Superintendent immediately of:

- Any non-compliance with any environmental authority or other permit, licence or approval applying to the Works or any environmental Legislative Requirements relating to the Works or the Site.
- Any incident involving actual or potential serious or material environmental harm or environmental nuisance associated with the conduct of the Works. In this Clause ‘serious or material environmental harm’ and ‘environmental nuisance’ have the same meanings they have in the Environmental Protection Act 1994 (Qld).

Notify the Superintendent immediately of any direction order or requirement being imposed on it by any agency responsible for administering environmental Legislative Requirements in respect of the Works.

21.7 Disposal of spoil

Remove all spoil (inclusive of Acid Sulphate Soils that cannot be treated on Site) not required as part of the Works from the Site. Pay all tipping fees at the waste disposal facility.

21.8 Environmental harm

The Principal may inquire about compliance. The Contractor must:

- Answer any reasonable request by the Superintendent where applicable concerning compliance with any environmental authority, or other approval, or any environmental Legislative Requirements concerning the Works.
- Respond to any reasonable direction of the Superintendent where applicable concerning compliance with any environmental authority or other approval concerning the Works, in the case of you being an independent contractor working under the Principal’s environmental authority, or in the case of you being a dependent contractor.

The Contractor is aware of approvals obtained by Principal.

- The Principal will provide copies of the following environmental authorities and other approvals relating to the Works which have been obtained by the Principal.
21.9 Environmental harm

21.9.1 Compliance with Environmental Laws

In addition to any other clause of this contract requiring compliance with laws by the Contractor, comply with the requirements of all environmental laws relating to the works or provision of services.

21.9.2 Contractor to Obtain all Necessary Authorities and Approvals

Prior to the commencement of works or provision of services, obtain all necessary Environmental Authorities, Development Approvals or any other Licences, Permits and Approvals of any kind whatsoever in order that the works or provision of services can be lawfully commenced.

21.9.3 Notification of Incidents and Compliance with Orders and Directions

Notify the relevant administering agency immediately of any non-compliance with any Environmental Authority or other Permit, Licence or Approval applying to the works or any environmental law or regulation relating to the works or the site on which the works are carried out.

Notify the relevant administering agency immediately of any incident involving actual or potential serious or material environmental harm or environmental nuisance associated with the conduct of the works. Provide such details of the incident as the Superintendent reasonably requires. In this clause “serious or material environmental harm” and “environmental nuisance” have the same meanings they have in the Environmental Protection Act 1994.

Notify the Superintendent immediately of any direction order or requirement being imposed on it by any agency responsible for administering environmental laws in respect of the works or any aspect of your conduct in respect of the works.

21.9.4 Environmental Management Plan

Unless otherwise advised by the Principal, prepare prior to the commencement of works an Environmental Management Plan (“EMP”) or Environmental Management System. This EMP shall ensure any potential environmental impacts associated with the works or provision of services are identified and managed appropriately.

21.9.5 Indemnity - Environmental Harm

Indemnify the Principal against all liability, loss arising from, and any costs, fines, charges or expenses incurred in connection with a breach by you of:

- The conditions of any Environmental Authority or other Approval or Permit whatsoever pertaining to the works; or
- Any relevant Environmental Law arising out of or as a consequence of the carrying out by you of the work under this contract.

Part A: Principal may inquire about Compliance, be prepared to;

- Answer any reasonable request by the Superintendent concerning your compliance with any Environmental Authority, or other Approval, or any environmental legislation concerning the works; and
- Respond to any reasonable direction of the Superintendent concerning compliance with any Environmental Authority or other Approval concerning the works, in the case of you being an Independent Contractor working under the Principal’s Environmental Authority, or in the case of you being a Dependent Contractor.

Part B: Contractor Aware of Approvals Obtained by Principal

- The Principal will provide copies of the Environmental Authorities and other Approvals (“the Approvals”) relating to the works or provision of services which have been obtained by the Principal.
- Accept that the terms and conditions of the above approvals have been read and understood and agree to be bound by them.
22. Authorities and Statutory Requirements

All work performed shall comply fully with the rules, regulations and by-laws of any Federal, State or Local Authority that have jurisdiction over the area within or adjacent to the site of Works, including but not limited to:

- Workplace Health and Safety Act and Regulations.
- Electricity Act and Regulations.

Prior to commencement of work the Contractor shall obtain all necessary statutory approvals, permits and/or licenses necessary for the undertaking of the Contract Works.

The Contractor shall provide the Superintendent with a copy of the above approvals and permits prior to commencement of the works.

23. Site Climatic Conditions

All equipment supplied and installed as part of the Works shall be designed to suit the following site conditions:

- Location: Gold Coast, Queensland
- Altitude: 5m above mean sea level
- Environment: Sewerage Pump Station
- Ambient temperature:
  - Minimum 0°C
  - Maximum 45°C
- Relative humidity:
  - Average maximum 65%
  - Average minimum 50%
  - Design Maximum 95% non-condensing

All materials shall be suitable for installation and operation under the environment and all conditions as described above and shall meet the site climatic condition requirements.

24. Completion

24.1 Completion of Works

All equipment and features must be commissioned and tested by qualified personnel. Provide the Superintendent at least two Business days’ notice of any inspection or commissioning requirements.

24.2 Progressive recording of As-Built Documentation

Further to Clauses 8.8 and 37.2 of the General Conditions of Contract regarding timeframes and acceptance of As-Built Documentation, undertake progressive recording of As-Built Documentation as follows:

- Retain a single set of approved For Construction drawings as control drawings onto which As-Built Documentation will be progressively recorded.

These control drawings must be clearly stamped ‘As-Built drawings – record’ in red colour. Keep accurate and reliable records of As-Built Documentation throughout the term of the Contract and regularly enter the As-Built Documentation onto the As-Built drawings using red colour pens.

The control drawings are to be available for review by the Superintendent at any time.

24.3 Format and content of As-Built Documentation

The Principal's requirement for the type of file format to be provided for As-Built drawings is outlined in the City of Gold Coast As-Constructed Data Capture Guidelines. Departure from these Guidelines is subject to approval of the Superintendent.
As-Built Documentation must meet the following minimum criteria:

- Show approved street names and correct lot numbers (current at the time of the works).
- Must be north facing.
- Show all significant variations from the contract drawings, including tolerances outside those specified.
- Where the Contract contains the decommissioning of any of the Principal's assets, these assets must be clearly marked on the As-Built drawing by labelling the asset ‘Decommissioned’ and displaying a ‘strike out’ with cross(es) on the drawing.
- All drawings prepared in addition to the Principal’s supplied drawings, including but not limited to As-Built Documentation associated with or arising from changes in the Contract scope of works, must be prepared using the same layout and format (i.e. titles, logos, drawing numbers, etc.) as that provided in the Principal’s supplied drawings and standard template drawings. In the event that the format of the standard template drawings and Principal’s supplied drawings differ, all drawings must be prepared using the standard template drawings, unless otherwise approved by the Superintendent.
- Incorporating password lock or equivalent security measures preventing opening of the drawing file or files will not be accepted.
- The Superintendent will notify the Contractor of the non-compliance and the Contractor must immediately correct the affected drawing files and within five Business days of the initial notification by the Superintendent will resubmit a complete set of the revised electronic drawing files.
- All drawings, including those with As-Built survey data endorsed by a Registered Surveyor, are to be certified by a RPEQ registered under the provision of the [Professional Engineers Act 2002 (Qld)](http://www.goldcoast.qld.gov.au/professional-engineers-act-2002-qld.html) if specified in the documentation.

### 24.4 As-Built survey information and certification

As-Built Documentation incorporating the As-Built survey details must, unless otherwise advised in writing, be prepared based on:

- Australian Height Datum unless otherwise advised in writing.
- Survey coordinate system converted to Mapping Grid of Australia 1994 Zone 56 (MGA 94).

The origin of all levels and details of all survey control points or survey coordination details or notes utilised in compiling the As-Built survey drawings are to be noted on the As-Built drawings.

All Permanent Survey Marks (PSM) must be submitted with MGA94 horizontal coordinates, of at least 4th order, Class D accuracy (as defined by the Intergovernmental Committee on Surveying and Mapping and Practices for Control Surveys) and 4th Order, Class D heights on Australian Height Datum.

For all works, excluding those where the works are located entirely within the boundaries of existing water and / or sewage treatment plants, As-Built Documentation must include details of survey control comprising as a minimum:

- For works comprising the construction of new or replacement pipelines (e.g. water mains, reclaimed water pipelines, pressure or gravity sewer mains and access chambers) totalling more than 400 metres in total length:
  - Three or more registered PSM’s.
  - Connection to the defined points of cadastral adjacent to the Site of the new infrastructure.
- For works comprising the construction of new reservoirs, pumping stations and ancillary facilities (water, wastewater or reclaimed water):
  - A minimum of two registered PSM’s.
  - Connection to the defined points of cadastral for the Site, or adjacent to the Site, of the new infrastructure.
- For all other works located within or adjacent to road reserves or public areas:
  - A minimum of two (three preferred) registered PSM’s.
Connection to the defined points of cadastre adjacent to the Site of the new infrastructure.

For all works located entirely within existing Gold Coast Water sites, As-Built drawings for any new facilities, structures or infrastructure constructed as part of the works must include details of survey control comprising as a minimum:

- Details of existing or newly constructed permanent reference marks from which the new infrastructure has been, and can be, referenced.
- Connection to the defined points of cadastre for the boundary of the treatment plant site.

Where agreed by the Superintendent and at the request of the Contractor, the Principal’s survey officers, through the Superintendent, may be available to discuss As-Built survey data requirements. This may include, but not be limited to, clarification of survey conversion or adjustment factors applicable to the Gold Coast region and to ensure consistency of survey coordination with the Principal’s base data requirements.

24.5 Operations and maintenance manuals

Further to Clause 8.8 of the General Conditions of Contract, provide instructions and a recommended maintenance schedule for all items supplied and installed, along with details of model (reference numbers or similar), manufacturer and / or supplier.

Draft operations and maintenance manuals must be submitted to the Superintendent prior to the commissioning of each infrastructure facility and / or item of installed equipment (e.g. switchboard, pumping equipment, or valves/pipework) associated with each Milestone Separable Portion, or the Works, or prior to applying for a Certificate of Practical Completion as applicable.

Include within the operations and maintenance manuals the following:

- Provide instructions and a detailed manufacturers recommended maintenance schedule for all items supplied and installed, along with details of model (reference numbers or similar), manufacturer and / or supplier. This would include but not be limited to:
  - Maintenance tasks to be performed;
  - Detailed work instructions;
  - Frequency of each maintenance task (daily, weekly, monthly etc.);
  - Special skills or experience needed to perform each maintenance task;
  - Any specialist tools required to carry out the maintenance task;
  - Provide a full list of required spare parts and contact details of local resellers of those parts.
- Test results from factory acceptance testing (FAT), Site acceptance testing (SAT) and commissioning, including all other test results associated with the Works.
- Where the nature of the Works required are an upgrade of sewerage pump stations, air valves and odour control units etc. provide relevant operational and maintenance information of the new Works that has been undertaken and/or provided.
- If any new Work has effected, altered, or changed any function or operational procedure of pre-existing equipment (i.e. pump station) or components from its existing presence, provide the entire operational procedure that includes those changes.

25. Standard Specifications

Unless specifically amended in this documentation, all works carried out under the Contract must be undertaken in accordance with the requirements of the current edition of the Principal’s Standard Specifications and Drawings:

Specifications - AS2124


Any Standard Specifications included as an Attachment to this specification take precedence over any equivalent Standard Specification available from the following website.

Gold Coast City Council’s Standards can be obtained from the following website:


If work scope included in this contract is not adequately covered by the above Standard Specifications, then the work scope must be delivered in accordance with the following standards:

- Australian Standards / British Standards / American National Standards / Institute Standards.
- Current Manufacturer’s Standards and Specifications.

26. Benchmark Project 1

General Building Refurbishment Works

26.1 Background

C27a pump station building was commissioned in the late 1980’s and manages the flow of sewage in and around the Tugun area, sending north to the City of Gold Coast’s Elanora STP. The building structure consists of a concrete foundation incorporating an underground (basement level) drywell with concrete floor and concrete walls, flat finish int/ext brick veneer walls (ground level) and concrete floor, 1 x brush finish metal external door with timber door jamb and timber framed window header, 1 x plywood infill panel with timber framed window header, 1 x brush finish metal external double door with timber door jamb and over-head protruding ‘I’ beam, zinc aluminium guttering with pvc downpipes, timber fascia, and hardwood timber trusses under a gabled zinc aluminium corrugated roof. The building consists of a ground floor and basement, and houses an internal switchboard (ground floor) and 2 x industrial pumps (basement), with access to the basement via an internal gated step-type ladder. From ground level the external dimensions of the building are approximately 4,200mm (high) x 4,900mm (wide) x 6,150mm (length) – excluding 600mm soffits and guttering.

Access to the site is via a secured electronic entrance gate and requires authorised access to gain entry. While the site is unmanned the C27a building does require both internal and external refurbishment works, as per the below scope, to extend the operational life of the building and ensure continued operations within the flow of sewage.

26.2 Scope of Works

This component of works is to undertake a mixture of internal and external painting, aluminium fabrication, asbestos removal (Class B non-friable), low rise fittings and fixture installations, and concreting pavement works.

Supply all materials, labour, plant and equipment necessary to undertake the following Works;

Item 1.01 – Standard ceiling sheeting

- Supply and install timber battens and fibro ceiling sheets to cover the internally exposed ceiling area of building;
  - Timber battens = 25mm x 38mm
  - Fibro ceiling sheets to suit and finished in a standard ceiling white;
  - Area Coverage = 25.0m².

Item 1.02 – Internal paint works

- Prepare and paint internal brick veneer and besser block walls (ground floor and basement);
  - Remove obsolete fixtures from walls and fill all holes within walls;
Specifications - AS2124

- Undercoat walls with water based primer and apply three coats of standard white water based paint (Light Reflective Value 85%);
  - Coverage = 140.0m².

**Item 1.03 – Concrete Plinths**
- Prepare and paint 2 x concrete plinths and galvanised metal stands (industrial pump supports) in basement;
  - Undercoat each plinth and metal stand with water based primer and apply three coats of high visual yellow water based paint;
  - Coverage = 8.0m².

**Item 1.04 – Non-slip flooring application**
- Prepare and apply non-slip application to internal concrete floor (ground floor and basement);
  - Fill any and all gaps in concrete floor;
  - Supply and paint floor with Virotuff Anti Slip Protection (or Principal approved equivalent) – light grey;
  - Coverage = 37.0m²;
  - Non-slip application to meet or exceed the expectations of the National Construction Code. All flooring applications of existing surfaces must be undertaken as to ensure it meets the test requirements of AS4663 (Slip resistance measurement of existing pedestrian surfaces).

**Item 1.05 – Aluminium grating and fabrication works**
- Renew existing galvanised grating within the internal dry well access pit with approximately 3.60m² of hinged aluminium grating;
  - Dry well pit opening = 2,830mm x 1,270mm
  - Cut hinge spacing into existing concrete to ensure no loss of open area space when grates are in the upright position;
  - Aluminium hinged grating = 3 at 1,270mm x 850mm x 30mm x 6mm non-slip finish;
  - Powder coat aluminium grating in High Visual Yellow;
  - Grates to open from west to south and incorporate 2 x heavy duty bullet hinges to each grate;
  - Supply grate lifter for aluminium grating, and supply and install wall mount for grate lifter;
  - Securely install grate lifter wall mount in a free space adjacent to dry well access pit.

**Item 1.06 – External single door**
- Replace single entrance door, timber door jamb, framing and header window on east side of building;
  - Fabricate new aluminium door with aluminium door jamb and aluminium louvered header panel by CKA Windows (or Principal approved equivalent) and install as per manufacturer’s specifications – refer to design on Attachment A - Shop drawing for external doors;
  - Exposed Door Opening = 3,360mm (high) x 935mm (wide);
  - Door height = 2,100mm;
  - Fixed louvered header height = 1,260mm.
  - Powder coat door and header panel Eucalyptus Green;
  - Supply and fit doors with 316 stainless steel hardware and fittings, single door Kaba exit device (or Principal approved equivalent), with 600 series external door handle and Principal supplied Cliq barrel lock;
  - Supply and fit fibreglass fly mesh to inside of header panel, with total size of fly mesh to completely cover the header panel;
  - Supply and fit weather seal around door;
  - Supply and fit 1 x Lockwood 2024 Hold Open Door Closer SIL (or Principal approved equivalent) to door.

**Item 1.07 – Aluminium step and handrail**
- Fabricate and supply single T6 aluminium serrated step with aluminium handrail on either side of step, and install at single door entrance of building;
  - T6 aluminium grating stair tread = 900mm x 285mm x 40mm;
  - Include high visual yellow abrasive nosing to front of step;
  - T6 Aluminium handrail fabricated and installed in accordance with AS1657 (Fixed platforms, walkways, stairways and ladders - Design, construction and installation).

**Item 1.08 – Aluminium infill panel**
Specifications - AS2124

- Replace existing exposed panel, framing and header window on east side of building;
  - Exposed Opening = 3,360mm (high) x 935mm (wide);
  - Fabricate and install aluminium panel to suit opening with 32mm x 32mm x 3.0mm square hollowed section internal aluminium framing to suit, with internal insulation and 1.2mm brush finish aluminium sheet on front and rear side of framing;
  - Fixed panel height = 2,100mm;
  - Fixed louvered header height = 1,260mm.
  - Powder coat aluminium panel and aluminium header Eucalyptus Green on both sides of panel;
  - Aluminium panel to be completely sealed and fixed within exposed opening.

Item 1.09 – Double door supply and installation
- Replace existing double entrance doors, timber door jamb, framing and header on north side of building;
  - Fabricate aluminium door with aluminium door jamb and aluminium louvered header panel by CKA Windows (or Principal approved equivalent) and install as per manufacturer’s specifications – refer to design on Attachment A - Shop drawing for external doors;
  - Exposed Opening = 3,210mm (high) x 1,860mm (wide);
  - Design double doors to allow for protruding ‘I’ beam at top of door;
  - Double door height = 2,380mm;
  - Louvered header height = 830mm.
  - Powder coat door and header panel Eucalyptus Green;
  - Supply and fit doors with 316 stainless steel hardware and fittings, double door Kaba exit device (or Principal approved equivalent), with 600 series external door handle and Principal supplied Cliq barrel lock;
  - Supply and fit fibreglass fly mesh toinside of header panel, with total size of fly mesh to completely cover the header panel;
  - Supply and fit weather seal around door;
  - Supply and fit Lockwood 2024 Hold Open Door Closer SIL (or Principal approved equivalent) to each door.

Item 1.10 – Soffit sheeting renewals
- Renew external asbestos soffit sheeting;
  - Remove approximately 10.0m² of asbestos fibro soffits (Class B non-friable asbestos licence required);
  - Supply and fit approximately 10.00m² of standard Hardiflex soffit sheeting (or Principal approved equivalent) finished in 3 coat standard white;
  - Remove and transport asbestos sheeting in accordance with the Environmental Protection Act Regulation 2008;
  - Dispose of asbestos sheeting in accordance with the City of Gold Coast Guidelines (http://www.goldcoast.qld.gov.au/environment/disposal-of-asbestos-24708.html)

Item 1.11 – Guttering and downpipe renewals
- Renew external guttering, downpipes and timber fascia;
  - Supply and fit 2 x 7,350mm lengths of standard quad zinc aluminium guttering – Eucalyptus Green;
  - Supply and fit 2 x 3,900mm round 90mm zinc aluminium downpipes – Eucalyptus Green;
  - Supply and fit approximately 31.00Lm of 225mm zinc aluminium fascia around building – Eucalyptus Green;

Item 1.12 – External paint works
- Prepare and paint external brick work and concrete base;
  - Remove and dispose of obsolete fixtures from walls and fill any and all holes within walls;
  - Remove and dispose of approximately 22.0Lm x 400mm corrugated wall sheeting located on brick wall just under soffits;
  - Undercoat walls with water based primer and apply three coats of water based paint - Eucalyptus Green;
  - Coverage = 74.0m².

Item 1.13 – Concrete pavement works
- Excavate approximately 15.0m² of ground cover (including existing concrete pathway) to allow for installation of concrete pathway between building and driveway;
  - Undertake service locations prior to works;
o Supply and install 15.0m² of concrete pavement from single door entrance of building, heading east in a direct line to adjacent driveway;
  - 75-100mm 20MPa with single layer FL72 mesh;
  - Concrete to meet or exceed AS1379 (concrete testing), and AS3600 (Concrete structures);
  - Concrete pavement to not exceed height of existing ground level, batter areas along exposed areas of pavement to mitigate trips and falls.

o Reinstate exposed excavated areas (eg. supply and lay turf where required).

**Item 1.14 – General external works**

- Paint exposed concrete valve surround (east west corner of building) high visual yellow;
  - Coverage = 4.0m².

- Supply and install temporary scaffolding over existing holding tank at rear (west side) of building to undertake external refurbishment works;
  - Supply and installation of scaffolding must be in accordance with AS1576 (Scaffolding general requirements).

- Scaffolding will be required for working at heights - Ladders are not be utilised on site.

- Demobilise and remove all unused materials and rubbish from site.

### 27. Benchmark Project 2

**Road pavement and fencing renewals**

#### 27.1 Background

Coombabah STP is a major facility located at the central northern area of the Gold Coast. The plant maintains a network of roadways, pathways, pavements and perimeter fencing for authorised personnel to access various operational components within the site. Due to deterioration, and constant traffic and heavy plant utilising this network of roadways continued maintenance and renewal works is required to ensure access is available. Sections of fencing require renewal to ensure the facility remains secure at all times.

#### 27.2 Scope of Works

Supply all materials, labour, plant and equipment necessary to undertake the following Works;

**Item 2.01 - Renewal of asphalt road pavement**

Renew existing asphalt road pavement to allow for heavy vehicle access.

- Excavate approximately 455.0m² (65.00Lm x 6.00Lm) of failed road pavement to a depth of 500mm;
  - Excavation must be cleanly and efficiently executed, watered and vibrator rolled to give a compaction of 95% maximum modified density as determined by the modified compaction test under AS1289.5.2.1 (Soil compaction and density tests) to provide for a sound base free from depressions or any deleterious materials;

- Supply, lay and compact 91.0m³ of 200mm 10/90 mattress rock layer;

- Supply, lay and compact 118.0m² of 260mm base course (CBR60), including final trim;

- Supply and lay approximately 455.0m² of roads application bidim nonwoven geotextile (or equivalent) for asphalt pavement;

- Supply, lay and compact 455.0m² of 40mm AC10 asphalt with prime coat;

- Compact to a relative density of 95% or greater;

Please note: Spoil from this site is classified as Acid Sulphide and must be removed, transported and disposed of in accordance with the City of Gold Coast guidelines and applicable laws. Allow for disposal of spoil by an accepting Queensland waste facility of acid sulphate soils and other contaminants’.

**Item 2.02 – Transport and disposal of acid sulphide soils**

- Excavate, transport and dispose of approximately 455.0m² of contaminated spoil excavated under item 2.01 – Renewal of asphalt pavement.

**Item 2.03 - Renewal of chain wire mesh fence**

Renew an existing section of chain wire mesh fence line along north east corner of site.

- Clear any overhanging shrubs and branches along boundary line and remove from site;
o Supply and install temporary fence along nominated area to ensure site remains secured while undertaking Works;
  o Undertake service locations along proposed area prior to removing existing fence or digging post holes;
- Dismantle approximately 200.0Lm of nominated chain wire mesh, galvanised posts, associated fittings and wire, and remove from site;
  o All galvanised posts and concrete footings to be completely removed from post holes;
  o Fill and compact exposed post holes with road base to ground level.
- Supply and install 200.0Lm of chain wire mesh with cranked blue band posts at a total height of 2,400mm including 300mm barbed wire top;
  o Supply and install 3 x 32mm x 200.0Lm (600.0Lm total) galvanised rails (top, lower middle and bottom);
  o Supply and install 200.0Lm of 2,100mm high 3.15mm black PVC coated chain wire mesh;
  o Supply and install 3 x barbed wire strands on top 300mm cranked posts along total length of new fence line.

Fencing Specifications:

Chain Wire Mesh – AS1725 (Chain link fabric security fences and gates);
- The bottom of the chain wire panels must not exceed a maximum height of 50mm above finished surface level;
- Chain wire supported by top, middle and bottom double thickness tension wires;
- Cables to be formed from two 3.15mm diameter wires twisted together;
- Chain wire to be fixed using 1.6mm wire ties.

Galvanised Posts;
- Corner, end and gate posts must be 80mm NB (88.9mm OD 3.2mm thick) galvanised steel tube to AS1163 (Cold formed structural steel hollow sections);
- Every eighth post must be 50mm NB galvanised steel tube to AS1163;
- Intermediate posts must be 40mm NB galvanised steel tube to AS1163 and spaced at 3.3m centres to AS1725;
- Standard couplings (down-ee fittings) may be used as an alternative to swaged joints and welds;
- Tightly fitted galvanised steel end caps must be provided to all posts;
- Corner posts must be adopted where the change in angle in horizontal alignment exceeds 20 degrees;
- Gate, end, corner and change of direction posts must be a minimum diameter of 80mm NB;
- All on site welds must be 5 thick CFW (continuous fillet welds) to AS1554.1 (Structural steel welding), with cold galvanised treatment to completed welds;
- Solid pipe stays must be provided at end posts, gate posts, corner posts and every eighth post;
- Posts must be vertical;
- All posts, stays and cables must be hot dip galvanised. Ferrous open sections to AS4791 (Hot-dip galvanized (zinc) coatings on ferrous open sections, applied by an in-line process), ferrous hollow sections to AS 4792 ) Hot-dip galvanized (zinc) coatings on ferrous hollow sections, applied by a continuous or a specialized process);
- Post holes 800mm deep x 300mm wide minimum;
- Concrete footings at 25 MPa.
ATTACHMENT A
SHOP DRAWINGS FOR EXTERNAL DOORS

EXAMPLE DRAWINGS ONLY
PLEASE DISCUSS ACTUAL DESIGN WITH MANUFACTURER

Glazing - McArthur 101.6mm Centre Pocket Frame

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Glazing Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6AL 6PLY</td>
<td>1.2mm alum sheet both sides of 5mm glass</td>
<td>Glass 1</td>
</tr>
<tr>
<td>FLY FIBRE</td>
<td>Fibreglass Fly Mesh</td>
<td>Glass 3</td>
</tr>
</tbody>
</table>

5mm glass with 1.2mm alum sheet glued to both sides = total thickness 8mm - 10mm
ATTACHMENT A
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**ACTIVE OUT**

5mm glass with 1.2mm alum sheet glued to both sides = total thickness 8mm - 10mm

**McArthur 101.6mm Centre Pocket Frame**