

BSBPMG511 MANAGE PROJECT SCOPE

Practical Task 1	
Description of task: A suitable observer is to verify the participant's ability to obtain project authorisation, develop a scope management plan, and manage the application of project scope controls.	
These tasks may be simulated or real. The participant is to gather evidence of how they have completed each component of the Practical Task, which is to be submitted with this Practical Assessment sheet. The observer is to provide detailed comments on the tasks completed by the participant. The assessor is to verify the observer's comments in the Assessor Comments section, and provide the Practical Assessment outcome on the front cover of this document.	
Resources required: Project documentation, Organisational documentation.	
Assessment of task	
Name of participant:	SARAH CONLEY
Name of observer:	PAUL O'BRIEN
Role of observer (Confirm suitability to sign)	PROJECT MANAGER
Email address of observer	pobrienoe@gmail.com
Signature of observer:	
Date:	Click here to enter a date. 13 SEPT 2019
When completing the task, did the participant:	Tick if satisfactorily completed. Provide comments if left unticked.
1 Conduct project authorisation activities	
1.1A. Develop and confirm procedures for project authorisation with an appropriate authority.	☒
1.1B. Obtain authorisation to expend resources.	☒
1.1C. Confirm project delegations and authorities in project governance arrangements.	☒
2 Define project scope	
1.2A. Identify, negotiate and document project boundaries.	☒
1.2B. Establish measurable project benefits, outcomes and outputs.	☒
1.2C. Establish a shared understanding of desired project outcomes with relevant stakeholders.	☒
1.2D. Document scope management plan.	☒
3 Manage project scope control process	
1.3A. Implement agreed scope management procedures and processes.	☒

1.3B. Manage impact of scope changes within established time, cost and quality constraints according to change control procedures.	☒
1.3C. Identify and document scope management issues and recommend improvements for future projects.	☒
The participant's performance was: ☒ Satisfactory ☐ Not Satisfactory	

OBSERVER COMMENTS

Sarah was able to independantly gather all required information from a previously completed job folder. She organised a meeting with the previous project manager to discuss lesson's learnt, which had not yet been completed and ~~Technical~~ technical scope items.

Major Purchase Bid Analysis

Date: 14/02/2018 Project: QAS southport Job N°: 20S3890/1100

Materials Required: metering Cost Centre: _____

	Vendor 1 (Exclude GST)	Vendor 2 (Exclude GST)	Vendor 3 (Exclude GST)
Vendor Name:	Hexeis	Supplier 2	Supplier 3
Price (Buy):	\$25,258.39	\$0.00	\$0.00
Tender (Budget):	\$44,240.00	\$44,240.00	\$44,240.00
Variance +\:-	\$18,981.61	\$44,240.00	\$44,240.00

*** PLEASE ATTACH ALL QUOTATIONS**

Vendor Recommendation items is specified Recommended By: Sarah Conley Date: 14/02/2018

Vendor Recommended Why? not allowed to using anything else. Items is specified

Is this the lowest possible price we can obtain? Yes ☒ No ☐

Does this spreadsheet include all materials of this type required for the job? Yes ☐ No ☒ If 'No' what value has still to be purchased? \$ 15,000.00

Do the materials being purchased meet the specification? Yes ☒ No ☐

If 'No' provide details: _____

CONTRACTUAL CONDITIONS

Does delivery meet project requirements? Yes ☒ No ☐ Do we have a signed contract from our client? Yes ☒ No ☐

Has the supplier been issued and accepted Fredon's T & C and/or Subcontractor conditions? Yes ☒ No ☐

Submitted By: Print Name: Sarah Conley Signature: _____ Date: 14/02/2018

1st Line Manager Approval: Adrian Parsons _____ 14/02/2018

2nd Line Manager Approval: Adam Stuart _____

Director/State Manager Approval: Michael Steuart _____

Head Office Approval: _____

Project: 20S3890 QAS Southport

Document history and status

Revision	Date	Description	By	Review	Approve

Approval

Project Approval

☐ Approved ☐ Postponed ☐ Cancelled ☐ Review

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1. Introduction

1.1 Project Description

The QAS Southport facility is a 24/7/365 operational 000 emergency command and ambulance station. The ability to have reliable backup infrastructure is imperative to the operational functions of the facility. This upgrade will ensure that reliable backup contingencies are in place.

1.2 Purpose of the Project Execution Plan (PEP)

The Fredon philosophy, strategies, structure and systems for the management of the QAS Southport Project are contained within this Plan.

The Plan provides:

- Client and Fredon objectives and KPIs
- Roles and responsibilities of the project team members
- An overview of the Functional Area inputs required for project execution
- Reference to the detailed plans and procedures which guide personnel in carrying out specific tasks for the project
- Interfaces with the client and other stakeholders

Fredon have formed a Project Management team to lead, manage and coordinate all aspects of the project. This team will be supported as required by staff with relevant expertise from Functional Areas such as Project Controls, Procurement, Engineering and Construction.

The project plans and procedures referenced in the PEP are separate documents which contain specific task oriented detail to be used in the implementation of the project. Plans and procedures will be progressively developed and implemented as the project progresses.

1.2.1 PEP Structure and associated Plans

Separate Supporting Plans may be used supplement this PEP. These can either be separate plans or included as attachments to the PEP	
Fredon	Project HSEQ Plan
Fredon	Asbestos Management Plan
Department of Housing and Public Works	Specification

2. Project Scope

2.1 Project Scope of Work

The Project is an Electrical Infrastructure Upgrade to the existing Queensland Ambulance Service depot at Southport QLD.

2.2 Interfaces

Fredon will report to Building and Asset Services (BAS) who are acting on behalf of the Queensland Government. Due to the operational nature of the facility, the works being undertaken are to ensure that there is no adverse impact on the operational continuity.

3. Scope of Fredon Services

3.1 Summary of Scope of Fredon Services

The following is a general description of the scope of work, this section is to be read in conjunction with the drawings.

- Liaison with ENERGEX
- Provision of new main switchboard
- Provision of new Manual transfer switches
- Provision of new Automatic transfer switches
- Provision of new ENERGEX and generator mains
- Provision of new mains cables
- Provision of new submains
- Provision of new distribution boards as shown
- Delivery and lifting of generators into place
- Generator plinth
- Installation compliance certification of engineering systems
- Labelling of equipment
- Painting and making good of affected surfaces
- Submittal of shop drawings, samples and equipment schedules
- Testing and commissioning of systems
- As built drawings and manuals
- Production of as built drawings
- Fire rating and sealing of all penetrations,
- Provision of training to maintenance and engineering staff
- Maintenance and warranties during the 12 months Defects Liability Period
- Warranty on parts and labour

Scope Variations must be logged, with the appropriate description and approvals. (also see section 7.4 Change Management)

3.1.1 Limitations

The following limitations apply to the project:

- Access to the site is restricted. Fredon will need to submit proposed program of work to Queensland Ambulance Service (QAS) and Public Safety Business Agency (PSBA) for their review and approval prior to commencement of works.
- Dust Control. All the indoor air conditioned spaces are clean environments and works should be carried out in a manner so that it remains dust free. The ambulance plantroom although unconditioned, is required to be protected from dust.
- All works pertaining to external civil works and generator testing and commissioning should be carried out during approved day time hours so that residences and QAS staff are least affected by the works (outside quite night hours).
- Any works requiring shut down of power and lighting (such as when refurbishing old MSB) shall be carried out at night and the shutdowns shall be kept to a minimum period. Provide Method of Procedure (MOP) for approval prior to commencement of works.
- If the noise due to any works is likely to propagate into the "000" call centre, provide noise mitigation and agree on a suitable time with the clients by providing a MOP for the works to be carried out for approval prior to commencement of works. Noisy work is defined as any activity which produces noise which is obtrusive and which adversely impacts the building occupants (e.g. hammer drilling).
- Do not shut down power to any part of the building without prior written approval from the Principal. Coordinate with the principal's requirements for continuous power to various areas and allow to provide a suitably sized generator to provide temporary power as is necessary.
- Provide at least 2 weeks written notice for any work in data/comms rooms and 000 call centre rooms
- Provide at least 2 weeks written notice for any work on electrical systems

- Provide at least 2 weeks written notice for any work which involves the isolation or shutdown of any part of the electrical system, chilled water system or hydraulic system.
- Do not block the driveway entries and exits from the building at any time without prior approval. The driveways are used by ambulance vehicles in emergency situations.

3.1.2 Objectives and KPIs

Health, Safety, Environmental and Quality objectives and targets have been established and are communicated to all personnel. The success of the objectives and targets can be attributed to the shared goal of Fredon management and site personnel. A complete set of Objectives and Targets is available on request. Below is an abridged listing of those associated to site work.

Objective	Target (or milestone)	KPIs or Measurement Tools
Management System to be continually reviewed implemented with training delivered to all employees.	Continual Improvement Ongoing Employees Training	Training Records
Reporting of Non-conformances	All non-conformances, product or service, are to be formally reported	Nil Non-conformances without formal documentation
100% Customer Satisfaction	Nil Customer Complaints	All Complaints are to be registered addressed and closed out within the specified time.
Work towards achieving an incident free workplace and preventing work related injuries and illnesses. Nil injuries, improve injury frequency rate	Lost Time Injury Frequency Rate (LTIFR) continually reducing Reduce to ZERO Total Recordable Injury Frequency Rate (TRIFR) continually reducing Reduce to < 3	LTIFR = Total lost time injury cases / total hours worked x 1,000,000 TRIFR = Total recordable cases / total hours worked x 1,000,000 "Recordable cases" is defined as any medically treated plus lost time injury.
Management demonstrate commitment to HSE by active participation in Incident Reporting and Investigations	Senior Management to review all Recordable Cases	100% of all Medical Treatment, Lost Time Cases and Near misses to be reviewed by Senior Management
Workers are familiar with hazards / risk associated with the workplace activities and provided training to enable work practices to be undertaken that are safe	SWMSs list all specific hazards and appropriate risk control measures, specific for the site & applying the hierarchy of controls; provide induction & work activity training	All SWMS reviewed. Site Audits conducted for compliance to SWMS. All workers undergo Competency Assessments
Nil Environmental Incidents. Avoid water, air and ground pollution caused by our Works. Minimise noise and vibrations impacts caused by our works.	No release of hazardous substances to soil & waterways. Control release of contaminants to the atmosphere, Minimise noise impact on occupants, neighbours, or users of facilities	Recording of Environmental Incidents. Where incidents occur, impact shall be minimised by appropriate controls implemented.
Minimise the use of non-renewable resources	Manage the use of non-renewable resources in design and in our activities.	Review designs to minimise material use. Manage paper and energy usage.
Control of waste disposal and recycling to reduce landfill and the use on non-renewable resources.	Formalise Waste Management at Branch Offices, Warehouses and Sites.	Develop Waste Management Programs to include the "Reduce, Re-use, Re-cycle" notion.

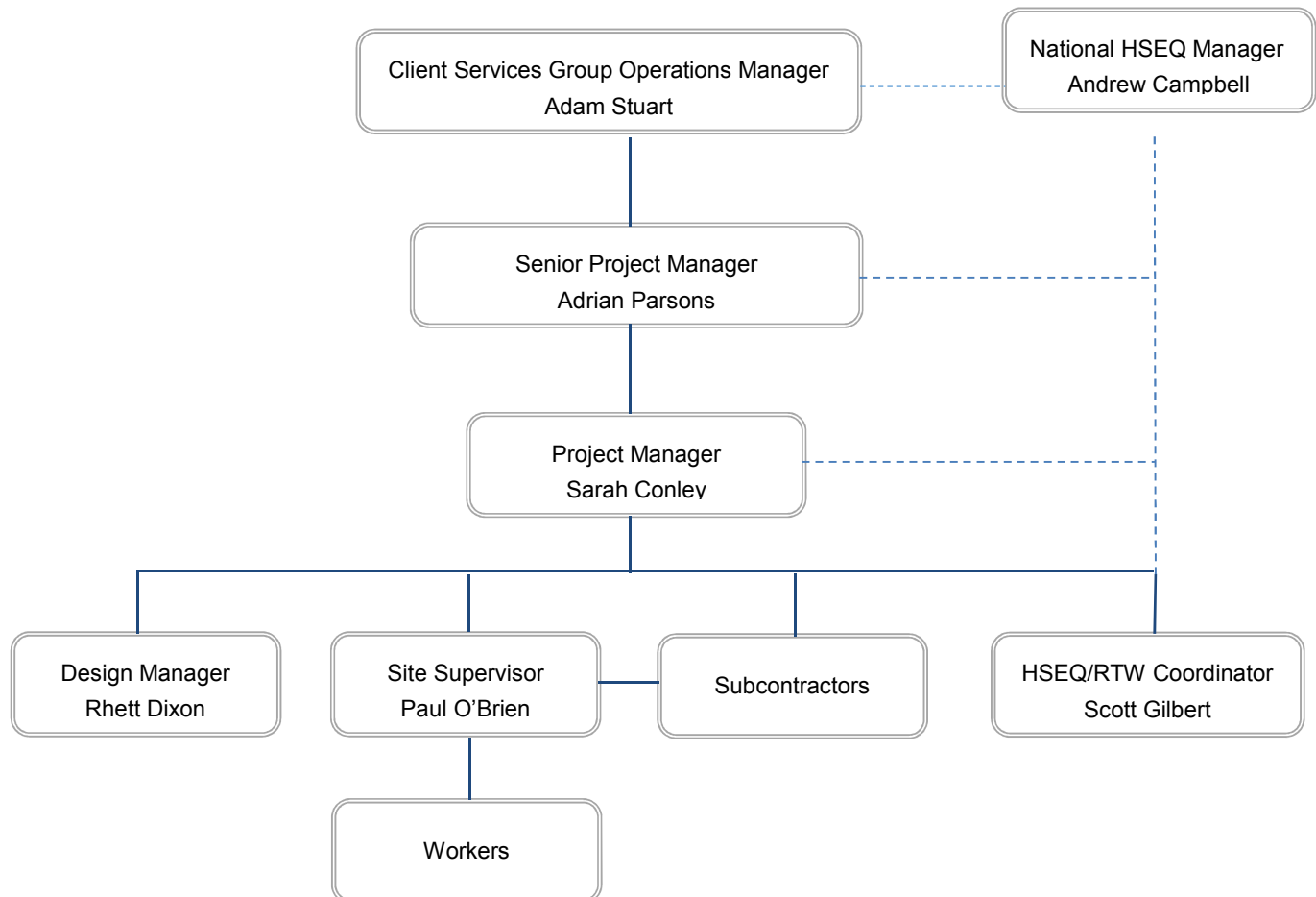
4. Deliverables

Delivery and installation of all infrastructure required to provide QAS Southport with generator backup.

5. Project Organisation

5.1 Organisation Chart

The project team structure is detailed below. This identifies the project team roles, the interfaces with the review authorities and with the client team. Revisions of this chart recording any changes will be issued for approval as appropriate.



5.2 Sub-Contracting

Approval must be gained from BAS through submission of Schedule 1 in the contract, Request for Approval to Subcontract/Sub subcontract, prior to engaging any subcontractors.

6. Communication and Reporting

Management of the communication process is essential to ensure that all communicated information is captured, documented and stored in a clear and consistent manner.

6.1 Project Numbers / Work breakdown structure

The project number for this project is 20S3890.

Where appropriate project work breakdown structures have been set up in accordance with specific disciplines and stages of the works. A breakdown of the WBS can be found in the Document Management System.

WBS	Description
0101	PREMLIMS
0205	SITE MANAGER/ SUPERVISOR
0400	UNDERGROUNDS
0500	TRAY AND CONDUIT SUPPLY
1100	DB'S (SUPPLY & INSTALL)
1101	SUBMAINS
1300	LIGHTNING PROTECTION
2900	GENERATOR
3400	ASBESTOS MANAGEMENT PC SUM

6.2 Communication Plan

Meetings:

The Project Manager will distribute a meeting agenda at least 2 days prior to any scheduled meeting and all participants are expected to review the agenda prior to the meeting. During all project meetings the Project Manager will ensure that the group adheres to the times stated in the agenda and will take all notes for distribution to the team upon completion of the meeting. It is imperative that all participants arrive to each meeting on time and all mobile phones should be turned off or set to vibrate mode to minimize distractions. Meeting minutes will be distributed no later than 24 hours after each meeting is completed.

Email:

All email pertaining to the QAS Project should be professional, free of errors, and provide brief communication. Email should be distributed to the correct project participants in accordance with the directory below, based on its content. All attachments should be in one of the organization's standard software suite programs and adhere to established company formats. If the email is to bring an issue forward then it should discuss what the issue is, provide a brief background on the issue, and provide a recommendation to correct the issue. The Project Manager should be included on any email pertaining to the QAS Project.

Informal Communications:

While informal communication is a part of every project and is necessary for successful project completion, any issues, concerns, or updates that arise from informal discussion between team members must be communicated to the Project Manager so the appropriate action may be taken throughout the project.

The Project Manager will negotiate with all necessary functional managers in order to identify and assign resources for the QAS Project. All resources must be approved by the appropriate functional manager before the resource may begin any project work. The project team will not be co-located for this project and all resources will remain in their current workspace.

Project team directory for all communications is:

Name	Title	E mail	Mobile Phone
BAS- Bob Builder	Client Management Representative	bbuilder@bas.gov.au	0400 000 000
Sarah Conley	Project Manager	sconley@fredon.com.au	0438 870 945
Adam Stuart	CSG Operations Manager	astuart@fredon.com.au	0413 805 190
Adrian Parsons	Senior Project Manager	aparsons@fredon.com.au	
Andrew Campbell	HSEQ Manager	acampbell@fredon.com.au	0408 096 170
Paul O'Brien	Site Supervisor	pobrien@fredon.com.au	0402 598 015

6.3 Meetings

Throughout the duration of the Project, BAS is to arrange meetings at fortnightly or other agreed intervals with appropriate Subcontractors, the BAS Superintendent's Representative, and the nominated Principal's Representative. Minutes of such meetings are to be kept by BAS and have electronic (PDF) copies forwarded to all attendees within 3 working days after each meeting. A Fredon representative is to attend all site meetings.

6.4 Reporting

Fredon is to provide the BAS Superintendent with site photographs (including sufficiently descriptive captions) of those portions of the Works under construction each fortnight to demonstrate progress.

The Project Manager is to complete the monthly HSEQ Report template and return to the Fredon HSEQ Manager by the second business day after the end of month.

7. Project Procedures

7.1 External or Client Procedures

Any works requiring shut down of power and lighting (such as when refurbishing old MSB) shall be carried out at night and the shutdowns shall be kept to a minimum period. Fredon is to provide Method of Procedure (MOP) for approval by BAS prior to commencement of works.

7.2 Fredon Standard Procedures

Fredon's maintains an integrated management system that is a suite of all of Fredon's documents and consists of the following:

The hierarchy and precedence of documentation includes the following levels:

- Policy Statements;
- Management System Manual;
- Procedures, Standards and forms; these include any entity or project-specific documents;
- Project specific plans, associated procedures/instructions, schedules, and deliverables;
- Records as specified by project system requirements.

To ensure the system remains consistent but has the flexibility to meet different operational and legislative requirements, systems documentation is subject to on-going review.

8. Documents and Records

The Document and Record Control Procedure (MSP-017) will be applied to control records (electronic data and hard copies) including provision for record identification, storage, protection, retrieval retention time and disposition.

All documents are reviewed and approved for adequacy by authorised personnel prior to issue.

Changes to the documents are communicated and superseded documents are retained for legal, references or knowledge preservation purposes.

Records are established to provide evidence for conformance of the services provided and the effective operations of the business.

Where files are kept on site, Project Managers are responsible for confidentiality and security of documents. Strict Control of all documentation must be maintained by site management/supervision during the course of the project.

8.1 Drawings Control

Drawings for project use must be strictly controlled as follows:

- All drawing must be appropriately identified (number, project etc.)
- Any drawing used for site work **MUST** be registered on the system drawing register;
- Any drawing or part of drawing being photocopied must also show drawing number to cross-reference if title block is not part of photocopy;
- Drawings that are for reference only i.e.: Architectural, other services etc., must be stamped 'FOR REFERENCE ONLY' on the drawing holder and not registered or stamped as it is not required to register 'Reference Only' drawings.
- Any customer imposed system (e.g Aconex)

8.2 Other documents and record control

- Administration, transmittals, project correspondence and any other related documentation must be filed appropriately in co-ordination with the Project Manager.
- Transmittal forms must be used for any documentation (especially drawings) handed over to client/client representatives, builders, sub-contractor and any other third party.
- Regular recording in the company's site diary forms part of the day to day routine of documentation.
- When a PC/Laptop is used on site, regular back-up must be carried out and access to the PC/Laptop should be limited to authorised personnel.
- All records of site work must be filed as per Fredon Document and Record Control Process, where full back-up of any electronic data must be carried out daily. Hard copy information must be filed appropriately and consistent with other files and records.

9. Project Controls

Project control activities include estimating, planning, progress control (schedules), progress measurement and cost management, all of which have an input to change management.

Project controls will ensure that the points listed below are addressed.

- Project Schedule
- Identify the key milestones and milestone dates
- Control of reward / penalty clauses associated with the milestones
- Opportunities for schedule improvement

- Project Controls for external contractors
- Managing Change system
- Weekly and Monthly reporting requirements

9.1 Cost and Revenue Forecasting

9.1.1 Project Cost Monitoring

The tracking of costs against budget will be carried out on a monthly basis and will be reported to:

- Fredon General Manager

Project costs will be monitored and controlled using Coins (Fredon specific financial management tool).

During delivery of the project, hours to complete will be reforecast and progress updated on a fortnightly basis. Earned Value of the work will be undertaken to calculate and to extrapolate a project completion cost. Earned Value, Forecast Cost at Completion and Variances are determined and Summary Reports are generated for internal and external use.

9.1.2 Budgets

The Project Manager will be responsible for delivering packages of work within agreed budgets. A CVR is to be completed monthly and presented to the Fredon General Manager for review.

9.2 Schedule

Project construction progress will be updated on a monthly basis in accordance with the process outlined in the below Table:

■ **Table – Schedule Monitoring Process**

Sequence	Task	Responsibility
1	Consultation with Project team, • Achievement of milestones in the last week; • Percentage completion of other design / activities in the last week; • Expected achievement of milestones in the next 4 weeks; • Receipt of design inputs in the last week; • Design inputs required in the next 4 weeks; and • Other information related to program and progress.	Project Manager
2	Update the Schedule to show actual progress compared with program and any changes to forecast delivery dates.	Project Manager
3	Produce Report (in accordance with the Communication Plan).	Project Manager
4	Review the updated Schedule and Report and take action to address any program issues, in particular: • Rectification of anticipated late delivery of milestones; and • Flagging of potential delay and issue of scope change notification (if applicable) to BAS.	Project Manager

9.3 Resource Planning, Resources Schedule and Mobilisation

The purpose of the resource schedule is to identify personnel, their inputs (in hours) and the timing of those inputs. This enables resource levelling to be addressed so that resourcing trends towards a smaller team with a greater level of input in percentage terms on a weekly basis.

The resource schedule is detailed in the CVR for the project.

Personnel leave will generally be covered by minimising (where possible) leave taken by key personnel during key activity periods.

9.4 Invoicing

Fees will be invoiced on a four weekly basis for payment within 30 days. Should payment not be received within 30 days from the date of issue of our invoice, Fredon reserve the right to cease or suspend work immediately. The application of this clause is at the Project Manager and Designated Project Executive's (PD) discretion.

10. Change Control

No work outside the agreed scope may be carried out without written agreement from the Project Manager.

If out-of-scope work is identified this must be immediately communicated to the Project Manager together with a rough assessment of the number of hours required, personnel / categories and schedule implications. The implication to the current work schedule resulting from delays in the issue of an instruction to proceed must also be highlighted.

A change is defined as any project change which may result in one or more of the following:

- Significant rework of calculations, drawings or other design documents.
- Significant changes to an issued design document.
- Significant changes, which will affect the performance or outcome of the project.
- Significant delays in the receipt of input (information, directions, approvals etc.) from others which may affect design delivery schedule.

Scope changes will be managed in accordance with the procedure outlined in the below table.

■ **Table – Change Management Process**

Sequence	Task	Responsibility
1	Incoming correspondence (either written or verbal instruction) are reviewed for any potential change effects.	Team Member
3	Scope change effects are determined, including implications on: • Project costs and program; and • Fredon costs and program.	Discipline Lead
4	Review and confirm change.	Project Manager
5	Informally discuss potential scope change with BAS prior to formal submission of scope change notice.	Project Manager
6	Complete Project Variation Request form	Project Manager
7	Send to BAS in accordance with Communication protocols.	Project Manager
8	Enter change details into Variation Register.	Project Manager

A-Project Variation Request form will be submitted BAS to seek approval prior to progressing the work. However, in some instances, changes to scope may be identified as work progresses; in these instances the variation form will be issued to BAS as soon as practicable.

A Variation Register/Change log will be maintained that records the unique identity, topic, date sent, requested date of response and date response received. The Change or Variation Register will be kept up-to-date by the Project Manager.

Any Changes will be discussed at regular meeting between the Fredon Project Manager and BAS. Where an agreement cannot be reached, the decision will be escalated to the Fredon CSg Operations Manager and BAS.

Under no circumstances will Fredon commence work on a change prior to formal approval by BAS.

A Fee Variation Register will be maintained by the Project Contracts Manager and located in the project files.

11. Reviews

The Quality Plan for QAS Southport will be developed to clearly define the assurance processes, procedures and reviews that will be employed. The plan sets out the general or project specific assurance and quality related activities to be undertaken by Fredon personnel which will give confidence that the all project KPIs will be met.

The Quality Plan is a support document of the Project Execution Plan (PEP), and provides:

- An overview on the assurance processes for the Project
- Guidance for specific project assurance documentation to be developed
- The review and monitoring philosophy and activities for the project
- A project review/audit plan including all proposed project and external (corporate) reviews

The Quality Plan is prepared to comply with the requirements of **AS/NZS ISO 9001**.

12. Health, Safety and Environment

A specific Health, Safety and Environment Plan will be developed for QAS Southport. The HSEQ plan is designed to cover all aspects of the project, from design to commissioning and handover to BAS and Queensland Ambulance. This HSEQ plan acknowledges the responsibilities to meet the relevant statutory requirements, specifications and standards.

The purpose of the plan for this project is to:

- Outline the project team responsibilities for management of health and safety activities
- Detail the Occupational Health and Safety policies and systems adopted for the project
- Detail the requirements for the management of hazards at the project site
- Provide the framework for the implementation of all health and safety activities
- Detail the requirements for the management of Environmental issues

The plan is supported by the HSEQ team. This HSE plan has been developed in line with the Fredon HSEQ Management System. It complies with the requirements of AS/NZS 4801.

13. Risk Management

The approach for managing risks for the BOQ Project includes a methodical process by which the project team identifies, scores, and ranks the various risks. Every effort will be made to proactively identify risks ahead of time in order to implement a mitigation strategy from the project's onset. The most likely and highest impact risks were added to the project schedule to ensure that the assigned project manager take the necessary steps to implement the mitigation response at the appropriate time during the schedule. The Project manager will provide status updates on their assigned risks in the weekly project team meetings, but only when the meetings include their risk's planned timeframe.

Upon the completion of the project, during the closing process, the project manager will analyze each risk as well as the risk management process. Based on this analysis, the project manager will identify any improvements that can be made to the risk management process for future projects. These improvements will be captured as part of the lessons learned knowledge base.

14. Procurement

The Project Manager will provide oversight and management for all procurement activities under this project. The Project Manager is authorised to approve all procurement actions up to \$10,000 and in accordance with PRP-005 Purchasing Process and Authorisation Levels (QLD). Any procurement actions exceeding this amount must be approved by the QLD Director. The Project Manager must ensure that purchase orders over \$5000 have a completed Major Bid Analysis (MBA) and supplier Price Comparison (PRF-003) and that it is unloaded onto the Coins system. Prior to uploading into Coins the MBA must be completed and include the recommendation by the Project Manager and why by completing all sections of the MBA. The MBA must have 3 quotations attached to it and have the appropriate authorisation level signed off.

The Project Manager will work with the project team to identify all items or services to be procured for the successful completion of the project. The Project Manager will use the tendering department's register of preferred suppliers or subcontractors to assist them in procurement for the project. The Project Manager will then ensure these procurements are reviewed by the CSG Operations Manager and presented to the contracts and purchasing group in Sydney head office once reviewed. The contracts and purchasing group will review the procurement actions, determine whether it is advantageous to make or buy the items or resource required services internally, and begin the vendor selection, purchasing and the contracting process.

In the event a procurement becomes necessary, the Project Manager will be responsible for management any selected vendor or external resource. The Project Manager will also measure performance as it relates to the vendor providing necessary goods and/or services and communicate this to the purchasing and contracts group.

Once a supplier or contractor has been confirmed and meets the requirements for the project the Project Manager must engage them using the Fredon 'PRF-020 Sub-Contract Agreement_Fredon QLD' for engagement of service and have them complete the Subcontractor Pre-qualification document at the meeting they have to finalise the signing of the terms and conditions.

The suppliers that will be used for the QAS project will mainly come from the estimating departments list of service providers as long as they can meet the specific scope of the project and that the Project Manager reviews to ensure that they can meet the expectations of the project. If the Project Manager wants to use other service providers they must demonstrate why it does not meet the scope, budget and time allocations originally set for the project by the estimating department.

15. Contract Management

15.1 Contract Implementation

A comprehensive handover meeting with appropriate minutes shall be held between the Tender Team and the Project Execution Team.

Subsequent to handover the Project Manager is responsible for the overall performance of the project within the specification, allocated time and cost during the Contract Execution Phase. The Project Team members are responsible to the Project Manager for the performance of their particular area and shall report progress and costs to the Project Manager on a regular basis.

The purpose of the meeting is:

- To ensure that engineering and project departments clearly understand contractual and customer requirements;
- To ensure full understanding of the Scope of Work;
- To ensure any questions and concerns are resolved; and
- The handover of all tender documentation and correspondence.

Any information that cannot be provided by the Estimating Manager should be the subject of an action in the minutes of meeting within identifying the outstanding item and the necessary timing of its supply to allow the work to proceed in line with the Contract program.

At the completion of the handover meeting all parties present shall sign the Contract Handover Form.

15.2 Review of the Head Contract

The Project Management team will meet at regular intervals to review the status of the project. The meeting will be chaired by the Project Manager.

The contract status review, interfaces and communications will be coordinated with the client as appropriate and through the regular progress meetings. These reviews will include the monitoring of Variation Orders and modifications to continually assess their impact on the contract.

The Project Manager, shall ensure that the requirements of any 'Variations to the Work' and modifications are verified against those of the signed contract between Fredon and the client and resolve any differences.

15.3 Contract Formation

A suite of contractual documents will be generated and forwarded to the client for approval. This will consist of the Tender Document package and the Contract Document package including General Terms and Conditions, Special Terms and Conditions and the Formal Instrument of Agreement. Once agreed, these documents will be used for all installation contracts.

Pre-qualified tenderers will be invited to bid for each package. A tender evaluation process will provide a recommendation to award.

15.4 Contract Administration

Contract Administration is the responsibility of the Project Manager.

16. Commissioning

Commissioning inspections and tests of installed building services and equipment systems have been satisfactorily completed and passed and the BAS Superintendent has been provided with copies of the inspection and test results verifying that these systems are working within optimum design parameters.

Persons nominated by the Principal have satisfactorily completed training in use of the building services and equipment systems.

17. Lessons Learned

The Lessons Learned process is designed to encourage the project management team to actively seek out and use lessons from other projects as an integral part of risk management and project execution planning.

Good and bad practices and experiences on the project should be captured, communicated and addressed to benefit the implementation this and future projects.

A lessons learned session is to be conducted at the end of the project using PMF-057 Lessons Learned record.

18. Project Execution Plan Sign off

Name, signature and date of all appropriate stakeholders (sponsor/client, project manager) signing this document.

Name	Role	Signature	Date

Appendices

A.1 Appendix A – Program

Issued By:	Sarah Conley
Title:	Project Manager
Email:	sconley@fredon.com.au
Variation No:	20S3890-V001
Date Issued:	Monday, 5 March 2018
Request No.	As per email from

Description of works	
	Inclusion of phase rotation meters into Fredon switch boards as per engineers requirements

Reason for Variation to Sub-Contract

Request from the Builder

Qualifications & Exclusions

Rotations meters only

Pricing Summary		TOTAL
1	Phase rotation meters	\$1,523.25
2		
3		
4		
5		
6		
7		
8		
9		
10		
	SUBTOTAL	\$1,523.25
	GST @ 10%	\$152.33
	TOTAL	\$1,675.58

To prevent delays to the current construction program approval is required within	N/A	Days
Extension of time is requested due to above works	N/A	Days

CONDITIONS (✓ = Applicable)	
☒	The above pricing is valid for 14 days from date of the Letter.
☐	As instructed we are proceeding with the works. Approval of our action and price is requested.
☒	We await instructions and approval of our price before proceeding with the works.
☐	The above works have already been carried out. Your formal acceptance of our price is requested
☐	Prices have been based on normal working hours only.
☒	The above pricing is based on the same responsibilities, extent of work and contractual limitations as applies for the main contract for the project.
☒	The above pricing is based on the attached Variation Specific Details

Signed:

Great Content

Release: 1

Date: 13 September 2019

Author: Sarah Conley

The information provided within this report is for the purpose of learning which should be seen as an opportunity for all sides of the business

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1 Overview

The Lessons Learned report is created for the purpose of recording and sharing lessons learned to:

- Avoid making the same mistakes
- Improving on current delivery standards by adopting proven good practice
- Responding to changes in the Project Management environment including new priorities, initiatives and strategies
- Contributing to organisational growth and maturity by effecting long term improvements in the way an organisation embeds and shares Project Management best practice.

2 Project scope

Fredon estimating team negotiated and were formally awarded the project on 1st December 2017.

The QAS Southport facility (generally abbreviated to QAS), is a 24/7/365 operational 000 emergency command and ambulance station. The ability to have reliable backup infrastructure is imperative to the operational functions of the facility. This upgrade was to ensure that reliable backup contingencies are in place. The intention was to have the project completed prior to the Commonwealth Games in March 2018.

3 Project Commercial summary

Contract (tendered)		Contract report (July 2018)		Differential
Value	\$417,561	Value	\$484,058	+\$66,497
Margin 15%	\$62,634	Margin 3.55%	\$ 17,198	-\$45,436
Project labour \$	\$129,800	Project labour used \$	\$121,196	+\$8,604
Project labour Hrs	1,615 Hrs	Project labour Hrs used	1,738 Hrs	41 Hrs
		Variation hours.	82 Hrs	
Labour gang rate	\$65.00		\$70.00	\$5.00
Project duration	16 weeks	Actual duration	29 weeks	+ 13 weeks

4 Could Do Better

The below are findings / observations which presented during the project journey.

Whilst in most project scenarios there is generally a pendulum effect (risks v opportunities) which ultimately find a point of balance.

ID	Subject	Issue	Actual Impact	Next time
1	CONTRACT	Contract was issued Dec 2017. The Project Manager (PM) was not placed on the project until the end of January 2018. Another PM had been given the project to start however he was due to go on paternity leave	Delayed start in the project meant that essential items were not covered, resulting in a temporary measure being constructed to allow for Comm Games period.	Allocate a PM at project commencement that is able to commence the project when required. If removing from another project ensure contingencies are in place to cover the other project.
2	PROJECT TIME FRAME	The initial project period was 16 weeks. The PM was allocated with approx. 6 weeks left to go prior to the lock out period.	No undergrounds had occurred No Energex connection No paperwork had been completed No metering done or organised No property pole No consultation with lightning protection	If a PM is unable to start on the project, allocated another resource to commence essential items. Energex connections required approx. 12 week lead time.
3	SWITCHBOARDS	Initial PM placed the order for switchboards, however no approvals had been given, or manufacturing had commenced. Second PM had to follow up	PM had to accelerate the switchboard builder, at additional cost to enable weekend work.	If a PM is unable to start on the project, allocated another resource to commence essential items, and monitor until handover to permanent PM
4	ENERGEX	Consultant had stated they had organised Energex to help out. No contact was made with Energex until PM commenced on the project. Energex contact was given during the kick off meeting with estimator and initial PM.	Energex lead time is approx. 12 weeks, which resulted in no permanent connection and Fredon failed to meet the Comm Games cut off.	If a PM is unable to start on the project, allocated another resource to commence essential items, and monitor until handover to permanent PM
5	PLAN B OPTION	Due to not meeting deadlines because of the above. Labour and material had to be used in order to give QAS a plan "B" option. Which gave them their N+1 backup for the Comm Games.	PM designed and reused parts of the current system in order to re-route the generators in a way that achieved this goal with what QAS had on site	If a PM is unable to start on the project, allocated another resource to commence essential items, and monitor until handover to permanent PM
6	POST COMM GAMES	Work recommenced after the Comm Games lock out period	As there was no longer a push for works to be completed, minor hurdles and cut overs would regularly be pushed back resulting in extra time required. To avoid lost time workers were allowed to take RDOs and annual leave, or sent to other sites.	Complete works in initial timeframe.
13	DESIGN	The project was supposed to have a Discrimination study done before the boards were built. This was done based on consultant's design which was found to be flawed. The Discrimination study as per contract was meant to be done 1 week after	This held up switchboard manufacture and Energex as the project was unable to confirm site supply requirements	If a PM is unable to start on the project, allocated another resource to commence essential items, and monitor until handover to permanent PM

ID	Subject	Issue	Actual Impact	Next time
		contract issue. It wasn't done until February.		
14	TRENCHING	The trenching budget was \$4,000 material plus 40 hours approx. Vac trucks were required to be used (in contract due to asbestos contamination in soil)	Actual cost came to \$35,000-\$40,000 plus 160 hours for spotters and supervision	Estimator to confirm trenching requirements before assuming excavators are acceptable
15	METERING	The metering allowed for was EDM1 which was below specified and not an adequate equivalent.	The metering allowed for was EDM1 which was below specified and not an adequate equivalent.	Estimating checklist of all specified materials to be completed during tender phase
16	LOAD BANK	There was meant to be two load banks on the project. Only one was picked up on the tender.	Each load bank was \$16,000, this resulted in a short fall in the budget	There was meant to be two load banks on the project. Only one was picked up on the tender.

5 What we must do better

- Tendering - Scope needs to be understood in its entirety – inclusive of any existing site conditions, builders' safety requirements, make good requirement, external provider timeframes and client programming restrictions.
- More efficiently allocate appropriate management to the Project on award, to ensure fast moving deadlines are met.

The information provided within this report is for the purpose of learning which should be seen as an opportunity for all sides of the business.