

BSBPMG511

MANAGE PROJECT SCOPE

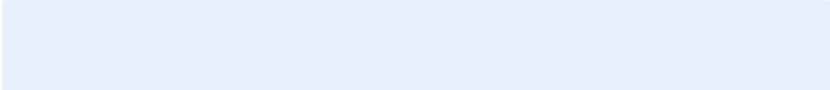
PRACTICAL ASSESSMENT INSTRUCTIONS

- The following practical assessment will require the participant to complete work related activities.
- The assessor will conduct observations of the participant's work to determine whether they display sufficient practical skills and knowledge.
- Please fill in the details below, providing your name, signature and date of assessment.
 - Your signature acknowledges that the assessor provided clear instructions and the participant understood what was required to complete this assessment.
- The assessor may substitute a Practical Task with another task of equal value.
 - Alternate tasks must be fully documented by the assessor.

Participant name Nazeem Ajez

Participant signature 

Assessor name _____

Assessor signature 

Date [Click here to enter a date.](#)

Number of tasks	Number of tasks completed	Satisfactory?	
		Yes	No
1	1	☐	☐

ASSESSOR COMMENTS

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:	Nazeem Ajez
Name of observer:	Andrew Secomb
Role of observer (Confirm suitability to sign)	Superintendent (suitable to sign, direct colleague/ supervisor)
Email address of observer	Andrew.Secomb@golding.com.au
Signature of observer:	
Date:	18/10/2021
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

Nazeem has displayed the above criteria (1.1A – 1.3C) through his day to day tasks at Golding Contractors. Nazeem has previously completed the Project Management Plans for the projects he is associated with in his current role at Golding Contractors.

Safety and Health Management Plan



Purpose: The purpose of this document is to define a project specific management plan, that when applied, supports the achievement of project safety and health objectives and the organisational goal of 'Zero Harm'.

Document Attributes	
Element	Project Management
Knowledge Area	Project SHE Management
Owner	Project Manager
Custodian	SHET Resource
Document ID	HAL00773-002

Halcyon Greens Contracts HAL00773

The current controlled .pdf version of this plan is located in folder 1001 of the project records and the Golding Wiki at <http://wiki.golding.com.au/display/BS> under Business Systems Services/Management Plans (Current Projects). All printed copies of this Management Plan are to be considered uncontrolled and must be validated with the Project Manager before use.

Effective from	Details of Revision		Approved By Owner	Document Review Number
15 Jun 2021	First controlled issue.		Project Manager Simon ELLIOTT	Urban-DRE-0081
Holder Number	Holder Name	Holder Position Title	Company Name	
419	Simon ELLIOTT	Project Manager	Golding Contractors Pty Ltd	
677	Troy SCHULTZ	Client Representative	Peak Urban Pty Ltd	
619	Tim FRANCIS	Infrastructure Manager	Halcyon Developments Pty Ltd	

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Safety and Health Management Plan



1. Scope

This document forms the Safety and Health Management Plan (SHMP) developed for contracted works on the Golding project as described in the Project Scope Statement below. Significant changes to the project scope of works shall require a review of this Plan.

PROJECT SCOPE STATEMENT									
Golding Tender / Project ID	HAL00773	Project Title	Halcyon Greens				Client Tender/ Contract ID		Various
Project Scope Description	- General civil work including establishment and set-out, removal and lawful disposal of rubbish, testing as per project specifications; - Minor earthworks; - Shaping cut off drains,trim and compact subgrade to pavement; - Construct gravel pavement of placement of asphaltic concrete surfacing,constructing kerb and channel, signage placement and road crossings; - Sewerage reticulation systems; - Water supply reticulation systems; - Stormwater and silt management; and - Other project associated works.								
Client Name	Halcyon Developments No. 5 Pty Ltd				ABN/ACN		26 716 612 542		
Client Address (Street & Postal)	1 Halcyon Way Hope Island, Qld 4212				Client Representative		Peak Urban Pty Ltd 196 Wharf St, Spring Hill QLD 4000		
Project Address	Halcyon Way, Pimpama QLD 4209			Region	SEQ	Discipline	Civil	Golding Division	Urban
Approx. Start Date		June 2021			Approx. Completion Date		October 2021		
Name of Principal Contractor		Golding Contractors Pty Ltd			ABN/ACN		88 009 734 794		
Address of Principal Contractor		Level 2, 40 McDougall Street, Milton Qld 4064							

1.1 Project Location

The project is located approximately five (5) kilometres from Pimpama (central) and 25 kilometres from the Central Business District (CBD) of Southport, Gold Coast in the south east corner of Queensland.



Figure 1-2-1: Locality Plan – Approximate only
(Source – Nearmaps)

2. Golding Policy



WORKING SAFELY

At Golding, we aspire to 'Zero Harm'. This means that no job is so important that it cannot be done safely. By working together, we can identify and manage risks, always reducing potential for personal injury and illness.

Our systems are designed for safe production and are known by all employees. Our leaders demonstrate visible safety leadership and are unwavering in their discipline in the application of these systems.

Golding employees consistently apply work systems designed for safe production. We stop, or don't start work where a hazard is identified that may pose a risk that has not been considered. Golding employees do not take risks with workplace safety and do not accept risk taking by those around them.

If incidents do occur, we investigate them thoroughly. We commit identified improvements to action and share our learning so incidents are not repeated.

At Golding, we work safely.



Geoff Caton
Chief Executive Officer
14 February 2020

Golding Contractors Pty Ltd ABN 88 009 734 794
ESTABLISHED IN 1942

3. Project Objectives

Golding's SHET performance is measured against the agreed targets set out within the below table. Specifically, SHET performance is measured with the application of the following:

- Weekly SHET Performance review meetings with the Project Manager, Superintendent and SHE Advisor;
- Targeted assurance and control activities scheduled with the application of the SHE Activity Planner; and
- Quarterly SHE Performance review processes that allow for detailed analysis of the project's performance, trends and any required improvement actions.

Measure	Objective	Target	Reporting Notes
Lost Time Injury Frequency Rate (LTIFR)	Nil Incidents	0 Measured Quarterly	The set target allows Golding to reasonably work toward an objective of Zero Injuries over a Calendar period. The quarterly timeframe provides opportunity to recognise and celebrate safe performance and provides incentive for the workforce to start again in the event of a quarter where the target isn't met. This safety target is more easily linked to a Safe Production target.
Recordable Injury Frequency Rate (RIFR)	Nil Incidents	0 Measured Quarterly	
High Potential Event Frequency Rate (HPEFR)	Nil Incidents	0 Measured Quarterly	
SHET Monitoring (Planned v Actual)	100% compliance	>90% compliance Measured Quarterly	The set target surrounding project assurance activity provides a KPI that allows for common project occurrences including significant weather events, changes of scope and lost production days.
Corrective Action Close Out (Incident and Project)	100% close out	>90% close out Measured Quarterly	
Positive Drug or alcohol tests	Zero confirmed positive results per quarter	Less than 1 positive result per 100 tests per quarter	The suggested KPI links directly with the other suggested KPI's providing a basis for quarterly management review of safety performance by Golding. Linking the three key lag measures provides a genuine and achievable target for crews to aspire to. Anecdotal evidence for other workforces testing suggests that 1 confirmed positive result per 100 tests is around the industry standard for the detection of drugs and alcohol using on site testing methods and is representative of the extent of the problems within society.

Safety and Health Management Plan

4. Structure

Golding provides a comprehensive, integrated approach to the management of safety health and environment.

Project Management Element

Based on an International standard (PMBOK) including:

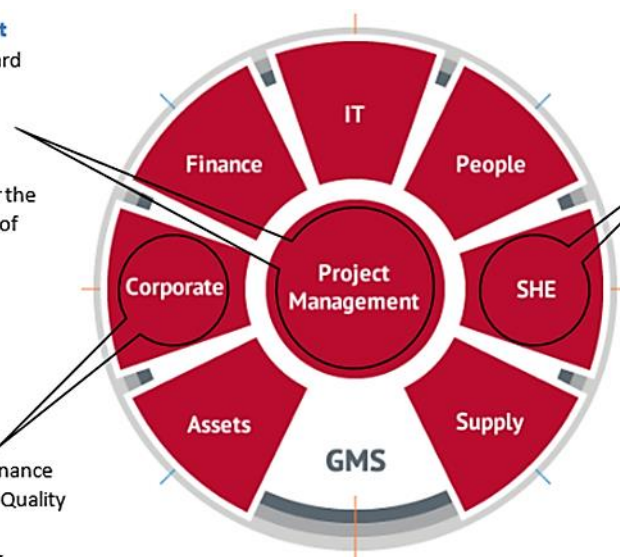
Project SHE Management

Defines project requirements for the Planning, Assurance and Control of SHE at a project level.

Corporate Element

Includes organisational governance functions such as the Golding Quality Management System and requirements for SHE auditing.

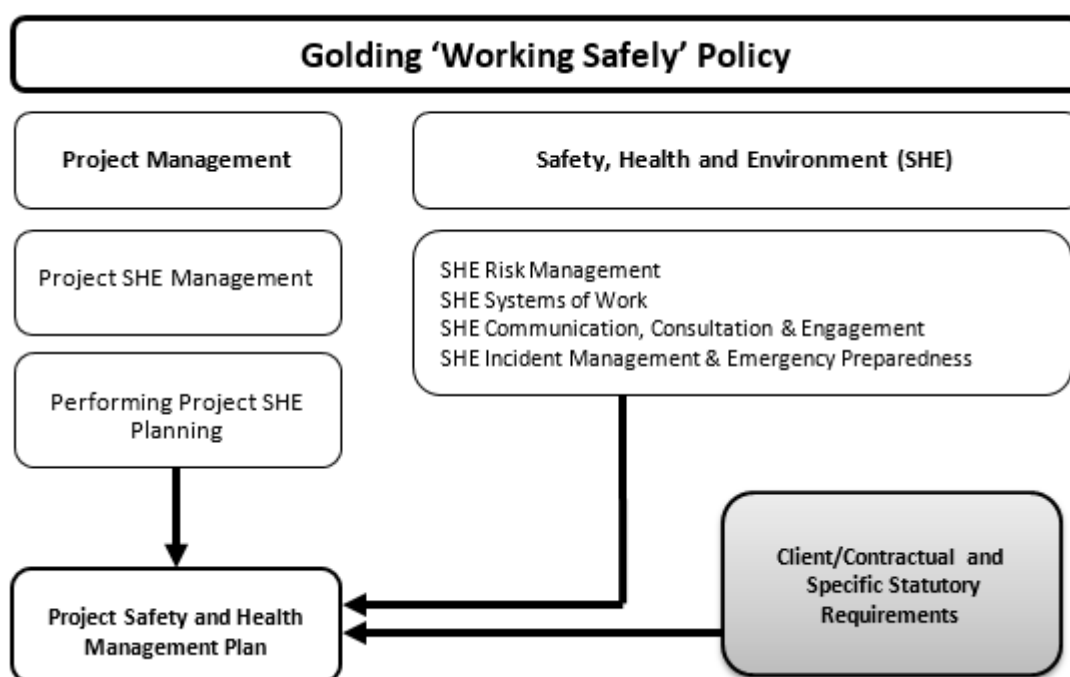
Golding is externally certified against ISO 9001.



SHE Element

Externally certified against ASNZS 4801, ISO 14001 and OFSC.

This SHMP is established in accordance with the Project SHE Management 'Knowledge Area' and references mandatory Golding procedures drawn from 'SHE Element', outlining the applicable system requirements that must be incorporated within the Project Safety and Health Management Plan to give effect to our 'Working Safely' policy and realise our goal of 'Zero Harm'.



5. Planning

5.1. Client Alignment

Alignment with client contractual and system requirements is a critical aspect and commences at the time of project bid. The purpose of the Golding contractual and system alignment process is to establish clarity surrounding the expectations and obligations of Golding to support the achievement of key success factors for the project.

The alignment process includes:

- Contract SHEC review and analysis;
- Golding and client system mapping and gap analysis;
- Formulation of an aligned Safety and Health Management Plan; and
- Joint interface and risk review processes involving key client and Golding team members.

5.2. Accountability and Responsibility

Golding employees and subcontractors shall be held to account surrounding their behaviour while at the project. Subsequently, all employees and subcontractors at the project are required to:

- Promote our 'Zero Harm' culture through leading by example;
- Active contribution to SHEC activities and within engagement forums;
- Stop work when unsafe work conditions are identified or required controls are uncertain;
- Accept accountability for their actions;
- Conduct work in accordance with the work plan, procedures and this plan;
- Follow all safety instructions given by advisors, supervisors and managers on the project;
- Work in a manner that protects the environment and the community;
- Report all unsafe conditions, unsafe acts and all incidents immediately to their supervisor; and
- Immediately report any injury to their supervisor or SHE Advisor.

Refer to **Attachment A Role Specific Safety and health Accountabilities**.

5.3. Legislative Compliance

Golding shall comply with all legislative requirements governing the scope of work required at the project. Subsequently, all relevant Australian Standards, Codes of Practice and Guidance Notes shall be incorporated within the authorised, safe systems of work for the project and monitored for compliance using the [SHE Operational Risk Assessment and Monitoring Schedule](#).

A Legislative Compliance Register is maintained by Golding and specifically incorporates relevant amendments associated with the *Work Health and Safety Act 2011* and *Work Health and Safety Regulation 2012* et al.

6. Risk and Change Management

All activities associated with the Golding scope of work is subject to consistent and appropriate risk management such that risks are identified and recorded with appropriately applied and monitored controls.

It is recognised that that effective risk identification, assessment, management and monitoring requirements underpin the success of Golding projects and includes the effective management of change during the lifecycle of the project.

6.1. Change Management

Central to the management of change within Golding is the application of SHE planning processes that monitor the changing risk profile of a project and trigger review by the project team.

When unplanned or unexpected changes occur, we stop, update and record our understanding with the use of the [Start Change Card](#) and the Operational Risk Assessment tool depending on the circumstances and the hazards involved. The Change Card is to be used to document any identified or uncontrolled hazards within the project and immediately submitted to the relevant Supervisor for appropriate action and recording.

We assess and communicate the impact of changes and apply appropriate controls. If our work is not safe, we stop work in the immediate area and make it safe.

6.2. Effective Pre-Task Planning

Central to effective communication and planning at a project level, is the need for pre-task planning and discussion. The Start Card/Change Card process is applied daily and prior to the commencement of each task in order to:

- Confirm within the work group that a Job Step Analysis (JSA) and any other necessary risk assessment process has been completed and all required controls are in place prior to work commencing;
- Confirm a consistent understanding of how the job will be undertaken through effective communication and engagement by the work group team leader;
- Provide a process by which to stop work when changes or unsafe conditions emerge; and
- Provide a communication prompt for Supervisors/Team leaders.

The Start Card process is not:

- A risk assessment process; or
- An independent process for managing risk in activities where no risk assessment has been performed.

6.3. Risk Assessment

In order to identify, understand and control risks associated with the contracted works for the project, Golding shall approach the [Operational Risk Assessment](#) process with a focus on three central requirements including:

1. Identification of risk scenarios during the life cycle of the project;
2. Identification of appropriate controls to manage the identified risks and hazards; and
3. Identification of required contingency controls including site specific emergency response.

Specifically, the risk assessment process involves consideration of the following:

- Analysis of identified risk scenarios and preventative control measures using the [Operational Risk Assessment](#) tool prior to the commencement of any activity at the project with the direct involvement of the project team;
- Each risk scenario is formulated and then attributed a consequence category and contributory/causal factors prior to the formulation of specific, preventative controls;
- The risk rating for each scenario is considered on the basis of preventative controls and the associated consequence and likelihood; and
- Control quality and control confidence is specifically analysed for each risk scenario to confirm the accurate application of the hierarchy of controls and the potential for controls to erode and be less effective during the passage of time.

6.3.1. Risk Assessment Levels

The Golding [Operational Risk Management](#) procedure shall be applied and consists of two (2) primary levels of risk assessment set out within the below table.

Risk Assessment Level	Operational Tool	Purpose
Level 1	Operational Risk Assessment (ORA)	This is the method of assessment used when a high level of definition and rigor is required to inform the safe systems of work for a project and are required for the following without limitation: Changes in design, traffic management layout or conditions, or consideration of construction methodology; and Assessment of all high risk construction activities; and Interface risk scenarios with the public, concurrent contractors and client works. ORAs directly inform Construction Procedures and other safe systems of work required for a project.
Level 2	Job Step Analysis (JSA)	JSAs require the assessment of the specific steps required to complete a task such that relevant workplace conditions and hazards are identified and appropriate controls are implemented prior to commencing work. JSAs are undertaken at a task level and don't require formal qualification (risk scores) as the focus is on identifying adequate control or reduction measures for each hazard identified to ensure a safe system of work. JSAs are not suitable for the following activities: • Routine tasks that occur frequently (though they can be used to develop safe work procedures for frequent or recurring tasks); • Tasks where the risks have not been previously identified; and • Tasks with complexity outside the normal experience or skill/competence of the group. JSAs are only applied for the duration of the specific job. If the same task is conducted repeatedly, it should be formalised into a Safe Work Instruction.

6.4. Hierarchy of Preventative Controls

Each level of the risk management requires the consideration of control quality and control confidence. When assessing control quality and confidence, the following levels of controls are applied.

6.4.1. Level 1 - Elimination

The most effective control measure involves eliminating the hazard and associated risk. We do this by understanding ways to eliminate the hazard and prevent its introduction into the workplace.

6.4.2. Level 2 – Substitution and Isolation

If it is not reasonably practicable to eliminate the hazards and associated risks, the following approach shall be applied:

- Consider how the hazard can be substituted;
- Consider how the hazard can be isolated from people; and
- Consider and implement required and reasonable engineering controls.

6.4.3. Level 3 - Administrative Controls and PPE

Once Level 1 and Level 2 controls have been considered and additional measures are required to be implemented, the following shall be considered and applied:

- Use administrative controls; and
- Use personal protective equipment (PPE).

Specifically, administrative controls and PPE should only be relied upon as the primary control when there are no other practical control measures available, as an interim measure until a more effective way of controlling the risk can be used or to supplement higher level control measures.

6.5. Project Risk Register

A [Project Risk Register](#) shall be developed through the application of the [Operational Risk Assessment](#) process to consider all potential damaging sources of energy surrounding Golding's scope of work as well as impacts to the environment, the health and safety of employees, contractors, interface risk scenarios, visitors and the surrounding community.

The Golding Project Risk Register is the core document which provides the monitoring priority for risks on site. Golding develops monitoring tools that demonstrate a link to the relevant controls outlined in a procedural control which has been identified to control contributing factors to a risk scenario.

The implementation and monitoring of this program is the responsibility of the Golding Project Manager. The Risk Register shall be reviewed at least monthly or as required in the event of change or incident occurrences.

6.6. Formulating Safe Systems of Work

Safe Work Method Statements (SWMS) shall be prepared for all high risk construction activities to be conducted on site and will be authorised for use by the Golding Project Manager prior to the commencement of work.

SWMS for high risk activities include but are not limited to:

- Bulk earthworks;

- Hazardous manual tasks;
- Working on or near roads;
- Work around overhead and underground services;
- Plant movement and operation;
- Work at height;
- Cranes and lifting;
- Drainage works;
- Confined space entry; and
- Work near or over water.

6.6.1. Review and Approval of Safe Work Method Statements

Prior to commencing work on site, all SWMS shall be reviewed and authorised for use by the Golding Project Manager, assisted by Supervisors and the project SHE resource.

To establish consistency and compliance with the Golding Safety and Health Management System and relevant legislation, the Project Manager will assess each SWMS with the use of the [Safe Work Method Statement Verification](#) tool. Each approved SWMS will then be tracked within the [SWMS Register](#).

6.6.2. Compliance with Safe Work Method Statements

The Golding Project Manager will schedule observations and monitoring of the application of Safe Work Method Statements (SWMS) prepared for high risk construction activities on the project using the project specific [SHE Operational Risk Assessment and Monitoring Schedule](#).

6.7. Competency Management

Golding shall prepare and maintain a [Project Training Plan](#) to:

- Identify the required competency and specialist skills to carry out the work safely and efficiently;
- Guide the planning and on-boarding of suitable employees and subcontractors as required;
- Equip the Project team with information confirming the capability of specific workers to undertake tasks and operate plant and equipment on site; and
- Assist with look ahead planning processes and establish clarity between the Project, Human Resources and Subcontractors.

The [Project Training Plan](#) shall include role specific information and competency requirements as required in a civil context and determined by legislation.

6.8. SHE Monitoring

A project specific [SHE Operational Risk Assessment and Monitoring Schedule](#) shall be prepared with direct reference to the project's Risk Register and the project's contract provisions such that all client required monitoring and high risk construction activities are allocated specific monitoring at an agreed frequency.

The [SHE Operational Risk Assessment and Monitoring Schedule](#) provides structure for the project team; establishes accountability for Supervisors, SHE resources and the Project Manager and required all subcontractors and Golding workers to be involved in SHE monitoring at the project. Additionally,

the planner allows for the scheduling of targeted monitoring activities and produces real time SHE performance data.

6.9. Safe Systems of Work

6.9.1. Fitness for Work

Project specific [Fitness for Work \(FFW\) Parameters](#) shall be prepared for the project such that a credible threat of detection is established. The FFW schedule shall consist of:

- Daily alcohol testing - 0.000% BAC using a calibrated Lion SD400 Alcolmeter allocated to the Project;
- Drug testing as scheduled with the assistance of an accredited third party;
- Golding Pre-Employment Medicals for Golding workers;
- Fatigue management information and guidance for the workforce, delivered via scheduled Tool Box discussions; and
- Access to the Golding Employee Assistance Program (EAP) shall be widely communicated throughout the project to support employees who require assistance with the management of FFW issues.

Regardless of test outcomes, the [Fitness for Work](#) procedure shall be applied. Golding Supervisors have the obligation to remove a person from risk until a further assessment can be made.

6.9.2. Personal Protective Equipment

Personal Protective Equipment for all workers at the project shall be applied in accordance with [Personal Protective Equipment](#) and shall include:

Long sleeve hi-visibility shirt (Golding employees shall wear the Golding provided uniform);

- Long pants (jeans or cotton drill work wear);
- Lace-up, steel-cap boots with ankle protection;
- Australian Standard hard hats with wide brims for sun protection;
- Australian Standard eye protection (glasses as a minimum);
- Appropriately selected hand protection as required and specific to the task; and
- Hearing protection as required and specific to the relevant task.

PPE exempt areas shall be established within the office/ administration area of the project. This shall be communicated within the project's induction program and will be demarcated on a site map. All persons including visitors who intend to move beyond the PPE exempt area must wear the required PPE.

The selection of PPE for specific tasks shall be assessed during [Operational Risk Assessment](#) and is to consider the following:

- The anticipated hazards;
- The limitation of the item of PPE;
- The ease with which that item of PPE can be worn with other items;
- The mobility and comfort of the wearer;

- Fit for purpose;
- Possible maintenance issues;
- Secondary hazards, such as restricted vision or movement; and
- Relevant signage is posted in conspicuous locations which comply with AS/NZS 1319 'Safety Signs for the Occupational Environment'.

6.9.3. Hazardous Chemicals and Dangerous Goods

The presence and use of hazardous substances requires Golding to establish procedures and processes to minimise the risk to persons and the environment. Specifically, this means Golding shall apply [Hazardous Substances](#) procedure which includes:

- All 'hazardous chemicals' must have approval from the Project Manager prior to being ordered or being allowed on site;
- Establish a process to have substances approved on site;
- Project/Site engineers are to conduct a risk assessment for using specific hazardous substances;
- Establish and maintain a hazardous substances register;
- Educate personnel of the risks that hazardous substances and dangerous goods;
- Have a list of approved substances on site including relevant Safety Data Sheets (SDS's) in readily accessible locations; and
- Audit hazardous substances storage and use.

Golding shall apply [Dangerous Goods](#) to minimise the risk to personnel of storing, using, moving and disposing dangerous goods. Specifically, this means Golding will:

- Establish a process to have dangerous goods approved on site;
- Project/Site engineers must conduct a risk assessment for using specific dangerous goods;
- Establish a dangerous goods register;
- Educate personnel on the risks that of dangerous goods;
- Have a list of approved substances on site including relevant Safety Data Sheets (SDSs) in readily accessible locations;
- Inform relevant emergency services of the dangerous goods on site and relevant quantities
- Audit dangerous goods; and
- Any fuels, chemicals or other materials identified as 'dangerous goods' must be transported in a secure and appropriate container at all times.

6.9.4. Occupational Hygiene

Golding has established processes to minimise the health effects of occupational hazards through the application of [Health Monitoring](#) and consists of:

- Ascertaining a base line of occupational health hazards through appropriate monitoring;
- Reducing as far as practicable personnel's exposure to occupational health hazards;
- Educating the workforce about the occupational health hazards;

- Providing and training individuals in the use of appropriate PPE for occupational hazards;
- Periodically monitoring personal exposure to occupational health hazards;
- Investigating instances where there is an appreciable increase in occupational health hazards and re-evaluating the monitoring schedule if required;
- Dust suppression must be controlled on exposed areas via the use of use of localised watering as required; and
- Testing and recording of the composition of the ground material is to be carried out prior to ground disturbance.

6.9.5. Manual Handling

Golding recognises that inappropriate manual handling can result in injuries to its workforce and requires the application of Golding [Manual Handling](#) procedure such that:

- All manual handling risks that cannot be eliminated are identified during the course of developing construction methodology;
- Personnel who are not capable of performing roles involving a significant amount of manual handling are identified via relevant pre-employment medical processes and prevented from engaging in manual handling tasks that may aggravate or cause injury; and
- Personnel are provided relevant information surrounding manual handling procedures through Tool Box discussions and the project specific induction program.

6.9.6. Work at Height

Golding recognises that personnel working at height without appropriate equipment and training poses a significant risk and requires the application of Work at Height such that associated risks are minimised through the following:

- High Risk activity licencing/ competency (all workers intending to use a EWP at the project shall be adequately trained and deemed competent prior to commencing the activity);
- No work is to be undertaken where there is potential to fall from any height without safety controls, this also includes working in close proximity to trenches or excavations where there is potential for falls;
- Design and constructability methodology must consider the necessity for work at height and construction methods should be considered that reduce the need for work at height (i.e. ground level pre-assembly);
- All identified drop zones are to have the appropriate barricading and signage identifying the hazard and be maintained for the duration of the activity;
- Physical barriers/ scaffold must be compliant with relevant Australian Standards;
- Fall Arrest and Fall Restraint systems when used, must be maintained and inspected regularly by a competent person, and workers trained in their use and selection, and deemed competent in their use;
- Equipment and plant used for working at height must comply to the relevant Australian standards and be maintained in accordance with the Original Equipment Manufacturer recommendations (OEM);

- The [Permit to Work System](#), Work at Height, shall be effectively applied; and
- Where work is carried out using fall arrest equipment, an emergency plan for the rescue of a worker at height shall be implemented and tested.

6.9.7. Hot Work

Golding acknowledges that carrying out hot work introduces risk into the workplace which requires specific controls to be established in accordance with [Welding, Cutting and Hot Work](#). Specifically, Golding requires:

- Workers carrying out gas welding and cutting, arc welding and cutting and grinding to be deemed competent;
- All equipment associated with hot work shall be thoroughly checked in accordance with the OEM instructions prior to use;
- A thorough check of the work area is conducted to confirm that the environment is suitable to conduct hot work in; and
- The application of the [Permit to Work System](#), Hot Work, in all instances.

6.9.8. Confined Spaces

Entry and work in confined spaces can create significant risk if not controlled. Golding recognises this risk and requires the following controls to be applied in accordance with [Confined Space](#):

- The [Permit to Work System](#) is effectively applied;
- All confined spaces are identified with either locks, signage or both;
- Personnel who are required to work in a confined space are to be appropriately trained;
- Atmospheric testing shall be conducted where necessary;
- All personnel who are required to work in a confined space are to be medically fit;
- Emergency response teams shall be trained in the confined space rescue procedure;
- Rescue equipment must be located at each entry point; and
- Emergency retrieval drills are periodically conducted.

6.9.9. Excavation, Trenching and Surface Penetration

Golding acknowledges that carrying out Excavation, Trenching and Surface Penetration work introduces risks into the workplace which requires specific controls to be established. Application of the Golding procedure [Trenching, Excavation and Surface Penetration](#) along with the [Permit to Work System](#) must be applied and requires:

- An Operational Risk Assessment;
- Permit To Work Issued;
- Verify underground and above ground services (such as overhead power lines, underground electrical, Telstra cables, gas lines etc.) are located;
- Appropriate level of barriers and barricading is applied including the application of warning/hazard signs
- Complete a START/Change Card;

- Safe Work Method Statement (SWMS); and
- For excavations above 1.5 meters in depth apply appropriate method of supporting the excavation such as,
 - Temporary support systems (Shoring),
 - Battering, or
 - Benching.

6.9.10. Fit for Purpose Equipment

Providing and maintaining fit for purpose equipment is critical in minimising the risk to personnel. Golding applies the following processes to verify fit for purpose plant and equipment:

- An assessment is conducted on the type of plant required prior to mobilising;
- A maintenance schedule is established in accordance with the OEM; and
- Operators are trained in conducting pre-start inspections and reporting defects in plant and equipment prior to operation.

6.9.11. Cranes and Lifting

The use of cranes and lifting gear is a high risk construction activity, Golding requires the application of the [Lifting Operations](#) procedure which includes:

- The [Permit to Work System](#) is effectively applied;
- An inspection of all cranes mobilised to site is conducted by a competent person;
- Equipment is to be uniquely numbered, registered, and clearly exhibits the Safe Working Load (SWL) and Working Load Limit (WLL) rating;
- A visual check of all equipment is conducted prior to every use; a
- Formal competency is required for crane operators, riggers and doggers;
- Crane studies are to be conducted for all critical lifts; and
- Lift Plans are developed for all light to medium lifts.

6.9.12. Work Near or Under Overhead Power Lines

Golding acknowledges that carrying out work near or under power lines introduces significant risks into the workplace which requires specific controls to be established. Specifically, Golding requires:

- The [Permit to Work System](#) is effectively applied;
- An Operational Risk Assessment (ORA) is to be conducted when working near or under overhead lines;
- A Safe Work Method Statement (SWMS) is developed from the ORA, and a Start Card for the work is raised;
- Where frequent activities are to occur near or under overhead power lines, tiger tails or equivalent are to be erected Any plant or equipment with the capability of breaching the three metre mandatory exclusion zone, requires a competent and authorised Electrical Observer to work in conjunction with the plant or equipment;
- Authorised Electrical Observers shall maintain positive communication with operators of plant and/or equipment at all times (UHF radios shall be used); and

- Electrical Observers will not be tasked with any other activity, and shall be the subject of Operational Risk Assessment, such that observers are not placed at risk of contact with moving plant.

6.9.13. Underground Services

As part of the Operational Risk Assessment process undertaken for all activities to be conducted at the project:

- The location and type of underground services shall be identified and considered in site specific technical specifications and drawings, and communicated to all workers during inductions and daily pre-start meetings;
- 'Dial Before You Dig' data shall be consulted prior to the commencement of any excavation or trenching; and
- The relevant utility or service provider shall be contacted to seek further guidance if the ORA require such steps to be taken.

The essential, underground services that may be relevant to (but not limited to) this project are the supply of telecommunications and electricity.

6.9.14. Electrical Equipment

Golding shall ensure all electrical equipment is safe to use and that all electrical work is undertaken in accordance with Electrical Safety including:

- Golding shall comply with all relevant regulatory provisions and Australian Standards;
- Electrical power tools and equipment power leads, earth leakage boxes must be inspected and certified by a qualified electrician or a Golding authorised and competent person;
- Testing of all electrical equipment shall be undertaken on a quarterly basis in accordance with the RUGBY system (Red = Dec to Feb, Green = Mar to May, Blue = June to Aug and Yellow = Sept to Nov);
- Electrical equipment must be visually inspected for damage or defect by the user prior to use;
- An Electrical Equipment Register using SHEC Registers is to be maintained for all electrical equipment;
- All portable power sources must be provided with Residual Current Protection or Electrical Circuit Breaker (RCD or ELCD);
- Extension cords must not have taped joints or repairs. All leads must be positioned so they are not liable to mechanical damage;
- Golding is to ensure appropriate electrical lead stands are used by workers where required on site;
- Leads shall be elevated where possible. Where this is impractical, additional mechanical protection must be provided, particularly across pathways;
- Electrical socket outlet adaptors, board adaptors, double adaptors, other than power boards, are not to be used on the work site;
- The maximum length of cords is not to exceed,
 - -10 Amp cable: 35m for 1.5mm² conductor,

- -15 Amp cable: 25m for 1.5mm² conductors; 40m for 2.5mm² conductors, or
- -20 Amp cable: 30m for 2.5mm² conductors; 50m for 4.0mm² conductors;
- Electrical hand tools must be double insulated. Portable generators with AC outlets must be earthed to ground before use. (Earth stake should be driven into the ground to 500mm)
Welders with AC power outlets shall not be used on site; and
- Where the plant is operated in a partially constructed building or where an earth stake cannot be used this unit should be earthed to the building foundations through column bolts, reinforcing etc.

6.9.15. Piling Operations

Golding acknowledges that carrying out piling operations introduces risks which require specific controls to be established. Specifically, prior to the commencement of any piling activity the following shall occur:

- An Operational Risk Assessment is undertaken;
- SWMS and Start Card are developed;
- All subcontractors and workers shall be verified as competent to perform the required tasks;
- Delineation of work area & exclusion zone using signage and barricading as required;
- A visual check/ inspection of all equipment prior to use ([Plant Pre-Start Inspection](#));
- Positive communication to be maintained at all times with workers, confirmed within the relevant SWMS;
- Assessment of ground conditions to be undertaken by a competent person;
- RPEQ Certification of working platform where required; and
- Appropriate positioning of a 'kelly bar'.

6.9.16. Demolition Work

Any proposed demolition work shall be the subject to the following requirements:

- An Operational Risk Assessment is undertaken;
- A Safe Work Method Statement (SWMS) and Start Card are developed;
- Appropriate Licencing is held by the workers for the activity to be conducted;
- Where required, notification to the Division of Workplace Health and Safety Qld;
- Buoyancy/Line rescue devices are available and considered within the project specific [Emergency Response Plan](#); and
- The use of a spotter for all plant to be operated within two (2) meters of an exposed water edge is applied.

6.9.17. Working Near or Over Water

- Golding acknowledges that carrying out work near or over water introduces risks into the workplace which requires specific controls to be established. Specifically, Golding requires:
- An Operational Risk Assessment to be undertaken;
- A Safe Work Method Statement (SWMS) and Start Card are developed;

- A minimum 2metre exclusion zone is established from exposed water edge, subject to risk assessment of the specific work area;
- Emergency response life jackets are available at the point of use;
- Buoyancy/Line rescue devices available at the point of use; and
- Barriers/fencing and/or travel restraint devices are available for the prevention of workers falling into the water.

6.9.18. Isolation and Tagging

Golding understands that effective isolation and tagging requirements can protect workers from significant harm. In controlling the risk of stored energy, Golding requires the application of [Isolation and Tagging](#) such that:

- A system of locks and tags are used to identify and protect personnel;
- Stored energy is bled, released or contained prior to working on equipment;
- All equipment is tested for dead; and
- No person can commence work on a piece of equipment until they have attached the appropriate lock and tag.

6.9.19. Amenities

Golding will make available such amenities as detailed and complying with Schedule 5A of the *Work Health and Safety Regulation 2011*. Amenities will include:

- Toilets;
- Meal rooms;
- Hand and face washing facilities; and
- Drinking water.

6.9.20. Public Safety and Site Access Signage

Golding shall make provisions for public safety by establishing adequate site security and signage to prevent unauthorised access to site. The below 'Principal Contractor Signage' will be established at all access points to the project in addition to supplementary signage confirming specific contact, communication and hazard information. Where unauthorised access to site cannot be prevented, barrier systems of exclusion zones will be erected to isolate specific hazards within the site boundaries.



6.9.21. Traffic Management and Road Worker Safety

Golding recognises that the risk of workers interacting with traffic travelling on the Halcyon Way is a significant risk that requires specialised risk assessment.

All activities in proximity to traffic shall be assessed with the application of ORA and reference to the relevant code of practice.

All persons entering the site are to comply with the Site Traffic Management Plan, with all vehicles to be operated in strict accordance with the relevant traffic management plans and guidance schemes.

The following minimum requirements are to be applied on the Project, and monitored:

- Drivers shall hold an appropriate current driver's license;
- Drivers and passengers shall wear seat-belts at all times (including reversing);
- Signposted speed limits shall be obeyed and restrictions implemented to suit the road conditions;
- All light vehicles will be parked in a safe location, handbrake applied and in gear;
- Mobile phones shall not be used unless the vehicle is stationary and the engine disengaged;
- Mobile plant must be parked in a location away from possible interaction of activities or laydown area established for the site;
- Detailed Traffic Guidance Schemes (TGS) will be developed by Golding and approved by the client prior to the commencement of any works on or adjacent to the road during the course of the project; and
- One lane of traffic must remain open at all times, along all roads.

All Traffic management is to be in accordance with the following as appropriate to the project:

- Manual of Uniform Traffic Control Devices Part 3;
- Transport Operations (Road Use Management) Act 1995;
- QLD COP Traffic Management for Construction and Maintenance 2008;
- Traffic Controller Accreditation Scheme – Approved Procedure (TCASAP); and
- A project specific Traffic Management Plan shall be prepared and will provide detailed guidance surrounding the application of the MUTCD Part 3 and associated risk management processes relevant to the project.

6.9.22. Fire

Prior to mobilising to site Golding will undertake an assessment of the fire risks and undertake the following actions:

- Minimising the quantity of combustible material on site;
- Installing fire detection equipment in offices and accommodation;
- Providing fire suppression equipment; and
- Training all personnel how to deal with fire risks on site pertinent to their role.

6.9.23. First Aid

The provision of timely first aid is critical in mitigating consequences of injuries. Golding requires the application of [First Aid](#) that aligns with the First Aid Code of Practice 2004 and requires:

- An assessment conducted identifying the likely injuries expected on site;
- Provision of appropriate first aid resources in prominent location;
- A system of checks to verify that first aid equipment is current; and
- A suitable number of trained first aiders.

6.9.24. House keeping

Arrangements shall be made with a waste removal provider establish skips/waste containers/vehicles for the collection and removal of waste. All waste material will be disposed of in approved locations, as per site rules. Further information is provided in the site Environmental Management Plan (EMP).

High standards of housekeeping are expected across the project. Good housekeeping is everyone's responsibility. Scheduled monitoring of housekeeping practices is embedded within the [SHE Operational Risk Assessment and Monitoring Schedule](#).

6.10. Communication and Engagement

6.10.1. Project Induction Program

Golding realises that a well conducted relevant induction will set the standard for a person's site experience. The project's induction program shall accord with Site SHEC Inductions, be specific to the project environment and shall include but is not limited to:

- Representation and involvement from senior site personnel and SHEC representatives;
- Provide an understanding of the key risks relevant to the persons work including hazard awareness and application of safe work practices;
- Expectations surrounding Safety, Health and the Environment;
- Information that maintains relevance to the workers on site, namely,
 - Communication of Safety, Health Management Plan,
 - Visitor induction and requirements,
 - Incident reporting and management,
 - Injury management and reporting,
 - Fitness for work, and
 - Pre-task planning, supervision and co-ordination.

6.10.2. Subcontractor Management

Golding expects contractors and suppliers to meet the requirements and demonstrate the obligations established within the Golding Management System and this Plan.

Weekly meetings are to be conducted with subcontractors to consult with and communicate the project look ahead program.

Golding requires contractors and suppliers to develop and implement processes that manage and monitor their specific SHEC risks to a level at least equal with Golding standards.

Golding is to ensure all subcontractors comply with the relevant safety management system requirements and will monitor, inspect and observe the activities of all subcontractors as scheduled within the project [SHE Operational Risk Assessment and Monitoring Schedule](#).

The SHEC performance of subcontractors will be measured against Golding Standards and reported to relevant Project Manager during weekly site communication meetings.

Golding understands that the effective management of subcontractors will reduce the risk to the Client and Golding by supporting the vision of 'Zero Harm', client and legislative compliance.

Prior to commencing work on a Golding site, subcontractors must:

- Provide the completed Subcontractor Verification of Competence and Subcontractor Verification Checklist to the Project Manager or SHET Superintendent for review and approval prior to commencing work;
- Submit all relevant Safe Work Method Statements to the Project Manager for approval prior to attending the project site and commencing work;
- Provide evidence of competency, training and assessment information for each item of plant the operator may be required to operate, or any high risk activity to be undertaken on site and recorded on the site training matrix; the Verification of Competency Assessment tools should be used where there is insufficient evidence to demonstrate an operator's competency;
- Provide details of appropriate WorkCover and Public Liability Insurance as required by Golding;
- Present for inspection, plant maintenance history records and information demonstrating plant condition;
- Present for inspection, all Operator's Manuals for specific items of plant to be brought onto a Golding site;
- Demonstrate the operator's knowledge and understanding of the OEM/Operator's manual requirements surrounding pre start inspection, loading and unloading and operation;
- Ensure the required personal protective equipment as determined by Golding to enable workers to enter the site – refer to PPE above;
- Provide weed and fire ant free declaration prior to commencing work;
- Submit to fitness for work testing as required by Golding prior to work commencing; and
- Complete a plant pre-start inspection checklist that is submitted to Golding prior to work commencing.

6.10.3. Tool Box and Pre-Start Discussions

Golding recognises the opportunities that pre-start and tool box talks provide to communicate SHEC messages with the workforce (including subcontractors). Pre start meetings are conducted to confirm:

- The work personnel are about to perform;
- The key hazards and associated risks of activities being undertaken; and
- The key controls required to manage those risks.

Tool box talks are:

- Conducted regularly, and are focused on broader safety performance and specific hazard groups; and
- To communicate any additional information or changes implemented to Golding Policies and Procedures.

6.10.4. Safety Committees

A project Safety Committees shall be established in accordance with [SHE Consultation](#) where required under the Work Health and Safety Act 2011.

Where identified, project subcontractors may be elected and form the structure of the Site SHEC Committee.

6.10.5. Safety and Health Issue Resolution

The prompt and considered resolution of work health and safety related issues are a priority for Golding. With this in mind, the communication and engagement processes established at the project are designed to facilitate open, transparent communication and a no-blame, supportive culture.

In the event an issue can't be resolved and requires further consideration, the default procedure provided within s23 of the Work Health and Safety Regulation 2012 shall be applied in conjunction with the involvement of the appropriate Golding Human Resource Advisor and the Golding SHE Manager.

6.10.6. Project Safety Rules and Prohibited Items

The project's rules shall be communicated to all workers and visitors as part of the project's induction program. Site rules shall also be advertised throughout the project in locations determined by the project's SHET Superintendent.

6.10.7. Employee Assistance Program

Golding has engaged a suitable provider to provide an effective, coordinated way for Golding to obtain professional support for employees and assistance with management strategies to address a common range of "people" issues. The Employee Assistance Program is focused on:

- Providing training and information to managers to recognise signs of common issues; and
- Providing services to assist and enhance an individual's ability to effectively manage and prevent escalation of their personal issues.

6.11. Emergency Planning and Preparedness

Identification of, and preparation for foreseeable emergencies is required to mitigate risk on Golding projects and requires the application of Emergency Preparedness procedures that shall include the following:

- Identification of potential emergency situations;
- List Emergency Evacuation procedures;
- Outline the personnel capability requirements needed to deal with emergency situations;
- Emergency evacuation procedures;
- Periodical review of the emergency personnel capability; and

- A Site Emergency Response Plan detailing the above components.

6.12. Incident Management

Golding recognises that timely and effective investigation of incidents and the subsequent corrective action process is critical to preventing accidents and improving performance. Golding requires the application of [Incident Management](#) with the following specific actions to be carried out:

- For reportable incidents, the incident scene shall be identified, cordoned and preserved until advice from Workplace Health and Safety QLD or the QPS is received and recorded;
- All incidents injuries and illnesses, including near misses are immediately reported to the relevant Golding supervisor and SHET Advisor;
- All incidents injuries and illnesses, including near misses are reported and recorded within the Golding (Electronic) Incident Data Base prior to the end of shift on the day of the incident and classified in accordance with the Incident Classification Matrix;
- Managers are notified and involved in a timely manner;
- Class 1, 2, HPE and all recordable injury classifications are investigated and completed using the Incident Cause Analysis Method (ICAM) within 14 days of the incident occurrence or from the date Golding became aware of the incident;
- Golding shall provide the Principal a summary of the event, any available root cause information, immediate actions taken to prevent a recurrence and details of the mechanisms of the event within 48 hours from the time of initial notification and reporting. The [Golding Investigation Summary Report](#) tool will be used to communicate this information as required and will be transmitted via a formal transmittal process by the Project Manager;
- Corrective actions are developed, regularly reviewed and tracked to completion with the use of a project specific [Corrective Action Register](#);
- The Principal will be promptly notified of all incidents by the Project Manager;
- All recordable incidents and high potential events must be immediately notified to the client and relevant Golding Managers in accordance with the Golding [Incident Management](#) procedure; and
- Project incidents, incident trends and corrective actions will be communicated to the work force via prestart and toolbox meetings.

6.13. Injury and Illness Management

Golding recognises that effective and early injury management is crucial to personnel returning to work in a timely manner. Golding requires the effective application of Injury and Illness Management such that the following occurs:

- All pre-existing injuries and or non-work related injuries that may impact a worker's ability to complete their role without restriction, must be immediately reported to the Project Manager;
- Immediate reporting of any workplace incident involving an injury or illness to the relevant Supervisor and SHET Advisor;
- Appointing preferred medical providers;
- Early intervention;

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- A multidisciplinary approach;
- Timely review and notification to managers; and
- WorkCover Queensland notification as required.

6.14. Pre-Mobilisation Risk Management Requirements

As part of the project's pre-mobilisation process, the following key actions shall be scheduled, executed and recorded.

Requirement	Persons Involved	Date Scheduled	Reference
Operational Risk Assessment (core activities including site establishment and mobilisation)	PM Project Eng. Project SHET	Pre-Mobilisation	Operational Risk Management
Formulation of a project Risk Register			ORA
Formulation of a project specific Emergency Response Plan			Risk Register ERP
Formulation of relevant and specific Safe Work Method Statements (SWMS) for each activity to be conducted.	Project Eng. Project Supt Project SHET	Pre-Mobilisation	SWMS SWMS Register

6.15. Reporting and Client Communication Requirements

The below table sets out the reporting and engagement requirements of the project that shall be applied on the project.

Requirement	Relevant Persons	Frequency	Reference
Meetings / Workshop			
Client Meetings	PM	As requested	
SHET Performance Meeting (Golding)	PM/ Project SHET	Weekly	Golding SHMP
Risk Register Review (Golding)	PM/ Project SHET	Monthly and as hazards arise	Golding SHMP
SHET Performance Review (Golding)	PM/ Project SHET	Quarterly	Golding SHMP
SHE Performance Reporting			
Project End of Month Report	Project SHET	Monthly	Golding SHMP
Incident Reporting and Notification			
Client specific requirements.	Project SHET	Day of event, as soon as possible	
All incidents are to be recorded on the Golding Incident Reporting Database.	Project SHET	On the day of the incident by C.O.B.	Golding SHMP
All Class 1, 2 HPE incidents are to be immediately reported to the client representative, Project Manager and Golding SHE Manager.	Project Manager Project SHET	Immediately upon occurrence	Golding SHMP

7. Assurance

Assurance activities are those activities conducted to confirm the application of this Plan.

7.1. Planned Assurance Activities

Assurance activities are conducted to a Schedule that is incorporated into the [Project SHE Operational Risk Assessment and Monitoring Schedule](#). The frequency of the assurance activities and the responsibility for the conduct of the activity is assigned within the [Project SHE Operational Risk Assessment and Monitoring Schedule](#). The below table outlines the key assurance activities for the project:

Assurance Requirement	Purpose
Project SHE Launch Action Plan Compliance Review.	The launch action plan operationalises the Safety and Health implementation plan. This assurance process requires monitoring of the action plan's progress and completion during the project launch phase.
Project Risk Register Review.	To confirm that risk scenarios relevant to the scope of work have been identified and confidence surrounding preventative controls is maintained.
Safe System of Work Compliance Review.	To confirm that the relevant system of work (SWMS) for high risk activities is being applied effectively and accurately.
Weekly SHET Performance Review.	To confirm the effectiveness of the project's monitoring program such that the type and frequency of monitoring is aligned with the project's forecast risk profile.
Effective Job Observations.	To identify unsafe workplace behaviours and work practices; improve safety communication and understanding of authorised systems of work and to provide a sensitive process for the measurement of the project's day to day safety performance.

7.2. Scheduled Golding Safety and Health Audits

A [Project Launch Audit](#) will be conducted by the Specialist SHE Advisor within four (4) weeks of project mobilisation. The audit will consist of an on-site verification that the [Project Safety and Health Implementation Plan](#) are being correctly applied and the Project SHE Launch Action Plan has been completed.

The Project Launch Audit will also identify the requirement of document retention as defined in GMS [Controlled Document Log](#).

Each project will be subject to at least a yearly follow up audit to review the application of the [Project SHE Implementation Plan](#).

On finalisation of the Project Launch Audit, the Project Manager and SHE Manager will identify the frequency of further audits and schedule these accordingly.

Outcomes of these audits will be provided to the Client as required and/or on request.

8. Control

8.1. Project Safety and Health Implementation Plan Control

Control activities are those activities conducted to confirm the effectiveness of the project's safety and health implementation plan in achieving the objectives for which it is established.

The principle mechanism for conducting project safety and health plan control is the [Critical Performance Audit](#) scheduled within the [Project SHE Operational Risk Assessment and Monitoring Schedule](#) at intervals not exceeding six (6) months.

The Golding SHE Manager will schedule the Critical Performance Audit in coordination with the Project Team, client representatives and the relevant General Manager.

The Project Manager and Project SHET Superintendent shall conduct a quarterly Project SHET Performance Review to verify the effectiveness of the system, and the Safety and Health Management Plan and identify areas for improvement.

The Project Manager shall:

- Determine the required action based on analysis and review; and
- Authorise any changes necessary to the Plan.

The Project SHET Resource shall:

- Collate and analyse lead and lag data that provides information on the performance of the project against established objectives identified in this plan;
- Present this information to Project Manager and project leaders at the scheduled project SHE review;
- Provide expert opinion on any changes required to core risk management and monitoring practices or this plan to effect improvement in the achievement of project SHE objectives; and
- Collate and track agreed actions, confirming that changes to the Safety and Health Management Plan are consistent with the Golding Management Systems, legislative and client contractual requirements, and are authorised by the Plan Owner.

8.2. Corrective Action Management

Corrective actions regardless of their source will be allocated a responsible person and timeframe and tracked until completion. Corrective actions will be regularly reviewed with appropriate plans being put in place and shall be managed in accordance with [Site SHEC Corrective Action Process](#).

8.3. Project Safety Improvement

To achieve sustainable project SHE performance improvement, the [Project Safety Improvement Plan](#) may be used as a tool to provide structure, clarity and direction in response to identified areas for improvement that fall outside of the tactical corrective action process. This process shall be guided by the Golding SHE Manager.

Attachment A Role Specific Safety and Health Accountabilities

Golding Project Manager

Accountabilities	Performance Measures
1. Lead by example and actively promote a 'Zero Harm' culture.	Concise, consistent and clear communication with the workforce is visible and effective.
2. Communicate and continually re-enforce SHET accountabilities to workforce.	SHET accountabilities are clearly provided with Position Descriptions.
3. Review SHET performance of leaders and hold to account for performance/actions.	Leaders execute accountabilities. Active participation within weekly and monthly SHET performance reviews.
4. Establish and Implement the SHET Management Plan on site.	The SHMP is approved and embedded at the project.
5. Establish SHET communication and consultation forums and participate in these.	Regular and effective SHET forums are scheduled and consistently maintained.
6. Establish and review a SHET activity and monitoring program based on risk.	Risk based monitoring activities are occurring at appropriate frequencies. SHET monitoring effort is reviewed weekly with corrective action taken swiftly if required.
7. Establish and review safe systems of work incorporating required competencies.	A Site Training plan is in place is maintained and is communicated to Superintendents and Supervisors.
8. Consider the impact that Golding activities have on the community.	Community impacts are considered during project lifecycle with active participation in risk assessment and community engagement activities.
9. Manage the SHEC performance of Contractors and Suppliers.	Subcontractors are clearly informed of their obligations and Golding's expectations. SHET performance is reviewed with swift action taken as required.
10. Establish and maintain emergency provisions to deal with potential emergencies.	Emergency provisions are in place and tested.

Superintendents

In addition to accountabilities set for all persons, Superintendents have the accountabilities set out in the following table.

Accountabilities	Performance Measures
1. Lead by example and actively promote a 'Zero Harm' culture.	Concise, consistent and clear communication with the workforce is visible and effective.
2. Coach Supervisors and continually re-enforce SHET accountabilities.	Supervisors understand their obligations and demonstrate through active leadership.
3. Review SHET performance of Supervisors and hold to account for performance/actions.	SHEC performance is part of performance review processes – Weekly SHET performance monitoring is considered.
4. Facilitate and participate in SHET activities and support training.	Participation in tool box, pre-start and pre-task planning discussions and workers are competent to conduct allocated tasks.
5. Regularly communicate, consult with the workforce about SHET.	Facilitates regular pre-starts and SHEC meetings and is actively engaged in effective Job Observation processes.
6. Understand and establish compliance with work plans and procedures.	Work areas are maintained to a high standard and activities are completed in accordance with the authorised, safe system of work.
7. Allocate appropriate supervision to work area/activities.	Timely and effective supervision is provided throughout the project.
8. Establish and implement safe systems of work relevant to the work area/activities.	Safe, systems of work are in place and applied.
9. Identify and effectively manage environment and community impacts.	Assessment of environment and community impacts is conducted – Active participation in operational risk assessment activities.
10. Support incident and emergency management.	Participate in investigations, drills and response.

SHET Resources

In addition to accountabilities set for all persons, SHET Resources have the accountabilities set out in the following table.

Accountabilities	Performance Measures
1. Lead by example and actively promote a 'Zero Harm' culture.	Concise, consistent and clear communication with the workforce is visible and effective.
2. Continually re-enforce SHEC accountabilities to Supervisors and workforce.	Workforce executes SHEC accountabilities, compliance with systems of work is consistent and SHET targets are achieved.
3. Review SHEC performance of subordinates and hold to account for performance/actions.	Performance discussed during weekly and monthly SHET performance reviews.
4. Provide relevant and current SHET advice to the Project Manager and Line Managers.	Quality of advice, engagement, and leadership is too high and consistent.
5. Act as custodian of project SHET plans and procedures.	All plans and procedures remain current and accurate.
6. Support quality and consistency of SHET activities.	SHET monitoring, pre-start discussions, pre-task planning involvement and safe system of work review is to a high and consistent standard.
7. Maintain SHEC Activity Planner, Risk Register and Training plan for the project.	The monitoring program is maintained, reviewed weekly and monitoring activities are scheduled at appropriate frequencies. The risk register is reviewed monthly or as required and preventative controls are translated into the relevant, safe system of work. The training plan is accurate, maintained and used to assist project planning and progression.
8. Track, measure and analyse SHEC performance and provide accurate reports.	The monitoring program is used to present accurate and relevant data for the consideration of the project team during weekly and monthly meetings.
9. Meet Golding SHET reporting requirements.	All incident and performance data is entered as required and is to a high standard.

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All Workers

In addition to accountabilities set for all persons, All Workers have the accountabilities set out in the following table.

Accountabilities	Performance Measures
1. Promote our 'Zero Harm' culture through leading by example.	Authorised, safe systems of work are applied, hazards are identified and reported and workers are actively encouraged to promote a zero harm culture.
2. Active contribution to SHEC activities and within engagement forums.	Allocated monitoring is completed to a high standard and active contribution during job observation processes is demonstrated.
3. Stop work when unsafe work conditions are identified or required controls are uncertain.	Unsafe conditions are identified, reported and discussed with supervisors and SHET Advisors.
4. Conduct work in accordance with the work plan, procedures and this plan.	Authorised, safe systems of work are followed without unauthorised or unplanned deviation.
5. Follow all safety instructions given by advisors, supervisors and managers on the project.	
6. Work in a manner that protects the environment and the community.	
7. Report all unsafe conditions, unsafe acts and all incidents immediately to their supervisor.	
8. Immediately report any injury to their supervisor or SHE Advisor.	Workers do not commence work with an injury or illness and stop work immediately if they experience illness or injury.

BSBPMG512 MANAGE PROJECT SCOPE

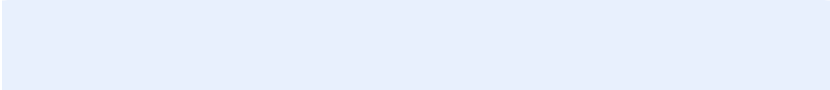
PRACTICAL ASSESSMENT INSTRUCTIONS

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- The assessor will conduct observations of the participant's work to determine whether they display sufficient practical skills and knowledge.
- Please fill in the details below, providing your name, signature and date of assessment.
 - Your signature acknowledges that the assessor provided clear instructions and the participant understood what was required to complete this assessment.
- The assessor may substitute a Practical Task with another task of equal value.
 - Alternate tasks must be fully documented by the assessor.

Participant name Nazeem Ajez

Participant signature 

Assessor name _____

Assessor signature 

Date [Click here to enter a date.](#)

Number of tasks	Number of tasks completed	Satisfactory?	
		Yes	No
1	1	☐	☐

ASSESSOR COMMENTS

BSBPMG512 MANAGE PROJECT SCOPE

Practical Task 1	
Description of task: A suitable observer is to verify the participant's ability to determine and implement a project schedule, and assess time management outcomes. 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, Computer, Project Management software.	
Assessment of task	
Name of participant:	Nazeem Ajez
Name of observer:	Andrew Secomb
Role of observer (Confirm suitability to sign)	Superintendent (suitable to sign, direct colleague/ supervisor)
Email address of observer	Andrew.Secomb@golding.com.au
Signature of observer:	
Date:	18/10/2021
When completing the task, did the participant:	Tick if satisfactorily completed. Provide comments if left unticked.
1 Determine project schedule	
1.1A. Develop work breakdown structure with sufficient detail to enable effective planning and control.	☒
1.1B. Estimate duration and effort, sequence and dependencies of tasks, to achieve project deliverables.	☒
1.1C. Use project scheduling tools and techniques to identify schedule impact on project time management, resource requirements, costs and risks.	☒
1.1D. Contribute to achieving an agreed schedule baseline and communication of the schedule to stakeholders.	☒
2 Implement project schedule	
1.2A. Implement mechanisms to measure, record and report progress of activities according to agreed schedule.	☒
1.2B. Conduct ongoing analysis to identify baseline variance.	☒
1.2C. Analyse and forecast impact of changes to the schedule.	☒
1.2D. Review progress throughout project life cycle and implement agreed schedule changes.	☒

1.2E.	Develop responses to potential or actual schedule changes and implement them to maintain project objectives.	☒
3 Assess time management outcomes		
1.3A.	Review schedule performance records to determine effectiveness of time management activities.	☒
1.3B.	Identify and document time management issues and recommend improvements.	☒
The participant's performance was: ☒ Satisfactory ☐ Not Satisfactory		

OBSERVER COMMENTS

I believe Nazeem is competent in all areas of the above-mentioned criteria (1.1A – 1.3B). Nazeem has shown project time management through his use of developing project programs (start through to end phases) as well as a three week lookahead program updated weekly on our site whiteboard.

Line	Name	Duration	Start	Finish	October		November				December				January				February				March										
					11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	7							
					26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47							
10	Prelims & Milestones	188d	16/04/2021 A	24/01/2022	10 Prelims & Milestones																												
2	Contract Award		16/04/2021 A	16/04/2021 A																													
3	Possession of Site		27/04/2021 A	27/04/2021 A																													
4	Contract Duration	68d	28/07/2021 A	10/01/2022	Contract Duration																												
5	EOT1 - Wet Weather	9d	11/01/2022	21/01/2022	EOT1 - Wet Weather																												
6	Contract Completion		24/01/2022	24/01/2022	Contract Completion																												
7	Lot 471-481 Handover - RQD 04/11/21 - 07/12/21		1/11/2021	1/11/2021	Lot 471-481 Handover - RQD 04/11/21 - 07/12/21																												
8	Lot 470 - 401 Handover - RQD 09/12/21 - 21/01/22		15/12/2021	15/12/2021	Lot 470 - 401 Handover - RQD 09/12/21 - 21/01/22																												
9	Lot 402 - 426 Handover - RQD 25/01/22 - 22/02/22		21/01/2022	21/01/2022	Lot 402 - 426 Handover - RQD 25/01/22 - 22/02/22																												
10	20 Establishment / Site Prep	64d	10/05/2021 A	6/08/2021 A																													
11	Mobilisation	18d	31/05/2021 A	24/06/2021 A																													
12	Construction Access & Compound	20d	31/05/2021 A	28/06/2021 A																													
13	Erosion and Sediment Controls	12d	3/06/2021 A	6/08/2021 A																													
14	Install Sediment Basins	19d	3/06/2021 A	30/06/2021 A																													
15	Loadout Topsoil	36d	10/05/2021 A	29/06/2021 A																													
16	Pipe Procurement	88d	7/06/2021 A	8/10/2021 A	Pipe Procurement																												
17	SW 375-600 FRCP		7/06/2021 A	7/06/2021 A																													
18	SW 675, 750, 825, 900, 1050, 1200 RCP		16/06/2021 A	16/06/2021 A																													
19	900, 1350 HDPE		21/06/2021 A	21/06/2021 A																													
20	1500 HDPE	15d	20/09/2021 A	8/10/2021 A	1500 HDPE																												
	Road 1 Works	117d	9/06/2021 A	22/11/2021	Road 1 Works																												
22	Retaining Walls Lot 490-494	18d	12/08/2021 A	1/11/2021	Retaining Walls Lot 490-494																												
23	Retaining Walls Lot 471-483	15d	2/11/2021	22/11/2021	Retaining Walls Lot 471-483																												
24	Cut/Fill/Export Material	42d	12/07/2021 A	19/10/2021	Cut/Fill/Export Material																												
25	Sewer Reticulation	22d	9/06/2021 A	20/08/2021 A																													
26	Stormwater Reticulation	45d	21/06/2021 A	23/08/2021 A																													
27	Water Reticulation	35d	8/07/2021 A	27/08/2021 A																													
28	Service Crossings	35d	8/07/2021 A	26/08/2021 A																													
29	Service Conduits	10d	23/08/2021 A	3/09/2021 A																													
30	Subgrade & Gravels	19d	9/08/2021 A	3/09/2021 A																													
31	Concrete Pavements	29d	9/08/2021 A	15/10/2021 A	Concrete Pavements																												
32	Curing Time	10d	18/10/2021	29/10/2021	Curing Time																												
33	Finishing	5d	18/10/2021	22/10/2021	Finishing																												
	Road 2 Works	82d	23/08/2021 A	14/12/2021	Road 2 Works																												
35	Retaining Walls Lot 448-453 (Others)	5d	20/10/2021	26/10/2021	Retaining Walls Lot 448-453 (Others)																												
36	Sewer Reticulation	15d	23/08/2021 A	10/09/2021 A																													
37	Stormwater Reticulation	6d	13/09/2021 A	21/09/2021 A																													
38	Water Reticulation	3d	21/09/2021 A	24/09/2021 A																													
39	Service Crossings	4d	21/09/2021 A	27/09/2021 A																													
40	Service Conduits	4d	5/11/2021	10/11/2021	Service Conduits																												
41	Subgrade & Gravels	4h	1/10/2021 A	1/10/2021 A																													
42	Concrete Pavements	14d	18/10/2021	4/11/2021	Concrete Pavements																												
43	Curing Time	28d	5/11/2021	14/12/2021	Curing Time																												
44	Finishing	5d	5/11/2021	11/11/2021	Finishing																												
	Road 4 Nth Works & Basin Access	165d	31/05/2021 A	1/02/2022	Road 4 Nth Works & Basin Access																												
46	Retaining Walls Lot 410 and PS	3d	14/12/2021	16/12/2021	Retaining Walls Lot 410 and PS																												
47	Sewer Reticulation	7d	31/05/2021 A	8/06/2021 A																													
48	Stormwater Reticulation	43d	29/06/2021 A	21/10/2021	Stormwater Reticulation																												
49	Water Reticulation	14d	23/08/2021 A	12/11/2021	Water Reticulation																												
50	Service Crossings																																

Notes: Comment - Chart Properties

[illegible]

BSBPMG513 MANAGE PROJECT QUALITY

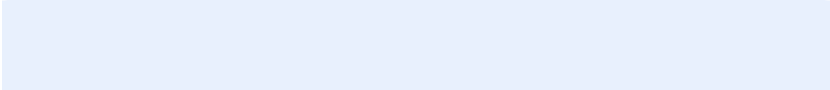
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 - Alternate tasks must be fully documented by the assessor.

Participant name Nazeem Ajez

Participant signature 

Assessor name _____

Assessor signature 

Date [Click here to enter a date.](#)

Number of tasks	Number of tasks completed	Satisfactory?	
		Yes	No
1	1	☐	☐

ASSESSOR COMMENTS

BSBPMG513

MANAGE PROJECT QUALITY

Practical Task 1		
Description of task: A suitable observer is to verify the participant's ability to manage quality within projects, including: - Determining quality requirements - Implementing quality control and assurance processes - Using review and evaluation to make quality improvements in current and future projects 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 (including quality criteria, evidence of quality monitoring and improvement practices), Computer and appropriate software.		
Assessment of task		
Name of participant:	Nazeem Ajez	
Name of observer:	Andrew Secomb	
Role of observer (Confirm suitability to sign)	Superintendent (suitable to sign, direct colleague/ supervisor)	
Email address of observer	Andrew.Secomb@golding.com.au	
Signature of observer:		
Date:	18/10/2021	
When completing the task, did the participant:		Tick if satisfactorily completed. Provide comments if left unticked.
1 Determine quality requirements		
1.1A.	Seek input from stakeholders to determine quality objectives and standards.	☒
1.1B.	In a quality management plan, document: - Quality metrics for the project and product output - Agreed quality requirements	☒
1.1C.	Select established quality management methods, techniques and tools to resolve quality issues.	☒
1.1D.	Distribute, discuss and support quality requirements with project team and stakeholders.	☒
1.1E.	Implement agreed quality requirements as the basis for performance measurement.	☒
2 Implement quality processes		
1.2A.	Undertake a quality assurance audit of project processes for compliance with agreed plans.	☒

1.2B.	Assess quality control of project and product output according to agreed quality specifications.	☒
1.2C.	Identify causes of variance to quality metrics and undertake remedial action.	☒
1.2D.	Maintain a quality management system to enable accurate and timely recording of quality audit data.	☒
3 Implement project quality improvements		
1.3A.	Review processes and implement agreed changes continually throughout the project life cycle to ensure continuous quality improvement.	☒
1.3B.	Review project outcomes against performance requirements to determine the effectiveness of quality-management processes and procedures.	☒
1.3C.	Identify and document lessons learned and recommended improvements.	☒
The participant's performance was: ☒ Satisfactory ☐ Not Satisfactory		

OBSERVER COMMENTS

Nazeem has proven that project quality assurance requirements are of high importance and I believe the above criteria is met (1.1A – 1.3C). A good example of quality requirements is the use of the Inspection and Test Plans (ITPs) which Nazeem generates and ensures the site follows throughout the life cycle of the project. The Golding Contractors Quality Management Plan is adhered to and Nazeem refers to it during construction works.

Quality Management Plan



Purpose: To define a project specific management plan, that when applied, supports the achievement of project quality objectives.

Document Attributes	
Element	Project Management
Knowledge Area	Project Quality Management
Owner	Project Manager
Custodian	Contractor's Quality Representative
Document ID	Urban-0504

Urban Projects

The current controlled .pdf version of this plan is located in folder 0501 of the project filing structure and Golding network at Public\Library\Management Plans. All printed copies of this Management Plan are to be considered uncontrolled and must be validated with the Project Manager before use.

Effective from	Details of Revision		Approved By Owner	Document Review Number
01 Nov 2016	First controlled issue.		GM Civil (Urban) Dan Draper	36
Holder Number	Holder Name	Holder Position Title	Company Name	
36	Dan Draper	GM Civil (Urban)	Golding Contractors Pty Ltd	
Refer 'General Plan Distribution' worksheet which forms part of Urban Document Control Forms for the full list of recipients.				

Quality Management Plan

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Quality Management Plan

Attachments

ATTACHMENT A: QUALITY MANAGEMENT ACCOUNTABILITIES 30

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Quality Management Plan

1. Scope

This document forms the Quality Management Plan (QMP) developed for projects carried out within South East Queensland. This plan covers projects less than \$10m in value and within the following scope of works:

- Clearing and grubbing;
- Topsoil stripping;
- Bulk earthworks;
- Retaining walls;
- Structural concrete;
- Stormwater;
- Sewer Mains;
- Sewer pump stations;
- Water mains; and
- Roadworks.

2. Policy

The Chief Executive Officer has issued an Assuring Quality statement detailing Golding's policy in regard to quality and is shown below. It includes management's commitment to:

- Maintaining a quality system that complies with international quality standards; and
- Meeting the quality objectives of,
 - Providing products and services that meet or exceed our client's expectations,
 - Applying the GMS procedures to provide a quality product and/or service, and
 - Regularly reviewing and auditing our GMS policies, systems, procedures and documentation and rectifying identified deficiencies through planned actions.

This quality policy is included in the project induction and all personnel working on the project are required to have a commitment to the Assuring Quality policy and its sentiments. A copy of the Assuring Quality policy shall be displayed prominently at the site.

Quality Management Plan



ASSURING QUALITY

At Golding, we work to provide products and services of a standard that meets or exceeds our client's expectations. Our reliability provides the basis for developing and maintaining successful and enduring work relationships with our clients.

Golding leaders implement and apply systems that provide for the effective delivery of quality products and services. We set measurable targets and implement regular review and audit to gauge the effectiveness of our policies, systems, procedures and documentation. Identified deficiencies are managed through planned actions until appropriately resolved.

We demonstrate our compliance with quality management principles through maintaining accreditation to international quality standards. Our quality assurance processes demonstrate the basis for confidence in Golding as a reliable contractor with our employees, our clients and the community.

At Golding, we deliver as promised.



Geoff Caton
Chief Executive Officer
1 February 2016

Golding Contractors Pty Ltd ABN 88 009 734 794
ESTABLISHED IN 1942

Quality Management Plan

3. Project Quality Objectives

The specific project quality objectives are shown in the following table.

Measure	Target	Reporting Notes
All delivered work identifiable on the Lot Register.	100%	Verified from completed checklists.
Hold and Witness Points adhered to.	100%	Verified from completed checklists
Any nonconforming work resolved expediently.	100% < 30 Days	Verified from the Golding CAR Database.
Level of project conformance to the requirements of the Golding Quality management System.	No system nonconformances. Audit Score of >2.6 out of possible 3.	Internal Audit against Project Quality Management Knowledge Area

These project quality objectives will be communicated to the project management team, including relevant subcontractor personnel, during the project induction.

4. Project Quality System Documentation

4.1. Quality Management Plan (QMP) Structure

This QMP is developed to fulfil the quality requirements nominated in the Golding Quality Manual and the Client's requirements for a project Quality Plan for this project. The Golding Quality Manual is available from the GMS via the Golding Intranet.

This QMP is created in accordance with the Performing Project Quality Planning procedure and incorporates the requirements of all the procedures in the Project Quality Management Knowledge Area of the Project Management Element of the Golding Management Systems (GMS). For details on the full structure of the GMS refer to procedure Golding Management Systems.

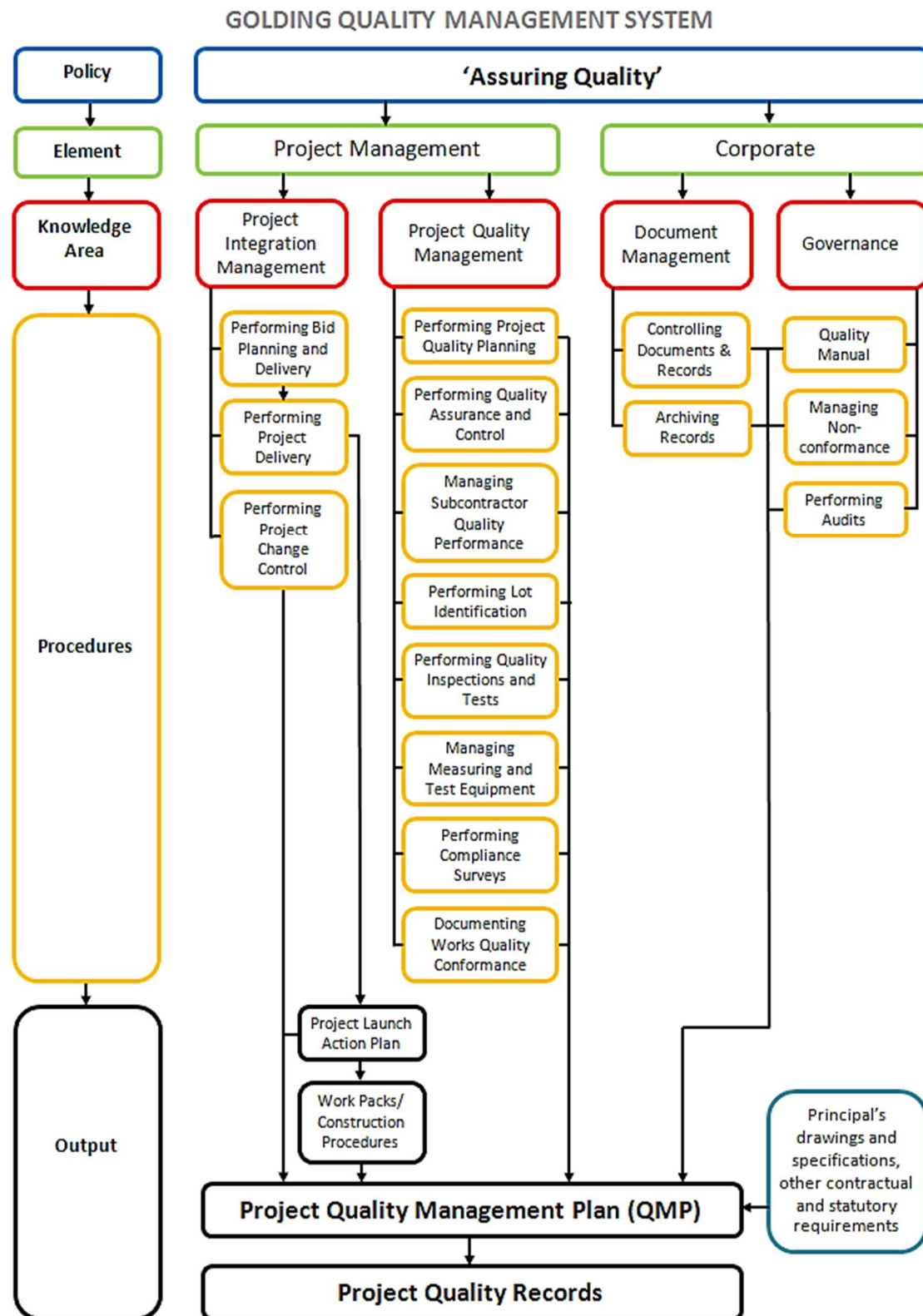
This QMP deals specifically with the systems to be applied to assure and control the quality of the project deliverables. Other aspects of project management that indirectly affect quality are contained in the remaining thirteen Knowledge Areas of the Project Management Element of the GMS.

This QMP references mandatory Golding procedures from other Elements of the Golding Management Systems (GMS), outlining the applicable system requirements that must be incorporated within the project Quality Management Plan to give effect to our 'Assuring Quality' policy and realise our quality objectives.

This QMP is structured in a similar manner to the Golding Quality Manual and ISO: 9001.

Quality Management Plan

Diagram 1 (below) shows the interaction of the Golding and Client systems to produce this project specific Quality Management Plan.



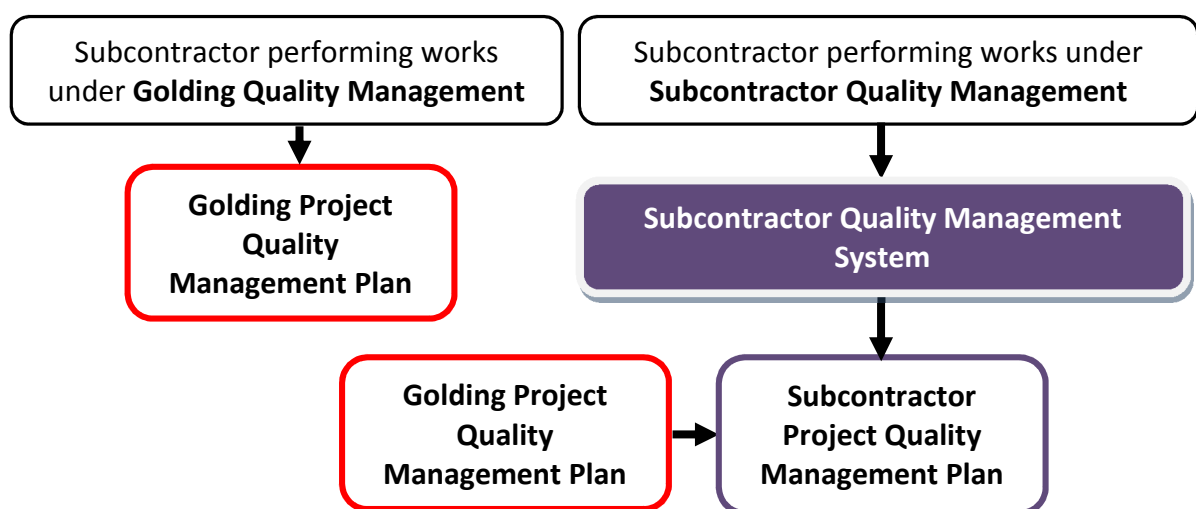
Quality Management Plan

The current version of each Quality Management System procedure is held and managed centrally in the Golding Management Systems (GMS) which is accessible to project personnel at their work locations via the Golding Intranet Landing Page.

Where subcontractors are engaged to perform work under this contract, they shall either:

- Implement the requirements of this Quality Management Plan, or
- Where they are implementing their Quality Management System, develop a Quality Management Plan that complies with the requirements of this QMP.

Diagram 2 (below) shows the interaction of this Quality Management Plan and Subcontractor Quality Management Systems.



4.2. Control of QMP Documentation

This QMP and associated documents are controlled documents and will be managed in accordance with the procedure Controlling Documents and Records which requires registration and formal transmission to stakeholders. These documents shall be stored locally in accordance with the Project Records Index for this project.

The Client will be notified within 5 working days of any changes to this QMP or procedures having an impact on the scope of work.

Where changes to the QMP are required to reflect changes to the work scope or improvements to processes, they will initially be made by hand on site and forwarded to the Client's representative. When a significant number of changes and/or a major amendment is required, a new version incorporating the amendments will be issued using formal document control.

4.3. Quality Records Management

Documents and Quality Records, including this Quality Management Plan and records generated for the performance of this contract shall be maintained, controlled and archived in accordance with procedures Controlling Documents and Records and Archiving Records.

On this project Golding will use the systems in the following table for document management.

Quality Management Plan

Documents	Database Application
Correspondence between internal and external parties	Golding site server file structure (Microsoft Windows) and/or hard copy
Drawings	Golding site server file structure (Microsoft Windows) and/or hard copy
Quality documents (ITPs, Check Lists, Test Requests, Registers etc.)	Golding site server file structure (Microsoft Windows) and/or hard copy
Requests for Information (RFIs)	Golding site server file structure (Microsoft Windows) and/or hard copy
Completed records, Check Lists, reports etc.	Golding site server file structure (Microsoft Windows) and/or hard copy
Document Transmittals	Golding site server file structure (Microsoft Windows) and/or hard copy

Copies of quality records shall be made available to the client at the completion of the contract or on request at any time during the contract.

Copies of Operation and Maintenance Manuals, where applicable to this project, shall be made available to the client in accordance with procedure Documenting Works Quality Conformance.

5. Required Work of Roles

Golding shall allocate sufficient personnel to allow the effective development, implementation and application of this QMP. The following is the required work of the various roles to achieve that.

5.1. Business Systems Manager

The Business Systems Manager shall perform the work of the Management Representative (refer to Golding Quality Manual Cl. 6.1) including:

- Provide advice and assistance to the Project Manager and Contractor's Quality Representative in the development and implementation of the quality management system on the project;
- Monitor the implementation and application of the requirements of this QMP on the project through;
 - Regular internal reviews of the status of quality records, and
 - Formal scheduled audits; and
- Provide feedback to the Project Manager on the status of the application of the Quality Management System on the project highlighting areas where attention is required.
- Additional specific accountabilities for the role are nominated in the Quality Management Accountabilities table included as Attachment A to this QMP.

5.2. Project Manager

The Project Manager shall:

- Appoint Golding's Quality representative for the project;
- Allocate resources to develop this QMP;

Quality Management Plan

- Facilitate obtaining approval of this QMP from the client as required;
- Authorise this QMP;
- Review this QMP during the delivery of the work under the Contract and thereafter as required to verify it is still relevant to the works being performed;
- Assign sufficient resources to allow for the successful implementation of the QMP;
- Verify that the quality requirements nominated in the Head Contract are included in subcontract documents; and
- Authorise systems of work so that the project scope is delivered that meets the quality requirements of the contract and the Golding Management Systems.

Additional specific accountabilities for the role are nominated in the Quality Management Accountabilities table included as Attachment A: Quality Management Accountabilities to this QMP.

5.3. Contractor's Quality Representative (CQR)

The Contractor's Quality Representative (CQR) shall:

- Monitor the implementation and application of the quality systems, including those of Subcontractors, on the project; and
- Verify that the results of inspections and tests performed during construction activities and/or on completed works confirm that the works comply with requirements.

Specific accountabilities for the role are nominated in the Quality Management Accountabilities table included as Attachment A to this Quality Management Plan.

The CQR shall be appointed by the Project Manager and identified on the Project Organisation Chart.

5.4. Responsible Engineer

Responsible Engineer can be either a Project Engineer or Site Engineer and is the term used to describe the person accountable for planning and monitoring the quality performance for portions of the work under the contract allocated by the Project Manager.

Responsible Engineers report to the Project Manager through the hierarchy shown in the Project Organisational Chart attached to this Quality Plan.

The Responsible Engineer shall be accountable for managing Subcontractors such that their output meets requirements prior to acceptance (Refer to Clause 9.1). The specific accountabilities for the Responsible Engineer role are nominated in the Quality Management Accountabilities table included as Attachment A to this Quality Management Plan.

5.5. Golding Superintendent (Quality Verifier - QV)

The Golding Superintendent reports to the Project Manager. The Golding Superintendent shall be accountable for the performance of the main construction activities on this project, excluding those performed by Subcontractors. The specific quality management accountabilities of this role are nominated in the Quality Management Accountabilities table included as Attachment A to this Quality Management Plan.

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5.6. Supervisor (Quality Verifier - QV)

The Supervisors report to the Golding Superintendent or Golding Project Manager. The specific quality management accountabilities of this role are nominated in the Quality Management Accountabilities table included as Attachment A to this Quality Management Plan.

5.7. Surveyor (Quality Verifier - QV)

The Surveyor reports to the Project Manager and shall liaise with the Golding Superintendent to arrange priorities for their work. Specific quality management accountabilities for this role are nominated in the Quality Management Accountabilities table included as Attachment A to this Quality Management Plan.

5.8. Quality Verifier (QV)

Quality Verifiers shall:

- Perform inspections, measurements and tests as defined in the Inspections and Test Plans and Check Lists to verify that the works, at the points of the construction activity nominated, meet the acceptance criteria as detailed in ITPs and the Specification; and
- Maintain their independence from the works being performed by not verifying work performed by them or under their direct supervision that,
 - Is a Golding or Principal Witness or Hold Point, or
 - Will be covered by subsequent work steps in the construction process.

5.9. Communicating Roles

Project Team roles and incumbents are shown in the Project Organisation Chart located in the project filing structure.

The role and accountability of project team members shall be included in their Role Summary and a signed copy will be kept in the project office filing system.

5.10. Project Team Members on Leave

Where personnel are temporarily assigned to this project, or duties are reassigned to existing project team members to cover the absence of project staff, the Project Manager shall advise the client of pending staff changes. The person temporarily assigned the duties of the role, or parts thereof, shall be accountable for the work performed while being assigned those duties.

6. Planning – Project Launch Action Plan

The Project Manager shall allocate resources to implement the Quality requirements of the Project Launch Action Plan in accordance with procedure Performing Project Quality Planning.

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7. Resource Management

7.1. Human Resources

A key requirement for the successful delivery of the project works is to have sufficient labour and staff to perform the works at the times required by the project schedule. The labour planning and sourcing of the required human resources shall be performed in accordance with procedures Performing Project Training Planning and Acquiring Project Teams.

An organisation chart showing the incumbent site personnel for project roles is held in folder 0605 of the project files.

7.2. Competency and Training

The successful delivery of the project works that meet requirements is achieved through a workforce that is suitably trained and competent. This will be achieved on this project by applying the requirements of procedures Performing Project Training Planning, Performing Project Training Assurance and Control and the project Training Management Plan.

This will allow the project to:

- Identify the competency and training needs to deliver the works;
- Maintain a record of certificates of competency for prescribed occupations;
- Confirm that workers engaged on a particular job are adequately experienced to carry out the work;
- Provide evidence of competency as required during audits etc.; and
- Establish a training program to meet the training needs of the project.

Additional training shall be 'on the job training' in the form of task specific and site specific work procedures which shall be presented at toolbox meetings in accordance with the SHMP.

7.3. Site Induction

All workers, including staff and subcontractors, shall attend a site specific induction prior to commencement of work on site. The induction shall be developed and conducted in accordance with procedure Performing Project Inductions and shall provide explanations of the minimum requirements for Safety, Quality, Environmental, Cultural Heritage and Employee Relations issues pertinent to this project. An assessment will be performed at the conclusion of the induction where a 100% pass rate is required.

Continued training shall be provided to employees until a 100% pass rate is achieved.

Inductions will be provided at two levels as follows;

- **Visitor Induction** for genuine offsite visitors who will not be conducting any on site work. This may include representatives of Golding or the Principal who are infrequent or periodic visitors, conducting oversight, administrative support or purely office based activities.
- **Full Induction** for any person undertaking permanent full time, permanent part time or regular casual work on site. A full induction is required for contractors

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undertaking work in excess of 7 calendar day's duration. This induction will cover relevant Safety, Quality and Environmental and other project issues in detail.

7.4. Work Area, Tools and Equipment

The Project Manager shall have processes in place to monitor that adequate facilities including buildings, work areas, tools and equipment are available as necessary to deliver the work scope in accordance with nominated acceptance criteria and in a safe and timely manner.

Health and Safety factors which may impact on the works will be managed in accordance with the Safety and Health Management Plan for this contract.

Environmental and Cultural Heritage factors which may impact on the works will be managed in accordance with the project Environmental Management Plan (EMP).

Plant and equipment will be evaluated prior to first use on site and maintained in a safe and operational condition in accordance with procedures Performing Plant Inspections and Maintaining Plant.

8. Design and Development

Golding shall plan and develop the design and / or development process (including any temporary works) required for this project using qualified consultants for the Design and managing the process in accordance with the procedures Performing Project Design Planning and Performing Project Design Assurance and Control.

All Consultants providing Design and Development for permanent works on this project will apply their own Design Management Plan (or similar) which shall comply with the requirements of Golding and the Client. The Design Management Plan shall contain the quality management processes that will be applied during the design phase and will be a separate controlled document(s) to this QMP.

The output of the design and development work will be an IFC design package, including a design certificate identifying the person certifying the works and their RPEQ number, drawing numbers and titles for which the certificate applies and the basis (i.e. specifications / Australian Standards) by which the certification is provided.

Golding staff, where required, will pro-actively participate in any project optimisation initiatives and will attend any meetings required to discuss potential improvements in the project outcome through design review.

9. Procurement of Goods and Services

Purchasing shall be undertaken in accordance with the documented procedures in the Project Procurement Management Knowledge Area of the GMS including Planning and Conducting Project Procurement and Administering and Closing Project Procurement.

Golding and its Subcontractors shall use the materials and standards of workmanship required by the contract. Unless stated otherwise, new materials shall be used.

Materials incorporated into the works shall also comply with manufacturer's recommendations relating to 'used by' or 'best before' dates. In addition, specific

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requirements may be included in the ITP for the process where the materials are being used.

The quality requirements for purchased goods and services shall be clearly identified in Vendor Contracts (e.g. Purchase Order, Material Supply Agreement).

9.1. Subcontracted Works

The quality requirements for subcontracted works set out in the head contract shall be included in subcontract agreements as applicable. Specific quality assurance and control activities (e.g. Hold and Witness Points) relating to subcontracted works shall be included in Inspection and Test Plans and other subcontractor quality documentation as required.

The quality management of subcontracted works shall be performed in accordance with procedure Managing Subcontractor Quality Performance which requires that Golding verifies that the works performed by subcontractors conforms to requirements before handing them over to the Principal. Subcontractors may work under Golding's QMP or implement their own Quality Management System after evaluation and assessed as suitable by the Project Manager.

Surveillance of subcontractor's work shall be included in the Quality Activity Planner held in folder 0505 of the project records and actioned.

9.2. Customer Supplied Items

Items indicated in the contract documents shall be supplied by the client (Customer) and will be stored in accordance with the client's and/or manufacturer's recommendations.

Client supplied items shall be identified, inspected, unloaded, stored, recorded and protected in accordance with procedure Managing Delivery of Goods and Services and any relevant contract specifications.

The client shall be promptly notified through correspondence or meeting minutes of any discrepancy in quantity, quality and timeliness of delivery of client supplied items.

Any damage caused to, or loss of client supplied items after delivery shall be promptly notified to the Principal through correspondence or meeting minutes.

Excess client supplied items shall be returned to the client in accordance with the contract specification.

10. Delivery of Project Scope

10.1. Defining Project Scope

The Project Manager shall put processes in place to determine the client's requirements for the project at the commencement of the contract through:

- Reviewing the Contract Summary prepared at Bid;
- Reviewing the drawings and specifications; and
- Clarifying requirements through Requests for Information (RFI), all in accordance with procedure Defining Project Scope.

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All quality system documentation identified in this Quality Management Plan shall be tailored to deliver the project scope identified above.

Where changes to the project scope during the duration of the contract are requested by either party, they shall be managed in accordance with procedure Performing Project Change Control.

11. Construction Procedures

11.1. Dial Before You Dig Procedure

Protection of existing Public Utility Plant (PUP) during the construction of the works is a key project outcome. To achieve this, Golding shall implement a project specific 'Dial-Before-You-Dig' process to reduce the risk of damage to all existing and any new services within the Work Area.

The Dial-Before-You-Dig process involves:

- Identifying and contacting actual and potential Service Providers who have assets in the proposed work area and adjacent areas to obtain the location of all known services prior to commencing works;
- Obtaining the latest services location data from any works performed in the early works package/s for the project to get the latest information;
- Locating the existing services on site using the Service Provider's Plans, a service locator and / or potholing by careful hand excavation;
- Clearly marking the services once located on site using paint, survey pegs, flagging and the like; and
- Isolating the service where practicable.

If any existing services which have not already been identified are found to be in conflict with the works, then the Client Representative shall be notified immediately.

11.2. Temporary Works

Where temporary works of a structural nature are required to complete the permanent works, they shall be managed in accordance with the work instruction Controlling Temporary Works. This requires registering the temporary works, assigning a responsible person for the temporary works (Temporary Works Controller), developing and authorising a temporary works design using a suitably qualified and competent designer (RPEQ), complete and maintain a Temporary Works Control form and apply the Temporary Works Permit process including obtaining RPEQ certification of any work platform.

12. Overview of Quality Verification Process

Golding shall apply systems and procedures on this project that meet the requirements of procedure Performing Project Quality Assurance and Control to achieve a high standard of quality compliance and these are outlined as follows:

- All construction work by Golding or by Subcontractors working under this Quality Management Plan will be,

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- Managed through by lots identified in the Lot Register, and
- Controlled by applying an approved Inspection and Test Plan (ITP) with compliance documented using the associated Check Lists;
- Each ITP and Check List prepared by Golding shall identify all Witness and Hold Point Inspections specified in the Contract documentation and others required by Golding;
- The Client Representative shall approve in writing all ITPs and Check Lists prior to their use on the project;
- Quality Verifier roles nominated in the ITPs shall perform verification inspections of field work for Lots nominated by the CQR and shall document inspections by progressively signing off and dating each successfully completed work activity on the Check List to record results and/or confirm conformance to the project requirements and making relevant comments in the 'Remarks' section on the checklist;
- Where a Client Representative nominates a lot to be audited, the Responsible Engineer shall document that the audit was performed, by making a note in the 'Remarks' section on the Check List.;
- The Responsible Engineer shall be accountable for the notification of all Hold and Witness Points to the Client Representative within the timeframes nominated in the Contract. The details of the notifications given shall be recorded in the comments area of the Check List against the relevant Witness or Hold Point. Client Hold and Witness Points shall be released by the Client Representative and documented by signature and date against the relevant activity on the Check List;
- The Supervisor shall direct the works in accordance with the ITP, liaise with the appropriate Quality Verifiers nominated on the ITP such that the required inspections and tests are conducted as the work progresses and recorded on the checklist for the lot, and when the work of the lot is completed, sign the 'Inspection' section of the Check List to confirm that the work has been inspected as required.
- The Responsible Engineer shall review the information recorded on the Checklist, and when satisfied, initial and date the last item on the Checklist 'Lot Closed' and sign the 'Verification' section of the Inspection and Verification Statement on the Check List at the completion of the Lot works to confirm that the recorded results, inspection and audit records demonstrate that the completed works conform to requirements;
- Lots identified as noncompliant to the contract requirements will have a nonconformance raised against the Lot and, CAR number included in the Lot Register;
- The status of lots will be classed as 'Open' in the Lot Register once the lot details and 'Date Opened' fields are completed until the Date Closed field is completed. Rejected lots will be clearly identified in the Lot Register;
- A Conformance Report for each lot raised on the project shall be prepared by the Responsible Engineers. Each Conformance Report shall summarise all Lot compliance requirements including the lot location, key field dates, copies of the completed ITPs and Check Lists, compliance testing and survey results and any Corrective Action Requests associated with the lot;

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- The Conformance Report will provide Golding and the client the evidence of progressive conformance of the works on a lot-by-lot basis. Each Conformance Report shall be verified by signature by the CQR confirming that either,
 - All work completed under the lot conforms in all respects to the specified requirements, or
 - The completed works, including the disposition of any associated nonconformances, have been accepted by the Client Representative; and
- Each Conformance Report shall be presented to the Client Representative for review and agreement.

Where subcontracted works are being performed under a Subcontractor's Quality Management Plan, the CQR shall verify that the above processes, or similar, are included in their processes.

13. Inspection and Test Plans and Check Lists

All quality related civil construction activities shall be managed by Golding using approved Inspection and Test Plans (ITPs) and associated Check Lists. Where subcontractors are using an approved system other than the Golding QMS, they will be managed according to that system.

The Responsible Engineer shall submit Inspection & Test Plans (ITP) and associated Check Lists developed for both Golding performed work and subcontracted work for review by the CQR. The CQR shall confirm that the ITPs and Checklists meet the requirements of procedure Performing Quality Inspections and Tests. This includes documenting the verification points for inspections and measurements as well as the Witness and Hold Points required by Golding and the Client's Representative. Once they are acceptable to the CQR, they shall be submitted to the Client's Representative for an assessment as to their suitability/approval, a minimum of seven calendar days prior to the planned use of the ITP on the project.

No ITP and associated Check List will be used on the project until reviewed and their suitability is formally received (in writing, minuted or electronically) in accordance with the above process.

Inspection and Test Plans and the associated Check Lists documenting the sign-offs for inspections will require review by the CQR and an assessment as to their suitability/approval by the Client Representative prior to use on the project.

The Project Manager shall allocate Responsible Engineers to manage sections of the work including self- performed work and/or Subcontractors performing the works. Responsible Engineers shall be accountable for the development, client approval and implementation of ITPs and Check Lists for controlling quality within their work sections. This includes monitoring subcontractor activities such that ITPs and Checklists required for subcontracted works are submitted by the Subcontractor in sufficient time for them to be reviewed and approved prior to the works commencing and so as not to delay the project.

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13.1. Inspection and Test Plans

The Subcontractor shall provide detailed ITPs and Checklists for their work to the Responsible Engineer for review.

ITPs shall be created to cover work activities that are generally discipline specific (e.g. Clear & Grub, Embankment Construction etc.). ITPs provide the structure for demonstrating compliance to the Specifications and Drawings in an organised and sequential order. They include identification of specific inspections, compliance testing and responsibilities for conducting them for the work to be performed for both permanent and temporary works.

ITPs are to be prepared in a systematic manner, with the construction activity broken down into a number of sequential work steps that match the delivery methodology used. Each work process that needs to be verified as successfully completed before continuing to the next step represents one line entry on the ITP. Each line or work step is reviewed against the relevant Contract requirements, which are then summarised onto the line including all specified Witness Points and Hold Points.

The ITP is a reference document and for self-performed work, the Responsible Engineer shall distribute the ITP and explain it to Golding's Superintendents, Supervisors and Leading Hands so that field conformance and verification responsibilities are understood by the construction delivery team.

Similarly for subcontracted work, the SQR shall have processes in place to distribute and explain the requirements of the ITP that the work will be performed under.

13.2. Check Lists

Check Lists for each Lot shall be created in association with the ITP. The Check List is to be provided to the Supervisor or Surveyor, who are responsible for the progressive field inspection on a lot-by-lot basis to confirm compliance.

Checklists shall be used to:

- Progressively document field inspections performed by the nominated Quality Verifier by initialling and dating the Check List;
- Record the review of test results by the Responsible Engineer to confirm compliance and any necessary notations concerning those results;
- Document the notification timeframes and release of Witness Points and Hold Points; and
- Record the performance of field inspection and audit by the Responsible Engineer and the Principal's representative by signature, date and comment on the Check List sheet.

On completion of the fieldwork, the Supervisor shall complete the 'Inspection and Verification Statement' section of the Check List to declare that the work has been inspected and tested as required and the recorded results confirm that the completed work complies with requirements.

The completed Check List forms an attachment to the Conformance Report (Refer Section 16).

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The CQR shall confirm that Subcontractors performing works under their Quality Management System have processes similar to the above and monitor their application during the delivery of the subcontracted works.

13.3. Managing Witness Points

Client Witness Points are nominated in the specifications or other contract documents. Witness Points are identified as 'Check' where required on Inspection and Test Plans.

At least one working day of notification to attend Witness Points shall be provided to the Client Representative as specified. Responsible Engineers are accountable for timely Witness Point Notifications in the areas they are responsible for. Witness Point Notifications are recorded by initials and date on the Check List.

Subcontractors shall provide sufficient notice to the Responsible Engineer to allow the above notification times to be met.

The Responsible Engineer/Client Representative may at their discretion observe (or otherwise) any Witness Points. Witness Points witnessed by the Responsible Engineer/Client Representative shall be documented by initials and date on the Check List. Work however, can proceed if the Responsible Engineer/Client Representative does not attend the Witness Point.

Non-attendance by the Responsible Engineer/Client Representative shall be recorded on the Check List by the Supervisor/Subcontractor/ Responsible Engineer regardless of the optional attendance criteria.

Golding may also include Witness Points on the Check List to assist with the control of the works. The works will be initialled and dated by an appropriate Golding Quality Verifier to verify the inspection was completed.

13.4. Managing Hold Points

Client Hold Points are nominated in the specifications or other contract documents. The Hold Point is an obligatory stop point in the particular construction activity and must be held until released by the Responsible Engineer/Client Representative. Hold Points are identified as 'HOLD POINT' where required on Inspection and Test Plans and Checklists.

Sufficient time of notification to sign-off Hold Points must be provided to the Responsible Engineer/Client Representative as specified in the relevant Specification.

The Responsible Engineer is accountable for timely Hold Point Notifications to the Client's Representative for the areas they are accountable for. Hold Point Notifications shall be recorded by initialling and dating on the Check List.

Subcontractors shall provide sufficient notice to the Responsible Engineer to allow the above notification times to be met.

The Responsible Engineer/Client Representative may at their discretion, request the inclusion (or exclusion) of Hold Points during the review and approval of Inspection and Test Plans. Golding shall comply with all reasonable requests and assess any consequences of the change in accordance with procedure Performing Project Change Control.

The Responsible Engineer/Client Representative must observe and release all Hold Points in a timely manner and shall document their release by initials and date on the Check List.

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Golding may also include Hold Points on the Check List to assist with the control of the works. An appropriate Golding Quality Verifier shall verify that the works comply by initialling the Golding Hold Point. A Golding Hold Point is an obligatory stop point in the particular construction activity and must be held until released by an appropriate Golding Quality Verifier as per clause 5.8 of this plan.

14. Lot Identification and Traceability

A Lot shall be an essentially homogeneous section of the work, the limits of which will be defined by reference to any relevant specification requirements or if not specified, by the Responsible Engineer and detailed in the ITP Check List. Essentially homogeneous shall be taken to mean a Lot or a section of work that is continuous and the same work type.

Lot identification shall be performed in accordance with procedure Performing Lot Identification. Generally this will be performed by referencing survey pegs and/or lot boards and drawings or sketches which nominate the lot by number. All personnel working on a lot shall be made aware of the boundaries of a lot during the familiarisation steps prior to works commencing.

All civil construction work shall be identified within the Lot register by a unique Lot number. Responsible Engineers will be responsible for the raising of Lots within their work area.

The division of work into Lots shall be performed to provide:

- Traceability of work by location within the permanent works;
- A link to the relevant controlled process activity (ITP) and the associated schedule work items and work quantities;
- As-built records of the timing of the execution of the work in the lot;
- Monitoring of conformance testing of the works by linking conformance testing and reporting to each Lot;
- Traceability of supplied product in the permanent works by linking suppliers' deliveries to each Lot; and
- Identification and management of nonconforming works by linking the reporting of nonconformances to each lot.

14.1. Lot Registration and Lot Status

The Lot Numbering convention is defined by a Lot Code and a corresponding sequential three-digit number for each new Lot opened. For example: Lot No: CG004 identifies the Lot Code as CG, which represents the ITP process work activity for 'Clearing and Grubbing' works and '004' is the fourth lot to be raised under the Clearing and Grubbing ITP.

The list of 'Standard Lot Codes' applicable to this project are attached to this plan.

The 'Lot Register' records the Lot Number, Lot location, status of the Lot, dates recording the timing of the works and any CARs associated with the Lot.

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15. Managing Testing

15.1. Control Testing

Control tests are trials conducted at the discretion of Golding before final inspection. Failure of control tests is considered work in process where immediate rework rectifies the problem.

Trial tests may be conducted on a lot to check progress toward achieving specification. A Corrective Action Request (CAR) is not required for trials not meeting Specification.

15.2. Compliance Testing

The Inspection Test Plan (ITP) identifies work activities for process control. Where compliance testing is required for a work activity or process, then the testing requirements will be summarised on the ITP. The ITP will specify the maximum lot size, minimum test frequency and minimum number of tests per lot.

All Test Requests are linked to a Lot.

A Test Request will identify the Lot Number and Lot location associated with the Testing, the location, type and quantity of tests required and timing of test execution.

For Golding performed work, the Responsible Engineer is accountable for:

- Raising Test and Survey Requests for works under their control and linking these Requests to Lots for traceability;
- Collating and reviewing of test results and any required statistical analysis of results to confirm (or otherwise) compliance; and
- Compiling test results for inclusion in the Lot Conformance Report. Compliance testing generally is managed as detailed further below.

For Subcontractor performed work, the Responsible Engineer is accountable for:

- Reviewing test results provided by the Subcontractor and performing any required statistical analysis of results to confirm (or otherwise) compliance.

15.3. Laboratory Type Testing

Where Golding is responsible for providing testing services to the project, a NATA registered company shall be engaged to undertake the specified compliance testing on the project. Where laboratory conformance tests are specified, the Responsible Engineer orders the required tests using a Test Request.

Test Requests are identified by a unique Test Request Number and will contain the following information:

- Test Supplier name, Test types and number of tests required for each test;
- The date, time and location of where the tests will need to be completed; and
- Required date for the test results in the 'Comments' field if specific instructions apply.

Test Requests are to be formally forwarded (email, fax or hand delivered) to the Tester's Representative nominated in the Vendor Contract who shall be accountable for the tests

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being performed in accordance with the appropriate testing standard and the results reported by the specified 'Required By' date. All test reports shall be issued on a Laboratory Test Report signed and dated by an authorised signatory for the test concerned.

Where a Subcontractor engages a testing laboratory to undertake compliance testing for subcontracted works performed under their Quality Management System, the Subcontractor shall provide to the CQR evidence that the Testing laboratory is NATA certified prior to any testing commencing. Such evidence will be forwarded to the Contracts Administrator where required.

15.4. Frequency of Testing

The testing for compliance shall be carried out at the frequency stated in the relevant technical specification. Where no frequency is nominated, an appropriate frequency of testing shall be nominated and applied with the relevant ITP.

15.5. Geometric Testing (Survey)

After completion of the construction process and prior to final acceptance, the works shall be surveyed where required in accordance with procedure Performing Compliance Surveys.

Golding will engage suitably qualified Surveyors to undertake geometric control of the works.

'As Constructed' survey reports will be attached to conformance reports for approval by the CQR.

15.1. Managing Measuring and Test Equipment

Measuring and test equipment used to deliver the works and to confirm that it meets the nominated acceptance criteria shall be managed in accordance with the procedure Managing Measuring and Test Equipment GMSD-14-599.

16. Lot Conformance Reports

Conformance Reports for each lot shall be completed as evidence of works conforming in accordance with procedure Documenting Works Quality Conformance.

The Responsible Engineer shall be accountable for the collation and verification of the associated Conformance Report for the Lots raised in the area they are accountable for.

For self-performed work, the Responsible Engineer shall complete a Conformance Report for each Lot and compile the supporting documentation. Documentation for a completed Lot will typically contain:

- Conformance Report cover sheet;
- Completed ITP and Check List with verification e.g. Hold and Witness Point Release signatures and dates;
- Corrective Action Requests CARs (where applicable) closed-out;
- Lot Test Requests, NATA Test Result Reports and any statistical analysis of the test results demonstrating compliance;
- Lot Survey Reports demonstrating geometric compliance; and

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- Any other relevant documents to demonstrate Lot Conformance.

Completed Conformance Reports will be reviewed and verified by the CQR upon completion of the lot and shall be presented for review and agreement by the Client Representative.

Lots shall be closed when all of the following has occurred:

- The Conformance Report has been verified as conforming by the CQR by signature and date on the Conformance Report;
- The Conformance Report has been reviewed and agreed with the Client Representative by signature and date on the Conformance Report for the lot; and
- A complete hard copy of the signed Conformance Report is filed in the Quality files on the project and an electronic copy is saved in the database in accordance with procedure Controlling Documents and Records, and is available for inspection, surveillance and audit.

For subcontracted work, the Responsible Engineer shall:

- Review the Conformance Report and verify that quality records supporting it confirm that the lot conforms; and once accepted
- Forward the Conformance Report to the CQR for submission to the Client Representative.

17. Control of Monitoring and Measuring Devices

All monitoring and measuring devices used on this contract shall be calibrated and maintained in accordance with procedure Managing Measuring and Test Equipment.

17.1. Survey Equipment Risk Analysis

The Project Manager shall put processes in place to check that all Golding's survey equipment used on this contract is calibrated at the frequency defined in accordance with the schedule in Maintaining Measuring Equipment.

Where the Project Manager considers the default frequencies for calibration of survey set out in Maintenance of Measuring Equipment do not meet the needs of the project, an increased testing frequency can be determined by performing a risk assessment using Risk Analysis - Survey Equipment Calibration Frequency.

The completed Risk Analysis for survey equipment shall be held on site and by Engineering Services and copies shall be provided upon request.

The Project Manager shall put processes in place to verify that all Subcontractors' survey equipment used on this contract is calibrated in accordance with procedure Managing Measuring and Test Equipment.

17.2. Survey Control

The Project Manager shall have processes in place to set out and keep to the works in accordance with the contract and shall provide all instruments and things necessary for that purpose. In the case that survey marks are incorrect, disturbed or obliterated, immediate notification shall be provided to the Client Representative.

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The Client Representative shall be notified in writing of proposed changes to the location of a client supplied survey mark and the procedure needed to do so effectively. The accuracy of survey marks shall be + 10 mm in all three dimensions.

18. Nonconformance, Corrective and Preventative Action

A Nonconformance is identified when any component, or material to be used in the works, and/or completed work, is inspected or tested and found not to meet specified acceptance criteria.

The management of Nonconformance, Corrective and Preventative Actions will generally be performed in accordance with procedure Managing Nonconformance and the following project specific guidelines.

In the event that a test result indicates noncompliance with the contract requirements, no further testing shall be carried out until the Nonconformance Report has been submitted and actions approved by the Client Representative.

18.1. Identifying Nonconformances

Nonconformances may be identified by any person on site and the CQR shall be notified. Under all circumstances, the CQR shall verify that a Corrective Action Request (CAR) for nonconforming product is actioned in the Golding CAR Database in accordance with procedure Managing Nonconformance.

Nonconformances relating to subcontracted work shall also be tracked in the Golding CAR Database.

All nonconformances will be notified to the Client Representative within one working day of detection in accordance with contract requirements.

Nonconformances may be identified by any person on site and the CQR will be notified. Under all circumstances the CQR shall ensure a Corrective Action Request (CAR) for nonconforming product is actioned in accordance with procedure Managing Nonconformance.

Where the proposed action to correct the nonconformance will result in work not complying with the requirements of the contract, the identification of a nonconformance and the subsequent issue of a nonconformance report and/or corrective action request shall constitute a Hold Point.

18.2. Nonconformance (Corrective Action) Register

The CQR shall be responsible for the management of the Nonconformance using the Golding CAR Database 'CAR Register'.

The Corrective Action Register shall identify each Nonconformance by a sequential number and show the individual Lots linked to the nonconformance.

18.3. Disposition of Nonconformances

The proposed correction action to address product nonconformance will be selected from the following options:

- Accept as is without repair or concession;

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- Accept as is without repair by concession or reduced rate;
- Rework / repair to meet specification;
- Repair with concession;
- Reject and scrap; or
- Regrade for alternative application.

The responsible person assigned to rectify a product nonconformance shall:

- Investigate and document the root cause or the key reasons why the nonconformance occurred;
- Provide supporting details for the proposed method of disposition including corrective action; and
- Provide preventative actions identified for implementation to prevent re-occurrence.

The CQR is responsible for reviewing the proposed disposition and preventative action for a nonconformance from the recipient prior to submitting to the Client Representative for approval.

The Client Representative shall be responsible for the approval, conditional approval or rejection of all Nonconformance Reports for nonconformances.

Once the NCR has been accepted by the Client's Representative, the CQR shall notify the Responsible Engineer to proceed with the disposition and preventative action nominated on the NCR.

The CQR is responsible for notification of all CARs to the Client Representative and ensuring that the Client Representative is kept fully informed on the status and progress of all nonconformances.

In the case of a serious nonconformance, the Client Representative may direct Golding to suspend the whole or part of the works and Golding shall immediately carry out any corrective action and/or remedial action.

The CQR may issue a 'Stop Work Order' in the event that work under construction exhibits a significant adverse trend and/or deviation from specification requirements and/or acceptable standards.

The CQR is the only person authorised to change the status of nonconformances in the CAR Register. The CQR may change the status of a Corrective Action Request in the CAR Register from 'Nonconforming' to 'Conforming' by entering the 'Date Closed' against the relevant CAR on receipt of a fully completed Corrective Action Request approved by the Client Representative.

19. Protection of Works

The work processes used on the project shall identify the necessary precautions to provide protection to partially and fully completed works in accordance with the Contract Specification until final handover to the client. Such precautions may include:

- Blocking off roads and access ways;
- Restricting traffic on unsealed roadworks, particularly during inclement weather;

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- Barricading off areas;
- Barricading off completed works; and/or
- Plugging conduits and service pipes.

Refer to the Contract specification for maintenance requirements.

Golding shall perform necessary, reasonable precautions to protect the work under the contract against the effect of inclement weather, and in particular prevent otherwise suitable materials from becoming unsuitable as a result of moisture entry during construction. To achieve these efforts shall be made to provide adequate drainage (including installing drainage structures early in the project) and minimise water entry to excavations as required.

Works shall be scheduled such that parts of the work scope that are susceptible to wet weather and its effects are performed outside expected periods of wet weather wherever practicable.

Golding shall not carry out any of the following activities on bituminous surfaces, including asphalt, or any other surface in which bitumen is to be placed:

- The refuelling of plant;
- The use of plant or equipment which leaks fuel or oil;
- The mixing of cutter or flux oils with bitumen; and
- Any other activity which may result in the spillage of any solvent.

20. Commissioning of the Works

The conformity of the delivered works to the specified requirements will be verified during both in-process inspections and tests and final inspections and tests as nominated in the approved Inspection and Test Plans (ITP). Where specific commissioning activities are required, this will be included in the relevant ITP. Details to be included are:

- The commissioning activity;
- The notification periods for the client and Golding to witness the commissioning activities; and
- The records required to verify the acceptance of the commissioned works.

All commissioning activities shall be performed by suitably qualified and competent personnel.

21. Handover of the Works

Handover of the works will be performed in accordance with procedure [Verifying Project Scope](#) where Golding provides evidence that allows the Client Representative to confirm that the delivered works is acceptable to requirements.

Only works that can be demonstrated to be conforming, including subcontracted works, will be handed over by Golding to the Client Representative at practical completion. Any minor omissions and defects will be recorded on Defect Lists and addressed by the appropriate party.

Quality Management Plan

Where works are handed over progressively, the Client Representative shall be provided with all relevant documentation prior to handover.

At final completion at the expiry of the defects liability period, additional inspections with the Client Representative will be conducted and any minor omissions and defects attended to.

21.1. Rectification During Defects Liability Period

At all times during and up to the expiry of the Defects Liability Period, Golding shall provide the contact details for a person who the Client Representative can notify of any defects that require rectification under the contract.

Golding will take the necessary steps to arrange for performing the rectification work with the appropriate party within a timeframe that is acceptable to the Client Representative.

22. Measurement, Analysis and Improvement

22.1. Internal Audits

Internal Audits of the project that meet the requirements of Management Review in the Golding Quality Manual shall:

- Be conducted by Business Systems in accordance with procedure Performing Audits using the template Audit Checklist to;
 - Determine the status of the implementation and application of the Quality Management System on the project, and
 - Review the suitability and effectiveness of this Quality Management Plan to deliver the Work under the Contract; and
- Include activities of subcontractors engaged on the project.

An internal audit of the Quality Management System will be completed within the first six weeks from site establishment to assess the implementation of the project launch phase.

The auditing frequency for this project shall be at maximum intervals of 6 months after the initial audit unless jointly agreed otherwise. The planning and tracking of internal audits will be included on the project Quality Activity Planner.

The internal audit schedule for all Golding projects is maintained by Business Systems.

22.2. Analysis of Data

The Project Manager shall review the results of monitoring of performance and testing of deliverables throughout the project to identify opportunities to improve delivery methodologies and/or systems.

The quality related data that shall be analysed includes:

- The number of lots remaining open for extended periods of time;
- The contributing factors identified when investigating the causes of nonconformance;
- The cost of rework;
- The time taken to close nonconformances; and

Quality Management Plan

- The repetition of similar instances of nonconformance.

22.3. Client Satisfaction

The Project Manager shall monitor client satisfaction throughout the duration of this contract. Key performance indicators as to the level of client satisfaction are:

- Written and verbal complaints received from the Client Representative about any aspect of the project;
- Lost man hours due to rework;
- Lost production due to breakdowns;
- Production targets not achieved; and
- Quality related complaints received.

Client complaints and compliments shall be regularly addressed at weekly site meetings with the Client's Representative. Where issues cannot be satisfactorily resolved at project level, they shall be escalated to the Golding General Manager for attention.

Quality Management Plan

Attachment A: Quality Management Accountabilities

Quality Management Accountabilities on the Project								
Quality Management Activity		Project Manager	Contractor's Quality Nominee	Responsible Engineer	Golding Superintendent	Supervisor	Surveyor	Business Systems Manager
PREPARATION	Develop and plan the implementation of a progressive and effective quality management process for the construction works delivered by Golding and its Subcontractors.	X						
	Prepare and review the Quality Management Plan prior to submission to the Project Manager for review and approval.		X					
	Develop an Induction to the QMS to be applied at the project		X					
	Approve QMP prior to work commencing	X						
	Arrange for Client's Representative review of QMP prior to work commencing		X					
IMPLEMENTATION	Implement Golding Policies and Procedures on site during the construction of the works.	X	X	X	X	X	X	X
	Deliver the contract works in accordance with Client requirements and relevant specification.	X						
	Perform the works in accordance with Golding's third party AS/NZS ISO 9001 certification.	X						
	Assign resources and plant that are appropriately selected and are sufficient to meet the requirements of this Quality Management Plan.	X			X			
	Provide relevant quality training so quality management procedures documented in this Quality Management Plan are understood and implemented across the project.	X						
	Consistently implement the approved Quality Management Plan across all construction disciplines.	X	X	X	X	X	X	
	Effectively manage the application of quality accountabilities of site staff across the project and through the construction processes.	X						

Quality Management Plan

Quality Management Accountabilities on the Project								
Quality Management Activity		Project Manager	Contractor's Quality Nominee	Responsible Engineer	Golding Superintendent	Supervisor	Surveyor	Business Systems Manager
IMPLEMENTATION CONT.	Monitor the implementation of the approved Quality Management Plan across all construction disciplines.		X					
	Be the point of contact for the Client's Representative for Site Inspections and arranging access to Quality documentation for audit by the Superintendent if required		X					
	Review and approve (or otherwise) Subcontractor Quality Plans.		X					
	Arrange for the review and approval of Subcontractor Quality Plans by the Client's Representative		X					
	Develop all Inspection and Test Plans (ITPs) and associated Check Lists that cover all aspects of the permanent works under their control (including any Subcontract works) and submit to the Contractor's Quality Representative for approval.			X				
	Review and approve all Inspection and Test Plans (ITPs) and associated Check Lists prior to submission to the Client's Representative for approval for use.		X					
	Maintain the Lot database including the opening of Lots and entering construction dates, assigning appropriate work items and quantities.			X				
	Notify the Client's Representative which lots work commenced on the previous day and lots where works were completed.			X				
	Raise Test and Survey Requests to meet the specified compliance requirements on the approved ITPs.			X				
	Set out and verify the geometric information required on site.						X	
	Effectively supervise and monitor the construction activities so it is undertaken in accordance with the specifications, drawings and QMP.			X	X	X		

Quality Management Plan

Quality Management Accountabilities on the Project								
Quality Management Activity		Project Manager	Contractor's Quality Nominee	Responsible Engineer	Golding Superintendent	Supervisor	Surveyor	Business Systems Manager
IMPLEMENTATION CONT.	Efficiently use labour, equipment and materials.				X	X		
	Monitor subcontractors under their control to verify that work is performed in accordance with the Specification.			X	X	X		
	Arrange for and verify that quality inspections and tests are conducted and documented in accordance with approved ITPs and Check Lists.			X		X		
	Manage Hold Point and Witness Point Notifications to the Superintendent's Representative as outlined on approved ITPs.			X				
	Manage the works so that construction and maintenance targets and schedules are met.	X		X	X	X		
	Review and confirm delivery dockets for permanent materials received to provide traceability of supplied product.			X	X	X		
	Verify that materials delivered to site meet the required technical specifications and are traceable in the permanent works.			X				
	Allocate relevant WBS elements to delivery dockets and forward daily to the project administration staff for cost management.			X	X	X		
	Check and verify all works are completed in accordance with approved ITPs.				X	X	X	
	Document checks and conformance by signature, on approved Check Lists.			X	X	X	X	
	Monitor and verify that subcontract quality documentation completed under the Golding Quality Plan is raised and managed in accordance to the QMP.			X				
	Perform surveillance of the implementation of the QMP on the project over and above nominated inspections listed above.		X					
	Provide 'as built' documentation in the required format.						X	
IM	Progressively 'Close-out' Lots to status 'Conforming'.		X					

Quality Management Plan

Quality Management Accountabilities on the Project								
Quality Management Activity		Project Manager	Contractor's Quality Nominee	Responsible Engineer	Golding Superintendent	Supervisor	Surveyor	Business Systems Manager
	Identify, raise and report any nonconformances in a timely manner and in accordance with procedure Managing Nonconformance.	X	X	X	X	X	X	X
	Maintain the Nonconformance Register and provide reports as required.		X					
	Review noncompliance results and corrective and preventative actions for forwarding to the Project Manager for approval.		X					
	Review and approve proposed Corrective and Preventative Actions from Nonconformances.	X						
	Forward NCRs to Client's Representative for review and acceptance.		X					
	Prepare Lot Conformance Report for each Lot with supporting Quality Records			X				
	Review and Authorise by signature a Conformance Report for each Lot		X					
	Submit all Lot Conformance Reports to the Client's Representative.		X					
	Maintain the integrity, traceability and completeness of the electronic Quality records and the hard copy quality filing system.		X					
HANDOVER	Review all quality records for work performed and the results of surveillance and audits and when satisfied, issue Handover Report in accordance with contract		X					
	Perform inspections of the works to verify conformance prior to the end of the Defects Liability Period, arrange for rectification of defects and provide final Handover Documents in accordance with the contract.	X						
REVIEW	Analyse and interpret all compliance testing of the works to verify conformance.			X				
	Conduct internal audits of the quality system and procedures to verify compliance.		X					X

Quality Management Plan

Quality Management Accountabilities on the Project								
Quality Management Activity		Project Manager	Contractor's Quality Nominee	Responsible Engineer	Golding Superintendent	Supervisor	Surveyor	Business Systems Manager
	Regularly review quality system to monitor effectiveness.	X	X					
IMPROVEMENT	Review, assign action and monitor the close out of all quality issues raised during Surveillance Audits completed by internal or external resources.		X					
	Implement authorised changes to the quality systems and procedures applied on the project where opportunities for improvement have been identified.	X						X

Quality Management Plan

Attachment B: Inspection and Test Plans and Check Lists

Performing Project Quality Assurance and Control

ITP AND CHECKLIST FOR CLEARING AND GRUBBING



Location: _____ Project/Stage: _____ Contract Number: _____
Lot Description: _____ Clearing and Grubbing Lot Number: CG-001
Reference Drawings: _____ Drawing No. _____

Test	Activity	Applicable Standard	Acceptance Criteria	Frequency	Inspection (sign and date)	
					Golding	
					Witness	Hold
					All relevant points to be signed and dated	
1	Lot Identification	GC Quality Plan	Lot register on file in place.			
2	Erosion and Sediment Control	Environmental Management Plan	Appropriate erosion and sediment control measures in place as required by the EMP.			
3	Pre-clearing Flare/Fence Report	GOCC DN	GOCC Approved Spatter and Catcher to conduct Flare and Fence inspection and report all findings. Report to be forwarded to Superintendent prior to clearing start.			Record of ATP required
4	Permits and Approvals	Op Work Permit	Obtain Local Authority Approved Tree Clearing Plan/Permit and maintain a Copy on site. Implement Special Conditions as required.			
5	Cultural Heritage Monitor	Cultural Heritage Management Plan	Client's representative notified in appropriate time frame of work requiring monitoring under the CHMP.			
6	Set Out	GOCC DN	Set out clearing boundary as per the drawing including tree protection fencing. Any trees required by Principal for use as marketable timber, to be flagged clearly and communicated to the clearing contractor.	1/lot		
7	Pre Start Meeting	Op Work Permit	Complete Local Authority Pre Start Meeting and gain Authorisation to Proceed.			Record of ATP required
8	Locate & Protect Services	DEVD Plan	Services located, relocated, and/or protected	1/lot		
9	Clearing	GOCC - SO4.9.7.12.5	Clearing complete in accordance with drawing specification and permit. Care taken not to disturb natural growth outside clearing boundary.	1/lot		
10	Grubbing	GOCC - SO4.9.7.12.6	Tree roots, stump and other organic and unsuitable materials removed to 500mm below ground level. Grub holes backfilled. Golding Supervisor to verify adequate grubbing prior to demolishing clearing equipment. Pre-taproot Strip Survey to be completed	1/lot		
11	Post Clearing Flare/Fence Report	GOCC DN	GOCC Approved Spatter and Catcher to provide post clearing report. Report to be forwarded to Superintendent within 5 days.	1/lot		
12	Quantity Verification	Sub-contract Agreement	Final cleared area agreed with clearing contractor for payment	1/lot		

Specification: City of Gold Coast Specifications
Dept of Transport and Main Roads Specifications

Remarks:

Legend: Superintendent Client's Superintendent or nominated Representative
Blank Inspection Box To be initiated and dated by relevant personnel
Shaded Inspection Box Not applicable

LOT CONFORMS

COB:

Client Rep. (optional at Client's discretion)

DATE

DATE

Performing Project Quality Assurance and Control

ITP AND CHECKLIST FOR CLEARING AND GRUBBING



Location: _____ Project/Stage: _____ Contract Number: _____
Lot Description: _____ Clearing and Grubbing Lot Number: CG-001
Reference Drawings: _____ Drawing No. _____

Test	Activity	Applicable Standard	Acceptance Criteria	Frequency	Inspection (sign and date)	
					Golding	
					Witness	Hold
					All relevant points to be signed and dated	
1	Lot Identification	GC Quality Plan	Lot register on file in place.			
2	Erosion and Sediment Control	Environmental Management Plan	Appropriate erosion and sediment control measures in place as required by the EMP.			
3	Pre-clearing Flare/Fence Report	GOCC DN	GOCC Approved Spatter and Catcher to conduct Flare and Fence inspection and report all findings. Report to be forwarded to Superintendent prior to clearing start.			Record of ATP required
4	Permits and Approvals	Op Work Permit	Obtain Local Authority Approved Tree Clearing Plan/Permit and maintain a Copy on site. Implement Special Conditions as required.			
5	Cultural Heritage Monitor	Cultural Heritage Management Plan	Client's representative notified in appropriate time frame of work requiring monitoring under the CHMP.			
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8	Locate & Protect Services	DEVD Plan	Services located, relocated, and/or protected	1/lot		
9	Clearing	GOCC - SO4.9.7.12.5	Clearing complete in accordance with drawing specification and permit. Care taken not to disturb natural growth outside clearing boundary.	1/lot		
10	Grubbing	GOCC - SO4.9.7.12.6	Tree roots, stump and other organic and unsuitable materials removed to 500mm below ground level. Grub holes backfilled. Golding Supervisor to verify adequate grubbing prior to demolishing clearing equipment. Pre-taproot Strip Survey to be completed	1/lot		
11	Post Clearing Flare/Fence Report	GOCC DN	GOCC Approved Spatter and Catcher to provide post clearing report. Report to be forwarded to Superintendent within 5 days.	1/lot		
12	Quantity Verification	Sub-contract Agreement	Final cleared area agreed with clearing contractor for payment	1/lot		

Specification: City of Gold Coast Specifications
Dept of Transport and Main Roads Specifications

Remarks:

Legend: Superintendent Client's Superintendent or nominated Representative
Blank Inspection Box To be initiated and dated by relevant personnel
Shaded Inspection Box Not applicable

LOT CONFORMS

COB:

Client Rep. (optional at Client's discretion)

DATE

DATE

Quality Management Plan

Attachment C: Lot Codes

EARTHWORKS	CODE	CONCRETE	CODE
Clear and Grub	CG	Concrete – Formwork and Preparation	CF
Topsoil Stripping	TS	Concrete Pours	CP
Proof Rolling	PR	Blockwork	BW
Excavation	EX	Grout	GT
Drill and Blast	DB	PILING	CODE
Ground Surface Treatment	GS	Piles / Piers – Bored	PB
Subgrade Preparation	SG	Piles / Piers – Cast in Place	PC
Embankments	EM	Piles / Piers – Driven	PD
Backfill	BF		
Select Fill	SF		
Acid Sulphate Treatment	AT		
Structural Geofabric	GF		
Wick Drains	WD		
SERVICES	CODE	METALWORK	CODE
Stormwater – RCPs	CU	Temporary Works – False Work	FW
Stormwater – RCBCs	BC	Welding	WE
Manholes	MH	Metalwork	MW
Water Lines	WL	Surface Protection	SU
Sewer Lines	SL		
Stormwater	SW		
Underground Services	US	BUILDINGS	CODE
Electrical – Conduits	EC	Building Fitout	BU
Electrical – Works	EW	Demolition	DM
ROADWORKS	CODE		
Subsoil Drainage	SD		
Pipe Culvert	CL		
Road Pavements	RP	LANDSCAPING	CODE
Road Pavements – Subbase	RS	Landscaping	LS
Road Pavements – Upper Subbase	RU	Fencing	FE
Road Pavements - Base	RB	Gabions and/or Mattresses	GM
Road Pavements – Cement Stabilised	RC	Stone Pitching	SP
Asphalt Surfacing	AS	Topsoil Placement	TP
Asphalt Priming	AP	Grassing/Hydromulching	GH
Bitumen Surfacing	BS		
Kerb and Channel	KC		
Line Marking	LM	INSTRUMENTATION	CODE
Road Furniture	RF	Geotechnical Instrumentation	GI
Road	RD	Weather Station	WS
Traffic Management	TM		

ITP AND CHECKLIST FOR EARTHWORKS - STRIP, CUT AND FILL

Location: Halcyon Greens Stage 5 **Contract Number:** HAL00733
Lot Description: Earthworks - Strip, Cut and Fill **Lot Number:** EW- 001
Reference Drawing/s: 101; 102; 103

Test	Activity	Applicable Standard	Acceptance Criteria	Frequency	Inspection (sign and date)			
					Golding		Client	
					Completed	Hold	Witness	Hold
					All relevant points to be signed and dated			
1	Define Lot	GMSD-4991 Performing Lot Identification	Lot boundaries defined to allow positive identification of work within the project and/or plans in place. Date opened entered on Lot Register.	Each Lot				
2	Underlying Lot	GMSD-5087 Performing Quality Inspections and Tests	All work associated with an underlying lot has been completed satisfactorily.	Each Lot				
3	Set Out/GPS	Drawings	Set out as per drawings. GPS models uploaded and TBMs set for checking.	Each Lot				
4	Topsoil Stripping	CGC - SC6.9.7.2.3.3	Pre-strip Survey Completed. All grass, vegetation and organic matter removed. Stockpiled in nominated location. Surface drainage flows away from works.	Each Lot				
5	Surface Pick Up	Project Provisions	Natural surface pick up complete.	Each Lot				
6	Locate & Protect Services	DBYD Plans	Services located, relocated, protected or not applicable.	Each Lot				
7	Excavation	CGC - SC6.9.7.2.3.4	Excavated to line and level as per drawings. Table & catch drains as per drawings. Batters trimmed to profile as per drawings and free of loose material. CLIENT AND GOLDING HOLD POINT: Classification and volume of rock to be agreed with Superintendent.	Each Lot				
8	Rip Rock	CGC - SC6.9.7.2.3.4.5	Operator to be used for the purposes of ripping for rock classification has been agreed upon with the Client Superintendent.	Each Lot				
9	Excavated Material	CGC - SC6.9.7.2.3.4	Material classified suitable for embankments or rock stockpile.	Each Lot				
10	Embankment Foundation Compaction	CGC - SC6.9.7.2.3.11	CLIENT HOLD POINT: Superintendent notified prior to removing potential unsuitable material. Compacted to >/=95% standard compaction. (Residential). Exposed subgrade tested and passes.	1 / 500m ³ 1 / 2,500m ²				
11	Embankment Fill Testing	CGC - SC6.9.7.2.3.4 & 16	Level 1 testing to AS3798. Results received and pass.	1 / 500m ³				
12	Earthworks Trim	CGC - SC6.9.7.2.3.1.5	Trimmed as per drawings. Allotments +/-100mm Subgrade Level +0mm/-25mm, Width not < widths specified Building Pads +0mm/-25mm of design.	1 / 50m				
13	As Constructed	Project Provisions	Advise Principal's Surveyor work is ready for As Constructed Details to be picked up, where applicable.	Each Lot				
14	Lot Closure	GMSD-5087 Performing Quality Inspections and Tests	All work processes associated with the lot have been completed e.g. Lot conforms to all specifications. All NCRs actioned and closed. All test results and required survey attached.	Each Lot				

Specification: City of Gold Coast Specifications
Dept of Transport and Main Roads Specifications

Remarks:



ITP AND CHECKLIST FOR EARTHWORKS - STRIP, CUT AND FILL

Location:

Halcyon Greens Stage 5

Contract Number:

HAL00733

Lot Description:

Earthworks - Strip, Cut and Fill

Lot Number:

EW- 001

Reference Drawing/s:

101; 102; 103

Test	Activity	Applicable Standard	Acceptance Criteria	Frequency	Inspection (sign and date)			
					Golding		Client	
					Completed	Hold	Witness	Hold
					All relevant points to be signed and dated			
Legend: Superintendent Client's Superintendent or nominated Representative Blank Inspection Boxes To be initialled and dated by relevant personnel Shaded Inspection Boxes Not applicable								
LOT CONFORMS CQR: _____ Client Rep. (optional at Client's discretion) _____					DATE _____ DATE _____			

BSBPMG514 MANAGE PROJECT COST

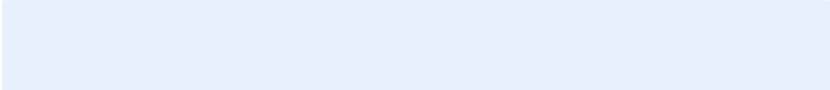
PRACTICAL ASSESSMENT INSTRUCTIONS

- The following practical assessment will require the participant to complete work related activities.
- The assessor will conduct observations of the participant's work to determine whether they display sufficient practical skills and knowledge.
- Please fill in the details below, providing your name, signature and date of assessment.
 - Your signature acknowledges that the assessor provided clear instructions and the participant understood what was required to complete this assessment.
- The assessor may substitute a Practical Task with another task of equal value.
 - Alternate tasks must be fully documented by the assessor.

Participant name Nazeem Ajez

Participant signature 

Assessor name _____

Assessor signature 

Date [Click here to enter a date.](#)

Number of tasks	Number of tasks completed	Satisfactory?	
		Yes	No
1	1	☐	☐

ASSESSOR COMMENTS

BSBPMG514 MANAGE PROJECT COST

Practical Task 1		
Description of task: A suitable observer is to verify the participant's ability to identify, analyse and refine project costs to produce a budget and use it and the principal mechanism to control project cost.		
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 (including budgets/other financial documents), Budget software.		
Assessment of task		
Name of participant:	Nazeem Ajez	
Name of observer:	Andrew Secomb	
Role of observer (Confirm suitability to sign)	Superintendent (suitable to sign, direct colleague/ supervisor)	
Email address of observer	Andrew.Secomb@golding.com.au	
Signature of observer:		
Date:	18/10/2021	
When completing the task, did the participant:		Tick if satisfactorily completed. Provide comments if left unticked.
1 Determine project costs		
1.1A.	Seek input from stakeholders and guidance from others when determining resource requirements for tasks identified in the work breakdown structure.	☒
1.1B.	Estimate project costs to prepare project budget within agreed tolerances.	☒
1.1C.	Develop a project budget.	☒
1.1D.	Within delegated authority, develop a cost-management plan to ensure ongoing management of project finances.	☒
2 Monitor and control project costs		
1.2A.	Implement agreed financial-management processes and procedures to monitor actual expenditure against budget.	☒
1.2B.	Select and use cost-analysis methods and tools to identify cost variations and evaluate alternative actions.	☒
1.2C.	Implement and monitor agreed actions to maintain financial objectives.	☒
1.2D.	Provide accurate and timely financial reports.	☒

3 Complete cost-management processes	
1.3A. Conduct appropriate activities to signify financial completion.	☒
1.3B. Use available records to review project outcomes and determine effectiveness of project cost management.	☒
1.3C. Review cost-management issues and document improvements.	☒
The participant's performance was: ☒ Satisfactory ☐ Not Satisfactory	

OBSERVER COMMENTS

I believe Nazeem has displayed the above criteria (1.1A to 1.3C) throughout the full duration of the projects we have been on. Nazeem monitors the project budget with daily costings and ensures amendments are made onsite to minimise loss and maximise profits. He completes end of month reporting tasks and advises of alterations required from upper management.

PROJECT # HAL00733



Enter date
for 1st day
of month

			ACTUALS											
	Profit/Loss		\$52,289	\$45,845	\$6,443	-\$1,260				\$1,097	\$2,305	\$2,968	\$1,333	
Version	Revenue		\$319,127	\$289,792	\$29,334					\$7,169	\$8,202	\$8,165	\$5,798	
Code	Description		TOTALS TO DATE	ACTUALS TO END OF Sep 2021	TOTALS THIS MONTH Oct 2021	Fri 1 Oct	Sat 2 Oct	Sun 3 Oct	Mon 4 Oct	Tue 5 Oct	Wed 6 Oct	Thu 7 Oct	Fri 8 Oct	Sat 9 Oct
PROJECT DELIVERABLES (DJC)														
2-2	Compound Setup, Perimeter Fencing and Mobilise Plant & Equipment	Profit/Loss	-\$1,278	-\$1,278										
		Revenue	\$1,567	\$1,567										
		Cost	\$2,845	\$2,845										
2-4	Cleanup & Demobilise from Site	Profit/Loss	-\$300	-\$300										
		Revenue												
		Cost	\$300	\$300										
2-5	Inclement Weather allowance - Plant and Labour Standdown Only	Profit/Loss	-\$4,015	-\$2,755	-\$1,260	-\$1,260								
		Revenue												
		Cost	\$4,015	\$2,755	\$1,260	\$1,260								
3-4	Cut to Spoil / Cut to Fill (Including trim)	Profit/Loss	-\$45,091	-\$45,091										
		Revenue	\$4,701	\$4,701										
		Cost	\$49,792	\$49,792										
3-6	Erosion & Sediment Control (Setup and Maintenance) - No Dust Control	Profit/Loss	-\$1,029	-\$1,029										
		Revenue												
		Cost	\$1,029	\$1,029										
4-1	Trim & Compact Subgrade (Doesn't include detailed excavation for Road)	Profit/Loss	-\$6,407	-\$5,495	-\$911					-\$911				
		Revenue	\$10,828	\$9,730	\$1,099					\$1,099				
		Cost	\$17,235	\$15,225	\$2,010					\$2,010				
4-3	Service Road Crossings	Profit/Loss	\$7,225	\$7,225										
		Revenue	\$12,750	\$12,750										
		Cost	\$5,525	\$5,525										
4-4	Gravels	Profit/Loss	-\$3,154	-\$1,061	-\$2,093					-\$165	-\$692	-\$374	-\$862	
		Revenue	\$6,972	\$6,099	\$873									
		Cost	\$10,126	\$7,160	\$2,966					\$165	\$1,565	\$374	\$862	
4-8	Concrete Footpaths / Islands / Driveways	Profit/Loss	\$10,868	\$10,868										
		Revenue	\$19,018	\$19,018										
		Cost	\$8,150	\$8,150										
5-1	RCPs Stormwater Supply and Install	Profit/Loss	\$52,375	\$50,640	\$1,735								\$1,735	
		Revenue	\$104,671	\$100,615	\$4,056								\$4,056	
		Cost	\$52,296	\$49,975	\$2,321								\$2,321	
6-1	Sewer Supply & Install	Profit/Loss	\$43,100	\$34,128	\$8,972					\$2,173	\$2,997	\$3,342	\$460	
		Revenue	\$120,459	\$97,153	\$23,306					\$6,070	\$7,329	\$8,165	\$1,742	
		Cost	\$77,359	\$63,025	\$14,334					\$3,897	\$4,332	\$4,823	\$1,282	
6-2	Sewer Pump Stations or Tunnel Bores	Profit/Loss	\$3,775	\$3,775										
		Revenue	\$18,063	\$18,063										
		Cost	\$14,288	\$14,288										
7-1	Water Reticulation Supply & install	Profit/Loss	-\$486	-\$486										
		Revenue	\$20,097	\$20,097										
		Cost	\$20,583	\$20,583										
90-1	Variation 1	Profit/Loss	-\$775	-\$775										
		Revenue												
		Cost	\$775	\$775										
90-3	Variation 3	Profit/Loss	-\$2,520	-\$2,520										
		Revenue												
		Cost	\$2,520	\$2,520										

PROJECT VALUATION



CONTRACT NAME :	Halcyon Green - Stage 5	CONTRACT NO :	HAL00733	GOLDING PROJECT NO :	HAL00733
CLIENT :	Halcyon Developments	MONTH ENDING :	30 September 2021	PROJECT MONTH NO.	5

BANK GUARANTEES / BONDS

BG Identifier	Type	Form of Guarantee	Total Amount	Issue Date	Anticipated Return Date	Returned	Comments
							TBC

SCHEDULE CALENDAR DAYS

Contract Award	Contract Date for PC	Contract Duration	Bid for Completion	Date	Revised Contract Date for PC	Revised Contract Duration	Forecast Programmed Completion	Ahead / Behind Bid Schedule	Rev
09-May-21	15-Nov-21	190	15-Nov-21		15-Nov-21	190	15-Nov-21	0.0	
EOT Submitted		EOT Approved		0.00	EOT Rejected		EOT Outstanding	0.0	

RATIO ANALYSIS

Time (Days)		Claimed (\$)		Cost (\$)		EV (\$)		Margin (\$)	
Completed	To Go	Completed	To Go	Completed	To Go	Completed	To Go	Completed	To Go
76%	46	42%	1,853,841	58%	1,236,687	58%	1,344,049	57%	107,362

VALUATION

	Original Contract Value	Progress Details			Final Forecast Details		
		Previous Month	Month Movement	To Date	Previous Month	Month Movement	This Month
PROGRESS CLAIM No:		4		5			
Contract Value	3,175,268	760,086	586,059	1,346,145	3,243,485	-43,499	3,199,986
Approved Variations		Incl in Cont Value above			Included in Contract Value above		
Un-Approved Variations & Claims		0	0	0			
PROGRESS CLAIM		760,086	586,059	1,346,145	3,243,485	-43,499	3,199,986
Sundry Income		0	0	0	0	0	0
Insurance Claims Settled		0	0	0	0	0	0
TOTAL CLAIMS		760,086	586,059	1,346,145	3,243,485	-43,499	3,199,986
Underclaims		460,138	49,654	509,792			
Overclaims		0	0	0			
Reversal - Un-Approved Variations & Claims		0	0	0			
Reliance - Contractual		0	0	0	0	0	0
Reliance - Non Contractual		0	0	0	0	0	0
Revenue Adjustment (Office Use Only)							
EARNED VALUE		1,220,224	635,713	1,855,937	3,243,485	-43,499	3,199,986
COSTS	2,886,607	1,127,290	584,437	1,711,727	2,994,463	-46,049	2,948,414
Reliance Cost Offset					0	0	0
MARGIN \$	288,661	92,934	51,276	144,210	249,022	2,550	251,572
MARGIN on COSTS%	10.00%	8.24%	8.77%	8.42%	8.32%	0.22%	8.53%

POTENTIAL MARGIN ADJUSTMENT from R&O

WORST CASE - MARGIN ADJUSTMENT \$				0	0	0
MOST LIKELY - MARGIN ADJUSTMENT \$				0	0	0
BEST CASE - MARGIN ADJUSTMENT \$				0	0	0

CONTINGENCY in COSTS

Contingency in Held Costs To Date			Contingency in Forecast Costs		
Last Period	This Period	Movement	Last period	This Period	Movement
0	0	0	0	0	0

PAYMENT SUMMARY

To Date (as at Progress Claim No.):			JTD Progress Claim Number:		
Claim Date :		Certified :	760,086	Claim Date :	29-Jun-21
Certified Date :		Payment Received :	267,281	Likely Certified Date :	14-Jul-21
		Cash Retention :		Previously Certified :	760,086
				Cash Retention :	134,615
Payment Due Date :		Payment Due :	492,805	Payment Due Date :	FALSE
				Likely Payment \$ Due :	451,445

UNDERCLAIMS								
Description							Value	
Materials/Work on Site/Complete not Claimed		EV ADJUSTMENTS - BOQ + VRNS ==>					126,257	
Effect of Unbalanced Bid		EV ADJUSTMENTS - EV ALLOWANCES ==>					383,535	
Other								
TOTAL							509,792	
OVERCLAIMS								
Description							Value	
Contingency Captured To-Date		Contingency Captured To-Date ==>						
Effect of Unbalanced Bid		EV ADJUSTMENTS - BOQ + VRNS ==>						
Deferred Apparent Surplus		EV ADJUSTMENTS - EV ALLOWANCES ==>						
Provision for Future Loss								
Advance Payments								
Other								
TOTAL							-	
RELIANCE								
Contractual - Unapproved Variations & Claims (over \$50k or outcome not known)								
Variation / Claim Description	Full Revenue	Full Costs (Not in FFC)	To - Date		Final Forecast Details			
			% Reliance	Revenue Value	% Reliance	Revenue Value	% Reliance	Costs Value
				0		0		0
				0		0		0
				0		0		0
				0		0		0
				0		0		0
				0		0		0
				0		0		0
				0		0		0
Sub Total	0	0	0%	0	0%	0	0%	0
Non - Contractual								
Description	Full Value	Full Costs (Not in FFC)	To - Date		Final Forecast Details			
			% Reliance	Revenue Value	% Reliance	Revenue Value	% Reliance	Costs Value
Insurance Claims				-		-		-
Liquidated Damages				-		-		-
Cost Savings / Backcharges				-		-		-
Other				-		-		-
Sub Total	-	-	0%	-	0%	-	0%	-
TOTAL RELIANCE IN PROJECT	-	-	0%	-	0%	-	0%	-
RISK & OPPORTUNITY								
Range of Outcomes for Risk & Opportunity Items - Values are above / below forecast								
R&O Description	Revenue			Cost				
	Best Case	Most Likely	Worst Case	Best Case	Most Likely	Worst Case		
Release of Contingency in Forecast Costs (-ve)								
Sub Total	0	0	0	0	0	0		
PREPARED BY								
Project Manager	Project Manager				Date :	11-October-2021		