

# Project Controls

## Master Specification

## PC-PM 1 to 5 Project Management

### Document Information

K Net Number:	13325654
Document Version:	1
Document Date:	02/05/2019
Responsible Officer:	

DEPARTMENT OF  
PLANNING, TRANSPORT  
AND INFRASTRUCTURE



Government of South Australia  
Department of Planning,  
Transport and Infrastructure

## Document Amendment Record

Version	Change Description	Date	Endorsement record (KNet ref.)
1	Initial Issue (formerly G10)	02/05/2019	
2	Minor formatting and content changes	19/09/2019	

## Document Management

This document is the Property of the Department of Planning Transport and Infrastructure (DPTI) and contains information that is confidential to DPTI. It must not be copied or reproduced in any way without the written consent of DPTI. This is a controlled document and it will be updated and reissued as approved changes are made.

## Contents

Contents	3
PC-PM1 Project Management & Reporting	4
1 General	4
2 Project Management System and Plan	4
3 Project Plans	4
4 Project Meetings	5
5 Project Reporting	6
6 Evaluation of the Contractor's Performance	7
7 Prequalification and Certification / Accreditation	7
8 Recording of Activities	8
9 Proprietary Products	8
10 Lessons Learnt	8
11 Hold Points	8
PC-PM2 Contract Program	10
1 General	10
2 Contract Program Information	10
3 Contract Program - Baseline	11
4 Contract Program Updates	11
5 Hold Points	11
PC-PM3 Contractor's Personnel & Training	12
1 General	12
2 Competence	12
3 Management of Contractor's Key Personnel	12
4 Training	13
5 Hold Points	13
PC-PM4 Risk Management	14
1 General	14
2 Risk Management System & Plan	14
3 Risk Register	14
4 Hold Points	14
PC-PM5 Information Management	16
1 General	16
2 Information Management System	16
3 Content Ownership and Right of Access	17
4 Document Management	17
5 Archiving & Completion	18
6 Audits	18
7 Training and Support	19
8 Hold Points	19

## PC-PM1 Project Management & Reporting

### 1 General

- 1.1 The Contractor must perform its obligations to effectively manage, control and deliver the project in accordance with the Contract.
- 1.2 This Part specifies the minimum requirements for the Contractor's Project Management system, processes and reporting.

### 2 Project Management System and Plan

- 2.1 The Contractor must establish and implement a Project Management System.
- 2.2 The Contractor must prepare, implement and update a site specific Project Management Plan to identify and document how the Contractor will manage and control the delivery of the Contractor's Activities.
- 2.3 The Project Management Plan is the overarching Plan that provides the:
  - a) approach to management of the Project;
  - b) management processes and systems to be employed;
  - c) management team structure, organisational chart, roles, resources, capabilities and experience;
  - d) details the interface between each Project Plan;
  - e) management procedures, processes, systems and resources which are not otherwise included in the other Project Plans;
  - f) process for the review and improvement of the Project Plans;
  - g) Contractor's strategies and processes to collaborate with DPTI and other Authorities.
- 2.4 The Contractor must ensure that all Sub-Contractors comply with the Project Management Plan and Project Plans and that any such plans required under the sub-contracts are consistent with the Project Plans.
- 2.5 The Contractor shall submit the Project Management Plan to the Principal for Acceptance within 10 days of execution of the Contract.
- 2.6 Submission and Acceptance of the Project Management Plan shall constitute a **Hold Point**.
- 2.7 The Contractor shall regularly review and update the Project Management Plan throughout the project lifecycle. As a minimum the Project Management plan shall be reviewed every 6 months.

### 3 Project Plans

- 3.1 Project Plans must be prepared, implemented and updated by the Contractor in accordance with Legislation and the Contract requirements
- 3.2 The Contractor must integrate all Project Plans within the Project Management Plan.
- 3.3 Project Plans are detailed within the Contract Documents and may include the Plans listed below:

Project Plan	Referenced in Part
WHS Management Plan	PC-WHS1 Work Health and Safety
Quality Management Plan	PC-QA1 Quality Management

Project Plan	Referenced in Part
Environmental Management Plan(s) including the following sub-plans:	PC-ENV1 Environmental Management and PC-ENV2 Environmental Protection Requirements
<ul style="list-style-type: none"> <li>• Construction Noise and Vibration Management Plan</li> <li>• Soil Erosion and Drainage Management Plan</li> </ul>	
Night Works Management Plan	
Engineering and Design Management Plan	PC-PM4 Risk Management
Construction Management Plan(s)	PC-CN2 Asset Handover
Community Engagement and Communications Media Management Plan	PC-CS1 Community Engagement & Media Management
Traffic Management Plan	PC-SM1 Traffic & Pedestrian Management
Industry Participation Policy Plan	PC-PM1 Project Management & Reporting
Risk Management Plan	PC-PM4 Risk Management
Safety and Systems Assurance Plan	PC-RW20 Systems and Safety Assurance
Rail Safety Management Plan	PC-RW10 Railways Management Planning
Rail Access Management Plan	PC-RW40 Accessing the Rail Corridor
Sustainability Plan	PC-ST1 Sustainability in Construction
Training Management Plan	PC-CN2 Asset Handover and / or PC-RW50 Inspection testing and Commissioning
Asset Management and Asset Maintenance Plan(s)	PC-CN2 Asset Handover and / or PC-RW50 Inspection testing and Commissioning
Asset Completion and Handover Plan	PC-CN2 Asset Handover and / or PC-RW50 Inspection testing and Commissioning

3.4 The Contractor may combine and integrate various Project Plans as commensurate with the specific project, as agreed by the Principal.

3.5 Where the Contractor elects to combine Project Plans, all the requirements pertaining to individual plans must be addressed in the combined Plan.

## 4 Project Meetings

4.1 The Contractor will establish and convene project meetings in accordance with the Contract Requirements and Project Control Requirements, including but not limited to:

- a) Leadership Team meetings;
- b) Management Team meetings;
- c) Engineering & Design coordination;
- d) Construction Management (site) meetings;
- e) Safety meetings, site inspections and audits;
- f) Rail Operations and Network interface management meetings;
- g) Community & Stakeholder engagement meetings; and
- h) Environmental review meetings.

4.2 The purpose of these meetings is to assist in attaining full co-operation between all concerned parties on the project, as well as checking progress of the work and providing the opportunity for general discussion.

4.3 The Contractor shall record meeting outcomes (minutes) to be provided to all parties no later than 7 days after each meeting.

4.4 The minutes or record of any meeting held pursuant to this clause do form part of the Contract and are for information only.

- 4.5 If at a meeting, the Contractor propose an amendment to Contract or the Principal provides advice, which may be interpreted as a Contractual Direction, the amendment or Direction must be clearly identified and documented separately from the meeting minutes in accordance with the Contract.

## 5 Project Reporting

- 5.1 The Contactor shall provide regular and accurate project reports as detailed in the Contractual Requirements.
- 5.2 The Contractor shall provide a consolidated monthly project report within seven (7) days of the end of the month. Any specific requirements of the Contract should also form part of this report.
- 5.3 The monthly report shall include a “dashboard” summary including but not be limited to the following:
- a) executive summary in the form of an A3 dashboard report summarising the key statistics and matters from each section of the report;
  - b) **health and safety** details including as a minimum:
    - i) hours worked this month, and the total to date;
    - ii) incidents / issues in the last month including commentary;
    - iii) lead indicators including inductions, training, toolbox meetings, audits / site inspection on a Month to Date and Year to Date basis;
    - iv) lag indicators including near misses, first aid injuries, lost time injuries, impact / property damage on a Month to Date and Year to Date basis;
    - v) relevant statistical data including rolling averages.
  - c) **financial status analysis** including:
    - i) variations / claims submitted , approved, rejected or under review by number and cost;
    - ii) cash-flow forecast vs actual including reasons for variance;
    - iii) percentage complete by time vs percentage complete by cost;
    - iv) EWN status and likely time, cost and / or quality impacts.
  - d) **quality report** including:
    - i) NCR and CAR summary and closure rates;
    - ii) lot closures rates;
    - iii) RFI status- submitted this period, to date and outstanding;
    - iv) audit and surveillance activities;
    - v) Hold Point details –submitted, released, outstanding.
  - e) **program report** including:
    - i) key and interim milestones and contract dates baseline, current and forecast;
    - ii) design progress planned vs actual at each stage of the review process (where applicable);
    - iii) procurement status and progress;
    - iv) construction progress – key metrics and quantities- planned , actual, remaining;
    - v) production graphs of key design and construction activities showing planned vs actual;
    - vi) any extensions of time claimed, approved and outstanding;
    - vii) explanation where works not meeting scheduled progress.
  - f) **environmental performance** report;
  - g) **community engagement** report;
  - h) **workforce industry participation** including:
    - i) any subcontracts let valued in excess of \$100,000;

- ii) employment hours worked vs target;
  - iii) progress of any initiatives to employ or train: the long term unemployed, local region and aboriginal people;
  - iv) total hours worked by people of Aboriginal or Torres Strait Islander descent vs target;
  - v) progress compared to the tendered Industry Participation Policy Plan / Economic Contribution Test.
- i) **key issues and opportunities** with mitigations and actions and likely impacts;
  - j) any other matter that the Contractor may deem relevant.

## 6 Evaluation of the Contractor's Performance

- 6.1 At any time, the Principal may undertake an evaluation of the Contractor's (and any sub-Contractor's) performance and compliance with the Contract requirements using the current version of the Principal's relevant Contract Performance Evaluation Procedure.
- 6.2 The Evaluation of the Contractor's Performance will be forwarded to the Contractor by the Principal including any reasons for below acceptance scores.
- 6.3 If the Contractor disagrees with the evaluation, they may forward a request to the Principal for review.
- 6.4 Where the evaluation of the Contractor's performance identifies non-compliance to the requirements, the Principal may issue a Corrective Action Request (CAR).

## 7 Prequalification and Certification / Accreditation

- 7.1 Where work listed in the following table forms part of the Contract, that work should be carried out by a company that meets the requirements specified in the following tables.

**Table PC-PM1 7-1 Prequalification**

Work Element	Prequalification with DPTI Requirement
Arboriculture (tree trimming / removal)	AB2
Asphalt	A2
Roadworks and Bridgeworks (national prequalification system).	Appropriate category for the work element
Landscaping	L2 for the appropriate class of work
Pavement Materials	Appropriate category for the material specified
Professional Services	Appropriate category for the professional service
Sprayed Bituminous Surfacing	S2
Supply of signs	Category 1
Workzone traffic management	Category 1 (where not self-performed by the Contractor)

**Table PC-PM1 7-2 Accreditation**

Work Element	Certification / Accreditation
Minor fabricated steel products, including noise barrier components, sign gantries, grids, grates, pit covers and fabricated posts / poles / arms	Certified to Construction Category 2 in accordance with the National structural Steelwork Compliance Scheme
Major fabricated steel products in accordance with ST-SS-S1 Fabrication of structural Steel.	Certified to Construction Category 2 in accordance with the National structural Steelwork Compliance Scheme
Pavement Marking	Painting Contractor's Certification program accreditation appropriate for the type of pavement marking.

- 7.2 A list of companies who are prequalified with DPTI may be obtained from the following internet site [https://www.dpti.sa.gov.au/contractor\\_documents/prequalification](https://www.dpti.sa.gov.au/contractor_documents/prequalification).

## 8 Recording of Activities

- 8.1 The Contractor shall record its activities on a daily diary form or electronic information management system, which at a minimum includes:
- Work completed each work day, including lot number and location; (e.g. lot number and chainage)
  - Plant and labour used on each work Lot;
  - Safety information;
  - Site conditions and Site issues; and
  - any other relevant information.
- 8.2 Each day's records shall be signed by the Contractor or otherwise confirmed in an electronic information management system and submitted to the Principal prior to the end of the following day;
- 8.3 At any time the Principal may check the records compiled by the Contractor. In the event that in the Principal's reasonable opinion the records do not reflect the actual activities undertaken, the Principal may record the discrepancy on the Daily Diary Form;
- 8.4 The purpose of these records is to assist in the valuation of variations and determination of any extension of time which may arise during the course of the Contract.

## 9 Proprietary Products

- 9.1 Where a proprietary product is specified in the Contract, that product shall be used in accordance with the manufacturer's instructions unless specified otherwise.
- 9.2 Where work is specified to be carried out "in accordance with the manufacturer's instructions", at least 2 working days prior to the use of the product, the Contractor shall provide 2 copies of all relevant instructions and performance criteria provided by the manufacturer.
- 9.3 Advertising markings and proprietary names of a permanent nature shall not be applied to any component where these markings will be visible in the completed Works.
- 9.4 Alternatives to specified products (if any) will be considered provided that sufficient information is submitted to the Principal. Provision of a proposal to use an alternative product shall constitute a **Hold Point**.
- 9.5 The Principal may approve or reject any proposed alternative product at its discretion and is under no obligation to approve any such proposal for the convenience of, or to assist, the Contractor.

## 10 Lessons Learnt

- 10.1 To assist with the Department's continuous improvements the Contractor shall provide "lessons learnt" from the project, including but not limited to:
- Inconsistencies in the Department's specified requirements;
  - Suggested improvements to the Master Specification Parts to reflect current industry practice and encourage innovation;
  - Other items identified by the Contractor to assist the Department in continuous improvement.
- 10.2 Lessons Learnt sessions are to be undertaken at times within the project lifecycle appropriate to the specific project scope (e.g. completion of planning / design / construction, etc.).

## 11 Hold Points

- 11.1 The following is a summary of Hold Points referenced in this Part:

Document Ref.	Hold Point	Response time
2.6	Submission for Acceptance the Project Management Plan	10 Working Days

---

Document Ref.	Hold Point	Response time
9.4	Submission of alternate proprietary products	10 Working Days

---

## PC-PM2 Contract Program

### 1 General

- 1.1 The Contractor must perform its obligations to effectively manage, control and deliver the project in accordance with the Contract.
- 1.2 This Part specifies the minimum requirements for the Contractor's Project Program.

### 2 Contract Program Information

- 2.1 The Contractor shall prepare and maintain a Contract Program to record the baseline project program and record actual progress of the Works to the baseline program.
- 2.2 The Contract Program is to record all of the Work under the Contract, including but not limited to:
  - a) procurement / manufacture;
  - b) design development for all packages including design review and acceptance;
  - c) installation / construction activities;
  - d) provision of manuals and training;
  - e) testing and commissioning, and
  - f) handover activities.
- 2.3 The Contract Program shall detail sufficient the information to demonstrate the Contractor's proposed activities to deliver the Works, including but not limited to the following:
  - a) show the title, revision number and date;
  - b) include all Milestones;
  - c) unique activity description, duration and identifier organised according to work activities and the work breakdown structure;
  - d) dependencies with each activity must have at least one predecessor or one successor;
  - e) the critical path must be clearly identified with each activity logically linked within the identified in Critical Path Analysis methods (to enable analysis by the Principal);
  - f) show the Contract program baseline (bar) for each activity;
  - g) details of any proposed occupations or defined closure periods of roads including clearly identifying the area of work and the duration;
  - h) wet weather allowance and the Contractor's risk allowance (program float);
  - i) all calendars used must be set in days and include relevant holiday periods, approved working hours and weekend works;
  - j) early start and early finish dates, late start and late finish dates and total float;
  - k) contain all resource and cost information required to undertake earned value analysis.
- 2.4 The output must be supplied in the native file format (e.g. Primavera P6 / MS project / pdf or other graphical file) and PDF format.
- 2.5 The Contract Program shall incorporate activities undertaken the Principal, Local Council, Authorities or other Contractors (e.g. supply of materials, adjacent Works or services) that may impact the Contractor's program, including but not limited to the following:
  - a) the activity description, activity owner and duration;
  - b) dependencies of the activity with the Contractor's program and critical path; and
  - c) the activity owner's risk allowance (program float) prior to the activity impacting the Contractor's program.

### 3 Contract Program - Baseline

- 3.1 Prior to commencement of Work under the Contract, the Contractor shall prepare and submit a baseline Contractor's Program incorporating the Contract Milestones to the Principal for Acceptance.
- 3.2 The Contractor's baseline program shall constitute a **Hold Point**.

### 4 Contract Program Updates

- 4.1 Each month the Contractor shall submit Contract Program updates to the Principal, including revised Contract Program (gant chart) and supporting program status information summary (report).
- 4.2 The Principal may request a revised Contract Program update at any given time, in which case the Contractor must submit a revised program within 7 days of the direction.
- 4.3 The Program status summary shall describe project program updates including, but not limited to:
- a) actual progress of the Works against the program baseline;
  - b) the reasons for any delay;
  - c) the mitigation measures that the Contractor proposes to undertake to reduce the impact of the delay;
  - d) analysis of the updated Contract Program to determine any change in critical path and extent potential impact to Contract Milestones;
  - e) list the measures taken, and the measures proposed, to prevent recurrence of the event which caused the delay and / or similar such events in the future; and
  - f) risks, mitigations and the time contingency within the program to address the major areas of risk.
- 4.4 The Submission of the Contractor's monthly program updates shall constitute a **Hold Point**.

### 5 Hold Points

- 5.1 The following is a summary of Hold Points referenced in this Part:

Document Ref.	Hold point	Response time
3.2	Submission for acceptance of the Contract Baseline Program	10 working days
4.4	Submission of the Contractor's monthly program update	10 working days

## PC-PM3 Contractor's Personnel & Training

### 1 General

- 1.1 The Contractor must perform its obligations to effectively manage its Personnel in accordance with the Contract Conditions.
- 1.2 The Contractor must ensure that the roles and responsibilities of its key Personnel nominated in the organisation chart are clearly defined against each position.

### 2 Competence

- 2.1 The Contractor shall ensure the management and supervision of the Contractor's Works are undertaken by competent personnel with relevant and qualifications and experience commensurate with their responsibility and authority.
- 2.2 The competence of the Contractor's Key personnel must meet the minimum requirements on projects of similar magnitude and complexity as detailed in the Table PC-PM3 2-1 Key Personnel Competencies.

**Table PC-PM3 2-1 Key Personnel Competencies**

Position	Qualifications	Experience (min)
Contractor's Representative	Professional Project Manager or Engineer	10 years
Engineering Manager	Professional Engineer	5 years
Construction Manager	Project Manager or Engineer	5 years on site
Design Manager	Chartered Professional Engineer (CPEng)	5 years
Lead Discipline Engineer	Chartered Professional Engineer (CPEng)	5 years
Lead Discipline Designer	Recognised professional qualification in discipline	5 years
Site Superintendent		10 years
Safety Representative	Qualifications in Safety Management	5 years
Quality Representative	Qualifications in Quality Management	5 years
Environmental Management Representative	Recognised tertiary environmental qualification	5 years

### Rail Safety Competency

- 2.3 The Contractor shall note the Rail Commissioner Procedure PTS-AR-03-EG-PRC-00000048 Assessment Competency.
- 2.4 In addition to the requirements in Clause 2 Competence, the Contractor shall identify all positions that will be undertaking rail safety work. For all positions that are identified as undertaking rail safety work the Contractor shall identify the required competencies and ensure that these competencies are maintained.

### 3 Management of Contractor's Key Personnel

- 3.1 The Contractor shall formally advise the Principal of its nominated Key Personnel including supporting information to demonstrate their competence to undertake the role.
- 3.2 Submission and acceptance of the Contractor's Key Personnel shall constitute a **Hold Point**.
- 3.3 In the event the Contractor requires to change individuals nominated in the Contractor's Key Personnel the Contractor shall advise the Principal of the reason and nominated replacement.
- 3.4 Submission and acceptance of changes to the Contractor's Key Personnel shall constitute a **Hold Point**.
- 3.5 The Principal may instruct the Contractor to remove from the Site, or from any of the Contractor's Activities, any person, who in the reasonable opinion of the Principal has not demonstrated the

required competencies or has been negligent, guilty of misconduct or failing to diligently undertake their duties.

- 3.6 The Contractor must within a 4 week timeframe provide replacement for key personnel with equivalent competencies.

## 4 Training

- 4.1 The Contractor shall provide all training for all employees and persons engage to complete the Works.
- 4.2 The Contractor shall provide and record training, including but not limited to:
- a) inductions and Work Health and Safety (WHS) training;
  - b) inductions on environmental systems;
  - c) induction on community engagement and media management;
  - d) achieving the competencies required to carry out the Works;
  - e) to address gaps or deficiencies in competencies; and
  - f) training delivered by the Contractor.
- 4.3 The Contractor must ensure that all the above requirements are addressed and implemented by sub-Contractors.

## 5 Hold Points

- 5.1 The following is a summary of Hold Points referenced in this Part:

Document Ref.	Hold point	Response time
3.2	Acceptance of the Contractor's Key Personnel	5 working days
3.4	Acceptance of changes to the Contractor's Key Personnel	5 working days

## PC-PM4 Risk Management

### 1 General

- 1.1 The Contractor must perform its obligations to effectively manage project risk in accordance with the Contract.
- 1.2 This Part specifies the minimum requirements for the Contractor's management of risk.

### 2 Risk Management System & Plan

- 2.1 The Contractor must establish a risk management system for its activities under the Contract which meets the requirements of Clause 5 "Process" of AS 31000: Risk Management.
- 2.2 The Contractor must prepare, implement and update a Contract specific Risk Management Plan to identify and document how the Contractor will manage and control the risk of the Contractor's Activities.
- 2.3 The Risk Management Plan must include, but is not limited to:
  - a) the risk management methodologies and processes that will be applied to the Contract;
  - b) how the Risk Management Plan integrates with other Project Plans;
  - c) the method of review, audit and update of the Risk Management Plan and register;
  - d) a methodology for managing records generated from the risk management process, including the status of risk treatments.
- 2.4 Submission of the Risk Management Plan shall constitute a **Hold Point**.
- 2.5 The Contractor may incorporate the Risk Management Plan into other Management plans such as the Safety Management Plan and Engineering and Design Management plan.

### 3 Risk Register

- 3.1 The Contractor must prepare, implement and update a Contract specific Risk Register to record the risk identification, analysis, evaluation, treatment and management responsibility in regards to
  - a) design and construction activities;
  - b) safety / quality / environment;
  - c) climate change / natural hazards;
  - d) commissioning, asset management and operations;
  - e) contractual requirements.
- 3.2 Climate change risks must be assessed and treated in accordance with DPTI Climate Change Adaptation Guidelines.
- 3.3 The Risk register is to record any residual risks that remain on completion of testing and commissioning of each work package.
- 3.4 The Contractor is to regularly review the risk register and provide updates to the Principal at intervals as agreed with the Principal.
- 3.5 Submission of the Risk Management Register shall constitute a **Hold Point**.

### 4 Hold Points

- 4.1 The following is a summary of Hold Points referenced in this Part:

---

<b>Document Ref.</b>	<b>Hold point</b>	<b>Response time</b>
2.4	Submission of the Risk Management Plan	10 Working Days
3.5	Submission of the Risk Management Register and regular updates	10 Working Days

---

## PC-PM5 Information Management

### 1 General

- 1.1 This part specifies the requirements for the transmission, storage and retrieval of Documents.
- 1.2 The following definitions apply:
  - a) **“Document”** means all information that the Contractor and Principal are required to provide to the other party under this Contract, including the Contractor’s Documents, conformance / verification records, reports, notices, claims, certificates, requests and any other correspondence between the parties.
  - b) **“Information Management System”** (IMS) means a common data environment for the transmission, storage and retrieval of electronic documents.

### 2 Information Management System

- 2.1 The Principal and Contractor agree to use an Information Management System (IMS) for the storage and retrieval and transmission of all Documents between the parties.
- 2.2 The Contractor shall provide a fit-for-purpose Information Management System (IMS) to manage, store, transmit documents and notices until project closure (expiry of defects Liability) or as agreed by the Principal.
- 2.3 The operation and management of the Information Management System is the responsibility of the Contractor.
- 2.4 The DPTI data on the Information Management System must be hosted and backed up in Australia.
- 2.5 The Information Management System shall:
  - a) be accessible for use by each party’s employees and agents when reasonably necessary for the management of this Contract including the third party authorities, Independent Design Certifier and Contract Verifier (if any);
  - b) provide secure access via the Internet using the current or previous major versions of Internet Explorer, Chrome and FireFox;
  - c) store all metadata and documents securely in Australia including a secure off-site backup regime in place for the entire system and its content;
  - d) ensure all users of the Information Management System have their own unique and secure login credentials;
  - e) maintain a full audit log of:
  - f) all access to Documents including additions, deletions, edits and views;
  - g) all additions, changes and deletions to the security access of all IMS users;
  - h) manage version control of all Documents;
  - i) use a secure Internet communication protocol;
  - j) Allow staff to be included or removed on the Information Management System within 1 business day of notification;
  - k) Allow all nominated staff from the Principal simultaneous access within 10 days of notification by the Principal;
- 2.6 The following Information Management System (IMS) software has previously been reviewed and accepted as satisfactory by the Principal:
  - a) Aconex;
  - b) TeamBinder; and.
  - c) iTWOCX

- 2.7 The Contractor shall submit details of the proposed Information Management System (IMS) software within its Tender submission.
- 2.8 Following Contract award of the Contractor shall submit details of the IMS to the Principal at least 28 days prior to the commencement of work under the Contract. The software shall be one of the previously reviewed and accepted IMS systems.
- 2.9 Acceptance of the proposed Information Management System shall constitute a **Hold Point**.

### 3 Content Ownership and Right of Access

- 3.1 The Principal has the right to access the Information Management System to locate all Documents, material, metadata and configuration within the system between the Principal and Other parties (e.g. Contractor, Authorities and third parties). The Principal reserves the right to access the information at any time.
- 3.2 This Part does not impact the ownership of intellectual property rights or “commercial in confidence” as defined within the Contract and any subcontracts between the Contractor and Sub-contractors or third parties.
- 3.3 This right of access extends to any reasonable third party specified by the Principal from time to time, such as internal or external auditors, related to the execution of the Principal’s business and execution of this Contract.

### 4 Document Management

- 4.1 Both parties shall use the Information Management System to fulfil their obligations under Clause 11 “Notices and Instructions” of the General Conditions of Contract.
- 4.2 Both parties shall use the Information Management System to fulfil their obligations under Clause 40 “Submitting Contractor’s Documents” of the General Conditions of Contract.
- 4.3 The Information Management System is to be the sole source for all Documents pertaining to the management and Works under this Contract. It is also the sole conduit for the exchange of Documents between the Contractor and Principal.
- 4.4 Both parties shall use the Information Management System for all claims, certificates, requests for information and all other correspondence between the parties.

#### Document Management Plan

- 4.5 The Contractor shall submit its proposed document management plan incorporating the operating processes and management protocols for the Information Management System review by the Principal’s representative.
- 4.6 Provision and acceptance of the document management plan shall constitute a **Hold Point**.

#### Naming and Version Control

- 4.7 All Documents added to the Information Management System shall have a comprehensive, descriptive and meaningful title.
- 4.8 Document naming convention shall be agreed between DPTI and the Contractor. In the event of misalignment of the document naming convention the DPTI requirements shall take precedence.
- 4.9 Drawing naming shall conform to DP001 drawing naming convention.
- 4.10 The Information Management System shall manage version control of all Documents. All entries for multiple versions of a Document shall have the same title. A single version of each Document, being the latest version, is to be available to all users.
- 4.11 The Information Management System shall be able to permit those suitably trained and authorised to access previous versions of the Document.

## Document Metadata

- 4.12 Document metadata to enable the Principal to upload the documents to the government corporate records (KNET) including but not limited to:
- a) Document unique identifier and title,
  - b) Document disk file name, size, date and time
  - c) Date and time of creation
  - d) Date and time registered into the Information Management System
  - e) Author's name
  - f) Name of the Information Management System user who registered the document
  - g) Comments regarding the Document

## Document formats

- 4.13 Documents are only to be provided in the following electronic formats;
- a) Portable Document Format type A (PDF / A);
  - b) AutoCAD / AutoDesk;
  - c) Digital model files (12da, nwd);
  - d) Graphics Interchange Format (gif);
  - e) Windows Media Player;
  - f) Microsoft office formats, (xlsx, msg, pptx, docx, vcdx);
  - g) Microsoft Publisher;
  - h) Windows Notepad;
  - i) Windows Wordpad.

## 5 Archiving & Completion

- 5.1 The current version of all Documents that are Defined Content (and associated metadata) is to be provided to the Principal at Completion of the Works and any Milestones (if any) through the Information Management System.
- 5.2 At the Completion of the Contract, all project documents and data shall be archived and provided on a USB drive to the Principal and available for interested parties (Contractors, Subcontractors and Service Authorities) on the Principal's Request.
- 5.3 The provision of all documents within the project archive is a Condition Precedent to project Completion before Final payment is eligible to be made.
- 5.4 Acceptance of the Information Management System Archive prior to Completion shall constitute a **Hold Point**.

## 6 Audits

- 6.1 The Lead Document Controller shall undertake monthly Audit of the meta-data within the Information Management System to ensure that the Information Management System meta-data is being entered accurately, consistently and in accordance with the Principal's requirements.
- 6.2 Outcomes of the Audit shall be provided to the Principal.

## 7 Training and Support

- 7.1 The Contractor, or their agent, shall provide sufficient training via a nominated trainer or online facility and written guidelines in the use of the Information Management System to all of the nominated Principal's staff to allow for confident practical use of the Information Management System.
- 7.2 The Contractor will ensure that support in the use of the Information Management System is available to the Principal's trained staff. A single contact point for the raising and follow-up of operational issues relating to the Information Management System will be provided by the Contractor.

### Lead Document Controller

- 7.3 The Contractor shall nominate a Lead Document Controller to provide project specific support and remains dedicated to the role until all Documents have been provided to the Principal at Completion.
- 7.4 The Lead Document Controller shall:
- a) demonstrate an understanding of the principles and practices of document control on major construction projects;
  - b) have 5 years previous experience in document control on projects of similar nature or can demonstrate an ability and knowledge to perform the Lead Document Controller role.

## 8 Hold Points

- 8.1 The following is a summary of Hold Points referenced in this Part:

Document Ref.	Hold point	Response time
2.9	Proposed Information Management System	10 Working Days
4.6	Document Management plan	10 Working Days
5.5	Information Management System Archive prior to Completion	10 Working Days