



TfNSW Standard Requirements (Contract Version)

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Template – Applicable to Transport Projects Delivery Office

Quality Management System

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1 Introduction

1.1 Purpose

This TfNSW Standard Requirement (TSR) describes the requirements and processes with which the Contractor and any Subcontractors must comply. This TSR must be read in conjunction with the Contract.

Unless noted otherwise in Annexure A - Additional Project Requirements, all requirements specified in this TSR apply to the Contract.

1.2 User Instructions

Unless noted otherwise, wherever used in this TSR, words and phrases have the meaning given to them in the General Conditions. In addition to these defined terms the following words or phrases have the meaning given to them below:

Asset Handover	Point in time at which the control of certain specified assets is transferred to an Operator/Maintainer and/or Asset Owner for their ongoing operation and maintenance.
Asset Owner	Organisation who will ultimately own the assets subject to the Asset Handover. In some cases this may also be the Operator/Maintainer.
Australian Network Rules and Procedures	means Australian Network Rules and Procedures as defined by the Rail Industry Safety and Standards Board.
CDR	Critical Design Review or equivalent stage of the design as developed in accordance with the Contractor's systems engineering processes.
Commissioning	Systematic process of ensuring that all infrastructure, equipment and systems installed in a project perform interactively in accordance with the design intent and the Operator/Maintainer's functional and operational needs.
Contract Management Plan (CMP)	Unless otherwise defined in the Contract means a Management Plan to be developed by the Contractor in accordance with the requirements of this TSR which acts as a framework for bringing together all the management requirements for the Contractor's Activities into a coordinated and integrated plan.
Cost Loaded Baseline Schedule	A baseline program or schedule where the Contractor's costs are distributed across activities such that a cash flow S-Curve may be created, this will also be used as the basis for measuring Earned Value.

Danger Zone	Danger Zone as defined in the Australian Network Rules and Procedures.
Earned Value	Method of measuring and reporting project cost performance based on integrated time, cost and scope elements in accordance with “TfNSW Quality Management System - Earned Value Management using Primavera P6”.
Environmental Control Map (ECM)	Document prepared to assist in the planning and delivery of construction works, specific to a work area and/or activity that identifies the physical location of physical protection measures, work method controls and monitoring requirements to minimise the impact of construction activities on the environment and community.
Environmental Management System (EMS)	A tool for managing the impacts of an organisation's activities on the environment and provides a structured approach to planning and implementing environment protection measures.
Fruin Level of Service	A level of service standard for pedestrian access created by John J Fruin PhD.
Global Possession Calendar and Standard Working Calendar	Default calendars in TfNSW’s P6 database which can be made available on request.
Hierarchy of Control Measures	Hierarchy of Control Measures as defined in the “Work Health and Safety Regulations 2011 Part 3.1 Managing Risks to Health and Safety”.
Hold Point	Verification point identified in this TSR or Works Brief or Services Brief beyond which the relevant part of the Contractor’s Activities may not proceed without the verification and subsequent written authorisation of the Principal’s Representative or the relevant person nominated in the TSR.
Management Plans	Any of the Management Plans to be developed by the Contractor in accordance with the requirements of this TSR which describe how the Contractor will manage related matters and issues that arise during the term of the project.
National Counter Terrorism Alert Levels	Levels described in the Australian Government’s National Terrorism Public Alert System and referenced on the Australian National Security website
Original Equipment Manufacturer (OEM)	The company that originally manufactured the product.

Operator/Maintainer	Organisation that, post Asset Handover, will operate and maintain the assets. In some cases, this may also be the Asset Owner.
PDR	Preliminary Design Review or equivalent stage of the design as developed in accordance with the Contractor's systems engineering processes.
Planning and Environmental Compliance Monitoring System (PECOMS)	Planning and Environmental Compliance Monitoring System developed and used by the Principal to monitor compliance with the conditions of all licenses, permits and approvals of its projects.
Project Rail Safeworking Coordinator	means the Principal's position role that is accountable for monitoring the management of worksite protection and rail safety requirements for controlled and managed worksites on the programs/projects being delivered by Transport Projects Office on behalf of the NSW State government.
Property Representative (PR)	Principal's Property Representative.
Rail Safety	Rail Safety as defined in the Rail Safety National Law (NSW).
Rail Safety Act	The Rail Safety National Law (NSW).
Rail Industry Safety Induction (RISI) Identification Card	A competence card issued to demonstrate successful completion of the Rail Industry Safety Induction training course and medical examination.
Rail Safety Work	Rail Safety Work as defined in the Rail Safety Act.
Rail Safety Worker (RSW)	Rail Safety Worker as defined in the Rail Safety Act.
Rail Train Operator	An entity defined by the Rail Safety Act as a rail operator or rail transport operator.
Regulator	The holder of a public office, or a public authority, of the Commonwealth, or of a State, or member of a government regulatory agency who or which is responsible for enforcing laws, regulations, and established rules.
Regulator Notifiable Incidents	Regulator Notifiable Incidents as defined in Part 3 of the WHS Act and Rail National Safety Law National Regulations 2012.

RMS	Roads and Maritime Services, a corporation constituted by section 46(1) of the <i>Transport Administration Act 1988</i> (NSW). A reference in any of the TSR documents to the "Roads and Traffic Authority" or "RTA" is to be construed as a reference to Roads and Maritime Services.
Safe Work Method Statements (SWMS)	Documents so titled prepared in accordance with this TSR and that give specific instructions on how to safely perform a work related task, or operate a piece of plant or equipment etc.
SDR	System Definition Review or equivalent stage of the design as developed in accordance with the Contractor's systems engineering processes.
Vehicle Registration Database	The Principal's database recording a rail vehicle's ownership and technical details to indicate that the vehicle has met the Principal's acceptance requirements and is authorised to operate on rail infrastructure managed by the Principal.
Witness Point	Point identified in the TSR or Works Brief or Services Brief where the Principal's Representative, or the relevant person nominated in the TSR, may review, witness, inspect, or undertake tests on any component, method, or process of the Contractor's Activities.
Work Breakdown Structure	Framework of discrete work elements (or tasks) used to organise and define the total project work scope, cost, and schedule control elements.
WorkCover NSW	WorkCover Authority of New South Wales.
Worksite Protection	The safety measures adopted, in relation to rail operations, to protect persons brought or invited to any part of the Site located within the Rail Corridor.
Worksite Protection Personnel	The personnel assigned to implement the required Worksite Protection for work within the Rail Corridor.
Worksite Protection Plan	The plan (provided by the Contractor) documenting the safety measures adopted, in relation to rail operations, to protect persons brought or invited to any part of the Site located within the Rail Corridor.

2 Project Administration

2.1 Requirements for the Contract Management Plan (CMP)

The CMP is the Contractor's project-specific overarching Project Management Plan and Management System that captures all other Management Plans and systems that the Contractor is required to develop under the Contract. The CMP is to provide a framework to bring together all the management requirements for the Contractor's Activities into one coordinated and integrated Management Plan.

Unless otherwise noted in Annexure A, the Contractor must have in place, maintain and consistently apply until Final Completion, a CMP to inform and direct personnel and others engaged by the Contractor about the specific work practices, resources, sequence of activities, controls and checks that are to be implemented during the performance of the Contractor's Activities. The timing and frequency for the initial and subsequent submissions of the CMP to the Principal's Representative for review in accordance with the requirements of the Contract is nominated in Annexure A of this TSR.

The CMP must:

- (a) explain in a systematic, coordinated and integrated structure the management method for performing the Contractor's Activities in delivering the Works;
- (b) define responsibilities, resources and processes for planning and performing the Contractor's Activities;
- (c) define responsibilities, resources and processes for verifying that the Contractor's Activities meet the requirements of the Contract;
- (d) cover all the project-specific management systems, Management Plans and project-specific deliverables required for the performance of the Contractor's Activities and to meet the requirements of the Contract;
- (e) cross reference each Management Plan required to be developed by the Contractor, through the use of a matrix or equivalent, listing its compliance with the relevant Contract and TSR conditions and requirements;
- (f) identify the responsible person for developing and updating the CMP and any other Management Plan;
- (g) describe how the Contractor will interface with the Principal's Representative to enable specific knowledge and experience of the Principal to be utilised in the development of the Management Plans;
- (h) describe how the Contractor will comply with all Laws, Codes and Standards and requirements, applicable to the Contractor's Activities;
- (i) document the interface between the Management Plans and the Contractor's corporate systems as applicable under the Contract; and
- (j) explain the alignment of the operating processes of the Contractor, Subcontractors and the Principal's Representative.

2.2 Construction and Site Management Plan

The Contractor must have in place, maintain and consistently apply until Final Completion, a Construction and Site Management Plan in accordance with the requirements of the Contract including this TSR. The Construction and Site Management Plan must describe the procedures and processes that the Contractor will undertake to plan and execute the construction of the Works.

The timing and frequency for the initial and subsequent submissions of the Construction and Site Management Plan to the Principal's Representative for review in accordance with the requirements of the Contract is nominated in Annexure A of this TSR.

The Construction and Site Management Plan must:

- (a) detail how the Contractor will comply with its obligations under the Contract in relation to the control, establishment, security, use and rehabilitation of the Site including the arrangements to provide access to, within and through the Site for the Principal, Other Contractors and any other person nominated by the Principal;
- (b) describe procedures for the preparation and implementation of plans and work method statements before the start of related construction work;
- (c) describe procedures for the management of Subcontractors and their plans and work method statements;
- (d) describe procedures for the Contractor's mobilisation and demobilisation to carry out the Contractor's Activities, including mobilisation and demobilisation of personnel, Construction Plant and equipment and closeout of stakeholder communications; and
- (e) address the management of interfaces with all Authorities and Other Contractors.

2.3 Risk Management Plan

The Contractor must have in place, maintain and consistently apply until Final Completion, a Risk Management Plan that is in accordance with "ISO 31000 (Risk Management Guidelines and Principles)" and addresses the management of risks applicable to the undertaking of the Contractor's Activities.

The timing and frequency for the initial and subsequent submissions of the Risk Management Plan to the Principal's Representative for review in accordance with the requirements of the Contract is nominated in Annexure A of this TSR.

2.4 Commuter and Passenger Management Plan

The Contractor must have in place, maintain and consistently apply until Final Completion, a Commuter and Passenger Management Plan that demonstrates how public movements will be accommodated during the various stages of the Contractor's Activities.

The timing and frequency for the initial and subsequent submissions of the Commuter and Passenger Management Plan to the Principal's Representative for review in accordance with the requirements of the Contract is nominated in Annexure A of this TSR.

The Commuter and Passenger Management Plan must include:

- (a) drawings showing, as a minimum, the layout of public areas, including facilities provided for operational staff and patrons and systems drawings at each stage of the Contractor's Activities;
- (b) drawings showing the proposed arrangement of the passenger facilities clearly showing the position of hoardings and provisions for interchange. Clearances and free area of platforms and the like should be clearly documented. Fruin Level of Service diagrams shall accompany the drawings and they shall indicate the proposed level of service for the proposed arrangement;
- (c) drawings showing proposed arrangement of signage covering existing signage and new temporary signage. Details must include location, size and wording of temporary and permanent way finding signage and proposed modification to any existing signage;
- (d) drawings showing proposed arrangement of passenger information panels including temporary relocations and modifications;
- (e) a program clearly indicating when configuration will be changed and proposed period of change;
- (f) controlled Site access points;
- (g) delineation lines and material to be used for delineation;
- (h) access point from public modes of transport and general ingress and egress points; and
- (i) identification of accommodation of level changes via ramps, stairs, and other means.

The Contractor must install signage and delineation as shown on the Commuter and Passenger Management Plan to clearly communicate to the public and others routes to safely and easily navigate around or through the Site.

The Principal's Representative may direct the Contractor to include additional or alternative signage and delineation to that documented in the Commuter and Passenger Management Plan.

2.5 Traffic Management Plan

The Contractor must have in place, maintain and consistently apply until Final Completion, a Traffic Management Plan that addresses the Contractor's obligations and responsibilities relating to the management of traffic.

The timing and frequency for the initial and subsequent submissions of the Traffic Management Plan to the Principal's Representative for review in accordance with the requirements of the Contract is nominated in Annexure A of this TSR.

The Traffic Management Plan must describe the Contractor's approach to satisfying the requirements in respect of:

- (a) the management of traffic on the Site;
- (b) the requirements under the WHS Legislation;
- (c) Authority Approvals, including any from RMS, NSW Police, State Emergency or any local councils;
- (d) The "RTA Traffic Control at Work Sites Manual";
- (e) "AS 1742.3-2009 Part 3 - Spoil Control Devices for Works on Roads";
- (f) Roads Act 1993 (NSW) and all other Laws; and
- (g) certificates, licences, consents, permits and approvals, including in respect of working hours.

The Traffic Management Plan must recognise, be consistent with and comply with the traffic configuration of the local road network as it exists at various stages during construction of the Works. The Traffic Management Plan must also describe as a minimum:

- (h) detailed traffic management procedures for the Site, including those required to manage: modifications to existing roads/paths and traffic patterns; changes to public transport routes and services; impacts on residents and/or commercial enterprises; and the impact of construction traffic within the Site and outside the Site on the adjacent public road system;
- (i) procedures to ensure the appropriate notification of relevant emergency services prior to implementing road and pedestrian traffic modifications such as street closures or changes to station access;
- (j) safety of commuters, pedestrians, cyclists and site personnel;
- (k) changes to traffic usage patterns (average, low and peak flows as well as special events or traffic embargoes);
- (l) programmed commencement and completion dates;
- (m) management of maintenance requirements, emergencies and incidents;
- (n) requirements for traffic and occupation of, or access through, private properties;
- (o) coordination of traffic management procedures and plans with the Principal's Representative, Other Contractors and other parties;
- (p) procedures for obtaining relevant certificates, licences, consents, permits and approvals;
- (q) expected number of truck movements each hour, based on the predicted maximum monthly spoil generation amounts and hours of operation of worksites;
- (r) roles and responsibilities of the Contractor's personnel and Subcontractors;
- (s) review and reporting procedures; and
- (t) procedures for regular updating of the Traffic Management Plan on an "as needs" basis or at the direction of the Principal's Representative.

Where nominated in Annexure A, the Contractor must prepare a detailed Traffic Control Plan (TCP) for the Site generally in accordance with the RTA manual "Traffic Control at Work Sites 4th Ed (June 2010)". The TCP must be submitted to and approved by all relevant Authorities and submitted to the Principal's Representative for review in accordance with the requirements of the Contract prior to the commencement of any work on the Site. Thereafter, the Contractor must ensure that the approved TCP is available for inspection by the Principal's Representative or any officer of WorkCover NSW, NSW Police, the RMS or any other Authority.

2.6 Defects Management Plan

The Contractor must have in place, maintain and consistently apply until Final Completion a Defects Management Plan that addresses the Contractor's obligations and responsibilities relating to the management of Defects.

The timing and frequency for the initial and subsequent submissions of the Defects Management Plan to the Principal's Representative for review in accordance with the requirements of the Contract is nominated in Annexure A of this TSR.

The Defect Management Plan must:

- (a) address all contractual requirements for managing Defects;
- (b) clearly specify the strategy for managing any Defects raised internally by the Contractor, raised by the Principal and raised by the Operator/Maintainer; and
- (c) include a procedure for the management of Defects which must include the use of Scenario 6 software (refer [Scenario – Defect Management 4TP-PR-158](#)).

2.7 Contractor's Program

The Contractor is required to update and submit the Contractor's Program monthly to the Principal's Representative by the time specified in Annexure A and at any other times required by the Contract. The Contractor must submit an A3 size PDF copy of the Contractor's Program, with the monthly progress report.

The Contractor, unless noted otherwise in Annexure A or the Contract, shall submit a Cost Loaded Baseline Schedule within 10 days of the date of the Contract for the Principal Representative's review in accordance with the requirements of the Contract.

Without limiting the General Conditions, the Contractor's Program and other programs must comply with the following requirements:

2.7.1 Working Environment

The Contractor must provide the Contractor's Program in the latest P6 version (XER format). The Principal will import the Contractor's Program into the Principal's Primavera planning environment database. The Principal will maintain the database security and control the access to the database.

The Contractor must develop, status and maintain the Contractor's Program in Primavera P6 on the Principal's planning environment. The Contractor will be given access to the Principal's planning environment via Citrix at no extra cost to the Contractor.

The Contractor must ensure that each update to the Contractor's Program as submitted in accordance with this clause 2.7.1 is archived within the Principal's planning environment;

The Contractor will be able to export the program file (no more than once per week) via a request to the Principal's Representative. The file will be emailed to the Contractor.

The Contractor will not be provided with access to import any programs into the Principal's Primavera database.

The Principal will not make changes to the Contractor's Program without the approval of the Contractor. Generally, any changes made will be limited to the application of activity codes or addition of logic links to external Principal schedules.

2.7.2 Program Framework

As a minimum, the Contractor's Program must:

- (a) be submitted monthly, on the first working day of the next month with a status date of the last calendar day of the previous month, unless noted otherwise in Annexure A;
- (b) group the Contractor's activities and milestones in a Work Breakdown Structure (WBS) that is aligned to the payment schedule or other form of cost breakdown structure included in the Contract;
- (c) show Earned Value in accordance with "AS 4817-2006 Project Performance Measurement using Earned Value" and "TfNSW [Earned Value Management using Primavera P6 - 4TP-PR-143](#)";
- (d) include budgeted cost and actual cost, input into the relevant WBS item each month, by the Contractor;
- (e) define approved Variation activities and/or additional working days in a separate WBS and cost breakdown structure item, so that cost and time of the Variation activities can be clearly distinguished from the original scope;
- (f) have a separate WBS structure outlining each step of the design review process for each individual design package; and
- (g) show the Principal's review periods in accordance with the requirements set out in the Contract.

2.7.3 Program Setup and Maintenance

As a minimum, the Contractor's Program must:

- (a) include all key activities and deliverables detailed in this TSR and the Contract and any other activities and deliverables directed by the Principal's Representative;
- (b) include requirements for the submission, review and approval of all deliverables including the Management Plans and other Documents (as applicable), in accordance with the requirements of the Contract;
- (c) outline the dates when the Contractor will require information, documents, materials or instructions from the Principal's Representative and the dates when the

Contractor will provide information or documents to the Principal's Representative. These dates must be consistent with dates that the Principal could reasonably have anticipated as at the date of the Contract;

- (d) provide start and finish dates for all elements of the Contractor's Activities (including design, procurement and construction activities), milestones, Track Possessions, external dependencies, Principal deliverables, Operator/Maintainer deliverables and any other significant events and contractual completion dates;
- (e) show the lead times for the supply of information, selection of Subcontractors and suppliers, approvals, and the supply of equipment by the Principal, its agents or persons for whom the Contractor is not responsible. Each period must be represented in a separate activity from the Contractor's activity for the relevant items;
- (f) clearly identify the access requirements and activities, including Track Possessions and any service outages;
- (g) show activities for Site mobilisation, establishment and demobilisation;
- (h) clearly identify the critical path activities and milestones;
- (i) show codes, resources and expense activities as directed by the Principal's Representative;
- (j) show quantities and rates as requested by the Principal's Representative;
- (k) identify time leads and lags, resources and other constraints;
- (l) show calendars identifying the working and non-working days for the Contractor's Activities. Project calendars are to be up-to-date and reflect changes to the available working periods. The calendars must reflect the Global Possession Calendar and Standard Working Calendar which can be provided on request. No other allowances for wet weather or other such contingencies are to be made in the calendars;
- (m) reflect the time scheduled, remaining duration and actual physical progress of the Works, and be consistent with all constraints on access, performance and coordination;
- (n) show allowance for weather and other event contingencies in a single activity at the end of the critical path and prior to the completion date; and
- (o) show Commissioning and Asset Handover activities, including the time allowed for testing and Commissioning of major items.

2.8 Program Quality

The quality of the Contractor's Program will be examined by the Principal's Representative upon the initial submission and again upon each subsequent submission. The Contractor shall maintain the quality of the Contractor's Program, by satisfying the criteria in the table provided below. The Contractor's Program will be rejected by the Principal's Representative if the quality does not meet the thresholds prescribed below. Further assessment criteria and thresholds may be added or modified by the Principal's Representative to the assessment of quality.

Deviations from the thresholds must be approved by the Principal’s Representative.

The quality of the Contractor’s Program will be assessed for all normal activities and milestones that are planned, in-progress, or complete.

Criteria	Description	Remarks	Threshold
Missing Predecessors	Total number of activities that are missing predecessors.	Activities that have missing predecessors are known as open-ended activities. Open ends cause time and risk analysis calculations to be erroneous. Ideally, all open ends should be fixed in a program during the planning phase.	Less than 1%
Missing Successors	Total number of normal activities that are missing successors.	Activities that have missing successors are known as open-ended activities. Open ends cause time and risk analysis calculations to be erroneous. Ideally, all open ends should be fixed in a program during the planning phase	Less than 1%
Merge Hotspot	The total number of activities with a high number of predecessor links.	Also known as merge bias, merge hotspot is an indication as to how complex the start of an activity is. If the number of links is greater than two, then there is a high probability that the activity in question will be delayed due to the cumulative effect of all links having to complete on time in order for the activity to start on time.	Less than 2.5%
Diverge Hotspot	The total number of activities with a high number of successor links.	A diverge hotspot is an indication as to how complex the end of an activity is. If the number of links is greater than two, then there is a high probability that the activity in question may delay a large number of successors.	Less than 2.5%
Critical	Number of critical activities	The number of critical tasks within a grouping. Typically critical activities have total finish float of zero. Primavera programs may have critical activities with more than zero float depending on the threshold set in Primavera P6.	No threshold
0 to 20 Days Float	Total number of activities with positive float of more than zero and less than or	Near critical activities should be closely monitored during execution to ensure a successful on-time project.	No threshold

Criteria	Description	Remarks	Threshold
	equal to 20 days.		
Hard Constraints (Finish on, Start on, Mandatory Finish, Mandatory Start)	Number of activities with hard or two-way constraints.	Hard or two-way constraints such as Must start on or must finish on should be avoided. Consider using soft constraints if absolutely necessary. Includes normal activities and milestones that are planned, in-progress, or complete.	Zero
Soft Constraints (Start On or After, Finish On or After)	Number of activities with soft or one-way constraints.	Soft or one-way constraints such as start no earlier than or finish no later than, constrain an activity in a single direction. While not as impactful as hard constraints, soft constraints do impact critical path method calculations in a program and should be reviewed carefully.	Zero
High Float	Excessive free total float	Number of activities with total float greater than 2 months. Activities must be agreed with the Principal	Less than 5%
Negative Float	Total number of activities with total finish float less than 0 working days.	Negative float is a result of an artificially accelerated or constrained program. Negative float indicates that a program is not possible, based on the current completion dates. Compare this metric to constraint metrics to determine which activities (with negative float) are being impacted by constraints. Ideally, there should not be any negative float in the program. Includes normal activities and milestones that are planned or in-progress.	Zero
Zero Duration	Normal activities having a zero duration	Normal activities having a zero duration	Zero
Wrong Status	Activities started or completed in the future	All activities with status in the future must be corrected in order to maintain an accurate execution plan. Includes only normal activities and milestones that are in progress or complete.	Zero
High Duration	Total number of activities that have a duration longer	Total number of activities that have a duration longer than 10 days. Activities must be agreed with the Principal.	Less than 5%

Criteria	Description	Remarks	Threshold
	than 10 days. This number should not exceed 5%.		
SF Predecessors	Total number of activities with Start to Finish (SF) logic links.	Start-to-finish links are deliberately used very rarely because they have the unusual effect that the successor happens before the predecessor. Generally a poor practice when planning. Includes only normal activities and milestones that are planned, in-progress, or complete.	Zero
Leads and Lags	Lags in excess of 10 days	A lag is a duration applied to a logic link often used to represent non-working time between activities such as concrete curing. Lags tend to hide detail in programs and cannot be "stated" like normal activities. Lags should typically be replaced with activities. Includes normal activities and milestones that are planned, in-progress, or complete.	Zero
Logic on summaries		A summary is not a true activity. Logic should be tied to activities within the schedule	Zero
Reverse logic		As a result of a negative lag (lead) the successor activity starts before their predecessor	Zero

2.9 Document Management

2.9.1 General

The Contractor must control all copies of the CMP, other Management Plans and Contract deliverables in accordance with the Contract. The Contractor must provide the Principal's Representative with electronic copies of all documents required to be submitted on CD/DVD in PDF and native formats (such as Microsoft Word, Microsoft Excel, P6, CAD in *.dwg. or *.dgn.). This requirement also applies when the Contractor is re-issuing documentation to the Principal's Representative.

The Contractor must promptly advise the Principal's Representative of any changes made to the submitted documents and re-submit the amended documents within 5 Business Days of the amendment, with the amendments clearly marked on the document.

2.9.2 Principal's Document Management System Tool

Where nominated in Annexure A, the Principal will administer the Contract document deliverables using the Principal's nominated electronic document management tool. The Contractor must engage and utilise the Principal's electronic document management tool, as specified or otherwise agreed to with the Principal's Representative.

The Contractor must incorporate into the CMP the Principal's administrative requirements for the acceptance, review and tracking of various Contract deliverables (including all Documents) using the Principal's electronic document management tool.

2.10 Monthly Reporting

Without limiting any other reports that may be required under the Contract, the Contractor must prepare and submit to the Principal's Representative, a progress report each month in accordance with the Contract, updating and describing as a minimum:

- (a) the status at the end of the previous month of the Contractor's Activities, as compared to the current Contractor's Program and the Contractor's other programs;
- (b) planned Contractor's Activities over the forthcoming month and quarter;
- (c) a list and timing of Hold Points and Witness Points planned for the forthcoming two (2) months;
- (d) a description, including photographs, of the progress made on all current Contractor's Activities;
- (e) a summary of the financial status of the Contract, including detailed final cost forecasts, and separate lists for the cost of approved Variations, Claims and outstanding claims for Variations;
- (f) the number and categories of personnel and equipment currently engaged by the Contractor to carry out the Contractor's Activities (including apprentices and those engaged in off-site functions such as engineering and specialist subcontractors). This data must also be compared with the planned resources for the Contractor's Activities;
- (g) the status of Design Documentation, major procurement orders, Subcontracts, manufacture and general construction;
- (h) key dates for the anticipated submission of design packages at SDR, PDR, CDR, and approved for construction stages.
- (i) the status of planning activities including Authority Approvals;
- (j) where Contractor's Activities involve any related Track Possession, shutdown or outage activity, the progress report must also include monthly reliability statistics listing the following:
 - i. Incidents in Track Possession/shutdown/outage;
 - ii. Incidents in non-Track Possession/shutdown/outage;
 - iii. actual Incidents;

- iv. potential Incidents in Track Possession/shutdown/outage; and
- v. potential Incidents in non-Track Possession/shutdown/outage;
- (k) any noncompliances with any Authority Approvals, nonconformances of the construction of the Works with Design Documentation and construction processes, and the steps taken by the Contractor to address those noncompliances and nonconformances;
- (l) any issues and noncompliances with environmental management requirements of the Contract (including this TSR and steps taken by the Contractor to address those noncompliances);
- (m) any issues arising from or affecting the CMP (or the subject matter of the CMP);
- (n) records of all corrective and preventative actions taken by the Contractor under the CMP (and the components thereof), and audits of such actions;
- (o) cooperation, coordination, industrial relations and interface issues with Other Contractors;
- (p) status of interface management with Other Contractors;
- (q) summary updates relating to community issues and potential community issues;
- (r) complaints received by the Contractor in relation to the Contractor's Activities;
- (s) other key issues that have the potential to affect the Contractor's Activities;
- (t) any other information the Principal's Representative reasonably requires;
- (u) activities of the Dispute Resolution Board, where such a board is established under the Contract; and
- (v) details of the status, implementation, operation and effectiveness of the Risk Management Plan. As a minimum, the Contractor must provide:
 - i. a report on the risks deemed 'extreme' or 'high' within the risk register;
 - ii. an overview of the full risk register (e.g. number of risks by category and rating, number of new risks identified and risks closed out during the previous month);
 - iii. the status of associated controls and tasks; and
 - iv. any results of risk audits.

Where the Works includes signalling system works, the progress report must also:

- (w) include a one page summary of the status of signalling design packages; and
- (x) provide the status of signalling inspection and test documentation such as permit to work applications, inspection and test plans, installation works packages, Commissioning test plans and Commissioning works packages.

2.11 Audits and Surveillance

Audit, surveillance and inspection of the Contractor's process and compliance with the requirements of the Contract and the Contractor's quality management system may be

conducted by the Principal's Representative at any time. The Principal's Representative may utilise independent auditors and surveillance officer(s) to assist the Principal in any such audit, surveillance or inspection. The independent auditor(s) and surveillance officer(s) will assist the Principal's Representative in recording the progress and performance of the Contractor's Activities (on site or off site). These records may be used by the Principal's Representative for any purpose.

The Contractor must be cooperative in assisting the independent auditor(s) and surveillance officer(s) in undertaking their duties. When any audit is to be undertaken by the Principal, the Contractor must:

- (a) make available all records produced under the Contract;
- (b) make suitable facilities available as agreed between the Principal's Representative and the Contractor, to accommodate the audit and audit team; and
- (c) provide all reasonable assistance during the audit including the participation of representatives from the Contractor's organisation (and Subcontractors' organisation(s) if the scope of the audit warrants) who can efficiently locate and produce the requested information for the audit. Assistance from technical specialists will also be provided by the Contractor as required by the Principal's Representative during each audit.

The Contractor must ensure that the audit report recommendations are actioned in accordance with appropriate corrective and preventive systems in a timely and agreed manner.

The Contractor must provide the Principal's Representative with a copy of the results of any self-verification and any audit, when requested by the Principal's Representative.

2.12 Property Management

2.12.1 General Property Obligations

The Contractor is responsible for managing each Site and minimising the impact of the Contractor's Activities on adjoining owners during any investigations, early/enabling works, construction and Defects rectification activities. The Contractor must ensure it has the necessary legal rights to access the appropriate property prior to commencing the Contractor's Activities. To assist the Contractor, the Principal has developed a non-exhaustive "TfNSW [Property Compliance Register - 2TP-ST-175](#)" which lists the applicable legislation.

2.12.2 Property Ownership and Rights of Access

Prior to commencing the Contractor's Activities, the Contractor must conduct property ownership searches (if lands are not supplied by the Principal) and undertake above ground and underground property boundary surveys of every land parcel where structures are to be built and where the Contractor will occupy or access in support of the Contractor's Activities.

Contractor's Activities to be undertaken on roads e.g. RMS owned lands or Council property, require a Work Authorisation Deed (WAD), Section 138 permit or other *Roads Act 1993* (NSW) consent or agreement with the owner or authority. If this has not been undertaken by

the Principal prior to the engagement of the Contractor, and it is not the Principal's responsibility under the Contract, the Contractor must negotiate the WAD or permit on behalf of the Principal to gain access to the lands and determine who will be the rightful owner of the new structures, and who will be responsible for the asset management liability. The Principal must approve the content of the agreement before it is formally released to any external party (e.g. RMS and Councils) for negotiation and execution.

2.12.3 Planning

With the exception of an alliance contract, the Contractor must fulfil all the conditions and requirements of the Planning Approval (including Conditions of Approval and Statement of Commitments) except to the extent that the Contract allocates responsibilities to the Principal. Where the Contractor is responsible and a submission to an approval Authority is required, the Contractor must provide a submission to the Principal's Representative for review in accordance with the requirements set out in the Contract prior to issue to the relevant approval Authority. The Contractor is to address any comments provided by the Principal's Representative and provide a final submission to the Principal with a request to forward to the relevant Authority. The Principal may provide additional comments to the Contractor should the previous comments not be adequately addressed or additional information has been received by the Principal. The Contractor is not to communicate (phone, mail, email etc.) directly with any Authority unless written consent is provided by the Principal and a communications protocol has been established.

Consistency checklists, in the format provided by the Principal unless otherwise agreed, are to be completed by the Contractor and provided to the Principal's Representative for review in accordance with the requirements of the Contract in circumstances where project works are likely to deviate from the approved project.

Should the Works be found not to be consistent with the approved project, the Contractor may request the Principal seek a project modification. Under such circumstances, it is the Contractor's responsibility to provide the necessary reports, studies and final submission to the Principal to justify the modification. Any modification must detail property impacts.

The Contractor must track compliance with Planning Approvals by using PECOMS.

2.12.3.1 Neighbouring Property

The Contractor must identify all neighbouring land owners, tenants, businesses, occupants, who may be impacted by the Works and provide the Principal with a consolidated list that includes:

- (a) addresses;
- (b) land use (retail, residential, garage, etc.);
- (c) primary contact Name, phone number and email address;
- (d) likely impact that works will have on neighbouring property; and
- (e) any past correspondence.

If access to neighbouring property is required by the Contractor, and once the Contractor has discussed the necessity for such access with the Principal's Acquisitions Manager, the

Contractor must comply with clause 2.12.1 above and the *Access to Neighbouring Land Act 2000* (NSW). In this case, the Contractor must prepare an application for access, provide the application to the Property Representative for review, and, once approved, submit the application to the local court.

2.12.3.2 Pre-Construction Land Surveys

The Contractor must verify survey control for the Contractor's Activities and must:

- (a) avoid, where reasonably possible, disturbance of existing survey marks and must re-establish any such marks disturbed or affected by the Contractor's Activities;
- (b) carry out boundary and engineering surveys in accordance with the Surveying and Spatial Information Act 2002 (NSW) and the Surveying and Spatial Information Regulation 2012 (NSW);
- (c) prior to commencing any activity which could affect existing infrastructure (including roads, railways, utility services and buildings), undertake a survey to identify and record the location of the construction site boundary in relation to existing infrastructure; and
- (d) provide the Principal with reports on the location of the construction site boundary in relation to existing infrastructure prior to commencing the relevant Contractor's Activity.

2.12.3.3 Works to be Constructed Within the Boundaries

The Contractor must ensure that the Works are constructed within the property boundaries (including air or subsurface stratum) of the Site. The Contractor must:

- (a) procure for itself and at its own cost the occupation or use of or relevant rights over any land or buildings in addition to the Site, including any land owned by RailCorp or other property owner, which is necessary or which it may require for the purposes of carrying out the Contractor's Activities; and
- (b) at its own cost carry out all activities and procure all Services necessary to make the land or buildings suitable for use by the Contractor.

If the building is to be built over the adjoining property and no formal agreement has been reached with the adjoining property owner, the Contractor must cease work on this part of the Works and immediately notify the Principal.

Liability is solely with the Contractor if building works are illegally undertaken on adjoining property owner's land.

2.12.4 Design Requirements

Where the design of any part of the Works is part of the Contractor's Activities the Contractor must include referenced drawings at all stages of design (including but not limited to approved for construction and as built drawings), clearly identifying property boundaries relative to all components of the Works.

2.12.5 Property Representative

In the event that the Principal has engaged a Property Representative (PR) for the project, the Contractor must work with the PR and provide the PR with access to the Site and all property records requested.

The Contractor must appoint a site-based person to be the Contractor's property representative. This representative must be present during all inspections undertaken by the PR.

Any findings by the PR from site inspections or document reviews must be actioned within the timeframes reasonably required by the PR. The Contractor must provide written notification to the Principal that the findings of the PR have been closed out within the timeframes specified in the Property Management Plan or in the inspection reports.

2.12.6 Property Risk Assessment

The Contractor must undertake a comprehensive and Site-specific property risk assessment in conjunction with the Contractor's construction personnel and in consultation with the Property Representative, prior to the commencement of early works (including pre-construction works). A staged risk assessment may be utilised, upon agreement with the Principal. This risk assessment must identify the actual and potential property impacts of the Contractor's Activities and the control measures that are required to be implemented in order to provide property protection in accordance with the requirements of the Contract. With respect to the Site (and where the Site is at more than one location, for each part of the Site), this risk assessment is to include:

- (a) permanent and temporary worksite access requirements and timing;
- (b) access to or across adjoining properties and timing;
- (c) crane swings, air rights and impacts on neighbouring properties or the Rail Corridor;
- (d) access to Services;
- (e) any future subdivision, easements, other title interests or divestment requirements;
- (f) any future commercial impacts of resultant works; and
- (g) Site investigation and contamination.

2.12.7 Property Management Plan

Unless otherwise noted in Annexure A, the Contractor must have in place, maintain and consistently apply until Final Completion a Property Management Plan which describes the procedures and processes the Contractor will implement to manage property issues.

The timing and frequency for the initial and subsequent submissions of the Property Management Plan to the Principal's Representative for review in accordance with the requirements of the Contract is nominated in Annexure A of this TSR.

The Contractor must progressively review, monitor, amend, update the Property Management Plan and submit for review in accordance with the requirements of the Contract, throughout the project, in accordance with Annexure A of this TSR.

As a minimum, the content of the Property Management Plan should address the “Sections” listed in the table in this clause 2.12.7 below.

The Contractor must address each of the requirements with a high level of detail so that a reasonable person would understand how the Contractor intends to meet the Principal’s requirements. In respect of those minimum “Sections” detailed in the table below, the Contractor must explain in detail how it will:

- (a) identify, manage and record risks/contingent liabilities, stakeholders, impacted adjoining land and assets;
- (b) manage and mitigate those risks directly related to the potential damage of property as a consequence of the Works;
- (c) identify actual damage, how it occurred and how that damage will be rectified;
- (d) identify disputes in relation to damage and how each dispute will be processed, managed and resolved; and
- (e) manage project relations with all adjoining owners and the Principal.

None of the requirements expressed in subclauses (a) to (e) above derogate from any other stated obligations or requirements of this TSR. The Contractor must comply with all stated requirements of the Property Management Plan.

Section	Title
1	Definitions
2	Project Description
3	Objective
4	Key Resources and Management
5	Requirements
6	Property Condition Surveys
6.1	Pre-construction Condition Surveys
6.2	Refusal or Lack of Response for Condition Surveys
6.3	Compliance Review of Condition Surveys
6.4	Distribution of Property Condition Surveys
6.5	Condition Survey Register
6.6	Post-construction Condition Surveys
7	Property Damage Management
7.1	General Overview

Section	Title
7.2	Notification Process
7.3	Assessment Process
7.4	Damage Rectification
7.5	Unresolved Claims
7.6	The role of an independent Property Damage Assessor
8	Ongoing Property Monitoring
8.1	Monitoring Frequency
8.2	Monitoring of Track and Structures
8.3	Distribution of Monitoring Data
9	Self Verification Checklist
Attachment 1	Complaint Resolution Process
Attachment 2	Property Damage Claim Process Flowchart
Attachment 3	Sample letter requesting permission to conduct a property condition survey
Attachment 4	Sample letter of introduction for property condition survey staff
Attachment 5	Sample covering letter for property condition report

2.12.7.1 Condition Surveys of Buildings

The Contractor must ensure that the processes and procedures for performing all condition surveys on buildings and / or other infrastructure facilities are based on industry best practices. Examples of acceptable standards for condition surveys of buildings include:

- (a) sections 4 and 5 of the “Royal Institute of Chartered Surveyors (RICS) Guidance Note 63/2010 Building surveys and technical due diligence”; and
- (b) “AS 4349 Inspection of Buildings – General Requirements”, and with specific regard to the heritage elements within the Site and Remote Sites.

The Contractor’s reports on condition surveys of buildings must as a minimum record the following features:

- (c) major features of the buildings and developments including location, type, construction, age and present condition, including any defects or damage;
- (d) type of foundations including columns, walls and retaining structures;
- (e) an assessment of the susceptibility of the building to further movement or stress;
- (f) an assessment of the effectiveness of water-proofing systems in basements to the anticipated movements caused by the Contractor’s Activities; and

- (g) an assessment of the susceptibility of the building to changes in water levels resulting from the Contractor's Activities.

Existing levels of aesthetic damage are to be recorded in accordance with the assessment requirements of "Building Damage Classification", by Burland et al, 1977 and Boscardin and Cording, 1989 or another similar or equivalent assessment method to the satisfaction of the Principal's Representative.

2.12.7.2 Pre-Construction Property Condition Surveys

The property condition survey section of the PMP must describe the Contractor's proposed approach to performing condition surveys. The plan must as a minimum:

- (a) set out the minimum standards of pre-construction and post-construction condition surveys;
- (b) include a procedure for the use of an independent third party to ensure compliance against the minimum standard of condition surveys; and
- (c) describe how the Contractor will minimise disruption to property owners and occupiers by completing single condition surveys in agreement with Other Contractors and Subcontractors.

2.12.7.3 Post-Construction Property Condition Surveys

Within one month of Completion and again at the times specified in Annexure A, the Contractor must perform a post-construction condition survey on each property previously subject to a pre-construction property condition survey and construction phase monitoring.

The Contractor must ensure that post-construction property condition surveys are performed to the same standards as the pre-construction property condition surveys. The Contractor must ensure that the same surveyor performs both the pre-construction and post construction condition surveys on a particular property.

The Contractor must submit all post-construction property condition survey reports to the Principal's Representative for review within 10 Business Days of the survey. Each report must contain a certificate from the surveyor who performed the survey certifying that the survey has been completed and is an accurate assessment of the property's condition.

The post-construction property condition survey report(s) must include a determination of the cause of any monitored change or damage identified (if any) since the pre-construction or previous construction survey(s) and the Contractor's proposed remedial works or activities. If any damage is found to have been caused by the Contractor's Activities, the Contractor must:

- (a) provide the Principal's Representative with a proposal setting-out the remedial action required;
- (b) obtain the property owner's acceptance, in a form agreed to by the Principal, of the compensation, repair or reinstatement work, and release from future claims and actions; and

- (c) If no damage is found to have been caused by the Contractor's Activities, the Contractor must:
- i. write to the property owner and provide a copy of both reports for the property owner's records; and
 - ii. provide the Principal's Representative with a copy of all records for its future reference.

2.12.7.4 Property Damage Management

The Property Damage Management section of the PMP must cover all property (including assets above and below ground) on and adjacent to the Site and in the sphere of influence of the Contractor's Activities including, but not limited to, premises, access roads and their surroundings, buildings, structures, utilities and services, rail assets and systems (including all property and rolling stock owned by others), roadways, footpaths, street furniture and gutters.

The plan must set out the following:

- (a) the damage mechanisms, including trials of construction procedures and methods to help assess the risk of property damage;
- (b) noise, vibration and settlement limits that will prevent the damage of existing property and items by the Contractor's Activities. The Contractor must transfer these criteria into method statements and inspection and test plans to ensure that any Contractor's Activities are within the above limits and minimise damage risks. The plan must include procedures for the review of, and change to, construction methodologies to minimise or prevent damage;
- (c) a list of properties with the potential to be detrimentally or negatively affected by the Contractor's Activities; and
- (d) a list of the properties and assets which will be subject to a condition survey by the Contractor. The Principal's Representative may direct the Contractor to include additional properties and assets if it considers they have the potential to be damaged as part of the Contractor's Activities and a Principal nominated person may attend the undertaking of condition surveys.

2.12.7.5 Construction Phase Monitoring

The Contractor must implement a monitoring and inspection regime for properties with the potential to be detrimentally or negatively affected by the Contractor's Activities. The monitoring and inspection regime must address the requirements of the Contract, the Planning Approvals and Third Party Agreements and agreements made with any Authority. The Contractor must also comply with the project-specific requirements for the construction phase monitoring set out in Annexure A and include these requirements in the Property Management Plan.

For activities in or adjacent to the Rail Corridor, the Contractor must implement specific monitoring regimes and emergency and response procedures for all Contractor's Activities close to or under, and likely to affect, live rail track in accordance with RailCorp monitoring standards.

The PMP must contain a clear statement that all Contractors' Activities causing any damage will cease until the construction methodology is reviewed and damage rectification agreed with the property owner and the Principal's Representative.

2.12.7.6 Property Compliance Checklist

The Contractor must prepare and submit to the Property Representative, the property compliance checklist contained in Annexure C, to demonstrate that all legal and contractual property related obligations have been met. The checklist must be submitted:

- (a) 10 days prior to site occupation; and
- (b) 10 days prior to construction commencement.

This property compliance checklist requires supporting documentation to be submitted and the Contractor must allocate sufficient time and resources to undertake the property related contractual obligations.

2.12.8 Implementation

2.12.8.1 Notification of Incidents

All property incidents and noncompliances must be reported to the PR and the Principal's Representative.

2.12.8.2 Principal Raised Nonconformity, Corrective Action and Preventative Action

The Principal may advise the Contractor of nonconformances and deficiencies in relation to property matters and the Contractor must deal with and close-out the nonconformances or deficiencies using its own compliance system. Any requirements incorporated into any such written advice must be responded to by the Contractor within 14 days, unless otherwise agreed with the Principal's Technical Director Project Property Services.

The Contractor must also comply with the requirements of "AS/NZS ISO 9001 Quality Management Systems – Requirements" in relation to the identification, management and addressing of property non-conformance, corrective action and preventative action.

2.12.9 Property Records

The contractor must provide the records described in Annexure A.

2.13 Competence, Training and Awareness

The Contractor must ensure its employees and the employees of Subcontractors engaged in carrying out the Contractor's Activities on the Site are inducted and trained in the requirements of the Contract to achieve a level of awareness and competence appropriate to their assigned activities, and required for the effective implementation of applicable management plans prior to the relevant employee carrying out any works on Site.

The Contractor must establish and maintain a register of training carried out including dates, names of people who have completed the training and details of the trainer. Training is to

include site specific training to cover all relevant property, environmental, safety and community issues.

The Contractor's Project Manager and other relevant personnel must attend any training provided by the Principal's Representative specified in Annexure A, or as otherwise directed by the Principal's Representative.

Any person who has not been inducted must not work on the site.

3 Environmental Management

3.1 Contractor's Environmental Management System

Unless otherwise noted in Annexure A, the Contractor's Environmental Management System (EMS) and Construction Environmental Management Plan (CEMP) must comply with the relevant requirements of the "NSW Government Environmental Management System Guidelines" and remain accredited under "AS/NZS ISO 14001:2004" whilst the Contractor's Activities are undertaken.

The timing and frequency for the initial and subsequent submissions of the Construction Environmental Management Plan (CEMP) to the Principal's Representative for review in accordance with the requirements of the Contract is nominated in Annexure A of this TSR.

The EMS and CEMP utilised must be consistent with the requirements prescribed in this TSR or elsewhere in the Contract.

3.2 Management of Environmental Aspects

The Principal has developed a number of environmental management guidelines, which provide guidance on how to manage certain aspects of environmental management during construction. These guidelines are available on TfNSW's website.

3.3 Environmental Inspections and Monitoring

The Contractor must document the procedures to be implemented to verify that the Contractor's Activities relating to environmental management matters are compliant with the requirements of the Contract and all Authority Approvals.

3.4 Notification of Environmental Incidents and Non-Compliances

The Contractor must notify and manage all environmental incidents and non-compliances in accordance with the Contract and "[TfNSW Environmental Incident Classification and Reporting - 9TP-PR-105](#)".

The Principal's Representative may advise an environmental non-conformance or deficiency in writing. Upon receipt of such advice the Contractor must deal with and close-out the noncompliance or deficiency under its EMS and in accordance with the requirements of the Contract. The "[TfNSW Environmental Incident/Non-Compliance Report – 9TP-FT-101](#)" must be completed by the Contractor and returned to the Principal's Representative within 48 hours, unless otherwise agreed with the Principal's Representative.

The Contractor must ensure that any environmental non-conformances are identified, managed and addressed (including via the carrying out of corrective actions and preventative actions) in accordance with the provisions of “AS/NZS ISO 9001:2008” that relate to control of nonconforming product and improvement.

3.5 Environmental Control Maps

The Contractor must develop, implement and maintain Environmental Control Map(s) or “ECM(s)” in accordance with all Authority Approvals and the [“TfNSW Guide to Environmental Control Map - 3TP-SD-015”](#). The ECM must be specific to a work area and/or work activity and identify the sensitive environmental areas and receivers and the location of mitigation measures to minimise the impact of construction activities on the environment and community.

Each ECM must be prepared as a map, suitably enlarged (e.g. A0 size) for mounting on the wall of a site office and for use by site personnel (e.g. A3 size).

The Contractor must submit the ECM(s) to the Environmental Representative for review at least one week prior to the commencement of construction in the area covered by the ECM(s). The Contractor must incorporate any comments made by the Environmental Representative into the final ECM.

The Contractor must regularly review and update the ECM(s) to incorporate works progression and changing site characteristics, and revise or amend environmental protection measures if those identified in the ECMs are not adequate in achieving compliance with the environmental obligations under the Contract. The revised ECM(s) must be submitted to the Environmental Representative for review and approval unless otherwise agreed with the Environmental Representative.

3.6 Pre-Construction Minor Works Approval

The Contractor must submit the details of any pre-construction works to the Principal’s Representative using the form “TfNSW Pre-Construction Minor Works Approval - 9TP-FT-202” for review in accordance with the requirements set out in the Contract at least 10 Business Days prior to the commencement of such works. All supporting documentation must be attached and pre-construction activities must comply with the requirements of all Authority Approvals. Pre-construction works may not commence until the review process required by the Contract is complete.

3.7 Complaints

Complaints received by the Contractor from any source in relation to environmental issues must be handled, recorded and reported in accordance with this TSR and the conditions of all Authority Approvals (if applicable). The Contractor must also notify the Principal’s Representative (or nominated delegate) and the Environmental Representative of any environmental complaints received and the actions taken to resolve the complaint.

3.8 Submission of Environmental Documents

Any environmental documents required by any Authority Approval, including the planning approval, such as the CEMP(s) must be submitted to the Principal's Representative for review in accordance with the requirements set out in the Contract.

3.9 Planning and Environmental Compliance Monitoring System (PECOMS)

The Planning and Environmental Compliance Monitoring System is the system developed and used by the Principal to monitor compliance with the conditions of all licences, permits and approvals of its projects.

Where nominated in Annexure A, the Contractor is required to:

- (a) use PECOMS to undertake self-regulation to confirm that all Contractor's Activities are compliant with all Authority Approvals (including the EPL); and
- (b) implement a PECOMS reporting structure in addition to any other reporting requirements under Contract and follow the applicable parts of "[TfNSW Guide to Compliance Monitoring and Reporting using PECOMS - 9TP-SD-012](#)".

3.10 Control of Environmental Records

The Contractor must comply with section 4.5.4 (Control of Records) of "AS/NZS ISO 14001:2004".

The Contractor must retain all environmental records for a period of no less than 5 years from the Date of Completion.

The Contractor must provide the Principal's Representative with copies of the environmental records stated at Annexure D. Records not required to be stored on-site must be forwarded to the Principal's Representative within 3 Business Days of a request.

3.11 Sustainability Requirements

The Contractor must comply with any project-specific sustainability requirements listed in Annexure A as well as the following:

- (a) Steel must be produced, designed and fabricated in an environmentally responsible method that results in efficient use of steel as a building material. Refer BFH-AUR-GN-9090004 Section 6.3 and BFH-AUR-GB-9090009 Section 5.4;
- (b) Timber must be certified by either the FSC International or the PEFC forest certification schemes, from a reused source, or a combination of both;
- (c) PVC must comply with the Best Practice Guidelines of PVC in the Built Environment <http://www.gbca.org.au/uploads/156/2716/Best%20Practice%20Guidelines%20-%20Verification%20Guidance.pdf>;
- (d) Where practical, use recycled materials in the building/ facility construction such as recycled steel, recycled concrete or timber;

- (e) The Contractor should consider the use of less greenhouse intensive fuels in construction vehicles and vessels; and
- (f) The Contractor is to consider developing a Green Travel Plan to assist construction site workers making informed decisions about public and/or active transport options to the work site.

4 Safety Management

4.1 Managing Health and Safety

The Contractor must manage health and safety in accordance with the WHS Legislation, Codes and Standards, NSW Government Guidelines and contractual requirements. The Contractor must ensure compliance, by it and those persons it exercises control over, with relevant Laws, the Rail Safety National Law, Codes and Standards, codes of practice and contractual requirements as a minimum.

The Contractor must identify who will be fulfilling the role of Senior Management Representative responsible for implementing and maintaining the safety requirements of this TSR (including monitoring the effectiveness of the Contractor's safety management system in complying with all safety requirements) and reporting to the Principal's Representative.

The Project Work Health and Safety Management Plan, as described further in clause 4.3, must document how the safety management system will be communicated to all persons associated with the Contractor's Activities such that it is incorporated into the Contractor's Activities.

4.2 Safety Culture

The Contractor must continuously promote a safer, healthier, more productive workplace. The Contractor must establish and maintain an effective safety management system that facilitates the flow of information both within the Contractor's organisation and between the Contractor's organisation, Subcontractors and, as required, the Principal.

The Contractor must provide strong leadership and promote safety as a core value, establishing and enforcing high standards of performance and ensuring relevant expertise is available.

The Contractor must ensure open and effective consultation and further mutual trust with the Principal, providing timely response to safety issues and concerns.

The Contractor must ensure the safety management system and the safety culture supports:

- (a) senior management commitment to safety;
- (b) commitment to work with the Principal to develop project-specific lead and lag Key Performance Indicators;
- (c) shared care and concern for hazards;
- (d) workers to adapt to their changing environment where required;
- (e) organisational learning through monitoring, analysis and feedback systems;

- (f) methods for providing feedback and set timeframes for such provision;
- (g) methods to communicate and share learning from successes and failures;
- (h) the encouragement of teamwork and of worker involvement in promoting and maintaining a positive safety culture;
- (i) methods to demonstrate how site safety rules will be reflected in the practice on it and how such rules will be incorporated into the Contractor's Activities; and
- (j) methods to enable the ongoing development of safety improvements developed in consultation and communication with the Principal's Representative, as required.

4.3 Contractor's Project Work Health and Safety Management Plan

4.3.1 Scope

The Contractor must develop a Project Work Health and Safety Management Plan which includes any relevant site-specific work health and safety management plans. The Project Work Health and Safety Management Plan must document the Safety Management System to be applied to the delivery of the contract.

The plan must make provision for development of procedures to meet the safety management requirements stated in the contract, Law and this TSR and comply with the "NSW Government Work Health and Safety Management Systems and Auditing Guidelines". The plan must be updated to reflect any relevant changes.

The timing and frequency for the initial and subsequent submissions of the Project Work Health and Safety Management Plan to the Principal's Representative for review in accordance with the requirements of the Contract is nominated in Annexure A of this TSR.

4.3.2 Health and Safety Risk Management

The Project Work Health and Safety Management Plan must include how the Contractor will manage risks in accordance with "AS/NZS ISO 31000:2009 - Risk Management". The Contractor must:

- (a) eliminate all risks to health and safety so far as is reasonably practicable; and
- (b) if it is not reasonably practicable to eliminate risks to health and safety; minimise those risks so far as is reasonably practicable applying, maintaining and reviewing the prescribed Hierarchy of Control Measures.

As part of the determination of whether risks have been eliminated or minimised so far as is reasonably practicable, the Contractor shall review, and record the review of the Principal's [Generic Work Health and Safety Operational Risk Register - 30-SD-101](#) and where the Contractor's Activities involve Rail Safety Work, the Contractor shall also review the [Generic Rail Safety Risk Register - 30-SD-038](#).

The Contractor must maintain a register of risks which includes:

- (c) a description of the risk/hazard and its likely impact;
- (d) the risk level assessed for each hazard;

- (e) specific control measures, including safe work methods to be implemented to eliminate or mitigate risks;
- (f) the residual risks/hazards;
- (g) methods to be used to monitor effectiveness of safe work methods and control measures;
- (h) the person(s) responsible for monitoring implementation of the control measures;
- (i) consultative processes employed by the Contractor in relation to the risk/hazard and the persons involved; and
- (j) demonstrable application of the Hierarchy of Control Measures undertaken to lessen the risks so far as is reasonably practicable.

In addition the Principal has detailed a number of control measures that are expected to be deployed, unless a more robust risk control is applied through a process of risk assessment. These control measures are set out in subclauses 4.3.2.1 to 4.3.2.7 inclusive.

4.3.2.1 Construction Plant

The Contractor must ensure that all Construction Plant is properly operated and maintained in accordance with the manufacturer's instructions and in accordance with the *Work and Safety Regulation 2011* (NSW) and the associated codes of practice, so as to ensure that it poses no risk to the health and safety of any person on the Site or on land adjoining the Site.

The Contractor must also:

- (a) ensure that quick hitch attachments fitted to excavators and other earth moving machinery are of the fully automatic type with a secondary locking attachment. The secondary attachment is to be capable of preventing the excavator attachment from releasing in the event of a partial or total failure of the power supply or when the operator stops operating the machine. All half-hitch, mechanical-hitch, form-lock, semi-automatic types are prohibited; and
- (b) where mobile plant's operating envelope is capable of encroaching within 3m of the Danger Zone or the safe approach distance to live electrical infrastructure, implement the use of programmable zone limiting devices that limit the hoisting and/or slewing and which are designed to be "fail safe" or which meet Category 4 reliability in accordance with "AS4024.1 Safeguarding of Machinery" or a SIL of 3 under "AS 61508 Functional safety of electrical / electronic / programmable electronic safety-related systems".

4.3.2.2 Electrical Safety

The Contractor must control the risks associated with electrical safety which accords with all relevant Codes and Standards and Laws, including WHS Legislation. These controls must take into account that live work is not permitted and isolated circuits are to be treated as live until they have been proven dead by testing.

4.3.2.3 Use of Portable Earphone Equipped Music Devices

The use of portable earphone equipped music devices is prohibited.

4.3.2.4 Fires or Burning Off

Fires or burning off will not be permitted anywhere on the Site.

4.3.2.5 First Aid and Emergency Arrangements

The Contractor must manage the provision of first aid for the Contractor's Activities in accordance with the WHS Legislation.

In addition the Contractor must provide a defibrillator (and suitable training in its use for its senior first aid personnel) at each major first aid location, and must ensure persons trained in the use of the defibrillator are on Site at all times.

4.3.2.6 Reference Checks

The Principal's Representative may direct the Contractor to undertake police criminal record checks for any of the Contractor's and Subcontractor's employees. The Contractor must develop procedures on how such checks will be undertaken and how the results will be treated in confidence.

The Principal's Representative must be promptly notified of the results of these checks if any offences have been recorded. The Principal's Representative may review the results of the checks and consider whether those records pose a potential risk to the Works or any person on Site. The Principal's Representative may then liaise with the Contractor to discuss any action that should be taken. The Principal's Representative may direct the Contractor to immediately remove a person, on the basis of their criminal record, from the Site and prevent that person from continuing to undertake any of the Contractor's Activities.

4.3.2.7 National Counter Terrorism Alert Levels

The Contractor must:

- (a) ensure that the security management of the Works reflects the National Counter Terrorism Alert Levels;
- (b) develop procedures to communicate and respond to changes in the National Counter Terrorism Alert Levels; and
- (c) document how notification of a terrorism incident will be made to the Principal's Representative and law enforcement authorities, and the roles and responsibilities of the Contractor's employees and Subcontractors in such an event.

4.4 Safe Work Method Statements

Before work commences the Contractor must provide Safe Work Method Statements (SWMS) for the proposed work. The Contractor must also ensure that work is carried out in accordance with the SWMS for the work. The Contractor must ensure that a SWMS is reviewed and, as necessary, revised if relevant control measures are revised.

All SWMS, regardless of whether they are authored by the Contractor or Subcontractors, must, unless otherwise directed by the Principal's Representative, be submitted to the

Principal's Representative at least seven days prior to the commencement of any significant construction activity. The Principal may review any submitted SWMS. All SWMS must be listed on a consolidated SWMS register that shall be proactively maintained and communicated to the Principal's Representative no less than monthly.

The Contractor acknowledges and agrees that by exercising its right under clause 4.4, the Principal is not assuming any management or control of the Site or the Works and is only receiving the SWMS information to monitor the Contractor's compliance with its obligations under this Contract and/or applicable Laws, including the WHS Legislation and/or the Rail Safety National Law.

4.5 Safety Incident Reporting, Investigation and Recording

The Contractor must notify the Principal's Representative of any Incident and comply with the requirements of the "NSW Government Work Health and Safety Management Systems and Auditing Guidelines" and clauses 4.5.1 and 4.5.2 below.

4.5.1 Recording of Incidents

The Contractor must immediately notify the Principal's Representative of any Incident and record the Incident by using the "INX InControl Incident Management System "INX". Should INX not be accessible, the Contractor must report in a manner that enables effective subsequent recording in INX.

All Regulatory Notifiable Incidents or occurrences must be reported immediately to the Principal's Representative and to the relevant Regulator/s. Where any type of notice, infringement or fine by a Regulator has been issued to the Contractor in relation to undertaking the Contractor's Activities, the Contractor must immediately notify the Principal's Representative.

4.5.2 Investigation of Incidents

The Contractor must undertake investigation of all minor and major near-miss or actual Incidents. The minor investigation must be recorded within INX utilising the minor investigation template contained therein. Minor investigations must be completed within (28) days of the incident.

The Principal's Representative may direct the Contractor to undertake a major investigation into an Incident or potential Incident, utilising the major investigation template contained within INX. Major investigations must be completed within (42) days of the incident. Terms of reference for major investigations will be issued by the Principal's Representative. If a major investigation requires the appointment of an external independent investigator, the Contractor shall bear the cost of the investigation.

The Principal's Representative may participate in any investigation being undertaken by the Contractor or initiate its own investigation. If the Principal's Representative instigates its own investigation the Contractor must provide the Principal's Representative with all assistance reasonably required for the purposes of the investigation, this includes the waiver of legal professional privilege over any investigation report prepared by, or on behalf of, the Contractor. The Parties may agree that any investigation report that is subject to legal

professional privilege may, between the Contractor and the Principal, be subject to a common interest privilege.

4.5.3 Safety Performance Rating

The Contractor must provide monthly safety statistics electronically by the 25th of the month.

4.6 Alcohol and Other Drugs

A policy of zero tolerance of alcohol and illegal drug use applies to projects carried out for or controlled or managed by the Principal. Alcohol and illegal drugs are not permitted on any Site or on premises controlled or managed by the Principal.

The Contractor must develop policies and procedures to ensure this policy of zero tolerance of alcohol and other drugs is adhered to at all times. The Contractor must develop and implement effective alcohol and drug testing procedures in line with relevant Laws.

The Contractor must ensure that all persons associated with the Contractor's Activities (including the Contractor's personnel, visitors, Subcontractor workers and agents) are aware of their obligations to comply with all alcohol and drug requirements.

The Principal prohibits any persons under the influence of alcohol or drugs from working on any projects carried out for or controlled or managed by the Principal, regardless of their work location. Prescription and over-the-counter drugs may also affect a person's ability to work safely and the Contractor, in consultation with the Principal, will determine its policy in relation to prescription and over-the-counter drugs on a case by case basis.

All of the Contractor's personnel and workers of Subcontractors may be subject to alcohol and drug testing by an authorised testing officer of the Principal at any time whilst carrying out the Contractor's Activities (including within the Contractor's Site amenities or facilities).

Testing for the presence of alcohol and other drugs may be undertaken during the following occasions:

- a) before performing duties (pre-sign on, primarily alcohol test);
- b) during the performance of duties (random and reasonable cause); and
- c) following any Incident.

Anyone that tests positive to alcohol or drug tests or who refuses an alcohol or drug test must be removed from the Site immediately, and the Principal's Representative must be notified immediately.

The Contractor must take disciplinary action against a person associated with the Contractor's Activities who breaches the Principal's policy of zero tolerance of alcohol and illegal drug use. The nature of the disciplinary action to be taken must be communicated to the Principal's Representative.

Each individual that signs on at the commencement of each shift will be declaring themselves to be free of alcohol and drugs.

4.7 Failure to Comply

If the Principal's Representative is of the opinion that the Contractor, the Contractor's personnel or a Subcontractor have not complied, or are not complying with any health and safety requirements in the Contract, this TSR or under the Rail Safety National and/or WHS Legislation, including the requirement to eliminate or minimise the risks so far as is reasonably practicable, then the Principal's Representative may:

- (a) direct the Contractor to immediately comply with the obligation; and/or
- (b) if it is in the opinion there is an immediate risk to the health, safety or welfare of any persons as a result of the non-compliance, direct the Contractor to immediately suspend carrying out all or any part of the Contractor's Activities until such time as the Contractor is complying.

5 Communications and Community Liaison

5.1 General Community Liaison Obligations

The Contractor must:

- (a) Ensure its employees, Subcontractors and agents comply with the requirements of the details listed below;
- (b) Ensure that the Principal is provided with adequate notification of planned construction activities and milestones; and
- (c) Consult the Principal prior to taking any action that may impact on stakeholders and the community.

5.2 Information to the Principal

The contractor is required to provide (and explain) accurate communications information to the Principal regarding current and upcoming Contractor's Activities (including works of subcontractors) and all associated community impacts as follows and as required:

- (a) Prior to Site establishment: a program of the Contractor's Activities, scheduling, and details of the planned community impact minimisation measures; and
- (b) Monthly: the works completed and upcoming Contractor's Activities, including any associated community impacts (in a format suitable for inclusion on the Principal's website).

The Contractor must be contactable on a 24-hour basis (as required).

5.3 Meetings with Stakeholders

The Contractor must not meet stakeholders without seeking approval from the Principal. The Contractor must provide the Principal with a minimum of 3 Business Days' notice prior to any meeting with the community or stakeholders.

The contractor must also support any meetings with stakeholders by providing relevant materials for presentation and/or distribution at such meetings. The Contractor must ensure that suitable persons are available to attend such meetings (including after-hours). Such persons must be adequately informed and suitably qualified to participate and be able to take the lead during meetings where requested by the Principal.

5.4 Public Communication Materials

The Contractor must promptly provide all information as reasonably required or directed by the Principal. All public communication material produced by the Contractor must meet *Web Accessibility Guidelines 2.0 (WCAG 2.0)* and be consistent with and comply with the “TfNSW Transport Projects Style Guide for Contractors and Consultants” and the [“TfNSW Editorial Style Guidelines”](#). The Contractor must not release any public communication material until it is approved by the Principal’s Representative.

5.5 Media Releases and Enquiries

The Principal wishes to exercise control over the release of any information regarding the work. This includes any promotional material that the Contractor seeks to publish, or any press releases or responses to enquiries from the media. The Contractor must refer the information to the Principal for written consent prior to the release. These constraints also apply to the Contractor’s consultants and subcontractors.

5.6 Community Notifications

The Contractor must issue written notifications to stakeholders and the community at least 5 Business Days before commencing any activity that incorporate any aspect of a Planning Approval such as planning conditions of consent, that will impact stakeholders and the community. The written notification must first be reviewed and approved by the Principal. The Principal will require a minimum of 5 Business Days to review and approve any written notification before being issued to stakeholders and the community.

5.7 Complaints and Enquiries Management

The Contractor is responsible for responding to complaints and enquiries received regarding the Contractor’s Activities and impacts associated with the Contractor’s Activities. Complaints and enquiries may be received through a variety of avenues including the Principal’s 24-hour construction response line or project info line, in writing (letter or email), direct to the Principal via telephone, or direct to the Contractor or Subcontractors.

In responding to complaints the Contractor must:

- (a) record details of every complaint received and how it was managed and closed out;
- (b) investigate and determine the source of the complaint immediately, including an immediate call to the complainant where the complaint was received by telephone. Should the Contractor determine that the complaint does not relate to the Contractor’s Activities, the Contractor must immediately notify the Principal;
- (c) provide at least an oral response to the complainant regarding what action is proposed as soon as possible and within a maximum of 2 hours from the time of the

complaint during standard construction hours as outlined in the Planning Approval, or on the next Business Day during all other times (unless the complainant requests otherwise). If no phone number was provided, the complaint must be responded to within a maximum of 24 hours for emails and one week for letters from time of receipt;

- (d) forward information on any complaints received, including response times and details of any actions undertaken or proposed or investigations occurring, to the Principal in writing each Business Day to meet the project's reporting requirements.
- (e) provide the Principal with details in writing of complaint close out actions and the date action was implemented.

In responding to enquiries the Contractor must:

- (f) record details of enquiries;
- (g) provide at least an oral response to the enquirer within a maximum of 2 hours from the time of the enquiry during standard construction hours as outlined in the Planning Approval, or on the next Business Day during all other times (unless the enquirer requests otherwise); and
- (h) forward information on any enquiries received and response given, to the Principal in writing each Business Day.

6 Working In and Adjacent to the Rail Corridor and Rail Environment

The following requirements shall apply to the Contractor, except where indicated as "Not required" in Annexure A.

6.1 Operating Railway System

The Contractor acknowledges and agrees that:

- (a) it is aware that Sydney Trains or another Operator/Maintainer may continue to use areas adjacent to the Site as part of normal operations of the railway system on a commercial basis during the undertaking of the Contractor's Activities;
- (b) the continuance of normal operations of the railway system, including within the Rail Corridor, the Site, adjoining areas and railway stations, on a commercial basis by Sydney Trains or another Operator/Maintainer during the performance of the Contractor's Activities must be maintained to the satisfaction of the Operator/Maintainer as notified by the Principal's Representative. The Contractor must ensure that the railway system operations and infrastructure are not impeded or interfered with by reason of the performance of the Contractor's Activities, except where this is approved in writing beforehand by the Principal's Representative;
- (c) it must maintain and coordinate sufficient access to the railway system, for users and operators, so as not to hinder main traffic routes, including access to and from operating railway station platforms, ticketing areas and the Rail Corridor, and the

- flow of traffic, including on or accessing the Site and the adjoining areas, except where this is approved in writing beforehand by the Principal's Representative;
- (d) it must, in performing the Contractor's Activities, do everything that could be reasonably expected of the Contractor to avoid Sydney Trains or another Operator/Maintainer breaching any obligation it may have arising out of or in connection with the continuing operation of the railway system on a commercial basis;
 - (e) it must ensure:
 - i. access and egress for Sydney Trains or another Operator/Maintainer and its contractors to the Site to undertake regular inspections and to complete maintenance and repairs of the operator's infrastructure where required;
 - ii. access and egress to those parts of the Site required by Other Contractor(s) are made available and coordinated so as to minimise any interference with or disruption to the Contractor's Activities; and
 - iii. emergency egress routes (including routes to the Rail Corridor and its support system) are maintained at all times and that emergency systems (including the Sydney Trains emergency warning intercommunication system and fire alarm panels) remain operational throughout the duration of the Contract;
 - (f) it must provide a safe place for persons carrying out Rail Track inspections and/or maintenance work, for example, refuges in any hoarding/fencing constructed adjacent to the Rail Track;
 - (g) it must comply with any Sydney Trains or other Operator/Maintainer standards applicable to the Works including for work that is adjacent to an operating rail line and to live overhead wires;
 - (h) it must ensure that whilst undertaking the Contractor's Activities, no employees or Construction Plant (including, for example, by the slewing of cranes) of the Contractor, Subcontractors or consultants enter an operating Rail Corridor, except as permitted by Sydney Trains "RailSafe Network Rules"; and
 - (i) it must at all times, and to the satisfaction of the Principal's Representative, carry out the Contractor's Activities in a manner that will ensure the safety of all property and persons, including the general public, travelling public, station lessees, railway traffic, railway system personnel, road traffic and any person associated or engaged in connection with the Contractor's Activities.

6.2 Arrangements for Track Possessions

The Track Possessions available to the Contractor are set out in the Contract.

Where power isolation is required, the Contractor must specify what power is required to be shut down and the time and duration required for the power isolation. This information must be submitted to the Principal's Representative for review at least 16 weeks prior to each Track Possession.

For each Track Possession to be utilised by the Contractor, the Contractor must attend and incorporate the requirements from:

- (a) the “Tier 6 Possession Coordination Meeting” with Sydney Trains held approximately 12 weeks prior to the Track Possession. This meeting will decide the coordination of all activities in the Track Possession, working hours, movements of equipment and work trains in the Track Possession area;
- (b) the “Possession Coordination Meeting” with Sydney Trains held approximately two (2) weeks prior to the Track Possession to discuss train movements and safe working; and
- (c) the “Pre-Possession Meeting” with Sydney Trains, usually held prior to the Track Possession to confirm the detailed arrangements for the Track Possession and coordinate the activities of each party working in the Track Possession.

If a Track Possession involves an asset or partial asset being handed over to the Asset Owner or Operator/Maintainer (even if only for maintenance prior to it being commissioned), a Commissioning event and formal Asset Handover will be required. In these circumstances, the following documents appertaining to the assets being handed over are required to be submitted to the Principal’s Representative for review in accordance with the Contract at least six (6) weeks prior to the Track Possession:

- (d) Safe Work Method Statements;
- (e) residual risk assessments;
- (f) configuration materials including O&M manuals, drawings etc.
- (g) Design Documentation; and
- (h) any other documents required as directed by the Principal.

6.3 Additional Possessions

It is unlikely that, in addition to those specified in the Contract, weekend Track Possessions, the Operator/Maintainer’s resources and/or Track Possessions (with or without power) in overnight periods when trains are not running, will be available for the Contractor’s Activities. If the Contractor requires additional Track Possessions, power isolation and/or the Operator/Maintainer’s resources, they are to be arranged by the Contractor at the Contractor’s own cost. This includes reimbursing the Principal for any costs that it incurs in respect of granting the additional Track Possessions and procuring the Operator/Maintainer’s resources. In the case of an alliance contract, the allocation of these additional costs will be in accordance with the commercial framework of the agreement.

The Contractor must provide a written request for additional Track Possessions or power isolation of overhead and transmission lines with a notice period as specified in the Contract.

Upon a written request by the Contractor, the Principal’s Representative will seek to facilitate obtaining additional Track Possessions, power isolations and/or the Operator/Maintainer’s resources for the Contractor by arranging a meeting between the Contractor and the Operator/Maintainer. At this meeting or subsequent meetings, possible dates for Track Possessions, power isolations and/or additional Operator/Maintainer’s resources may be identified.

The Principal does not guarantee the granting of, and is not obliged to arrange additional Track Possessions, power isolations or Operator/Maintainer resources on any particular date, or at all.

6.4 Arrangements during Track Possessions

The Contractor may not have exclusive access to any Rail Tracks or areas within the vicinity of Rail Tracks during a Track Possession. The Contractor must coordinate the Contractor's Activities with those sharing the Track Possession, including parties involved in the operation or maintenance of the rail system and Other Contractors.

This includes, where required, the Contractor allowing for Operator/Maintainers' contractors and Other Contractors to pass through the worksite(s) during the Track Possessions. The extent of Operator/Maintainers' contractors' and Other Contractors' activities on or within the vicinity of the Rail Track during Track Possessions will be determined at the "Tier 6 Possession Coordination Meeting" referred to in clause 6.2.

The Contractor must ensure that all persons invited or brought onto the Site by the Contractor or Other Contractors, and those who enter an area within the Rail Corridor undertake all necessary Site inductions and obey all directions given by the Worksite Protection Personnel.

Prior to the end of the Track Possession, an appropriately qualified inspector holding the appropriate competencies must approve Completion of the relevant Works and sign off on "Sydney Trains Certificate of Practical Completion/Certification (W42F01)".

Any defects listed on W42F01 must be rectified by the Contractor to the satisfaction of the Principal within 5 Business Days of the issue of the relevant W42F01.

The Contractor must immediately comply with any instructions by the Principal's Representative to vary the program described in clause 6.5(b), or curtail the Contractor's Activities if the Principal's Representative considers that continuing with intended Contractor's Activities will result in a delay to returning the Track Possession and/or delay to trains.

The Principal may alter, cancel or curtail any Track Possession at any time.

If assets are being handed over to the Operator/Maintainer under a formal Asset Handover, then the Contractor must assist the Principal.

6.5 Planning and Managing Track Possessions

To ensure that Track Possessions are managed effectively and safely, the Contractor must:

- (a) prepare, maintain and update policies and procedures for planning and managing Track Possession work in accordance with the Sydney Trains Possession Manual; and
- (b) prepare and submit to the Principal's Representative for review for conformance with the "Sydney Trains Possession Manual", six (6) weeks prior to each Track Possession:

- i. a consolidated plan comprising all information required in advance of the Track Possession including that detailed in the Sydney Trains Possession Manual; and
- ii. a program including:
 - A. the elements of the Contractor's Activities to be completed prior to the Track Possession;
 - B. an hour by hour breakdown of the elements of the Contractor's Activities to be carried out during the Track Possession;
 - C. milestones and the time and date by which they must be achieved so as to ensure that the rail infrastructure can be reinstated within the allocated time and which, if not achieved by the nominated time, would result in the Contractor bringing work to an end and commencing reinstatement of the rail infrastructure and other works to avoid a delay in returning the Track Possession and/or delays to trains;
 - D. adequate allowance of time at the beginning and end of the Track Possession to safely remove and reinstate the affected rail infrastructure to operational condition and for providing and removing safeworking protection and the Operator/Maintainer inspections and certifications;
 - E. the specific risks to be managed during the Track Possession and the procedures to be followed in managing these risks;
 - F. any potential interface issue in any way connected with work carried out by an Other Contractor or involving the Operator/Maintainer's operational and maintenance activities; and
 - G. progress/program review meetings scheduled during the Track Possession as requested by the Principal's Representative and/or the Operator/Maintainer.

6.6 Certification of Work in Track Possessions

Before handover of an area at the end of any Track Possession the Contractor must provide to the Principal's Representative and, if required by the Principal's Representative, to the Operator/Maintainer; the following:

- (a) for any form of civil or structural works that will support operating Rail Track, written certification by the Contractor's designers (including design Subcontractors) that the relevant works are safely able to support the operating rail infrastructure;
- (b) for any adjustments to or interruptions of service to signalling, track, overhead wiring or high voltage infrastructure, written certification from the Contractor's designers (including design Subcontractors) that such infrastructure is suitable for operations and complies with the approved design;
- (c) for any adjustments to or interruptions of service to signalling, overhead wiring or high voltage infrastructure, written certification from a Sydney Trains' (or other

relevant Operator/Maintainer's) representative that such infrastructure is suitable for operations; and

- (d) all other infrastructure certification required by Sydney Trains or the relevant Operator/Maintainer and/or Asset Owner.

6.7 Rail Safety

The Contractor must ensure that where the Contractor's Activities involve work in or adjacent to the Rail Corridor or the rail environment, the Project Work Health and Safety Management Plan required in clause 4.3 includes provision for rail safeworking arrangements, based upon (without limitation) compliance with the Australian Network Rules and Procedures.

6.7.1 Project Work Notification and Work Activity Advice

The Contractor must complete and submit the relevant Operator/Maintainer's Project Work Notification or other applicable document to the Principal's Representative at least six (6) weeks prior to the planned works, including any works in a Track Possession. The Contractor must comply with the requirements of the "TfNSW/Rail Transport Operator Safety Interface Agreement".

A Work Activity Advice (WAA) must be produced by the Contractor using the form [TfNSW Work Activity Advice - 4TP-FT-105](#). Each WAA must cover a particular part of the Works and includes the SWMS applicable to that part of the Works.

The Contractor must conduct a pre-work briefing with all personnel involved, including the Protection Officer, prior to commencing the work.

6.7.2 Competencies

The Contractor must provide the Principal's Representative with a list of position descriptions which identifies whether each position is a Rail Safety Worker. The Principal's Representative may require alteration of the designation of Rail Safety Workers as nominated by the Contractor.

Any person supervising or setting up safe work arrangements for the Contractor's Activities on or in the vicinity of the Rail Corridor must hold the qualifications required by the Rail Transport Operator and the Principal.

The Contractor must ensure that no person undertakes Rail Safety Work unless they have been issued with a certificate of competency under the Rail Safety National Law.

The Contractor must consult with the Principal's Representative to obtain a determination as to when the Rail Industry Safety Induction (RISI) Identification Card is required for the Contractor's Activities. The Contractor must ensure that any visitors required to enter the Rail Corridor complete a Rail Industry Safety Induction.

6.7.3 Fatigue Management, Medical and Health Management

For workers carrying out Rail Safety Work the Contractor must apply the following fatigue, medical and health minimisation controls:

- (a) implement a fatigue management program that:

- (i) addresses the requirements of the Rail Safety National Law and this TSR;
 - (ii) restricts workers to no more than 12 hours worked at a time not including travel time to and from work, unless there is a declared Incident in which case work can be performed up to a maximum of 16 hours at a time, as long as workers are not required to drive a motor vehicle or operate heavy plant or equipment after the 12th hour;
 - (iii) restricts workers that have worked more than 12 hours from driving after finishing work;
 - (iv) includes periods of 11 hours rest away from work;
 - (v) restricts the maximum number of work days to 12 work days in 14 consecutive days;
 - (vi) minimises to five consecutive occasions where eight (8) hours are worked at night (i.e. after normal office hours) or four (4) consecutive occasions where 10 hours are worked at night or three (3) consecutive occasions where 12 hours are worked at night without a 48 hour rest break;
 - (vii) ensures employees receive a minimum of 48 consecutive hours free of work in a 14-day period; and
 - (viii) has the capacity to replace or relieve workers where unplanned or unavoidable extended hours have created a risk to employee health and safety;
- (b) inform such persons that they are subject to medicals and health assessments in accordance with the “National Standard for Health Assessments of Rail Safety Workers”;
 - (c) ensure that the “National Standard for Health Assessments of Rail Safety Workers” are undertaken and documented including re-examinations. The documented records must be maintained according to the State Records Act 1998 (NSW); and
 - (d) inform such persons that additional medical and health assessments may be required to be undertaken where they are involved in a safety accident or where there is reasonable cause for concern that person may be unable to perform work safely (such as upon return from a long illness).

6.7.4 Alcohol and Other Drugs

In addition to the requirements set out in clause 4.6, if the Contractor’s Activities involves work in or adjacent to the Rail Corridor and the rail environment, the alcohol and other drugs procedures must be in line with the Rail Safety National Law, and the testing regime must include prestart testing prior to Track Possessions.

6.7.5 Work on Track Methods for Working Safely

Unless specified by the issue of a safeworking notice by the Principal's Representative, the primary work on track methods for working safely are summarised as follows:

Construction Site: A site under construction without any rail traffic movements, or traction power systems being installed. Worksite Protection and RISI Identification are not required.

TfNSW Rail Site: A Principal managed and controlled rail site which has no interface access with other rail sites or rail systems. Work within or potential to impact the Danger Zone requires Local Possession Authority (LPA) in accordance with the Australian Network Rules and Procedures.

Should a TfNSW Rail Site encroach on the Danger Zone of any other adjoining Rail Transport Operator rail sites:

- (a) adjacent line protection must be implemented and managed in accordance with the rules of the adjoining Rail Transport Operator; and
- (b) an access interface is considered removed if points that allow entry and exit to the site are secured and a physical barrier is established at the limits of the TfNSW Rail Site.

Other Rail Transport Operator Rail Sites: Where the contracted work is undertaken within a rail site managed and controlled by another accredited Rail Transport Operator, the other Rail Transport Operator's Network Rules and Procedures apply.

6.7.6 Arrangements for Track Possessions

For each Track Possession to be utilised by the Contractor, the Contractor must conform to the requirements of the relevant Rail Transport Operator.

The Contractor may not have exclusive access to any Rail Tracks or areas within the vicinity of Rail Tracks during a Track Possession. The Contractor must coordinate the Contractor's Activities with those sharing the Track Possession, including parties involved in the operation or maintenance of the rail system and Other Contractors.

6.7.7 Worksite Protection Personnel

Worksite Protection is required for carrying out the Contractor's Activities within the Rail Corridor in accordance with the Australian Network Rules and Procedures and/or the requirements of the Rail Transport Operator.

The Worksite Protection Personnel are required to hold a minimum of Worksite Protection Personnel level 2 accreditation (PO2).

The Worksite Protection Personnel must brief all personnel undertaking the Contractor's Activities on the Worksite Protection arrangements at the Site at the start of each shift or as is required by the Contractor's Activities (and agreed by the Principal's Representative).

Where the Principal is to provide the Worksite Protection Personnel, the Contractor must provide 10 Business Days' notice in writing to the Principal requesting the number of Worksite Protection Personnel required.

6.7.8 Use of Rolling Stock, Hi-Rail Vehicles and Work Trains

Rolling stock and rail traffic are not permitted to travel or operate on the Site without the approval of the Contractor.

The Principal's Representative may also impose requirements, limitations and constraints on rail traffic travelling or operating on the Site.

To the extent that any part of the Contractor's Activities requires the use of hi-rail vehicles or work trains the Contractor must:

- (a) ensure that such vehicles are only operated by persons with appropriate competencies and by an organisation which holds accreditation as a "Rolling Stock Operator" (as that term is defined under the Rail Safety National Law);
- (b) ensure that hi-rail vehicles are duly checked and certified as being fit for their intended use at the start of each shift;
- (c) ensure the hi-rail vehicle has been certified as compliant and safe to use with the hi-rail modifications by the Original Equipment Manufacturer (OEM) or an independent competent engineer, including from a WHS and rail safety perspective;
- (d) ensure that the utilisation of hi-rail vehicles or work trains is appropriately addressed in the Contractor's procedures to ensure safe operations, to prevent injury and damage to infrastructure and to ensure that responsibilities are identified and documented;
- (e) assess the past record of potential Subcontractors to ensure that they comply with the Rail Safety National Law and relevant rail accreditation requirements. The results of these assessments must be made available to the Principal upon request;
- (f) set out and carry out regular reviews of the performance of train and hi-rail operators engaged for the undertaking of the Contractor's Activities (including at least one review after each major Track Possession or Incident, or in any event every three months). The results of these reviews must be made available to the Principal upon request; and
- (g) only use rolling stock, hi-rail vehicles and work trains authorised on the Vehicle Registration Database.

6.7.9 Swing Arm Plant – Rail Environment

The Contractor must ensure the use of restrictors for swing arm plant.

The Contractor's construction planning process must include the validation of the proposed method of work to be carried out on the day. This validation process must include the completion of a site specific risk assessment and development of a plant working diagram by the Contractor in conjunction with the Project Rail Safeworking Coordinator and any other required project personnel.

The Contractor's pre-work briefing must include the following items:

- (a) description of swing arm plant and equipment being used, including the type of restrictor(s) being used;

- (b) details of the “line in the sand” for the positioning of the chassis of the swing arm plant or equipment being used (including consideration of the size and reach of the swing arm plant or equipment);
- (c) arrangements for the provision of a spotter;
- (d) reference to the details included in the Worksite Protection Plan prepared by the Protection Officer that includes swing arm plant considerations; and
- (e) in the case of operations involving the use of a crane, details of the lifting plan developed for the Contractor’s Activities.

ANNEXURE A – Additional Project Requirements

Project Team to replace this page with Additional Project Requirements – see TSR Annexure A template (5TP-FT-426)

ANNEXURE B – List of Reference Documents

List of Reference Documents

- ISO 31000 (Risk Management Guidelines and Principles)
- RTA Traffic Control at Worksites Manual
- AS 1742.3-2009 Part 3 - Spoil Control Devices for Works on Roads
- RTA Guideline Traffic Control at Worksites 4th Ed (June 2010)
- AS 4817-2006 - Project Performance Measurement using Earned Value
- TfNSW Earned Value Management using Primavera P6 - 4TP-PR-143
- Royal Institute of Chartered Surveyors (RICS) Guidance Note 63/2010 Building surveys and technical due diligence
- AS 4349 Inspection of Buildings – General Requirements
- Building Damage Classification, by Burland et al, 1977 and Boscardin and Cording, 1989AS/NZS ISO 9001:2004 Quality Management Systems – Requirements
- TfNSW Property Compliance Register - 2TP-ST-175
- AS/NZS ISO 14001:2004 – Environmental Management Systems – Requirements with Guidance for Use
- TfNSW Environmental Incident Classification and Reporting - 9TP-PR-105
- TfNSW Environmental Incident/Non-Compliance Report - 9TP-FT-101
- TfNSW Guide to Environmental Control Map - 3TP-SD-015
- TfNSW Pre-Construction Minor Works Approval - 9TP-FT-202
- TfNSW Guide to Compliance Monitoring and Reporting using PECOMS - 9TP-SD-012
- TfNSW Generic Work Health and Safety Operational Risk Register - 30-SD-101
- TfNSW Generic Rail Safety Risk Register - 30-SD-038
- AS 4024.1 Safeguarding of Machinery
- AS 61508 Functional safety of electrical / electronic / programmable electronic safety-related systems
- NSW Government Work Health and Safety Management Systems and Auditing Guidelines
- Transport Projects Style Guide for Contractors and Consultants - 8TP-ST-100
- Transport for NSW Editorial Style Guidelines
- TfNSW Work Activity Advice - 4TP-FT-105

ANNEXURE C – Property Compliance Checklist

Property Compliance Checklist Pre Site Occupation/Pre Construction Commencement

Compiled by: _____

On behalf of: _____

Contract #: _____

Date: _____

#	Issue	Circle relevant answer and add comment	Attachment
1	Has the Contractor been liaising with the Principal's Property Manager?	Y N NA Comment: [insert text here]	
2	Have all properties affected by the project been identified?	Y N NA Comment: [insert text here]	
3	Has a list of all affected properties been issued to the Principal?	Y N NA Comment: [insert text here]	
4	Are all properties owned by the Principal?	Y N NA Comment: [insert text here]	
5	Is access required to properties owned by other parties?	Y N NA Comment: [insert text here]	
6	Are all agreements in place with other landowners to permit the contractor to undertake the works?	Y N NA Comment: [insert text here]	
7	Have all surveys been conducted?	Y N NA Comment: [insert text here]	
8	Have all surveys been cross-checked with the designs?	Y N NA Comment: [insert text here]	
9	Do any of the proposed works fall outside the property / site boundaries?	Y N NA Comment: [insert text here]	
10	If so, has the Contractor got agreements to build on the adjoining	Y N NA Comment: [insert text here]	

#	Issue	Circle relevant answer and add comment	Attachment
	land?		
11	Are new easements, stratum, MOU's or WAD's with stakeholders required for the project?	Y N NA Comment: [insert text here]	
12	Have any new easement, stratum, MOU's or WAD's been drafted and issued to the Principal for review?	Y N NA Comment: [insert text here]	
13	Have all property Pre-Condition Surveys been conducted and submitted?	Y N NA Comment: [insert text here]	
14	Has the Asset Management Plan been considered in design?	Y N NA Comment: [insert text here]	
15	Are there any other property risks?	Y N NA Comment: [insert text here]	

RECEIVED by TfNSW

Signed: _____

Received by: _____

Date: _____

REVIEWED by Property Representative

Signed: _____

Name: _____

Date: _____

Acceptable? (Conforms to contract requirements): Y/N provide reasons:

Comments provided: Y/N (attach comments)

No Comments or no further Comments: Y/N

ANNEXURE D – Environmental Records

Environmental Records

The following lists the environmental records required by this TSR. All records must be made available to the Principal's Representative. The Contractor must ensure that the Principal's Representative has the latest version of the records at all times.

Where the Contractor is required to forward records to the Principal's Representative, the Contractor must submit one original and three copies (one of which is unbound) of each document (including draft and final reports, specifications, drawings, plans, etc.) for the Principal's review. In addition the Contractor must also submit an electronic copy on CD/DVD in PDF and native formats (such as Microsoft Word, Microsoft Excel, CAD in *.dwg or *.dgn) of documents.

Required Record or Reference
Copies of all completed forms, templates required under any of the documents/guidelines referenced in Annexure B
Contractor's noncompliance, incident, near miss, non-conformance reports and register
Preventive and corrective action reports and register
Environmental audit reports
Environmental Control Maps
Index of all environmental records (prior to Final Completion)
Induction and training records
Records/checklists of inspection and testing
Records of environmental management reviews for the project
Register of equipment, calibration frequency and certificates
Surveillance, audit of subcontractors environmental performance and controls