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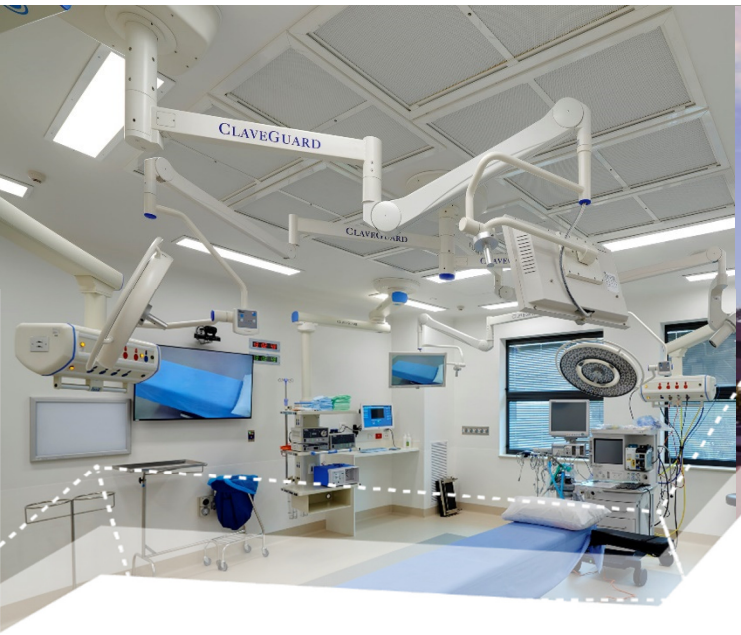
DEXUS PROPERTY GROUP

North Shore Private Hospital – East Tower
DEXUS Property Group

Preliminary Construction Management Plan

August 2016



partners for excellence

Preliminary Construction Management Plan

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1 INTRODUCTION

1.1 Description of the Works

A. Purpose of the Project

The proposed North Shore Private Hospital - East Tower (NSPH-ET) Project is located at 12 Frederick Street, St Leonards NSW 2065, in the vicinity of the North Shore Private Hospital. The proposed hospital will become an essential part of the local health care infrastructure, supplementing the existing health care system and catering for the growing population.

The proposed hospital will consist of 5 levels above ground and 3 levels below ground where parking will also be provided. The Project will be separated into two functional areas. The private hospital will comprise of 128 inpatient beds, operating theatres, emergency, treatment facilities and support services (administrational facilities). The Medical Centre will consist of a Radiology Diagnostic Imaging Centre, General Practitioner Centre, Consulting Rooms and Retail Facilities.

B. Location

The proposed NSPH-ET Project is located at 12 Frederick Street St Leonards NSW 2065 and bounded by Westbourne St to the South, Reserve Rd to the West, and Commercial Factory buildings to the North and East. The site area is 5,060m² with a building footprint of approximately 4,150m².

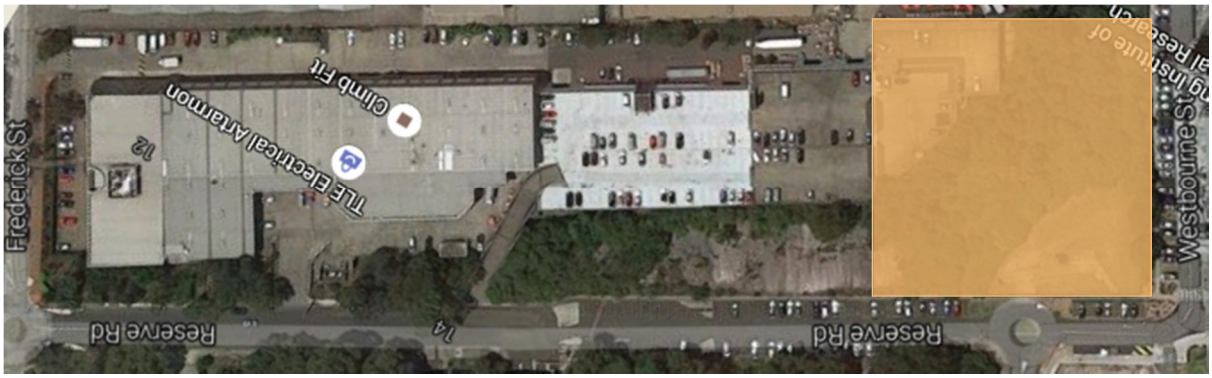

Figure 1 - Site Location

1.2 Current Site

The site is currently vacant, with vehicular access from Frederick St.

1.3 Purpose of this Plan

This Construction Management Plan (CMP) has been prepared in response to an Early Contractor Involvement (ECI) for the NSPH-ET Project. This Plan is one of a number of Plans to be developed to manage obligations as part of the Project's delivery.

This CMP is written with the purpose of communicating to the NSPH-ET Project representatives the construction management objectives, strategies, methodologies and actions for the execution of the works under the contract. This CMP has been prepared as part of the SEARs submission, however further consultation with the relevant authorities will be required for the final CMP submission.

After contract award, this Plan will be reviewed and updated on a regular basis to reflect design development, and the developing construction methodology.

This CMP is to ensure the construction team and other project stakeholders understand the objectives and the procedures and processes in place as necessary for the successful execution of works under the Contract.

1.4 Objectives

The primary objective of this CMP is to meet the obligations set out in the Preliminaries document. Where called up in other documents the requirements of the plan are summarised on the Self Verification Checklist Contained in ***Appendix A*** of this document.

The project objectives can be summarised as follows:

- Develop a strong working relationship with DEXUS Property Group, Ramsay Health Care and its project stakeholders
- Exceed the expectations of the project representatives and client to the greatest degree possible
- Develop and maintain a cooperative and harmonious environment from commencement through to completion across all levels of the Project
- Complete the Project in accordance with the requirements of the Contract documents
- Complete the Project within the timeframe identified in the Contract.
- Provide a safe and accident free workplace
- Avoid disputes wherever possible. In the event of disputes arising at any level on the Project, work collaboratively to resolve them in a mutually beneficial manner.
- Deliver a product which displays a high quality of workmanship
- Construct the Project within the allocated budget and apply a balanced approach to the process of tendering / awarding of Subcontracts.

The strategies to achieve these objectives are outlined in the following subsections.

1.5 Reference Documents

- Preliminaries Document

1.6 Precedence

Where ambiguity is detected between the procedures and requirements in this plan and Statutory Authority Requirements then the procedures nominated in this plan will take precedence.

2 AUTHORITY APPROVAL

NSPH-ET Development Consent is yet to be sort or granted.

The Consent Matrix for the Development Approval Conditions will need to be obtained by the client and the conditions of the approval considered and documented within the CMP.

2.1 Licenses and Permits

The Contractor will submit applications as necessary for Works Zones, Road openings and Hoarding applications to Willoughby Council.

2.2 Hours of Work

Once the Planning Project Approval is received the Contractor will work in accordance with those hours, it is anticipated that the standard construction hours will be:

Working Day	Working Hours
Monday to Friday	0700 to 1730
Saturday	0730 to 1500
Sunday and Public Holidays	Not permitted

3 REGULATIONS AND LEGISLATIVE REQUIREMENTS

3.1 Legislation and Regulation

All work shall be conducted, as appropriate, in accordance with (but not limited to) the following environmental regulatory and legislative requirements:

- Environmental Planning and Assessment Act 1979 and Regulations
- Protection of the Environment Operations Act 1997 and Regulations

- Environmental Protection and Biodiversity Conservation Act 2000 (Cth)
- Heritage Act 1997 and Regulation
- Heritage Amendment Act 2001 and Regulation;
- Australian Heritage Commission Act 1975 (Cth)
- Contaminated Land Management Act 1997 and Regulation
- Soil Conservation Act 1939 and Regulation
- Threatened Species Conservation Act 1995 and Regulation
- Endangered Species Protection Act 1992 (Cth)
- Noxious Weeds Act 1993 and Regulation
- Native Vegetation Conservation Act 1997
- Companion Animals Act 1998
- Dangerous Goods Act 1975 and Regulation
- Environmentally Hazardous Chemicals Act 1985 and Regulation
- Sydney Water Act 1994 and Regulation
- Water Act 1912 and Regulation
- Water Management Act 2001 and Regulation;
- Waste Avoidance and Resource Recovery Act 2001
- Local Government Act 1993
- Worker compensation legislation
- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011
- Building Code of Australia

3.2 Codes of Practice and Australian Standards

All work shall be conducted, as appropriate, in accordance with (but not limited to) the following environment and construction-related codes of practice and Australian Standards:

- Australian Standard AS 2436-1981: Guide to Noise Control on Construction, Maintenance and Demolition Sites;
- Australian Standard AS 2601 – 2001: Demolition of Structures;
- Australian Standard AS 4576 – 1995 Scaffolding
- Australian Standard AS 2601 – 2001 Demolition
- Australian Standard AS 3610 – 1995 Formwork
- Australian Standard AS 3600 - 2001 Concrete Structures
- Australian Standard AS 2865 - 2009 Safe Working in a Confined Space
- Australian Standard AS 4839 – 2001 Safe Use of Portable & Mobile Oxy-Fuel Gas Systems
- Australian Standard AS/NZS 3012- 2003: Electrical Installations - Construction and Demolition sites
- Australian Standard AS2436 – 1981: Guide to Noise Control on Construction, Maintenance and Demolition Sites;
- BS6472 – 1992: Evaluation and Human Exposure to Vibration in Buildings (1 to 80 Hz);
- BS7385 Part 2 – 1993: Evaluation and measurement of Vibration in Buildings Part 2;
- Manual Handling NOHSC: 1001 – 1990

- Synthetic Mineral Fibres NOHSC: 1004 – 1990
- Management and Control of Asbestos NOHSC: 2018 - 2005
- Department of Conservation and Land Management, CALM (1992): Urban Erosion Control and Sediment Control;
- NSW DEC (2007): Noise Guide for Local Government;
- National Environment Protection Council (1998): National Environment Protection Measure (NEPM) on Ambient Air Quality;
- NSW Department of Housing (1998): Managing Urban Stormwater – Soils and Construction;
- NSW DEC (2004): Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes;
- DEC, NSW (2005): Approved Methods for the Modelling and Assessment of Air Pollutants in NSW.
- DEC, NSW (2007): Approved methods for the Sampling and Analysis of Air Pollutants in NSW;
    - Code of Practice – How to Manage Work Health & Safety Risks
    - Code of Practice – Work Health & Safety Consultation, Co-ordination and Co-operation
    - Code of Practice – Excavation Work
    - Code of Practice – Formwork
    - Code of Practice – Labelling of Workplace Chemicals
    - Code of Practice – Moving Plant on Construction Sites
    - Code of Practice – Mono-strand Post – Tensioning of Concrete Buildings
    - Code of Practice – How to Safely Remove Asbestos
    - Code of Practice – How to Manage & Control Asbestos in the Workplace
    - Code of Practice – Work in Hot or Cold Environments
    - Code of Practice – Amenities for Construction Work
    - Code of Practice – Overhead Protective Structures
    - Code of Practice – Electrical Practices for Construction Work
    - Code of Practice – Pumping Concrete
    - Code of Practice – Cutting & Drilling Concrete and other Masonry Products
    - Code of Practice – Safe Handling of Timber Preservatives and Treated Timber
    - Code of Practice – Safe Use of Synthetic Mineral Fibres
    - Code of Practice – Confined Spaces
    - Code of Practice – Managing the Risk of Falls at Workplaces
    - Code of Practice – Hazardous Manual Tasks
    - Code of Practice – Managing the Work Environment & Facilities
    - Code of Practice – Managing Noise & Preventing Hearing Loss at Work
    - Code of Practice – Work Near Overhead Power Lines
    - Safe Erection, Altering & Dismantling Scaffolding – Industry Safety Standard

4 PROJECT TEAM

4.1 Project Delivery Team

The structure of the Project Delivery Team shall be confirmed by the construction Contractor, identifying each person's role within the Project and the hierarchy of the Project.

4.2 Key Contacts & Responsibilities

The key personnel proposed for the project are to be defined, however not limited to:

Key Personnel			
Name	**Role**	**Responsibilities**	**Reports To**
	Project Director	• Be the senior point of contact for the Principal's Representative • Ensure project schedule and budget • Deliver DEXUS Property Group / Ramsay Health Care vision and objectives • Provide overall team leadership • Develop a high performance culture • Drive a safe working culture • Develop and maintain an effective working relationship with North Shore Private Hospital (NSPH) client and representatives • Mentor and guide the Management Team • Ensure the Project Team is adequately qualified • Approve expenditures, milestone schedules, valuation and other matters related to the overall project execution • Identify the need for specific procedures or amendments necessary to fulfil the objectives of the Project	Managing Director
	Project Manger	• Be the senior point of contact for the Principal's Representative • Develop and maintain an effective working relationship with The Children's Medical Research Institute • Provide team leadership • Develop and monitor the program to ensure milestones are being achieved	Project Director

Key Personnel			
Name	**Role**	**Responsibilities**	**Reports To**
	Project Manger	• Allocate sufficient resources to complete works under the contract • Allocate adequate resources to implement workplace health, safety and environmental controls. • Promote safety and environmental awareness in site meetings • Verify progress payments and variations under the contract • Advise NSPH of risks to the contract and available mitigation measures • Responsible for the implementation of all management plans and to ensure resources are available to allow the management plans to be implemented • Provide contract support to the Project Manager • Review and engage in contracts with consultants and subcontractors • Manage the contracts with subcontractors and consultants • Prepare progresses payments and variations advice	Project Director
	Site Manager	• Provide buildability advice on the design and construction phases of the Project • Lead the Construction Team in the execution of the physical works • Ensure all workplace health and safety issues are adequately controlled • Develop and monitor the contract program • Create target program for the site teams • Advise the Community Liaison Manager of up and coming construction activities • Ensure all requirements under the WHS Act and Regulations are being met on the sites. • Ensure compliance with all management plans	Project Manager
	WHS, Environmental & Sustainability Manager	• Co-coordinate staff training in the implementation of the Contractor's Safety & Environment System and specific safety topics. • Assist the Project Manager in the implementation and monitoring of the Project Safety & Environment System.	Project Manager

Key Personnel			
Name	**Role**	**Responsibilities**	**Reports To**
	WHS, Environmental & Sustainability Manager	• Assist management personnel in meeting their obligations under the relevant WHS legislation / Regulation, Codes of Practice and Australian Standards. • Inform management personnel of changes in the relevant WHS legislation / Regulations, Codes of Practice and Australian Standards. • Conduct Safety & Environment audits of AW Edward's sites and reporting the findings to the respective Project Manager and/or Site Manager / Foreman. • Maintain a library of safety data sheets (SDS) at Head Office, which are to be provided to sites on request. As required by legislation, the SDS library will be updated regularly to ensure that SDS's are replaced every 5 years. • Collate and report on monthly Safety & Environment System records from site. • Manage and track corporate sustainability goals and metrics for the business. • Ensure compliance with all relevant legislation and standards. • Advise on how to find environmental benefits and manage social issues. • Outlines a monitoring program that includes the frequency of monitoring and maintenance and includes a check lists of equipment/components that should be inspected • Identify an appropriate response to rectify systems that are working outside of the target that includes life cycle cost analysis of existing conditions and improvement options • Setting and tracking the targets for local and sustainable material procurement	Project Manager

4.3 24 Hour Contact

The 24 hour contact person for the Project will be confirmed in due course.

5 PRE CONSTRUCTION PLANNING

5.1 Communication

A. Pro-active & Co-operative Management

A pro-active approach to all aspects of the Project will be applied to ensure a high level of control is exercised and any potential problems can be identified and responded to as early as possible.

A team pro-actively managing the Project by focusing closely on planning, programming, forecasting and monitoring activities will be nurtured. This focus will minimise the potential for problems to occur. The Construction Team will continue to develop contingency plans to address the possibility of problems actually arising. This approach is fundamental to the successful delivery of the Project.

Despite the best endeavors of all stakeholders, problems or unforeseen circumstances may arise. The Construction Team will actively resolve or help to resolve such problems in the most expedient and efficient way possible. Project staff with the experience and skills needed to solve complex problems in projects of this nature will remain committed to this project. In the event that unforeseen problems are encountered, the Team will immediately initiate and implement a problem resolution plan to minimize any impacts.

The Construction Team will encourage and promote a co-operative and harmonious project environment. This applies to relationships between the Local Health District (LHD), clients, employees, consultants, suppliers, subcontractors, unions and other stakeholders. The team objective will be to eliminate conflict wherever possible and at all levels, as this can be a major impediment to progress and meeting project objectives.

B. Good Communication

Success for the Project will rely on good and effective communication between all parties. This means rapidly sharing and exchanging information with all project stakeholders and developing cooperative relationships with the Principal's Representative, DEXUS Property Group, Ramsay Health Care, the Local Health District and the relevant consultants.

Systems for both formal and informal communications are to be agreed. The Construction Team will commit to ensuring communications are timely and any surprises are minimised. The Team will ensure North Shore Private Hospital and its representatives are comfortable with the information provided to make timely and appropriate decisions.

5.2 Construction Communications Plan

A Construction Communications Plan (CCP) may be developed to provide details of the coordination and management of communications activities that will be undertaken during the construction phase of the North Shore Private Hospital - East Tower Project. This CCP provides the framework for communication between the Hospital, Project Team, the LHD and community stakeholders.

In particular, the aims of the plan are to:

- Identify all proposed communication and consultation tools to be used i.e. information staff, notifications, advertisements and signage;
- Ensure that there are procedures in place for managing issues if/as they arise;
- Policies and procedures for handling community complaints and enquiries, and for handling of media enquiries;
- Details of the Contractor's nominated 24-hour contact for management of complaints and enquiries.

Ensure all communication strategies are approved by Client Representatives before implementation.

5.3 Stakeholder and Community Liaison

The Construction Team will need to develop relationships with the stakeholders and communities surrounding the Project via open and transparent communication. The Team will need to recognise this is a high profile project and management of stakeholders and the community will be instrumental in a successful project outcome.

The Construction Team will need understand the responsibilities of the Principal Contractor in relation to stakeholder consultation and community relations management for the Project. The Contractor will need to support DEXUS Property Group and Ramsay Health Care in communicating and consulting with the LHD, other relevant stakeholders and communities throughout the course of the Project to meet the following key objectives:

- Ensure the reputation of DEXUS Property Group, Ramsay Health Care and their stakeholders are maintained during the Project
- Ensure any potential risks that may affect stakeholders or neighbouring sites are identified, appropriate controls implemented and communicated to those impacted
- Provide a framework, including policies, processes and procedures for communications management to ensure they are timely, relevant, accurate and consistent
- Ensure all workers and subcontractors are aware of and comply with these policies and procedures
- Ensure relevant, accurate and timely information is provided on construction activities and potential impacts to the local community
- Manage all correspondence, complaints and community contacts in a professional, efficient, timely and effective manner
- Develop and maintain robust relationships with the LHD, local communities, stakeholders, Council, the Principal and other contractors as appropriate so the Project can be delivered on time and on budget

The Contractor may be required to develop a Stakeholder and Community Relations Plan which will outline how the above objectives will be achieved.

A. Avoiding Disruption to the Local Community

As the site is located near a public hospital and local medical facilities, specific measures will be implemented to minimise local community disruption surrounding the Hospital.

To ensure a harmonious relationship with the local community, the client and the construction activities, the Construction Site Management Team will liaise with the surrounding stakeholders, conduct regular meetings during which any issues will be discussed and undertake public education exercises such as letter drops to mitigate the impact of the construction process on the area.

The purpose of community meetings and notices is to inform the community of the progress of the works, upcoming activities and any changes to previous issue of plans.

The notices will provide the community with an opportunity to provide comment on the construction activities.

5.4 Liaising Local Medical Facilities

Liaising with the LHD and local medical facilities will require prompt and professional communication to ensure they are informed as to the progress of the NSPH-ET works and matters that require notice to be given to the specific personnel potentially affected.

Part 5 of NSPH-ET-CCP-001 makes provision for identification of stakeholders relating to the NSPH-ET Project. Local medical facilities and residents will be listed as a stakeholder in the “for construction” issue of the plan.

The Contractors’ communication with the Hospital may be outlined in the Communications Plan. Details will be finalized upon commencement of the work.

5.5 Adjoining Properties

A. Photographic Survey of Adjoining Properties

The survey (completed prior to the demolition taking place) will be revisited to close out any issues arising. This will be supplemented with separate reports to record the conditions prior to the main works commencing.

B. Dilapidation Survey

The Contractor will undertake a dilapidation survey which will detail the current structural condition of the site and adjoining areas, including all existing fences, adjoining buildings, infrastructure, roads, crossovers etc. The dilapidation survey will include a written description and comprehensive photographic record of existing conditions.

The Contractor will undertake periodic inspections of adjoining properties and infrastructure to confirm no damage has occurred as a result of the execution of the works.

Copies of the dilapidation surveys will be issued to the PCA, Council, Clients Representative and the Planning Authority.

At the completion of construction, a post-construction dilapidation report will be completed and provided to Council and the Department of Planning.

C. Public Risk Insurance Policy

For the NSPH-ET Project, the Contractor will provide the public liability insurance policy of no less than $20M for the duration of the works.

5.6 Safety and Environment

A. Public Safety and Amenity

The safety of the general public is paramount. The Contractor will ensure that the general public is protected from activities occurring on the site.

If not managed correctly, construction sites can create risk to the general public who move around the site or who adjoin them. Examples of the hazards that need to be managed include:

- Changes to the surface level
- Excavations, holes and trenches
- Falling material and debris
- Plant and equipment
- Dust, vapours or other hazardous substances
- Noise
- Vibration
- Movement of vehicular traffic

The construction site will be kept neat and tidy to maintain public safety and local amenity. Where activities occur outside of the site boundaries such as works to local authority assets, steps will be taken to ensure the impact of the work is kept to a minimum.

B. Work Health & Safety

The Contractor will develop a Workplace Health and Safety (WHS) Management Plan that complies with the WHS Act 2011 and WHS Regulations 2011.

The 'for construction' WHS Management Plan will be submitted prior to construction work commencing on site.

Further to the WHS Management Plan, the Contractor will complete a WHS Management Monthly Report in accordance with the Contract documents.

As evidence of commitment to WHS Management, the Contractor will:

- Carry out all activities in compliance with the Workplace Health & Safety Act 2011, and the Workplace Health & Safety Regulation 2011
- Hold and maintain an accredited occupational health and safety & rehabilitation management system by a NSW Government agency that complies with the WHS&R Guidelines, for as long as any activities are carried out
- Carry out all activities in compliance with the NSW Government Code of Practice for Procurement
- Comply with all WHS policies, procedures and measures implemented or directed by the Principal
- Create a safe working environment for all activities, ensure the safety of all authorised personnel on the Site and other work sites, and ensure no unauthorised individuals gain access to the site or other work sites
- Regard and ensure the safety of the public especially at all sites

A draft of the WHS Management Plan will be provided prior to construction by the Contractor.

C. Environmental Management

The Contractor will develop an Environmental Management Plan (EMP) that complies with environmental legislation.

The EMP will describe the environmental strategy, methods, controls, and requirements for the execution of the NSPH-ET Project. The EMP should be read in conjunction with the WHS Management Plan. In accordance with the contract documents, the 'for construction' EMP will be submitted before commencing work on the site.

The primary objective of the EMP is to provide a framework of procedures to minimise the impacts of the construction of the Project on the environment.

The secondary objectives of the EMP are to provide certainty of delivery of the prescribed environmental outcomes during all phases of the Projects' construction and to implement a system for compliance with all applicable requirements, obligations and commitments for the Project to ensure:

- The Contractor is compliant with all obligations and commitments from the pre-construction environmental assessment process
- The Contractor is compliant with the Conditions of Approval
- The Contractor meets all relevant legislative requirements
- All licenses, approvals and/or permits required to construct and/or operate the Project have been granted
- Compliance with other non-legislative requirements and commitments including:
    - Australian Standards and Guidelines
    - Best practice environmental management
    - Section 4 of the NSW Environmental Management System Guidelines 1998
- ESD Measures

D. Noise & Vibration Management

The Contractor will be committed to ensuring that no works significantly impact on local background noise or vibration limits at the NSPH-ET Project. The Contractor will develop a Noise and Vibration Management Plan which will document how the construction noise and vibration objectives will be managed.

The objective of the Noise & Vibration Management Plan is to:

- Ensure that construction works do not significantly impact background noise levels around each site, and that applicable guidelines and regulations are met;
- Ensure all equipment operates within the applicable noise levels; and
- Ensure that construction works do not cause sufficient vibration to damage surrounding buildings, and comply with the applicable guidelines and regulations.

i. Noise Management

It is anticipated that conditions on disruptive noise to the Project will be:

- Periodic attended noise measurements during the potentially worst case periods of the excavation.

The Noise and Vibration Management Plan will detail the management controls to achieve the prescribed noise objectives.

ii. Vibration Management

Should a Construction Vibration Management Report be produced, it would be expected that the Contractor understand the construction vibration objectives and conduct vibration monitoring continuously during the proposed period of excavation works. The monitors should be set to record all vibration over a trigger level and should alarm via SMS in the event vibration exceeds the levels or level threshold. Vibration monitors should be located at the following positions:

- Within the potentially worst affected hospital building receiver to the excavation site to be confirmed if deemed necessary.

iii. Proposed equipment

Proposed equipment, power requirements, set up communication protocols, triggers and software will be detailed further in the 'for construction' CMP. Furthermore, a detailed Noise and Vibration Management Plan will detail the management controls to achieve the prescribed vibration objectives should the plan be deemed necessary for the Project.

E. Dust Management

The management of construction activities is important to ensure dust and exhaust emissions of plant and equipment are controlled to an acceptable level.

The Contractor will develop a strategy for dust control, which will be included in the EMP. This strategy will include control measures and document how these measures are to be implemented and monitored.

The Contractor will need to understands the importance of adequate dust control with consideration to the operation of the adjoin properties.

F. Soil & Water Management

A comprehensive Soil & Water Management Plan (SWMP) will be developed and will be contained within the EMP.

The Contractor will need to ensure that no works significantly impact soil and water in and around the construction sites.

The objective of the Soil & Water Management Plan is to:

- Ensure that construction works do not significantly impact on the movement of sediment and soil across the site in the form of erosion
- Ensure that construction works do not significantly impact on the quality of site run-off, causing potential turbidity and chemical contamination in stormwater and local waterways

G. Hazardous Materials

i. Ground Contamination

The site has the material classification of General Solid Waste (GSW). Soil testing and classification will be completed prior to removing any material from site.

The Contractor must understand the Office of Environment and Heritage (OEH) requirements surrounding the identification, testing and tipping of different waste classifications, along with the chain of custody requirements related to the tipping of Restricted Solid Waste (RSW) and any material containing asbestos. WorkCover NSW is also quite prescriptive with the handling of asbestos.

H. Waste Management

A Waste Management Plan may be developed if deemed necessary (WMP), included at ***Appendix B***. This plan will be submitted to the PCA and local Council, prior to commencement of work.

The Waste Management Plan should outline how the Contractor will handle the waste management on the NSPH-ET.

The Contractor should ensure they implement appropriate methods of waste minimisation, recycling and disposal and spoil management.

The objectives of any Construction Waste Management Plan (CWMP) are as follows:

- Comply with the ESD Initiatives;
- Ensure that waste generation is avoided as a priority;
- Ensure that environmentally sensitive work practices are followed within waste minimisation programs;
- Ensure that, wherever practicable, waste materials are recycled/re-used;
- Ensure that the disposal of all liquid and non-liquid wastes is in accordance with the EPA regulations;
- Ensure that spoil from sites is managed appropriately to minimise environmental and health risks;
- Ensure that the air quality surrounding sites is appropriately managed;
- Ensure that all spoil is disposed of to prevent contamination of any lands; and
- Identify the major waste streams on the Project.

5.7 Quality Management

A project-specific Quality Management Plan (QMP), which stipulates the processes and procedures to be implemented in order for the works and services to meet the project requirements.

The Contractor's management system should be accredited to AS/NZS ISO 9001:2000 (Quality), which will be the basis for development of the project-specific Quality Management Plan.

The plans will include the processes and activities that determine quality policies, objectives and responsibilities so that the Project will satisfy the level of quality required.

The primary quality processes to be established and implemented for the Project are as follows:

- Quality Planning
- Quality Assurance
- Quality Control

In accordance with the contract documents, the QMP will be issued within 28 days of the award of contract.

5.8 Industrial Relations

The Industrial Relations Management Plan will be developed to outline how the Contractor will manage industrial relations on the Project.

The Contractor will comply with the NSW government *Industrial Relations Management Guidelines* and manage all aspects of Industrial Relations.

The objectives of the Industrial Relations Management Plan (IRMP) are as follows:

- Provide a base for the successful completion of the Project in relation to safety, cost, quality, community and environmental outcomes;
- Clearly identify responsibilities for industrial relations management on the Project;
- Ensure that there is minimal disruption to the construction program due to industrial issues;
- Identify real and perceived industrial risks to the Project, processes and actions, to manage them and any emergent industrial risks;
- Provide a positive impact to the workplace culture;
- Enhance positive relationships with industry parties; and
- Ensure compliance with the applicable framework.

The Industrial Relations Management Plan will be developed and issued when required.

5.9 Traffic & Pedestrian Management Plan

A Traffic and Pedestrian Management Plan will be developed which details how traffic and pedestrian access will be managed on the NSPH-ET Project, this may be in addition to GTA Consultants current CTMP.

Key issues for traffic and pedestrian management during the construction include:

- Ensure maximum safety of on-site personnel, pedestrians, cyclists, commuters, residents and drivers;
- Minimise environmental nuisance and impact as a result of construction traffic;
- Ensure construction traffic does not interrupt existing traffic flows on the local road network;
- Safe operation of buses and other transport services during construction;
- Establish strict scheduling of vehicle movements to ensure there are no vehicles waiting off the site;
- Have no vehicles arrive at the site outside the site working hours;
- Encourage site workers to utilise local public transport system and car sharing wherever possible;
- Timely and effective implementation of traffic management measures; and
- Fulfilling Council requirements.

The Contractor will liaise with Willoughby City Council to obtain endorsement of the Traffic and Pedestrian Management Plan.

5.10 Archaeology

We are not aware that the site contains material of archaeological significance. In the event that any material is found on the site considered to be of archaeological significance, the Contractor will cease works in the immediate area and notify the Principal's Representative for further direction.

5.11 Flora & Fauna

We are not aware that the site contains any items of ecological significance.

5.12 Commissioning

In order to ensure compliance with all the requirements of the Project, the Contractor will implement the Commissioning Management Plan which will embrace all activities under the contract, specifically relating to inspections and the testing necessary for commissioning.

The Commissioning Management Plan will be developed as systems are specified and design details are refined.

The Commissioning Management Plan will provide:

- Presentation of commissioning procedures for the project installations to the Principal's Representative;
- Identification of systems to be commissioned;
- Verification of installed system performance and compliance with the specified design for each installation as defined within the Contract;
- Certification as required by the Contract;
- Test Record Sheet management process;
- Implementation of corrective processes and action, where this is deemed necessary under the Contract;
- Acceptance criteria;
- Confirmation of the roles and responsibilities of key owner/operator stakeholders in the commissioning process and procedures;
- Confirmation that completed building works complies with all requirements of the Building Code of Australia (BCA), the Fire Strategy and Safety Assessment Report (FSSAR) and applicable Australian Standards;
- Compliance with Greenstar requirements; and
- Appropriate training to all owner/operator staff before handover.

To assist with the planning and verification of the Commissioning Management Plan for the NSPET Project, the Contractor may engage an independent Commissioning Advisor.

If engaged, the scope of the Commissioning Advisor role may be defined as follows:

- Commissioning Management Includes complimentary systems such as:
    - *Mechanical Services* – Essential services systems, steam, medical gases
    - *Electrical services* – Lighting controls, emergency lighting, CCTV, access control, emergency lighting, CCTV, access control, communication, data. MATV, electrical essential services, back-up power systems, UPS, diesel generator, fire fan control and fire indicator panel.
    - *Fire Services* – Sprinkler, hydrant and hose reel systems.
    - *Hydraulic Services* – Stormwater drainage and grease arrestors

The Commissioning Management Plan may be developed in consultation with the Contractor, the Commissioning Advisor and Services subcontractors.

5.13 Subcontractor Assessment

The thorough assessment of subcontractors is critical to the successful completion of the NSPH-ET Project.

The Contractors' Management System should include procedures for the careful assessment of subcontractors during the letting process. The contract documentation given to all tendering subcontractors outlines the project requirements, should the tenderer be successful.

During the Project, the Contractor should establish procedures for verification of the subcontractor's compliance with the industry schemes and the appropriate awards and workplace arrangements.

The Contractor must understand the criticality of selecting the correct subcontractors for this type of project. The detailed interface between the services and the complexities related to hospital works requires subcontractors with experience in similar projects.

During the tender period the Contractor should where possible identify subcontractors with previous health experience.

5.14 Defect Completion

A. Introduction

In reality many projects are completed defect free or close to same. Many items referred to as defects are in fact outstanding items or items that require attention. These outstanding items are often the result of time pressures builders are under, leading to incomplete work rather than defects.

The Contractor should recognise this as the first step to a defect-free completion. That is, allow sufficient time in the program to complete the work. Once sufficient time is available the builder can then concentrate on procedures and processes to ensure the works are completed.

The Contractors' procedures and processes should start with the Project Quality Management Plan. Refer to this plan for further detail.

B. Quality Management Plan

The Quality Management Plan (QMP) referred above should detail all the requirements necessary to satisfy relevant accreditations. Adherence to this is very important as it results in a project, which the client can be assured, has been verified in terms of compliance with the specifications and other documents.

C. Opportunities for Contractors

There exists a real opportunity for the Contractor to capitalise on the defect or outstanding work exercise to the benefit of the Project, the Contractor, and the Contractor's relationship with the Client.

The benefits to the Contractor are the opportunity for their personnel to take part in the rectification process. This teaches organizational skills to those executing the process. It more importantly teaches those involved what a defect is, what it takes to fix and how they can possibly be avoided in the future.

Many projects, due to the angst of trying to extract information during the works, develop difficult relationships between the consultants and the Contractor. Where possible, the Contractor is to develop a cooperative approach to working with the design team and consultants.

D. Method for execution

Preparation and issue of lists will take various formats; largely influenced by the consultants involved.

The process can be started early and used to check off outstanding work/issues. By the time practical completion is achieved all involved are familiar with the process.

It is extremely important for the Contractor to distribute lists to subcontractors promptly upon their receipt from the client, consultants or indeed the Contractor. This includes dissecting with clear allocation of responsibilities.

Breaking down to issue only those issues affecting a particular trade will assist in their coming to terms with the scope of their work.

The Contractor will make a phone call, after issue to all recipients, to confirm receipt and gain commitment to completion. This call will usually reveal questions as to responsibility and contractual obligations. These issues will differ from job to job and should be addressed accordingly.

The format can vary to suit the different ways consultants will want to produce them. A few simple additions can be incorporated.

These are:

- Column for trade allocation:
    - This can be added by the Contractor on soft copy. Though it's not always possible quickly on site and at least on initial hard copy it will help PM/SM to allocate responsibilities.
- Column for sign off:
    - The most important column! The need to establish a paper trail for accountability is essential. Some sub-contractor supervisors prefer to tick

items off when reviewing the status of a list. This leads to ticking off items in the site office instead of reviewing in the field and signing off. By initialing or signing off each item the reviewer takes a level of responsibility for the item from that point on.

E. Records

Records kept may depend on the reporting requirements of the client. All records kept will comply with the Project Quality Management Plan or the Contractor's Management System.

5.15 Deliverables Schedule

This CMP is prepared to address the requirements set out in the Preliminaries documents. These deliverables have been identified in the Self Verification Checklist in ***Appendix A***.

A detailed deliverable schedule will be developed during the early phases of the Project.

6 SITE MANAGEMENT STRATEGY

6.1 Survey and Set out

A registered surveyor will be engaged to set out the works and verify its location to the property boundaries and the approved alignment levels.

At the completion of the Project, the Contractor will provide a final survey, completed by a Registered Surveyor, which will document the relationship of the works to any relevant property boundaries and easements.

6.2 Safety

A. Induction

All employees and sub-Contractors must undertake a site induction prior to their commencement of their works on the site.

The site induction will cover the following:

- Objective and purpose of the Project
- Site details, including working hours, deliveries and parking
- General safety requirements
- Equipment, plant and tools
- General environmental requirements
- First aid and emergency procedures

- Fire and evacuation emergency procedures
- Discrimination
- Site specific requirements, including community liaison, media, adjoining neighbours etc.

At completion of the site induction, all personnel must complete a site induction attendance record and provide a copy of their general industry induction card and any other certificate of competency they hold. By completing the induction attendance record, personnel declare their acknowledgement of the site rules and their responsibilities towards them.

The site induction will be updated to reflect changes in the site conditions or the introduction of new procedures and controls.

Regular toolbox meetings will be used to advise site personnel of changes to the induction.

All personnel completing the site induction will be issued with an induction sticker that is to be placed on their hard hat. The induction sticker will record the site, their induction number and date of induction.

The Contractor will align their site induction with any site-specific contractor induction related to interface works with operational buildings.

B. Incident Reporting

Incidents are to be reported and recorded in accordance with the following management plans:

- Health and Safety incidents are to be reported in accordance with the Project Work Health and Safety Plan;
- Environmental incidents are to be reported in accordance with the Project Environmental Management Plan; and
- Community related incidents are to be reported in accordance with the Project Management Plan.

Incidents may fall under more than one of the above categories and the reporting of such incidents will need to comply with all of the relevant plans.

C. Safe Work Method Statements

A Safe Work Method Statement (SWMS) will be completed for each construction activity as prescribed in the Work Health and Safety Regulations 2011.

The Contractor will complete an internal review of each subcontractors SWMS.

The Contractor will periodically check a subcontractor's compliance with their SWMS, and direct action as necessary.

D. Personal Protective Equipment

Use of Personal Protective Equipment (PPE) by all subcontractors and visitors to the site is mandatory. PPE is to be worn in accordance with WHS Legislation and Contractors SWMS.

All PPE must comply with the relevant Australian Standards.

Mandatory Personal Protective equipment includes:

- Hard hats
- Steel capped boots
- Hi-Visibility clothing

Other PPE must be worn as identified in the associated safe work method statement.

E. Drug and Alcohol Policy

A total ban on the possession and consumption of alcohol and drugs on the construction site.

The Contractor will implement this policy on the NSPH-ET Project.

The main objective of the policy is:

- The Contractor's Site Manager and subcontractors are to enforce a total ban on the possession and consumption of alcohol and drugs during working hours and shall ensure that all persons in the work place who appear to be affected by drugs or alcohol are immediately removed from risk of danger to themselves, others and then counselled.

F. Emergency Response and Incident Management

An Emergency Response and Incident Management Plan (ERIMP) will be developed for the NSPH-ET Project.

The aim of the ERIMP is to document the organisational arrangements, systems, strategies and procedures relating to the response and management of emergencies.

An Emergency Planning Committee (EPC) will be established, and, in collaboration with the workers onsite, will determine which types of emergencies warrant specific emergency response procedures to include within this plan.

The EPC, Chief Warden, site team, and nominated workers shall participate in the implementation and maintenance of the emergency plan, as appropriate to their role.

The Emergency Response and Incident Management Plan shall include the following:

- Emergency Preparedness
- Emergency Mitigation
- Activities for, and prevention of emergencies, such as training and maintenance

- Overall control and co-ordination arrangements for emergency response, including evacuation strategies for site workers with a disability
- Roles and responsibilities.

The ERIMP will be discussed during all site inductions, and the specific emergency response plans will be displayed on the site noticeboard, and posted in the site induction room.

Development of the ERIMP will occur in conjunction with NSPH-ET to ensure that emergency response objectives are aligned.

6.3 Temporary Works

Temporary works will be designed, planned, engineered and implemented to ensure they are suitable for the application and coordinated with the ongoing construction activities.

Temporary works may include:

- Propping / strutting
- Formwork design
- Specialised lifting equipment
- Scaffolding
- Loading platforms
- 3rd party verifications

It is currently envisaged that temporary works will be needed where construction activities will be undertaken within or adjacent to existing buildings. The temporary works will be planned with the Principal's Representative and the operating facility.

6.4 Signage

Site Notices will be erected at the boundary of the site. The Site Notices will include the following details:

- Contractors' details
- Name of the Site Manager and 24 hour contact number
- Approved hours of work
- Details of the PCA
- Details of the Structural Engineer

Safety related statutory signage will also be erected on the boundary of the site in accordance with WorkCover requirements.

For works within public areas, signage related to pedestrian traffic, vehicular traffic etc. will be addressed in the Traffic and Pedestrian Management Plan.

6.5 Visual Amenity

In order to protect the visual amenity of the site, the following practices will be implemented:

- Materials will be stored in a safe and organised manner and prevented from dispersing into public areas;
- Excavated spoil will be removed from site shortly after excavation, rather than stockpiled for lengthy periods;
- Vehicles leaving the site will be cleaned to prevent spilling of mud and debris on to adjoining traffic routes;
- Site hoarding and/or shade cloth will be well maintained; and
- Any graffiti on site hoardings or fences will be removed within 48 hours.

6.6 Identification of Services

Services shown on drawings can be indicative. The Contractor will complete a Dial Before You Dig Survey (www.1100.com.au) to understand the extent of services in the immediate area.

If services are identified within the works area, a services location consultant will be engaged to identify the location of the services onsite. Once the services have been identified, a surveyor will survey the location of the services and provide a drawing which will be issued to the relevant subcontractors.

When undertaking excavation works near an asset, information will be obtained from the asset provider regarding safe digging practices.

Not all services are members of Dial Before You Dig, and therefore the possibility exists that services within the site are not documented on the Dial Before You Dig Survey.

A visual inspection of the site will be undertaken to identify any risers, manholes, pits, poles, drains etc., that are not identified on the Dial Before You Dig Survey.

6.7 Existing Services Shutdowns

The Contractor in collaboration with DEXUS Property Group / Ramsay Health Care will develop an existing services shutdown schedule which will provide information and instruction to all project stakeholders about the intended shutdown of existing services.

The schedule will accompany a notification procedure which will be developed in collaboration with the building managers.

When shutdowns are required, the Contractor will issue an Interruption to Building Services Permit to the building manager or Principal's Representative where required, and obtain Authority Approval where required.

The permit will include:

- Details of the service to be disrupted
- Date and time that the disruption will commence

- Estimated duration of the disruption and when the service will resume operation
- The possible, the impact of the disruption
- Any other relevant information

The notification period for existing services shutdown will need to be negotiated with building management and the Principal's Representative.

6.8 Security

Control of people and vehicles during the construction stages is critical to the safety and smooth delivery of construction and the security of the works.

The Contractor will maintain the site in a safe and secure manner. The site is permanently fenced (or hoarded) and sign-posted in a manner, which will assure the safety of the public and those working on the Project.

Safety lighting will be provided throughout the Project, to provide a visible means of identifying trespassers.

A monitored alarm system will be setup in the site office complex.

Full time security guards will be employed at the later end of the Project to ensure that valuable equipment will be secure when the site is not occupied.

The Contractor's supervision staff will also monitor the effectiveness of the site security and safety measures on a daily basis, via the Survey of Hazards inspection process, implemented by the Site Manager.

A Security Management Plan will be developed during the early stages of the Project. This plan will cover security risks throughout the entire duration of the Project.

6.9 Visitor Control

Casual visitors to the site will be discouraged due to safety considerations. All visits will need to be scheduled and arranged through the Site Manager or his appointed assistant.

The Contractor will maintain a visitor log book, and all visitors will be required to complete a visitor's induction, sign the register. The Site Manager will ensure that visitors wear appropriate safety equipment during their visit.

All visitors will be escorted by the Contractors personnel.

6.10 Media Enquires

High profile projects can attract media attention. If handled poorly, adverse media attention can result.

The Contractor must understand that all media enquires must be directed to the Principal's Representative.

As part of the site induction all site personnel will be advised that any media enquiries should be directed to the Contractor's Management Team who will advise the Principal's Representative accordingly.

The Principal's Representative may provide written consent for the Contractor to respond to media enquiries.

7 PROJECT ADMINISTRATION, PROGRAM AND TIME MANAGEMENT

7.1 Document Management

Aconex is to be used as the document management system for the Project. Aconex provides a platform for the transfer of all correspondence, design documents and Contractor documentation. All correspondence must be issued via Aconex.

A. Operation and Maintenance Manuals

Operational and maintenance manuals will be provided to the satisfaction of DEXUS Property Group / Ramsay Health Care.

The information contained in the manuals will indicate the operating sequence, the operation and function of all plant and equipment under both automatic and manual control, and will be supported by all necessary plant and system lay-out drawings, key diagrams of the services, controls, circuits and wiring diagrams applicable.

7.2 Meetings

A. Meeting Schedule

The Contractor will coordinate, minute and attend weekly/fortnightly meetings with the Principal and other representatives as required.

The meeting agenda will be developed in collaboration with the Contractor and the Principal.

The Contractor will prepare and issue the minutes within 48 hours of the site meeting.

B. Coordination Meetings

A number of meetings will be required to ensure the construction activities are progressing in accordance with DEXUS Property Group / Ramsay Health Care proposed integration and operation schedules. The Contractor will provide a representative at these meetings, who will provide a co-ordination interface with the Construction Team.

These meetings may include:

- Enabling Works Meetings
- Communication Meetings
- Commissioning Meetings
- Logistics Meetings

7.3 Construction Program

A construction program will be further developed based on the tender construction program submitted with the tender.

The program is the primary tool to identify the key procurement activities, design and construction activities on the Project. Regular discussions and workshops with the design team, subcontractors and suppliers will be used to adjust and monitor the construction program to ensure the project objectives are achieved.

The Site Manager will actively review the program on a weekly basis and implement strategies to ensure the project objectives are met or improved upon.

A. Items for Inclusion in Construction Program

The construction programs will identify the following activities, as per the Contract:

- Authority Approvals
- Appointment of major subcontractors
- Commencement and completion dates for design activities
- Commencement and completion dates of construction activities
- Dated for milestones and contractual completion dates
- Provision and approval of shop drawings, samples or other product data
- Submission and review periods to the Principal's Representative
- Any off-site activities such as fabrication
- Procurement of major plant
- Logical relationships between activities
- Lead times and Lags
- Critical path activities
- Supply of furniture and equipment
- Commissioning durations
- Existing services shutdowns
- Supply of draft and final operating and maintenance manuals and instructions
- Supply of as-built and installed information
- Principal training
- Contractor's rectification of defects

B. Submission to the Principal's Representative

The construction program will be issued to the Principal's Representative within 14 days of contract award. The program will be submitted in the following formats;

- Adobe PDF

On a monthly basis or whenever directed by the Principal's Representative, the construction program will be updated. The revised will take into account any changes or instruction from the Principal's Representative. These changes may include the following;

- Significant change in scheduling
- Instruction from the Principal's Representative
- Extensions of time granted by the Principal's Representative,
- Actual progress made,
- Variations,
- Any other changes to the activities.

The revised program will be issued after receiving any such instruction,

Detailed programs for specific activities will be submitted to the Principal's Representative for review, as required.

7.4 Site Diary

A site diary will be maintained by, which will record;

- General progress and significant events
- Subcontractors and number of personnel on site
- Temperature and weather conditions
- Meetings, visits and inspections
- Delays
- Unusual events
- Accidents and near misses

7.5 Works as Executed Drawings

Works as executed drawings will be progressively produced as works are completed.

The drawing print size will match that of the contract drawings and be submitted in both CAD and PDF format.

The format of the drawings will need to be agreed with NSPH-ET.

8 PROJECT SPECIFIC REQUIREMENTS

The following has been identified as site specific requirements to this Project, further methodology may be required to address each issue.

8.1 Mobilisation

After the award of Contract:

- Submit site-specific Work Health and Safety, Quality Assurance and Environmental/Waste Management Plans as detailed in this Construction Management Plan
- Liaise with Council and local stakeholders to brief them on the upcoming works and program
- Let primary subcontract trades and advise the Principal's Authorised Person of all subcontractors to be engaged
- Prepare a Dilapidation Survey, as detailed in this Construction Management Plan
- Confirm Site Representatives and 24 hour contact person
- Confirm location of site facilities and amenities
- Submit to the Principal's Authorised Person complete compliance documentation including WorkCover Certificate of Currency

8.2 Traffic Management

Traffic management of the site will be implemented and monitored in accordance with the Construction Traffic Management Plan prepared by GTA Consultants and included in ***Appendix C***.

8.3 Site Facilities

A site office and workers facilities/amenities will be established within the site, in accordance with WorkCover requirements.

As the Project progresses the site accommodation may be relocated to suit the construction sequence.

8.4 Temporary Fencing and Hoardings

Upon possession of the site, the Contractor will review and adjust/replace the perimeter hoarding to secure the site in accordance with WorkCover requirements.

The Contractor will establish a daily inspection regime of the hoardings.

It will be a contractor requirement that all graffiti is removed within 24 hours.

8.5 Parking

The issue of contractor parking is addressed in the Construction Traffic Management Plan by GTA Consultants.

Contractors will be advised in the site induction that there is no parking on site.

For construction vehicles entering the site, it will be clearly stated in the site induction that vehicles must not obstruct roads, driveways and escape routes from the building or fire protection equipment.

All speed limits must be strictly obeyed.

As parking is a premium around the hospital, contractors will be encouraged to use public transport.

8.6 Materials Loading

During the piling and excavation activities, vehicles will be unloaded within the site.

As the excavation progresses, trucks that are unable to enter the site will use the construction zone on Reserve Road for the loading and unloading. However, presently it is anticipated that most vehicles will be loaded and unloaded from within the area defined in the GTA Consultants' Construction Traffic Management Report.

8.7 Noisy or Disruptive Works

Although this is only an isolated requirement, the Contractor will implement best practice for reducing noisy and disruptive works throughout the entire construction duration.

Noise and Vibration Management Plan details how the works will be managed to fall within the maximum noise level.

During the methodology development, no activities have been identified which may breach this criterion. Should any activities arise that may be noisy or disruptive, the Contractor will liaise with DEXUS Property Group and Ramsay Health Care to coordinate the best times to compete the works.

8.8 Disruption to Local Business

The Contractor will consider local businesses when completing the works on site. It is important to understand the importance of maintaining business continuity for local businesses. The Contractor will liaise with the local businesses if they believe the works will affect their operation.

8.9 Modifications to Roads and Footpaths

During the initial phase of the Project, roads and footpaths will be modified to suit the construction accesses and works zones. Further development and implementation of traffic managements plan to complete these works will be needed to providing access for pedestrians and vehicles.

The surrounding area will be well sign posted to provide clear direction to pedestrians and drivers.

Additional CTMP may be required to supplement the CTMP for Early Works produced by GTA Consulting.

8.10 Dust/ Infection Control

Construction dust can increase the threat of infection that exists for patients within a hospital and also effect critical research projects, as they can be more susceptible due to their illness.

Some of the infections which can be caused from construction dust include:

- Aspergilla
- Bacilli

The Contractor will need to develop a Dust Management Plan to identify all potential hazards of dust generation and detail mitigation measure to control the production, distribution and migration of construction dust. The Dust Management Plan will be developed in consultation with criterion. Should any activities arise that may be noisy or disruptive, the Contractor will liaise with DEXUS Property Group / Ramsay Health Care.

During the excavation phase, dust will be managed with water spray to dampen any rising dust. Air-conditioning filters to the adjoining properties will be upgraded to ensure microbes do not enter the buildings is deemed necessary. Tarps of stockpiles will be employed when not in use.

8.11 Fire Procedures

The Contractor will gain an understanding of Local Business Evacuation procedure, and ensure this is incorporated into the site specific induction and provide required personnel on site with specific details of these procedures.

Items to be included in the site induction include:

- Workers to respond to evacuation procedures
- Follow direction from any emergency services
- Emergency egress paths from the local business are to be keep clean and clear at all times

The Contractor will complete evacuation drills during the course of the Project, and will advise the DEXUS Property Group and Ramsay Health Care of the intended drills as to not alarm hospital occupants.

The Contractor will provide the necessary fire-fighting equipment for the construction works. This equipment will be selected for the type of work being conducted and kept in good working order.

As the building is over 25m high, during construction fire hydrants will be maintained a maximum of 2 floors below the highest works deck, in accordance with the BCA.

8.12 Non Smoking Policy

It is expected that the Contractor will introduce a non-smoking policy on the site. The non-smoking policy will be part of the site induction.

8.13 Principal Access

Works around occupied portions of the existing hospitals buildings will be kept clean and clear to minimise nuisance to the occupants and ensure their safety.

Prior to undertaking works around these areas, the Contractor will liaise with DEXUS Property Group, Ramsay Health Care, the LHD and Local Business and Residents as required.

The Contractor will provide the Principal's Contractors with access to complete maintenance works where access is required though the site. During this time, the Contractor will need to comply with any WHS requirements.

8.14 Helicopter Management

The Ambulance Service New South Wales (ASNSW) will be contacted prior to the positioning of any cranes. Red obstruction lights will be placed at the extremities of the boom and at the highest point.

An aviation report may need to be prepared, with any conclusion of the report documented in a Helicopter Management Plan if deemed necessary.

9 SITE LAYOUT AND LOGISTICS

A detailed study of the proposed building design will need to be undertaken to further develop and define a practical, efficient and cost effective construction methodology. In most circumstances, conventional and well-established construction methodologies can be adopted for this project. Based on the initial planning, sequencing, programming and development of materials handling strategies, on the concrete framed building with a composite façade, the methodology should take into consideration the time allocated to deliver the Project.

The key focus of the construction methodology should revolve around the notion of constructing the concrete structural frame expeditiously and clearing the floors to allow the services and partition installation to commence at the earliest possible time. The façade installation will closely follow the formwork removal to provide early weatherproofing to the building and allow the fit out activities to continue at pace.

A developed programme and methodology around this objective will need to be applied to provide a balanced approach to the aspects of time vs. cost to arrive at what can be considered to be the optimum construction strategy and methodology.

9.1 Site Accommodation

Initially the site office and amenities will be established within the confines of the site. This accommodation will cater for a site crew of 18-24, which is what could be expected during the piling and bulk earthworks activity.

The site accommodation will be kept tidy with a cleaning regime and daily disposal of food scraps to designated bins to prevent rat infestations.

9.2 Hoarding

Once the Contractor takes possession of the site, the Contractor will establish a perimeter hoarding to secure the site in accordance with WorkCover requirements.

During the piling works, a temporary chain wire fence will be employed to secure the site. The nature and staging of these works will require numerous fencing relocations, which a temporary type fence is most suited to.

Prior to the excavation progressing, a fixed Class B hoarding will be installed around the perimeter of the site. The hoarding will be designed and installed to take vehicle impact should a vehicle crash into the hoarding.

Daily inspection regime of the hoardings will be implemented.

All graffiti is to be removed within 24 hours.

9.3 Materials Handling

A. Tower Crane

Currently a Liebherr 316 EC-H Tower Crane has been used as to assess the project requirements. This tower crane has a radius of 75m and a capacity of 2.8t at 60m.

This crane has been selected for these reasons:

- Noise - This is an electric crane that is virtually noise free and will limit the noise impact of the Project. Diesel-powered tower crane noise is a common source of noise complaints on projects with sensitive receivers.
- Speed – This crane has quick lifting and trolleying speed, which translates into efficient materials handling.
- Wind – This type of crane can operate at higher wind speeds than luffing type cranes.

The tower crane has been located towards the centre of the building. The crane base will consist of a concrete slab on piles. The crane base will be cast below the Lower Ground 3 slab, allowing the basement slab to be placed over the crane base, once the crane has been removed.

The location of the tower crane provides maximum coverage of the site, which is important on large floor plates.

The tower crane has been sized to lift all anticipated plant and equipment associated with the construction and fit out of the building.

The tower crane will be installed during detailed excavation and pad footing construction. A 200t mobile crane will be used to install the tower crane. During this activity, Helicopter Service will have to be advised of the mobile crane being onsite, as the jib of the crane will project well above the existing buildings during the installation.

The crane will be used for the vertical movement of materials from the construction zones to the work face during the structure phase and the facade installation. Once the concrete frame is completed and majority of the façade is completed, the tower crane will be removed.

A 350t mobile crane will be used to remove the tower crane. Once again Helicopter Service will need to be advised of the crane being onsite.

B. Mobile Crane

Mobile cranes will be required to supplement the tower crane at times, and to lift materials once the tower crane has been removed.

Mobile cranes will be used in a number of different locations around the Project, depending on the lifting position and weight of the item being lifted.

A detailed lifting plan will be developed for each location at which mobile cranes are to be established. These positions will be agreed with Willoughby City Council and the Local Health District if located outside the boundary.

Mobile cranes will be required for the following activities:

- Erection and dismantle of the tower crane
- Lifting plant and equipment onto the building

C. Forklift

A forklift may need to be allocated for the unloading of vehicles and horizontal movement of materials around the site. The forklift will work in conjunction with mobile cranes to provide an alternative form of materials handling should there be no tower crane be onsite.

The forklift will be used to load and unload materials from vehicles as well as emptying bins into skips.

D. Hoists

A man and material hoist will be established when the structure is at Level Lower Ground 1. The hoist will be used to transport men and materials from Level Basement 2 to Level 8.

This hoist selection will need to consider the following:

- Good capacity to lift most of the building materials
- Long enough to transport sheets of plasterboard
- Able to be arranged in a way to minimise access impacts on staging areas

- Able to provide access to all floors
- Able to move quickly between floors

E. Builders Lift

The early commissioning of a builders lift will need to be planned. Currently it is intended that Lift #4 will be used as the builders lift, as it is a bed lift and services all floors.

Once the majority of the materials are loaded onto the floors, the men and materials hoist will be removed, and the builder lift will be commissioned. The internal lining of the lift will be protected with plywood to prevent any damage to the finished surfaces. This lift will be used for the transport of men and materials to the floors.

The removal of the hoist will allow the façade to be completed and the associated internal linings to progress.

9.4 Materials Storage

Materials storage is valuable space on all construction projects. For the NSPH-ET Project, there are limited storage areas available, which can create planning and logistical issues. Development and implementation of detailed construction delivery programs and staging of the works in a way to optimise the available space will be carried out.

During the early phases of the Project, the site fence will be established at the extreme boundaries of the site to allow the major plant to operate safely and efficiently within the site. These major items of plant include piling rig, anchor rig, excavators, trucks and concrete trucks, etc.

Materials will be staged and stored in such a way to promote a clear and safe work site. As the Project progresses storage areas will become a premium and will require detailed planning by the Site Manager. Storage areas will include the East and Southern Boundaries of the site. At all times, materials are to be stored within the confines of the site.

9.5 Construction Zone

Construction zones will be established on Westbourne Street and Reserve Road. The construction zones will be the main staging area for deliveries and concrete pumping activities. They will be approximately 25m long to accept deliveries on semi-trailers.

The construction zones will be established when vehicles can no longer drive into the site to unload.

A Detailed Traffic Management Plan for the construction zones will be developed in addition to the CTMP by GTA Consulting.

9.6 Elevated Working Platforms

Scissor lifts, boom lifts, mobile scaffolds and the like will be established during the base building works.

9.7 Landing Platforms

Retractable landing platforms will be installed on levels LG3-LG1, 3-5. These platforms will be used for the loading and unloading of materials from each floor by the tower crane.

The loading platforms will be installed as the formwork stripping activity commences and will be removed or recycled as the façade is installed.

The loading platforms will provide a good drop off and pick up area for most building materials.

9.8 Rubbish Removal

Rubbish will be removed from the floors using construction bins which can be craned or taken down in the hoist. These bins will be loaded into 20m³ bins located in the staging area.

A rubbish chute may also be established for the disposal of materials during the structure phase and early in the fit out phases. The rubbish chute will discharge directly into a 20m³ bins.

A waste management strategy will be implemented in accordance with a Waste Management Plan. During the structure phase, additional bins will be provided for timber only, and during the fit out phase additional bins will be provided for plasterboard waste. All other bins will be general rubbish.

During the structure phase, bins will be provided on the formwork decks and craned into the skip when full. During the fit out phase, bins will predominately be moved using the men and materials hoist and the telehandler. The telehandler is fitted with a rotator to allow the tipping of the bins into the skip.

Towards the completion of the Project and during internal works, wheelie bins will be used to remove materials from the floors. With the use of the specific lifting device, these wheelie bins will be emptied into skips.

9.9 Temporary Services

A. Electrical Services

Temporary power connection will be connected to the site upon occupation.

Generally during the excavation, portable generators will be used for power as installing distributions boards is not feasible with major plant in operation.

During the base build, temporary power will be provided to the entire site based on the rule of work faces less than 25 metres from the power boards. Access and safety lighting will be provided to access corridors on each floor, fire stair and lift landings.

The main power consumers will be the general power and lighting, then the commissioning power requirements.

The temporary power will be installed, tested and regularly maintained in accordance with AS3000 and the WorkCover Code of Practice – Electrical Practices for Construction Work.

B. Hydraulic Services

Temporary connections will be established to stormwater and sewer services as per Sydney Water requirements.

Temporary toilets will be provided adjacent the site office.

Temporary water will be provided on each floor.

Facilities will be provided for Contractor washout and washing up which will capture wastes and prevent their entry to the sewerage system.

The permanent sewer and cold water services will be progressively connected and commissioned, enabling the disconnection and removal of the temporary services.

C. Nurse Call System

A fully wireless and battery operated nurse call system will be installed. The wireless system provides greater flexibility in the relocation of the nurse call stations as the works fronts change throughout the Project. The nurse call system will have a dedicated number; this number will be recorded against a location and stored next to the control pad in the site office. If the nurse call is activated the number will be displayed on this panel and a site siren will sound. This combined system will ensure a prompt response when the nurse call is activated. Each nurse call station will be tested on a monthly routine.

The portability of the nurse call system, allows for easy expansion or contraction of the system.

Wireless controlled sirens including strobe lights will be installed throughout the Project. The sirens are powered with 240v and include a 6 hour battery backup. The evacuation trigger will be a keyed switch located in the site office.

D. Fire Control Measures

All work amenities, offices, vehicles, plant and storage facilities including those of Contractors will have a suitable type and number of fire extinguishers available for use in the event of a fire.

An assessment of the suitability of firefighting equipment will be undertaken on the Project.

10 CONSTRUCTION METHODOLOGY

10.1 Enabling works

Upon site possession, hoardings will be erected around the site and the enabling works will commence, which include:

- Demolition
- Services searches
- Services diversions
- Soil classification

- Access modifications to the site
- Establish contract protocols

10.2 Sub Structure

A. Piling & Excavation

Once the site has been established, the piling activity will commence. The piles will be installed starting at the South East corner working in a clockwise direction. Additional piling rigs will be used as required to maintain the construction program.

It will be necessary to classify the pile spoil to ensure it is disposed of in the correct waste stream.

As a run of piles are completed, excavation will commence to 500mm below the rock anchor height. As sufficient space is available the rock anchoring and shotcrete activity will commence.

Generally the site will be excavated in a South to North direction. Excavated materials will be removed from the site in accordance with the approved traffic management plan.

As each area is shotcrete and the rock anchors are stressed, the excavation will be taken to the Bulk Excavation Level (BEL). Once the site has been excavated to the BEL, detailed excavation of the lift pit, services pit and pad footing will commence.

The focus of the works will be placed on the lift shaft as it has the longest string of activities.

At the completion of the excavation the Contractor will obtain a clearance certificate for the site.

B. Concrete Placement

During the substructure works, it is anticipated that the concrete will be placed with the line pump from either within the site or from the construction zone on Reserve Road or Westbourne Street

C. Detailed Excavation

Detailed excavation for the lift shaft and pad footings will occur once the bulk excavation and fill has been reached. The primary focus will be the lift shaft excavation as it has the longest thread of activities. Excavators will be used to excavate the pad footings/ strip footings in readiness for the form, reo and pour activity.

D. In Ground Services

The in grounds services will commence immediately following the pad footing construction.

Services will be progressively installed and backfilled to allow the slab on grade to proceed.

Prior to the casting of any concrete structure of in ground hydraulics, the services will be tested.

E. Slab on grade

Once the lift pits have been constructed, waterproofed, backfilled and the in ground services have been installed and tested, the slab on grade will follow in a South to North direction.

Once the first section of ground slabs are completed, the formwork trade will commence.

10.3 Structure

A. Formwork

A traditional formwork system will be employed on the Project. The carpark and upper floors will be divided into pours to provide continuity to the structural trades. The formwork will commence from the southern end of the site working in a northern direction.

As the slabs are poured and the formwork can be removed, the materials will be recycled through the Project to minimise the amount of material on the Project.

A jump form may be used to form the lift shaft structure. The stair shafts will be formed using conventional methods.

Prompt stripping of the area will allow the aerial services installation to progress.

B. Cast In Services

The correct location of cast in services will be critical. To ensure services are cast in the correct position, a surveyor will be used to set out the position of all cast in services.

The surveyor will work from a coordinated CAD drawing to set out the services.

C. Concrete Placement

Concrete pours for the main structure will be managed from either the construction zone on Westbourne Street or that on Reserve Road.

Logistical plans for each of the concrete pours will be developed to allow the efficient docking of concrete trucks to ensure concrete is placed at the maximum rate possible. Efficient placement of concrete will be necessary to ensure that concrete pours do not over run and cause nuisance to the neighbours.

A 36m concrete placing tower boom will be used to distribute the concrete to the floors. The tower boom will be established once ground slabs are underway.

D. Scaffolding

A modular scaffold system will be erected around the perimeter of the building to provide edge protection during the structure phase and to provide working platforms to install the façade.

The scaffold to the perimeter of the building will be a 5 board wide scaffold. The formwork will be extended to the internal face of the scaffold to provide edge protection and a working deck for the post tensioning of the structure.

When the formwork is removed, a temporary handrail will be installed along the slab edge, to provide edge protection until the 2 board hop-ups are fitted to the scaffold for access to install the façade.

Both stretcher stairs and alloy stairs will be installed throughout the scaffolds to provide access between the scaffold decks.

The scaffold will be progressively removed as the façade is completed.

10.4 Façade

The early procurement of the façade contractor is essential to process the design development, shop drawings and procurement.

It will be critical during the structure phase to continuously survey and check the formwork and cast concrete elements to ensure they are in accordance with the shop detailing of the façade elements.

Long lead times for materials procurement and offsite fabrication will be planned and carefully monitored.

Once the formwork has been removed, the facade will be installed starting from Level 1 working in a clockwise direction around the building from the Eastern façade. The façade elements will be loaded onto the floor with the tower crane or the materials hoist. Early sealing of the façade system will allow the internal finishes to progress at pace.

Multiple crews will be engaged to progress the works to suit the program.

Scaffolds will be stripped as sections of the façade are completed and cleaned.

10.5 Structural Steel & Roofing

On completion of the concrete structure at Level 6, the structural steel and roof will be constructed. The major structural elements will be erected with the tower crane.

Detailed shop drawings and erection plans will be developed for all elements of the structural steel.

Erection of the structural steel and installation of the mechanical plant will be coordinated to ensure all major plant is in place before the steel is completed and the roof is installed.

Roofing will commence immediately after installation of the structural steel to provide a weather proof environment for the rough in and fit out trades to progress.

10.6 Fit Out

A. Rough In

As the areas are stripped and cleared of formwork, the partitions will be set out on the concrete slabs to provide set out for the services rough-in.

A first pass of aerial services will be installed throughout each area. Detailed coordination of the services will be necessary to ensure efficient execution of the works with minimal delays due to lack of planning. Specific attention to the rough-in of medical gases will be required to ensure the services are coordinated.

The lifts installation will occur once the formwork to the shafts is removed.

B. Partitions

Once the first pass of aerial services has been installed, framing of the internal partitions will progress, with focus on the wet areas.

The full height partitions will be erected first and sheeted one side, to allow the service rough-in to continue.

Particular attention to acoustic detailing and wall sealing in these early phases to ensure the contractors are aware of the specific requirements of each area.

Blocking to the partitions will be installed at this stage.

Once the partition rough-in is completed and the walls have been inspected and signed off, the second side of the partitions will be sheeted, once again paying particular attention to acoustic detailing and wall sealing.

Once the walls have been sheeted, the installation of the ceiling grid will commence along with the partitions that terminate under the ceiling.

Any hanging elements will be installed during this phase.

Coordination of all wall and ceiling blocking will be essential; the use of oversized blocking will be employed for greater flexibility.

A detailed inspection of services including acoustic and fire rating details will be completed prior to the closing up of ceilings.

C. Wet Areas

Once available the wet area fit out will commence. There is a long sequence of activities within wet areas which requires detailed attention. Walls and ceilings will be completed within the wet areas prior to completing the membranes and walls finishes.

Fit off of services will occur once the wall and floor finishes are completed.

A review into the feasibility of prefabricate ensuites may be undertaken once the design is further progressed.

D. Floor Finishes

Once the partitions are completed, a floor topping exercise will be completed. Post-tensioned slabs can tend to “hog” the floor, which results in slightly undulating floors.

A survey of the concrete floor will be completed to determine the highest and lowest points. Once the baseline is established, the floor will be topped to within floor tolerances.

The floor finishes will be applied progressively, focusing firstly on patient rooms and theatres where a longer fit out duration is required. Corridors will be left for as long as possible. As areas are completed, protection will be applied to the floors.

10.7 Plant Rooms

As soon as available, plant rooms will be progressed to ensure the services have sufficient time to complete throughout testing and commissioning regimes.

A focus on the procurement of long lead time items, and the early establishment of permanent power to supply all the plant and equipment.

Early commissioning of the Level 2 and 6 plant rooms is critical to the program and progression of the internal works.

10.8 Fit Off

Services will continue to be tested during the fit off activity. Services fit off will follow the initial paint of the ceilings and walls.

Once the ceiling services have been fit off, the remaining ceiling tiles will be installed.

Dust covers will remain on the smoke detectors, until final commissioning and fire tests are completed.

Once the services have been fit off, final testing and commissioning will follow.

10.9 Fixed Furniture and Equipment

As the ceiling, floor finishes and painting is progressing, the FF&E required to be installed progressively will be fitted. Areas of focus will remain to be the theatres.

10.10 External Works

As sections of the external scaffolding are removed the external works will proceed. The pavements will be installed working out in an East to West direction.

The B Class hoarding will be removed to allow the streetscape works to be completed, the hoarding will be replaced with temporary fences.

Soft landscaping will occur through the later stages of the Project.

10.11 Final Clean

The Contractor will complete an initial and final clean to ensure all building debris, dust and plant has been removed from the building. It is expected that the client will complete the sterile clean.

10.12 Commissioning

The importance of allowing sufficient time to commission the services on this Project has been identified, especially considering the complexity surrounding theatres.

The Contractor will develop a comprehensive Commissioning Management Plan which will detail commissioning methodology and program.

Initial commissioning of services will commence at the earliest possible time.

Final commission and acceptance testing will occur towards the end of the Project.

11 CONSTRUCTION RISKS AND MITIGATION MEASURES

11.1 Early Risk Identification and Mitigation

The approach to risk management is to identify, at the earliest possible opportunity, risk and governance issues that could impact the NSPH-ET Project and seek innovative solutions to minimise them. The risk management process will be consistent with processes that are embedded in management activities throughout the Project.

The Contractor will provide oversight and give assurance that all prudent risk management measures are taken. Senior managers will be responsible for risk management and assurance activities within their spheres of control. Specialist advisers will be appointed where required to support managers and provide additional assurance to the Project Team.

11.2 Risk Management Strategies

The critical objective of a risk management strategy is to minimise the risk exposure of the Principal and other stakeholders to the NSPH-ET Project.

Various risk management strategies will need to be considered to assist in achieving this objective, consisting of the following:

- Identify risks to the Project before they occur; that is, events or circumstances that may have an impact on one or more of the project objectives
- Treatment plans for the key risks are developed and implemented
- Accountability for the management of the key risks is allocated to an appropriate Manager
- Eliminate risks wherever possible or reduce the likelihood of their occurrence through proven mitigation strategies
- New and/or emerging risks are identified and considered
- Assess cost and program effect of any agreed risk

An important aspect of the Risk Management Plan is that it will provide the necessary framework needed to continuously identify, assess and minimise risks throughout the various stages of the Project. This framework also aligns people, processes and interoperates with other organisational systems required for the Project, namely procurement, delivery, program management, stakeholder management, design management, safety and environmental management.

To ensure the successful execution of risk management, a broad level of commitment will be required by all parties and stakeholders to NSPH-ET Project to ensure the effective management of risk is achieved within a collaborative environment:

- **A partnership approach**. The project stakeholders, including Project Team (both in-house and Contractor), the business and contextual influencers such as related projects must work closely together to identify and manage risks.
- **Commitment at all levels**. The commitment to managing project risks must start with the agency's senior management and continue through all participants and stakeholders in the Project.
- **Communication and consultation**. The Project must maintain contact with their internal and external stakeholders at every stage of the risk management process and concerning the process as a whole. Risks are prone to varying perceptions and it is important to reflect and reconcile these.
- **Risk ownership**. Each identified risk must be assigned to the person, role, team or agency best able to manage it in terms of their responsibilities. They must have the overall responsibility and authority for managing the risk.
- **A continuous approach**. Risk management is a continuous process throughout all stages of the Project. The Project Team must constantly monitor the project risks to assess the effectiveness of the risk management measures, to identify any new or changing risks, and develop revised risk treatments as appropriate.
- **Effective system engineering and project management**. The Project must ensure that there are plans and processes for managing the project risks. The Project Management Team should, through participation in similar projects, have a good understanding of the risks that the Project may face and of appropriate methods for managing those risks.

- **An appropriate risk management process**. The use of proven methods can significantly increase the effectiveness of the risk management process. Appropriate methods and techniques, used by experienced managers and team members, will guide the identification and analysis of risks and will assist with the development of effective risk treatments.

11.3 Project Risks

The following table identifies a number of construction related risks and mitigation measures. The mitigation measure will be implemented through planning, training, site inductions, tool box talks and Safe Work Method Statements.

Risk	Mitigation Measures
Noise from the works in general	• Cutting / sawing / pulveriser and crushing techniques vs. hydraulic breakers • Noise mitigation equipment fitted to construction equipment • Close consultation with all stakeholders during the works phase to inform of timing and any works which may impact on their operations and amenity • Remove large sections of structure (pre-cast elements) from site and break up elsewhere • Install noise sensors and alarms • Undertake works in accordance with Australian Standard AS 2436- 1981 Guide to Noise Control on Construction, Maintenance and Demolition on Sites; and DECC Noise Management Guideline – Construction Noise
Noise from construction	• Implement a Noise Mitigation Strategy • Noise mitigation equipment fitted to construction equipment • Position concrete pumping operations in locations that minimize effect on neighbours • Close consultation with all stakeholders during the early works phase to inform of timing of any works that may impact on their operations and amenity • Install noise sensors and alarms • Undertake works in accordance with Australian Standard AS 2436- 1981 Guide to Noise Control on Construction, Maintenance and Demolition on Sites; and DECC Noise Management Guideline – Construction Noise
Noise from construction plant and equipment	• Selection of electric tower cranes • Temporary sound barriers for stationary equipment (compressors, generators, jack-hammers etc) if required • Test/fix mufflers & maintain equipment • Locate equipment as far as practicable from sensitive buildings • Undertake works in accordance with Australian Standard AS 2436- 2010 Guide to Noise Control on Construction, Maintenance and Demolition on Sites; and DECC Noise Management Guideline – Construction Noise
Vibration	• Close consultation with all stakeholders to inform of timing of any works that may impact on their operations and amenity • Install vibration monitors and alarms

Risk	Mitigation Measures
Dust	• Use of perimeter site screens/ shade cloth • Removal offsite of precast elements to allow crushing elsewhere • Hosing down of demolition vehicles • A water cart for spraying to reduce dust generation on construction vehicle access routes • Street sweeper vacuum truck to regularly clean external roads • Regular cleaning of adjacent pavements • Trucks transporting materials off site shall be covered • Stockpiles shall be kept damp or stabilised, or covered or turfed, to prevent generation of dust
Stormwater runoff	• Use of silt socks and filter fabric in stormwater runoff pits and gutters • Silt fences and sediment ponds to prevent runoff of sediment into drainage lines and bushland areas
Flora and Fauna	• Tree protection zones established around all trees to be retained • Equipment storage areas and stockpile areas located away from tree protection zones
Hazardous materials removal	• Works not to commence until the hazardous material assessment has been completed and approved removal and disposal methods developed
Wastewater	• Waste water from construction activities collected and treated prior to disposal
Air quality	• The burning of timber and other combustible materials not to be permitted on site at any time
Construction and demolition traffic	• Works are to proceed in accordance with GTA consultants Construction Traffic Management Plan • Ensure appropriate traffic control measures are employed to ensure separation of construction activities and the public • Pre-agreed safe public access pathways to be established and maintained • Provide alternative parking for construction workers
Neighbouring Deliveries	• Access to NSPH-ET entrance well signposted • Erect way-finding signage • Endeavour to provide temporary access routes in similar locations to existing routes • Public notice boards and general information in prominent locations which provide information on the development and change to access routes • Construction personnel to look out for and be aware of the delivery drivers and provide guidance
Visitors and general public	• Access to NSPH-ET entrance well signposted • Erect way-finding signage • Construction hoardings and fences to be in good, sound condition and provide visual and physical barriers to the construction areas

Risk	Mitigation Measures
	• Construction areas to be sign posted as 'no unauthorised entry', with directions to the site office for visitors • Public notice boards and general information in prominent locations which provide information on the development and change to access routes • Construction staff to look out for and be aware of visitors and provide guidance

11.4 Project Risk Assessment

A Project Risk Assessment will be developed which will identify all the WHS risks on the Project and how each risk will be controlled.

The Project Risk Assessment becomes the base document for reviewing all Safe Work Method Statements (SWMS) and Risk Assessments (RA). The Project Risk Assessment will be continually updated to capture any new hazards.

Copies of the Project Risk Assessment will be issued to subcontractors, to ensure the relevant identified risks are included in their SWMS.

12 RECORDS

Records of compliance for the Project Construction Management Plan shall be maintained in accordance with the Contractors Management System.

13 AUDITING

The collaborative audit process will be established on the Project and will be followed when planning audits of the Construction Management Plan. It is expected that the Construction Management Plan and related obligations and actions arising from it will be audited every 12 months.

14 APPENDICES

Appendix A - Self Verification Checklist

Self Verification Checklist

Contract Document Required	Brief Description of Requirement	Location in Plan

Appendix B – Waste Management Plan

Appendix C – Construction Traffic Management Plan