Lismore Base Hospital Stage 3C

Document Number: LBH-PP-JH-Y-0016-01-CMP

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CONSTRUCTION MANAGEMENT PLAN NORTH TOWER

Lismore Base Hospital Stage 3C

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REVISION LIST

Rev	Date	Prepared by (Name and Signature)	Reviewed by (Name and Signature)	Approved by (Name and Signature)	Change Remarks (Include Section, Page and Details)
00	4/8/17	Brett Popham	Brett Popham	Brett Popham	Initial Issue – North Tower Extension MWO#03 offer
01	29/3/18	Michael Sawyer	Brett Popham	Brett Popham 29/3/18	Minor updates of JH procedure numbers and personnel

AMENDMENT RECORD

Rev	Amendment Record	Section	Page
00	Initial Issue for North Tower Extension – MWO#03 offer	All	All
01	Revision 1 – minor updates to JH procedure numbers and JH personnel	All	All

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Brett Moore/ Colin Matthews	Operations Manager	4
Justin McGrath	Construction Manager	5
Project Personnel		Electric Copy

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1 INTRODUCTION

1.1 Definitions and Abbreviations

Definitions and abbreviations used in this document are listed in Appendix A.

1.2 Purpose & Application

Health Infrastructure has appointed John Holland Pty Ltd (JH) under a GC21 Edition 2 Contract (Head Contract), to perform the design, construction, commissioning and completion of Lismore Base Hospital Stage 3C Redevelopment – Main Works.

All references to JH in this document encompass the John Holland Group Procedures, Requirements and Management Standard Systems.

The purpose of this North Tower scope specific Construction Management Plan (CMP) is to outline the project management practices that will be implemented on the project so as to assist in the successful delivery of the North Tower scope (from level 3 to level 10) by the project team by complying with all contractual and corporate management system requirements.

The plan is based on the core processes and activities defined within the Project Management Cycle attached to this plan as Appendix B**,** and brings together the management requirements for JH's activities and the various component plans that are required under the Head Contract or by John Holland Management Systems, as a co-ordinated and integrated plan.

Appendix C lists a matrix of project plans with each plan describing and defining the relationship between the relevant management system Standards and the IMS Procedures relevant to each plan.

These plans, which are subordinate to this plan, cover other specific management functions on the project. The hierarchy of Project Documentation in Appendix D shows the relationship between the Head Contract, the project plans, and JH's Policies, other Plans, Procedures, Forms and Checklists.

For clarity, scope of plan includes the North Tower scope including the lower floors from Level 3 to Level 6 and the North Tower Extension from Level 7 to Level 10. The CMP for South Tower and Block A demolition is documented in LBH-PP-JH-Y-0013, the Refurbishment methodology is documented in LBH-PP-JH-Y-0014.

1.3 Policy & Objectives

1.3.1 Policy

It is the policy of JH to provide a product that meets Principal and community requirements, on time, and in a spirit of co-operation and non-adversarial contracting as outlined in the John Holland Mission, Vision and Values in Appendix E.

1.3.2 Objectives

The primary JH objectives of this project are to provide appropriate resources, management systems and support to ensure that the project is delivered in accordance

with project requirements and to meet JH project programs, safety, quality and environmental risk management requirements and budgets.

The objective of this CMP is to demonstrate to the Principal and JH management how the Principal specifications and JH objectives will be achieved plus to be a training and reference document for project staff on how the project will be delivered.

1.4 Construction Management Plan Requirements

The objective of this plan is to address the project specific requirements related to overall management of the Project in accordance with Head Contract. Many of the below items listed are described in detail in the other project plans for this project that are listed in Appendix C. The suite of Project Plan's provide approach and strategy on the delivery of:

- Overall project management methodology;
- Description of the scope of construction activities for the works;
- Approach to risk management and an up-to-date risk assessment for the Works including mitigation actions;
- Approach to management, monitoring and reporting on safety, quality and environmental aspects of the Works, including key personnel responsible for these aspects;
- An organisation plan including approach to Workplace Relations;
- Procedures for controlling emissions and managing the Site;
- Approach to obtaining and complying with the Authorisations relating to the Works, including a schedule of all relevant consents;
- Approach to managing Site Conditions (including groundwater, potential Contamination, Cultural Heritage, etc.) and restoring and maintaining the Site's;
- An establishment plan;
- A detailed construction program (to be incorporated into the Works Program) and approach to program review and development;
- Approach to sub-contracting and procurement for the Works, including Aboriginal Participation, Training requirements, Local Industry Participation approach and management of sub-contractors including safety, quality and environmental aspects;
- Approach to information and document management
- Construction KPIs and protocols for monitoring the performance of construction activities against these KPIs;
- Progress review and reporting protocols; and

- Controlled copies of the following documentation from the Contractor's Integrated Management System, shall be consulted in conjunction with this Construction Management Plan:
- Contract Program
- Workplace Health and Safety Plan covering all construction activities
- Quality Plan setting out the quality management procedures to be followed by the Contractor and its subcontractors during construction
- Construction Environmental Management Plan (CEMP) to ensure effective environmental management practices are applied in undertaking all construction activities
- Stakeholder Management Plan for design and construction of the Works

This Plan and the other project plans listed in Appendix C address all the requirements listed above.

1.5 JH Project Management Strategies

The overall strategies adopted by JH for this project are to:

- Ensure that the contract is understood and there is a clear allocation of scope to staff on meeting the requirements of the Head Contract.
- Develop and maintain a project management system consisting of a series of management plans and procedures under this Construction Management Plan.
- Provide a JH management team, which is appropriately skilled and competent, together with the training and resources necessary for the team to successfully deliver the project.
- Implement and maintain JH's safety, quality and environmental risk management requirements to ensure a safe worksite and minimise adverse environmental effects.
- Engender a high degree of cooperation and collaboration between JH, Principal and community representatives to ensure that community matters are pro-actively addressed.
- Support the role of the Independent Certifier/ Quality Surveyor/ Watching Brief consultants in all functions or as required
- Provide a high level of design management on the consultant services for the project.
- Adopt a Management System for the Project developed through review and assessment of existing John Holland system procedures in line with the requirements of AS/NZS ISO 9001:2008, AS 4801:2001 and AS/NZS ISO 14001:2004 and other relevant standards and legislation. Other Subcontractors' Management Plans will be assessed for compliance with the Head Contract and JH's requirements and incorporated where appropriate;

- Ensure the dates for completion of the Project are met through target programs and developing time contingencies.
- Manage the contract efficiently, meeting specifications by doing work right the first time every time and pursuing rightful entitlements, thus ensuring budgets are achieved.
- Working closely with the Principal and Principal's Authorised Person to ensure issues are promptly resolved.

1.6 Plan Distribution

The Plan is distributed to the Principal team as requested, to JH line management and is available to all JH project staff.

The controlled copy of this plan will be maintained in the JH Document Management System and uploaded into Aconex. Each revision of the plan will also be uploaded to Aconex.
Copies of the Plan downloaded by project personnel shall be deemed uncontrolled.

1.7 Further Development & Updating of this Plan

The Plan will be further developed and revised to address any changes in the project management process, comments by the Principal or their Authorised Person in accordance with the Head Contract, and changes identified by continuous improvement as will the other management plans referred to herein.

Regardless of further development of this plan to address changes in the project management process, this plan will be reviewed by the Project Manager, with the assistance of senior project staff, at regular intervals of not less than 12 months.

1.8 Business Unit Approval for Implementation

This revision of the Construction Management Plan has been reviewed by the Business Unit with regards to process, levels of authority and operational accountability and has been deemed appropriate for implementation from the approval dates as below.

Brett Popham
Project Manager – Lismore Base Hospital Project
John Holland

Date

_____ _____

Colin Matthews / Brett Moore
Operations Manager – Building
John Holland

Date

_____ _____

David Lehmann
Executive General Manager, Building Group
John Holland

Date

_____ _____

1.9 Contract Overview

1.9.1 Principal

Health Infrastructure have engaged CBRE as Principal's Representative and the nominated Principal's Authorised Person for the project is David Oliver.

1.9.2 Scope

The Principal, Health Infrastructure (HI) has awarded John Holland Pty Ltd and John Holland Queensland Pty Ltd (JH) the Early Contractor Involvement (ECI) Deed of Agreement for the Lismore Base Hospital Stage 3C Redevelopment Main Works. The ECI Deed of Agreement is dated 17 May 2016. The ECI proposes the project having a Planning Phase and a Delivery Phase.

The ECI Planning Phase includes consultation with Health Infrastructure, the User Groups (led by Local Health District representatives), design and detailing of the departments and compliance with relevant codes, standards, guidelines (i.e. Australia Health Facility Guidelines) and Building Code of Australia. There are no specified ESD (Ecologically Sustainable Development) design or construction requirements for the project.

JH has been awarded a Main Works Contract to enable the commencement of the Delivery Phase. The Main Works contract is a GC21 General Condition of contract with

an effective date 12/1/17. The variation for the North Tower Extension was issued on Principal letter dated 9/11/2017.

The Lismore Base Hospital is located at 60 Uralba Street, Lismore, NSW, 2480. The site is approximately 5000 sqm with site access along Little Uralba Street which is a steep one-way residential street and adjacent to the new Ambulance entry bay. The site is heavily sloping and is constrained by adjacent hospital buildings to all building perimeters and private residencies along Little Uralba Street.

The Principal has nominated John Holland Queensland Pty Ltd as "Principal Contractor" under Workplace Health and Safety Act 2011 (NSW) for the works with site possession from 23 August 2016 for the Early Works delivery phase.

The Lismore Base Hospital Stage 3C Redevelopment Main Works scope for the North Tower is summarised below:

- Design and construction structure and fit out of Level 3 to Level 10
- Completion and commissioning of North Tower
- Coordination of the imaging equipment relocation to North Tower (PET, MRI, X-rays).

The major project stakeholders are:

- Health Infrastructure (HI) – Project Principal
- CBRE – The Principal's Project Management company for the project, engaged by HI
- Lismore Base Hospital – Staff, users and visitors including the Local Health District Representatives (LHD)
- Local Indigenous Community
- Local and surrounding community and residents – Benefit through construction and at completion with the new and refurbished Departments
- Local Authorities – Including Lismore City Council, Essential Energy, Rous Water, Telstra, NSW Fire & Rescue, Northern Rivers Buslines, Elgas, etc.
- JH as Design Finalisation and Construction Contractor – Engaged under GC21 Contract with HI
- Conrad Gargett – Engaged by JH as Architect
- All services and other building element design consultants – Engaged by JH for design of all services and elements for the building
- Building Subcontractors – Engaged by JH to construct the works
- Local suppliers and companies – Direct benefit from the project

All contractors engaged will comply with JH systems and requirements for Safety (including Workplace Risk Assessment, Activity Method Statements, Task Risk Assessment and Start Cards as a minimum), Quality, Design and Environment.

1.9.3 Location of Project

Location of Project Office	Design Phase: JH Head Office, The Emporium, 1000 Ann Street, Fortitude Valley, QLD 4006 Construction & Commissioning Phase: JH Site Office, 73 Little Uralba Street, Lismore, NSW 2480 Defects Liability Period JH Head Office, The Emporium, 1000 Ann Street, Fortitude Valley, QLD 4006

1.9.4 Hours of Work / Site Contacts

The hours of construction as nominated by the DA, including delivery of materials to and from the site shall be restricted as follows:

a) Between 7:00AM and 6:00PM, Mondays to Fridays inclusive
b) Between 8:00AM and 1:00PM, Saturdays
c) No work on Sundays or Public Holidays
d) Works may be undertaken outside these hours where:
   - The delivery of materials is required outside these hours by the Police or other authorities
   - It is required in an emergency to avoid the loss of life, damage to property and/or prevent environmental harm
   - Variation is approved in advance in writing by the Director-General or his nominee

   All rock breaking, rock hammering, sheet piling, pile driving and similar activities shall only be undertaken within the following hours, unless prior approval is provided by the Director-General:

a) 9:00AM to 12:00PM, Monday to Friday
b) 2:00PM to 5:00PM, Monday to Friday; and
c) 9:00AM to 12:00PM, Saturday

There are not direct waterways adjacent to site. There is potential for unidentified hazardous materials in the existing buildings, and existing service infrastructure.

Site Contact Details

Project Manager:

Brett Popham,

M: 0419 519 889

E: brett.popham@jhg.com.au

Site Manager:

Justin Ingram

M: 0437 747 006

E: justin.ingram@jhg.com.au

1.9.5 Type of Contract / Stakeholder Relationship

The type of contract is a GC21 Edition 2 contract. As the quality of the products and services is the key to the successful delivery of the project, it is important for JH to understand the Head Contract requirements to meet or exceed the expectations of the following stakeholders:

- Health Infrastructure (HI) – Project Principal
- CBRE – The Principal's Project Management company for the project, engaged by HI
- Lismore Base Hospital – Staff, users and visitors including the Local Health District Representatives (LHD)
- Local Indigenous Community
- Local and surrounding community and residents – Benefit through construction and at completion with a the new and refurbished Departments
- Local Authorities – Including Lismore City Council, Essential Energy, Rous Water, Telstra, NSW Fire & Rescue, Northern Rivers Buslines, Elgas, etc.
- JH as Design Finalisation and Construction Contractor – Engaged under GC21 Contract with HI
- Conrad Gargett – Engaged by JH as Architect
- All services and other building element design consultants – Engaged by JH for design of all services and elements for the building
- Building Subcontractors – Engaged by JH to construct the works
- Local suppliers and companies – Direct benefit from the project

The below Organisational Chart summarises some of the stakeholder relationships for the project. A larger version of the Organisational Chart is included in Appendix G.

1.9.6 Contract Summary - Refurbishment

Contract Title	NSW Government GC21 (Edition 2) General Condition of Contract, Contract Number: HI15381MW for the Lismore Base Hospital Stage 3B Redevelopment Project – Main Works
Parties	Principal Name – Health Infrastructure Contractor - John Holland Pty Ltd and John Holland Queensland Pty Ltd
Principal Contractor	John Holland Queensland Pty Ltd
Contract Type	Design finalisation and Construction Contract. JH is responsible for the design, construction and commissioning of the Works, as detailed in the Head Contract

Contract Documents	Letter of Award dated 12/1/17 including GC21 (Edition 2), Contract Number: HI15381MW
Terms of Payment Contract Value Contractual Dates	Clause 59 of the Head Contract TBC excl. GST Date of Award – Letter of Award for NT lower was 12/1/17 and for NT Extension was 9/11/17. Date of Site Possession – 23/8/16 Date of Completion – Milestone 4 Completion is 20/1/20 (excludes EOTs).
Liquidated Damage	Refer Contract information item 49.
Defects Period	12 months after Completion Date

1.9.7 Contract Documents

The contract documents for the project are summarised and listed in the Letter of Award dated 12/1/17. In summary, the contract documents include: GC21 Edition 2 General conditions for Contract HI15381MW, Preliminaries, Special Conditions, List of Principal's Documents, and the listed schedules.

1.9.8 Contractual Rights & Obligations

The followings list key requirements and obligations of the Head Contract:-

- Each party must promptly inform the other if it becomes aware of anything that is likely to affect the time for Completion, or the cost or quality of the Works
- The Contractor is not liable to the Principal for consequential loss
- The Contractor is not entitled to rely on the completeness or accuracy of the Contract Documents.
- If the Principal instructs the Contractor to use a particular work method or perform particular Temporary Work or to change a specified work method or Temporary Work without first agreeing in writing with the Contractor the effects of the instruction, the Contractor may make a Claim
- The Contractor shall provide the Principal with a monthly design certificate certifying that the current design in the Contractor's Documents is consistent with the requirements set out in the Contract Documents.
- Notices must be sent to the nominated Principal's Authorised Person and must be in writing.
- The Contractor is responsible for:

  1) Compliance with all Statutory Requirements;
  2) Giving all notices necessary to comply with Statutory Requirements;
  3) Obtaining all licences, authorisations, approvals and consents necessary to carry out the work in connection with the Contract

- The Principal is responsible for approvals listed in the Head Contract.
- Both parties must comply with NSW Government Code of Practice for Procurement (NSW Code) and the New South Wales Government's Implementation Guidelines to the NSW Code of Practice for the Building and Construction Industry (NSW Guidelines)
- The Contractor (John Holland Queensland Pty Ltd) is the Principal Contractor for all works undertaken on the Site including works undertaken by other contractors engaged by the Principal.
- The Contractor is required to submit the relevant project plans as listed in Head Contract

- The contractor must notify the Principal promptly of any matter affecting WHS where consultation with the Principal is necessary
- The contractor must observe working hours as specified in Development Approval and the Head Contract
- The contractor must pay the building and construction long service levy and give evidence to the principal of the payment
- The Contractor must submit a Contract Program to the Principal within 14 days after the Date of Contract
- Payments held in trust: Contractor must establish an account and provide declaration and statement as a condition precedent to payment
- When there is any change in work in connection with the Contract, or the program or sequence of the work, the Contractor must take all reasonable steps to: 1) carry out any additional work concurrently with other work; and.2) otherwise minimise any effects on the time for Completion
- The Contractor must update the Contract Program as specified in the Head Contract
- The Contractor must obtain the Principal's prior written consent to any press release / promotional advertisement / publication it wishes to make or place concerning the Contract, the Principal or the Works.
- The Contractor must refer any media enquiries to the Principal
- The Contractor shall provide the insurances specified in the Head Contract
- The Contractor must include in every Subcontract the specified back to back clauses specified in the Head Contract
- If requested, the Contractor shall provide names and addresses of subcontractors noting the list of Preferred Subcontractors in the Head Contract
- The Contractor must obtain from each relevant Subcontractor a warranty to the Principal in the form of Schedule 1 (Subcontractor's Warranty)
- The Contractor must give the Principal the Completion Undertaking (2.2% of the contract price) and the Post-Completion Undertaking (1.1% of the contract price)
- Unless the Principal has made or intends to make a demand against an Undertaking, the Principal must return the Completion Undertaking within 14 days after the relevant milestones dates
- The Contractor must deposit all money it receives in trust, [for subcontractors security and payment received from the Principal for work done by a subcontractor and the subcontractor has not been paid the amount to which it is entitled], into a trust account in a bank selected by the Contractor no later than the next Business Day, and manage the account as per Head Contract
- List of documents / information does not form part of the contract and is not guaranteed for accuracy, quality or completeness
- The Contractor is solely responsible for dealing with any adverse Site Conditions
- The Contractor must complete the design provided by the Principal and carry out all other design necessary in connection with the Works. The Contractor must carry out its design responsibilities so that the Works are fit for the purposes required by the Contract and comply with the other requirements of the Contract. Contractor cannot depart from design unless as per approval process.
- The Contractor must submit Contractor's Documents to the Principal at least 21 days before the date the Contractor proposes to use them for procurement, manufacture, fabrication or construction.
- For any innovation incentive, the Contractor may submit in writing to the Principal, a proposal for changes to the Works, which are likely to offer significant benefits to the Principal. JH will receive a 25% share of the financial benefits
- If at any time the Contractor discovers or is made aware of any error in the location, level, dimensions or alignment of the Works: (1) the Contractor must

notify the Principal; and (2) unless instructed otherwise by the Principal, the Contractor must rectify the error to ensure that the Works comply with the Contract

- The Contractor must give the Principal a copy of a survey showing the Works as constructed on the Site.
- The Contractor must Test all parts of the Works that are specified in the Contract to be tested, give the Principal the opportunity to witness the Tests by giving reasonable notice, and make the results available to the Principal
- If at any time before Completion the Contractor becomes aware of any defect or deficiency which results from design or other work or actions for which it is not responsible, it must promptly notify the Principal
- Variation instructions, requests and Contractor notifications must be in accordance with Head Contract
- If the Contractor becomes aware of changes in Statutory Requirements that require a change to work, the Contractor must notify the Principal in writing as soon as possible and in any event within 7 days after becoming aware of the changes in Statutory Requirements.
- The Contractor is entitled to an extension of time if: the Contractor is or will be delayed in achieving Completion by a cause beyond the control of the Contractor, the delay is to a critical activity on the current program, the Contractor has given the Principal an initial notice in writing within 7 days after the start of the delay; and the Contractor has provided the required information. The claim for extension of time must be submitted within 28 days after the start of the delay and be updated every 28 days while the delay continues. The Contractor must submit a copy of the current program showing the effects of the delay.
- The Contractor is entitled to delay costs only for:
  1) Variation (other than a Variation for the Contractor's convenience);
  2) Failure to give the Contractor access to the Site within the time stated in Contract Information item 13;
  3) Subject to clause 8.9, an instruction under clause 8.8 (instruction to use a particular work method);
  4) Changes in Statutory Requirements that require changes to work;
  5) A suspension instruction if the need for the suspension arises from the Principal's act or omission;
  6) A breach of the Contract by the Principal. Delays costs as per Head Contract.
- The Principal may claim general damages if the Contractor fails to achieve Completion of the Works or any Milestone by its Contractual Completion Date as per Head Contract rates.
- The Principal may issue an Acceleration Notice, managed as per Head Contract clause.
- The Principal may instruct the Contractor to suspend progress of the Works as per Head Contract clause.
- The contract includes provisional sums listed
- The Contractor an advance payment against the Contract Price at any time before achieving Completion in accordance with Head Contract clause conditions
- The Contractor must submit a Payment Claim each month, on the last business day of the Month as per Head Contract conditions including relevant supporting conformance documentation.
- Unfixed materials - Payment Claims must not include any amount for Materials intended for incorporation in the Works but not yet incorporated unless as per Head Contract clauses
- The Principal must provide a Payment Schedule within 10 Business Days after being served a Payment Claim. The Principal must pay the Contractor the Scheduled Amount within 10 Business Days

- The Contractor must submit a Final Payment Claim within 13 weeks after achieving Completion of the whole of the Works. Any Claim not submitted before or with the Final Payment Claim is barred.
- Set off - If the Principal claims a sum, including a debt due, in connection with the Contract or any other contract between the Principal and the Contractor, the Principal may set-off the claimed sum against any amount to which the Contractor is otherwise entitled.
- Early use - Before the Contractor achieves Completion, the Principal, may use or occupy any part of the Works which is sufficiently complete. 21 day notice required.
- The Contractor must achieve Completion by the Contractual Completion Dates
- At any time after Completion, the Principal may instruct the Contractor to make good any Defect within the time specified in a Defect Notice as per Head Contract.
- A Contractor Claim not covered by the Head Contract conditions shall be submitted within 28 days after the later of the start of the event giving rise to the Claim; and the time the event should have become known to the Contractor.
- Notification of issue and resolution by senior executives as per Head Contract clauses
- Termination clauses and notices as per Head Contract conditions.

1.9.9 Other Documents

Other documents relevant to the execution of this contract include the national and international standards nominated within the contract documents. The applicable issue of such referenced standards is to be determined by reference to the conditions of contract.

1.10 Key Project Issues

The following key issues and how they are handled will determine the success of the project:

a. Develop a positive relationship with Health Infrastructure and CBRE based on a collaborative approach and a competent and efficient delivery.

b. Excellent community relations with Local Indigenous, surrounding neighbours and the general local community.

c. Develop and maintain positive relationship with relevant stakeholders, namely the LHD (through positive and proactive consultation and communication), subcontractors, suppliers and consultants includes consultation and coordination of the refurbishment Disruption Notices.

d. Create positive and proactive safety culture with objective of the project achieving good safety statistics. This includes immediate notification of any incident or potential issue to the Principal.

e. Meet program delivery timeframes and develop delay mitigation measures as required to benefit of all stakeholders.

f. Accurate status of the program and forecasting of cashflow

g. Delivery of North Tower building and facilities that meets the Head Contract requirements and complies with all quality standards.

h. Implementation of JH's safety, quality and environmental risk management requirements to ensure safe execution of the project.

i. Engagement of appropriate staffing and labour under reasonable terms.

j. Authority Approval management and consultation (Essential Energy, Rous Water, Elgas, Telstra, Lismore City Council).

k. Environment Management including positive relationship with EPA, Lismore City Council, management of hazardous materials, erosion and sediment control, etc.

l. Traffic Management, particularly planning traffic arrangements along Uralba Street and Little Uralba Street to expedite safe and efficient construction.

m. Production rates on building/civil works and services, mitigating wet season delays.

n. Ensuring designs are buildable.

o. Prevent/minimize industrial issues via positive engagement and consultation with relevant unions.

p. Manage project cost within the JH project budgets.

1.11 Key Performance Indicators

Targets and Performance Indicators specific to each of the disciplines are detailed in the respective management plans such as safety, quality, environment, industrial relations, etc. For the project the following Key Performance Indicators (KPI) are adopted:

Issue	Target
Appoint key staff	Completed
Workplace Agreement	Not relevant
Substantial Construction	Site possession from 23/8/2016, North Tower commencement mid 2018
Design work	ECI Main works offer submission completed
Site Establishment	Completed
ECI Main Works	Completed
Main Works milestones – North Tower	As per MWO#03 North Tower program, completion 20/1/20 (excludes EOTs)
Safety:	• LTI Frequency Rate, LTIFR 0 (zero) • Total Recordable Frequency Rate (TRIFR) target < 4.85
Quality	• Rework costs (RC) – Not to exceed 0.2% of project turnover. RC= Cost of all reworks (all NCR's) x 100 divided total cost of project for the period
Environment	• Environmental Incident Frequency Rate (EIFR) below 0.06 (EIFR = No. Class 1 and 2

	incidents x 1,000,000 divided by man hours for the period) • Zero certification major non-conformances • Zero breaches, infringements or fines
Community Relations	• ECI to develop cost effective design for refurbishment scope. • To achieve project cash flow and early notice to Principal of changes to estimated cash flow • JH to achieve margin as agreed with JH Operational Managers
Financial	Zero breaches, infringements or fines
Procurement	Let subcontract packages within JH budget and in timely manner
Industrial Stoppages	Target nil stoppages due to project specific issues

Progress on the relevant KPI's will be included in the monthly report to the Principal's Authorised Person and in the JH internal report as relevant together with preventative and corrective actions as required.

1.12 References

The documents and plans listed in Appendix C are pertinent to the delivery of the project and as such, shall be subject to control in accordance with the requirements of this plan.

1.12.1 Management Procedures

Management procedures at both a Group and Business Unit are defined within the Integrated Management System (IMS). These procedures are relevant to the management systems required for the performance of all works under the contract and are available to all staff on the project via the Lotus Notes database on the John Holland intranet.

2 MANAGEMENT, ORGANISATION and STAFFING

2.1 Management Plan and System Structure

This Construction Management Plan (CMP), together with its subordinate plans forms the basis of the Project's management system. Each subordinate plan (refer to list in Appendix C) is linked to the Construction Management Plan and collectively, these plans provide a complete and coherent system of requirements and processes to ensure that the project requirements are met.

Beneath the project plans, there is a suite of more detailed and specific documents such as system procedures, system instructions, technical procedures, inspection and test plans (ITP), work method statements and standard forms and checklists.

The Project Plans are submitted as part of the Head Contract requirements and are listed in Appendix C. Collectively the documents indicated form the Project's Management System. Appendix D provides list of project documents including internal JH system documents.

As relevant, an introduction to the CMP and other management plans and procedures will be provided by nominated personnel at JH staff project inductions.

2.1.1 Project Plan Interfaces

Project Plans will be controlled documents, each with an "owner" or "sponsor" within the John Holland project team. Interfaces between Project Plans and procedures will be as per the listing of Project Documentation in Appendix C and will be managed by the Project Quality Representative and the Project Manager.

Interfaces between major plans and subordinate plans will be managed by the sponsors of the major plan.

2.2 Principal and Principal Representative Interface

2.2.1 Principal Management Strategy

The Principal, Health Infrastructure, have engaged CBRE as the Principal's Authorised Person for the project. The management strategy relating to the Principal is:

- Formal fortnightly meetings (Site Coordination Meeting): Attendees include Principal Representative, Principals Authorised Person, LHD representative, JH Project Manager and any other relevant personal required (i.e. JH Site Manager)
- Accurate compilation of monthly reports, including program status and cash flow
- Early notice of project issues, risks or concerns
- Immediate notification for any safety or environmental incident or issue
- Prompt advice on project issues to Principal Authorised Person
- As required, escalation of issues or concerns to JH Operations/ Building Manager to assist prompt resolution
- Attendance to formal monthly PCG meetings attended by Health Infrastructure, CBRE, LHD.
- Formal recommendations and correspondence as per Head Contract
- JH to issue regular status on the procurement and letting register, the Disruption Notice register, Extension of Time (EOT) register, input to the project variation register.
- JH engagement and consultation, through Principal Authorised Person, with relevant User Groups as required
- JH construction of the required prototype rooms and submission of the relevant samples
- Formal recording of Principal instructions and directions
- Identification and clarification of Principal key expectations and priorities
- Obtain Principal feedback and implement strategies to resolve any concerns

2.2.2 Principal Organisation Structure

Refer to the Principal Organisation structure as described in Appendix G (Organisational Chart).

The Principal Authorised Person will administer and manage the project on behalf of Health Infrastructure. The main line of contractual communication will be between the Principal Authorised Person (David Oliver) and the Contractors Representative (Brett Popham).

Day to day communication will be between the Principal Authorised Person delegate, David Oliver and JH Project Manager Brett Popham.

All monthly reports and meeting minutes are issued by Contractors Representative to the Principal and the Principal Authorised Person.

2.2.3 Principal Responsibilities

The responsibilities and obligations of the Principal include:

- Granting possession of site for each of the milestones including the LHD decant and salvageable items activities.
- Conditions of Approvals
- Approval to commence construction
- Issuing instructions or directions
- Accuracy of Principal supplied information
- Approval of design submissions, including management of the Watching Brief and 3 as relevant consultants and the relevant User Groups (both clinical and support related)
- Claim certification and payment in accordance with Head Contract
- Times to reply to requests, issue notices and approve variations and time claims
- Milestones and hold points
- Principal activities on the critical path, including FFE confirmation & FFE supply (Group 2).
- Participating Commissioning and witness testing, granting completion, review of operations and maintenance manuals.
- Management of all media enquiries, statements & requests

Understanding these responsibilities is crucial for successful project delivery.

2.3 Manpower Management

2.3.1 Management Requirements

Key management requirements are to:

- Define and document organisation structures and individual positions, including responsibility for establishing and reporting on the Project Management System;
- Ensure sufficient and appropriate resources are applied to the project;
- Provide clear and mutually compatible Position Descriptions with Authority and Responsibilities levels detailed including expenditure and correspondence limits.

2.3.2 Organisation Structure

The project organisation chart illustrates the roles and management reporting structure for the contract and is included in Appendix G.

The project will update the Organisation Charts as required.

The organisation structure provided in Appendix G divides the project into a number of key sections with an experienced senior site personal responsible for each section. The following key personnel report to the Project Manager include:-

- Commercial Manager
- Site Manager
- Project Engineer (includes Project Environmental Representative & Project Quality Representative)
- Design Manager
- Project Safety Advisor
- Services Manager

The organisation structure and overall level of staffing will vary during the course of the project in response to the phases of the project work and updated organisation charts and contact lists will be available at all times.

2.3.3 Roles and Responsibilities

JH has given the Project Manager responsibility for the delivery of the Project. The Project Manager is supported in his tasks on a day-to-day basis by the Operations Manager and the Regional/Business Unit Support Team.

The Project Manager will manage the Project through the site team who in turn have the responsibility and authority necessary to deliver the elements of the Project for their specific area.
Key functions and responsibilities within the project team are as follows:

a) Project Manager (PM)

The Project Manager responsibilities include the following:

- Overall management of the project.
- Ensuring project requirements, targets and programs are met.
- Ensuring the Principal's key expectations are identified and understood early in the project.
- Reviewing and authorising all procedures and project plans.
- Assigning responsibilities to all project staff.
- Developing effective and professional relationships within the project team.
- Developing effective and professional relationships within the project team of the Principal.
- Monitoring project program and review construction techniques.
- Compiling monthly claims and variations and agree with Principal.
- Ensuring JH's safety, quality and environmental risk management requirements are satisfied throughout the life of the project.

- Reporting on job progress to JH senior management via timely monthly reports including analysis of projects cost/revenue, costs to complete and risk and opportunity analyses.
- Ensuring Principal feedback on performance is obtained on a regular basis and duly acted upon, throughout the life of the project

b) Project Engineer

The Project Engineer has general responsibility of management of the design of all temporary and permanent works, construction methodologies, traffic management methodologies, overall construction programming, QA and environmental management. His responsibilities include the following:

- Ensuring the detail design process produces construction documentation that is cost effective. Achieves the specified standards, can be constructed or erected safely and efficiently and satisfies all Statutory and Principal imposed obligations.
- Ensuring appropriate construction methodology and programming options are explored and are practical, timely and cost effective.
- Ensuring that all temporary works are designed, verified, documented, fabricated installed and safely used in accordance with all method statements, project procedures and system procedures within John Holland's Integrated Management System (IMS).
- Overseeing the work of the Project Environmental Representative and the Project Quality Representative and the construction methodology team.
- Identifying and investigating project specific engineering advantages.
- Developing effective and professional relationships with the subcontractors and superintendent.

c) Design Manager (part-time only)

The Design Manager is responsible for managing the design process to ensure that all design documents are produced to the desired standards, on program, and that the relevant designs satisfy JH's safety, quality and environmental risk management requirements and is cost effective. His responsibilities include the following:

- Management of design consultants and consultation with User Groups
- Preparation and submission of the Contractors Documents as per Head Contract
- Liaising with the PM to develop a detailed programme of design deliverables
- Awareness of the detailed scope of work relating to design activities.
- Identification of engineering solutions which enable program and /or cost benefits to be achieved and for JH's safety, quality and environmental risk management requirements to be satisfied.
- Reviewing, verification and acceptance of the design outputs (calculations, drawings, specifications etc.) prior to issue for construction.
- Submission of design documents and design certificates to the Principal for review
- Establishment of Design Packages

d) Site Manager

The Site Manager has overall responsibility for planning and execution of all construction activities. His responsibilities include the following:

- Consultation and communication with LHD representative including preparation and approval of all Disruption Notices
- Supervision and coordination of all construction activities.
- Ensuring construction targets and milestones are met
- Ensuring JH's safety, quality and environmental risk management requirements are satisfied throughout the life of the project.
- Ensuring construction processes are carried out in a manner that satisfies statutory and project safety, environmental and quality plan requirements.
- Reviewing and co-authorising all construction procedures and project plans.
- Assigning responsibilities to project engineers, supervisors and construction staff.
- Monitor project program and review construction techniques.
- Procuring plant and equipment.

e) Site Engineer (SE)

The Site Engineer is responsible for technical support including coordinating the construction of the project works and reports to the Project Engineer and liaises with Site Manager. His other duties include:

- Monitor control and coordinate progress within delegated areas of responsibility.
- Ensuring JH's safety, quality and environmental risk management requirements are satisfied throughout the life of the project.
- Provide assistance to project staff in construction planning, programming and administration.
- Procure and expedite materials necessary to perform the works (within expenditure limits).
- Manage plant and labour, in conjunction with supervisors.
- Undertake QA Safety and Environmental management responsibilities.

f) Commercial Manager / Contract Administrator

The Commercial Manager/Contract Administrator has overall responsibility for the cost control, cost planning, procurement, site administration, payroll, insurance, office support and Contract Administration. His other duties include:

- Ensuring an appropriate cost control system is established and effectively implemented throughout the project.
- In conjunction with the design manager, ensuring that appropriate cost planning is performed during the design process to ensure cost effective design solutions are evolved for all project elements within the set Target Price.
- Ensure Supply/Subcontract agreements, claims and payments are carried out according to John Holland procedures.
- Ensuring JH's safety, quality and environmental risk management requirements are satisfied throughout the life of the project
- Managing all administrative, secretarial, reception and general office support required for the project.
- Ensuring the project accounting and reporting system is maintained.
- Ensuring the claim/variation system is effective.

- Assisting the Project Manager with the forecasting of cost/expenditure for the development of financial reports.
- Maintaining and controlling PCR database.
- Establishing and developing relationships with subcontractors on a commercial level.

g) Project Quality Representative (PQR)

The Project Quality Representative has overall responsibility in ensuring that all work activities comply with the relevant specification and standards. His duties include:

- Ensuring that the project Quality Management Plan is correctly Implemented.
- Allocating project staff to perform inspection duties
- Ensuring control measures as identified in the Workplace Risk Assessment, Activity Method Statement, Task Risk Assessment and Worker Start Cards are implemented to assist in the achievement of the specified standards in the finished works.
- Ensuring all Non-Conformances are reported, disposition and remedial actions implemented.
- Ensuring subcontractors fulfil quality obligations.
- Attend meetings to discuss quality issues.
- Reviewing and approving Inspection and Test Plans.
- Assisting in the auditing/assessment of suppliers/subcontractors.

h) Project Environmental Representative (PER)

The Project Environmental Representative has overall responsibility in ensuring that all work activities comply with the relevant standards and ensures the protection of the local Environment. His duties include:

- Monitoring project activities for compliance with Environmental & legislative requirements.
- Ensuring measures to avoid or control environmental issues as identified in the Workplace Risk Assessment, Activity Method Statement, Site Environment Plans, Task Risk Assessment and Worker Start Cards are provided.
- Ensuring that the Project Construction Environmental Management Plan is correctly implemented.
- Liaising with and inducting project staff and personnel in the environmental obligations of the project and the required environmental practices and controls.
- Inspecting site activities and environmental controls to ensure compliance with Site Environmental Plans and that environmental non-conforming practices and controls are reported and corrected.
- Registering and reporting environmental complaints.
- Attending meetings called to discuss environmental issues and liaising with Principal, stakeholders and other interested parties.

i) Project Safety Advisor

The Project Safety Manager/ Safety Advisor is responsible for assisting the Project Manager to implement the Project Safety Plan. He reports to the Project Manager and liaises with Site Manager and his duties include:

- Monitoring project activities for compliance with OHS&R legislative requirements (WHS Act 2011 and WHS Regulations 2017).
- Ensuring control measures outlined in the Workplace Risk Assessment, Activity Method Statement, Task Risk Assessment and Worker Start Cards are implemented throughout the life of the project.
- Monitoring and auditing subcontract processes for compliance.
- Preparing OHS&R and inspection reports and communicating OHS& R performance to the Project Manager.
- Establishing and reviewing accident/incident and emergency procedures.
- Inducting all personnel, subcontractors and visitors in regard to their safety obligations whilst on site.
- Ensuring that relevant licences, inductions, hazard assessments, and safety equipment as specified in the Activity Method Statement, Task Risk Assessment and Worker Start Cards is in place prior to any work activity being carried out on site.
- Communicating with Regional OHS&R Manager on matters relating to health and safety.
- Carrying out safety inspections, enforcing safe work practices, monitoring activities and recording observations so that OHS & R objectives and effectiveness can be assessed and modified as required.

j) Foreman / Supervisor

The Foreman / Supervisor is responsible for coordinating and supervising work performed by personnel under their control, and organising and planning the successful execution of given jobs by obtaining the necessary information, equipment, tools and manpower. They report to the Site Manager and their other duties include:

- Participating in process planning meetings before commencement of the works to discuss the execution of the work.
- Preparation of Task Risk Assessment and Worker Start Cards prior to any work activity being carried out on site.
- Communicate and co-operate with Project Engineers, Quality Control and Safety Officers.
- Obtain maximum productivity and optimum quality through teamwork and close supervision.
- Observe and enforce compliance with statutory safety guidelines, rules and regulations.
- Instil an attitude of “make it right first time” and “Zero Harm” in personnel under his control.
- Keeping accurate site diaries.

k) Services Manager

The Services Manager has overall responsibility in ensuring that all services work activities comply with the relevant specification and standards. His duties include:

- Ensuring that the project Commissioning Management Plan is correctly Implemented.
- Allocating project staff to perform inspection duties
- Ensuring control measures as identified in the Workplace Risk Assessment, Activity Method Statement, Task Risk Assessment and Worker Start Cards

are implemented to assist in the achievement of the specified standards in the finished works.

- Ensuring all Non-Conformances are reported, disposition and remedial actions implemented.
- Ensuring services subcontractors fulfil quality obligations.
- Attend services meetings to discuss quality issues.
- Reviewing and approving Inspection and Test Plans.
- Assisting in the auditing/assessment of suppliers/subcontractors.
- Coordinate, manage and resolve all issues relating to services coordination, shop drawings, consultant inspections, Witness testing and commissioning activities.

2.3.4 Key Project Management Staff & Position Descriptions

All section Managers shall develop Position Descriptions for all subordinate staff. The Project Manager shall maintain a signed copy of each Position Description for review and audit.

Position Descriptions shall be generally in line with the requirements of JH Procedure ensuring key responsibilities and authorities are defined.

2.3.5 Key Authority Levels

The levels of authority given to the Project Manager, as produced by the Operations Manager, are in accordance with the "Key Authority Levels & Business Controls Matrix JH-APP-BUA-007-02. This is an internal JH commercial document.

2.4 Industrial Relations & Human Resources

2.4.1 Workplace Relations

It is imperative that the project has an attractive workplace for all persons involved with the project. It is only with a motivated and enthusiastic workforce that the project will achieve its objectives.
JH and the project are equal opportunity employers and JH intends to be the employer of choice.
This will be achieved through good recruitment, well organised inductions, good internal communication and adequate financial rewards.

2.4.2 Employment of Staff

The project will employ staff by secondment from the relevant Business Unit where available and appropriate, plus through direct recruitment and employment.

2.4.3 Project Inductions

All staff and labour will be inducted to the project in a structured manner. The project induction is available on request. All visitors to the project will be required to complete a 'visitor induction' prior to entering site. Temporary supplier personal (i.e. regular concrete mixer drivers, delivery truck drivers, etc.) will be required to read a 'driver induction' upon entering site.

2.4.4 Industrial Relations Management

The project strategy to manage Industrial Relations is described in the project Workplace Relations Management Plan (WRMP) and is based on:-

- Compliance to the NSW Government Code of Practice for the Construction Industry
- Compliance to JH Right of Entry Protocol
- Review and confirmation of subcontractors NCOP (National Code of Practice) compliance prior to engagement
- Establish and maintain site & amenities to mitigate risks
- Positive consultation with relevant Union Representatives
- Prompt resolutions of any IR issues raised
- Dedicated personnel, Site Manager, to manage on site IR inspections and issues
- Adequate support to the Site Manager during discussions and enable resolution of any issues
- JH Regional HR to support site team

The strategy complies with the (relevant) Industrial Relations Guidelines and its objective is to ensure that there is a continuous improvement in the creation of a positive IR environment during the project with relevant Union Representatives.

Contract IR requirements are discussed during pre-contract negotiations with all subcontractors. The Commercial Manager will maintain a summary of the current status of subcontractors' industrial and insurance payments and this is updated monthly as part of the progress claims administration process.

The Industrial Relations objectives for the project are to:

- Ensure that there is minimal disruption to the construction program due to industrial issues
- Identify real and perceived industrial risks to the project and manage them;
- Wherever possible provide a positive impact to the workplace culture;
- Foster and enhance positive relationships with industry parties: and
- Ensure compliance with the applicable legislation
- Adopt a risk management approach to best manage IR risks. The Site Manager will have carriage of this process with assistance and support from the Project Manager, Safety Manager and the Regional HR team.

2.4.5 Training

A project specific Training Management Plan (TRMP) has been developed for the project to facilitate training of all JH personal to deliver the project as per the requirements set out in the 'NSW Training Management Guidelines' 2009. Further, the training plan is prepared to ensure construction personnel have the necessary skills and knowledge to undertake work on the project in a safe and environmentally responsible manner. The plan also promotes and facilitates continuous improvement through the training of all personnel on the project.

The plan describes the mechanism of identifying, training, assessing, reporting and monitoring the training needs of personnel. The Project Manager in conjunction with the Regional Training Coordinator has the responsibility for monitoring and overseeing project training under the guidelines described in IMS procedure JH-MPR-HRT-020 People Capability.

The Training plan defines the targets for both training and apprentices and provides a framework to enable the targets to be ecorded and achieved for the project.

2.5 Major Stakeholders

The major stakeholders in the project are as follows:

- Health Infrastructure (HI) – Project Principal
- CBRE – The Principal's Project Management company for the project, engaged by HI
- Lismore Base Hospital – Staff, users and visitors including the Local Health District Representatives (LHD)
- Local Indigenous Community
- Local and surrounding community and residents – Benefit through completion of the refurbished Departments
- Local Authorities – Including Lismore City Council, Essential Energy, Rous Water, Telstra, NSW Fire & Rescue, Northern Rivers Buslines, Elgas, etc.
- JH as Design Finalisation and Construction Contractor – Engaged GC21 Contract with HI
- Conrad Gargett – Engaged by JH as Architect
- All services and other building element design consultants – Engaged by JH for design of all services and elements for the building
- Building Subcontractors – Engaged by JH to construct the works
- Local suppliers and companies – Direct benefit from the project

All contractors engaged will comply with JH systems and requirements for Safety (including Workplace Risk Assessment, Activity Method Statements, Task Risk Assessment and Start Cards as a minimum), Quality, Design and Environment.

2.6 Communications & Interface

2.6.1 JH with Principal

During the project launch phase of the project, including the GC21 Start-up Workshop, the JH site team (including the JH Building Manager) met with the Principal and the Principal's Authorised Person to determine the Principal's key expectations of JH's performance of the project. The GC21 Start-up workshop was crucial to achieve expectations and alignment between JH and the Principal.

On a monthly basis during the project, the JH Project Manager shall obtain feedback from the Principal's Authorised Person on how well JH continues to meet and / or achieve these expectations. The 'Monitoring and Evaluation' process described in the Head Contract will be the monthly assessment for the performance noting that that quarterly assessment will be via the CPR (Contractors Performance Reports).

JH site offices are located at 73 Little Uralba Street which is directly opposite the new Emergency Department. The Principal and CBRE office is located adjacent to the main site at 78 Uralba Street, Lismore. There will be regular communication between the Principal's Authorised Person and JH Project Manager.

Fortnightly meetings (Site Coordination Meeting) will be chaired and minuted by JH with minutes being distributed to all agreed distribution list including the Principal, Principal's Authorised Person, LHD representative, and JH personal.

A Monthly Report will be submitted by JH to the Principal Authorised Person.

2.6.2 JH with Environmental Protection Agency (EPA)

As required, JH will consult with and respond to any queries or communications with the Environmental Protection Agency (EPA) in their roles as the key environmental regulatory authorities for the project. Communications with EPA will be undertaken by the Project Manager supported by Regional Environmental Manager.

No specific Environmental Licence(s) in accordance with the relevant Environmental Protection Act(s) are required for the project.

Further details of JH's process for communication and approval with EPA are provided in the JH Construction Environmental Management Plan (CEMP) for the project.

2.6.3 JH with Services Authorities/ Local Councils

The JH site team is committed to ensuring that the construction works proceed as programmed by full integration of the management of modifications of services.

The strategy for ensuring the appropriate and timely relocation of services is to:

- Identify all services on the project alignment prior to works commencing;
- Establish a program of service delivery using the Contract Program;
- Set dates for submissions to Authorities, including Project Approvals;
- Where necessary, procure service delivery designs and submit; and
- Obtain final sign-offs

The project team includes a Services Manager to manage services and service authorities for the construction team. They will support the Project Manager as required to contact and communicate with the relevant project service authorities. They will coordinate their activities to avoid gaps and overlaps.

During the design phase of the project, services that are high risk or require high capital outlay will be identified and considered early in design. The project has identified all major services in the development of the tender design documentation. This investigation has included close communication with the service authorities in planning the tender concept design for the project.

The existing site is generally at capacity with all services and hence the infrastructure design from Stage 3A generally creates new supply for all services for the South and North Tower buildings.

The nominated Services Manager will obtain up-to-date drawings from each service authority once installed. The service authorities normally identify these drawings with a use-by-date at which time they will be superseded by new drawings from the authority.

2.6.4 JH Internal

The senior management team, consisting of Operations/ Building Manager and the Project Manager will meet informally on a weekly basis to review progress on the project and during that meeting discuss any matter, which is an impediment to progress or a change to the project plans.

Regular meetings to review and coordinate the management and progress of the project will be held prior to and post fortnightly Site coordination meetings with the Principal.

2.6.5 JH with Design Consultants

The principal design consultant is the architect, namely Conrad Gargett Architecture. The management of their activities will be by the Design Manager as set out in the project Design Management Plan. The other design consultants for the project are listed below:

Discipline	Organisation
ARCHITECT, MEDICAL PLANNER, INTERIOR, HARD & SOFT LANDSCAPE	Conrad Gargett Architecture
CIVIL & TRAFFIC ENGINEERING	Arcadis
STRUCTURAL ENGINEERING	Arcadis
MECHANICAL ENGINEERING, MEDICAL GAS, PNEUMATIC TUBE	Wood & Grieve Engineers (WGE)
LIFT AND VERTICAL TRANSPORT	Norman Disney Young (NDY)
ELECTRICAL INCL HV,COMMS & IT, SECURITY, AUDIO VISUAL	Wood & Grieve Engineers (WGE)
HYDRAULICS & WET FIRE, DRY FIRE	Donnelly Simpson Clearly (DSC)
BCA & DDA CONSULTANT	McKenzie Group Consulting
FIRE ENGINEERING (BCA)	AECOM
ACOUSTIC ENGINEERING	Acoustic Logic
GEOTECHNICAL	Douglas & Partners

2.6.6 JH with Subcontractors & Suppliers

There will be many subcontractors and suppliers involved in the project and the interfaces with them occur in two phases, procurement and execution. During procurement, the contact will be between the Commercial Manager and the subcontractor or supplier. Input on subcontractor scope and conditions will be obtained from both design and construction team members, as well as their attendance at tender interviews. Sequence of subcontractor and supplier lettings will be detailed in the Procurement Schedule.

Upon award of the subcontract, primary contact will be with the Site Manager and Project Engineer responsible for the scope of work of the subcontract, but all commercial matters will still be directed to the Commercial Manager.

2.6.7 JH with the Media

No comments concerning the project are to be made to the media and all inquiries in this regard must be referred to the Project Manager who will refer all such inquiries to the Principal.

All Project personnel and subcontractors will comply with the requirements of the Head Contract which will be included in their subcontracts and confirmed to all workers in the compulsory site induction.

2.7 Project Meetings Schedule

The following forums will be used on this project to ensure that information and requests relating to project issues are received and communicated within the project team.

NAME	FREQUENCY	SENIOR REP.	OTHER ATTENDEES	CHAIR / MINUTES
PRINCIPAL				
PROJECT CONTROL GROUP (PCG)	Monthly, 4th Tuesday at 3:30pm	JH Project Manager	Health Infrastructure: - Justin Barrett, Geoff Ong CBRE:- David Oliver, Mohaned El Gubbi LHD:- Lynne Weir, Scott Huxley Others:- Consultants etc. as requested	Health Infrastructure/ CBRE
SITE COORDINATION MEETING	Fortnightly, Tuesdays at 10:30am	JH Project Manager, JH Site Manager	Health Infrastructure: - Justin Barrett, Geoff Ong CBRE:- David Oliver, Mohaned El Gubbi LHD:- Scott Huxley JH:- Brett Moore, Justin McGrath.	JH Project Manager
EXECUTIVE STEERING GROUP	Monthly:- Time as agreed	JH General Manager, JH Building Managers, HI Senior Executives	JH:- Scott Olsen / David Lehmann, Brett Moore, Colin Matthews Health Infrastructure:- Sam Sangster, Martin Cook	Informal
DESIGN (ECI PHASE ONLY)				
DESIGN COORDINATION MEETING	Typically fortnightly or as required.	JH Project Manager, JH Design Manager	All Design Consultants, Health Infrastructure – Justin Barrett, Geoff Ong CBRE – David Oliver, Mohaned El Gubbi	JH

USER GROUPS – HEALTH INFRASTRUCTURE	As required	JH Project Manager JH Design Manager	Health Infrastructure – Justin Barrett, Geoff Ong CBRE – David Oliver, Mohaned El Gubbi JH – Brett Popham Consultants – As required	JH/ Consultant
FFE COMMITTEE	Fortnightly as required	JH Project Manager, JH Design Manager, JH Design Manager	Health Infrastructure – Justin Barrett, Geoff Ong CBRE – David Oliver, Mohaned El Gubbi JH – Brett Popham LHD- Representation Consultants – Conrad Gargett	JH/ Consultant
ICT WORKING GROUP	Fortnightly as required	JH Services Manager, JH Design Manager	Health Infrastructure – Justin Barrett, Geoff Ong CBRE – David Oliver, Mohaned El Gubbi JH – Mark Moseley, LHD-Representation Consultants – Wood & Grieve Engineers	JH/ Consultant
AUTHORITIES / KEY STAKEHOLDERS				
LISMORE CITY COUNCIL	As required	JH Project Manager, JH Site Manager	Health Infrastructure & CBRE as required Health Infrastructure – Justin Barrett, Geoff Ong CBRE – David Oliver, Mohaned El Gubbi JH – Brett Popham, Justin Ingram Consultants – As required	JH
ROUS WATER, ESSENTIAL ENERGY, TELSTRA, ELGAS	As required	JH Site Manager	Health Infrastructure – Justin Barrett, Geoff Ong CBRE – David Oliver, Mohaned El Gubbi JH – Brett Popham, Justin Ingram Consultants – As required	JH
JH INTERNAL				
PROJECT FINANCIAL REPORT (PFR)	Monthly	JH Project and Building Managers	JH - Brett Popham, Colin Matthews, Justin McGrath, Brett Moore	N/A
JH INTERNAL DESIGN/COST PLAN REVIEW MEEETING	As required	JH Project Manager and staff	JH Design Team – Brett Popham	Design Manager
SAFETY REVIEW	Monthly	JH Project Manager, JH Building Manager	JH Project Safety Advisor, JH Site Manager, JH Senior Project Engineer	Regional Safety representative
JH CONSTRUCTION				
JH INTERNAL	Weekly,	JH Project	All JH site team	JH

TEAM MEETING	Tuesday at 3:30pm	Manager		
SENIOR LEADERSHIP TEAM	As required	JH Project Manager (Brett Popham)	JH Project Safety Advisor (Michael Sawyer) JH Site Manager (Justin Ingram), JH Senior Project Engineer (Will Roberts), JH Commercial Manager, JH Services Manager	N/A - Informal
SHORT RANGE PROGRAM	Weekly	JH Project Engineer	JH Site Manager, JH Project Engineer, JH Site Engineers, JH Foreman	No minutes, Two week look ahead
SUBCONTRACTOR – SERVICES SHOP DRAWING & SITE COORDINATION	Weekly or as required	JH Senior Project Engineer, JH Services Manager, JH Site Manager	Service subcontractor representatives –Shop drawing representatives & supervisors	JH Project Engineer
HEALTH SAFETY COMMITTEE (HSC)	Weekly – Wednesday at 10:30am	JH Project Safety Manager, JH Site Manager	Subcontractors / work group HSC's	Elected chairman
COMPLETION/COMMISIONING GROUP	Monthly or as required	JH Project Manager, JH Site Project Engineer	Health Infrastructure – Justin Barrett, Geoff Ong CBRE – David Oliver, Mohaned El Gubbi LHD – Scott Huxley JH – Brett Popham, Mark Moseley	JH Site Project Engineer
SITE SUBCONTRACTOR MEETING	Weekly, Thursday at 10:30am	JH Site Manager	JH Foreman & Engineers, All subcontractor supervisors	JH
CONTRACTOR SITE SAFETY AUDIT (HI TEMPLATE)	Fortnightly – Wednesdays	JH site or Project Manager or JH Safety Advisor	Health Infrastructure – Greg Barnes, As required CBRE – Mohaned El Gubbi JH – Brett Popham, Michael Sawyer	JH using HI template
DIRECTOR'S SAFETY WALK	Last Thursday of the month at 9am	JH Project Manager	JH – Brett Popham, Justin Ingram Subcontractor directors, company owners SafeWork NSW Inspector	Safety audit template

The following forums will be used to communicate and interface with Authorities, Community or other interested parties:

Method / Medium	Frequency	Personnel Involved	**Records**
Meeting with Authority (EPA, LCC, Work Cover etc.)	As Required	▪ Project Manager ▪ Responsible Staff Member ▪ Principal Authorised Person ▪ Authority Representative	Minutes, Diary Entry

Method / Medium	Frequency	Personnel Involved	Records
Distribution of Newsletter	As Required	▪ Project Manager ▪ Responsible Staff Member ▪ Principal Authorised Person ▪ Relevant Community ▪ Media / communications via Principal	Newsletter, Signs, Information Brochure
Community / Interest Group Meeting	As Required	▪ Project Manager ▪ Principal Authorised Person ▪ Responsible Staff Member ▪ Interested Parties ▪ Media / communications via Principal	Diary Entry, Meeting minutes / record as required
Notice of Road Closures, Road Work, Traffic Disruptions etc.	As Required	▪ Project Manager ▪ Responsible Staff Member ▪ Principal Authorised Person ▪ LCC Representative	Minutes, Advertising, Information Brochures (letter drop), Newspaper, Public Notice

All meetings will be minuted using form JH-TPL-CCM-005 or in a format required as per Head Contract.

2.8 Statutory Requirements & Approvals

The Principal is responsible for obtaining the following statutory approvals. The required approval and JH obligations are listed below:

- McKenzie Street temporary car park – Principal has issued approval. JH to comply with requirements and conditions of the Development Approval to use McKenzie Street temporary car park.
- LCC Plumbing and drainage approvals (JH responsibility)
- Development Approval for North Tower Extension (JH responsibility)
- Principal has issued approval
- Little Uralba Street Houses:- Principal has issued approval, JH to comply with requirements and conditions of the Development Approval for Little Uralba Street houses/sites.

2.9 Audit & Review

2.9.1 Audit Planning

Audits will be conducted as detailed in the procedure JH-MPR-SQE-002 Monitoring and Review. Audit Schedules will be maintained by the relevant Manager as follows:

Audit Scope	Responsible Manager
Management Systems (Management Plans)	Project Quality Representative
Construction Quality (Work Process)	Project Quality Representative

OHS&R (JSEA compliance)	Safety Advisor/Manager
Environment (Environmental Compliance)	Project Environment Representative

The results of Audits and surveillance (internal and external) undertaken during the preceding month, together with a summary of the selection, surveillance and audit of subcontractors and suppliers carried out during the preceding month, will be reported as specified in the procedure and also in the JH Internal Project Monthly Report.

2.9.2 Project Reviews

During the life of the project a full project review may be carried out by John Holland Group personnel who are independent of the project. This audit will cover compliance with the entire scope of the Head Contract, and all associated project functions and activities, and will be undertaken in accordance with the requirements of the JH procedure JH-MPR-PMA-018 Independent Project Reviews. Interviews and discussion with Principal's Representatives maybe required during these reviews.

2.9.3 Systems Audits

Safety, Quality and environmental elements of the project will be audited in accordance with John Holland audit procedure JH-MPR-SQE-002 Monitoring and Review. These will be management "system" audits and will be conducted by the respective Regional Quality, Safety and Environmental Managers or their nominated representatives, in accordance with audit schedules detailed within the respective Quality, Safety and Environmental Management Plans.

The Project Manager will determine if it is necessary to conduct audits on major consultants and on subcontractors' Quality, Safety and Environmental Management systems.

2.9.4 Work Process Audits

Work process audits will review adherence to Activity Method Statements, work process compliance to the specification requirements and the conformity of the product or service to specified requirements.

The Project Quality Representative is responsible for maintaining the Work Process Audit Schedule and co-ordinating site-specific audits. The Audit Schedule will be based on the construction program and as such may change depending on construction progress, procedure changes and Audit findings.

Checklists will be developed by the nominated personnel from the procedures to ensure suitability for all project elements. The respective nominees will carry out these internal audits on the project and are in addition to any second or third-party audits that may be conducted.

2.9.5 Surveillance

Project Engineers and the Project Safety Advisor/Manager will provide ongoing surveillance and monitoring of implementation of subcontractors' controls for safety, quality and environmental aspects of their work.

The JH site team will carry out inspections and surveillance of work processes on a regular basis as part of their duties and will take appropriate action in the event that departures from the agreed risk controls noted in the Activity Method Statements and Task Risk Assessments, Inspection and Test Plans and/or Site Environmental Plans are observed.

2.10 Reporting

2.10.1 Requirements

Regular reporting by JH will be in accordance with:

- JH internal requirements: - Monthly PFR, safety, etc.
- Head Contract requirements :- Monthly report

This reporting will form part of a structured project reporting system established in conjunction with the Principal Authorised Person.

2.10.2 Monthly Reporting General

The Project Manager will compile and submit a monthly report to the Principal Authorised Person. It will be copied to the JH Building Manager.

The relevant site team personal will generally compile reports on their particular area and this collective information will be consolidated into the monthly reports with an overview by the Project Manager.

The reports will cover the following:

(a) D&C Program

Report on progress against the Contract Program for:

- Approval of design submission packages;
- Status of Construction works in the various areas against targets;
- Any delays to the works and proposed means of achieving completion by the date for completion.
- Any extension of time claims will be explained as required of Head Contract.

The Contract Program will be updated on a regular basis and as required by the Principal.

(b) Safety, Quality & Environmental Requirements including Risk Management Implementation and Other Related Information

Reporting in respect of safety, quality and environment requirements and other related records will consist of:

- Reports on audits conducted;
- Incidents, infringements and corrective actions;
- Non-conformance reports, including dispositions and corrective actions;

- Certifications provided by the independent verifiers / auditors;
- Status of project plans; and
- Other reports which may be required under any of the project plans.

Environmental Reports will include performance against status of compliance with the environmental documents and legislative approvals.

(c) Approvals

- Details on the status of approvals or the failure to obtain approvals sought;
- An approvals schedule updated.

(d) Technical Matters

Reporting on technical matters will include:

- Updates on condition monitoring;
- Submissions to Authorities.

(e) Construction Related Matters

Reports will include:

- Summary of traffic management activities and any traffic accidents;
- Photographic records of construction progress and of any other construction matters of interest; and

(f) Claims

- Details of any claims under the Head Contract.

(g) Project Costs

Reports on project costs will include:

- Listing of key assumptions which affect all project cost;
- Status of submitted progress claims and payments;
- Updates on estimated works costs at the design phase and any risk items;
- List of submitted and potential variations;
- Any matters which are considered extraordinary; and
- Any matters which are considered to be variations.

Progress claims will be forwarded to Principal's Authorised Person in accordance with Head contract requirements.

2.11 Documentation & Records Management

2.11.1 Requirements

The Project requires the creation or receipt of thousands of documents of various types, all of which must be appropriately managed. These documents include:

- Project requirements documents;
- Project management documentation;
- Technical standards;
- Technical documents such as drawings and specifications;
- Presentation style documentation prepared for project communication purposes, including web-based information;
- General correspondence;
- Contractual documentation;
- Inspection and testing records; and
- System outputs such as non-conformance records and audit outcomes.

Document management includes the creation, receipt, storage, distribution and archiving of these documents.

The requirements for document management depend on whether the documentation is subject to revision. Documents subject to revision include Project Management System elements and Design Documentation. Proper control of such documentation requires that the latest document versions are identified, stored and issued to recipients of earlier versions. Superseded version of these documents must be stored.

General documentation such as correspondence and records need to be identified, stored and retrievable.

2.11.2 ICT Systems

The procurement and use of software and hardware including licensing and maintenance and its interfacing with the JH network will be managed by the John Holland ICT Department. The project will have computer support from the Regional ICT Support Team.

Software and hardware necessary for design and construction of the work shall be procured or hired from JH or externally purchased.

2.11.3 Project Administration Control Systems

The project administration control systems to be used on the project are listed below and will be readily available to all project staff via the John Holland intranet. Access to each system will be subject to hierarchical security, dependent on the nature of the particular system to be used.

- Lotus Notes – Correspondence & Administration Package (Project Admin & System/Project Packs)
- Project Cost Reporting (PCR) – Cost Control & Reporting
- Primavera (P6) – Planning & Programming
- Aconex Document Management System – Document Control and all Principal correspondence
- Integrated Management Systems (IMS) – Group & Regional Procedures & Forms
- JHET Safety & Environmental Statistics Reporting System

JH will use proven information technology to enhance its operation under the project management system.
This will include:

- Aconex: - A purpose designed project data communication system that will enable all project stakeholders to access authorised information, in particular the design documentation.
- On line access to Australian standards and all project generated standards, policies and procedures.
- A server-based document management and control system using Lotus Notes/Aconex to manage all drawings, correspondence and documentation.
- Structured workflows integrated into the document management process, prompting approval points and creating a complete audit trail for each document and workflow.

The Project Manager, in association with the Regional ICT support team, shall ensure that all computer and intranet-based programs utilised by project staff are current and that the integrity of associated electronic records is maintained

As JH has control of the design and design documentation of the project, document control policy for drawing issue, drawing revisions, etc. is detailed in the Design Management Plan for the project.

The structure of the project filing system and the filing system numbering will be defined in the system procedure (refer Appendix I).

Quality documentation will be controlled by the Project Quality Representative. Environmental documentation will be controlled by the Project Environmental Representative. Safety documentation will be controlled by the Project Safety Advisor/ Manager. Subcontract Documentation and cost administration documents shall be controlled by the Commercial Manager.

At the end of the project, the Commercial Manager or Administrator shall arrange for the archiving of all hard copy documents and correspondence.

2.11.4 Document Control System

The system used for control of technical documents including all documents subject to revision will be Aconex. The database software system enables the complete management of all documents, including the identification of document or drawing lists, author and recipient management.

Management of other general documentation including internal JH correspondence will be through Lotus Notes IMS Admin and System Packs. In addition to the management of technical documents, Lotus Notes Packs also enable the identification, receipt, creation, electronic storage and retrieval of all general documents.

Incoming paper correspondence (letter, fax, and memo) will be given to the Project Administrator or Project Secretary to carry out the following tasks:

a) Enter into IMS incoming correspondence the details of the correspondence and attach a scan of the document.
b) Forward a copy of the IMS incoming correspondence page to the Project Team associated with the correspondence.
c) File the hard copy of the correspondence in the appropriate file/s (note: several copies may have to be taken and placed in the appropriate folder – e.g. A letter from the Principal regarding a variation will be placed in the Principal - incoming correspondence folder and also in the Principal – correspondence on variations.

Electronic correspondence (emails) will be via the lbh3B2.project@jhg.com.au address and will be stored on the project server and accessible via Lotus Notes. The email may be printed out and filed in the appropriate folder if the receiver considers the email as being significant. Generally, all contractual correspondence will be via letter issued on Aconex as per Head Contract requirements.

As John Holland has control of the design and design documentation of the project, document control policy for drawing issue, drawing revisions, etc. as detailed in the Design Management Plan.

2.11.5 Corporate Identity

Stationery and other communications items will display the JH logo where possible. All site signage will be in accordance with the Head Contract requirements and regulations.

3 PROCESS MANAGEMENT

3.1 Risk Management

JH has implemented a risk management process, which complies with the Australian Standard AS/NZS 4360:2004 “Risk Management” and the relevant corporate requirements of the John Holland Group.

The project specific risks are managed through the WRA (Workplace Risk Assessment) and the AMS (Activity Method Statement) which have been developed by the site team. The risk management documents outline the processes and responsibilities for the identification, communication, management strategy development and reporting of the potential risks and opportunities that will need to be considered.

Continual review of risk relating to the Principal and the LHD throughout the life of the project will be recorded in the monthly reports. The risk identification and mitigation processes developed for the project will also need to be consulted with the Principal’s Authorised Person and the LHD representatives.

Following the commencement of implementation of this Construction Management Plan, the project risk profile has been built upon the developed Project Risk Summary and Workplace (SQE) Risk Assessment that was conducted during tender. The project summary SQE assessment is presented diagrammatically in Appendix J. Further, the monthly report issued to the Principal includes a project risk register that is current to the date of the monthly report.

Developed form the project risks, the internal JH monthly reporting includes the Project Risk & Opportunity Summary, including an assessment of the valuation of each risk or opportunity along with a view on likelihood. The Project Risk and Opportunity summary includes specific management strategy to be implemented for each and every risk. This

list, plus the contained valuations, and management's view on likelihood, will be reviewed by the JH Operations Manager and Regional Commercial Manager Monthly, with the revised status contained within the internal JH monthly report.

A summary of project risks identified in the tender R&O, and the control and mitigation steps to be used in their minimisation, are as follows:

Risk	Mitigation
Disruption to Hospital, neighbours, traffic, public, business	- Hospital – Follow Disruption Notice procedure in the Head Contract. - External parties – Proactive engagement and notification, newsletters, etc. - Traffic – Develop and implement traffic management plan.
Local community and Aboriginal Participation targets	- Positive engagement (community presentation, smoking ceremony) on employment opportunities. - Enforce subcontractors to achieve targets. - Assistance of Project officer as per MOU.
Wet Weather Program slippage	Alternative access, durable hard stand pathways. Fortnightly status and review of sequencing to mitigate any slippage
Safety of workers and public	Set and maintain high standard. Audit and inspection process from various stakeholders. Immediate notification of any incident or near miss to Principal
Industrial Relations	Engagement and consultation to resolve any issues raised
Cash flow accuracy	Accurate cost reporting and forecast Maintain program productivity
Project Budget – External	Open and honest communication of any potential variations or project costs to Principal. Accurate estimates and forecasting of potential and actual costs, noting consultation with Independent Certifier/ Quantity Surveyor
Project Budget – Internal	Tight control of design management and scope creep. Rigorous scoping and letting of subcontracts and supplier agreements
Environmental	Identify hazards (storm water runoff, Cultural Heritage, noise, vibration, dust) and develop strategy for each, refer CEMP
Community and External Stakeholders	Positive consultation Principal to manage media Engagement with authorities and LCC noting strategy to include 'good news' stories
Coordination and communication with LHD	Positive communication strategy including consultation and agreement on early access dates, witness testing requirements, disruption notices, access and egress coordination, etc.

Opportunities arising from this summary and the steps to be taken to maximise their realisation are as follows:

Opportunities	Opportunity Strategy
Future work with Health Infrastructure	Meet and exceed Principal's expectations
Additional Principal instructed scope	Demonstrate value for money and that JH is best delivery method for future expansion options, including potential Refurbishment packages at Lismore.
Earliest possible finish	Commence productive works at the earliest, accurate program status, good site planning and management, establish all weather access Review decant staging in consultation with LHD and Principal
Increase JH profile for new business in Northern Rivers Region	JH New business to utilise project to develop and create new contacts in regional market

3.1.1 Risk and Opportunities Tracking

The project risks register will be updated monthly by the Project Manager and included in the monthly report to the Principal.

For internal JH monthly reporting, the project will track risks and opportunities on a Risks and Opportunities Register that is updated monthly and submitted to JH senior management. Any changes to project forecasts or accessing overall project contingencies will not be undertaken prior to having passed through the register.

3.2 Occupational Health & Safety

A project specific Workplace Safety Management Plan has been developed which addresses the requirement for a Safety Management System under the Head Contract and is generally in line with the JH safety management system, which is third party certified to AS 4801 requirements. In addition, the Workplace Safety Management Plan contains a summary of the Workplace (SQE) Risk Assessment and also addresses requirements for the preparation of Activity Method Statements, Task Risk Assessments and Worker Start Cards on the project.

The project team has collectively committed to providing a 'Zero Harm' environment for all employees, sub-contractors, visitors and members of the public, with this objective being progressed through the following:

3.2.1 Awareness

Effective and timely communications of our project 'Zero Harm' goal is the key element in achieving project aims. The Project Safety Manager and Project Safety Advisor will assist the Project Manager in implementing the Project Workplace Safety Management Plan and will provide advice and assistance on OH&S matters to project personnel. This Safety team will insist on correct safe practices as noted on Activity Method Statements,

Task Risk Assessments and Worker Start Cards at all times and will participate in safety meetings, programmes, inspections and reports.

3.2.2 Risk Management

Major risks to health and safety on site are listed in the Workplace Risk Assessment (WRA) that is included in Appendix J. As per section 3.1, the project risk assessment includes:

- interaction and protection of the public (North Tower scope is adjacent to and connected to a live operational hospital)
- Secure Mental Health: - Working adjacent to with hazards on falling objects, noise and visual impacts.
- Managing works to ensure LHD continue their business and operations
- Safe operation of plant (in particular in relation to adjacent South Tower building that will be live and operational).
- materials handling and waste removal
- crane movements and heavy lifts
- scaffolding and access hazards
- live services
- working at heights
- hazardous materials (potentially inground)
- Plant/people demarcations
- Demolition works
- HLS operations to close during the construction of North Tower.

These hazards, along with any other risks that may subsequently be identified on site, will be addressed by the implementation of project specific work methods and practices as set out on Activity Method Statements (AMS) and Task Risk Assessments (TRA). The implementation of the specified risk treatments and controls will ensure that appropriate measures are taken to mitigate the potential effects of the nominated risks and issues. This risk management approach applies to safety, quality and environmental hazards on the project.

3.2.3 Consultation

All workplace personnel will have a continuous involvement with OH&S from the time they arrive on site and include the following:

Site Induction – Project and site-specific induction required for all personnel, subcontractors, inspectors, frequent visitors and frequent delivery personnel prior to starting work on site. The induction should include general induction issues but also identify specific needs and risks of the group being inducted.

Task Risk Assessment (TRA) & Worker Start Cards – These documents will be prepared in consultation with the Site Manager and Foreman following consideration of the work processes to be performed as set out on the Activity Method Statement.

Daily Pre-Start Meeting – The JH internal prestart is carried out by either the Site Manager/ Supervisors or Foreman late in the afternoon to plan and record the next day's critical activities. The JH prestart minutes are then distributed for each subcontractor to use to conduct their daily prestart which is chaired by Supervisor of each subcontractor discipline.

Tool Box Meeting – Weekly or fortnightly as required. Topics include Heavy lifts, complex operations, safety alerts or high-risk activities will require a job specific tool box

meeting prior to each operation to go through the step by step sequence of the operation, to evaluate the associated risks of each step, to assign individual responsibilities, review contingencies and assess previous performances. TRAs should be signed off at this time by each participant in the operation or activity.

Safety Committee Meeting – To be determined after the formation of the Health Safety Committee (HSC), but usually with be at least fortnightly and generally weekly on Wednesday. The HSC will be formed by management, employee and subcontract representatives. The Committee will actively encourage employee consultation and participation in safety improvement activities including site inspections/walkabouts and hazard identification. It will promote a positive culture of safety awareness and ownership amongst all personnel. An award system will also be set up where workplace personnel exhibiting safety awareness and involvement will be recognised and rewarded on a monthly basis.

As well as the above, there are Management Site Meetings and Safety Reviews occurring at regular intervals to ensure safety policies, procedures and systems are maintained and improved. These reviews and audits include Principal Representatives (Construction Managers, MBA representatives, SafeWork NSW Inspectors, etc.) and their associated checklists.

3.2.4 Incident Management

Incident Management Procedures to cover the control processes in the event of a major incident on the project are covered in the Emergency Response Management Plan.

A listing of emergency contacts is maintained on the project and updated as required. The listing will be displayed in all prominent positions throughout the project and will be communicated at Project Inductions. Further, a project specific Emergency Response Management Plan has been developed and implemented.

As per head contract, the JH Project Manager will immediately notify the Principal of any safety incidents or emergencies if they arise.

3.3 Quality

A project specific Quality Management Plan has been developed for the project.

This plan outlines the system elements to be used for the implementation and execution of the Quality Management System (QMS) for the project and has been developed within the framework of AS/NZS ISO 9001:2008. The Quality Management Plan is consistent with the management system in order to provide a uniform approach to quality across the project. The Quality Plan defines all necessary quality documentation to be provided by JH such as:

- Project specific procedures, which include safety, quality and environmental risk management requirements as well as technical requirements; and
- Control measures for monitoring the performance of subcontractors and suppliers.

The QMP together with the SQE Workplace Risk Assessment (WRA), Inspection and Test Plans (ITP) and Activity Method Statements form the project specific QMS to ensure that all works, supplies and services are carried out in a planned, systematic and

controlled manner and deliver completed works in accordance with the standards specified.

The Project Quality Representative (PQR) is responsible for the implementation of the Quality Management Plan.

The PQR together with the Project Engineers will contribute to the preparation of the Workplace Risk Assessment and Activity Method Statements and will develop ITPs for the project. The PQR will ensure that all required certificates, checklists, records, evidence, inspection reports etc., are compiled and attached as supporting documentation for each ITP. The ITPs and supporting documentation will be filed in such a manner to ensure lot traceability and easy verification that all specification requirements have been satisfied.

Verification and sign-off of project activities will occur on three levels in accordance with quality management and specific project requirements, namely:

- Consultant, supplier and sub-contractor verification and sign-off;
- JH verification and sign-off; and
- Principal Authorised Person and witness testing verification and sign-off as required under Head Contract.

Verification of JH and consultant/supplier/subcontractor activities by internal processes will be carried out in accordance with the provisions of the relevant management plans. This includes:

- Normal verification of design in accordance with AS/NZS ISO 9001:2008 and Head Contract requirements as implemented in the project management system;
- Verification of construction activities through objective evidence produced from records of inspection and test plans and other inspection processes; and
- Audit outcomes of all project processes.

The Design Manager shall establish the quality requirements for all design documentation.

The Project Manager will make all necessary provisions to ensure that the required interaction with the Principal occurs. The project Design Management Plan provides the processes for interaction with the Principal during the design phase, particularly in respect of review of design documentation and consultation with user groups as required.

The Project Manager shall also be responsible for establishing the quality requirements for offsite manufacture and fabrication and organising the inspection of incoming materials, items, plant and equipment, as well as controlling the quality outcomes of subcontractors under their control.

The PQR is responsible for overseeing the quality system questionnaire for subcontractors and suppliers during procurement. The questionnaire is to be conducted in association with sub contract interviews and supported by the Commercial Manager.

Verification, Inspection and test procedures and associated planned records shall be submitted to the Principal for acceptance no later than 7 days prior to the commencement of the applicable work as required by the contract.

The Principal has engaged APK (Altus Page Kirkland) as the Independent Certifier/ Quantity Surveyor who will act as the independent construction verifier for this project and may inspect the construction elements throughout the duration of the project.

The Quality Management Plan defines the above hierarchy of verification and sign-off. Sign-off will culminate in the various required certifications.

To ensure compliance with the project quality management system and risk management requirements, internal audits will be scheduled throughout the life of the project. These compliance audits, which will be performed by qualified John Holland auditors' independent from the project, are reported to JH senior management.

3.4 Environment

A project specific Construction Environmental Management Plan (CEMP) has been developed for the project. The CEMP details the management procedures required to ensure that the construction of temporary and permanent works comply with applicable State legislative environmental regulation and project requirements including environmental risk management requirements.

The CEMP provides a framework to manage project activities and to minimise impacts to the natural, built and social environment. It has been prepared as a requirement of the Head Contract. The CEMP also addresses environmental aspects and Impacts recorded in the project's combined SQE Workplace Risk Assessment, as well as JH's third party environmental accreditation responsibilities. Waste management approach and noise, vibration and dust control measures.

John Holland's environmental management system has been third party accredited to AS/NZS ISO 14001:2004. IMS procedures including all environmental procedures have been incorporated into an electronic "Lotus Notes" database and are accessible at computer terminals in all John Holland offices and project site offices.

The Project Environmental Representative (PER) is responsible for ensuring the CEMP is correctly implemented. The PER shall also ensure that all environmental permits and licences as noted in the SQE Workplace Risk Assessment and Activity Method Statements, have been obtained prior to commencement of work and requirements stated in those permits are met during construction activities. Such requirements will be included in Site Environmental Plans and Environmental Inspection Checklists.

Environmental monitoring activities will be performed throughout the construction operation to ensure compliance with documented project specific Site Environmental Plans (SEPs) and conformance to statutory requirements. Environmental inspections and tests will be defined in the CEMP and recorded on Environmental Inspection Checklists. To ensure compliance with the project environmental management system and risk management requirements, internal audits will be scheduled throughout the life of the project. These compliance audits, which will be performed by qualified John Holland auditors' independent from the project, are reported to JH senior management.

3.5 Community Relations

There are community liaison requirements in the Head Contract and the Project Manager has overall responsibility for managing this process. A project specific Stakeholder and Community Management Plan has been developed for the project. In general, the Principal will manage and communicate with any negative community groups or media enquiries. For individual complaints or concerns, the JH site team will review and respond to any complaints or enquiries within a 48-hour timeframe, noting that JH Project Manager will notify the Principal of all complaints.

The project strategy is primarily to create good community relations to ensure that all project personnel are considered to be “good neighbours” by the local community and the impact of construction on adjacent hospital, local residents, adjacent business and adjacent transport infrastructure users is minimised.

All project personnel, including subcontractors, will be made aware of their community obligations during the site inductions.

The monthly report to the Principal will include all contact from stakeholders, issues raised, responses provided and required actions.

Interactions with the community may include the following:

- Initial project newsletter issued to surrounding neighbours and community
- Ongoing notifications to the local community (Project signage, Project newsletters, Advertisements as required)
- Traffic changes and alerts as required
- Attendance to local community group meetings as required (i.e. Ngayundi Health Executive)
- Regular communication with the adjacent hospital representatives (i.e. the LHD)

3.6 Work Breakdown Structure

The work breakdown structure is based on construction of North Tower with the fitout being further developed into floor levels as described below:-

- North Tower Fit-out
  - Level 3 – Plant
  - Level 4 – Pharmacy, FOH
  - Level 5 – Imaging
  - Level 6 Peri-operative
  - Level 7 – Plant
  - Level 8 – ICU
  - Level 9 – Surgical IPU
  - Level 10 – Medical IPU

- North Tower Construction
  - Bored Piles
  - Inground services (storm water, sewer, electrical, etc.)
  - Substructure, footings, lift footing, MSB pits as applicable
  - Superstructure (includes temporary and permanent)
  - Structural steel

- North Tower Envelope
  - Scaffold
  - Roofing

- Façade
- Glazing
- Canopies

- North Tower Internal fit out sequence per floor
  - Services rough in
  - Ceiling and partitions
  - Services fit off
  - Finishing trades
  - Commissioning
  - Final clean

3.6.1 Lot Numbers

The work breakdown structure is reflected in the above section and in the North Tower Extension Contract Program. This commonality facilitates effective management and review of project works and implementation to the quality lots. The WBS will be further developed during execution of the project in conjunction with updated programs and budgets.

The above breakdown enables the development of the project Lot which will align with the construction phases for structure, facade, fit out, completion and infrastructure works.

3.7 Project Planning

Project planning is the structured analysis of the alternative ways of handling the design, approval and construction of the project with the aim of developing the most cost-efficient delivery of the project within the nominated constraints and meeting JH's safety, quality and environmental risk management requirements. It is to be conducted by the project team with input from programming, design, safety, quality, environment, traffic etc. in accordance with the relevant procedures.

3.8 Project Time Control

3.8.1 Requirements

Effective programming of the most cost-efficient delivery of the project works will be required in order to facilitate and ensure timely completion. Requirements for program control of the works include:

- Establishment of an appropriate work element and activity breakdown;
- Development of a Contract Program with appropriate sub-elements showing precedence of activities, critical path, float and contingencies;
- Ability to effectively, measure, status and monitor the progress of the work in accordance with the program; and
- Effective implementation of program changes where warranted.

3.8.2 Project Program

The project programs will be developed and monitored using the Primavera project management software package P6. Microsoft Project or Excel may be used for sub-

element programs at the lower level of individual work areas or for short range program. These will then be rolled up into the Contract Program using P6 at relevant status dates.

3.8.3 Contract Program

A Contract Program was developed and will be approved by the Principal in accordance with the Head Contract. The program shows the critical path for the project and provides an overview of the project's activities and includes contractual dates such as the Site Access dates, Milestone Completion dates and the Completion dates for each portion. It is noted that the completion is defined as achievement of defect free for the milestone unless otherwise agreed by the Principal.

Appendix L contains the proposed North Tower Extension program.

The milestone dates for the North Tower Extension program are shown in Appendix L. The contractual milestones are to be agreed with the Principal and included in Head Contract. Program are listed in below table:

Description	Contracts Program
Contract Award	TBC
Site Access	23/8/16
Site Establishment	18/11/16, noting North Tower to commence in mid-2018
North Tower Milestones	Milestone 4 Completion 20/1/20 (excludes EOT's)

The Contract program will be statused monthly and included in the monthly report issues to the Principal as per Head Contract.

3.8.4 Target Program (Construction Delivery Program)

The project will prepare a no delay target program, which will be the primary driver of all activities on the project to achieve the earliest possible completion date. This program is referred to as Construction Delivery Program. This program will be status monthly and included in the internal report to JH senior management.

The Procurement Schedule has been prepared to meet the requirements of the target program and is attached as Appendix N. It is imperative that design programs and Principal decisions meet the requirements of the Procurement Schedule and Target Program.

3.8.5 Medium & Short-Range Programs

The project will prepare both Medium Range Program (MRP) for six-month look-ahead and a Short Range Program (SRP) for three-week look-ahead programs for all key activities, updated and extended weekly. These programs, (MRP in P6, SRP in Excel), will link to the Target Program and are internal JH programs. The short-term programs will be reviewed at the weekly internal management meetings and be a key management tool on the project.

3.8.6 Program Control

Monthly program updates and status of the Contract program will be provided by the project to the Principal Authorised Person for review within the monthly report. JH will work closely with Principal Authorised Person to ensure that completion of the works will

meet the date for completion. Where program review shows that progress in an area of work is behind the Contract Program, the project will implement appropriate mitigation strategies to ensure that program milestones are achieved.

The main programming tool for the JH site team is the internal Construction Program and the project will use its best endeavour to meet the target program. The time contingency, if any, between Construction and Contract Works program is considered as Contractor's float to allow for the uncertainties in construction.

3.8.7 Resources Program

Below table provides summary for the acquisition of resources for the project.

Resources Required	Responsibility	By When
1. ECI Planning Phase:- Project Manager, Design Manager, Commercial Manager, Service's Manager	Project Manager	Completed
2. North Tower Main Works Phase:- Project Engineer, Foreman, Project Engineer	Project Manager	June 2018

3.8.8 Progress Control & Reporting

The following tools will be employed to monitor, control and manage progress of project milestones.

Weekly project team meetings where program, progress and forecast are discussed will take place.

Current status of project milestones will be updated at appropriate intervals and will be tabled at the weekly meeting.

If project milestone dates look like they may not be achieved, mitigation strategies methodology will be produced by the project team to plan out the method to resolve the contributing issue/s including assessment of production rates or additional resources that may need to be used.

The following will occur to monitor programs:

Programming Target Task	Responsibility	When
Internal Status of Program	Project Manager Senior Project Engineer Site Manager	Fortnightly
Report Status of Contract program with Principal	Project Manager	Monthly Report
Specific Plans for program slippage / delay	Project Manager Senior Project Engineer Site Manager	When Required
2 Week Look Ahead (Short Range Program) – internal for site subcontractor meetings	Project Engineer Foreman Senior Project Engineer Site Manager	Weekly

3.9 Establishment/Commencement

The project launch process will require progressive implementation of numerous activities which are listed in the Project Launch procedure JH-MPR-PMA-001 and also procedure JH-MPR-SQE-006 Managing Safety, Quality & Environmental Risks.

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3.10 Design

JH has developed a Design Management Plan (DMP) that reflects the requirements of the Head Contract and details the methods and personnel to be utilised to control the safety, quality, environmental cost, timing and integrity of the design**.** It also documents the design acceptance process, design change procedure, design validation / verification / certification requirements, design deliverable dates, document formats, design reviews, request for information process etc.

The Design Consultants will comply with the requirements of the novated consultancy agreements and their own management systems.

The DMP will establish the design packages, design verification, design inputs, design review and design validation.
Changes to design originated by the Principal will be reviewed by the Design Manager in regard to variation to project costs and variation to construction program duration (which also incurs costs). Time and cost implications shall be reviewed by the Project Manager and submitted to the Principal where appropriate under the contract.

The DMP will also cover temporary works design and will set out verification processes for any in house and external temporary works design where it is required.

3.10.1 Design Cost Planning

It is recognised that the majority of cost savings to the project reside in good cost planning of design. Designs must be driven by build ability and the most economical solution may not be the lowest material cost or slimmest design.

Where required, the Cost Planner reports to the Project Manager and will be involved in assessing alternatives with input from the design, construction, programming and approvals teams. This applies to both temporary and permanent works.

3.11 Procurement

Procurement planning and packaging will be as outlined in the Procurement Schedule attached as Appendix N. The construction program is driven by the dates upon which the procured item is required in accordance with the procurement sequence for major items as set out in the Target Program.

The Project Manager in conjunction with the Commercial Manager has overall responsibility for procurement. The Project Engineers and Site Manager may have input to, any purchase order, subcontract or supply agreement. The Project Manager must approve all subcontract and supply agreements and ensure that all relevant IMS procedures and requirements are adhered to.

3.12 Construction Methodology

A project specific Construction methodology has been developed for the project. The methodology is shown in Appendix O. Appendix H contains the demarcation plans between the construction and public accessible areas. Appendix J contains the SQE site

plan recording a summary of the key site hazards and sensitive receivers at the boundaries to the project. The Appendix describes how the management of the construction site will be set out to implement the required procedures for planning, coordinating, verifying, controlling, undertaking, auditing and surveillance of the work activities. The planning includes the implementation of the Activity Method Statements including work procedures, Task Risk Assessments, Inspection and Test Plans and Site Environmental Plans, which will address the requirements of the Head Contract.

The project involves the construction processes for:

a) Site Establishment (completed on previous stage)
   - Site Establishment of sheds and amenities at 73 Uralba Street, on the Little Uralba Street properties and the main site.

b) North Tower
   - Detailed Excavation
   - Bored Piling
   - Inground services
   - Pad and lift footing
   - Structural steel frame level 3 to level 4
   - Reinforced concrete frame including post tensioned suspended slabs
   - Structural steel roof and wall framing
   - Typical metal roofing and prefinished façade, including glazing
   - Fit out including high level services
   - Partitions and ceilings
   - Final finishes (joinery, vinyl) and fit off
   - Install of MME (Major medical equipment) as required and defecting
   - Commissioning and witness testing
   - Final clean
   - Infrastructure and civil works for Level 3

Procurement planning and packaging will be as outlined in the Procurement Schedule attached as Appendix N.

Activity Method statements detailing the step by step sequence of erection or construction have been prepared. These Activity Method Statements will be further developed by the Senior Project Engineer in conjunction with the Project Safety Manager/ Advisor and Site Manager.

Construction will be carried out using a mix of John Holland personnel as well as subcontractors and will follow the exact requirements of the method statements authorised for use.

Prior to executing any element of work described in a particular Activity Method Statement, JH and the subcontractor supervisors will hold a meeting for the purpose of reviewing the step described in the Activity Method Statement. An appropriate Task Risk Assessment will be developed as an outcome from this meeting. Any specific environmental requirements (which may be required by various permits) as well as any quality requirements will also be communicated and signed off at this time. This process will ensure control over the construction of those elements which have potential to put the success of the project and the safety of personnel at risk.

The Site Manager has overall responsibility for the organisation of plant, labour and material required to carry out the work described in each work method statement. The

project will be divided into discrete portions and overseen by a Foreman and Project Engineer work area team.

Procurement planning and packaging will be as outlined in the Procurement Schedule attached as Appendix N.

Activity Method statements detailing the step by step sequence of erection or construction have been prepared. These Activity Method Statements will be further developed by the Senior Project Engineer in conjunction with the Project Safety Advisor and Site Manager. Prior to executing any element of work described in a particular Activity Method Statement, JH and the subcontractor supervisors will hold a meeting for the purpose of reviewing the step described in the Activity Method Statement. An appropriate Task Risk Assessment will be developed as an outcome from this meeting. Any specific environmental requirements (which may be required by various permits) as well as any quality requirements will also be communicated and signed off at this time. This process will ensure control over the construction of those elements which have potential to put the success of the project and the safety of personnel at risk.

The Site Manager has overall responsibility for the organisation of plant, labour and material required to carry out the work described in each work method statement. The project will be divided into discrete portions and overseen by a Supervisor/ Foreman and Project Engineer work area team. Construction will be carried out by subcontractors that will follow the requirements of the method statements authorised for use.

3.13 Traffic Management

Materials management will play a very critical role on the project. The transportation of material to and from the construction sites will be managed by the implementation of approved Traffic Management Plan in accordance with the Head Contract and the local city council requirements. A project site specific Traffic Management Plan has been developed and as required any relevant approvals from Lismore City Council (LCC) will be obtained.

For the North Tower works, the objective is for minimal impact to adjacent public roads. The materials handling proposal as shown in Appendix O is to utilise Little Uralba Street properties area as amenities and material storage area to supply the main site via the ramp to Level 3 area. The use of the off-street areas will minimise impact to the streets and the entrances to the hospital and ambulance bay.

The traffic control plan for North Tower has been consulted and submitted to LCC for approval prior to implementation in May 2018.

The above approach minimises the impact to public roads and hence limited requirement for LCC approvals and permits.

3.14 Commissioning & Project Completion

Commissioning and Project Completion should be performed in accordance with the requirements of JH IMS procedure JH-MPR-QUA-011 Commissioning of Works. A project specific Completion and Commissioning Plan will be developed to identify and mitigate the potential issues listed below.

Issues relevant to project completion include the following:-

- Management and correct service connections of FFE and MME
- Confidence of operation of installed services
- Mitigate defects or operational issues post Practical Completion (i.e. defects / re-work in fully operational hospital to be eliminated where possible)
- Plan and manage commissioning to mitigate late finish
- Identify and plan witness testing by consultants, Principal, and Independent Certifier
- Identify and plan for all Head Contract completion requirements
- Commissioning of new fit outs to mitigate disruption or loss of services to occupied floors (i.e. South Tower is occupied).
- Testing and compliance of existing services in the North Tower scope
- Substantial Completion Milestone
- Validation period for North Tower was confirmed by Principal to be 28 days.
- Completion milestone

3.14.1 Certification & Provision of Warranties

In order to gain Practical Completion, the following documents and certificates are required by the Head Contract to be submitted to the Principal:

- As Built Drawings
- All Guarantees and Warranties
- Defect free
- Notice requesting Certificate of Practical Completion
- Certificate of Classification:- Private Certifier
- Final Fire Safety certificate by FRNSW

The warranties required are included in Appendix F which is extract from Head Contract.

After completion of the project, a Close-Out workshop will be conducted to review the management of the contract and also provides opportunity to provide feedback to all parties to enable improvement.

3.15 Finance & Administration

The project exists to make a reasonable return on the investment by John Holland and the control and accurate reporting of the project financial position is one of the key tasks of the project team.
The software system Project Cost Reporting (PCR) will be used to manage and control budgets, forecasts, expenditure and reporting on the project. This software will be implemented across the project network to enable consistent information to be communicated.

3.15.1 Administration

Progress Claims will be prepared in accordance with the requirements of the Head Contract and the corresponding invoice submitted to the Principal Authorised Person on the last business day of each month, or as agreed with Principal. The Progress Claim will be made in accordance with the requirements of Clause 58 of the Head Contract.

The JH monthly claim is for relevant works completed to the date of the claim. A draft claim will be submitted on approximately the 25th of the month followed by a site inspection with the Principal and the Independent Certifier to assess the draft claim. This

should mitigate any deductions or delays with the final claim once submitted on the last day of the month.

Extension of Time (EOT) claims will be prepared by project staff as appropriate and submitted by the Project Manager to Principal Authorised Person. These EOT claims are to be reviewed and administered in accordance with Clause 50 of the Head Contract.

The project will be administered in accordance with IMS procedure JH-MPR-PMA-003 'Head Contract Administration'.

3.15.2 Project Work Breakdown Structure (WBS)

The project works and temporary works will be divided using the WBS for the purposes of allocating budgets and monitoring costs. The work breakdown structure is described in section 3.6 and Appendix K of this plan.

3.15.3 Budgets

Internal budgets will be established for the various work breakdown elements (cost centres) of the project. Budgets will be approved by the Project Manager.

3.15.4 Cost Planning

Where required, cost planning will be implemented during the design process in order to ensure that the cost of the works at the design stage meets project budgets. Equivalent cost controls will be implemented during construction with regular reporting and assumptions-based forecasting of costs to completion, in order to ensure that project costs can be appropriately managed.

Assumptions which affect all cost centres will be declared each month in the financial section of the internal JH Monthly Report and key assumptions having an impact on a particular cost centre will be noted in the back up sheets for that cost centre.

Major productivity items will be tracked with "trends" noted and variances to expectations reported.

Contingencies within cost codes will be declared within the internal cost codes and an overall Contingency shown.

3.15.5 Check Estimates

A Check Estimate is a complete re-estimation of the cost of the project and is done based on costs, cost plans and other information to a certain date, extrapolated to project the cost of the scope of work to go.

A Check Estimate may be undertaken approximately 6 months after commencement of construction and again a year later. It will have involvement at a senior level by a party external to the project, appointed by the relevant Business Unit senior management.

3.15.6 Progress Claims & Cash Flow

Revenue control is primarily through careful management of Progress Claims and Variations on the project in accordance with IMS procedure JH-MPR-PMA-003. Progress

Claims will be made promptly and in accordance with stated requirements in the Head Contract.
Variations will be monitored and reported through the use of a variations register.

The Principal's Authorised Person must assess the claim within 10 days of receipt and issue a Payment Certificate. The Payment Certificate must state the calculations employed to arrive at the amount and if more or less than the claimed amount, the reason for the difference.

The Principal shall pay the amount shown on the Payment Certificate within 10 days of the date of issue as per Head Contract requirements.

The following items must be provided prior to the Principal's Authorised Person issuing payment certificates:

- Covering letter
- Tax Invoice
- All relevant calculations
- Completed and true Statutory Declaration that all employees engaged in work under the contract have been paid all money payable to them whether by JH or subcontractor;
- Trust Account declaration including bank statement
- Design certification
- Undertaking / Security;
- Evidence of required insurances;
- Quality certification
- Conformance records for quality documentation
- Environmental monthly report
- Unfixed materials – compliance with the Head Contract requirements
- Prepayment – compliance with the Head Contract requirements

Approved Variations must be included in Progress Claims.

As the progress claim may not be able to be submitted until the last of the month and the payment of the certificate is 20 business days thereafter, outgoing payments to subcontractors should occur between the 29th and the 1st of the next month if cash flow is to be positive.

Subcontractors and consultants will be required to submit their claims to JH no later than the 25th of each month. Note that payment claims on the 1st of each month can include accrued items/monies. The claims are to be assessed within 10 days and agreed to or responded to stating the value of the assessment. Upon agreeing with the subcontractor or consultant, an invoice shall be submitted to JH for the agreed amount agreed. The subcontractor or the consultant must also submit their required Statutory Declarations to declare all their employees, subcontractors etc. have been paid. Evidence of insurance must also be shown prior to payment. Subcontractor and consultancy agreements must include/describe supporting documentation requirements so that payments to JH by the Principal are not held back due to lack of supporting information.

3.15.7 Risks, Opportunities and Contingencies

Project wide Risks are identified and monitored through the monthly report issued to the Principal.

Commercial Risks, Opportunities and Contingencies are to be identified and calculated. The appropriate contingency allowances will be calculated based on the risks and opportunities. The risk and opportunity is part of the internal JH monthly report that is submitted and reviewed by JH management.

3.15.8 Insurance

Insurances and guarantees required by the contract are listed as follows:

- Contract Works – Principal is responsible
- Public Liability – Principal is responsible
- Professional Indemnity – JH
- Workers Compensation – JH

3.15.9 Hire of Plant & Equipment

The Plant and Equipment Schedule is included in Appendix P of this plan. JH IMS “Plant & Equipment” procedure JH-MPR-PAE-001 must be applied in the control of all plant and equipment hire on the project. The Project Manager shall have overall responsibility of plant and equipment hire. The Appendix summarises major plant or equipment items required for the project directly hired by JH but does not list all plant that is the responsibility of relevant subcontractors and suppliers

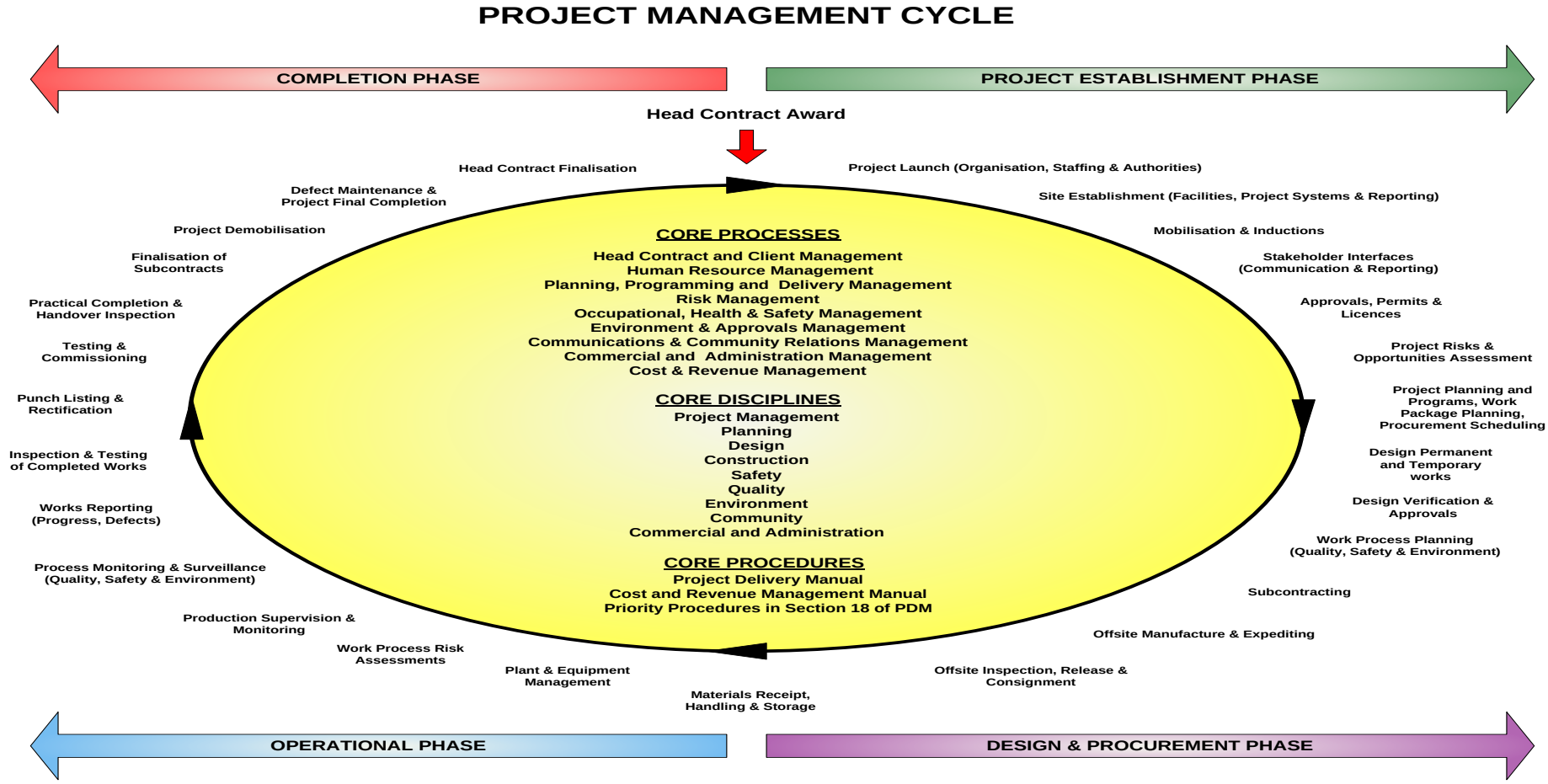
Appendix A Definitions and Abbreviations

The following definitions are used in this document:

Abbreviation	Definition
AMS	Activity Method Statement is a planning process to determine detailed methodology which breaks down and analyses individual WRA work elements). Also referred in industry as Work Method Statement (WMS), Work Pack and/or Safety Activity Pack.
APK (Altus Page Kirkland)	Independent Certifiers, appointed by Principal, who will act as the Independent construction verifier
AS	Australian Standard
ASS	Material which contain iron sulphides in concentrations which have the potential to produce acidic conditions in the earthworks if left untreated. Acid sulphate soils will include all materials which are actual acid sulphate soils (AASS) or potential acid sulphate (PASS) soils as indicated by the acid sulphate soil testing regime in the EMP.
CEMP	Construction Environmental Management Plan
Construction Management Plan (CMP)	A document setting out the specific management issues, performance outcomes, practices, resources, activities and responsibilities relevant to a particular project or contract i.e. this document.
Contractor	John Holland Pty Ltd (John Holland) as the organisation responsible for the total performance of the works under the Head Contract.
Consultant	The Consultant who has been engaged or novated to John Holland to perform the design, preparation of detailed "For Construction" documentation and necessary certification to meet contractual requirements.
D&C Subcontractor	A subcontractor who is required to carry out design of work elements and their necessary certification, as well as and preparation of documentation, coordination, supply and installation to meet contractual requirements.
EIFR	Environment Incident Frequency Rate
Environmental Harm	As defined by the Environmental Protection Act 1994, including nuisance, serious and material environmental harm
EPA	The Environment Protection Agency (EPA) is responsible for conducting environment assessment, research to create and enforce standards and laws that will promote the health of individuals and the

	environment.
FFE	Furniture, fixtures and equipment
Head Contract	Contract between the Principal (Health Infrastructure) and John Holland Queensland Pty Ltd.
ITP	Inspection and Test Plan
JH	John Holland Pty Ltd, which complies with all John Holland Groups processes and procedures.
John Holland	John Holland Pty Ltd (JH) as the organisation responsible for the total performance of the works under the Contract.
KPI	Key Performance Indicator
MME	Major Medical Equipment
MRP	Medium Range Program
NCR	Non-Conformance / Compliance Report
PEM	Project Environmental Manager
PER	Project Environmental Representative
Plan	A document setting out the specific practices, resources, activities and responsibilities relevant to a particular project or contract.
Principal (Client)	The party to whom John Holland is contracted for a Project. For this project the Principal is Health Infrastructure
Principal's Authorised Person	The person appointed by the Principal to perform the duties as defined in the head contract. For this project the Principal's Representative is CBRE.
QMP	Quality Management Plan
QMS	Quality Management System
SQERM	Safety, Quality and Environment Risk Management
SRP	Short Range Program
Subcontractor/Supplier	Any company, body or person who is contracted to John Holland for the purpose of supplying goods or services. Categories such as manufacturer, fabricator and supplier are considered Subcontractors.
TRA	Task Risk Assessment
WBS	Work Breakdown Structure
Workplace Risk Assessment (WRA)	Workplace Risk Assessment (high level risk assessment conducted on workplace and broken down into work components for the purpose of identifying system, training, legislative, high level physical action and the identification of further detailed planning and risk assessment activities).

Appendix B Project Management Cycle



Appendix C Matrix of Project Plans

Management procedures will be as per John Holland Integrated Management System (IMS). Further the project will implement the following project plans.

Document Reference	*Documentation Description*	*Sponsor*	*Submission Date*
LBH-JH-Y-0002	Design Management Plan (DMP)	Brett Popham	23 May 2016
LBH-JH-Y-0003	Quality Management Plan (QMP)	Brett Popham	2 August 2017
LBH-JH-Y-0004	Construction Environmental Management Plan (CEMP)	Brett Popham	21 April 2017
LBH-JH-Y-0005	Workplace Safety Management Plan (WSMP)	Brett Popham	12 February 2018
LBH-JH-Y-0007	Traffic Management Plan (TMP)	Brett Popham	29 March 2018
LBH-JH-Y-0008	Training Management Plan (TRMP)	Brett Popham	31 August 2016
LBH-JH-Y-0009	Aboriginal Participation Plan (APP)	Internal JH document	
LBH-JH-Y-0010	Workplace Relations Management Plan (WRMP)	Brett Popham	18 July 2017
LBH-JH-Y-0011	Stakeholder Management Plan (SKMP)	Brett Popham	27 September 2016
LBH-JH-Y-0012	Emergency Response Plan (ERP)	Brett Popham	27 July 2017
LBH-JH-Y-0013	Construction Management Plan (CMP)	Brett Popham	28 October 2016
LBH-JH-Y-0014	Construction Management Plan – Refurbishment (CMP)	Brett Popham	23 May 2017
LBH-JH-Y-0015	Electrical Works Management Plan	Internal JH document	16 May 2017
LBH-JH-Y-0016	Construction Management Plan (CMP) – North Tower	Brett Popham	29 March 2018

All relevant procedures, forms and checklists in the Project Plans and on the IMS will be utilised on the LBH3B Project

Appendix D Project Documentation

Below lists of project documentation:

- Health Infrastructure Letter of Award for Contract Number HI15381MW dated 12/1/17 lists the Contracts Documents
- Design compliance to AHFG, MP5.5, BCA & AS
- Construction compliance to WHS Act 2011 and WHS Regulations 2017
- JH Project Plans (refer Appendix C)
- JH Integrated Management Systems: Procedures, Forms Appendices
- Site Specific documents for Safety (WRA, AMS, TRA), Quality (ITPs), Environmental (SEP) etc

Appendix E John Holland Mission, Vision and Values

OUR MISSION

We provide engineering and infrastructure solutions with skill and passion that benefit our customers, our people, our communities and our shareholders

OUR VISION

To transform our industry through leadership and absolute commitment to:

Safety	Know everyone will return home safely every day
Customer Focus	Be integral to our customers' success
Our People	Care for, recognise and support careers of our employees
Innovative Spirit	Deliver outstanding services by leveraging technology and knowledge
Shareholder Value	Consistently exceed expectations

OUR VALUES

Integrity	Innovation	Collaboration	Accountability	Care
We act honestly, consistently and ethically at all times	We constantly strive for new and better ways of doing things	We share and leverage our collective talents to achieve great results together	We do what we say we will do, and trust others to do their job	We protect and enhance the wellbeing of our people, communities and environment

OUR BEHAVIOURS

Integrity	Innovation	Collaboration	Accountability	Care
• Speak up when something is wrong • Demonstrate our values consistently - in good times and in bad • Maintain confidential information • Be trustworthy • Mean what you say • Don't take personal advantage	• Suggest new and better ways to do things at work • Encourage diverse thinking • Be open to change • Seek feedback and input from others • Learn from mistakes	• Share knowledge • Respect and value others • Seek shared wins • Accept constructive feedback • Encourage teamwork	• Set clear goals and meet them • Use initiative • Trust others to perform their work • Take responsibility for your own mistakes and don't blame others • Be transparent and honest about your own performance • Learn and follow the rules	• Be vigilant about and ensure your safety, and safety of others • Check in on your team mates • Make time to listen and support others • Be concerned about your impact at work • Seek to understand others' experiences - within and outside the workplace

Appendix F Warranties

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Schedule 1 – Part B

Required Warranties

Refer to clause 30.1 and Contract Information item 32 of the GC21 General Conditions of Contract.

The tables below set out the required warranties, and the minimum period for each warranty.

Major Services:

Item	Warranty Period
All electrical trades and equipment, including luminaires, communications, security, nurse call	2 years
All mechanical trades and equipment, including medical gases; Pneumatic tube systems.	1 years 1 years
BMCS	1 years
Fire services	2 years
Hydraulic services installations	2 years
Lifts	1 years
PABX	7 years
Sterilisers	5 years
Structured cabling	20 years

External (General Elements):

Item	Warranty Period
Bicycle racks	7 years
Structural steelwork corrosion protection	15 years
Bollards	7 years
Metal fencing	10 years
Handrails and balustrades	10 years
Stair Nosing	7 years
Street furniture	7 years

Door Assembly:

Item	Warranty Period
Aluminium & Glass Doors	10 years
Aluminium door frames	10 years
Autodoors	2 years parts; 1 year labour
Door closers	2 years
Door hardware Electrical and electronic components	2 years

Item	Warranty Period
Door hardware Finish	25 Years
Door hardware General	25 years
Door hardware Keys	1 years
Fire rated steel door frames	7 years
Fire shutters	7 years
Hold open devices	2 years
Metal Louvred doors	7 years
Operable Walls	7 years
Roller shutters (external)	7 years
Roller shutters (internal)	7 years
S/S Kick plates	7 years
Steel door frames	7 years
Timber doors	7 years

Membranes:

Item	Warranty Period
Balcony slabs	20 years
External & Tanking	20 years
Planter boxes	20 years
Wet Areas	10 years

Roofing

Item	Warranty period
Colorbond Gutter / Down pipe systems	15 years
Colorbond roofing	15 years
Roof Insulation and sarking materials	15 years
Roof membrane (concrete roof systems)	20 years
Stainless Steel gutter & downpipe systems	15 years
Underslab Insulation	15 years

Ceiling systems

Item	Warranty period
Ceiling systems	15 years

Roof Access Safety Systems:

Item	Warranty Period
Coating stability and colour retention of components	15 years

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Item	Warranty Period
Faults in supplying and installing components	25 years
Integrity of components	25 years

Joinery:

Item	Warranty Period
Bathroom cubicle partitions	7 years
Carcass and doors	7 years
CORIAN Benchtop	7 years
Joinery in wet areas	7 years
Reception Joinery	7 years
Servery joinery	7 years

Façade, Windows, Roof Lights, Screens, Louvres:

Item	Warranty Period
External façade (General)	10 years
Glazing and coatings	10 years
Framing system	10 years
External metal louvres, grilles and screens	10 years
Sunshading devices (aluminium)	10 years
Paint finishes	10 years
Brick / blockwork	25 years
Metal Finishes (ALPOLIC)	10 years
FC sheeting cladding systems and eaves systems	10 years
VITRA PANEL	15 years
Steel Galvanising	15 years
Applied finishes to steel	15 years
Metal wall cladding	15 years
External window systems	10 years
Internal glazed screen / partition systems	10 years
Roof lights	10 years
Canopies	10 years

Floor Finishes (internal):

Item	Warranty Period
Resilient Finishes	10 years
Vinyl skirting	10 years
Ceramic tiles	7 years

Item	Warranty Period
Carpet tiles	7 years
Carpet Broadloom	7 years
Floor Expansion joints	25 years
Timber flooring	7 years
Entry Mats	7 years
Topping slab system	20 years

Wall Finishes:

Item	Warranty Period
Paint (internal)	7 years
Paint (external)	7 years
Resilient Finishes	7 years
Render/plaster	7 years
Acrovyn Products (door & wall protection, corner guards, handrails etc)	15 years
Wall Tiles	7 years
Timber lining	7 years

Bathrooms / WCs:

Item	Warranty Period
Sanitary ware	7 years
Mirrors/glass splashbacks	7 years
Fittings, fixtures and accessories Baby change table Grab rails	7 years 5 years 1 yaer

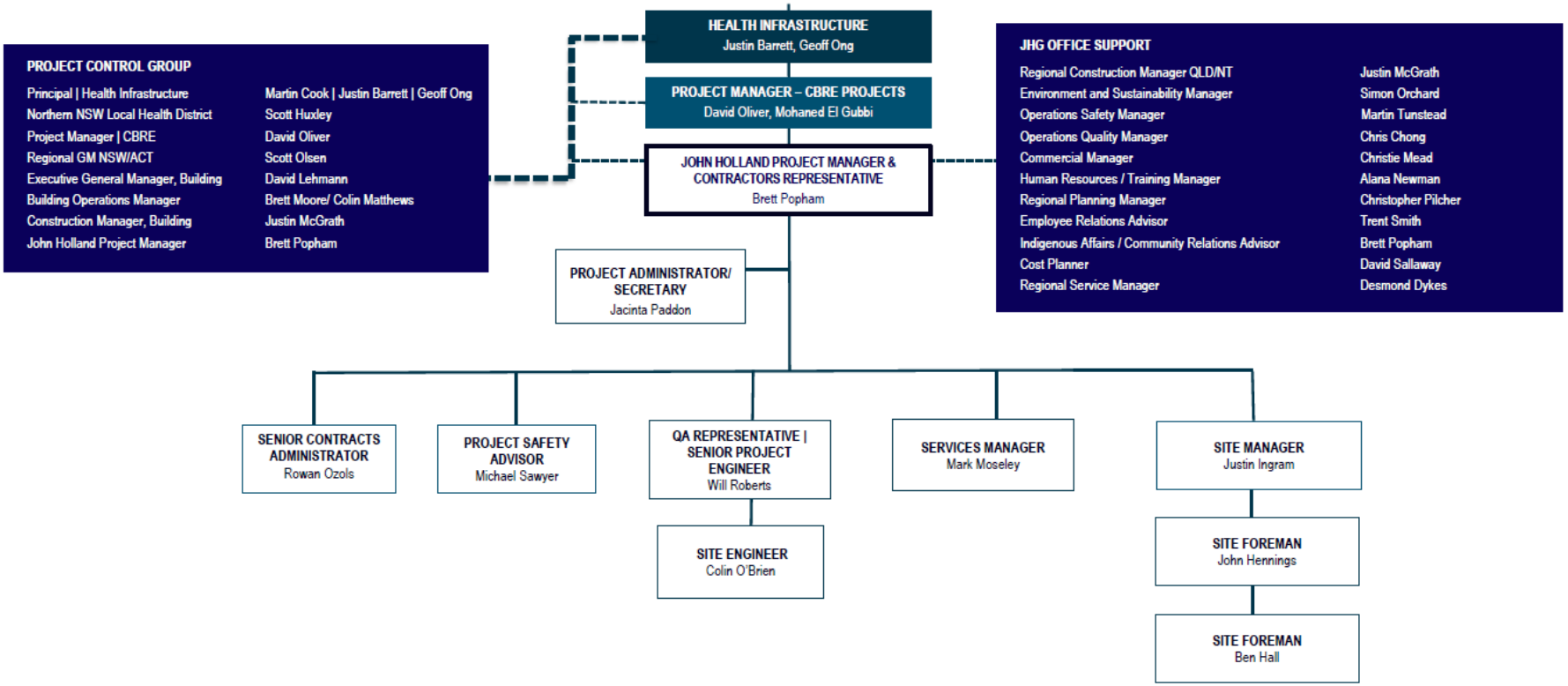
Other:

Item	Warranty Period
Fire stopping systems and compounds	10 years
Food service equipment	2 years
Furniture	7 years
Monitor brackets	7 years
Signage	7 years
Blinds	5 years
Termite Management	1 year

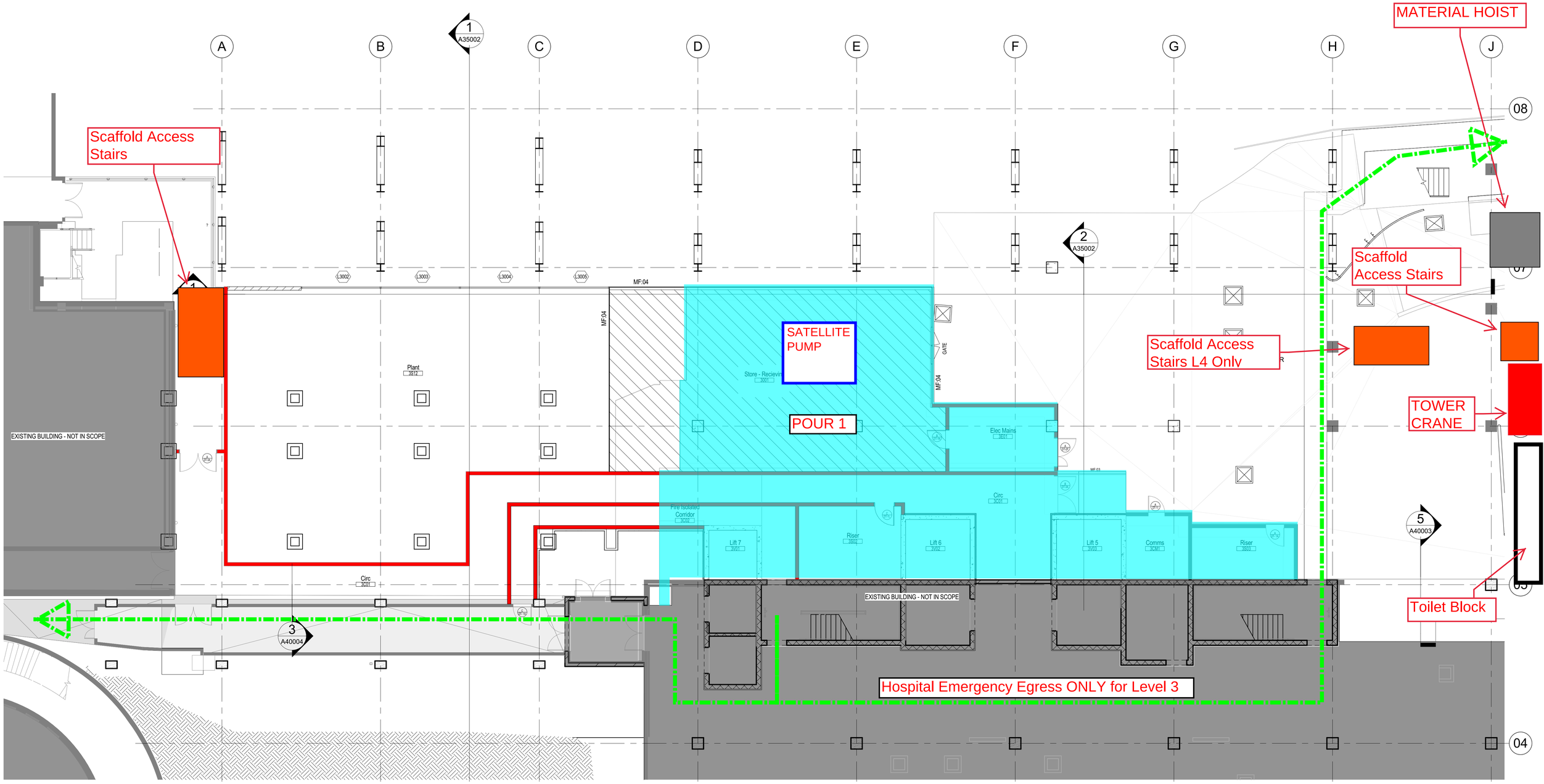
Appendix G Project Organisation Chart

Organisational Chart – Delivery Phase - North Tower

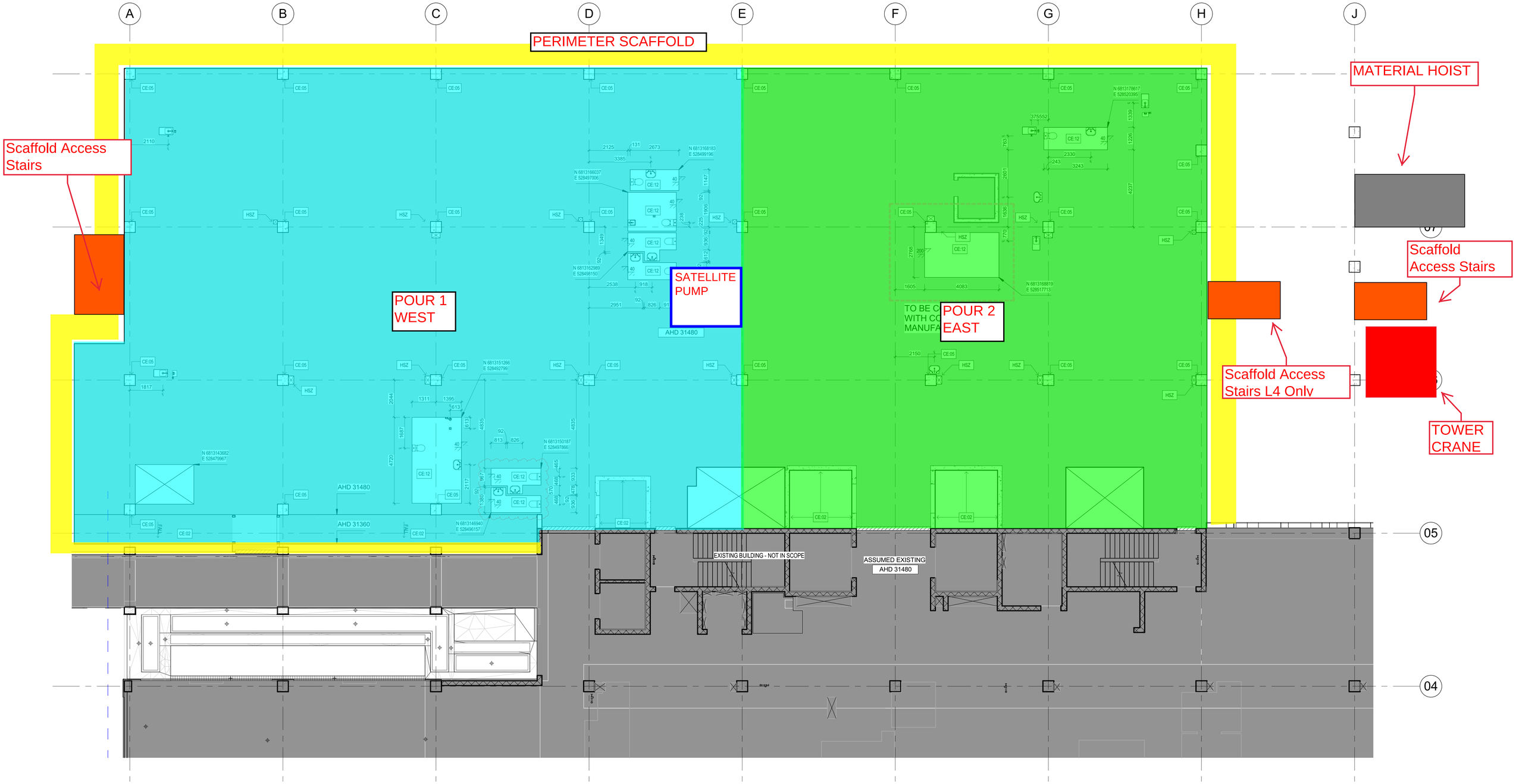
Revision A: - 20/03/2018



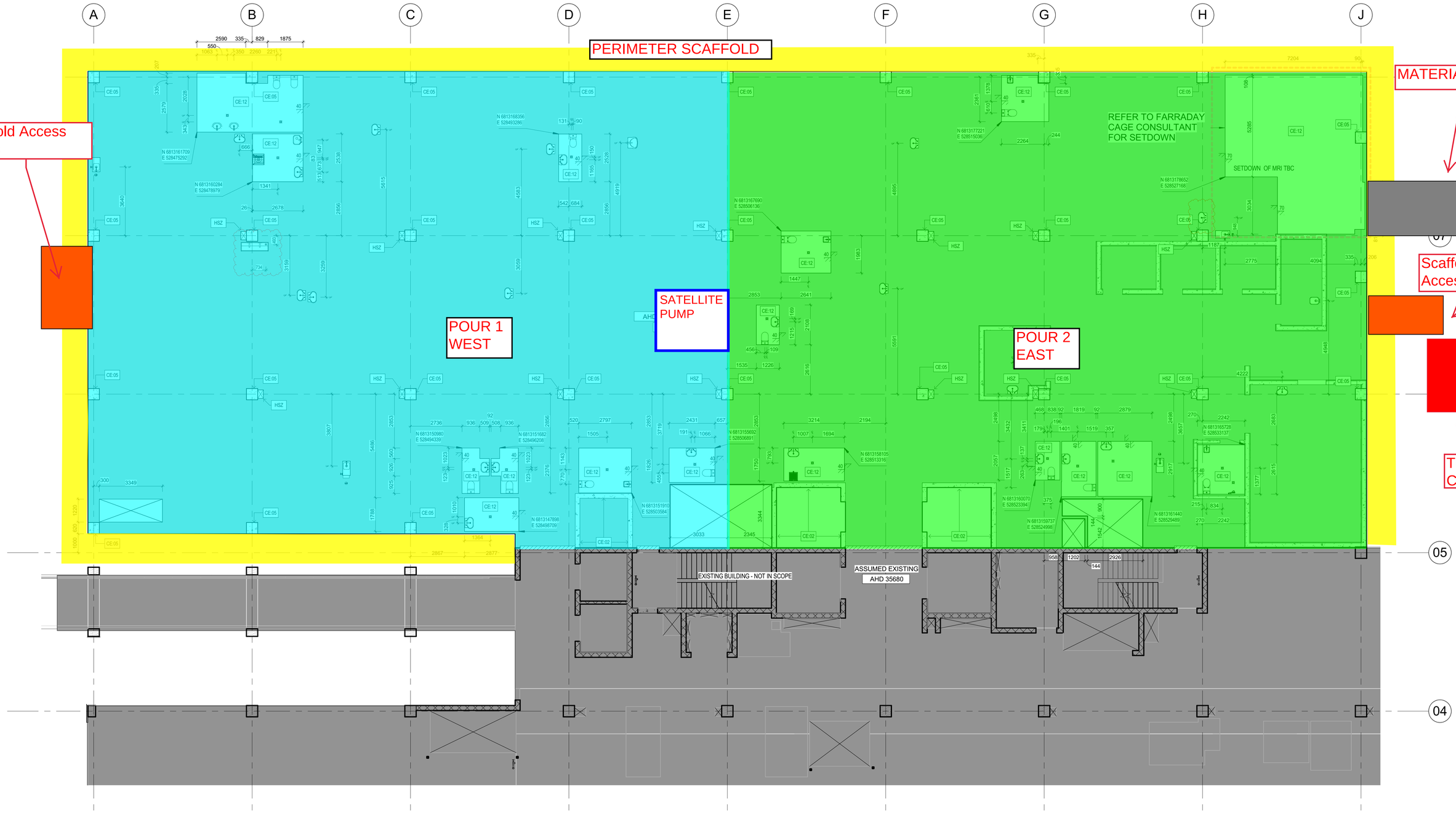
Appendix H Plans showing the North Tower (Scope of Works)



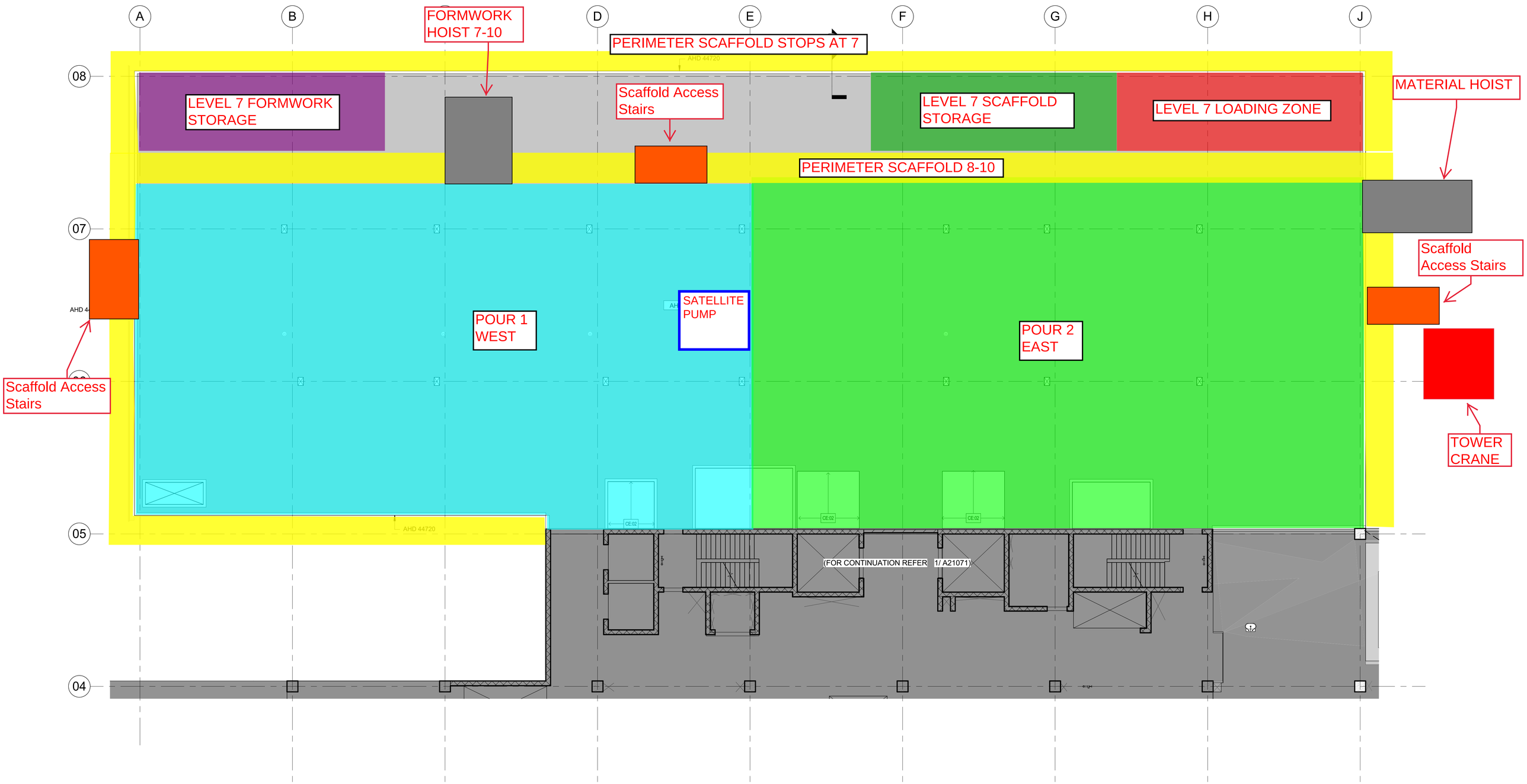
NORTH TOWER LEVEL 3 SITE PLAN



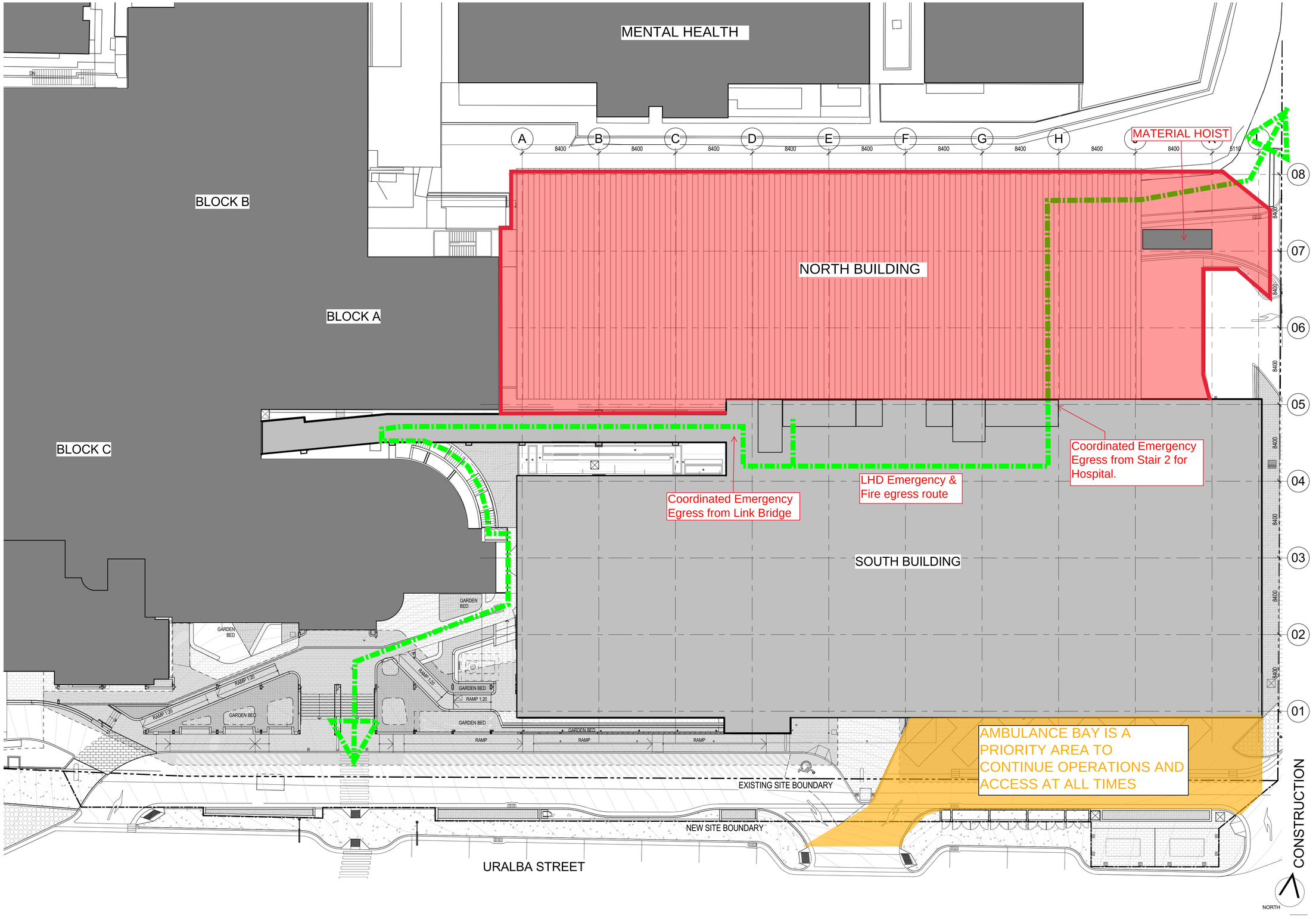
NORTH TOWER LEVEL 4 SITE PLAN



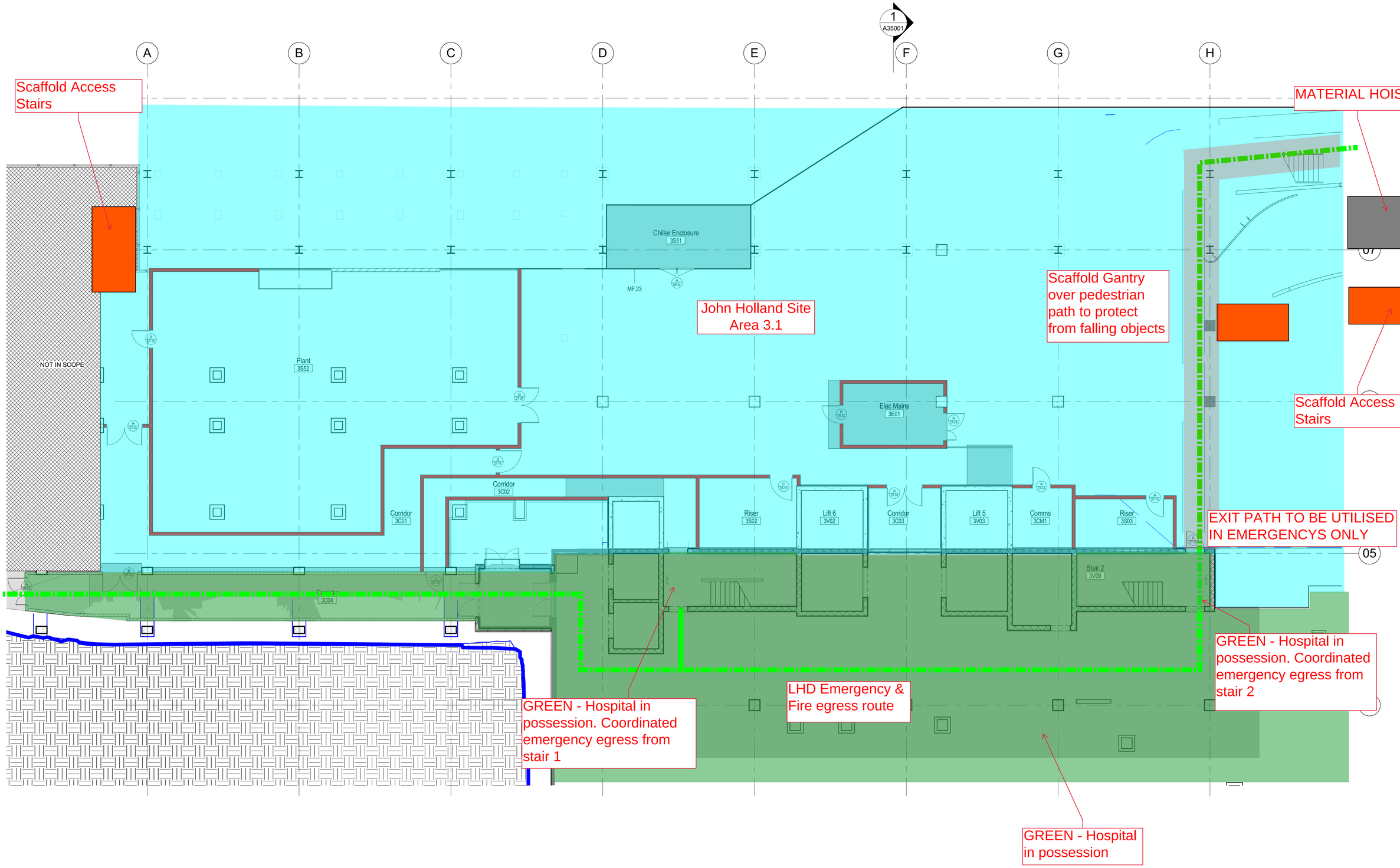
NORTH TOWER LEVEL 5-7 SITE PLAN



NORTH TOWER LEVEL 8-10 SITE PLAN



NORTH TOWER EVACUATION ROUTES



NORTH TOWER LEVEL 3 - Internal Fitout Zone