1 Denison St North Sydney

Construction Management Plan

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1. Project Images

2. Authorisation, Issue & Review

2.1 Authorisation

The issue and use of this document is approved and it is the responsibility of all Grocon personnel to ensure that work is carried out in accordance with this Construction Management Plan.

Position	Name	Signature	Date
State Construction Manager NSW	David Risbey		3 June 2014

2.2 Issue and Review

This Construction Management Plan has been developed in consultation with the NSW Construction Management Team and NSW WHS Team.

Revision	Date	Comments	Approved By
1	3 June 2014	Draft	

2.3 Distribution List

The register below identifies the distribution of registered and therefore controlled copies, of this Construction Management Plan. It will form the basis for the distribution of any amendments.

Revisions to this plan will be distributed to all holders of controlled copies. These holders shall be responsible for updating the document held by them and removing the sections that have been revised.

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Controlled Copy No.	Issue Date	Registered Holder	Registered Holder Position
Master	3 June 2014	David Risbey	State Construction Manager NSW

3. Introduction

This Construction Management Plan (CMP) has been prepared to communicate the management strategies that will be utilised on 1 Denison St project. It describes the construction methodologies, processes and procedures from site establishment through to practical completion.

Specifically this document addresses the following items:

- Work Health and Safety
- Grocon Commitment, Project Overview and Interface and Management & Training
- Site Location, Hours of Work and Site Interface
- Early Works, Temporary Services, Site Boundary & Hoardings
- Site Establishment and Site Access
- Pedestrian and Traffic Management
-
- Programming and Planning
- Stormwater and Erosion Management
- Construction Methodology:
    - Demolition
    - Ground Works
    - Main Building Works
- Materials Handling
- Perimeter Protection Systems
- Environmental Management Plan
- Noise & Vibration Management Plan
- Quality Management Plan
- Completion Plan
- Documentation Management
- Industrial Relations
- Emergency Response Procedures

The Construction Management Plan will be developed and revised throughout the construction process.

4. Construction Methodology

This Construction Management Plan has been prepared by the Grocon project team to comprehensively detail the strategy for successfully delivering the 1 Denison St for Eastmark Holdings.

The project consists of approximately 50,000m2 of GFA including

- 4 Basement levels
- Lower Ground and Ground floor
- L1 and L2 retail
- L3 Plant
- L5 to L30 Office floors
- L31 and L32 Plant rooms

Which is to be delivered in a design and construction contract for and is located at 1 Denison St North Sydney CBD.

Grocon has developed a construction methodology specifically tailored to the complex requirements of 1 Denison St project. Methodology will minimise disruption to the North Sydney Council operations and allow a successful and smooth project delivery. Specifically, consideration has been given to the following;

- Our role in the timely delivery of design documentation for procurement of works in line with the project requirements.
- The management of construction and shop detailing documentation to ensure efficient and effective construction methodologies may be implemented.
- Pedestrian and vehicle traffic management, including our approach to co-ordination and co-operation with other relevant projects.
- The WHS of personnel, the public and property, both within the construction site boundary and adjacent affected areas.
- The impact of construction on our neighbours and the authorities and services that we interact with.
- Impact of the additional construction traffic on the already congested CBD street network.
- Our collaborative approach to the management of typical construction disruptions such and noise, dust and vibration
- Management of disruptions related to the protection and maintenance of existing infrastructure

An overview of the key elements of the works are outlined below;:

1. **Preconstruction Phase** –
   Prior to construction works being undertaken on site, the following investigations will be undertaken to mitigate and control impacts arising from the works:

a. Existing Condition & Dilapidation Survey

A detailed dilapidation survey will be performed on surrounding areas including:

- Roads, kerb & gutter, footpath.
- Street signs, street furniture, light poles, trees etc.
- Infrastructure installations (pits, bollards etc.).
- Adjoining properties including facades, visible structure and important features.
- A detailed hazardous materials audit

b. Existing Infrastructure Due Diligence

Infrastructure investigations including:

- Location of services in ground (including marking of location).
- Capacities of infrastructure to understand amplifications, upgrades etc. which may be required.
- Establish dialogue and liaise with authorities to make relevant applications.

c. Authority Approvals

Approvals applications (aside from planning requirements) including:

- Work Zones.
- Hoardings.
- Crane permits (including road closures where required).
- Footpath crossover permits (if required).

2. **Early Works -** The existing Denison St. site contains essential services that are required to maintain the amenity for the occupants of the Beau Monde Apartments at 77 Berry St. Some of these services are:-
   - switch rooms
   - Fire Control Room and sprinkler booster pump /valve room
   - Stormwater
   - Sewer
   - Internal Refurbishment work of retail space in Beau Monde retail area

   To maintain the amenity of the Apartments, it is proposed to carry out these diversion works prior to the commencement of the main Development Works.

   Prior to undertaking any works on site, relevant Authorities will be contacted, and where required, applications lodged to obtain the necessary approvals and permits. All required notifications and timeframes will be established for any inspections and attendance required by the relevant authority. Such inspections and attendance will be coordinated with Grocon, subcontractor's representatives on site and relevant certifying

consultant to ensure continuity of work flow, commissioning, testing and acceptance into service

Authority	Jurisdiction
North Sydney Council	Heritage, Gantries, Hoardings, Work Zones and Stormwater
Ausgrid	Electrical Infrastructure
Sydney Water	Water & Sewage
Telstra & Optus	Telephone & Data communications
Roads and Maritime Services	Roads Infrastructure
Jemena	Gas Infrastructure
Transport for NSW	Future Rail Easement
WorkCover	Notification of demolition work
Dial Before You Dig	Information on Underground Utilities
Fire & Rescue NSW	Existing Fire Protection and Cl.152 Report
PrincipalCertifying Authority	Construction Certificates / Occupation Certificates

3. **Hazardous Material Plan -** A Hazardous Material Survey will be conducted at the site to identify hazardous materials located in the building on site. The Hazardous Materials Management Plan will identify the arrangements for the removal and disposal of potentially hazardous materials from the site, specifically asbestos. Suitably licensed disposal facilities will be used for disposal. The DCPM will track and record the disposal of hazardous materials of asbestos materials. This will be undertaken in accordance with the Protection of the Environment Operations (Waste) Regulation 2005.

    a. **Asbestos Containing Materials**- Electrical backing boards will be removed whole, sealed in appropriately marked plastic bags and placed in sealed, plastic lined bins for disposal at an EPA approved waste facility. Fibro sheeting and asbestos roofing and other asbestos containing materials (gutters, lashing etc) will be removed whole and placed in plastic sealed lined bins for disposal to a NSW EPA approved waste facility. Water will be used to prevent generation of dust. The causing Bins will be labelled ‘Caution Asbestos’ in accordance with the requirements of the Protection of the Environment Operations (Waste) Regulation 2005. An accredited asbestos removal company will be used for the asbestos removal works.

    b. **Light Capacitors Containing PCBs** - Light capacitors containing PCBs will be removed whole and placed in plastic bags and then placed in appropriately labelled and sealed 200 L drums. The drums will be transported for treatment and disposal to BCD Technologies in Queensland, or another approved facility.

c. **Lead Paint Systems** - Lead paint systems will be removed by manual scraping of the surfaces which will be wetted down during the works. Plastic will be placed on the ground around and under the work area. On completion of the scraping, the plastics will be rolled and placed in a sealed bin for disposal at a NSW EPA approved waste disposal facility.

d. **SMF Insulation** - SMF insulation will be removed and bagged in clearly marked and sealed plastic and placed in plastic lined sealed drums for disposal at a NSW EPA approved waste disposal facility.

e. **Clearance Certificate** – Following removal of the hazardous materials, the buildings will be inspected by a qualified occupational hygienist. The occupational hygienist will issue a Clearance Certificate once satisfied that all hazardous materials have been removed and appropriately disposed of in accordance with relevant legislation. Demolition and recycling of a building will not commence until a Clearance Certificate has been issued.

4. **Demolition –**

The demolition subcontractor for the demolition phase will develop and implement specific plans to ensure works appropriately deal with safety and environmental issues. This includes:

- WorkCover notification of demolition works.
- Removal of hazardous materials present within the existing building.
- Demolition of existing internal building finishes, including existing building services not required in the new development.

The sites have existing buildings being the Berry Square Shopping Centre and a commercial building which will need to be demolished to allow for the new Development. These buildings will be demolished by a suitably licensed demolition contractor. A specific CEMP will be created by the demolition contractor for these works.

'A'- class and 'B' - class hoardings will be installed to enclose the sites and an external scaffold suitable for demolition works will be installed prior to the works commencing. The next initial works will include services disconnection and redirection, removal and disposal of all contaminants (e.g. asbestos), followed by major demolition. This will commence with the internal strip out, removal of the asbestos roof structure (for the Berry Square Centre only) by a licensed contractor, progressively working down to the removal of the structural steel framing. Machines will then be lifted on to the concrete slab & progressively demolish all walls, columns & slabs, finally reaching slab on ground which will be also be removed. The removal of footings, tanks and the like which have been cut into the rock will be removed by the excavation contractor.

4.1 Demolition Management Plan

A Demolition Management Plan (containing a Demolition specific Site Quality, WHS and Environmental Management Plan) will be developed and included in the appendix of this CMP at a later date.

All works will be completed in accordance with the Work Health & WHS Act 2011 and Work Health & WHS Regulations 2011.

4.2 Demolition Subcontractor Site Establishment & Preparatory Works

- Conduct a detailed hazardous materials audit.
- Carry out detailed analysis of the surrounding infrastructure and existing services assets regarding their structural capacity and the effects that demolition / construction impacts may have.
- Carry out any required dilapidation reports and surveys, geotechnical or structural investigation and reporting.
- Confirm designated truck routes into and exiting the CBD.
- Establishment of all demolition phase environmental management procedures - sedimentation and environmental controls to the site and surrounding stormwater systems.
- Finalise all SWEMS and induct all workers to the site.
- Erect perimeter barricade tape and signage to the immediate work area as deemed necessary by a competent qualified demolition supervisor.
- Secure all entry points to the associated work faces and obtain services sign off.
- Obtain structural and civil certification of all temporary and permanent retaining structures required duration demolition.

4.3 Demolition Phase -Environmental Management

The following issues will be address prior to demolition commencing:

Dust Minimisation

Dust control caused by ground works (excavation) trades will be via the use of high pressure water sprayer / gurneys and hoses and street sweeping of the area adjacent the site and the streets will occur when required. Tarpaulins will cover truck trailers and bogies to ensure containment of material during transit.

Mist spraying will be implemented during demolition works to suppress the migration of dust.
Vacuum cleaners and water pumps within the works areas will effectively vacuum up and treat and contaminated mist spraying water from further contamination of the work site.

Vehicle Tyres
All roads surrounding the site are hard surface roads. The demolition / excavation subcontractor will install appropriate wheel washing measures (cattle grates, wheel washers, hose down bays) to ensure that road surfaces are kept

clean at all times. This will be supplemented by manually sweeping when needed.

All vehicles will be loaded from concrete or sealed hardstands and any minor spillages will be swept up immediately by the traffic controllers.

Sediment & Stormwater Control

The demolition subcontractor will ensure that sediment controls measures such drain socks, geofabric and or sand bags or the like are installed at critical locations around the site to divert, dam and remove, filter or catch water containing sediment from entering storm water or sewerage systems.

Waste water derived from demolition and excavation activities (when using mist spray for dust suppression) will be filtered before entering the storm water system.

Any ground water or storm water entering the basement into the excavation area shall be collected into a sump excavated within the excavation. The water in the sump shall be allowed to settle over night with the aid of flocculants and then pumped out into the existing storm water systems pending approval by Council. As a general rule, no water exceeding 60mg/L of sediment will be allowed to enter the storm water system.

All demolition and excavation works will comply with:

- The Department of Land and Water Conservation's Erosion and Sediment Control Manual and the Department of Housing Manual Managing Urban Stormwater – Soils and Construction (August 1998)
- NSW Protection of the Environmental Operations Act 1997.

Should groundwater require dewatering, further advice will be sought from the geotechnical engineers and dewatering systems will be designed and implement under the direction of the relevant engineers and authorities.

Waste Transport and Disposal

All contaminated and non-recyclable materials to be loaded and transported to an EPA approved landfill sites. All loads departing the site shall be covered with tarpaulins to prevent debris escaping the truck or bin body.

All materials suitable for recycling will be disposed of at the closest and relevant recycling depot. Details of the recycling depots will be described in the site Waste Management Plan.

Storage of Dangerous Goods

Flammable fuels such as petrol, diesel, Oxy-acetylene, oils, etc. will be stored in bunded and lockable compounds with sufficient ventilation. Material WHS data sheets for all of flammable and potentially harmful liquids will be stored on site.

Waste / Debris Handling and Load Out

Waste / debris handling and load out is a critical activity that is required to allow works to continue safely and with the planned productivity.

Bringing the demolition material down to the ground area for processing and loading out will be managed by the specialist demolition subcontractor to ensure that works are efficiently performed.

5. **Excavation –** The bulk excavation will be undertaken using equipment in accordance with the Excavation Contractor's work methods and safe work method statements and WHS Act 2011.
   Bulk excavation and construction of the raft slab within the building footprint. Detailed excavation for core raft slabs and lift pits.

   All material removed from site is to be sorted and disposed of in accordance with the Waste Minimisation and Management Act of 1995. All contaminated and non-recyclable materials will be loaded and transported to EPA approved landfill sites.

   All loads departing the site shall be covered with tarpaulins to prevent any debris from escaping the truck or bin body.

   Works will commence with the clearing of the site, including the removal of footings and in-ground tanks followed by the installation of external shoring piles. Early bulk excavation will start from the Spring St. boundary until a sufficient depth has been reached, so as to allow the installation of a loading platform within the site at the southern boundary.
   This loading platform will be used to overcome the difficulties associated with the tight, land-locked, restricted nature of the site. The loading platform will ideally be designed as a temporary / permanent structure, with portions of it being incorporated in the final structure of the building once construction out of the basement reaches street level. It will not only provide a platform on which machinery can both excavate from, but both a 'loading zone' for trucks to load excavated materials as well as a mustering point for concrete trucks during concrete pours.
   During this stage, excavated material will be loaded out on to the Spring St. footpath. When this platform is complete, excavation will continue from the northern end of the site towards the south, with all materials to be loaded and unloaded from this platform. As the excavation proceeds, rock anchors will be installed as per the structural & geotechnical engineer's advice. As excavation continues below the shoring walls, geotechnical engineers will carry out regular inspections to determine the requirement

for additional rock anchors, rock pins and shotcreting to ensure the structural adequacy of the remaining rock, as well as the safety of the workers inside.
As the excavation nears completion, detailed excavation will commence with the core base to enable early commencement of the core tower. Detailed excavation of footings, pits and the like will follow from the northern end to the loading platform at the southern end. The final excavated material which cannot be reached by means of excavators will be removed with the assistance of the tower crane or mobile crane as required.

It is estimated that approximately 50,000m3 of excavated solid material will be removed from the 1 Denison Street site.

Please refer to Mainland Civil's Sequencing Plans, as attached Appendix G.

6. **Construction -** Construction will commence with the early erection of Tower Crane 1 to facilitate materials handling for the site. As detailed excavation is completed to the lift core, 'form, reo, pour' of the lift overrun pits & core base will commence, followed by the erection of the core jump-form system. On completion of the core base, Tower Crane 2 will be erected. This, along with the lift lobby slabs will continue with adjustments to its completed height. The construction of footings will commence at the same time as the core base. Progressively as the footings are completed, in-ground services and pits will be constructed followed by the slab on ground. Suspended slabs will then commence from level B3 which will be completed in three pours. This three-pour system will continue to the Lower ground level. Due to the complexity of the ground floor slab, this will be broken up in to a number of pours so as to accommodate the extra steps and folds. At this point, partial removal of the staging platform may be required. As the podium levels are split into two separate portions, they will generally be completed in 2 – 3 pours, with the use of a Cuplock formwork system due to the height required, especially in void areas. The typical tower floors will reduce to two pours with the pour joint being located at the core. The tower will be encapsulated by a manual climbing formwork screen system and serviced by two external 28/32 Alimaks with the addition of a single internal core Alimak. The formwork subcontractor will be required to install an external formwork hoist or an internal monorail to lift formwork materials. Higher up, the pour joint will move southward to continue the two pour sequence to the top. As the floors are progressively stripped of formwork, installation and rough in of services will commence. When formwork screens have been raised up the building to provide four clear floors, the curtain wall will progress with final services, finishes and fitout following.

7. **Services**

When formwork or back-propping is removed from a floor area, typically four (4) levels below the leading structure floor / deck, high level services rough-in will commence. This will also include loading of the floors with materials and equipment for installation.

After the equipment is in position and materials install in the service risers the main reticulation of pipework, ductwork and electrics will radiate outwards across the floor.

Concurrently services connections within the plant rooms and floor plates will be carried out whilst suspended ceilings and partition walls are being installed.

When the facade is complete the ceilings and services fit-off will be undertaken to complete the installation of the works. Testing and commissioning will follow after all systems are finalised.

8. **Façade Installation**

The initial facade set out and installation of fixing brackets, patch fittings, sub sills, framing and relevant components for the facades will be conducted;

- Inside the perimeter structure safety screens that encapsulates the building. With panels launched and installed post screen climbing.

All facade panels and materials are to be delivered to the floors via tower crane to dedicated loading areas via retractable loading platforms or man and materials hoists.

Facade material is to be distributed across the floor and launched into position above handrail of the proprietary perimeter WorkRightExPanda(or similar) safety fencing system and installed into its final position, typically with the use of a small crawler floor crane or monorail system from the floors above.

Safe work methods, risk assessments and facade safety in design workshops will be developed and implemented in consultation with our in-house facade engineers, WHS&E advisors, industry professionals and relevant subcontractors to ensure controls are in place to agree safe installation procedures and eliminate risk of falling objects.

9. **Landscape & Ground Plane**

Ground plane works will commence once low level scaffold has been removed. External street works and promenade make good will commence once hoardings are removed.

10. **Completion and Handover**

Grocon will ensure that all works are complete, commissioned, working and are effectively integrated at practical completion with the final building adjustment and defects rectification carried out during the defects liability period. A detailed Completion Plan will be established about 6 months prior to Practical Completion.

Progressive site inspections will be undertaken to ensure that works are carried out in accordance with the design documentation. Grocon will diligently manage a project riser / void closure system ensuring full inspection prior to closing in risers, plenums, ceilings and the like. Monthly inspections will be carried out by the Architect and the Design Consultants. Consultants will issue reports outlining findings, reoccurring issues, potential design issues and required rectification and reinspection if required. Progressive inspections and sign-offs will be conducted so to ensure minimal defects at handover.

We understand the importance of commissioning in that all the building services and functions need to operate at the highest efficiency under all conditions. All services and functions will be witnessed, tested, commissioned (for the pre-occupation condition) prior to handover and effectively integrated with on-going building fine-tuning to ensure efficiency and effectiveness in the occupied and fully operational building.

As part of our handover procedure, training for the facility management team or other people nominated by the Principal or Project Manager will be programmed and provided before the building is handed over. The training will include the operation of all the services, the function of all the building facilities and any other requirements as needed.

Grocon will ensure that the project is completed and handed over on time with all Operations and Maintenance Manuals, as built documents, warranties and required approvals, certifications and training in place.

5 Stakeholder Management

5.1 Stakeholder & User Group Management

Our Project and Site Managers will have key roles in maintaining relationships with project stakeholders to ensure that the project objectives are achieved with minimal disruption to the adjoining owners & businesses and the authorities and service providers that we interact with.

We will seek to achieve a workable balance between maintaining project momentum in accordance with the construction programme and the needs and expectations of stakeholders. Some of which are listed below:

- Eastmark Holdings
- North Sydney Council
- Transport for NSW
- Roads Maritime Services / Traffic Management Centre
- Sydney Buses
- Police
- Fire & Rescue NSW
- Ausgrid
- Sydney Water
- Jemena
- Adjoining Owners / Neighbouring properties

5.2 Construction Liaison

Due the close proximity of the site to neighbours, public areas, and the adjacent public infrastructure, Grocon will carry out the project in a manner designed to minimise disruption to the activities of others to the extent practical.

Access to the site, material movement and hours of work will be in accordance with the approved working hours and pedestrian & traffic management plan. The construction programme has been based on these working hours. Grocon believe in a collaborative approach and will co-operate with all the relevant regulatory authorities by involving them early in the project and promoting a proactive “hand-in-hand” approach to project delivery.

Grocon will immediately liaise with North Sydney Council and other relevant authorities in order that appropriate Management Plans are lodged in accordance with their requirements.

Grocon will nominate someone from the site management team to act as a liaison officer, enabling ongoing communication of upcoming works and providing a contact point in the event of any issues requiring clarification or resolution.

5.3 Adjacent Buildings

Grocon, along with the traffic consultant will implement a fully integrated traffic control system on all surrounding streets with the use of on site traffic controllers, so as to ensure surrounding buildings and their driveways are not blocked by construction vehicles. It is understood from North Sydney Council that the construction of the nearby buildings may occur at the same time and that this project’s proposed construction traffic route is also from Little Spring St. This will require careful planning from both sites to ensure traffic movements in the area don’t disrupt the public.

5.4 Community Consultation

Grocon will consult with the local community to detail the proposed works and the strategies we propose to minimise any impact on access, amenity, staging and programme as well as the impact on surrounding facilities and services. In particular we will advise on the proposed pedestrian &traffic management controls to be implemented.

The purpose is to provide a forum for neighbours to discuss issues, project progress and special activities.

The meetings will be established prior to work starting on site and will meet on a regular basis for as long as required. The following plans will be discussed at these meetings:

- Construction Management Plan
- Construction Programme
- Traffic Management Plan
- Dilapidation Reports
- Noise and Vibration Monitoring Reports
- Plans for any temporary road closures and use of mobile cranes
- Demolition Report
- Geotechnical Reports

5.5 Dilapidation Surveys

Dilapidation surveys are to be conducted for all the surrounding pavements, neighbouring buildings, infrastructure etc.

Copies of these reports will be submitted to the Principal Certifying Authority (PCA), North Sydney Council and the Adjoining Owners prior to any work commencing on the site.

6 Site Boundary & Hoardings

The location of the site is an integral part of North Sydney Council and has four (4) public boundaries on that will require hoardings and or other protection structures.

A complete listing of hoarding and other protection structures required for the appropriate protection of site boundaries and other public interfaces will be as follows:

6.1 Frontages Hoarding

The Denison and Little Spring Street hoardings will comprise the following:

- Denison Street: Approximately 80 lineal metres of "B" Class hoarding
- Little Spring Street: Approximately 80 lineal metres of "B" Class hoarding.
- Typically the average hoarding height will be a minimum 2.4m to this elevation with high bays for vehicle / truck access.
- The hoarding materials will be consistent with other Grocon sites.
- Graphics / signage will be agreed with North Sydney Council prior to installation.
- Emergency Access/Egress gates will be provided.
- Security and public access lighting will be provided.
- Site shedding may be installed on hoarding.

7 Site Access

7.1 Site Access Control

Signage will be placed at all site entrances clearly stating that access is for authorised persons only. The construction workforce will be required to undertake site specific WHS induction training and will be issued with project specific identification to confirm this has been completed.

Daily sign-in registers will be kept at the main entrance to the site, and each subcontractor company will be required to advise their numbers of personnel on site each day.

Only those workers who have completed site specific inductions will be allowed to enter the site and undertake works.

Visitors to the site will need to attend to the site office, sign in, and wear PPE (minimum standard requirements) and be escorted by site personnel at all times, and sign out at the end of the visit.

7.2 Security

Grocon will have in place an on-site manned and after hours mobile security presence across the site. This security network will continue to work closely with Grocon and other relative authorities to protect people and property.

Security staff will be located at the site entry in a security booth and will assist in coordinating access to the site.

Grocon will maintain a site entry register requiring all visitors to sign in upon entry. All visitors are required to wear an identification “visitor” badge and wear PPE (minimum standard requirements) at all times while on site.

All gates are securely locked outside of working hours and patrolled by security staff. This security network will continue to work closely with Grocon to ensure that security is being maintained throughout construction.

The security guard also performs an important PR role; he is the face of the site, the first person with whom visitors, passers-by and neighbours have contact.

Site Security will be responsible for all compliance management procedures, with the Smartek Compliance Management system utilised.

8 Site Establishment

8.1 Overview

Site establishment will include the establishment of site offices, mess and toilet facilities, vehicle access, vehicle loading and unloading, lay down areas, establishment and maintenance of on-sitework areas.

We have allowed for 350 workers at the peak of construction on this stage. Initial site sheds and amenities will be located on the northern portion of the existing basement carpark which is to be retained and later form part of the new lower ground and retail areas. This will have a capacity of150 men with the additional sheds for the remaining 250 workers required elsewhere on the job. Grocon's current thoughts are to provide sheds either in the new tower.. A site office will need to be located off-site in one of the surrounding buildings, provided space is available and will need to be in the order of 400 – 600m2.

An average number of workers on site for each stage of the project will be as follows:
Early Works: 15 per day
Demolition: 20 workers + trucks
Excavation: 25 workers + trucks
Structure: 200 workers
Finishes: 300 workers
Landscaping: 15 workers

Specific areas will also be provided for the storage of materials and will be restricted to secure areas within the site. No storage will be allowed elsewhere onsite or off site.

9 Construction Temporary Services

Temporary supplies to the proposed project, site establishment and typical floors will be established as follows:

9.1 Temporary Electrical Services

Power supply to the existing building will be isolated to the floors prior to demolition. A temporary power supply will be established on the various floors as required for the demolition process. The existing substation will be utilized to provide temporary power during construction.

Based on the floor layout and typical allowance for maximum 30 metre leads, Grocon will install two (2) electrical distribution boards on each floor. Construction temporary/ emergency lighting will be provided to comply with relevant requirements of WHS regulation 2011, AS1680 & AS2293 throughout the works.

Subcontractors will be responsible for the supply of any power and lighting beyond the description above. This will include the supply of leads, lead stands, spider boards, task lighting and the like.

9.2 Temporary Hydraulic Services

Existing water mains will be re-used and extended with temporary water supply will be connected to existing mains take-offs. A metered supply shall feed into the building site and feed site establishment and temporary risers up to each level.

Temporary hydraulic services will be provided to the site accommodation areas and the construction site. As the structure progresses one (1) drinking fountain will be provided to the leading decks. One (1)drinking fountain will also be located on each floor for services, facade and finishes trade subcontractors.

One (1) hose taps will be provided on every floor and sediment drums on every second (2nd) floor. Hose taps and sediment drums will be located adjacent to the core for ease of maintenance and general access by trades.

9.3 Temporary Sewage

The existing sewer mains shall be reused for the temporary connection of builder's construction sewerage. Connection to mains will connect the temporary toilets associated with the main site establishment and the temporary riser that will connect temporary toilet cubicles on every fourth (4th)floor of the building.

9.4 Stormwater

Stormwater collected during construction will be filtered and/ or capped. Stormwater detention and overflow control measures will be implemented to prevent debris from the construction site entering the street stormwater system and this process will be monitored on a regular basis. As construction develops, stormwater control measures will continue until final detention and gross pollutant devices are installed.

9.5 Fire Hydrant

The staging of the fire hydrant system will ensure coverage up to two (2) levels below the leading structure floor / deck following initial system installation, utilising a Fire & Rescue NSW appliance / truck to charge the hydrant system in the event of a fire on-site.

10 Materials Handling

10.1 Construction Work Zones

It is envisaged that the majority of materials unloading and loading during demolition and excavation will occur on site however a street construction zone on Denison Street will be required. Denison Street construction zone will be used for

the loading and unloading of all other materials and will occupy approximately 60m of the southern end of Denison Street.

Construction work zones required to be established on existing roads, will require separate approval from the relevant Authorities.
These elements are further detailed in the attached 'Project Planning sketches Appendix C.

Once the excavation works are complete, Grocon will set up the tower cranes and commence construction of the basement. It is envisaged that there will be two (2) tower cranes servicing the project. The tower cranes will be used to handle materials for the installation of the structure, services, façade and roof. Crane 1 will be positioned in the SE corner of the project site, externally to the building. It will have the ability to load materials from the southern end of the Denison Street construction zone and will principally be used to service the southern half of the site. Crane 1 will most likely be a Favelle Favco M440D. Crane 2 will be set up using Crane 1 and will be positioned within the high rise lift core. This crane will be used to load materials from the northern end of the Denison Street construction zone and service the northern half of the site. Crane 2 will most likely be a Favelle Favco 310D. The site will also operate a 28/32 twin hoist which will be positioned on the southern face of the building. As this southern side of the building will be used for concrete pouring and turning circle area of larger trucks, this twin hoist may be better served being within the building line, however this would have a detrimental effect on any decision by the client for a staged handover. There will be an additional hoist located within the core to provide access to the jumpform access system. Again, the formwork subcontractor will be required to install an external formwork hoist or an internal monorail to lift formwork materials. The formwork subcontractor will also provide a Crown 'lift & reach' fork to facilitate the horizontal movement of materials and the raising of the formwork screens. A two tonne forklift will be provided by Grocon once the basement formwork has been stripped.

The crane and hoist locations are shown in the attached Project Planning sketches Appendix C.

Construction Work Zones:
For the building to be built, Construction Work Zones will be required for the majority of the construction building time.
The Construction Zones will be used to park trucks for the purpose of:-
Unloading materials required for the Works.
Load up surplus materials including waste, from the works.
Standing a concrete pump and concrete trucks required for the Works.
To alleviate congestion to the Construction Work Zones and streets, once the permanent basements are constructed and stripped of formwork, trucks that can be marshalled into the basements will be directed there for unloading and / or reloading of materials. Some of these activities will be:
Delivery of concrete trucks

Pick up of rubbish bins
Delivery of finishing materials such as bricks, blocks, gyprock, light fittings and generally anything else which can practically be hoisted by hoist or builders lifts rather than the tower crane to the designated floor.

The need for maintaining smooth traffic flow and pedestrian safety is essential and so four, well informed and trained, traffic controllers will be required to ensure this occurs.

To assist the traffic flow and the traffic controllers, Site Management will ensure that all trucks are pre booked well in advance for a designated time to stop in the Construction Zones so that no unnecessary cueing occurs which will restrict traffic flow. The tower cranes will have a schedule for the anticipated truck deliveries so that they can schedule their work to minimize truck waiting time in the Construction Zones. This will be monitored by a dedicated member of the Site Management team who will be responsible for this element of works. All necessary assistance will be afforded to this member by the whole team as the smoothness of operation of these Construction Zones will benefit the Project, members of the public and surrounding business operation.
occurs.

10.2 Tower Cranes

Two(2) diesel luffing tower cranes for the materials handling of all structure, facade, services and finishing trades are planned for the Tower works.

Two (2) tower cranes for the Tower works have been selected to ensure that there is adequate capacity to move materials both vertically and horizontally to the workface from very limited loading and unloading areas.

The tower cranes have been positioned to effectively and efficiently provide materials handling for the site.

Tower Crane No. 1 and No.2 will be installed prior to the commencement of tower structural demolition works and will stay in place for the duration of the building works and removed prior to completion of the project.

These cranes will essentially be “the workhorses” for all site deliveries to the project and subsequently have been selected so as to provide both speed and capacity.

At no time will any loads be lifted over any roadways or public without suitably designed overhead protection gantries traffic control and prior authority approval. The only time cranes may encroach over roadways is during “after hours weathervane” mode.

10.3 Crane removal and movement

For completion of the roof works and general site works, Tower Crane No.1 and 2 may be removed and replaced with smaller tower cranes. These will be set up on grillage on the roof areas.

10.4 Construction Hoists / Lifts

Appropriate penetrations, with perimeter reinforcement “rip” boxes, pull out bars, or similar, will be made to accommodate all temporary penetrations. These will need to be in filled progressively from bottom to top once crane, hoists etc. are removed.

10.5 Concrete Pumping and Placement

The structure and concrete pour sequence will comprise of two pour for the slabs on each level. Typical one (1) core jump form pours per floor will occur where stairs and miscellaneous items will also be poured.

The concrete pumping zone will be located in the work zone. There are provisions for two concrete trucks to reverse onto the concrete pump.

Concrete will then be pumped via static line to the tower boom located within the jump form then distributed to the respective pour area.

Note: Upon engagement of the concrete subcontractor; another two tower booms may be installed to facilitate the concrete pours.

11 Pedestrian Management

Pedestrian safety is of utmost importance to all stakeholders and the plan to safeguard their protection is detailed below. Grocon will provide temporary signage where necessary to direct the public and to warn them of any potential hazards. The content and position of the signs will be in accordance with statutory and council requirements. Temporary crossovers will also be constructed so as to divert pedestrian traffic when footpaths are closed.

During the demolition stages, an ‘A’ - Class Hoarding and heavy duty scaffold encapsulating the existing buildings will be required to allow the works to be completed safely. The existing buildings are built to the boundaries of the properties.

The footpath in Little Spring Street and Denison Street is between 1.2 to 1.9m wide. To safely allow pedestrians to pass by, ‘B’ – class hoardings will be erected on both these streets, 3m from the building line, to allow pedestrian access underneath. It is proposed that heavy duty scaffold be erected on top of the hoarding to encapsulate the existing building for demolition.

To maximize public and pedestrian safety, we would propose the erection of an 'A' – class hoarding at the kerb line to the Spring Street frontage of the building, closing the footpath to pedestrian traffic.

This footpath area within the site hoarding would also facilitate standing trucks to load them of the demolition rubble, hence eliminating the need to use areas other than the construction work zones to stand trucks for loading of rubble.

To facilitate pedestrians using the alternate side footpaths, we would suggest the installation of a raised pedestrian crossing in Little Spring Street similar to the ones that exist in Denison Street. Adequate signage will be provided by the builder to inform pedestrians to this effect.

During the excavation stage, the hoardings as proposed for the demolition stage will remain and would continue through the construction stages of the project.

12 Traffic Management Plan

In partnership with the Traffic Consultant, a detailed heavy vehicle access route map will be produced, outlining routes through Council areas to arterial roads with provision to ensure through traffic is maintained at all times, prior to commencement of the works.

The road network serving the site comprises:

- Walker Street
- Little Spring Street
- Denison Street
- Spring Street
- Berry Street

Traffic will generally be managed at the site in the following way:

- Designated transport routes shall be communicated to all personnel
- Strict scheduling of vehicle movements is to occur to minimise vehicles waiting off the site
- Current directional traffic flow around Little Spring Street Denison Street and Spring Street will not be altered during the construction phase of the project.
- Site workers are to utilise local public transport and car sharing wherever possible

The development involves the demolition of the existing shopping centre at 77 Berry Street, which will involve the movement of construction vehicles and pedestrian management measures.

Daily construction activity on the site is scheduled to occur as detailed in the consent conditions. No work shall be conducted on the site during Sundays or

Public Holidays. Vehicular movements associated with construction will only operate within these hours, which will be defined by the Conditions of Consent. All works will be undertaken within the site, other than the unloading of materials, which will require the provision construction zone within the Walker Street and Denison Street frontages.

No tracked vehicles will be permitted or required on any paved roads. Public roads and access points will not be obstructed by any materials, vehicles, refuse skips or the like, under any circumstances. It is anticipated that all works will be carried out within the site and will require the provision of 'A'-Class hoardings along all boundaries of the site.

If there is a requirement to operate any material handling machinery on public access roads, Grocon will be required to seek Council or police approval prior to the event occurring. All associated requirements and regulations relative to such work will be satisfied.

In partnership with the Traffic Consultant, a detailed heavy vehicle access route map will be produced, outlining routes through Council areas to arterial roads with provision to ensure through traffic is maintained at all times.

Access to neighbouring properties will be maintained at all times and Grocon will keep property owners and residents advised of the timeframes for completion of the various stages of the project via letter drops.

Consideration should be given by the client to hold discussions with North Sydney Council to attempt to acquire portions of the parking zones on Little Spring St. and the narrower sections of Denison St. The reason for this is two fold: Firstly and most importantly, it is to protect the safety of pedestrians and people getting in and out of their cars on these roads. Secondly, it is to protect the parked cars on these roads from damage and to allow the larger trucks to pass by with minimal congestion. Grocon has had preliminary discussions with members of North Sydney Council on these matters and has received support in principal for these requests. North Sydney Council has suggested that further discussions with their head of construction and planning would be beneficial.

Please refer to Appendix G – 'Halcrow Traffic Management Report', for further details regarding Traffic Management

12.1 Heavy Vehicle Management

There will be some heavy vehicles arriving and departing the site each day during the demolition and construction stages of the works. All vehicles transporting loose materials will ensure the entire load is covered by means of a tarpaulin or similar impervious material. The vehicle driver will take all precautions to prevent any excess dust or dirt particles depositing onto the roadway during travel to and from the site. The respective trades will be inducted by Grocon into the above

procedures and will monitor their trucks entering and exiting the works zones to ensure the procedures are met.

The appointed contractors and suppliers within the site will ensure that the entry and exit points will be kept free from material that has been deposited by any site vehicles. Grocon will monitor the roadways leading to and from the site on a daily basis and take all necessary steps to have rectified any adversely impacted roads pavements caused by site vehicles. The roads will also be cleaned on a regular basis when required to minimize dirt particles depositing externally from the site.

Vehicles operating to and from and within the site shall do so in a manner which does not create unreasonable or unnecessary noise or vibration. No vehicle will cause interference to any adjoining property or business.

Truck movements associated with the demolition and construction processes will approach the site from Berry Street and will use Little Spring Street and Spring Street respectively so that a straight approach to the site frontages can be achieved. Exiting vehicles would use Denison Street in order to travel back towards Berry Street and exit North Sydney.

Vehicle access routes are contained in attached Construction Traffic flow Schematic.

12.2 Truck Movements Forecast

The envisaged truck arrivals will be:

Early works -	5 per day
Excavation -	25 - 40 per day
Demolition -	5 - 10 per day
Concrete Pour -	10 - 40 per day (on pour days only)
General Construction -	5 - 15 per day
Fit out -	5 - 15 per day (mainly within loading dock)
Landscaping -	5 - 10 per day

12.3 Street Closures

For the works to be completed safely, several temporary street closures will need to occur. These may affect Little Spring Street, Denison Street and Walker Street. These closures will be well planned and documented in advance with all coordination and approvals with council and other statutory authorities sought beforehand. Public that may be affected by these closures will be notified and consulted with as to alternative arrangements.

Some of the activities that will require these closures are:

- Erecting and dismantling tower cranes
- Removal of existing pedestrian bridge over Denison Street to the Berry Square Shopping Centre
- Diversion of statutory authority services and utilities in various surrounding streets.
- Reconfiguring southern end of Denison Street and western end of Spring Street and carrying out hard and soft landscaping works.
- Excavation and construction of underground tunnel linking the basements of the commercial building and the Hotel.

Most of these road closures should occur at non peak traffic times. In regard to the last two items, these works will not be able to be limited to non peak times due to their nature and extent. To minimise the impact on traffic and maintain access to driveways, these works may be carried out when the new laneway connecting Little Spring Street and Denison Street through the Development is open to the public and traffic. This will resolve most of the traffic issues.

Attached is a sketch showing the Proposed Traffic Flows with laneway open and whilst these works are occurring.

13 Perimeter Protection Systems

During construction and installation of the facade, fall protection will typically be provided by a perimeter protective screen system. The system will comprise four elements:

1. Perimeter Protective Screens
2. Catch Screens and Decks
3. Work Right – ExPanda Fence System

13.1 Perimeter Protective Screens

The system will be an integral part of the tower structure and will encapsulate three to four floors as the building progresses. It will provide protection for all structure trades and protect against falling objects.

In conjunction with the perimeter protection screen system, best work practices will be adopted to eliminate the risk of objects falling from heights by the use of tool and material lanyards.

The perimeter protection screen system will be removed following the removal of all formwork.

13.2 WHS Fences ("Workright"/"ExPanda" Fence System or similar)

Following the removal of all formwork, the perimeter protection screen system will be removed and replaced by a WHS fence screen system that incorporates a full height (slab to slab) screen (similar to the Workright – ExPanda Fence System).

The ExPandaWHS Fence System will be installed prior to the removal of the structure perimeter protection system. As noted, the system is a combination of handrails and full height screens.

The ExPandaWHS Fence System will be removed following the installation of the facade panels.

13.3 Internal Fall Protection

Internal voids will be protected by either the Work Right –ExPanda fence system (or equivalent) or internal scaffold.

14 Work Programme & Working Hours

The working hours will be in accordance with the conditions of consent. The Saturday working hours may be reviewed by an acoustic consultant.

- Sunday Work Subject to Out of Hours Permit Approval
- Shift/Night Works Subject to Out of Hours PermitApproval

* Out of hourswork will be subject to Out of Hours Permit approvals from relevant authority/ ies.

The site will be closed down and secured on public holidays and in particular, Australia Day, Easter, ANZAC Day, Labour Day, Christmas period, New Year's Eve/ Day and the industry picnic day.

After hours lighting will be minimised to security lighting and the cranes jib tip lights.

During Earth Hour the site will be closed one hour prior so that all lighting can be turned off apart from perimeter hoarding lighting which will be provided for pedestrian comfort and safety.

The entire construction of the 1 Denison Project is expected to take approximately 37 months

15 Workplace WHS Management Plan

Work Health and Safety (WHS) is Grocon's highest priority.

WHS is one of Grocon's core values and it is imperative that the Health, Safety and wellbeing of all1 Denison St project Stakeholders, Subcontractors, Consultants, all Project Workers and Staff, any Visitors to the site and the Public, are addressed in all of our planning, design and management decisions.

A comprehensive site specific Workplace WHS Management Plan which addresses how Grocon intends to manage Work Health and Safety and its industry leading compliance with all requirements of the Work Health & Safety Act 2011 and Work Health and Safety Regulation 2011 during the construction of 1 Denison St project has been developed and is included in **Appendix A** of this Construction Management Plan.

16 Emergency Response Procedure

In the event of an emergency in relation to an accident on site, the Project Manager will be notified immediately. The allocated First Aid site personnel will also be notified and where possible assist with the incident.

The relevant external services will be contacted and arrangements will be made for access to the area of concern.

In the event of a fire or mass evacuation procedure a fixed air horn will be sounded repeatedly. The air horns will be located at the Wheat Road and the main site entrance / project office. The excavation procedure will be outlined during the initial induction and updated with toolbox talks and information boards. Personnel will then vacate in and orderly and controlled manner to the designated assembly areas to be accounted for.

The Evacuation Plan will be continually updated throughout the construction works.

A detailed Emergency Management Plan will be developed prior to site establishment works in consultation with required parties.

17 Quality Management Plan

Grocon's Quality Management System has been developed and documented to satisfy the elements of the AS/NZS ISO 9001:2000 and AS/NZS 4801:2001 Quality Management Systems requirements. It establishes the criteria for carrying out activities associated with the delivery of Eastmark Holdings.

The main objectives of implementing a Quality Management System are to:

- Sustain our current profile as market leaders in the Construction Industry;
- Maintain a consistent approach to the delivery of products and/or services;
- Deliver the product on time, within budget and to achieve complete client satisfaction.

The Quality Management System which will be implemented on Eastmark Holdings will:

- Assure the client and tenants of conformance to the specified quality requirements;
- Provide Grocon with management information derived from the Quality System to analyse defective processes and allow for their subsequent rectification and prevention;
- Facilitate the effective completion of the project within program time and budget;
- Provide the objective evidence necessary to determine the level of compliance with the project documentation;

- Apply control measures to facilitate the active identification of recurring and potential non-conforming works and their subsequent corrective and preventative actions;

A detailed Quality Management Plan will be developed during the DA approval phase of Eastmark Holdings. In summary, it will document and identify the process of implementation of the Quality Management System required for Eastmark Holdings, the organisational structure for the project, the responsibilities and authorities of personnel associated with the project and details of implementation procedures.

The Quality Management Plan will be developed and documented to comply with the specific requirements of the project and outlines as a minimum the following elements:

- Project Organisation Responsibilities and Duties
- Subcontractor requirements
- Design Control with respect to Buildability, Value Management and Particular Design Responsibilities.
- Document Control
- Purchasing
- Process Control
- Inspection and Testing
- Control of Inspection, Measuring and Test Equipment
- Corrective/Preventative Action
- Control of Quality Records
- Auditing

The Quality Management Plan will outline the organisational structure for the project, identifies the levels of authority and responsibility and lines of formal communication. It also includes persons responsible for ensuring inspection and monitoring activities are carried out at times which are relevant to maintaining the project program.

The Quality Management Plan which will be implemented on Eastmark Holdings will reflect the management, administration and construction processes to be adopted by Grocon. This will ensure that the works carried out during project delivery conform to the requirements of the project specification and to the high level of workmanship standards established and delivered by Grocon.

18 Environmental Management Plan

A detailed Environmental Management Plan will be drafted for the project.

The Environmental Management of the CBD surroundings will be paramount. Grocon will engage an Environmental Consultant who will in conjunction with Grocon, develop a Stormwater & Erosion Management Plan as part of Eastmark Holdings Environmental Management Plan. As a minimum this plan will address the following.

- Sediment laden water from 1 Denison St construction site may potentially flow into the stormwater and/or adjacent surface water bodies
- Stormwater with excessively high or low pH values could run-off from potential stockpiles
- Stormwater collected in excavations and requiring disposal
- Groundwater entering excavations and requiring disposal after dewatering
- Site cut off drains eroding and increasing site water sediment loads
- Vehicles leaving the site depositing dirt/mud on public roads after rain periods
- Removal of bulk materials off site escaping from vehicles and polluting roadways
- Debris and litter collecting along roads and in catch drains
- Site contamination through the potential for an overflow of fuel/chemical storage containers and contamination from equipment and plant repair areas.

These activities will be documented within the Grocon Environmental Management in **Appendix G**.

The above and following items have been noted as critical to the works and as such have already been reviewed.

19 Noise & Vibration Management Plan

A draft Noise and Vibration Management Plan has been produced by Acoustic Logic Consultancy and is included in **Appendix B** of this Construction Management Plan. The plan outlines the information gathering process, impact statements, control measures and implementation requirements for the site.

The proposed site team are aware of the crucial need for vibration isolation and minimisation. This includes coordinating or restricting the use and timing for rock hammering, percussion drilling or vibration generating activities that could impact the adjoining buildings and stakeholders.

Grocon shall provide a Noise and Vibration Management Plan prior to the commencement of the works.

All works will comply with The Environmental Protection Authority guidelines for noise emissions from construction/ demolition works and the provisions of the Protection of Environmental Operations Act 1997.

The following noise management measures will be implemented during the construction works:

- Grocon shall set up noise and vibration monitors around the site at locations identified by the Acoustic Consultant as sensitive areas and high risk areas.
- Works on site will only be carried during approved hours

- Grocon will be responsible for scheduling activities that generate high noise to short term duration wherever possible and practical
- Establishment of site practices and strategic positioning of processes on site
- Establishment of direct communication with affected Parties

Vibration monitoring will be used:

- At the commencement of a new activity near a sensitive structure, establish and confirm safe working distances from the sensitive structure
- When activity identified as producing significant ground vibration is occurring within the safe working distance established, continuously record vibration levels at sensitive structures using unattended vibration loggers. These will also provide a visual/audible alarm when vibration limits are approached
- When operating very close to sensitive structures, attended monitoring is to ensure that any preventative action is taken immediately to prevent the targets from being exceeded.

Where a monitor alarm is activated, the following actions shall be undertaken:

- All vibration producing works in the vicinity of the alarm shall cease immediately
- Cause of the exceedence shall be investigated immediately.
- If the cause of the event is likely to be caused again, or if another alarm is triggered, then the acoustic specialist should be advised and further action taken place before works recommence.

One of two courses of action can then follow:

- If attended monitoring is established the activity can continue with the attended monitoring confirming that even if the alarm level is exceeded the works can proceed provided the vibration limits are not exceeded.
- Work practices are modified and attended monitoring used to confirm the vibration limits are being achieved, before returning to unattended monitoring

The 2 stages of construction that will generate the most noise are:

- Demolition of the existing building
- Excavation of the basement car park

Demolition will be carried out with the use of heavy plant equipment. Where possible all plant will have necessary noise suppression equipment fitted. During demolition noise and vibration monitoring will be carried out by an Acoustic Consultant.

Excavation will be carried out with the use of heavy plant equipment. Where possible all external faces of the excavation will be saw cut to reduce excessive vibration for the amenity of adjoining neighbours. Where possible all plant will have necessary noise suppression equipment fitted. During excavation noise and vibration monitoring will be carried out by an Acoustic Consultant.

All Grocon construction workers undertake an induction program, which includes policies of minimising noise during construction, respecting neighbours and being mindful of the environment.

Grocon has reviewed all recommendations made by the acoustic consultant, Acoustic Logic, made in their 'Extended Hours Noise Impact Assessment Report' and will consider any necessary noise attenuation procedures as recommended to ensure permissible noise levels are not breached.

20 Documentation Management

All correspondence in the form of letters, memoranda, various advices, requests for information will be communicated by the Aconex web based communication system. Grocon will utilise Aconex to establish the various required mail types. It is envisaged that the mail types will cater for all eventualities, however further mail types may be available upon request to Grocon.

All mail is automatically tagged and numbered for easy retrieval. Any attachments to mail will be stored on the system however those attachments are only searchable via locating the mail.

Documentation Management is also catered for on Aconex. The document register must include any project information that is likely to undergo revisions or updates.

Documents are registered on Aconex and transmitted via Aconex. The fundamental point of the Aconex document management system is that it tracks these exchanges.

It is important to note that each organisation's document register is private to that organisation. Information in a register is only available to other organisations where it has been transmitted via Aconex. The correct use of the Transmittal process means that each organisation's document register will be up to date with current approved information.

21 Industrial Relations

Grocon's methodology is one of pro-activeness and inclusiveness with all the stakeholders in the industrial arena. Grocon has certified agreements with the major construction unions. Grocon's policy is one of ensuring that all its employees and site management have a full working understanding of all the relevant agreements.

Grocon's philosophy is to ensure that all facets of the business understand the need for constructive cooperation. Its policies in relation to occupational health, WHS and environmental requirements are of the highest standards which will result in significantly reducing the incidents of associated industrial disputes. The approach of

the Directors, which extends down to line management, is to ensure WHS is foremost in all dealings.

Grocon has involved its employees in training to ensure consultation and that their voice is heard. The “Action employees can take” initiative fully informs the employees of their rights and appropriate measures they can take to have a say in both WHS and Employee wellbeing.

Grocon will comply with the National Code of Practice for the Construction and Building Industry.

22 Completion Plan

Grocon will implement a plan for testing, pre-commissioning, commissioning, performance testing and training for the works leading up to Practical Completion. Particular emphasis will be placed on waterproofing to wet areas and maintaining photographic records.

A void closure system will be implemented through the site team to ensure testing and inspection to risers, plenums, ceiling voids and the like before they are closed in.

Commissioning will be validated by the consulting team. An inspection and test plan will be developed by Grocon who will liaise with Eastmark Holdings to ensure that concerns are considered in the close out procedure.

Manuals for each apartment type will be drafted from the design documentation and finalised prior to completion.

All of these procedures will be monitored and the addressed with the Quality Management Plan. The void closure and on-site inspections will be implemented to ensure adequate quality control of the works and will be formalised through the project Quality System.

At the completion of different phases of work we will conduct a handover to the client to take possession of different areas. All of the required completed quality assurance information will be submitted to the relevant parties for Practical Completion.

Defect Management:

- Defects inspections by Grocon, Consultants and lastly the Client.
- Sequential lock off of floors.
- Keying system for locking in place.
- Final cylinders installed on defect free, completed.

Appendices

A. **Workplace WHS Management Plan**

B. **Pedestrian and Traffic Management Plan - Halcrow 6/7/2011**

C. **Project Planning Sketches**

D. **Workplace Environmental Management Plan**

E. **Workplace Quality Management Plan**

F. **Draft Design and Construction Program**

G. **Mainland Civil Sequencing Plans – 29/4/11**

A. Workplace WHS Management Plan

Workplace Safety Management Plan

1 DENISON ST
1 Denison Street North Sydney

Discipline	Document No.	Rev #	Effective Date	Description of Change
Safety	WSMP/C1Den	1	03/06/2014	Draft

APPROVAL of AMENDMENTS

Health, Safety and Environmental Advisor _____ / /

Project Manager _____ / /

This Workplace Safety Management Plan (WSMP) is considered an integral part of Grocon's Management System which provides reference to the Organisational Structure, Procedures and Practices of Grocon which are applicable to this Project and has been reviewed and is approved for use by the National HSE Manager. Each WSMP is tailored to meet project specific requirements and is approved for use when the signature panels are completed.

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1.0 Scope and Application of the WSMP

This WSMP has been prepared to outline the scope of works, services and resources to be provided for the implementation of the Grocon Occupational Health and Safety Management System (WH&S Management System) for this Project.

Overarching the Grocon WH&S Managements System is the Grocon Work Health and Safety Policy.

Refer: Section 6 for current WH&S Policy which shall be displayed in all Office.

The WSMP has been developed to reflect the Grocon WH&S Management System's alignment with AS/NZS4801:2001: Occupational Health and Safety Management Systems.

The WH&S Management System implemented on this project shall:

- Assure the client and project stakeholders of conformance of the project works to the specified health and safety requirements;
- Provide Grocon management with information to control conformance and promote continual improvement utilising Lessons Learnt.
- Assist the completion of the project to meet programme, budget, quality and health and safety requirements;
- Provide the objective evidence necessary to demonstrate compliance with the project health and safety legal and other requirements;
- Provide control measures to support a proactive approach for the identification and prevention of hazards and or hazardous conditions that may pose a risk to the health and safety of project stakeholders and the public;
- Provide the process for the identification and control of unsafe conditions and acts and the subsequent implementation of corrective and preventative actions.

This WSMP is documented to outline or reference the resource structure, the responsibilities and authorities of personnel associated with the project and the health and safety procedures to be implemented.

It has been developed to comply with the specific requirements of this project and outlines the following elements:

- Design Development (Safety in Design)
- Workplace Risk Assessment (WRA) development
- Implementing WH&S by Consultants, Subcontractors and Suppliers
- Project Responsibilities and Duties
- Procurement & Purchasing
- Document Management & Record Control
- Inspection and Testing
- Managing Non Conformance, Corrective & Preventative Action
- Inspection, Measuring and Test Equipment
- Auditing

The Workplace Safety Management Plan (WSMP) is one part of the Construction Management Plan (CMP) which lists various other plans that may be required for the management of project activities which may include Design, Environmental, Quality and Traffic management, etc.

2.0 Project Description

The new project development will incorporate:

• Demolition of existing building	
• Excavation of 4 basement levels	
• Concrete Structure	
• Services	
• Façade installation	
• Fitout	
• Landscaping	

Note: For further details on the sequence of works and content refer to the Construction Management Plan.

3.0 Scope of Delivery for the Project

The scope of this project includes:

- Design and Construction of the project;
- Ensure the Clients WH&S Brief is met;
- Management of all Subcontractors to deliver the trade packages to achieve WH&S Objectives and Targets;
- WH&S Auditing and inspecting;
- Providing all required records to demonstrate WH&S compliance.

4.0 WH&S Management System Implementation

4.1 Commitment to Grocon's WH&S Management System

Included in this WSMP is a copy of the Grocon Occupational Health and Safety Policy which demonstrates our commitment to the delivery of excellent projects and services for our clients and all stakeholders.

In addition to this, the Grocon project team have health and safety responsibilities outlined that through implementation will demonstrates the team's commitment to achieve compliance with the Clients requirements and the delivery of a successful project.

Where Grocon undertakes part of the project works, such as structural, the requirements of this WSMP shall be applied to the Grocon works in the same way as it is applied to Subcontractors and or Design Consultants.

Grocon's WH&S Management System is third party certified to AS/NZS4801:2001 which is comprised of company policies, procedures, plans, work instructions and forms, to ensure the consistent implementation of the company's requirements on all projects.

Note: All Procedures are available in real time via the Grocon Intranet to employees. Procedures may be inspected on request, but copies are not distributed externally due to their confidential nature.

4.2 WH&S Management Systems by Subcontractors & Design Consultants

Third parties such as design consultants, subcontractors and suppliers are used on Grocon projects, and where required shall develop and implement their own WH&S Management Systems to ensure that the provision of all the products and services they provide are in compliance with the specified project health and safety requirements.

Design consultants shall be required to complete design documentation in accordance with the workplace health and safety harmonisation legislation.

Subcontractors who operate their own WH&S management system shall be required to provide a project specific Safety Management Plan.

Where design consultants and or subcontractors, do not have a safety management system, they will be required to comply with Grocon's WH&S management system.

Grocon personnel will monitor all third parties' activities and carry out regular checks, which may include reviews, inspection and audits of the third parties WH&S Management Systems. Any checking/monitoring of the third parties work by Grocon will not relieve the third parties from their responsibilities under the contract.

NOTE: In states that have adopted harmonised legislation, a Design Safety Report is to be supplied and incorporated in the WRA process of the project.

4.3 WH&S Management Systems Reporting

- All projects shall monitor and record performance against the OH& S objectives and targets as set out in the Workplace Safety Management Plan (WSMP). These shall be discussed at each month's project team meeting and the results recorded in the meeting minutes and reported in each months WH&S report.
- The Project Manager, in conjunction with the HSE Advisor, shall ensure that all safety related incidents and information is progressively recorded in the QSE system, so that each project is able to produce safety performance reports on a monthly basis. All data shall be complete and entered into the QSE system within 48 hours of the last calendar day each month.
- All Projects shall review the safety performance at the project Central Safety Committee meetings held each month to identify areas of concern or areas for improvement.
- Each State OHS/HSE manager shall monitor the safety reports from each project to ensure WH&S issues have the appropriate corrective and preventative actions in place.
- The National OHS/HSE manager will compile project and state safety information for inclusion into the monthly Board report, which is presented for review at the Corporate Central Safety Committee.

4.4 Statutory reporting to the relevant Safety Authority

- The HSE advisor is required to report Notifiable Incidents to the relevant state Safety Authority after consultation with the State WH&S/HSE manager. These Incidents shall be reported in accordance with the relevant authorities' requirements which are available from the authority web sites.

  http://www.worksafe.vic.gov.au/safety-and-prevention/health-and-safety-topics/incident-notification

  http://www.deir.qld.gov.au/workplace/incidents/incidents/notify/index.htm

  http://www.workcover.nsw.gov.au/injuriesclaims/Reportinganincidentinjury/Pages/default.aspx

  http://www.safework.sa.gov.au/show_page.jsp?id=2542

- Grocon maintains WH&S accreditation with the Office of the Federal Safety Commissioner (OFSC) and is required to produce various reports related to Scheme or Non scheme projects. These reports shall be produced by the National/State WH&S/HSE manager with input from the relevant project managers and HSE advisors. Details are available from the FSC website.

  http://www.fsc.gov.au/sites/fsc/resources/az/pages/whsperformancereportingpack

  Further details of statutory reporting are in section 16.0 Incident Investigation and Notification.

5.0 Legal and Other Requirements

The legal and other requirements associated with the delivery of the project have been identified during the assessment of risks.

Grocon subscribes to SAI Global, Safety Law and Enviro Law. Relevant stakeholders who require access to changes in legalisation and Australian Standards will be required to register and receive updates by:

- *Electronic notification from SAI Global*
  - **http://bca.sai-global.com/**
- *Safety Law and Enviro Law*
  - **http://www.enviroessentials.com.au/envirolaw/index.php?la=true**

Note: Legislative updates can also be sourced through state or territory WHS/WH&S websites.

Second and third tier Subcontractors will be advised of changes that are relevant to their Safety Plans and SWEMS via notification from Grocon Site Management through:

- Safety Environmental Committee meetings – Grocon and Subcontractors
- Sub-Contractor meetings – Subcontractors
- Aconex notification from site – Grocon and Subcontractors
- Email notification from site – Grocon and Subcontractors
- Site Safety Notice Boards – Grocon and Subcontractors
- Site Safety Management Meetings – Grocon and Subcontractors

Refer: 6010A1 Health Safety and Environmental Legal and Other Requirements Matrix

6.0 Grocon WH&S Policy

Grocon

beyond

OCCUPATIONAL HEALTH AND SAFETY POLICY

Grocon recognises that the wellbeing of people employed at work and people affected by our activities is a major priority and must be addressed during all activities performed by Grocon.

Grocon will drive a Safety culture change to become industry leaders in Safety to achieve our goal of 'ZERO HARM.' Grocon is committed to the provision and maintenance of a Safe and healthy workplace for all.

In implementing this policy, Grocon is committed to:

- Making Health and Safety an integral part of managerial and supervisory positions and ensuring it is given due consideration in all planning and work activity;
- Actively encouraging employees to embrace the culture of Safe work practices and a Safe working environment at work and beyond;
- Providing a continuous program of education, training and learning in the principles of Health and Safety to ensure employees work in the safest possible manner and embrace Grocon's core Safety Values;
- Ensuring that all work is undertaken by competent and suitably trained employees;
- Taking appropriate disciplinary action when employees and subcontractors disregard Health and Safety procedures and practices;
- Complying with relevant legal and other requirements;
- Implementing and maintaining an effective Integrated QSE Management system, to ensure that Hazards are identified, associated risks assessed and controlled;
- Measuring Health and Safety performance through regular monitoring of set measurable objectives and targets for each workplace;
- Ensure that resources are available to achieve the objectives of this policy;
- Adopting innovative strategies to assist in delivering a Safe outcome.

Daniel Grollo
Chief Executive Officer
Grocon Group
Dated this day 16th July 2012

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7.0 Safety Objectives

Grocon recognises that the wellbeing of people employed at work and people affected by our work is our first priority which must be considered and addressed during all work performed by Grocon.

Grocon is committed to the provision and maintenance of a safe and healthy workplace for all. It is the objective of Grocon to have **Zero Lost Time Injuries**.

Incidents and injuries will be investigated dependant on Potential apportioned and corrective actions implemented to prevent recurrences. Site interactions and inspections are prescribed to company positions to assist in the identifications of hazards, namely unsafe conditions and unsafe acts.

Project specific Safety Objectives will be developed in line with the Project WRA, National and State Objectives. Strategic Planning developed and implemented during the course of the Project will be considered for inclusion in this document.

7.1 Grocon Project Safety Objectives Matrix

No.	OBJECTIVE	MEASURE - KPI	METHOD	TOOLS or RECORDS	RESPONSIBILTY
PROJECT SAFETY OBJECTIVES					
1/ Subcontractor Pre Start Meetings					
1.1	CM and PM to meet with each 2nd Tier subcontractor principals to reinforce safety expectations	Each subcontract let	In house meeting and sign off	Recorded on a meeting form – 6060F5	CM, PM
1.2	Subcontractor site representative to attend site meeting to address specific safety methodology aligned to the scope of work	Each subcontract let	In house meeting and sign off	Recorded on a meeting form – 6060F5	SM, FM, HSEA
2/ SWEMS Sign off					
2.1	Project Manager to sign off on selected high risk SWEMS: o Harness work o Special crane lifts o Demolition o Confined space work	As reviewed prior to work commencing	In house review and sign off	Signed off SWEMS' filed in QSE database	PM, SM, FM, HSEA
3/ KPI - Safety Interaction Position Matrix					
3.1	Project team to complete Safety Interactions	100% return per month, considering absenteeism through personal, annual or other leave. Management review process as agenda item in Project CSC Meeting	Activities on site	Recorded in register	PM
4/ Front Line and Project Team training					
4.1	Foreman to obtain safety competency to Cert IV level WH&S	Certificate of attainment	External training. Site activities for assessment	Records filed on site and nationally with L & D	PM, SM Mentor by WH&S Manager or HSEA
4.2	Foreman and project team members (Front Line Managers) to undertake First Aid training – Occupational or Workplace First Aid as required	Certificate of attainment	External training.	Records filed on site and nationally with L & D	PM
5/ CAR Close Out					
5.1	Project team to close all allocated CAR's	100% monthly. Management review process as agenda item in Project CSC Meeting	Corrective actions carried out	Aconex, hard copy and QSE Database	PM, SM, FM, HSEA

8.0 Project Stakeholders

Client/Owner:	Eastmark Holding Pty Ltd	
Project Manager:		
Builder and ABN/CAN:	Grocon Constructors Pty Limited	ABN: 32 120 476 495
Project Office:		

8.1 Communications with Client and all Project stake holders.

Grocon communicate with our Clients and Project stakeholders using various methods including:

- Aconex mail types including; Emails, RFI's, Site Instructions OFI's, etc. (QSE Database System being developed);
- Conference calls;
- At meetings including Safety, PCG, Design, Stakeholder, User groups, Subcontractor etc.
- Written Reports;
- General written correspondence;
- Face to face conversations.

8.2 Compliments and Complaints

Complaints are deemed be issues raised from outside sources, not issues raised by any of the Project Stakeholders. Issues raised by our Clients or Stakeholders during the project shall be addressed through normal lines of project communications.

Complaints received from the community during the project, or from any source after the completion of the project, shall be recorded in the QSE data base with appropriate actions assigned to the relevant members of the project team.

Compliments may be received in the form of letters of commendation or industry awards and are usually communicated via the Grocon intranet.

9.0 Project Personnel & Resources

The delivery of the Project will be carried out by a team under the management of the assigned Project Manager as detailed in the organisational chart, which is located within the Construction Management Plan.

The Construction Manager and or the Executive Project Manager in conjunction with the Project Manager will identify and assign adequate resources to facilitate the effective and efficient management of the works. These resources will include skilled & trained personnel for management, performance of the work and verification activities including site inspections and internal health and safety audits.

The Project Organisational Chart Identifies how the project team functionally interact in order to execute their respective responsibilities and authorities to manage Grocon works, including Consultants, Subcontractors and/or suppliers to achieve contractual requirements.

9.1 Grocon Management Representatives

The Project Manager (PM) has the authority and responsibility for ensuring that the requirements of this WSMP are fully implemented and maintained throughout the duration of the project. The following health and safety related responsibilities are listed for various project positions. The PM is responsible to ensure these responsibilities are communicated to the relevant members of the Project team and ensure that they are covered in the incumbent's Position description.

The Project Manager's responsibilities are:

- Promoting a proactive safety culture to ensure the highest standard of safety performance;
- Understanding the Grocon WH&S System requirements; and
- Ensuring that the allocation of project resources is adequate to meet those needs;
- Ensuring that relevant elements of the Grocon WH&S System are implemented, monitored and reviewed;
- Initiating and ensuring the implementation of the Workplace Safety Management Plan for the Project;
- Chair the Workplace Risk Assessment workshop and ensure monthly monitoring to maintain control of project risks;
- Ensuring compliance with WH&S Legislation and supporting Codes of Practice and Standards;
- Ensuring that subcontractors' ability to comply with WH&S requirements are evaluated prior to commencing work; and
- Monitored and reviewed during delivery of contracted works;
- Attending project and other safety meetings as outlined in the Central Safety Committee Hierarchy; and
- Attending Toolbox Talks and Pre Start Meetings as required;
- Ensure all project personnel attend project and other safety meetings as outlined in the Central Safety Committee Hierarchy;
- Ensuring that safety is the first agenda item at all management and contractor meetings;
- Ensuring training needs analyses are undertaken to determine any training or competency requirements for the site; and
- Ensuring appropriate safety training or competencies requirements are attained;
- Ensuring all staff are adequately trained and instructed in the Grocon WH&S System;
- Ensuring all staff are fully informed about the hazards associated with their work activities;
- Lead and implement the Safety Interactions program;
- Ensuring all staff undertake Safety Interactions as apportioned in the Safety Interactions Position Matrix;
- Ensuring all staff participate in activities that;
  - Identify hazards;
  - Assess risks;
  - Eliminate where possible;
  - Develop and implement appropriate control measures;
  - Monitor and review the control measures;
- Disseminating WH&S related information to all site personnel;
- Consulting with employees and/or Health and Safety Representatives on all safety issues; and
- Ensuring line management participates in the Issue Resolution process;
- Ensuring line management assists in the establishment of Work Groups where requested;
- Participating in the investigation of WH&S incidents where applicable; and
- Providing team members to assist in the investigation process; and
- Ensuring controls are actioned within the allocated time frames;
- Ensuring all internal and external reporting and notification is carried out;
- Notify the State WH&S / HSE manager of All Incidents which are rated 0, 1, or 2, with in 2 hours.
- Providing the WH&S Manager with a review of Workplace WH&S performance on a regular basis.

The Site Manager's responsibilities are:

- Take the lead role in developing and maintaining a safety culture, to ensure the highest standard of safety performance;
- Understanding the Grocon WH&S System requirements; and
- Ensuring that the allocation of resources is adequate to achieve the highest standards of safety performance;
- Ensuring that the Grocon WH&S System is understood, implemented, monitored and reviewed;
- Ensuring the implementation of the line management aspects of the Workplace Safety Management Plan for the Project;
- Ensure actions raised from the Workplace Risk Assessment (WRA) are implemented and continuously reviewed to control risks in line with progress of the works on site.
- Ensuring compliance with WH&S Legislation and supporting Codes of Practice and Standards;

- Ensuring that subcontractors' ability to comply with WH&S requirements are evaluated prior to contract engagement and prior to commencing work; and
- Regularly Monitored and reviewed during delivery of contracted works;
- Attending project and other safety meetings as outlined in the Central Safety Committee Hierarchy; and
- Attending Toolbox Talks and Pre Start Meetings as required;
- Ensuring that safety is included as the first agenda item at all management and contractor meetings;
- Assist in reinforcement and promotion of good safety performance;
- Ensuring training needs analyses are undertaken to determine any training or competency requirements for the site; and
- Ensuring appropriate safety training or competencies requirements are attained;
- Ensuring all staff under their direction are adequately trained and instructed in the Grocon WH&S System;
- Ensuring all staff under their direction are fully informed about the hazards associated with their work activities;
- Undertaking Safety Interactions as apportioned in the Safety Interactions Position Matrix;
- Ensuring all staff under their direction undertake Safety Interactions as apportioned in the Safety Interactions Position Matrix;
- Ensuring all staff under their direction participate in activities that;
  - Identify hazards;
  - Assess risks;
  - Eliminate where possible;
  - Develop and implement appropriate control measures;
  - Monitor and review the control measures;
- Participate in disseminating WH&S related information to all site personnel;
- Consulting with employees and/or Health and Safety Representatives on all safety issues; and
- Actively participating in the Issue Resolution process;
- Assisting in the establishment of Work Groups where requested;
- Ensuring that Safety Environmental Committee members have the appropriate training to fulfil their roles;
- Participating in the investigation of WH&S incidents where applicable; and
- Providing team members to assist in the investigation process; and
- Ensuring controls are actioned within the allocated time frames;
- Ensuring all internal and external reporting and notification is carried out;
- Providing the Project Manager with a review of Workplace WH&S performance on a regular basis.
- Notify the State WH&S / HSE manager of All Incidents which are rated 0, 1, or 2, with in 2 hours.

The Foremen's are responsibilities are:

- Actively promoting health and safety;
- Understanding the Grocon WH&S System requirements; and
- Participating in the implementation of the Workplace Safety Management Plan for the Project;
- Ensuring compliance with WH&S Legislation and supporting Codes of Practice and Standards;
- Participating in all management and contractor meetings; and
- Attending project and other safety meetings as outlined in the Central Safety Committee Hierarchy;
- Conducting Toolbox Talks and Pre Start Meetings as required;
- Assist in reinforcement and promotion of good safety performance;
- Identifying training or competency requirements for the site;
- Ensuring all workers under their direction are adequately trained and instructed in the Grocon WH&S System;
- Ensuring all workers under their direction are fully informed about the hazards associated with their work activities;
- Undertaking Safety Interactions as apportioned in the Safety Interactions Position Matrix;
- Ensuring all workers under their direction participate in activities that;
  - Identify hazards;
  - Assess risks;
  - Eliminate where possible;
  - Develop and implement appropriate control measures;
  - Monitor and review the control measures;

- Participate in disseminating WH&S related information to site workers;
- Consulting with employees and/or Health and Safety Representatives on all safety issues; and
- Actively participating in the Issue Resolution process;
- Participating in the investigation of WH&S incidents where applicable; and
- Ensuring controls are actioned within the allocated time frames;
- Ensuring that subcontractors' ability to comply with WH&S requirements are evaluated prior to commencing work; and
- Monitored and reviewed during delivery of contracted works;
- Participate in the preparation of Grocon SWEMS;
- Participate in audits of Grocon and Sub Contractor SWEMS.

The HSE Advisor's responsibilities are:

- Actively promoting health and safety and implementing the Grocon WH&S system
- Assisting the site team to conduct the Workplace Risk assessment (WRA) and monitor the actions raised to address identified risks during the project;
- Continuously reviewing the Grocon WH&S System to meet WH&S Legislation and relevant Standards;
- Coordinating the site auditing of Workplace Safety Management Plan;
- Providing occupational health and safety expertise to support all personnel;
- Assist in reinforcement and promotion of good safety performance;
- Attending project and other safety meetings as outlined in the Central Safety Committee Hierarchy;
- Chair the site Safety Environmental Committee (SEC) meetings;
- Establish the SEC committee as soon as practicable and to comply with local requirements;
- Advise and provide site based training to personnel (as required) on hazard identification, risk assessment, control implementation and the monitoring and review process;
- Undertaking Safety Interactions as apportioned in the Safety Interactions Position Matrix;
- Continually monitor the quality of site based Safety Interactions; and
- Reporting to the site management team opportunities for improvement;
- Assisting all staff to participate in activities that;
  - Identify hazards;
  - Assess risks;
  - Eliminate where possible;
  - Develop and implement appropriate control measures;
  - Monitor and review the control measures;
- Ensure relevant WH&S information is available to all site personnel;
- Consulting with employees and/or Health and Safety Representatives on all safety issues; and
- Actively participating in the Issue Resolution process;
- Assisting in the establishment of Work Groups where requested;
- Participating in the investigation of WH&S incidents; and
- Assisting team members in the investigation process; and
- Monitoring that controls are actioned within the allocated time frames;
- Assisting in the internal and external reporting and notification process;
- Assessing subcontractors' documentation for relevance with WH&S requirements during the tender phase and prior to commencing work on site; and
- Participating in the monitoring and reviewing process during delivery of contracted works;
- Leading the preparation of Grocon SWEMS;
- Recommending appropriate personnel to participate in the preparation of Grocon SWEMS;
- Review and follow up with audits of Grocon and Sub Contractor SWEMS;
- Reporting on health and safety performance to the Site Manager and the State WH&S Manager.
- Notify the State WH&S / HSE manager of All Incidents which are rated 0, 1, or 2, with in 2 hours.

The Design Manager's responsibilities are:

- Implement Grocon's Design Safe requirements as per Design Safe Work Instruction;
- Obtain Design safe reports from all design consultants;
- Understanding the Grocon WH&S System requirements; and

- Ensuring the implementation of the line management aspects of the Workplace Safety Management Plan for the Project;
- Ensuring compliance with WH&S Legislation and supporting Codes of Practice and Standards;
- Providing the project team with technical advice based on risk management principles where applicable;
- Attending project and other safety meetings as outlined in the Central Safety Committee Hierarchy;
- Ensuring that safety is included as the first agenda item at all DesignSafe and contractor meetings;
- Assist in reinforcement and promotion of good safety performance;
- Ensuring all workers under their direction are adequately trained and instructed in the Grocon WH&S System;
- Ensuring all staff under their direction are fully informed about the hazards associated with their work activities;
- Undertaking Safety Interactions as apportioned in the Safety Interactions Position Matrix;
- Ensuring all staff under their direction undertake Safety Interactions as apportioned in the Safety Interactions Position Matrix;
- Ensuring all staff under their direction participate in activities that;
    - Identify hazards;
    - Assess risks;
    - Eliminate where possible;
    - Develop and implement appropriate control measures;
    - Monitor and review the control measures;
- Participating in the investigation of WH&S incidents where applicable;
- Providing the Project Manager with a review of Workplace WH&S performance on a regular basis.

Project Engineer's responsibilities are:

- Actively promoting health and safety;
- Understanding the Grocon WH&S System requirements; and
- Participating in the implementation of the Workplace Safety Management Plan for the Project;
- Ensuring compliance with WH&S Legislation and supporting Codes of Practice and Standards;
- Providing technical advice based on risk management principles where applicable;
- Attending project and other safety meetings as outlined in the Central Safety Committee Hierarchy;
- Assist in reinforcement and promotion of good safety performance;
- Ensuring all workers under their direction are adequately trained and instructed in the Grocon WH&S System;
- Ensuring all workers under their direction are fully informed about the hazards associated with their work activities;
- Undertaking Safety Interactions as apportioned in the Safety Interactions Position Matrix;
- Ensuring all workers under their direction participate in activities that;
    - Identify hazards;
    - Assess risks;
    - Eliminate where possible;
    - Develop and implement appropriate control measures;
    - Monitor and review the control measures;
- Participating in the investigation of WH&S incidents where applicable;
- Assist in reinforcement and promotion of good safety performance;

First Aid Officer's responsibilities are:

- Maintaining first aid facilities ensuring they are accessible, clean and contain the required components;
- Treating injured persons to the limit of their training, and not beyond that training;
- Arranging for emergency services where there is a risk to life or long-term wellbeing; and
- Arranging for medical treatment as required, including transportation to a doctor or hospital as necessary.

Contract Administrators /Managers responsibilities are:

- Actively promoting health and safety;
- Understanding the Grocon WH&S System requirements;
- Providing relevant WH&S documentation to Subcontractors at the pre tender stage;
- Assessing subcontractors' ability to comply with WH&S requirements during the Tender phase and prior to being contracted to undertake any work; and
- Updating Subcontractors details in the QSE Database as directed by the Project Manager;
- Participating in the monitoring and reviewing of WH&S requirements during delivery of contracted works;
- Attending project and other safety meetings as outlined in the Central Safety Committee Hierarchy;
- Undertaking Safety Interactions as apportioned in the Safety Interactions Position Matrix;
- Participating in all management and contractor meetings.

Document Controller's responsibilities are:

- Setting up and maintain the document management system, Aconex, in accordance with the Grocon Aconex Project Configuration Document and Best Practice Guide;
- Ensuring all project documentation is submitted via Aconex or scanned onto Aconex;
- Ensure any hard copy documents being used by Grocon are current revisions from Aconex;
- Maintaining copies of superseded documents either electronically or in hard copy for reference;
- Ensuring documents printed from Aconex are identified by a stamp or print on the document, to reduce archiving of hard copy documents when the project is completed;
- Monitor, support and arrange training of project team members, to ensure the correct use of Aconex;
- Ensure that all project records are retained in accordance with Grocon's company procedures, work instructions and Legal department instructions;
- Attending project and other safety meetings as outlined in the Central Safety Committee Hierarchy;
- Undertaking Safety Interactions as apportioned in the Safety Interactions Position Matrix.

All Employees

Employees are all Grocon employees, including managers, supervisors, people with administrative roles and the general workforce plus all subcontractors. They are each responsible for the following:

- Working in a safe manner;
- Taking care for their own health and safety and for the health and safety of anyone else who may be affected by his or her own acts or omissions at the Workplace;
- Co-operating with his or her employer with respect to any action taken by the employer to comply with any requirement imposed by or under the WH&S Legislation;
- Reading, understanding, and complying with the Occupational Health and Safety Policy, safe work practices and procedures and site safety rules;
- Not interfering with or misusing items or facilities including those provided for the health, safety and welfare of employees;
- Reporting potential and actual hazards to their Manager, Supervisor or elected Health and Safety Representative;
- Participating in the Workgroup process;
- Participating in the Issue Resolution process;
- Assisting in the reduction and control of accident and illness producing conditions and suggest ways to eliminate hazards;
- Using the correct tools and equipment for the job;
- Keeping tools in good condition where applicable;
- Using the required safety equipment and protective clothing;
- Reporting defects in workplace equipment;
- Attending induction and any other training provided;
- Reporting any personal injuries and receive first aid treatment as required; and
- Participating in the preparation of Grocon SWEMS.

Off Site Positions

Executive Project Manager and OR Construction Manager have the following responsibilities:

- Ensure that Grocon Workplaces under their control implement this WSMP plan.
- Provide adequate resources to identify and manage project QSE and Design risks.
- Ensure that a contract review considering the QSE issues relating to the works is undertaken.
- Ensure that all design impacts are considered and provide suitable resources to undertake a design safety review.
- Ensure that a Risk Assessment/Workshop (WRA) is undertaken at the beginning of the project covering Design Risks, QSE risks and attended by the relevant project team members.
- Ensure the identified risks have the delegated responsibilities assigned.
- Ensure that the risk assessment and assigned actions are regularly reviewed by the Project manager and the project team and recorded at team meetings to maintain control measures for identified risks.

The State WH&S / HSE Manager has the following responsibilities:

- Conduct the initial review and approval of the WSMP for the project;
- Assist the project team to understand the safety responsibilities outlined in the WSMP;
- Provide updates on changes to the WH&S system in a timely manner;
- Ensure the project team conduct and maintain the Workplace Risk assessment (WRA)
- Train the project team in the manner and timing for conducting Safety Interactions;
- Assist the project team in communicating the WH&S System requirements to all Consultants and subcontractors;
- Assist the project team in reviewing the WH&S System requirements to all Consultants and subcontractors, to ensure adequacy and compliance;
- Support the continual improvement of the WH&S System by attending meetings, workshops, audits & reviews with the HSE Advisor, Project manager, Site Manager and Design manager as required;
- Assist the project team to develop, review and communicate Target and Objectives;
- Undertake internal audits on the project against Grocon Procedures or WH&S documents.
- Conduct regular surveillance of all projects and provide support towards achieving the highest industry safety standards;
- Provide assistance, where required, to improve the safety performance of Grocon subcontractors;

The National WH&S Manager has the following responsibilities:

- Oversee and support the national implementation of the Grocon WH&S System;
- Ensure the Grocon WH&S System is being applied, resourced and managed on all projects through the state Construction managers and each Project manager;
- Maintain the Grocon WH&S System certification and compliance to ISO 4801.
- Maintain, Develop and continually improve the Grocon WH&S System;
- Use feedback and input from WH&S System users across the business at all levels to ensure the system continues to meet business and compliance requirements.
- Manage all internal procedure Audits and external certification audits for Grocon.
- Obtain information from third parties to enable the implementation of corrective action and continual improvement.

9.2 Grocon Resources

Grocon is well known for building complex structures and has completed a large portfolio of well-known projects, which were completed using our direct employees. When Grocon directly undertakes the structural portion of a project we utilise our skilled workforce to carry out the work.

9.3 Subcontract & Supplier Resources

Projects are broken down into trade packages and Grocon employs experienced subcontractors & suppliers to undertake each trade package to deliver a completed project.

Each subcontractor or supplier will be engaged through an evaluation process, as described in this WSMP, which shall consider the resources necessary to deliver the scope of works for the relevant package of work being contracted.

9.4 Consultant Resources

When Grocon is responsible for the Design of the project, we partner with experienced and skilled design consultants who have the necessary resources to complete the Design documentation for each of the disciplines required for the delivery of the project.

Design consultant's novated to Grocon or engaged by Grocon, shall be listed in a project organisational chart which shall be developed during the initial stages of the project.

10.0 Induction and Training

10.1 QSE Training

All project team personnel will be given QSE training as soon as practical to engagement. The training will be consistent with the line management level of the individual. The training may be as a one on one basis or in groups whichever is determined by the Project manager and System manager to effect best time and resource management.

Ongoing training is required given the QSE Database is constantly being upgraded as part of the continuous improvement cycle. Change is driven by the System managers armed with the feedback provided by the end users.

10.2 Safety Cultural Training

Each member of the project team with a line management function will undertake a two day safety cultural training course conducted where possible at the project. On the second day of the training, attendees will separate into small groups and be shown how to conduct onsite Safety Interactions. The Safety Interactions required numbers and timings are defined in ***2025A1 Safety Interactions Position Matrix*.**

All employees (Grocon and Subcontractors) inducted on the project shall be given training in the Action By Employees (ABE) program and instructed about the location and use of the ABE cards. This training will be incorporated in the Site Specific Induction.

10.3 Inductions

All persons who will undertake work at the site must have a General Construction Induction or interstate equivalent. All persons attending the Site Specific Inductions are required to supply Grocon with copies of their Construction Industry Induction Card and relevant tickets of competencies.

Persons who have previously undertaken a General Construction Induction but have not worked in the Construction Industry in the previous two (2) years will need to undertake the training again prior to commencing work on site.

The site induction process includes the following:

- ***The person arranging the induction/s is to forward to site a Subcontractor Employee Registration Form – 6065F2 at least 48 hours before the day of the induction;***
- ***Between 6:30 and 7:30 am the Subcontractor or Grocon site supervisor will complete a session of SWEMS induction and sign off with all workers;***
- ***Between 7:30 and 9:30 the Site Specific Induction and ABE training will be delivered by Grocon to all new inductees;***

The Site Specific Induction and ABE training is delivered in Power Point Presentation format and updated at regular intervals to capture and communicate the changing nature of the project and associated hazards and risks. Further communication of site related safety issues are addressed with the site workers in pre start and toolbox talk meetings.

The inductions also outline to Grocon workers and others where applicable the important work related safety supports such as:

- ***Grocon Employee Assistance Program (EAP)*** – critical event response;
- ***GroHealth*** **–** wellbeing;
- ***Mates in Construction (MIC) QLD & NSW*** – suicide watch training, intervention and support.

Information relative to EAP and GroHealth are accessible through the Grocon Intranet by clicking on >Systems, >People and Culture and finally >Employee Benefits. Hard copy information posters are displayed on site notice boards.

10.4 Operational Training

Competency levels required in the delivery of a specific workplace task will be considered. Where training is required by Grocon employees, training will be supplied in accordance with procedure 6000P of the Grocon QSE management System.

Certain jobs or tasks can only be undertaken by persons recognised as having a demonstrated competence to perform them efficiently and safely. The issue of a relevant licence, Certificate of Competency or permit is the commonly accepted means of both recognizing and demonstrating such competency. Competency requirements should be identified first, either through a training needs analysis or as prescribed by regulation and then appropriate training can be arranged if necessary.

Where workers are engaged in key supportive safety roles, existing training relevance and currency will be verified and where required new or refresher training will be provided, e.g.:

- Fire wardens
- HSR
- Safety Environmental Committee member
- Assessment and Workplace trainer
- Height retrieval

Grocon provide online training to all employees through the intranet hosted ***Learning Seat – GroLearn.*** Each programs have a built in competency assessment that once completed successfully results in a certificate being generated.

11.0 Hazard Identification, Risk Assessment and Control (HIRAC)

Following on from any corrective actions undertaken in the Development stage of the project and in linking to the outcomes of the DesignSafe process further HIRAC is required for the construction stage.

The DesignSafe process involves facilitated workshops / meetings between appropriate stakeholders and specialists to discuss the safety impacts of the design in a structured way. To stimulate and structure the discussion a series of hazard/risk categories with word prompts and considerations have been developed and form the foundation of the review.

The risk consideration discussed and identified shall be documented, together with any actions and notes considered necessary by the DesignSafe review team. The review is not intended to compromise or change the design performance or architectural detail but to enhance the design buildability, maintainability, operability, end user interactions and disposal of the structure or elements thereof.

Where design changes are implemented during the construction stage, the DesignSafe process will be conducted in accordance with ***Managing Quality, Safety and Environmental Risks 6000P and the DesignSafe Work Instruction 2005W1.***

11.1 Hazard Identification – Workplace Risk Assessment

Where hazards associated with the program are identified in the Workplace Risk Assessment (WRA) are unable to be eliminated, each workplace risk will be given a risk score using the matrix contained in ***6000A1 Risk Assessment Matrix*** a Risk Score will be determined by referring to the matrix on the Risk Assessment System. A risk reduction can be achieved where applicable by implementing a control or combination of control measures from the Hierarchy of Control.

Prior to the commencement of work activities, the Grocon Site Manager, Responsible Foreman and HSEA shall formally review the scope of works for the task to identify and document hazards, eliminate where possible and assess the risks using Grocon's *Workplace Risk Assessment (WRA)*. The risk management process will be used to identify high risk plant and activities aligned to the task.

The successful mitigation of hazards is based on the following parameters:

- Identify, assess, eliminate where possible, control, monitor and review;
- Instructing personnel on how to report and document any hazards or potential hazards to the Site Manager and/or Foreman.

The reporting of hazards is the first and critical step in the hazard management process, if this step does not occur there is a potential for hazards to go unchecked. All hazards that are identified and cannot be "See & Fixed", that is easily and safely fixed, must be reported to the Grocon Foreman or another supervisor where appropriate or an WH&S representative or Safety Environmental Committee member. The reporting of these hazards can be done verbally. The supervisor directly responsible for the area and / or task is responsible to ensure that the hazard is:

- Made safe
- Rectified

When hazards or potential hazards are identified, personnel shall attempt to rectify, identify, barricade or isolate the hazard, ***only*** where practical and safe to do so. This should be done before reporting the hazard to the responsible Foreman to ensure others are not exposed to risk of injury or illness.

Any hazard, not able to be controlled or rectified immediately, is to be made safe with barricades, information tags and/or warning signs and reported to the relevant Grocon Site Manager or Foreman. The employee should also advise all personnel in the vicinity of the hazard. The Foreman will immediately initiate the appropriate action to correct the hazard or notify the appropriate management representative and HSEA should it be beyond their control. After the hazard has been rectified, the responsible Foreman shall report the outcomes of the hazard to the employees.

If the hazard is of a serious / complex nature it should be documented in written form on *1005 F1 Hazard Report*. The preferred formal method of documenting hazards is via the QSE database, via hazard reporting function in the Safety Menu or via the Grocon Safety Interaction function, *2025 F1 Workplace Safety Interaction Record Sheet*.

11.2 Control Measures

Control measures must be selected and implemented in the WRA using the Hierarchy of Control as follows:

1. Elimination
2. Substitution
3. Isolation
4. Engineering
5. Administrative
6. PPE/C

NOTE: Elimination is the preferred control, with PPE/C being the least preferred.

The Risk Assessment Matrix has four (4) layer Residual Risk Score indicator that identifies – ***Low*** (0 to 6, Acceptable), ***Moderate*** (7 to 14) SWEMS required, ***Very High*** *(15 to 22)* SWEMS required and to be ***SWEMS Implementation Audited (6000F6)*** and ***Extreme*** (23 to 25) score range where work is not to commence.

11.3 Safe Work and Environmental Method Statements (SWEMS)

Safe Work and Environmental Method Statements (SWEMS) will be developed and implemented for all high risk construction activities, or where identified in the Residual Score indicator as required. The Site Manager, Engineers, Responsible Foreman and HSEA shall formally review the SWEMS using ***SWEMS Review***

(6000F5) prior to work commencing to ensure they are correct for the task being undertaken. Records of the SWEMS reviews will be filed in hard copy format and electronically in the QSE Database.

The SWEMS development, implementation, amendment and review process should have employee input where they are engaged in the work activities, those employees are required to be involved in the development process. Specific consideration in relation to the communication of the SWEMS must be given to employees undertaking work outlined in the SWEMS should they move from task to task.

Where changes are required in the WRA through the following actions of review, audit or investigation the changes are to be highlighted in red or italic text.

11.4 Safety Interactions

Safety Interactions conducted in workplaces will be used to assist Grocon and its employees to identify unsafe practices and to utilise skills provided in training to assist in improving safety culture.

The responsibility, timing and number of Safety Interactions required monthly are listed on the ***2025A1 Safety Interactions Position Matrix***.

The Safety Interactions are as follows;

- Workplace Safety Interaction
- SWEMS Implementation Audit
- SWEMS Review
- Plant Inspection
- Safety Environmental Committee Attendance
- Safety Environmental Committee Walk Participation
- Project CSC Meeting Attendance
- Incident Investigation Subcommittee Meeting Attendance
- Project Safety In Design Meeting / Review
- Workplace Risk Assessment

A Workplace Safety Interaction is the act of observing people performing their work tasks in their surrounding environment and undertaking behaviour improvement discussions with them or their group.

All employees will be encouraged to eliminate hazards on a “see and fix” basis.

Considerations for identifying hazards:

- Is the equipment / resources used to perform a task suitable?
- Is the equipment / resources appropriately located? If no, how can it be improved?
- Is the method for using the equipment and materials appropriate? If no, how can it be improved?
- Can people be affected by noise, fumes, vibration, lighting etc? If so, how can this be prevented?
- Can people be injured by equipment, machinery or tools? If so, how can this be prevented?
- Can people be injured by chemicals and other hazardous materials used in the work place? If so, can this be prevented?

To assist this process of identification, resources such as the following should be used:

- Workplace Health and Safety Codes of Practice and other publications, e.g. Safety Alerts;
- Hazard profiles for specific trade groups;
- Workplace experience and training;
- Consultation (e.g. Toolbox Talks) with workers experienced in the task to be undertaken.

All hazards that are identified and cannot be “See & Fixed”, that is easily and safely fixed, must be reported to the Grocon Foreman responsible for the area. Opportunity for Improvement (OFI) can be raised in the QSE Database where the action requires a specific person to take corrective actions, which are then verified as completed by the OFI originator. This method provides a mechanism for closing the loop in relation to the HIRAC process

11.4.1 2025A1 Safety Interactions Position Matrix.

SAFETY INTERACTIONS POSITION MATRIX

2025 A1 Form	Safety Management System

This Matrix refers to the Work Instruction 2025W1 Safety Interactions Program. For Positions refer to Company and Project Organisational Charts.

	Safety Interactions Program Activities Participation Requirements											
	Position	Abbreviation	Workplace Safety Interaction	SWEMS Implementation Audit	SWEMS Review	Plant Inspection	Safety Committee Meetings Attendance	Safety Committee Walk Participation	Project CSC Meeting Attendance	Incident Investigation Subcommittee Meeting Attendance	Project Safety In Design Meeting/ Review	WRA Review
CORPORATE	SLC Members	SLC	1	1								
	Head of Department	HOD	1	1					As Required**			
	General Manager	GM	1	1					As Required**			
	Construction Manager	CM	2	2			1	1	As Required**	As Required**	As Required**	As Required**
	HSE Manager	HSEM	2	2			1	1	1	1	1	1
	Operations Manager	OPM	2	2			1	1	As Required**	As Required**	As Required**	As Required**
	Corporate Positions	CP	1	1					As Required**		As Required**	
PROJECT	Executive Project Manager	EPM	2	2			1		1	As Required*	As Required**	As Required**
	Project General Manager	PGM	2	2			1		1	As Required*	As Required**	As Required**
	Project Manager (including assistant)	PM	2	2	2		1	1	1	As Required*	1	1
	Design Manager	DM	2	2	2		1	1	1	As Required*	1	1
	Contract Administrator/Manager	CA	1	1			As Required**	As Required**	1			As Required**
	Site Manager	SM	2	4	4		4	4	1	As Required*	1	1
	Foreman/Supervisor	FM	2	4	4	4	As Required**	As Required**	1			As Required**
	HSE Advisor	HSEA	2	4	4	4	4	4	1	1	1	1
	Leading Hand	LH	2	2	1		As Required**	As Required**				As Required**
	First Aider	FA	2				4	2	1	As Required*		
	Project Support Positions	PSP	1	1			As Required**	As Required**	1			As Required**
MAYGAR	Grocon Operations Management	GOM	2	2	2	2	4	4	1	As Required*	1	1
	Grocon Operations Supervisor	GOS	2	2	2	2	4	4	1	As Required*	1	1
	NOTE: As Required* - Applicable when Host Project As Required**- When Invited											

This document is uncontrolled when printed. Please consult the electronic version for the latest revision.

Ownership: Systems Managers
Title: 2025 A1 Safety Interactions Position Matrix

Effective Date: 05th April 2013
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12.0 Subcontractor Management

Subcontractors will only be engaged to work in the workplace who have a demonstrated commitment to occupational health and safety and who are committed to complying with applicable WH&S Legislation and Standards.

All subcontractors on Grocon sites are required, as per the Subcontract Deed, to submit a Project Specific Safety Plan to the project Site Engineer. The documents are to be processed as outlined in the ***6191F1 QSE tenderers capability statement*** available from the intranet.

- Subcontractors and their employees are required to comply with this Workplace Safety Management Plan and the Site Safety Rules;
- Appropriate references and requirements to comply with WH&S Legislative requirements and this Workplace Safety Management Plan, are included in all subcontracts;
- Subcontractors shall submit their site specific SWEMS for review and work will not be allowed to commence until the SWEMS is accepted. SWEMS will be field audited by Grocon personnel for correct implementation at least once, with high risk activities being audited on a more regular basis;
- Subcontractors will be primarily responsible for the health and safety of their employees. Grocon will also undertake monitoring and supervision of subcontractors. The level of monitoring and supervision will depend upon factors such as:

  - the size and expertise of the subcontractor, including in relation to health and safety issues;
  - the complexity of the tasks;
  - the level of risk;
  - the control that Grocon has over the workplace and the particular activity or would ordinarily have in relation to such activity;
  - The interaction of the subcontractors with other site personnel, including Grocon employees, such as:
  - Safety Environmental Committee meeting: and
  - Site Safety Communication meeting attendance.

12.1 Contractual Subcontractor Management including pre-tender evaluation

The Tender package to be issued to the market must include the following documents as a minimum;

Scope of Works:

- Prior to issue this must be approved by the Project Manager, Site Manager and HSEA.

Tenderers Capability Statement 6191F1:

- This document outlines the safety criteria required to be met by the tenderer. Once this information is gathered the Site Management Team must evaluate the information.

Other Documents:

- Grocon General Preliminary Specifications;
- Environmental Management Plan ;
- Project Quality Plan;
- Workplace Safety Management Plan; and
- Supporting safety requisite documents.

Once tenders are received, the Contract Administrator is to evaluate the tenders to gauge those most suited to the successful completion of the package. This evaluation is to include price, programme, previous performance, safety and environmental issues and quality assurance.

Once contracts have been awarded, the subcontractor and Grocon management will meet to discuss Grocon expectations and make arrangements for a site meeting of the project teams to establish the requirements prior to starting work on-site.

12.2 Sublet Subcontractor Management

Second Tier subcontractors (those with a contract with Grocon) will be responsible for reviewing all their subcontractors' documentation (third tier subcontractors) and ensuring it is in line with Grocon, legislative and other requirements. Prior to the third tier subcontractor starting on site, all documentation (including evidence of the Secondary tier subcontractor's review) is to be made available to Grocon for review.

Subcontractors Safety Plans will be audited by the relevant Grocon Supervisor with assistance supplied by the HSEA as part of auditing as outlined in this WSMP. Where non-conformances are identified the Subcontractor will be issued an OFI which must be closed out in the allocated time frame.

13.0 Workplace Establishment

Obtain information and where applicable provide notification to authorities including, but not limited to:

- Notification / application to Council, WHS / WH&S legislator; Police:
  - Construction Certificate;
  - Hoarding notification;
  - Demolition;
  - Asbestos Removal;
  - Contaminated soil removal;
  - Roadway work zone approval;
  - Traffic Management Plan;
  - Footpath closure permits;
  - Road closure permits;
  - Out of Hours Work.
- Site Clearance:
  - Excavation;
  - Soil removal.
- Environmental:
  - Environmental Protection Agency (EPA);
  - Environmental Impact on neighbouring properties;
  - Environmental Management Plan – WRA.

13.1 Workplace Access and Security

The workplace will be made secure to prevent the entry of general public. This will be achieved by the installation of hoarding or fences, gates and signage. All visitors wishing to gain access to the site are required to contact the Project Manager and/or the Site Manager, prior to entering the Site, otherwise access may be denied. Visitors to the workplace are required to report to the Site Office to sign in when entering and sign out when departing the workplace. Visitors must be accompanied by an authorised person at all times whilst on the Site. A visitor sign in book is located at Reception in the Project Office. Visitor tags are to be visible at all times.

13.2 Parking

No general parking or employee parking is available at the Site.

13.3 Site Entry

Construction vehicle access to the Site is via Queen Street and Adelaide Street after the car park ramp is poured.

13.4 Site Hours

Site hours to be approved by the North Sydney Council are: as guidance

6:30 am to 6:30 pm	Monday to Friday;
6:30 am to 6:30 pm	Saturday;
Sunday Work	Subject to Out of Hours Permit;
Shift/Night Works	Subject to Out of Hours Permit.

Out of hours work subject to permit approval.

13.5 Signage

Signage will be displayed prominently at Workplace entry points and throughout the site. This will include, but not be limited to:

- Safety signs;
    - first aid;
    - evacuation;
    - assembly area;
    - warden identification;
    - Safety Environmental Committee;
    - site rules;
    - safety alerts.
- Additional signage:
    - public restriction signs;
    - personal protective equipment signs;
    - traffic management signs;
    - warning lights;
    - Hazchem signs;
    - signage regarding the requirement for personnel to be inducted;
    - site procedures

13.6 Workplace Amenities

Amenities will be established in line with program requirements, with consideration given to accessibility to services such as electricity, water, sewerage, ventilation and the proximity to work areas. The number, size and types of amenities will be in accordance with the relevant Code of Practice. Overhead protection will be provided where amenities are located adjacent to open building structure or under an area where overhead lifting activities are carried out. Access ways or paths to amenities must be kept clear at all times and be free of stored material, static or mobile plant.

13.7 First Aid and Rehabilitation

The first aid facility will be located in accessible areas and clearly defined on a site plan. An appropriate number of suitably trained First Aid Officers will be available at the Workplace during normal work hours. Any persons with a health problem or chronic illness that requires medication during working hours must inform the First Aid Officer about their condition and the medication. This information will be treated in the utmost confidence and will assist the First Aid Officer in the correct management of an accident or emergency involving that person. All persons who sustain an injury are required to report the matter to their

Foreman, Supervisor, Grocon First Aid Officer or HSEA and seek treatment from the First Aid Officer (if required).

Rehabilitation

Rehabilitation facilitates the safe return of injured persons to meaningful and productive work and includes:

- Nomination of a Rehabilitation Coordinator;

- Development of a program for the injured person in conjunction with the treating Medical Practitioner;
- Coordination of a return to work program; and
- Contact and correspondence with the injured person.
- Subcontractors will have applicable WorkCover documentation available onsite should an injury occur and the employee needs offsite medical attention, i.e. suitable duties plan.

Employees are informed of Grocon's rehabilitation commitment via the Site Specific Induction. Grocon shall ensure injured workers are treated with respect and offered every level of assistance and provided appropriate suitable duties for full normal working hours in line with applicable medical constraints set by the treating Medical Practitioner, in consultation with the nominated Project preferred Medical Practitioner.

Site based support will be provided to an injured worker that will enable:

- Identify the work that is available within the Employees capabilities, and discuss the nature of such work with the Employee;
- Accompany the Employee to the treating Medical Practitioner if agreed to seek approval of suitable duties;
- Monitoring the injury to ensure any follow up treatment is scheduled and received;
- Provide motivation support to the injured worker to assist with a return to normal duties.

The process of managing the rehabilitation process is outlined in the ***2520 F1 Return to Work Interaction Pack.***

Subcontractors are to provide the Grocon team of their company nominated Rehabilitation Coordinator.

13.8 Emergency Management

The Emergency Management Plan will evolve in line with the program requirements. Initially emergency management will be implemented in the early works in the following way:

- Assessing and supplying adequate emergency equipment;
- Ensuring Grocon and Subcontractors have suitable qualified emergency response trained workers;
- Producing evacuation procedures, evacuation signage;
- Installing evacuation alarm equipment;
- Identifying the location for set down of emergency response personnel;
- Recording quantities and storage locations of Hazardous substances and dangerous goods;
- Maintaining currency of MSDS/SDS and filing in a readily accessible location;
- Communicating emergency evacuation procedures and emergency contact / service numbers in the induction process.

On commencement of the structure vertically an Emergency Management Plan will be developed to provide for the following:

- Fire Wardens;
- Nurse call system / two way radio;
- Crane lifted first aid box;
- Fall retrieval equipment;
- Fire drill procedures.

External notification to the WHS/WH&S legislator other authorities will only be via the HSEA in consultation with the PM. Notification of emergency events to the client will be via the Project Manager and Client.

13.9 Safety Environmental Committee

A Safety Environmental Committee will be established at the Site in accordance with relevant WHS/WH&S Legislation and in consultation with site workers. All members of the Safety Environmental Committee will be required to have undertaken training as required under the relevant WHS/WH&S legislation.

Meetings will be conducted weekly (where applicable), with minutes documented and distributed in hard copy format to attendees, site management and site safety notice boards. Electronic copies will be sent to Subcontractors via Project Centre or Aconex, whichever is the chosen system for the project. Minutes of each meeting will form part of the Project CSC meeting agenda for discussion and actions where required. Safety Environmental Committee members will be joined weekly (where applicable) by one or more Grocon management representatives in conducting site safety walks.

13.10 Toolbox Meetings, Communication and Consultation

Toolbox meetings will be held weekly by Grocon and Subcontractors/Pre start talks will be held for safety related issues, training, job co-ordination and whenever changes to procedures and SWEMS take place. These meetings will be recorded on the appropriate record in accordance with Grocon's WH&S System.

Where Work Groups are established at the site, each group will be an integral part of the consultancy process. The management team will provide timely site safety information to HSR's for each Work Group to ensure there is a coordinated approach to managing the overlapping work activities required in the program.

Grocon will provide information to second tier subcontractors through:

- Project Centre / Aconex;
- Subcontractor meetings;
- Safety Environmental Committee Meetings;
- Subcontractors tool box meetings.

6060F5 Toolbox Talk Record

Second tier subcontractors are to communicate information to third tier subcontractors. Where tool box talks or other means of communication are used, Grocon will require the subcontractor to provide a copy of the tool box talk documentation or any other correspondence for record purposes.

Records of correspondence relevant to safety issues raised with public authorities will be filed onsite in the standard file directory.

External Communication

Grocon will at the first opportunity communicate with external parties (e.g. clients, neighbours, regulatory authority) regarding safety matters arising at any time during construction of the project. Where regulatory are required to be notified it will be in accordance with regulatory specified time frames. All communication will be recorded electronically in Project Centre or Aconex, with any actions required carried out in the QSE Database.

14.0 Workplace Specific Safety Requirements

Detailed Occupational Health and Safety policy and procedures are set out in Grocon's WH&S System. This WSMP has been developed consistent with the Grocon WH&S System. The policy and procedures in the Grocon WH&S System and the site SWEMS apply throughout the Workplace except where specifically indicated otherwise.

14.1 General

- All personnel must work in a safe manner and in accordance with relevant WH&S Legislation, Codes of Practice, Australian Standards, site policies and procedures;
- Statutory Rules and Regulations are to be taken as a minimum guide only;
- Any workplace injuries (including minor First Aid treatable) or incidents must be reported on the day of occurrence to the Workplace Management or Workplace First Aider; and
- All incidents and injuries require an Incident or Injury report form to be completed.

In conjunction with Grocon, all Subcontractors must ensure compliance with these requirements:

- All personnel are to ensure the safety of the general public at all times and each contractor will be responsible to provide any temporary protection or barriers to ensure public safety;

- All vehicles entering the Site are to obey displayed speed limit of **5kph**. Any driver found to be disobeying speed limits or general road rules will be banned from entering site;
- All reversing plant (including trucks) shall have a spotter and reversing beepers;
- No children are permitted on site, excepting authorised work experience;
- No animals are permitted on site;
- Grocon reserves the right to carry out searches of bags brought onto site, if required, this procedure would only be conducted in the presence of the owner, and it is a condition of entry to comply;
- Subcontractors are required to submit job specific Safe Work and Environment Method Statements (SWEMS), Risk Assessments and Hazard Identification Procedures for Grocon perusal and review at a minimum of 5 working days prior to commencing on site;
- Employees not inducted in a SWEMS for a task with identified risk, are not to carry out that task; and
- SWEMS implementation and adequacy will be regularly audited throughout the life of the project.

14.2 Safety Requirements

- Designated walkways are to be used when walking around the site. Materials or equipment are not to be stored in designated walkways;
- Dust to be suppressed and fumes must be appropriately ventilated;
- All floor and wall penetrations must be appropriately identified and secured;
- Fall arrest equipment, including safety harnesses, lanyards, shock absorbers and inertia reels must only be used when safe work platforms cannot be used;
- All workers must be trained in their application prior to use. Retrieval systems must be documented and proven for all worked conducted with fall arrest equipment;
- All equipment must be registered, correctly stored and inspected;
- Persons engaged in work utilising a fall arrest system must have received training in the previous two years;
- Travel restraint systems must be used in preference to fall arrest systems wherever the risk of impact to a falling person could occur;
- Trenches and excavations must be adequately shored, battered or benched before personnel are allowed access. Safe access shall be provided in all excavations over 1.5 metres in depth;
- Gas cylinders are required to be secured upright at all times to prevent falling;
- Flash back arresters to be used where appropriate and must be on both ends of the hoses, maintenance must be performed in accordance with the applicable Australian Standard;
- Adequate fire protection must be provided as necessary. In particular, a suitable fire extinguisher shall be securely attached to each electric or oxy-acetylene or oxy-LPG welding plant brought on Site; and
- Proper care shall be taken in the use of compressed air. This includes safety glasses, suitable hearing protection and airline safety clips.

14.3 Interference with Safety Installations

Interference with safety installations such as handrails, guardrails, penetration covers, safety lighting, caps over starter bars, and signage etc. will not be tolerated. ***Offenders will be instantly removed from site.***

14.4 Personal Protective Equipment and Clothing (PPEC)

PPE and clothing deemed to be necessary will be worn by all Grocon management, supervisors, employees, subcontractors and visitors in designated areas.

Mandatory PPEC at all Grocon sites include:

- Steel capped footwear;
- Safety eyewear for general work and visitors; and
  - Face shield for pressure cleaning;
  - double eye protection for grinding, e.g. face shield worn over safety glasses or goggles;
  - goggles or safety glasses and face shield for overhead drilling;
- Safety Helmet -
- Gloves (task specific / fit for purpose);
- High visibility vest (or clothing);

- Long sleeved shirt, long pants.

All PPE and clothing must conform to the appropriate Australian Standards. PPE requirements are communicated to all staff and subcontractors prior to attending the site specific induction. PPE will be supplied to Grocon employees in accordance with Grocon's Occupation Health and Safety Management System.

14.5 Personal Conduct

It is essential that all Grocon Management and employees, subcontractors and others maintain a high personal standard of conduct and a commitment to a safe workplace at all times whilst in the workplace. This is a shared responsibility. The way in which people conduct themselves in the workplace is an important element in maintaining healthy and safe conditions.

- Any person found committing any of the following offences on site shall be disciplined and may be subject to their site access being withdrawn:
  - Horseplay, throwing objects, practical jokes and rowdiness, etc. will not be tolerated
  - Fighting on site;
  - Sabotage, vandalism, graffiti, wilful damage to any appliance or material;
  - Serious misuse of site equipment and amenities e.g. damage to sheds, fire extinguishers, electrical equipment;
  - Not using toilets provided;
  - Theft;
  - Refusing to act on safety instruction;
  - Interfering with safety installations;
  - Skylarking or playing games in a manner that could cause injury or damage.

- The possession or consumption of **alcohol** or **drugs** is prohibited on all Grocon workplaces. Any person who is under the influence of drugs and alcohol must not enter or remain on the site;
- Grocon has implemented a **NO SMOKING** policy which prohibits smoking on site;
- Portable radios, MP3 players, "walkman" type players, and mobile phones are considered to be a safety hazard and therefore the use of this equipment is not permitted on the project. Only supervisors/managers are permitted to use mobile phones, and then only for work purposes, they are not to walk and talk and must position themselves in an area that is isolated from site hazards;
- Good housekeeping on the job is mandatory and every person on site must do their part daily to ensure the job is clean for safety and efficiency;
- Work areas must be kept clean and clear of debris, waste materials and tripping hazards at all times;
- Materials are to be stacked in designated areas;
- Spillage of oil and liquids is to be cleaned up immediately;
- Food is not to be consumed in work zones, only in the lunchrooms; and
- Glass Containers are not allowed on the site other than in the lunchrooms.

Disciplinary action will be applied in accordance with the Grocon Disciplinary Policy and the EBA.

Penalty system for non-conformance being:

- *1st non-conformance – Verbal warning and recorded;*
- *2nd non-conformance – Written warning;*
- *3rd non-conformance – Re-induction and final written warning;*
- *4th non-conformance – Removal from site.*

Any of the above stages are reset after 6 months without a non-conformance.

14.6 Sexual Harassment and Discrimination

Harassment of any form, bullying, or racial discrimination will not be tolerated on this project. All personnel are to refrain themselves from using obscene or offensive language or behaviour. Display of offensive or discriminatory signs or posters is prohibited.

14.7 Drugs and Alcohol

The possession or consumption of alcohol or drugs of addiction are prohibited on all Grocon work sites. Any person who is under the influence of drugs and/or alcohol must not enter the Site. Any employee reporting to work under the influence of alcohol or illicit drugs will be removed from Site following consultation with his

Supervisor/Foreman, Health and Safety Representative and/or the Safety Environmental Committee.

This position is subject to any drug and alcohol policy that Grocon may implement.

15.0 Issue Resolution

WH&S issues at the site will be resolved in accordance with ***Issue Resolution 6660P.*** Where a health and safety issue is identified that involves a hazard in the workplace, the person raising the issue with their PCBU Supervisor or HSR will then assist in the completion of the section in the ABE Card. There is provision within WHS/WH&S legislation for work to cease if there is a serious risk to health and safety and also provision for the raising of a PIN by a HSR.

HSR's involved in the issue resolution process will have completed the relevant training as required by WHS/WH&S legislation.

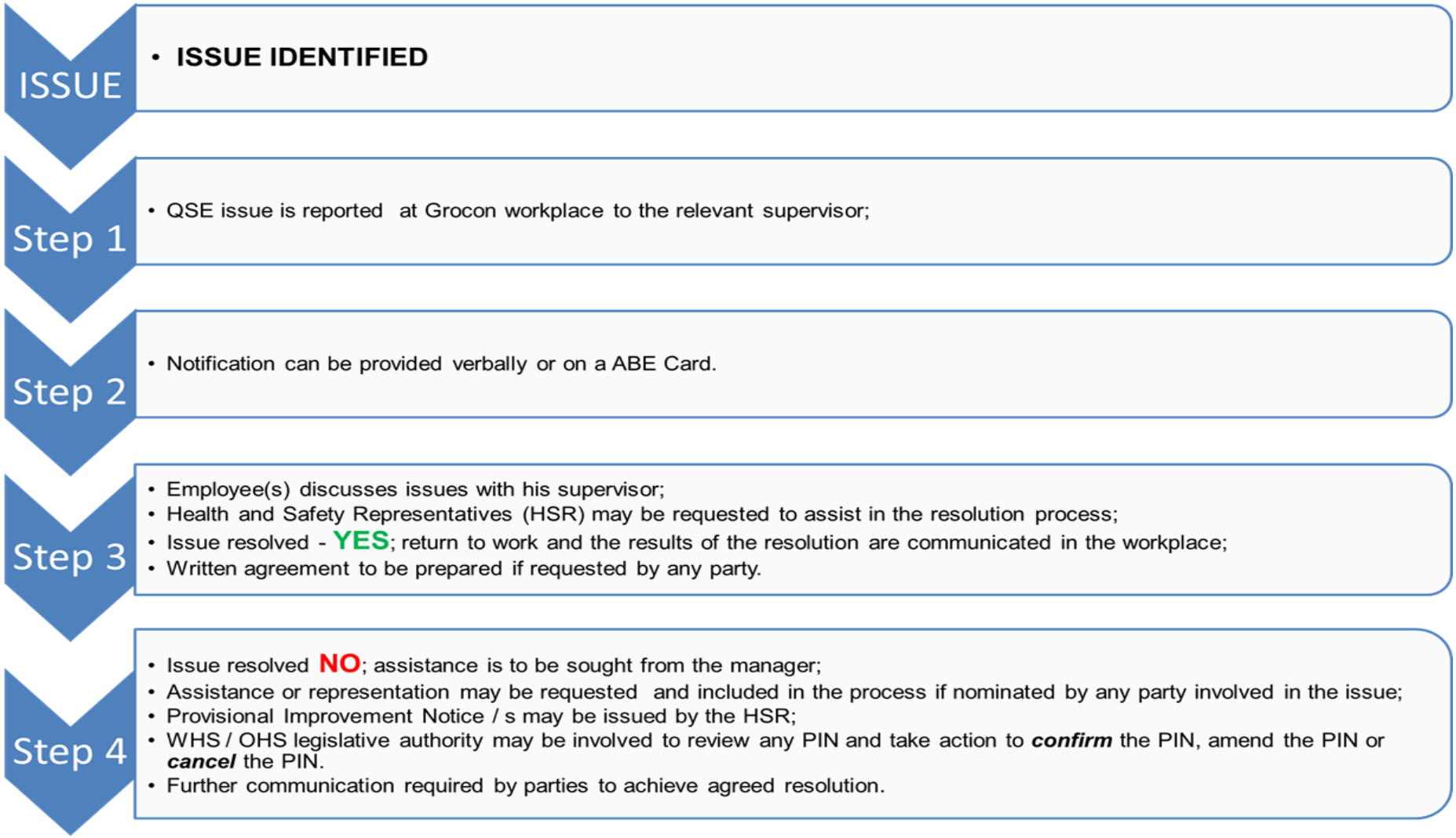
Resolution of issues will be given high priority status and may include in the process to achieve a satisfactory outcome the following persons:

- Site Manager or Line Manager;
- Persons conducting a business or undertaking (PCBU) – Subcontractors included;
- HSR;
- Worker/s;
- Worker/s Representative;
- HSEA.

Where parties cannot reach an agreed position on resolving the issue a request may be made to WHSQ to provide an Inspector to assist in the process.

The HSEA will maintain a register of received Hazard Report Forms / Issue Resolution documents and table the register for discussion at the Safety Environmental Committee Meeting. Hazard Reports (Electronic) are to be managed on the QSE database.

15.1 Issue Resolution Flow Chart



16.0 Incident Investigation and Notification

Occurrences are to be reported immediately to the HSEA. Other relevant persons at the Workplace should be informed of the incident/accident/dangerous including the Project Manager, Site Manager, Supervisor/Foreman, Health and Safety Representatives and/or Safety Environmental Committee. The HSEA will notify the WH&S/HSE Manager. Persons with responsibilities for incident management at this Workplace have been nominated as:

- Project Manager
- Site Manager
- First Aid

External notification to the WHS/WH&S legislator and other authorities will only be via the HSEA in consultation with the PM and WH&S/HSE Manager.

Notification of safety incidents to the client will be via the monthly PCG Report, and as nominated in the D & C Contract:

Details of any:

- work related illness;
- injury;
- dangerous event;
- direction of any Authority or worker's representative in relation to health and safety; or any other event giving rise to an WH&S Notification Requirement.

NOTE: Only that result in a LTI or MTI will be reported as soon as possible but not later than 24 hours after such occurrence.

Under WHS/WH&S legislation, incident notification requires the following incidents to be reported if any of the following events occur at the workplace;

(a) the death of a person; or
(b) a serious injury or illness of a person; or
(c) a dangerous incident.

Upon becoming aware of any of the incident above occurring, site management will notify the WHS/WH&S legislator by the fastest possible means, e.g. telephone, email, fax or other electronic means. Where notice and details are given by phone, the WHS/WH&S legislator may request a written notice on an approved form within 48 hours. In cases where phone notice is given but WHS/WH&S legislator does not require a written notice, the WHS/WH&S legislator must provide site management with;

(a) details of the information received; or
(b) an acknowledgement of receiving the notice.

Grocon will retain a record of all notices given to WHS/WH&S legislator in accordance with the relevant legislation.

- It is a requirement of the FSC that each Grocon site (Scheme or Non-Scheme) will notify the FSC in the following instances and in the manner prescribed:
  - All fatalities irrespective of the project value (notify immediately to 1800 652 500 and provide report within 48 hours);
  - Any incident resulting in a LTI and/or AWI (Alternate Work Injury) where the project value is $3 million or more (provide report within 48 hours if a notifiable Incident, otherwise provide report within 3 weeks);
  - Any MTI or dangerous occurrence on a Scheme project (provide report within 48 hours if a notifiable Incident; otherwise provide report within 3 weeks).
  - all subcontractor incidents should be included in the reporting process.

OFSCreporting@deewr.gov.au

External notification to the OFSC will only by the HSEM using the OFSC Reporting Pack.

17.0 Public Protection

At different stages of the program development, public protection will require additional control measures to be implemented for various hazardous locations or high risk activities where applicable such as:

- Traffic management;
    - Roads;
    - Streets;
    - Footpaths;
    - On site.
- Falling objects:
    - Over roads and footpaths;
    - Over adjoining properties;
    - On site.
- Demolition;
- Asbestos removal;
- Dust;
- Noise.

17.1 Traffic Management

At different stages of the project, Traffic Management Plan/s (TMP) will be developed and reviewed in line with project development. Each TMP will address control measures for the movement and protection of the public and site personnel and will incorporate relevant drawings, permits, signage and trained personnel.

All site personnel are to observe all traffic control equipment and signage and use the designated access and egress.

Appropriate signage and / or physical protection to reduce the risk to the public from vehicles from entering the workplace will be implemented. Consideration will also be given to issues such as noise and dust control.

Internal plant and traffic movement will be controlled, where applicable, by licensed traffic controllers or in other cases as outlined in the Internal Traffic Management Plan (ITMP).

17.2 Falling Objects

In all stages of construction, loads will be required to be lifted over footpaths and into and out of the site. To provide protection to the public on the footpaths during lifting operations, the following controls taken from the ***"Hierarchy of Control"*** will be implemented:

Isolation –
Where possible footpath closure permits will be applied for and hard barriers erected;

- Erect a hoarding along the boundary;
- Erect a gantry along and over the footpath;
- Install warning beacons or sirens;
- Install a retractable barrier system at the footpath crossover location/s and at each end of the gantry when objects are being lifted across. Footpath closure is required under gantries where significant sized or weighted loads are lifted over – applicable to QLD.

Administrative –

- Place qualified Traffic Controllers in the locations required;
- Erect safety signage in conspicuous location for easy public viewing.

Planning for overhead protection will consider factors such as (but not limited to):

- The duration of the overhead protection;
- Location of areas to be protected;
- Crane lifting, luffing and slewing areas;
- The type of loads to be lifted over the areas requiring protection;
- The type and loading of overhead protection required;
- Materials to be used in the structure;
- Supporting ground conditions;
- Provision of temporary services such as power, lighting, water, drainage and concrete pump lines;
- Overhead electrical assets;
- Location of underground services and access to services;
- Pedestrian and vehicular access;
- Obstructions such as trees, light posts, bus stops, street signs and fire hydrants;
- Whether the structure is to be freestanding or tied to an existing building;
- The use of the structure for storage of materials and equipment or amenities and associated access;
- The use of the structure to support scaffolding or formwork;
- The drainage of storm water;
- Method of regular inspections.

Where overhead protective structures are required to be placed over public footpaths or roads, local council must be consulted in the planning stage. All required permits must be obtained from local councils prior to structures being installed.

Overhead protective structures require an Engineer's Certificate for the design, installation, alterations or additions and documentation must be kept at the workplace. Suppliers are to ensure that the persons erecting, altering or dismantling the structure are adequately supervised and have received appropriate instruction.

Overhead protective structures and hoardings must be designed for dead loads and live loads, including wind loads, in accordance with the relevant WHS/WH&S legislation and Australian Standards.

Additional controls will be provided as the structure grows in height that includes the process of isolating the materials, plant and activities from falling by way of:

- Erecting scaffolding to the perimeter of the structure;
- Erecting or fixing containment screening to the structure;
- Isolating areas below with a hard barrier: and
- Placing a Spotter in the lower area to prevent unauthorised entry.

17.3 Demolition

All demolition work will be undertaken by persons qualified and licensed to undertake such work. Demolition contractors are responsible for ensuring all work involving asbestos removal is carried out in accordance with the WHS/WH&S legislation and relevant Code(s) of Practice. Work that involves demolition will be subject of appropriate hazard and risk assessment prior to any work being performed. SWEMS will be developed and implemented for all work activities involved in the demolition works.

17.4 Asbestos Removal

All asbestos removal will be undertaken by persons qualified and licensed to undertake such work. Asbestos contractors are responsible for ensuring all work involving asbestos removal is carried out in accordance with the WHS/WH&S legislation. Work that may involve exposure to asbestos and/or synthetic mineral fibres will be subject of appropriate hazard and risk assessment prior to any work being performed. SWEMS will be developed and implemented for all work activities assessed as having occupational health and safety risks.

17.5 Noise

Areas assessed as potential noise hazards to personnel shall be surveyed by appropriately trained personnel to determine the level of risk, required corrective actions, exposure dosages and required PPE.

Maximum Allowable Noise Levels

- Noise equivalent to a continuous level of 85 dB(A) for eight hours (LAeq8h=85dB(A))
- Steady noise level of 115dB(A)
- Impulse noise level of 135dB(A)
- Peak noise level of 140dB (1peak=140dB[lin])

Management of noise hazards generated from on-site activities will be by addressing the source first to eliminate and where that is not possible controls will be implemented in line with the ***"Hierarchy of Control".*** Before PPE is considered as a control against hearing damage, Grocon will require subcontractors to look at alternatives of a higher control. Previous successful controls have included the following:

- Equipment substitution;
- Equipment shrouding;
- Sound blankets or barriers; and
- On-site area isolation.

Education and Training

Education and training in hearing conservation for employees who may be exposed to the noise comprises as a minimum:

- Hazards associated with noise;
- Control of noise hazards;
- Appropriate protective measures; and
- Hearing protectors.

Audiometric Testing

Personnel exposed to noise hazards frequently will be required to undertake audiometry screening conducted by recognised testing personnel or agencies. The relevant PCBU will be responsible for arranging and recording evidence of audiometric testing.

All test results shall be treated as confidential but participants may be asked for clearance to use the results for statistical purposes.

17.6 Dust

Construction operations on-site have a high potential to generate dust during dry weather periods. The activities that may cause problems include traffic movements on unsealed roads and on working areas, vehicles transporting soils and construction materials, excavation works, drilling, earthworks and the movement of soils. Dust control planning should consider seasonal weather conditions.

Early works

Where necessary (i.e. in the event that any visible dust is generated on the construction site), work methods to be applied include the following:

- Work procedures should prioritise the prevention of dust generation over dust suppression techniques. Weather reports can be utilised to forecast and plan for adverse conditions;
- Chemical dust reduction treatment should be applied to all roadways that are constructed with bare soil that is to be exposed for more than 48 hours;
- If visible dust is generated, keeping a water cart on-site to wet down access roads, working areas and exposed soil surfaces as required;
- The water used or additives added to the water to increase the dust suppression properties should have no adverse impact on the environment;
- Covering and / or grass seeding of any stockpiles that are to remain for any extended periods, or if weather forecasts predict strong winds;
- Construction of wind fences where appropriate;
- Attaching shade cloth to open fencing;

- Covering loads of soil and rock during transport to or from site;
- Tailgates to be secured and checked prior to leaving the site;
- Visual surveillance of dust generation;
- The emission of odorous substances or particulates that create or are likely to create objectionable conditions for the public are not permitted; and
- Dust generated during excavation works by rock sawing and/or trimming/grinding to be controlled by water suppression methods.

Base build and Fit Out

- Substituting materials that release dust when being machined, drilled or sawn;
- Isolating areas where dust generation is being carried out by process;
- Utilising equipment that has dust extraction systems;
- Using wet cutting equipment;
- Erecting barriers and warning signage;
- Identifying and providing the appropriate PPE required to conduct the task.

18.0 Excavation and Trenching

Excavation and trenching contractors are responsible for ensuring excavations and trenching work are carried out in accordance with the WHS/WH&S legislation and relevant Code(s) of Practice. All excavation and trenching is to include access/egress, edge and shoring controls implemented.

SWEMS will be developed and implemented for all work activities involved in the excavation and trenching works.

19.0 Inclement Weather

19.1 Lightning

The 30/30 rule (as per AS1768 – Lightning Protection) is to be implemented on this site. This rule states that people should seek shelter if the 'flash to bang' delay (the length of time in seconds between a lightning flash and its subsequent thunder), is 30 seconds or less, and that they remain under cover until 30 minutes after the final clap of thunder.

19.2 Rain and Wind

During periods of rain and or high wind, any work areas that are identified potentially as unsafe a review of the specific work area including the tasks being performed. The HIRAC process will be conducted to determine the level of risk and required actions to be taken. Directly involved in the review shall be the Supervisor/Foreman, HSEA, HSR/s and if required the Site Manager.

Areas requiring dewatering following rain shall be dewatered by the trades/employees required to work in these areas.

All materials stored on the top deck or lower levels open to the environment are to be secured to prevent movement by wind gusts. Where possible scaffolding will be fitted with screening that provides the least resistance to wind, otherwise where an approaching weather event is identified scaffold will have mesh removed.

20.0 Ultra Violet Radiation

All personnel are advised of the dangers of sunburn and the harmful effects of the sun's UV rays. All personnel are required to wear protective clothing and are required to wear sunscreen at all times. Grocon will provide sunscreen at locations around the workplace, including the First Aid room, toilet and amenities area and the site office.

21.0 Heat and Cold Weather

Workplaces with exposure to UV radiation can adversely affect the health and safety of workers without the implementation of a comprehensive sun safety policy. Ways of controlling exposure to be explored include:

External work controls may include:

- Monitor the weather forecasting agencies to capture forecast weather conditions;
- Rescheduling works where possible across the day to avoid exposure between 10.00am and 2.00pm (heat) and provide internal work where possible;
- Providing and ensuring workers use the appropriate personal protective equipment including appropriate protective hats, clothing (lightweight shirts with long sleeves, collars, close weave, long lightweight trousers), sunglasses and SPF 30+(minimum) water-resistant broad-spectrum sunscreen;
- Provide shade where possible; and
- Provide training and educating staff in weather impact awareness;
- Provide strategically located chilled or bottled water;
- Provide an ice machine for workers;
- In severe cases where work is not stopped at a stated temperature, provide where possible a cool down room (heat).

Internal work controls include:

- Monitor the weather forecasting agencies to capture forecast weather conditions;
- Where possible ventilate the structure to allow natural ventilation and close the openings;
- Identify the area's most like to be affected by heat and install an adequate number of fans;
- Provide strategically located chilled or bottled water;
- In severe cases where work is not stopped at a stated temperature, provide where possible a cool down room.

22.0 Manual Handling

Manual handling activities shall be assessed for potential risk during the preparation of the task SWEMS. Recommended practices for the prevention of manual handling injuries shall be addressed at time of induction and reiterated during the SWEMS review by the area supervisor and the allocated team. Wherever practical, elimination and substitution methods will be adopted and taken into consideration by all personnel.

Manual handling means any activity requiring the use of force exerted by a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any animate or inanimate object. These activities may stress or strain the body when the force required exceeds the capacity of a person, or the activity is improperly undertaken.

The risks from manual handling shall be assessed for minimisation at the workplace. Construction sites by their nature are constantly changing. The physical characteristics and nature of risks change dramatically during a project. This creates a great deal of difficulty when it comes to redesigning work systems and work tasks. Nevertheless, a number of general principles apply. If employees are educated about how to reduce exposure to risk, and the employer is committed to risk reduction, effective changes can be made.

General principles:

- Use smooth, controlled actions and movement, bend your knees;
- Avoid repetitive bending, twisting and overreaching movements;
- Design the workplace and work station layout to allow employees to use an upright and forward facing posture, to have good visibility of the task and to perform the majority of tasks at about waist height and within easy reach;
- Decrease the frequency, repetition and duration of the manual handling activity where practicable;
- Store frequently used items between knuckle and shoulder height;
- When carrying a load, keep it as close as possible to the body;
- Wear gloves when handling hot materials or objects with sharp or ragged edges;
- For seated work, avoid lifting, lowering or carrying loads above 4.5kg;
- Avoid lifting, lowering or carrying loads above ones personal capabilities, without mechanical or other assistance;
- Where an object requires two (2) or more persons to handle, one (1) person shall give the signals for lifting and lowering the object;
- Persons under the age of 18 should never lift, lower or carry loads in excess of their personal capabilities, (never above 20kg) without mechanical or other assistance;
- Extra care should be taken when lifting, lowering or carrying awkward, large, unbalanced, slippery, soft, hot, cold or sharp-edged loads;

- Poor housekeeping, inadequate lighting, lack of space, poor walking surfaces, uncomfortable working temperatures, lack of training in manual handling techniques, young or old age, all increase manual handling risks; and
- Round objects must be locked to prevent rolling.

Other Manual Handling Principles

- Change the weights, size or shape of the load;
- Change or rearranging the workplace layout;
- Rearrange the materials flow;
- Using different actions, movement and forces to do the task;
- Modify the task through mechanical assistance or team lifting;
- Provide mechanical handling equipment and appropriate training to use the equipment; and
- Where the previous control options do not reduce the manual handling risk then appropriate instruction, training and/or education shall be provided.

23.0 Dangerous Goods and Hazardous Substances

Specific procedures for the storage, handling and use of dangerous goods and hazardous substances will be implemented at the Site in accordance with the Grocon WH&S System.

Storage, handling and use of dangerous goods and hazardous substances will be in accordance with the relevant WHS/WH&S legislation and relevant Code(s) of Practice.

A hazardous substance register will be established for the project and relevant Material Safety Data Sheets (MSDS/SDS) will be obtained or provided prior to the materials being brought on to site. MSDS's are not greater than 5 years old, will be readily accessible to all personal and risk assessments as identified.

Appropriate warning (HAZCHEM) and safety signs will be displayed where dangerous goods and/or hazardous chemicals are stored.

Tasks that require working with dangerous goods or hazardous substances will be the subject of an appropriate hazard and risk assessment as identified. SWEMS will be developed and implemented for all work activities utilising a dangerous or hazardous substance. A register of dangerous goods & hazardous substances will be maintained at the Project, this will include the type and quantity of the substance. Each sub-contractor will provide Grocon with a list of dangerous goods or and hazardous substance they are using or storing on site at the end of each week. Grocon will in the event of an emergency provide the register to the relevant emergency response personnel.

24.0 Electrical Safety

All leads, portable power tools and earth leakage devices will be tested, inspected and tagged by a licensed electrician or a competent person as prescribed in legislation before being presented on the site. Whilst on the site all electrical equipment will be subject to regular inspections, including Tagging and Testing in accordance with AS 3012 and AS/NZS 3760.

Site safety requirements relevance to temporary construction wiring include:

- All leads are to be kept off the ground and run on insulated hooks where not restrictive to work processes and not touching Scaffolding, Formwork frames, Fire services etc;
- Logbook records of testing are to be available for review;
- RCDs and switchboards must be tested once a month in accordance with the Australian Standard AS 3012;
- Electric leads shall be of industrial grade
- No leads shall run from one floor to another, except in lift shafts, stair wells – one level and newly completed formwork decks;
- Extension leads must pass through the bottom of switchboards and be tied to the insulated support rail;
- Double adapters must not be used;
- Leads are not to be joined;
- All extension leads must be run from the temporary boards. Orange boxes (EPOD's) can be used to supply power to tools only at the work area;

- All power to extension leads and power tools must be switched off when not in use;
- Work on or near live electrical circuits or live distribution boards is to be carried out in accordance with the relevant WHS/WH&S legislation;
- All temporary construction cables must be identified as such by the Electrical Contractor; and
- The Red, Green, Blue and Yellow colour code system is to be used on the project for Test and Tag.

25.0 Formwork / Jump Form

All formwork erection and stripping is to be undertaken by persons both experienced and qualified or a labourer/trades assistant under the direct supervision of a qualified form worker.

Site safety requirements relevance to formwork, permanent formwork and jumpform include:

- All formwork shall be designed, erected, altered and dismantled in compliance with the with the relevant WHS/WH&S legislation and engineering specifications;
- All formwork activities are to be compliant with the relevant Code/s of Practice and Australian Standards;
- The use of explosive power tools will only be undertaken by persons trained and experienced;
- Project tasks and specific SWEMS are to be created, approved and implemented;
- A risk assessment must be conducted for all working at heights;
- A documented risk assessment with associated SWEMS must be developed for all works at heights of greater than 2m.
- Scaffolding or edge protection must be in place prior to formwork commencing;
- Access to the formwork decks is to be by secured ladder only and not by frames;
- Access ways are to be implemented, maintained and indicated with the use of safety tape throughout the formwork frames;
- Formwork stripping areas are to be barricaded with flagging or barricading, not tape alone, and have signs posted at all times (FORMWORK STRIPPING IN PROGRESS, KEEP CLEAR);
- Adequate access and task lighting is to be maintained by the Formwork Supervisor in coordination with the Site Manager;
- Housekeeping is to be maintained in the formwork areas with the formwork decks being swept routinely (minimum daily);
- After rain, including overnight, the formwork areas are to be inspected by the Site Manager or Foreman with the Formwork foreman to ensure a safe work area prior to workers accessing the areas;
- Formwork certificates are to be produced prior to concrete pour commencing as per the legislative requirements were applicable.
- Decks barricaded below while placing concrete.

26.0 Concrete Pumping

Site safety requirements relevance to concrete pumping include:

- All concrete pumping will be undertaken by persons qualified and certificated as required by legislation to undertake such work and all work associated with the pumping of concrete shall be in compliance with the relevant Code/s of Practice and Australian Standards;
- Project specific SWEMS are to be created, approved and implemented and must include blow back, cleaning, waste and runoff controls;
- No placement of concrete is permitted on formwork until formwork certificates are completed and forwarded to the site manager as per legislative requirements;
- A documented pre-pour safety inspection is to be completed by the concrete Supervisor;
- The placement of the concrete pump is included in the site establishment drawings
- Consideration of types and capacity has been used and placement to eliminate or reduce the build-up of exhaust gases;
- Clear access to the concrete pump for concrete trucks and personnel is to be implemented and maintained;
- A spotter must be in place for all reversing concrete trucks;
- Daily pre-start inspections are to be conducted and recorded in a logbook;
- Monthly and six monthly maintenance inspections, as per manufacturers specifications, are to be conducted, documented and records maintained and available;
- All signage, including all safety signage, is to be clean and legible;

- Safety grates on pump in feed and safety pins are to be on all line joints and must be in place prior to operation;
- All equipment associated with concrete pumping must have fixed compliance plates and/or appropriate certification for their use;
- High visibility clothing to be worn at all times;
- All concrete operations must comply with Traffic Controller instructions if working from the street; and
- All concrete washout must occur in the designated washout area.

26.1 Tilt up and Pre-Cast Concrete

Where Pre Cast elements have been designed in the structure of the project, hazard elimination and risk reductions are realised by eliminating much of the work required to construct the elements in-situ. Hazards associated with the on-site unloading, lifting, placing and securing will be managed through the WRA, Subcontractors SWMS and in the review process in Appendix A of the WSMP.

27.0 Working at Heights

This height hazards on this project are residual following the DesignSafe process whose purpose, however there are many areas in all stages of program development where a fall could occur. The most desirable method of construction is to build from a on the ground or on a solid construction.

Falls could typically on the same level or could be from a height associated with the following:

- Early work (excavation and retention);
- Erecting, accessing, servicing, dismantling Tower Cranes;
- Accessing plant;
- Erecting gantries, hoardings and scaffolding;
- Erecting formwork;
- Erecting, altering or dismantling perimeter containment screens;
- Working from access equipment.

There is also a risk of persons falling into shafts, through wall or floor penetration in cases where the most appropriate form of isolation is not implemented.

27.1 Floor and Wall Penetrations

All floor and wall penetrations must be appropriately identified and guarded. Penetrations larger than that which a person could fall through which are unable to be protected by the use of cast in mesh (25mm x 25mm x2.5mm) will be barricaded or secured. Mesh will not be used where there is a risk of objects falling through the mesh onto workers below.

Examples of guarding include (but are not limited to):

- Barriers;
- Guard-rails;
- Para webbing;
- Appropriate secure covers – highlighted with the words Penetration Beneath / Behind.

Lift door openings / overruns will be identified and guarded with plywood or mesh. Lift door openings will have meshed lift guard doors (lockable) installed progressively as required in the lift installation process. Guarding of lift openings will be full heights.

27.2 Ladders / Platform Ladders

Ladders are only to be used when mobile scaffold and/or scissor lifts are not suitable for the work process and must be platform ladders. In cases where ladders are required for access, they must be used in the correct manner, e.g. correct angle, secured and projected at least one metre past the top platform or landing.

Site safety requirements relevance to ladder work include:

- Only those ladders marked “Industrial” to be used on the project;
- Ladders shall always be in good condition and regularly inspected;
- Ladders shall always be placed clear of walkways and traffic ways;

- No Platform Ladder shall be used within three (3) metres of safety barriers/fences unless full enclosure barriers are in use;
- Platform Ladders should only be used in the fully open position;
- 3 points of contact must be maintained, this means either two feet and one hand, or one foot and two hands on the ladder when ascending or descending;
- Only light duties are to be performed off a Platform Ladder;
- Equipment is not to be carried whilst accessing the Platform Ladder, unless tools are carried on a tool belt, holster or pouch, not in your hands;
- Tools and equipment are not to be stored on the Platform Ladder;
- One Platform Ladder one person;
- Electricians are to use appropriate ladders only; and
- Platform Ladders are not to be used as trestle ladders/tables;
- Trestles must be marked “industrial” have a minimum platform width of 450mm, the platform not exceed 700 in height, and only be used for light work activity.

27.3 Scaffolding

There will be large quantities of scaffolding erected externally and internally throughout the duration of the project. Typically the scaffolding will be modular, with mobile type also utilized in the fit-out.

Site safety requirements relevance to scaffold work include:

- All scaffolding at the site is required to comply with the relevant WHS/WH&S legislation, Code/s of Practice and Australian Standards;
- All scaffolds over 4 metres in height must be assembled by a person who holds a scaffolder’s certificate of competence. Any alterations to a scaffold must only be undertaken by a person who holds a scaffolder’s certificate of competence;
- Scaffolds should not be used unless, and until, Grocon has been provided with a handover certificate and the scaffold displays a green “scafftag” card;
- Where the “scafftag” card or other system is used, a scaffold plan is to be displayed to identify the locations of each card;
- Duplication of the relevant “scafftag” may be utilised where there are multiple access and egress locations in a permanent scaffolding system.
- All scaffolding, open sided work areas, formwork, floor openings, pits or excavations where persons can fall 2 meters or more, shall have appropriate fall protection, such as guard rails/mesh; and

Mobile scaffolds are to be erected and dismantled by persons suitably qualified to do so.

NOTE: All plastic mesh used on the project must be non-flammable.

28.0 Plant and Equipment

All plant and equipment brought on to site must have a Plant Risk Assessment and a Pre-Start Checklist completed and have both approved by the HSEA five working days prior to use on site. All plant and equipment being brought on to site shall be inspected and approved by Grocon for site access. The inspection will include but not limited to the following:

- All plant and equipment, including forklifts, must comply with the relevant WHS/WH&S legislation, Code/s of Practice and Australian Standards;
- All plant and equipment being brought on to site must comply with the relevant Acts or Regulation;
- No machinery, hand tools or any other type of equipment is to be operated without effective guarding, locking pins, etc;
- No general parking or employee parking is available at the site;
- Walking pace (5kph) shall be observed by drivers within the site at all times;
- Site personnel must not operate cranes, mobile plant or equipment unless they have been trained, are appropriately qualified (Certificate of Competence) and are competent in its use. All tickets must be supplied at induction, be available on site and made readily available upon inspection;
- If seat belts are fitted they must be worn;
- Where applicable, seat belts are to be fitted and serviceable;
- Vehicle safety – No seat NO RIDE;

- All equipment such as front-end loaders, bulldozers, forklifts and backhoes are to have their bucket or blade(s) lowered when not in use;
- All plant and equipment must have:
  - a current log book,
  - current Service Maintenance Report,
  - Inspection and Commissioning Reports (where applicable) e.g. Hoists, Alimak, Swinging Stages and Mast Climbers
  - an operators manual,
  - Plant Registration/design Notification (If applicable),
  - Certification of Operation (Operator training record),
  - Safe Working Loads displayed,
  - Warning and operational decals/signs legible,
  - Warning devises, fitted and working,
  - Fire extinguishers fitted and serviced,
  - All associated lifting equipment certified and tagged in accordance with specified time frames.
  - Fuel operated plant exhaust clears no greater than 10 seconds after start up.

Inspection, Testing and Servicing

An appropriate process for the inspection, testing and servicing of plant and equipment at the site will be implemented. Records of inspections, tests and servicing will be maintained at the site. The process will include a process for conducting WH&S inspections and testing (and, where relevant, servicing) for incoming products, such as materials, plant and equipment-

29.0 Cranes, Lifting and Rigging

The 1 Denison St Project will be serviced by cranes throughout its construction.

The crane(s) will be designed, erected, operated, maintained, inspected and recovered in accordance with the relevant WHS/WH&S legislation, Code/s of Practice and Australian Standards. Hazards identified with the

Crane activities will be assessed in the Workplace Risk Assessment (WRA) and Safe Work Environmental Method Statements (SWEMS) developed as required for high risk activities.

Refer to the Construction Management Plan for Crane location, operational radius, and relevant crane operational diagrams. Safety and Environmental impact on neighbours and businesses will be assessed in Grocons WRA and communicated to affected stakeholders.

Periodically mobile cranes will be used on the Project for the installation of materials and plant as required. Mobile cranes will be set up in accordance with the requirements of the Mobile Crane Code of Practice as applicable to crane sitting and underground services.

Hazards identified with Mobile Crane activities will be assessed using the Grocon Risk management process and documented in the Workplace Risk Assessment (WRA) and Safe Work Environmental Method Statements (SWEMS).

Training and Competencies

All crane associated activities such as Crane Operator, Dogger and Riggers shall be carried out by personnel holding the required certificate of competency. An exception will be made for a person who is undertaking a prescribed training programme who is logbook compliant with legislative requirements and under direct supervision of a holder of a certificate of competencies for the prescribed occupation that the training is being undertaken.

Crane Operators, Doggers and Riggers must undergo refresher training between two and a half and three years after either being issued with their initial certificate of competency, or since attending their most recent refresher training, whichever is the shorter time frame as per legislative requirements or as deemed necessary.

Installation and Commissioning

A competent person shall be appointed to coordinate the erection, operation, inspection and dismantling of cranes and hoists. Crane installation includes foundation/standing (Design and Certification), for all tower cranes. All relevant crane design documentation and sign off certificates where applicable, must be completed and records maintained on site. Crane Registration (Workplace Health and Safety) is to be maintained on site.

CraneSafe will be engaged to conduct inspections of all project cranes and on completion each crane will display the Green CraneSafe Sticker.

Operation

Safe crane operation is primarily in the control of a competent operator who knows the machine and is able to determine how far a load can be placed based on crane charts. Limiters are only secondary safety device and are to be considered as a backup only.

Known Crane hazards and incidents:

- Falling objects during erection, servicing, jumping, operating and dismantling;
- Power line contact;
- Overloading;
- Operating in poor ground, over underground services and unsupported slab / platforms (mobile);
- Failure to level crane (mobile);
- Failure to use outriggers (mobile);
- Failure to fully extend outrigger beams (mobile);
- Improper blocking beneath outriggers (mobile);
- Machine defects;
- Rope and tackle failure;
- Operating in adverse weather conditions outside manufacturers specifications;
- Incorrect assembly of crane;
- Ignorance of crane capacity;
- Inattention to job;
- Fast slewing and sudden moves causing load to swing out of radius;
- Incidents associated with the process of Tower Crane assembly, jumping, maintenance and dismantling;
- Operating in close proximity to other cranes, plant, equipment and structures;
- Operator error, i.e.: poorly slung loads and falling material;

Electrical Clearance

Electrical clearances to be maintained include:

- 3 m if the voltage is up to 132 Kv
- 6 m if the voltage is up to 330 Kv
- Controls to be considered include:
  - Task specific training.
  - Spotters.
  - Exclusion Zones
  - Operational limits and devices.

Note: Tiger tails are visuals only, they do not isolate.

Crane Maintenance and Inspections

- A scheduled maintenance programme must be developed and implemented for all inspection and maintenance work in accordance with the Manufacturer's recommendation,
- Third party inspections of the Tower Cranes will be undertaken periodically with the Inspection Report handed to the plant supplier to carry out corrective actions as required.
- Damaged plant is to be inspected and repaired by a competent person and recommissioned for operational works.
- The Crane coordinator or nominated person shall maintain a register of all lifting gear on site. All lifting equipment shall be designed marked, used and inspected in accordance with AS 2550 and comply with AS 1418 and any other standard specific to the lifting equipment being inspected. Any

equipment found to be defective will be removed from service and tagged for repair or destroyed if repair is not practical. Refer 3.12 Out of Service Tagging. Refer to Appendix A
- Major inspections – 10 years
- Life cycle – 25 years (Major inspection/reports)
- Specific Items to be included in inspections include, but are not limited to:
  - Detached Hydraulic Hoses and oil leaks
  - Structural damage/guarding missing
  - Loose bolts in tower crane base, tower sections or slew
  - Rust in structural members
  - X-ray of welds

Pre-operational Checks

Pre-operational checks shall be conducted and records maintained (logbooks) on site for:
- Daily Log Books are to be fully completed prior to commencement of operations;
- Any Major operational fault must be reported to the Grocon Site Manager;
- Daily Log books are to be submitted to Grocon at the end of every week;
- Current inspection and testing register maintained and submitted to Grocon;
- Soft fabric slings – used only following risk assessment and consultation with Grocon Management, will be withdrawn from use if damaged or more than 3 months old from first use.

Work Boxes

Work boxes used for lifting persons or materials shall be of a type specifically designed for that purpose. The design and use must comply with relevant legislative, Code/s of Practice and Australian Standards.

30.0 Structural Steel Erection

Steel construction provides the framework for the structure for which other designed components of are added externally and internally in a systematic process to achieve a completed building.

Steel construction is any work to erect assembled portions and single components of structural steel, such as:
- Columns;
- Beams;
- Bracing;
- Rafters;
- Purlins;
- Girts;
- bridging and fly bracing;
- Trusses.

Steel construction by process is generally beneficial in providing less material congestion on site and reduced manual handling when compared to traditional formed concrete structures. On the other hand the steel construction process requires elevated work at heights on the structure and requires additional mobile plant to be placed on slabs during frame erection.

The risks to the health and safety of persons involved in steel construction work are falls from heights, falling objects, collapse of the structure and plant engaged in the steel construction work. Risk management plays an important role in the management of workplace health and safety and the key elements of the HIRAC process are captured in the DesignSafe, Workplace Risk Assessment and relevant SWEMS for high risk construction work.

High risk construction works required in steel construction include:

- Work at heights –
  - On slabs, on permanent formwork, on perimeter screen platforms, on scaffolding, in elevated work platforms, in crane lifted work boxes and as a last resort in harnesses.
- Cranes -
  - Tower and mobile;
- Dogging -

  - Dogging work is the use of slinging techniques including the selection and inspection of lifting gear to safely sling a load, or the directing of a plant operator in the movement of a load when the load is out of the operator's view.
- Basic rigging –
  - The scope of work for basic rigging includes:
    - dogging work;
    - structural steel erection;
    - particular hoists;
    - placement of pre-cast concrete members of a structure,
    - safety nets and static lines;
    - mast climbers;
    - perimeter safety screens; and
    - shutters; and
    - cantilevered crane loading platforms.
- Intermediate rigging -
  - The scope of work for intermediate rigging includes:
    - rigging work in the class Basic Rigging;
    - all hoists;
    - rigging of cranes, conveyors, dredges and excavators;
    - tilt-slabs, demolition of structures or plant; and
    - dual lifts.
- Advanced rigging -
  - The scope of work for advanced rigging includes:
    - rigging work in the class Intermediate Rigging;
    - rigging of gin poles and shear legs;
    - flying foxes and cableways;
    - guyed derricks and structures; and
    - suspended scaffolds; and
    - fabricated hung scaffolds.
- Basic Scaffolding: SB –
  - The scope of work for basic scaffolding includes:
    - modular or prefabricated scaffolds
    - cantilevered hoist with a maximum working load of 500 kg (materials only)
    - ropes
    - gin wheels
    - safety nets and static lines
    - bracket scaffolds (tank and form work).
- Intermediate Scaffolding: SI -
  - The scope of work for intermediate scaffolding includes:
    - scaffolding work included in the class of Basic Scaffolding
    - tube and coupler scaffolds including tube and coupler covered ways and gantries
    - cantilever crane loading platforms
    - cantilever and spurred scaffolds
    - barrow ramps and sloping platforms
    - scaffolding associated with perimeter safety screens and shutters
    - mast climbers.
- Advanced Scaffolding: SA –
  - The scope of work for advanced scaffolding includes:
    - scaffolding work included in the Intermediate scaffolding class
    - cantilevered hoists
    - hung scaffolds, including scaffolds hanging from tubes, wire ropes or chains
    - suspended scaffolds.
- Concrete pumps and placement booms
- Mobile plant –
  - Access equipment, forklifts and slab supported mini cranes for façade erection.

31.0 Confined Spaces and Hot Works

Tasks that require working in confined spaces or carrying out hot works will be managed through the HIRAC process. Each process requires the use of Permits in conjunction with SWEMS.

Confined Space work on this project has been reduced through the DesignSafe process, however in cases where it is required to be carried out, competency of the entry, observer and retrieval workers and knowledge of the process will be linked to the SWEMS and Permit.

Hot Work and Confined Space work will be carried out in accordance with relevant legislative, Code/s of Practice and Australian Standards.

32.0 Document Management & Record Control

32.1 General

Grocon uses Aconex to manage and control project related documentation & records. The intent is to ensure that all project related documentation & records are managed in a manner that is controlled, accurate, efficient, comprehensive, reliable and systematic.

Grocon also has a QSE system which is used to manage the QSE processes on our projects. This system is also used as a data base to review and store QSE type documents including Safety Plans, SWEMS, Toolbox Talks. These documents shall be transmitted using Aconex.

Whilst Aconex is established for use on individual projects, the QSE system is used as a data base with information, documents and records from current and past projects.

32.2 Document Controller and Aconex set up

The Project Manager will assign a document controller to manage and control all project documents using Aconex. Where Grocon establishes Aconex, the Document controller is usually the Aconex System administrator who provides the relevant access level for all users and relevant support and training.

All documentation used during the project will be maintained and controlled in accordance with the Aconex Project Configuration document and any relevant Grocon Document Control Procedures.

32.3 Site Diary Recording

Grocon records daily site diaries using the QSE database, where the Site manager has the overall responsibility for the collation of daily records. Various project roles are assigned the responsibility for adding information to report on the labour resources of all trades, weather conditions including any delays and any offsite activities, site incident (Near miss, injury or illness) notes for later reference, deliveries and other project information.

The Site Manager will progressively review the entered data in the QSE Site diary for completeness and accuracy. Any anomalies will be addressed with the appropriate responsible person and corrected prior to the weekly diary being closed for editing.

Project diaries can be reviewed by Grocon personnel with appropriate access into the QSE database.

32.4 Completion Documentation

Prior to the project reaching Practical Completion, Grocon will obtain the required documents as listed, but not limited to the following; (each project may add others required under the contract)

- Grocon and Subcontractor Lever Arch hard copy safety documents, the documents must include:
- Incident records
- Rehabilitation Records

- Internal and External Auditing Reports and Action Lists
- Reports to the relevant WHS/WH&S legislative authority
- External Notices issued by the relative WHS/WH&S legislative authority
- Reports to the Office of the Federal Safety Commissioner (OFSC) where applicable
- Internal and External safety meeting minutes.

32.5 Documentation Archiving

Following completion of the project, the Contracts Administrator and Document Controller shall be responsible for archiving all project documentation & records which shall be maintained in accordance with Grocon's Record Management Procedure and related Work Instructions.

Grocon endeavours to minimise the archiving of hard copy documents and where possible uses electronic methods such as Aconex, the QSE database and Computer drives for archiving of all project records.

Where a hard copy of documentation is required to be archived, it shall be in its original condition or in lever arch files and sent to Grocon's current archive provider.

All Hard copy archiving shall be completed in accordance with the **Work Instruction '6130W2 Archiving'**.

33.0 Managing Non Conformance, Corrective & Preventative Action

33.1 General

Work being carried out that does not conform to specified safety requirements is deemed to be non-conforming and will therefore need to be prevented from occurring again on the project.

All Grocon employees are responsible for identifying and recording any non-conforming work activities and where possible "See and Fix" will be applied. In other cases requiring a higher level of control to be implemented, an Opportunity for Improvement (OFI) is to be logged in the QSE database.

The subcontractor shall also maintain their own register which shall record and manage all safety Non-conformances, including those of any 2nd & 3rd tier subcontractors. Each Non-conformance raised shall require Corrective and Preventative Actions approved by the relevant authority (Grocon raiser), prior to being closed.

34.0 Inspection, Measuring and Test Equipment

34.1 General

Grocon shall maintain a central IMTE register (**form 3101F1**) and copies of calibration certificates for all Inspection Measuring & Test Equipment (IMTE) being used on the project which shall cover Grocon's and all Subcontractor's equipment.

Each subcontractor shall identify and list all Inspection Measuring & Test Equipment (IMTE) to be used for the Project and provide their own IMTE register and copies of calibration certificates for each piece of equipment to Grocon. As equipment is updated or changed, revised IMTE registers shall be issued to Grocon's Site Quality Representative (SQR).

The Site Quality Representative is to maintain a central Inspection, Measuring and Test Equipment Register with copies of all calibration certificates and ensure that all the calibrated equipment is appropriately identified to the IMTE register.

Grocon Foreman & Supervisors will monitor the equipment being used on site for inspection measuring and testing and advise the Site Quality Representative where new equipment has been identified.

This may also be monitored through an agenda item & discussion at subcontractor site meetings.

35.0 Handling, Storage, Packaging, Preservation and Delivery

35.1 General

Grocon will monitor the delivery of incoming goods to ensure proper handling, storage, and packaging, to assist in the preservation of all components or products which will become a part of the completed project.

Generally most products are supplied by our subcontractors as a part of their trade package works and each subcontractor or supplier is ultimately responsible to ensure they manage their products with correct handling, packaging, storage and protection to ensure the products are maintained in good condition until they are incorporated into the project and accepted at handover of the relevant works.

35.2 Materials Handling

Some materials Handling shall be provided by Grocon to assist with unloading deliveries by suppliers and subcontractors which may include Cranage and Forklifts. Materials handling may be described within the Grocon Workplace Safety Management Plan (WSMP) for the project.

Otherwise Subcontractors and Suppliers shall provide the appropriate equipment or resources for the proper handling of all materials delivered to the project.

35.3 Storage of delivered materials

Storage areas will be designated by Grocon to prevent damage or deterioration of delivered products and materials pending use or incorporation into the project. The method of storage employed is determined with due consideration being given to the characteristics of the materials to be stored, e.g. the hazardous nature, and hazard material or dangerous goods class.

Subcontractors will be responsible to maintain adequate protection of products and materials in storage, during use and disposal.

36.0 Auditing

36.1 General

Audits are conducted on the Grocon Integrated QSE Management System for the Construction business, to ensure that all system elements are correctly and effectively applied to achieve compliance with the requirements of the company procedures.

36.2 External Certification Audits

External Certification & Surveillance Audits are conducted annually on our certification for Quality, Safety & Environmental. Grocon's QSE management system is certified by NCSI.

Additional WH&S audits are conducted by the Office of Federal Safety Commissioner (OFSC) either annually or every six months. Grocon maintains OFSC accreditation.

36.3 Internal Grocon Audits

Internal audits on company procedures are scheduled on our construction projects to provide a systematic check of their correct application. These audits are scheduled by the National Quality Manager in consultation with the National and State HSE manager. An annual audit schedule will be prepared for all current projects and updated as necessary to monitor the scheduled audits and to include any new projects.

All internal audits will be carried out in accordance with the Grocon procedures available from the Intranet.

36.4 Internal Subcontractor & Consultant Audits

Audits on Subcontractors and Suppliers Safety Managements Systems (SMS) are established in a project audit schedule developed by the Health, Safety and Environmental Advisor (HSEA) in conjunction with the SQR and Site Manager (SM) and as approved by the Project Manager (PM).
(**Form 6140F1** Project Audit Schedule available from the Intranet)

First round audits shall be scheduled for each of the above, following commencement of work on the project to confirm the proper implementation of their SMS on the project.

Second & subsequent round audits shall be scheduled subject to the outcome of an informal risk assessment, conducted with input from the HSEA,SQR, SM and PM, which shall consider previous audit results and the demonstration of acceptable performance of their SMS.

The HSEA and SQR are to maintain the audit schedule three months in advance and will be continually reviewed and updated, considering the letting of contracts and the projects construction programme.

Project audits shall be conducted to identify compliance with the Project safety requirements, legislative requirements, Codes of Practice, Standards and other requirements.

36.5 Conducting Audits and Documentation

All Internal Audits shall be conducted in accordance with Grocon's Internal Audit procedure and Work Instruction available from the Intranet. Audit documents and forms are available from the Grocon intranet for use in conducting and managing audits on projects.

36.6 Recording and Reporting of Audits

The results of all Audits shall be recorded and entered into the QSE data base including any OFI's raised from the audit. The QSE data base is capable of producing audits reports for use at project and business levels.

37.0 Review, Issue and Authorisation.

37.1 Preparation, Review & Authorisation

The First Issue.

1. The HSEA, assisted by the State WH&S manager will prepare the WSMP template and include the project specific content.
2. The Project Manager will review the WSMP to ensure it meets the project requirements.
3. The State WH&S/HSE manager will review the first draft issue to ensure it maintains Grocon requirements.
4. The Construction Manager will review the WSMP for approval.

Complete these details in the **First Issue Approval table** of the WSMP.

Any major comments shall cause the WSMP to be returned for further revision and recommence the cycle.

Minor Revisions after First issue.

1. The HSEA will create revisions of the WSMP to suit minor changes identified.
2. The Project Manager will review the changes prior to approving the revised WQMP.

Major Revisions or change of Intent

Should the WSMP require major revisions (based on the First Issue and subsequent minor revisions) which alter the intent or scope of the Original issued document, then the Project Manager shall seek further review by the State WH&S manager and approval from the Construction Manager which shall be recorded in the **First Issue Approval table** for that revision.

Approval of Amendments

All approved WSMP shall be signed by the HSEA and by the Project Manager on the front page.
Records of the amendments shall be recorded in the 'Record of Amendments' table in the WSMP.

First Issue Approval Table for revision 0

Step	Activity	Name	Position	Signature	Date
1	Preparation	TBC	WH&S Manager		
2	Review	TBC	Project Manager		
3	Review	TBC	WH&S / HSE Manager		
	Revision - 1 - was issued with Approval by the Construction Manager.				
4	Approval	TBC	Construction Manager		

(Note: No need to obtain WH&S / HSE Manager Review or Construction Manager Approval after the first issue, subject to Major revisions or change of intent above.)

37.2 Record of Amendments

The WSMP amendments shall be recorded in the table below. The issue and use of this document must be approved and it is the responsibility of all Grocon personnel to ensure that work is carried out in accordance with this current Workplace Safety Management Plan (WSMP).

Revision	Date	Comments	Approved By

37.3 Distribution List

This document shall be available electronically within the Project Aconex Document Register once approved. All printed copies unless nominated in the distribution list are deemed to be “Uncontrolled”.

Approved copies of the all Grocon WSMP shall be loaded onto the QSE database

Appendix A HIRAC Management Matrix

HIRAC MANAGEMENT MATRIX						
High Risk Element	**By Whom**		**Frequency**	**Method**	**Grocon HIRAC Tool/s** *Available in Systems on the Grocon Intranet*	**Filing location**
	Responsible	**Approver**				
Asbestos	SM, CA, FM	PM	Pre Start During removal On disposal On clearance	Asbestos Register / Report – (Consultant/Hygienist) Asbestos Management Plan Safe Work Method Statements Safety Document Review, Monitoring and Auditing Pre Start Meetings / Toolbox Talks Disposal Dockets Clearance Report	6000P Managing QSE Risks 2005W1 DesignSafe Work Instruction 2005F1 DesignSafe Risk Register 2005F2 Design Change Form WH&S Review 6010A1 Health Safety and Environmental Legal and Other Requirements Matrix 6150F2 Plant Inspection 6191F1 Tenderers Capability Statement 6150F1 Plant Risk assessment 6190F2 Monthly Subcontractor Performance Report 6004F1 Safe Work and Environmental Method Statement 6000F5 Safe Work and Environmental Method Statement Review 6000F6 Safe Work and Environmental Method Statement Implementation Audit 6000F7 HSE Purchasing Risk Assessment 6060F5 Toolbox Talk Record 6060F6 Daily Prestart Meeting 2025A1 Safety Interaction Position Matrix 2025F1 Workplace Safety Interaction Record Sheet 2025F2 Monthly Safety Interaction Register 2025WI Safety Interaction Program	Aconex Site Lever Arch Folders QSE Database Site Shared Drive
Demolition	SM, SE, CA, FM	PM	Pre Start During demolition On disposal	Dilapidation Report Structural Drawings - (structural loadings) Engineering Report/s - (structural loadings) Services Report – (DBYD / type / location) Demolition Plan Traffic Management Plan (External / Internal) Safe Work Method Statements Document Review, Monitoring and Auditing Pre Start Meetings / Toolbox Talks Disposal dockets		
Concrete pumps and placement booms	SM, SE, FM	PM	Pre Start Erection Commissioning During use Inspecting / servicing Decommissioning	Design Documentation Pre-Start and Operational Documentation Structural Drawings - (structural loadings) Engineering Report/s - (structural loadings) Traffic Management Plan (External / Internal) Safe Work Method Statements Document Review, Monitoring and Auditing Pre Start Meetings / Toolbox Talks Commissioning Reports Inspection / Servicing Reports CraneSafe Sticker		
Cranes – Tower and mobile	SM, SE, FM	PM	Pre Start Erection Commissioning During use Inspecting / servicing Jumping Dismantling			

HIRAC MANAGEMENT MATRIX

High Risk Element	By Whom		Frequency	Method	Grocon HIRAC Tool/s *Available in Systems on the Grocon Intranet*	Filing location
	Responsible	Approver				
Excavations	SM, CA, SE, FM	PM	Pre Start During process	Services Report – (DBYD / type / location) Structural Drawings - (structural loadings) Engineering Report/s - (geotechnical / structural loadings) Asbestos Register / Report – (Consultant / Hygienist) Asbestos Management Plan Traffic Management Plan (External / Internal) Safe Work Method Statements Document Review, Monitoring and Auditing Toolbox Talks Pre Start Meetings Disposal Dockets Clearance Report	6000P Managing QSE Risks 2005W1 DesignSafe Work Instruction 2005F1 DesignSafe Risk Register 2005F2 Design Change Form WH&S Review 6010A1 Health Safety and Environmental Legal and Other Requirements Matrix 6150F2 Plant Inspection 6191F1 Tenderers Capability Statement 6150F1 Plant Risk assessment 6190F2 Monthly Subcontractor Performance Report 6004F1 Safe Work and Environmental Method Statement 6000F5 Safe Work and Environmental Method Statement Review 6000F6 Safe Work and Environmental Method Statement Implementation Audit 6000F7 HSE Purchasing Risk Assessment 6060F5 Toolbox Talk Record 6060F6 Daily Prestart Meeting 2025A1 Safety Interaction Position Matrix 2025F1 Workplace Safety Interaction Record Sheet 2025F2 Monthly Safety Interaction Register 2025WI Safety Interaction Program	Aconex Site Lever Arch Folders QSE Database Site Shared Drive
Mobile plant	SM, SE, CA, FM	PM	Pre Start During use	Design Documentation Pre-Start and Operational Documentation Services Report – (DBYD / type / location) Structural Drawings – (structural loadings) Engineering Report/s - (structural loadings) Demolition Plan Traffic Management Plan (external / Internal) Safe Work Method Statements Document Review, Monitoring and Auditing Toolbox Talks Pre Start Meetings		
Tilt – up and pre – cast construction	SM, SE, FM	PM	Pre Start During erection	Structural / Design Drawings Engineering Report/s - (structural / environmental loadings) Traffic Management Plan Safe Work Method Statements Inspection / Servicing Reports		
Work at Heights	SM, SE, FM	PM	Pre Start During process	Safe Work Method Statements Inspection / Servicing Reports – (Plant and equipment) Commissioning Reports		

HIRAC MANAGEMENT MATRIX

High Risk Element	By Whom		Frequency	Method	Grocon HIRAC Tool/s *Available in Systems on the Grocon Intranet*	Filing location
	Responsible	Approver				
Hoists, builders lifts	SM, SE, CA, FM	PM	Pre Start Erection Commissioning During use Inspecting / servicing	Design Documentation Pre-Start and Operational Documentation Structural Drawings - (structural loadings) Engineering Report/s - (structural / environmental loadings) Safe Work Method Statements Document Review, Monitoring and Auditing Toolbox Talks Pre Start Meetings Inspection / Servicing Reports Commissioning Reports	6000P Managing QSE Risks 2005W1 DesignSafe Work Instruction 2005F1 DesignSafe Risk Register 2005F2 Design Change Form WH&S Review 6010A1 Health Safety and Environmental Legal and Other Requirements Matrix 6150F2 Plant Inspection 6191F1 Tenderers Capability Statement 6150F1 Plant Risk assessment 6190F2 Monthly Subcontractor Performance Report 6004F1 Safe Work and Environmental Method Statement 6000F5 Safe Work and Environmental Method Statement Review 6000F6 Safe Work and Environmental Method Statement Implementation Audit 6000F7 HSE Purchasing Risk Assessment 6060F5 Toolbox Talk Record 6060F6 Daily Prestart Meeting 2025A1 Safety Interaction Position Matrix 2025F1 Workplace Safety Interaction Record Sheet 2025F2 Monthly Safety Interaction Register 2025WI Safety Interaction Program	Aconex Site Lever Arch Folders QSE Database Site Shared Drive
Mast climber	SM, SE, CA, FM	PM				
Swing stage	SM, SE, CA, FM	PM				
Work boxes, first aid cages	SM, SE, FM	PM	Pre Start During use Inspecting / services	Design Documentation Pre-Start and Operational Documentation Safe Work Method Statements Document Review, Monitoring and Auditing Toolbox Talks Pre Start Meetings Inspection / Servicing Reports		

HIRAC MANAGEMENT MATRIX

High Risk Element	By Whom		Frequency	Method	Grocon HIRAC Tool/s *Available in Systems on the Grocon Intranet*	Filing location
	Responsible	Approver				
Rope access equipment / anchors	SM, SE, CA, FM	PM	Pre Start During use Inspecting / services	Design Documentation Pre-Start and Operational Documentation Safe Work Method Statements Document Review, Monitoring and Auditing Toolbox Talks Pre Start Meetings Inspection / Servicing Reports	6000P Managing QSE Risks 2005W1 DesignSafe Work Instruction 2005F1 DesignSafe Risk Register 2005F2 Design Change Form WH&S Review 6010A1 Health Safety and Environmental Legal and Other Requirements Matrix 6150F1 Plant Risk assessment 6150F2 Plant Inspection 6191F1 Tenderers Capability Statement 6190F2 Monthly Subcontractor Performance Report 6004F1 Safe Work and Environmental Method Statement 6000F5 Safe Work and Environmental Method Statement Review 6000F6 Safe Work and Environmental Method Statement Implementation Audit 6000F7 HSE Purchasing Risk Assessment 6060F5 Toolbox Talk Record 6060F6 Daily Prestart Meeting 2025A1 Safety Interaction Position Matrix 2025F1 Workplace Safety Interaction Record Sheet 2025F2 Monthly Safety Interaction Register 2025WI Safety Interaction Program	Aconex Site Lever Arch Folders QSE Database Site Shared Drive
Harnesses / Lanyard (Travel restraint)	SM, SE, CA, FM	PM				
Confined spaces	SM, FM	PM	Pre Start During process Process completion	Structural Drawings Engineering Report Confined Space Entry Permit Safe Work Method Statements Document Review, Monitoring and Auditing Toolbox Talks Pre Start Meetings Inspection / Servicing Reports		
Hot works	SM, FM	PM	Pre Start During process Process completion	Hot Works Permit Safe Work Method Statements Document Review, Monitoring and Auditing Toolbox Talks Pre Start Meetings Inspection / Servicing Reports		

HIRAC MANAGEMENT MATRIX

High Risk Element	By Whom		Frequency	Method	Grocon HIRAC Tool/s *Available in Systems on the Grocon Intranet*	Filing location
	Responsible	Approver				
Temporary Structures – Gantries, hoardings, screens, scaffolding.	SM, SE, CA, FM	PM	Pre Start Erection Commissioning During use Inspecting / servicing Decommissioning	Design Documentation Operational Documentation Services Report – (DBYD / type / location) Structural Drawings – (structural loadings) Engineering Report/s - (structural / environmental loadings) Demolition Plan Traffic Management Plan (external / Internal) Safe Work Method Statements Document Review, Monitoring and Auditing Toolbox Talks Pre Start Meetings	6000P Managing QSE Risks 2005W1 DesignSafe Work Instruction 2005F1 DesignSafe Risk Register 2005F2 Design Change Form WH&S Review 6010A1 Health Safety and Environmental Legal and Other Requirements Matrix 6150F2 Plant Inspection 6191F1 Tenderers Capability Statement 6150F1 Plant Risk assessment 6190F2 Monthly Subcontractor Performance Report 6004F1 Safe Work and Environmental Method Statement 6000F5 Safe Work and Environmental Method Statement Review 6000F6 Safe Work and Environmental Method Statement Implementation Audit 6000F7 HSE Purchasing Risk Assessment 6060F5 Toolbox Talk Record 6060F6 Daily Prestart Meeting 2025A1 Safety Interaction Position Matrix 2025F1 Workplace Safety Interaction Record Sheet 2025F2 Monthly Safety Interaction Register 2025WI Safety Interaction Program	Aconex Site Lever Arch Folders QSE Database Site Shared Drive

B. Pedestrian & Traffic Management Plan