Goodman Fielder Erskine Park Production Facility

Response to Submissions – Attachment 3

CONSTRUCTION MANAGEMENT PLAN

CONNECT @ ERSKINE PARK
Building E – Goodman Fielder

Revision: C

CONTENTS

1 ENVIRONMENTAL MANAGEMENT PLAN CONTROL

CMP Review and Approval

Position	Name	Sign	Date
Review			
Site Safety Officer	Ray Jones		
Site Manager	TBA		
Project Manager	Danny Rhind		
State HSE Coordinator	Rick McClelland		
Approval			
Construction Manager	Chris Bellemore		
Client's Representative	Terry Mahady		

CMP Revisions

Revision	Date	Summary Description

CMP Distribution

Electronic Copy	Name	Organisation
Electronic Master		Hansen Yuncken
1		
2		
Paper Copy	**Name**	**Organisation**
Signed Paper Master	Project Manager	Hansen Yuncken
1		

DEFINITIONS & ABBREVIATIONS

Definitions

The following definitions have been used in this Construction Management Plan. Further definitions are provided in referenced procedures and plans.

Client	GPT & GOODMAN FIELDER
Coolth	Used to describe cooling, the opposite of warmth.
Council	Penrith Council
Cradle to grave	Refers to the concept that to achieve ecological sustainability, materials and products must be assessed for their impact on the environment throughout their full life cycle, which should include their recycling or reuse.
Embodied Energy	Accounts for all non-renewable energy used by a material or product from cradle to grave.
Greenhouse gases	Refers to all the industrial by-products that contribute to the gradual warming of the earth by trapping heat in the atmosphere.
Green Waste	Includes: Manageable bundles of vines, creepers and weeds Leaves, lawn clippings, flowers, branches, pruning or trunks not greater than 20cm in diameter; Pruning tied bundles of no more than one meter in length and thirty centimeters in diameter.
Hard Waste	Includes white goods, broken furniture, electrical goods, hot water services, televisions, and mattresses up to a maximum of 1m³ per household, but does not include car parts or building materials.
Hazardous Waste	Includes all kitchen, bathroom, workshop, garden, commercial and industrial chemicals such as pharmaceuticals, paints, poisons and motor fluids.
Liquid Waste	Includes grey water, sewerage, oil used for cooking purposes and hazardous waste that is also in a liquid form.
Recycled	To put or pass through a cycle again, as for further treatment. To extract and reuse (useful substances found in waste). Possible to use again.
Superintendent	Gallagher Jeff – Terry Mahady

Abbreviations

The following abbreviations have been used in this Construction Management Plan. Further abbreviations are provided in referenced procedures and plans.

ABGR	Australian Building Greenhouse Rating
CMP	Construction Management Plan(this document)
$C0_2$	Carbon Dioxide - the primary pollutant from the burning of fuel and is a major contributor to the greenhouse effect.
EMP	Environmental Management Plan
EMS	Environmental Management System
EPA	State Environment Protection Authority
ESD	Ecologically Sustainable Development. ESD can be defined as a design process that meets the needs of the present without compromising the ability of the future generations to meet their own needs. It takes into account the social, natural and economic environment.
EWMS	Environmental Work Method Statement
GBCA	Green Building Council of Australia
HSE	Health, Safety & Environment
HY	Hansen Yuncken Pty Ltd
ITP	Inspection & Test Plan
VOC	Volatile Organic Compounds, which give off toxic emissions.
WMS	Work Method Statement

2 INTRODUCTION

The purpose of this Construction Management Plan (CMP) is to provide an easy reference document to assist in the control and monitoring of the environmental issues on the project. It supports the HY Construction Management System, which has been third party certified and produced to comply with the requirements of AS/NZS ISO 14001.

The HY plan has also been developed to ensure that Contractors comply with the environmental conditions of approval for the project and that environmental risks are properly managed. This has been achieved by:

- Defining the project environmental objectives and targets
- Highlighting the environmental regulatory and legislative requirements to be adhered to throughout the duration of the project
- Emphasising the areas of environmental concern and risk on the project
- Providing control plans to mitigate the environmental risks on the project and to provide guidance for ESD solutions.
- Highlighting the importance of environmental training and presenting basic training requirements for all HY, Trade Contractor and site staff
- Defining reporting requirements as evidence of compliance with the established environmental targets and objectives

This CMP is to be submitted to the client for acknowledgement. Once recognised it provides a clear definition for both parties as to what will be monitored and documented for Environmental Management.

Outline of the Project

The Goodman Fielder, Food manufacturing warehouse is goods receivable, production, R&D facility inclusive of research office, administration office, amenities and carpark for approximately 123 employees, the completed facility will be a 24hr / 7day a week operational plant.

ENVIRONMENTAL CONTROL PLANS

4.1 Complaints handling

INTRODUCTION

This project undertaken by Hansen Yuncken Pty Ltd (HY), by it's nature and generally in close proximity to a suburban population and environment, will at times be the subject public attention.

The success of the Company's Environmental Management Plan for this project will rely on:

- Immediate response
- Hansen Yuncken will provide credible liaison for public attention or complaints handling
- Effective communication of accurate and up-to-date information is to be provided at all time to all project participants.

By implementing a pro-active plan Hansen Yuncken can lessen the impact of a complaint while it is occurring by;

- Conveying information vital to public safety
- Allaying fears
- Supplying factual information.

Purpose

The main purpose of this Complaints Handling Plan (CHP) is three-fold;

- To prevent or minimise any complaint from the public or government authority,
- To keep HY site employees up to date with accurate information and in a caring manner, and
- To manage the complaint in a thoughtful and respectful manner, by understanding the concerns or needs of the person or authority.

Environmental Responsibilities & Contact List

Position	Name	Contact Number	
Review			
Project Manager	Danny Rhind	0434 074 680	
Project Engineer	Petros Mihailou	0434 185 389	
Site Manager	Tom Markotic	0411657352	

4. 2 Sedimentation Control Plan

Objective of the Sedimentation Control Plan

Due to the volume of demolition and excavation involved with the Building E – Goodman Fielder Project, the objective of this control plan is to:

- Manage the volume of sedimentation created as a result of construction-associated works.
- Control and avoid sedimentation entering the local stormwater system.

Satisfying these objectives will contribute to achieving ESD vision for HY, Trade Contractor's, and the Project Team.

Method of Assessment

Sedimentation control will be assessed by:

- Visual inspection of the sedimentation control measures utilised and the volume of silt trapped.
- Regular audits conducted by HY of the sedimentation control procedures and practices utilised (frequency to be agreed prior to commencing works)
- Review of the sedimentation control section of the Trade Contractor's EWMS and review of regular sedimentation control reports

The responsible party of a sedimentation control measure will be the Trade Contractor or site personnel who implemented the control.

All works are to be generally carried out in accordance with;

a) Local authority requirements
b) EPA – Pollution control manual for urban storm water
c) Department of conservation and land management manual – "Urban Erosion and Sediment Control".

Trade Contractor Required Output

Trade Contractor's nominated in Table 1 (Part 6) as "Responsible" will need to:

- Provide a EWMS prior to commencing work onsite that highlights the Trade Contractor's knowledge of the Sedimentation Control Plan and measures that will be used onsite to control sedimentation.
- During progress of the works, provide on a regular basis (to be agreed with HY prior to commencing works) a report that includes:
  - Photos of the sedimentation control measures being utilised.
  - Description of the works creating sedimentation.

- Future works that will cause sedimentation and control measures that will be incorporated.

Trade Contractor's nominated in Table 1 (Part 6) as "Acknowledge" will be required to recognise the existence of the Sedimentation Control Plan and its objectives within their EWMS. However, these Trade Contractor's will not be required to define within their EWMS items such as control measures or provide additional reports on sedimentation control during construction.

Trade Contractor's are to works in accordance with Soil and Sediment Control Plan (refer Appendix 2)

Inspections and Audits
To ensure sedimentation is controlled in accordance with this Control Plan:

- HY will conduct random site inspections to ensure sedimentation control measures utilised by the Trade Contractor's are appropriate and functioning as required.
- HY will conduct audits of the sedimentation control procedures and practices put in place by the Trade Contractor to ensure they conform with both the HY Building E – Goodman Fielder EMP and the Trade Contractor's EWMS. Frequency of audits to be agreed with the Trade Contractor prior to commencement of work.

HY Monitoring of the Sedimentation Control Plan

The appointed Environmental Manager for the Hansen Yuncken Goodman Fielder project will be responsible for ensuring compliance to the developed procedures and monitoring of the effectiveness of sediment and soil erosion prevention measures installed on-site. The monitoring and control of storm water (uncontrolled water) across the site will also be the responsibility of the appointed environmental Manager.

To ensure that all site personnel adequately control the creation and flow of sediment, HY will monitor the work of Trade Contractor's and other site staff by:

- Visually viewing site works and utilising digital photos to record and witness sedimentation control measures during random site inspections
- Checking and recording silt levels following significant rain events.
- Undertaking audits on a regular basis to review sedimentation control procedures and practices
- Reporting on a monthly basis to the Project Control Group. Such reports to include:
  - Relevant Trade Contractor reports for the period
  - Other Important information / events that generated dust and how it was controlled (if not covered by the Trade Contractor reports).
  - Overall assessment of dust control practices and procedures for the month.

Actions to be undertaken by the site team to Reduce the Effects of Sedimentation
To reduce the environmental effects of erosion and sedimentation the following measures are to be utilised by Trade Contractor's and site staff:

- Sedimentation control is to be carried out using a combination of silt fences, hay bales and sand or gravel bags.
- Silt fences are to be placed around the perimeter of the work area.
- Sand, hay bales or gravel bags require being used to protect inlets and direct flow.
- Sediment collected on silt fences or around sandbags will be disposed within site landscaping or in another suitable locations as directed by the HY management.
- Vehicles must enter and leave the site on the access driveway to limit the tracking of mud and/or soil on to public roads
- Muddy or dirty vehicles must go through the site washout bay before leaving site to limit the tracking of mud and/or soil on to public roads.
- Preserve as much grassed or vegetated area as possible to filter sedimentation from stormwater runoff
- All soil, sand and cement stockpiles should be placed wholly on the construction site and behind a sediment barrier. These stockpiles should also be covered at the end of each day if rain or excessive wind is likely.
- Activities that generate surplus wastewater with sediment (such as brick cutting) must only be carried out on site. This wastewater should be recycled or discharged into a contained area for drying by soakage.
- Should dirt and/or mud traffic onto public roads and footpaths, site staff must sweep rather than hose off the sediment.
- Undertake dewatering of trenches, excavations (etc.) when necessary, ensuring that the water is taken away from site and disposed at a location approved by the EPA and/or relevant authorities. This water cannot be deposited into the local stormwater system.

Trade Contractor's are encouraged to utilise sedimentation control measures that they believe will meet the objectives of the Sedimentation Control Plan and the HY Building E – Goodman Fielder CMP & EMP.

Sequencing of Works

1. Prior to commencement of excavation the following soil management devices must be installed
    a. Construct site fences below the site and across all potential runoff areas.
    b. Construct temporary construction entry / exit and divert all runoff to suitable control systems
    c. Construct sedimentation traps / basins including outlet control and overflow
    d. Construct turf lined swales where required
    e. Provide sandbag sediment traps around pits where required.

Sequencing of Works

The Project Manager is responsible to ensure that the contractor implements the works in accordance with the contractor including the drawings and specifications. To ensure that the contractor is aware of his obligations, the Project manager will hold a Contractor Start Up Meeting immediately following appointment of the Contractor.

In addition, Councils Building Inspector will regularly inspect the works. On completion of construction, the Civil Engineer will certify that the civil works have been constructed in accordance with the plans and specifications.

The following check list will be made available to the Contractor for checking prior to the commencement of the works on site.

Objectives of the Storm Water and Sediment Control Matrix is to;

- Prevent contamination of, damage to, storm water drains and prevent contamination to the existing Creek to the south.
- Ensure that sediment from the building on site is retained onsite during construction works.

Required Measures

	Stormwater and Sediment Requirements	Yes	No	N/A	Outline details	Shown on plan?
	Stormwater Measures					
1	How is stormwater to be prevented from entering adjoining properties?				Provide details:	Yes / No
2	How is upslope water to be diverted to prevent it travelling through the site?				Provide details:	Yes / No
3	Are down pipes to be connected as soon as any roof is installed onsite?					Yes / No
4	Specify how stormwater will be filtered before being pumped to a legal point of discharge?				Provide details:	Yes / No
	Excavation Work					
5	Has the location and extent of excavations been provided in the Stormwater Plan of the site at Appendix A?				Provide details:	Yes / No
6	Will the site area need to be cleared?				Provide details:	Yes / No
7	Has excavation and topsoil stripping been avoided until the site is ready for construction?				Provide details:	Yes / No
8	Has consent been obtained for excavations that occur within three metres of a road?				Provide details:	Yes / No
9	Has consent been obtained for excavations that occur within a 45 degree angle of				Provide details:	Yes / No

	Site Entries					
10	Has the location of site entries been specified on the Plan?				Provide drawing and give details:	Yes / No
11	Are the site entry and traffic routes to be stabilised?				Provide details:	Yes / No
12	Are rumble grids or similar to be provided to collect mud from vehicles leaving the site?				Provide drawing and give details:	Yes / No
13	Is a cleaning plan specified for rumble grids?				Provide details:	Yes / No
14	Is a grated drain provided at the entrance of the site to prevent uncontrolled run-off?				Provide details:	Yes / No
	Drainage and Sediment Control					
15	Will the site be properly drained to prevent site water retention that may cause structural damage to excavations or retaining walls?				Provide details:	Yes / No
16	Will provisions be made to pump out any water collected at bottom of excavation sites? Will water with greater than 50mg/L of total suspended solids be pumped to the sewer with the necessary approvals?				Provide details:	Yes / No
17	Have natural falls of the site and sediment controls been identified in the Stormwater Plan?				Provide details:	Yes / No
18	Is there a maintenance program to replace sediment barriers when sediment controls become ineffective?				Provide details:	Yes / No
19	Will drains on and near the site have sediment traps or filters around them? Will these be checked daily?				Provide details:	Yes / No
20	How will any loose materials such as soil, sand and gravel be managed to prevent displacement?				Provide details:	Yes / No

21	Are vehicle wash down areas provided near site entries? Do they capture and treat water prior to discharge?				Provide details:	Yes / No
22	Do wash down areas use more than 3000 litres per day of recycled water?				Provide details:	Yes / No
23	Are facilities in place to enable paint brushes, rollers and spray equipment to be cleaned without discharge of by-product into stormwater systems?				Provide details:	Yes / No
	Vegetation					
24	Is vegetation retained where possible to absorb water flows and minimise dust?				Provide details:	Yes / No
25	Will vegetation be reinstated as soon as possible on completion of works?				Provide details:	Yes / No

have read the Explanatory guidelines for Storm Water and Sediment Control. I am aware of the overall statutory and Council requirements and my responsibilities and obligations to such requirements.

4.3 Dust Control Plan

Objective of the Dust Control Plan
The objective of the Dust Control Plan is to:

- Manage and minimise the amount of dust generated as a result of construction-associated works.
- Reduce the nuisance that dust may cause to the community and site personnel so as to ensure all live/work in a contaminate free environment.
- Ensure dust is controlled in accordance with the EPA Guidelines so as to minimise its impact on air quality.

Satisfying these objectives will contribute to achieving the overall project objective and the ESD vision for HY, Trade Contractor's, and the Project Team.

Method of Assessment
Dust control will be assessed by:

- Visual inspection of controls will be conducted by the Site Mnager to ensure that a reduction of the amount of dust generated onsite by construction and associated work.
- Regular audits conducted by HY of the dust control procedures and practices utilised (frequency to be agreed prior to commencing works).
- Review of the dust control section of the Trade Contractor's EWMS and review of regular dust control reports.

Please note that the responsible party of a dust control measure will be the Trade Contractor or site personnel who implemented the control.

Trade Contractor Required Output
Trade Contractor's nominated in Table 1 (Part 6) as "Responsible" will need to:

- Provide an EWMS prior to commencing work onsite that highlights the Trade Contractor's knowledge of the Dust Control Plan and measures that will be used onsite to control dust.
- During progress of the works, provide on a regular basis (to be agreed with HY prior to commencing works) a report that includes:
  - Photos of the dust control measures being utilised.
  - Description of the works creating dust.
  - Future works that will cause dust and control measures that will be incorporated.

Trade Contractor's nominated in Table 1 (Part 6) as "Acknowledge" will be required to recognise the existence of the Dust Control Plan and its objectives within their EWMS. However, these Trade Contractor's will not be required to define within their EWMS items such as control measures or provide additional reports on dust control during construction.

Inspections and Audits
To ensure dust is controlled in accordance with this Control Plan:

- HY will conduct random site inspections to ensure dust control measures utilised by the Trade Contractor's are appropriate and functioning as required.
- HY will conduct audits of the dust control procedures and practices put in place by the Trade Contractor to ensure they conform with both this CMP and the Trade Contractor's EWMS. Frequency of audits to be agreed with the Trade Contractor prior to commencement of work.

HY Monitoring of the Dust Control Plan
To ensure that all site personnel adequately control the creation and spread of dust, HY will monitor the work of Trade Contractor's and other site staff by:

- Visually viewing site works and utilising digital photos to record and witness dust control procedures during random site inspections
- Undertaking audits on a regular basis to review dust control procedures and practices
- Reporting on a monthly basis to the Project Control Group. Such reports to include:
  - Relevant Trade Contractor reports for the period
  - Other Important information / events that generated dust and how it was controlled (if not covered by the Trade Contractor reports).
  - Overall assessment of dust control practices and procedures for the month.

Actions to Reduce Dust

During dry conditions, on-site construction activities have the potential to generate dust. The following activities are those identified as a specific potential source of dust generation as a result of the above works:

- Earthmoving activities including clearing of topsoil;
- Movement of vehicles and construction machinery, both within and off the
- Stockpiling of materials; and
- Build-up of material around erosion and sedimentation controls.

To reduce the environmental nuisance of dust generation, Trade Contractor's and site staff should implement the following measures:

- In the event of dust levels on site becoming a nuisance or unacceptable, introduce controls such as ground watering.
- Cover trucks transporting material from the site immediately after loading to prevent wind blown dust
- Where or whenever necessary, erect appropriate barriers to control dust generated as a result of construction-associated works.

Trade Contractor's are encouraged to utilise dust control measures that they believe will meet the objectives of the Dust Control Plan and this CMP.

Module 3: Guidelines for Managing Air Pollution (hereafter, "Module 3") of the NSW Department of Environment and Climate Change's (DECC) 2007 Local Government Air Quality Toolkit details air pollution control techniques for a range of industries and processes. Module 3 identifies a range of general dust suppression techniques to alleviate the impact of an operation's emissions on the surrounding environment.

Module 3 (NSW DECC, 2007) identifies the use of water to raise the moisture content of surfaces as a key method for the suppression of dust generation. Wetting often results in a degree of agglomeration and weak cementation of loose particles in an unconsolidated surface, with or without the addition of chemicals to promote such bonding. Further, Module 3 (NSW DECC, 2007) note that spraying increases moisture content and bonding, and, even on drying, wind entrainment will be minimised by the weak cementation or 'crusting' which results.

Water can be applied through the use of mobile water spray vehicles, fixed spray systems and hand-held watering devices, depending on ease of access to source.

4.4 Noise Control Plan

Objective of the Noise Control Plan

Given the location of the site, construction noise impacts from the site should not adversely affect adjoining sites.

The objective of the Noise Control Plan is to:

- Manage and minimise the level of noise generated as a result of construction-associated works.
- Minimise noise disturbance to adjacent property owners and the public in accordance with the EPA Guidelines.

As outlined within the Acoustic Investigation produced by ERM Australia, the Construction noise is explicitly excluded from the EPA's INP, and the assessment criteria for construction noise set out in the Environmental Noise Control Manual ENCM (EPA, 1994) will be used.

- for construction sound power levels periods of between four and 12 weeks, the $L_{10,15min}$ Sound Power Levels should range between 103 dB(A) & 115 dB(A) in accordance with Table 4.4 of the ERM (Noise Assessment Report)

- for construction periods of six (6) months and under, the $L_{10,15min}$ noise level due to the construction site should not exceed 45dB(A) in accordance with Table 4.4 of the ERM (Noise Assessment Report)

Construction noise will be controlled by standard noise mitigation measures, as required;

- Hansen Yuncken will be implementing the ERM (Noise Assessment Report) Section 5.0- Recommendations & Mitigation.

- The contractor will, where reasonable and feasible, apply best practice noise mitigation measures including:
  - Maximising the offset distance between noisy plant items and nearby noise sensitive areas.
  - Avoiding the coincidence of noisy plant working simultaneously close together.
  - Orienting equipment away from noise sensitive areas.
  - Carrying out loading and unloading away from noise sensitive areas.

- The contractor will take reasonable steps to control noise from all plant and equipment.

The proposed construction duration is estimated for 6months, the hours will be 7am to 6pm Monday to Friday and 7am to 1pm Saturdays or in accordance with local authority requirements.

Method of Assessment
Noise control will be assessed by:

- Visual inspection of controls to reduce the amount of noise generated by construction and associated work.
- Regular audits conducted by HY of the dust control procedures and practices utilised (frequency to be agreed prior to commencing works).
- Review of the noise control section of the Trade Contractor's EWMS and review of regular noise control reports.

Please note that the responsible party of a noise control measure will be the Trade Contractor or site personnel who implemented the control.

Trade Contractor Required Output
Trade Contractor's nominated in Table 1 (Part 6) as "Responsible" will need to:

- Provide an EWMS prior to commencing work onsite that highlights the Trade Contractor's knowledge of the Noise Control Plan and measures that will be used onsite to control noise levels.
- During progress of the works, provide on a regular basis (to be agreed with HY prior to commencing works) a report that includes:
  - Photos of the noise control measures being utilised.
  - Description of the works creating excessive noise.
  - Future works that will cause excessive noise and control measures that will be incorporated.

Trade Contractor's nominated in Table 1 (Part 6) as "Acknowledge" will be required to recognise the existence of the Noise Control Plan and its objectives within their EWMS. However, these Trade Contractor's will not be required to define within their EWMS items such as control measures or provide additional reports on noise control during construction.

Inspections and Audits
To ensure noise is controlled in accordance with this Control Plan:

- HY will conduct random site inspections to ensure noise control measures utilised by the Trade Contractor's are appropriate and functioning as required.
- HY will conduct audits of the noise control procedures and practices put in place by the Trade Contractor to ensure they conform with both this CMP and the Trade Contractor's

EWMS. Frequency of audits to be agreed with the Trade Contractor prior to commencement of work.

HY Monitoring of the Noise Control Plan

To ensure that all site personnel adequately control noise creation and levels, HY will monitor the work of Trade Contractor's and other site staff by:

- Visually viewing site works and utilising digital photos to record and witness noise control procedures during random site inspections
- Undertaking audits on a regular basis to review noise control procedures and practices
- Daily site inspections will be performed by the onsite SM / EM to ensure adverse noise impacts are minimised.
- Reporting on a monthly basis to the Project Control Group. Such reports to include:
  - Relevant Trade Contractor reports for the period
  - Other important information / events that generated excessive noise and how levels were controlled (if not covered by the Trade Contractor reports).
  - Overall assessment of noise control practices and procedures for the month.
  - summarising noise level observations will be prepared by the Environmental Manager for submission to the Site Manager and Project Controller.

Actions Available to Reduce the Environmental Effect of Noise

To reduce the environmental effects of noise the following measures should be undertaken by Trade Contractor's and site staff:

- Where practicable excessive noise-causing work (beyond recommended dB levels) should be scheduled in less sensitive hours of the day or week, with due regard to the commercial and residential properties adjoining.
- Utilise equipment and work procedures that will contribute to reducing the level of noise generated by construction works.
- To limit the additional noise impact of industrial waste collection vehicles, waste should be collected within the approved working hours for the project.

Please note, this is a list of suggestions only and as a result is not exhaustive. Trade Contractor's are encouraged to utilise noise control measures that they believe will meet the objectives of the Noise Control Plan and this CMP.

4.5 Vibration Control Plan

Objective of the Vibration Control Plan

The objective of the Vibration Control Plan is to:

- Manage the amount of vibration generated as a result of construction-associated works in order to minimise disturbance to adjacent property owners and the public.

- Prevent damage to adjacent properties due to vibration from construction activities.

Method of Assessment
Vibration control will be assessed by:

- Visual inspection of controls to reduce vibrations generated onsite by construction and associated work.
- Regular audits conducted by HY of the vibration control procedures and practices utilised (frequency to be agreed prior to commencing works).
- Review of the vibration control section of the Trade Contractor's EWMS and review of regular vibration control reports.

Please note that the responsible party of a vibration control measure will be the Trade Contractor or site personnel who implemented the control.

Trade Contractor Required Output
Trade Contractor's nominated in Table 1 (Part 6) as "Responsible" will need to:

- Provide an EWMS prior to commencing work onsite that highlights the Trade Contractor's knowledge of the Vibration Control Plan and measures that will be used onsite to control vibration.
- During progress of the works, provide on a regular basis (to be agreed with HY prior to commencing works) a report that includes:
  - Photos of the vibration control measures being utilised.
  - Description of the works creating vibration.
  - Future works that will cause vibrations and control measures that will be incorporated.

Trade Contractor's nominated in Table 1 (Part 6) as "Acknowledge" will be required to recognise the existence of the Vibration Control Plan and its objectives within their EWMS. However, these Trade Contractor's will not be required to define within their EWMS items such as control measures or provide additional reports on vibration control during construction.

Inspections and Audits
To ensure vibrations are controlled in accordance with this Control Plan:

- HY will conduct random site inspections to ensure vibration control measures utilised by the Trade Contractor's are appropriate and functioning as required.
- HY will conduct audits of the vibration control procedures and practices put in place by the Trade Contractor to ensure they conform with both this CMP and the Trade Contractor's EWMS. Frequency of audits to be agreed with the Trade Contractor prior to commencement of work.
- Vibration tests will be conducted by ERM Consultant (at times designated by HY) to determine if vibration levels are within the required range.

HY Monitoring of Vibration

To ensure that all site personnel adequately control the creation and spread of dust, HY will monitor the work of Trade Contractor's and other site staff by:

- Visually viewing site works and utilising digital photos to record and witness vibration control procedures during random site inspections
- Undertaking audits on a regular basis to review vibration control procedures and practices
- Reporting on a monthly basis to the Project Control Group. Such reports to include:
  - Relevant Trade Contractor reports for the period
  - Other Important information / events that generated excessive levels of vibration and how these were controlled (if not covered by the Trade Contractor reports).
  - Overall assessment of vibration control practices and procedures for the month.

4.6 Concrete Pump, Truck and Traffic Control Plan

Objective of the Concrete Pump, Truck and Traffic Control Plan
The objective of the Concrete Pump, Truck and Traffic Control Plan is to ensure:

- Concrete and aggregate do not enter the local stormwater system, therefore reducing the contamination of waterways.
- Concrete and aggregate contamination is kept to one area of the site.
- All concrete pumps, trucks and vehicles leaving the construction site are clean of mud and debris before driving on public roads and/or access ways.

Method of Assessment
Measures to control the environmental impact of concrete pumps, trucks and vehicles will be assessed by:

- Visual inspection of concrete pumps and trucks prior to them leaving the construction site.
- Regular audits conducted by HY of the measures used to control the environmental impact of concrete pumps and trucks (frequency to be agreed prior to commencing works).
- Review of the concrete pumps and trucks control section of the Trade Contractor's EWMS and review of regular concrete pump and truck control reports.

Trade Contractor Required Output
Trade Contractor's nominated in Table 1 (Part 6) as "Responsible" will need to:

- Provide an EWMS prior to commencing work onsite that highlights the Trade Contractor's knowledge of the Concrete Pumps, Trucks and Traffic Control Plan and measures that will be used onsite to control their environmental impact.
- During progress of the works, provide on a regular basis (to be agreed with HY prior to commencing works) a report that includes:
  - Photos and description of the concrete pump and truck control measures utilised.

Trade Contractor's nominated in Table 1 (Part 6) as "Acknowledge" will be required to recognise the existence of the Vibration Control Plan and its objectives within their EWMS. However, these Trade Contractor's will not be required to define within their EWMS items such as control measures or provide additional reports on vehicle control during construction.

Inspections and Audits

To ensure the environmental impacts of concrete pumps, trucks and vehicles are managed in accordance with this Control Plan:

- HY will conduct random site inspections to ensure control measures utilised by the Trade Contractor's are appropriate and functioning as required.
- HY will conduct audits of the control procedures and practices put in place by the Trade Contractor to ensure they conform with both this CMP and the Trade Contractor's EWMS. Frequency of audits to be agreed with the Trade Contractor prior to commencement of work.

HY Monitoring of Concrete Pump, Truck and Traffic Control Plan

To ensure that all site personnel adequately control the environmental impact of concrete pumps, trucks and vehicles HY will monitor the work of Trade Contractor's and other site staff by:

- Visually viewing concrete pumps, trucks and vehicles leaving the site and utilising digital photos to record and witness control procedures during random site inspections
- Undertaking audits on a regular basis to review control procedures and practices
- Reporting on a monthly basis to the Project Control Group. Such reports to include:
  - Relevant Trade Contractor reports for the period
  - Other Important information / events in regard to the environmental impact of concrete pumps and trucks and how these were controlled (if not covered by the Trade Contractor reports).
  - Overall assessment of control practices and procedures for the month.

Actions Available to Control the Environmental Impact of Concrete Pumps, Trucks and Vehicles

To reduce the environmental effects of concrete, aggregate, dirt and mud contamination, the following measures should be undertaken by Trade Contractor's and site staff:

- Trucks, concrete pumps and other vehicles should enter and exit the site from the designated areas as indicated by HY site management.
- Excess concrete should be taken back to the batch plant and not dumped onsite
- Upon leaving the construction site all trucks, concrete pumps and vehicles will need to be washed in the designated wash bay prior to driving onto public roads.

Please note, this is a list of suggestions only and as a result is not exhaustive. Trade Contractor's are encouraged to utilise concrete pump, truck and vehicle control measures that they believe will meet the objectives of the Concrete Pump, Truck and Traffic Control Plan and this CMP.

4.7 Contamination Control Plan

Introductory Notes
For the purpose of this control plan, Contamination refers to:

- Contaminated soil or ground material discovered during substructure and/or associated works
- Fuel and/or chemical spills and other hazardous materials that reduce the environmental quality of the building site or present a future environmental hazard to building occupants.

In the case of fuel and/or chemical spills and hazardous materials, it should be noted that procedures to ensure the health and safety of site personnel (including site evacuation procedures) can be found in the HY Construction Management Procedure.

Objective of the Contamination Control Plan
The objective of the Contamination Control Plan is to:

- Ensure contaminates discovered onsite during excavation, substructure or superstructure works are reported, tested, remediated and if necessary removed from site in a safe and environmentally conscious manner.
- The ground upon which the Building E – Goodman Fielder Project will be situated is fit for purpose and its future inhabitants
- Land contamination from excavation and disposal of contaminated waste is kept to a minimum

Method of Assessment
The control of contaminates discovered on site will be assessed by:

- Visually viewing the controls implemented to remove or remediate the contaminated substance, be it soil or another material during random site inspections.
- Test results of the remediated or removed material to ensure the land / area / material is free of contaminates prior to recommencing associated works.
- Audits of the contamination control procedures and practices utilised (frequency to be agreed prior to commencing works). HY or the consulting engineer will conduct these audits.
- Review of the contamination control section of the Trade Contractor's EWMS and review of contamination control reports (when a contaminate is found).

Please note that the responsible party for contamination control will be the Trade Contractor or site personnel who in the first instance caused the contamination or in the second instance discovered the contamination whilst undertaking the relevant works package.

Trade Contractor Required Output
Trade Contractor's nominated in Table 1 (Part 6) as "Responsible" will need to:

- Provide an EWMS prior to commencing work onsite that highlights the Trade Contractor's knowledge of the Contamination Control Plan and measures that will be used onsite to control the environmental impact of contaminates (should they be found).
- Should a contaminate(s) be found, provide a report prior to commencing remediation or removal that includes:
  - Photos and description contaminate.
  - Test results of the contaminate
  - How the contaminate will be remediated or removed (in accordance with this CMP and the Trade Contractor EWMS).
- During the remediation or removal process provide:
  - Photos and description of the process
  - Updated test results to determine when the contaminated area / material / substance will be environmentally safe.

Trade Contractor's nominated in Table 1 (Part 6) as "Acknowledge" will be required to recognise the existence of the Contamination Control Plan and its objectives within their EWMS. However, these Trade Contractor's will not be required to define within their EWMS items such as control measures or provide additional reports on contamination control during construction.

Inspections and Audits

To ensure the environmental impacts of contaminates are managed in accordance with this Control Plan, should they be discovered HY will:

- Conduct random site inspections to ensure control, remediation or removal procedures utilised by the Trade Contractor's are appropriate and functioning as required.
- HY will conduct audits of the control procedures and practices put in place by the Trade Contractor to ensure they conform with both this CMP, the consulting engineer's recommendation and the Trade Contractor's EWMS.

HY Monitoring of the Contaminate Control Plan

To ensure that all site personnel adequately control the environmental impact of contaminates, HY will monitor the work of Trade Contractor's and other site staff by:

- Undertaking audits to review control procedures and practices
- Reporting to the Project Control Group should a contaminate be discovered. Such reports are to include:
  - Relevant Trade Contractor reports for the period
  - Collated test results of the contaminate
  - Other Important information / events in regard to the environmental impact of contamination and how these were controlled (if not covered by the Trade Contractor reports).
  - Overall assessment of the contamination control practices and procedures.

A fortnightly site inspection of contaminates and hazardous materials will also be conducted by the Building E – Goodman Fielder Occupational Health & Safety Committee.

Recommended Actions to Deal with Contaminates

Should contaminates be discovered during the construction process, the following measures can be utilised by Trade Contractor's and site staff to reduce the environmental impact:

- If possible (and safe) immediately prevent the contaminate from causing further environmental damage (i.e. prevent spill from contaminating other areas).
- Immediately report the discovery of contaminates to HY Management so as the appropriate authorities and Project Team members can be notified.
- Cordon off the contaminated area (if visible) and avoid working within close proximity to it. If applicable, cover the area to prevent the spread of dust.
- Liaise with HY and the relevant consultants to arrange for testing of the soil and adjacent areas.
- Communicate with the Project Team to establish possible onsite remediation solutions so as to avoid dumping of the contaminated waste
- Facilitate the actions agreed with the Project Team (be it remediation or removal from site) to resolve the issue of soil contamination.
- During rectification utilise equipment and procedures to ensure the contaminate is controlled within the affected area(s).
- Submit required reports to HY before, during and after the control, remediation or removal process.

Please note, this is a list of suggestions only and as a result is not exhaustive. Trade Contractor's are encouraged to utilise contaminate control measures that they believe will meet the objectives of the Contaminate Control Plan, the consulting engineers recommendations and this CMP.

4.8 Site Amenities Control Plan

Objective of the Site Amenities Control Plan
The objective of the Site Amenities Control Plan is to:

- Ensure site amenities encourage the implementation of sound environmental practices
- Ensure site amenities provide adequate shelter, toilets and facilities that promote a healthy and productive environment.
- Encourage the use of site amenities that incorporate technologies, incentives and solutions that promote the minimisation of waste and reduction of water and energy consumption.
- Promote the use of site amenities that are an example of the Building E – Goodman Fielder Project environmental ethos.

Satisfying these objectives will contribute to achieving the overall project objective of a 5-star Green Star and ABGR rating. Similarly, achieving the objectives will contribute to obtaining the ESD vision for HY, Trade Contractor's, and the Project Team.

Method of Assessment
The appropriate environmental control of Site Amenities will be assessed by:

- Visual inspection of controls to reduce the amount of materials, energy and water consumed and the volume of recycled waste as a resulting from construction and associated work.
- Separate energy and mains water metering of site amenities and construction activities.
- Monitoring the amount of stormwater retained for use onsite.

Trade Contractor Required Output
Trade Contractor's nominated in Table 1 (Part 6) as "Responsible" will need to:

- Provide an EWMS prior to commencing work onsite that highlights the Trade Contractor's knowledge of the Site Amenities Control Plan and measures that will be utilised to make the site amenities more environmentally friendly.
- During progress of the works, provide on a regular basis (to be agreed with HY prior to commencing works) a report that includes:
  - Photos of the environmental initiatives being utilised.
  - Description of environmental initiatives.
  - Additional environmental initiatives that could be incorporated
  - If known, the amount of water and energy saved as a result of environmental initiatives.

Trade Contractor's nominated in Table 1 (Part 6) as "Acknowledge" will be required to recognise the existence of the Dust Control Plan and its objectives within their EWMS. However, these Trade Contractor's will not be required to define within their EWMS items such as control measures or provide additional reports on dust control during construction.

Inspections and Audits
HY will be undertaking regular inspections of all HY and Trade Contractor site amenities to ensure environmental initiatives are being utilised wherever possible. Similarly, environmental audits will be conducted on a quarterly basis to ensure all control procedures are in order.

HY Monitoring of the Site Amenities Control Plan
To ensure the adequate environmental control of the site amenities the following monitoring procedures will be undertaken by HY:

- Regular visual inspection of the site amenities to ensure all environmental initiatives are operating
- Photos of the environmental initiatives in use throughout the duration of the project
- Accumulation of energy and water readings to tabulate consumption and savings.

Proposed Actions Available to Reduce the Environmental Effect of Site Amenities
To reduce the environmental effect of site amenities, the following measures should be considered by HY and Trade Contractor's providing their own site amenities:

- Incorporate features that save on energy and water consumption, such as waterless urinals, occupant sensor controlled lighting to lunch sheds and site sheds that have higher insulating properties.
- Investigate alternative energy solutions to run some appliances and the use of 'green power' from utility companies for site amenities and construction activities
- Provide a paint brush facility that utilises collected stormwater from site sheds

Please note, this is a list of suggestions only and as a result is not exhaustive. Trade Contractor's are encouraged to utilise other initiatives that they believe will meet the objectives of the Site Amenities Control Plan and this CMP.

4.8 Water Management Control Plan

Objective of the Water Management Control Plan
The purpose of this procedure is to ensure that:

- Onsite water consumption is considerably reduced during the construction process as a result of water saving practices and technologies implemented by HY and Trade Contractor's

Method of Assessment
The appropriate method of assessment for water saving initiatives initiated by either HY or Trade Contractor's will be:

- The measurement of consumption through submetering
- Visual inspection of the water saving measures implemented by either HY or the Trade Contractor's.

Trade Contractor Required Output
Trade Contractor's nominated in Table 1 (Part 6) as "Responsible" will need to:

- Provide an EWMS prior to commencing work onsite that highlights the Trade Contractor's knowledge of the Water Management Control Plan and measures that will be used onsite to control water consumption.
- During progress of the works, provide on a regular basis (to be agreed with HY prior to commencing works) a report that includes:
  - Photos of the water saving measures implemented by the Trade Contractor.
  - Description of the water saving measure(s).
  - Future water saving initiatives that may be utilised by the Trade Contractor as works progress.

Trade Contractor's nominated in Table 1 (Part 6) as "Acknowledge" will be required to recognise the existence of the Water Management Control Plan and its objectives within their EWMS. However, these Trade Contractor's will not be required to define within their EWMS items such as control measures or provide additional reports on water management.

Inspections and Audits
To ensure water consumption is controlled in accordance with this Control Plan:

- HY will conduct random site inspections to ensure water management measures utilised by the Trade Contractor's are appropriate and functioning as required.
- HY will conduct audits of the water management procedures and practices put in place by the Trade Contractor to ensure they conform with both this CMP and the Trade Contractor's EWMS. Frequency of audits to be agreed with the Trade Contractor prior to commencement of work.

HY Monitoring of the Water Management Control Plan
To ensure that all site personnel adequately control the consumption of water, HY will monitor the work of Trade Contractor's and other site staff by:

- Visually viewing site works and utilising digital photos to record and witness water management procedures during random site inspections
- Undertaking audits on a regular basis to review water control procedures and practices
- Reporting on a monthly basis to the Project Control Group. Such reports to include:
  - Relevant Trade Contractor reports for the period
  - Other Important information / events that reduced water consumption (if not covered by the Trade Contractor reports).
  - Overall assessment of water management practices and procedures for the month.

Proposed Actions Available to Reduce Water Consumption and Recycle Water
To increase the environmental benefits of reducing water consumption, the following measures should be undertaken by HY and Trade Contractor's:

- Rainwater collection for use when washing down concrete pumps, trucks and other vehicles leaving site
- Introduce waterless urinals to the site amenities
- Educate site workers about water consumption and simple measures to save water (e.g. utilise collected rainwater for cleaning equipment, ensure taps are not left running etc.)
- Submetering of water consumption

Please note, this is a list of suggestions only and as a result is not exhaustive. Trade Contractor's are encouraged to utilise initiatives that they believe will meet the objectives of the Water Management Control Plan and this CMP.

4.9 Waste Management Control Plan

Objective of the Waste Management Control Plan
The purpose of this procedure is to ensure that:

- Both HY and Trade Contractor's considerably reduce onsite waste during the construction process as a result of waste recycling and reuse practices.
- Minimise the Building E – Goodman Fielder Project's contribution to landfill

Method of Assessment
The appropriate method of assessment for waste reducing initiatives initiated by either HY or Trade Contractor's will be:

- Measurement by volume / weight of the materials recycled, reused or taken to landfill
- Visual inspection of the waste management procedures implemented by either HY or the Trade Contractor's.

Trade Contractor Required Output
Trade Contractor's nominated in Table 1 (Part 6) as "Responsible" will need to:

- Provide an EWMS prior to commencing work onsite that highlights the Trade Contractor's knowledge of the Waste Management Control Plan and measures that will be used onsite to reduce waste.
- During progress of the works, provide on a regular basis (to be agreed with HY prior to commencing works) a report that includes:
  - Photos of the waste management procedures implemented by the Trade Contractor.
  - Description of the waste management procedures utilised.
  - Future waste reducing initiatives that may be utilised by the Trade Contractor as works progress.

Trade Contractor's nominated in Table 1 (Part 6) as "Acknowledge" will be required to recognise the existence of the Waste Management Control Plan and its objectives within their EWMS. However, these Trade Contractor's will not be required to define within their EWMS items such as control measures or provide additional reports on waste management.

As well as the output required from Trade Contractor's, the Firm(s) responsible for recycling and waste collection will be required to supply data that details the amount, type and percentage of waste recycled, reused or sent to landfill.

Inspections and Audits
To ensure waste management is controlled in accordance with this Control Plan:

- HY will conduct random site inspections to ensure waste management measures utilised by the Trade Contractor's are appropriate and functioning as required.
- HY will conduct audits of the waste management procedures and practices put in place by the Trade Contractor to ensure they conform with both this CMP and the Trade Contractor's EWMS. Frequency of audits to be agreed with the Trade Contractor prior to commencement of work.

HY Monitoring of the Waste Management Control Plan
To ensure that all site personnel adequately control waste, HY will monitor the work of Trade Contractor's and other site staff by:

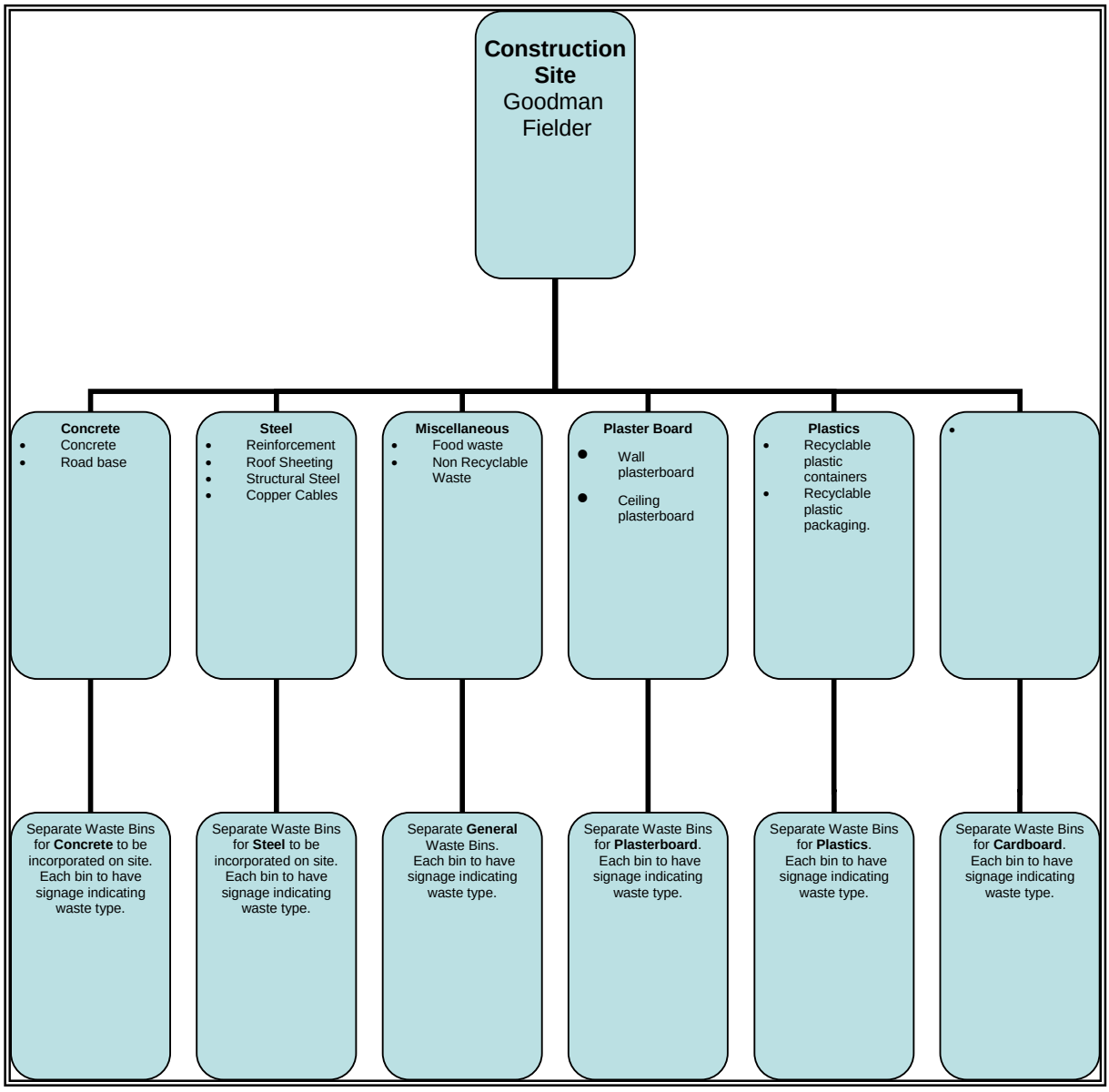
- Visually viewing site works and utilising digital photos to record and witness waste management procedures during random site inspections
- Undertaking audits on a regular basis to review waste management procedures and practices
- Reporting on a monthly basis to the Project Control Group. Such reports to include:
  - Relevant Trade Contractor reports for the period
  - Other Important information / events that reduced waste (if not covered by the Trade Contractor reports).
  - Overall assessment of waste management practices and procedures for the month.

Actions Available to Reduce Waste and Increase Recycled Materials
To increase the environmental benefits of reducing waste, the following measures should be undertaken by HY and Trade Contractor's:

- Separate waste generated during the construction process into the appropriate recycling containers / bins provided. (e.g. timber, steel, plasterboard, plastic, cardboard and general waste)
- Return unnecessary and/or unwanted packaging back to the supplier so as they become aware that such packaging is not required
- Promote participation in waste reduction policies such as List relevant State or Local Government Waste reduction Policies, Strategies or Programmes.

Please note, this is a list of suggestions only and as a result is not exhaustive. Trade Contractor's are encouraged to utilise initiatives that they believe will meet the objectives of the Waste Management Control Plan and this CMP.

4.10 Project Waste Stream



APPENDICES

Appendix 1 – Environmental Audit Template

TRADE SUBCONTRACTOR:……

ABN:……..

TRADE PACKAGE:……..……

TRADE SUBCONTRATOR REPRESENTATIVE:……

DATE & TIME:……

AUDIT CONDUCTED BY:……

Number	Environmental Issue / Control Plan	Yes	No	Not Applicable
1	**Sedimentation Control**			
1.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
1.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Sedimentation Control Plan and measures that will be used onsite to control sedimentation? (If no, must be resubmitted)	☐	☐	☐
1.3	Has the Trade Subcontractor utilised control methods to manage the volume of sedimentation created as a result of construction & associated works? Is so what measures?	☐	☐	☐

1.4	Has the Trade Subcontractor managed to control and avoid sedimentation entering the local stormwater system? If so how? If not why?	☐	☐	☐

1.5	During the progress of works, has the Trade Subcontractor provided provided on a regular basis a report that includes:			
1.5.1	o Photos of the sedimentation control measures being utilised.	☐	☐	☐
1.5.2	o Description of the works creating sedimentation.	☐	☐	☐
1.5.3	o Future works that will cause sedimentation and control measures that will be incorporated.	☐	☐	☐
2	**Dust Control**			
2.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
2.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Dust Control Plan and measures that will be used onsite to control dust? (If no, must be resubmitted)	☐	☐	☐
2.3	Has the Trade Subcontractor used procedures to manage and minimise the amount of dust generated as a result of construction & associated works? If so what measures?	☐	☐	☐

2.4	During the progress of works, has the Trade Subcontractor provided provided on a regular basis a report that includes:			
2.4.1	o Photos of the dust control measures being utilised.	☐	☐	☐

2.4.2	o Description of the works creating dust.	☐	☐	☐
2.4.3	o Future works that will cause dust and control measures that will be incorporated.	☐	☐	☐

3 Noise Control

3.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
3.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Noise Control Plan and measures that will be used onsite to control noise? (If no, must be resubmitted)	☐	☐	☐
3.3	Has the Trade Subcontractor implemented measures to manage and minimise the level of noise generated as a result of construction-associated works? Is so what measures?	☐	☐	☐

3.4	Do noise levels exceed ……at the property boundaries?	☐	☐	☐
3.5	During the progress of works, has the Trade Subcontractor provided on a regular basis a report that includes:			
3.5.1	o Photos of the excessive noise control measures being utilised	☐	☐	☐
3.5.2	o Description of the works creating excessive noise.	☐	☐	☐
3.5.3	o Future works that will cause excessive noise and control measures that will be incorporated.	☐	☐	☐

4 Vibration Control

4.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
4.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Vibration Control Plan and measures that will be used onsite to control vibration? (If no, must be resubmitted)	☐	☐	☐
4.3	Has the Trade Subcontractor implemented measures to manage the amount of vibration generated as a result of construction-associated works? Is so what measures?	☐	☐	☐

4.4	Do vibrations exceed a ground acceleration of…….mm/second?	☐	☐	☐
4.5	During the progress of works, has the Trade Subcontractor provided on a regular basis a report that includes:			
4.5.1	o Photos of the vibration control measures being utilised.	☐	☐	☐
4.5.2	o Description of the works creating vibration.	☐	☐	☐
4.5.3	o Future works that will cause vibration and control measures that will be incorporated.	☐	☐	☐

5 Endangered Species Control

5.1	Have endangered species been encountered on the Project?	☐	☐	☐
5.2	If so have the discoveries been reported in accordance with the SA Water EMP?	☐	☐	☐

6 Concrete Pump and Truck Control

6.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
6.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Concrete Pump and Truck Control Plan and measures that will be used onsite to control concrete pump and trucks? (If no, must be resubmitted)	☐	☐	☐
6.3	Is concrete and aggregate contamination kept to one area of the site.	☐	☐	☐
6.4	Does the Trade Subcontractor ensure excess concrete is taken back to the batch plant and not dumped onsite?	☐	☐	☐
6.5	Is concrete, aggregate, dirt and mud prevented from being carried out of the site onto public roads and footpaths? If so how?	☐	☐	☐

6.6	During the progress of works, has the Trade Subcontractor provided on a regular basis a report that includes:			
6.6.1	o Photos and description of the concrete pump and truck control measures utilised.	☐	☐	☐

7 Contamination Control

7.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
7.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the COntamination Control Plan and measures that will be used onsite to control contamination? (If no, must be resubmitted)	☐	☐	☐
7.3	Has contaminated soil been discovered by the Trade Subcontractor?	☐	☐	☐

Please complete the following only if a contaminate has been discovered

7.4	Did the Trade Subcontractor provide a report prior to commencing remediation or removal that includes:			
7.4.1	o Photos and description contaminate.	☐	☐	☐
7.4.2	o Test results of the contaminate	☐	☐	☐
7.4.3	o How the contaminate will be remediated or removed (in accordance with the HY SA Water EMP and the Trade Subcontractor EWMS).	☐	☐	☐
7.5	Did the Trade Subcontractor provide a report(s) during remediation or removal of the contaminate that included:			
7.5.1	o Photos and description contaminate.	☐	☐	☐
7.5.2	o Updated test results to determine when the contaminated area / material / substance would be environmentally safe.	☐	☐	☐

8 Archaeological Artifacts and Aboriginal Heritage Control

8.1	Have archaeological artifacts and/or items of aboriginal heritage been encountered or discovered on the Project Site?	☐	☐	☐
8.2	If so have the discoveries been reported in accordance with the SA Water EMP?	☐	☐	☐

9 Site Amenities Control Plan

9.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
9.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Site Amenities Control Plan and measures that will be used make the site amenities for environmentally friendly? (If no, must be resubmitted)	☐	☐	☐
9.3	During the progress of works, has the Trade Subcontractor provided on a regular basis a report that includes:			
9.3.1	o Photos of the environmental initiatives being utilised.	☐	☐	☐
9.3.2	o Description of environmental initiatives.	☐	☐	☐
9.3.3	o Additional environmental initiatives that could be incorporated	☐	☐	☐
9.3.4	o If known, the amount of water and energy saved as a result of environmental initiatives.	☐	☐	☐
9.4	Does the Trade Subcontractor encourage the use of site amenities that incorporate technologies, incentives and solutions that promote the minimisation of waste and reduction of water and energy consumption? If so how?	☐	☐	☐

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10 House Keeping Control Plan

10.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐

10.1	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Housekeeping Control Plan and measures that will be used onsite to control environmental impact of housekeeping activities? (If no, must be resubmitted)	☐	☐	☐
10.2	During the progress of works, has the Trade Subcontractor provided on a regular basis a report that includes:	☐	☐	☐
10.2.1	o Photos of the environmental initiatives being utilised.	☐	☐	☐
10.2.2	o Description of environmental initiatives.	☐	☐	☐
10.2.3	o Additional environmental initiatives that could be incorporated	☐	☐	☐
10.3	Has the Trade Subcontractor contributed any initiatives or technologies to reduce the environmental impact of housekeeping activities? If so what are they?	☐	☐	☐

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11 Energy Consumption Control Plan

11.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
11.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Energy Consumption Control Plan and measures that will be used onsite to control energy use? (If no, must be resubmitted)	☐	☐	☐
11.3	During the progress of works, has the Trade Subcontractor provided on a regular basis a report that includes:			
11.3.1	o Photos of the energy saving measures implemented by the Trade Subcontractor.	☐	☐	☐
11.3.2	o Description of the energy saving measure(s).	☐	☐	☐
11.3.3	o Future energy saving initiatives that may be utilised by the Trade Subcontractor as works progress.	☐	☐	☐
11.4	What energy saving initiatives have been utilised by the Trade Contractor?	☐	☐	☐

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12 Water Management Control Plan

12.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
12.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Water Management Control Plan and measures that will be used onsite to control water consumption? (If no, must be resubmitted)	☐	☐	☐
12.3	During the progress of works, has the Trade Subcontractor provided on a regular basis a report that includes:			
12.3.1	o Photos of water saving measures implemented by the Trade Subcontractor.	☐	☐	☐
12.3.2	o Description of the water saving measure(s).	☐	☐	☐
12.4	What water saving initiatives have been utilised by the Trade Contractor?	☐	☐	☐

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13 Waste Management Control Plan

13.1	Was an EWMS provided prior to commencing work onsite?	☐	☐	☐
13.2	Did the EWMS adequately highlight the Trade Subcontractors knowledge of the Waste Management Control Plan and measures that will be used onsite to control waste? (If no, must be resubmitted)	☐	☐	☐
13.3	During the progress of works, has the Trade Subcontractor provided on a regular basis a report that includes:			
13.3.1	o Photos of waste management measures implemented by the Trade Subcontractor.	☐	☐	☐

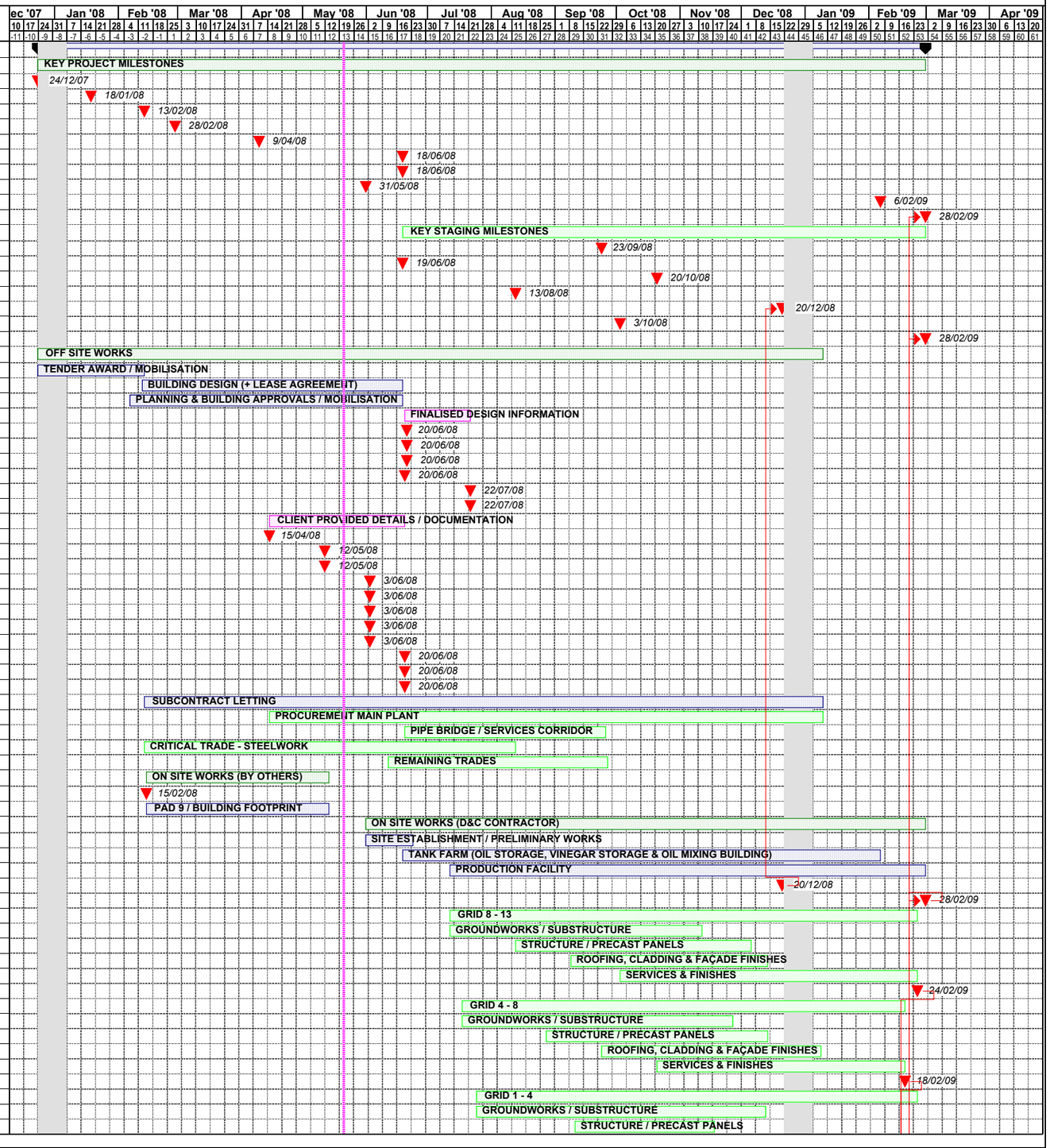
13.3.2	o Description of the waste management measure(s).	☐	☐	☐
13.3.3	o Future waste management initiatives that may be utilised by the Trade Subcontractor as works progress.	☐	☐	☐
13.4	Does the Trade Subcontractor adequatley separate waste generated during the construction process into the appropriate recycling containers / bins provided?	☐	☐	☐
13.5	Does the Trade Subcontractor return unnecessary and/or unwanted packaging back to the supplier?	☐	☐	☐

hansen yuncken
Building Value

GOODMAN FIELDER
LENORE DRIVE, ERSKINE PARK
DESIGN & CONSTRUCT PROGRAMME

Data Date: 30/05/08
Planner: DU Checked: DR/KB
Revision: **HY Construct Rev G**

ID	Task Name	Dur	Start	Finish	Float
0	GOODMAN FIELDER	319 d	24/12/07	28/02/09	0 d
1	KEY PROJECT MILESTONES	319 d	24/12/07	28/02/09	0 d
2	Development Proposals Submitted	0 d	24/12/07	24/12/07	
3	Developers Short Listed	0 d	18/01/08	18/01/08	
4	'Heads of Agreement' In Place	0 d	13/02/08	13/02/08	
5	Lease Agreement Signed Off	0 d	28/02/08	28/02/08	
6	Development Application (DA) - Lodge Documentation	0 d	9/04/08	9/04/08	
7	Development Application (DA) - Approved	0 d	18/06/08	18/06/08	
8	CC - Approved	0 d	18/06/08	18/06/08	
9	Site Possession / Commence Work on Site	0 d	31/05/08	31/05/08	
10	Tank Farm Operational	0 d	6/02/09	6/02/09	
11	Practical Completion (PC)	0 d	28/02/09	28/02/09	
12	KEY STAGING MILESTONES	193 d	19/06/08	28/02/09	
13	Stage 1A - Tank Farm: Slab & Footings Ready for Tank Farm & Services Installation	0 d	23/09/08	23/09/08	
14	Stage 1B - Main Building: (Excavation, Drainage & Footings) - Commences	0 d	19/06/08	19/06/08	
15	Stage 1B - Main Building: (Excavation, Drainage & Footings) - Complete	0 d	20/10/08	20/10/08	
16	Stage 2 - Main Building: Structure Commences	0 d	13/08/08	13/08/08	
17	Stage 2 - Main Building: Structure Complete	0 d	20/12/08	20/12/08	
18	Stage 3 - Main Building: Internal Production Rooms & Fit Out Commences	0 d	3/10/08	3/10/08	
19	Stage 3 - Main Building: Internal Production Rooms & Fit Out Complete	0 d	28/02/09	28/02/09	
20	OFF SITE WORKS	280 d	24/12/07	9/01/09	0 d
21	TENDER AWARD / MOBILISATION	30 d	24/12/07	13/02/08	0 d
29	BUILDING DESIGN (+ LEASE AGREEMENT)	87 d	13/02/08	18/06/08	0 d
35	PLANNING & BUILDING APPROVALS / MOBILISATION	91 d	7/02/08	18/06/08	0 d
44	FINALISED DESIGN INFORMATION	22 d	20/06/08	22/07/08	1 d
45	Underslab Services	0 d	20/06/08	20/06/08	0 d
46	In-slab Drainage	0 d	20/06/08	20/06/08	0 d
47	Finalised Dimensions for Service Slabs - Tank Farm / Trade Waste etc	0 d	20/06/08	20/06/08	0 d
48	Fixtures to the Structure	0 d	20/06/08	20/06/08	1 d
49	Office Fit Out (Services / Base Building Works)	0 d	22/07/08	22/07/08	58 d
50	Office Fit Out (Internal Finishes / FF&E)	0 d	22/07/08	22/07/08	58 d
51	CLIENT PROVIDED DETAILS / DOCUMENTATION	50 d	15/04/08	20/06/08	0 d
52	Substation - Client Supplied Details	0 d	15/04/08	15/04/08	0 d
53	Boilers - Client Supplied Details	0 d	12/05/08	12/05/08	0 d
54	Air Compressors - Client Supplied Details	0 d	12/05/08	12/05/08	0 d
55	Main Switchboard - Client Supplied Details	0 d	3/06/08	3/06/08	41 d
56	Distribution Boards - Client Supplied Details	0 d	3/06/08	3/06/08	53 d
57	Chillers - Client Supplied Details	0 d	3/06/08	3/06/08	13 d
58	Cooling Towers - Client Supplied Details	0 d	3/06/08	3/06/08	13 d
59	Fan Coil Units / Air Handlers - Client Supplied Details	0 d	3/06/08	3/06/08	13 d
60	CHW - Client Supplied Details	0 d	20/06/08	20/06/08	41 d
61	Condenser Water Pumps - Client Supplied Details	0 d	20/06/08	20/06/08	41 d
62	Ventilation Fans - Client Supplied Details	0 d	20/06/08	20/06/08	41 d
63	SUBCONTRACT LETTING	229 d	14/02/08	9/01/09	0 d
64	PROCUREMENT MAIN PLANT	203 d	15/04/08	9/01/09	0 d
100	PIPE BRIDGE / SERVICES CORRIDOR	81 d	20/06/08	25/09/08	47 d
105	CRITICAL TRADE - STEELWORK	125 d	14/02/08	12/08/08	0 d
111	REMAINING TRADES	77 d	12/06/08	26/09/08	0 d
122	ON SITE WORKS (BY OTHERS)	68 d	15/02/08	13/05/08	21 d
123	Commence Bulk Earthworks	0 d	15/02/08	15/02/08	21 d
124	PAD 9 / BUILDING FOOTPRINT	68 d	15/02/08	13/05/08	21 d
129	ON SITE WORKS (D&C CONTRACTOR)	205 d	31/05/08	28/02/09	0 d
130	SITE ESTABLISHMENT / PRELIMINARY WORKS	16 d	31/05/08	23/06/08	6 d
135	TANK FARM (OIL STORAGE, VINEGAR STORAGE & OIL MIXING BUILDING)	175 d	19/06/08	6/02/09	0 d
161	PRODUCTION FACILITY	173 d	12/07/08	28/02/09	0 d
162	Stage 2 (Main Building Structure) - Complete	0 d	20/12/08	20/12/08	
163	Stage 3 (Internal Production Rooms & Fit Out) - Complete	0 d	28/02/09	28/02/09	
164	GRID 8 - 13	169 d	12/07/08	24/02/09	0 d
165	GROUNDWORKS / SUBSTRUCTURE	98 d	12/07/08	11/11/08	0 d
171	STRUCTURE / PRECAST PANELS	90 d	13/08/08	5/12/08	0 d
183	ROOFING, CLADDING & FAÇADE FINISHES	75 d	9/09/08	13/12/08	0 d
202	SERVICES & FINISHES	101 d	3/10/08	24/02/09	0 d
222	Grid 8 - 13 Complete	0 d	24/02/09	24/02/09	0 d
223	GRID 4 - 8	160 d	18/07/08	18/02/09	3 d
224	GROUNDWORKS / SUBSTRUCTURE	106 d	18/07/08	26/11/08	3 d
230	STRUCTURE / PRECAST PANELS	85 d	28/08/08	13/12/08	0 d
236	ROOFING, CLADDING & FAÇADE FINISHES	73 d	24/09/08	8/01/09	4 d
251	SERVICES & FINISHES	85 d	21/10/08	18/02/09	4 d
270	Grid 4 - 8 Complete	0 d	18/02/09	18/02/09	4 d
271	GRID 1 - 4	159 d	25/07/08	24/02/09	0 d
272	GROUNDWORKS / SUBSTRUCTURE	112 d	25/07/08	12/12/08	0 d
278	STRUCTURE / PRECAST PANELS	53 d	11/09/08	17/11/08	0 d



Goodman Fielder

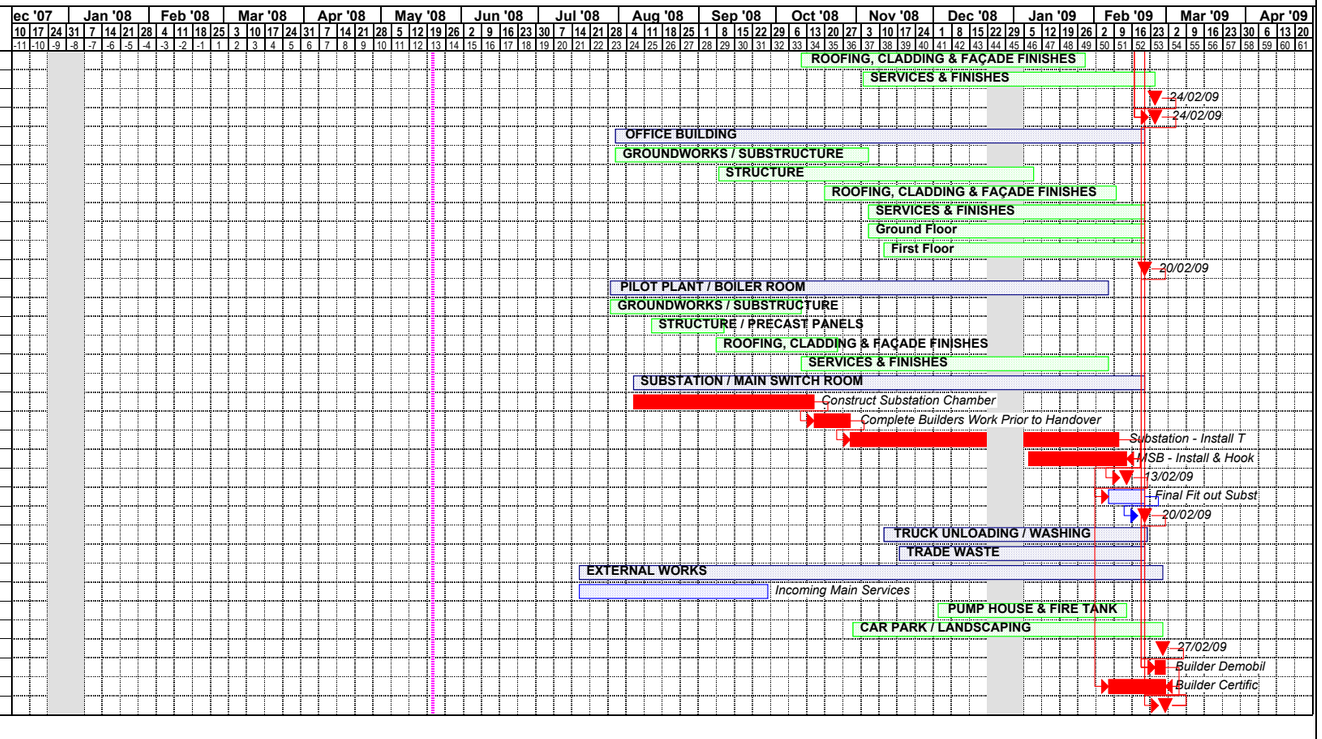
Critical Task — Milestone — Summary — Progress
Non-Critical Task — Deadline — Project Summary — Complete Milestone

hansen yuncken
Building Value

GOODMAN FIELDER
LENORE DRIVE, ERSKINE PARK
DESIGN & CONSTRUCT PROGRAMME

Data Date: 30/05/08
Planner: DU Checked: DR/KB
Revision: **HY Construct Rev G**

ID	Task Name	Dur	Start	Finish	Float
284	ROOFING, CLADDING & FAÇADE FINISHES	75 d	11/10/08	28/01/09	0 d
303	SERVICES & FINISHES	77 d	4/11/08	24/02/09	0 d
321	*Grid 1 - 4 Complete*	*0 d*	*24/02/09*	*24/02/09*	*0 d*
322	*Production Facility Complete*	*0 d*	*24/02/09*	*24/02/09*	*0 d*
323	OFFICE BUILDING	152 d	31/07/08	20/02/09	2 d
324	GROUNDWORKS / SUBSTRUCTURE	79 d	31/07/08	5/11/08	2 d
331	STRUCTURE	85 d	9/09/08	8/01/09	1 d
338	ROOFING, CLADDING & FAÇADE FINISHES	78 d	20/10/08	9/02/09	6 d
355	SERVICES & FINISHES	73 d	6/11/08	20/02/09	2 d
356	Ground Floor	73 d	6/11/08	20/02/09	2 d
376	First Floor	69 d	12/11/08	20/02/09	2 d
396	*Office Area Complete*	*0 d*	*20/02/09*	*20/02/09*	*2 d*
397	PILOT PLANT / BOILER ROOM	142 d	29/07/08	6/02/09	0 d
398	GROUNDWORKS / SUBSTRUCTURE	59 d	29/07/08	10/10/08	0 d
404	STRUCTURE / PRECAST PANELS	23 d	14/08/08	10/09/08	0 d
409	ROOFING, CLADDING & FAÇADE FINISHES	37 d	8/09/08	24/10/08	0 d
424	SERVICES & FINISHES	83 d	11/10/08	6/02/09	0 d
437	SUBSTATION / MAIN SWITCH ROOM	146 d	7/08/08	20/02/09	0 d
438	Construct Substation Chamber	55 d	7/08/08	15/10/08	0 d
439	Complete Builders Work Prior to Handover	12 d	16/10/08	29/10/08	0 d
440	Substation - Install Transformers / Hook Up Incoming Mains (ASP1)	70 d	30/10/08	10/02/09	0 d
441	MSB - Install & Hook Up Main Switch Board to Substation (ASP2)	30 d	7/01/09	13/02/09	0 d
442	*Permanent Power Available*	*0 d*	*13/02/09*	*13/02/09*	*0 d*
443	Final Fit out Substation Meter Room - Signage etc	12 d	7/02/09	20/02/09	2 d
444	*Substation Complete*	*0 d*	*20/02/09*	*20/02/09*	*2 d*
445	TRUCK UNLOADING / WASHING	70 d	12/11/08	21/02/09	1 d
459	TRADE WASTE	64 d	18/11/08	20/02/09	2 d
473	EXTERNAL WORKS	168 d	17/07/08	27/02/09	0 d
474	Incoming Main Services	60 d	17/07/08	27/09/08	25 d
475	PUMP HOUSE & FIRE TANK	48 d	3/12/08	13/02/09	11 d
480	CAR PARK / LANDSCAPING	83 d	31/10/08	27/02/09	0 d
492	*External Work Complete*	*0 d*	*27/02/09*	*27/02/09*	*0 d*
493	Builder Demobilises from Site	4 d	25/02/09	28/02/09	0 d
494	Builder Certification / Functional Testing & Commissioning / Defect Inspections & Rectification	18 d	7/02/09	28/02/09	0 d
495	*Practical Completion (PC)*	*0 d*	*28/02/09*	*28/02/09*	*0 d*



Goodman Fielder

Critical Task		Milestone		Summary		Progress	
Non-Critical Task		Deadline		Project Summary		Complete Milestone	

Environmental – Incident & Noncompliance Report

TO BE COMPLETED BY SITE MANAGER AND PROJECT ENGINEER

SITE: *(where incident occurred)*……..

DATE OF INCIDENT: ……. **TIME OF INCIDENT:** .....

NAME OF PERSON WHO REPORTED THE INCIDENT / OCCURRENCE: .....……

WITNESS(ES) TO THE INCIDENT: .....

NATURE OF INCIDENT: *(Circle applicable description and provide details)*

ENVIRONMENTAL – Chemical or Hazardous Material Spillage / Noise & Vibration / Flora / Fauna / Dust / Public Disturbance / Stormwater & Erosion / Cultural or Archaeological Heritage / Contaminated Land / Air Quality/ Other:

.....……..

.....……..

.....……..

.....……..

.....……..

.....……..

DESCRIPTION OF INCIDENT OR DANGEROUS OCCURRENCE
INCLUDE REPORT(S) FROM WITNESS(ES): *(Attach report if insufficient space)*

.....……..

.....……..

.....……..

.....……..

.....……..

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.....……..

HAS REPORT BEEN FORWARDED TO RELEVANT AUTHORITY? **YES ☐ NO ☐**

BY WHOM: ..... **DATE:** .....

Environmental – Incident & Noncompliance Report

DESCRIBE THE IMMEDIATE ACTION TAKEN AS A RESULT OF THIS INCIDENT/ OCCURRENCE:

NOTE: No alterations to be made unless inspected and approved by the Relevant Authority Inspector

(Provide attachment if insufficient space)

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RECOMMENDED ACTION TO BE TAKEN BY THE COMPANY TO MINIMISE A RE-OCCURRENCE OF THIS OR A SIMILAR TYPE OF INCIDENT/OCCURRENCE:

(Provide attachment if insufficient space)

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COMMENTS BY PROJECT MANAGER CONCERNING OCCURRENCE AND RECOMMENDED ACTION:

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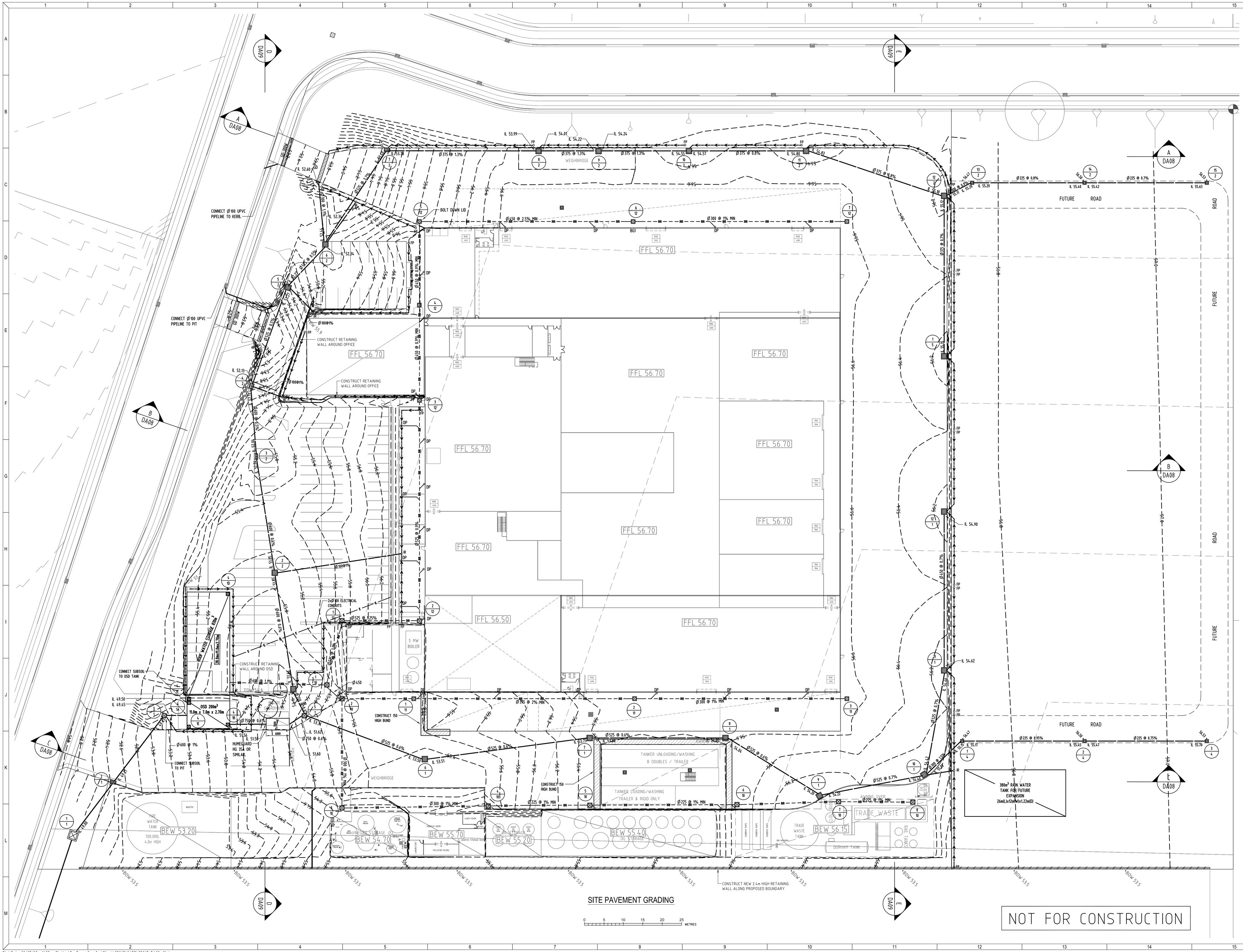
SIGNED: ..... **DATE: .....**

5.4 Non-Conformance Report – Environmental

	NCR No.	
STAGE 1 (by Contractor)	**PROJECT:** **TRADE CONTRACTOR:** **LOCATION OF NON-CONFORMANCE:** **DESCRIPTION OF NON-CONFORMANCE:** **REPORTED BY:** **DATE:**	**CONTRACTOR (Copy to) >**
STAGE 2 (by Contractor)	**PROPOSED METHOD OF DISPOSITION:** **A)** ☐ **TO BE REJECTED AND REPLACED** **(B)** ☐ **TO BE REWORKED TO MEET SPECIFIED REQUIREMENTS** **(C)** ☐ **TO BE USED UNDER CONCESSION AS IS** **(D)** ☐ **TO BE USED UNDER CONCESSION WITH THE FOLLOWING NOTED PROVISIONS** **NOTED PROVISIONS:** **PROPOSED BY:** **DATE:**	**PCM >**
STAGE 3 (by PCM)	**HY PROJECT MANAGER'S REVIEW:** **PROPOSED DISPOSITION:** **(A)** ☐ **APPROVED** **(B)** ☐ **REFUSED** **OTHER REQUIREMENTS:** **SIGNED:** **DATE:** **PROJECT CONSTRUCTION MANAGER**	**CLIENT / QMR >**
STAGE 4 (by Client)	**CLIENT'S REVIEW** **REFERENCE DOCUMENTS:** **PROPOSED DISPOSITION:** **(A)** ☐ **APPROVED** **(B)** ☐ **REFUSED** **OTHER REQUIREMENTS:** **SIGNED:** **DATE:** **BY or FOR CLIENT**	**CONTRACTOR >**
STAGE 5 (by HY)	**VERIFICATION OF DISPOSITION:** **INSPECTED BY:** **DATE:**	**CLIENT >**
STAGE 6 (by HY)	**ROOT CAUSE ANALYSIS:** ☐Training/Qualifications ☐Documentation ☐Responsibilities unclear ☐Design ☐Change Management ☐Resource Allocation ☐Physical Conditions ☐Risk Assess ☐Communications ☐External ☐Work Organising/ Planning ☐Other	**QMR >**

Goodman Fielder Erskine Park Production Facility

Response to Submissions – Attachment 4



REFERENCE DOCUMENT REGISTER Q.A.

BUCKTON LYSENKO REV No.	3-1	1-1	1-2	1-3	1-4	1-5	3-0
DISCIPLINE: DRAWING No.	REVISION No. OR DATE						
ARCH: -	-	-	-	-	-	-	-
STRUCT: -	-	-	-	-	-	-	-
MECH: -	-	-	-	-	-	-	-
ELECT: -	-	-	-	-	-	-	-
SURVEY: -	-	-	-	-	-	-	-

True North

Drawing by

Consultant Disclaimer

Status Legend

0 PRELIMINARY DESIGN DRAWING
1 DEVELOPMENT APPLICATION
2 AUTHORITY APPROVAL
3 TENDER PURPOSES
C CONTRACT PURPOSES

NOTE: ANY DRAWINGS ISSUED FROM STATUS 0 TO 3 SHALL NOT BE USED FOR CONTRACT PURPOSES

Status/ Revision	Description	Issue By	Issue Date
1-0	ISSUED FOR D.A. APPROVAL	A.B.	11.04.08
1-1	ISSUED FOR INFORMATION	A.B.	22.04.08
1-2	ISSUED FOR DESIGN MEETING	A.B.	15.05.08
1-3	REVISED GRADING	R.W	27.5.08
1-4	REVISED DWG	KP	4.6.08
1-5	ISSUED FOR PRICING	BOC	12.06.08
3-0	ISSUED FOR TENDER	GBM	25.06.08
3-1	RELOCATION OF SECTION CUTS	BOC	08.07.08

Architect

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SPPACE DESIGN Pty Ltd ABN 331 205 266 50

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Builder

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FAX: 02 9770 7601
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E-MAIL: email@bucktonlysenko.com.au

Project

TEMPLAR ROAD - ERSKINE PARK
SITE E - SITE PLAN

Title

STORMWATER DRAINAGE AND SITE GRADING PLAN
GENERAL ARRANGEMENT

Designer	Drafter	Cad File Path
-	BOC	I:\25067\CADD\25067-DA03_31.dwg

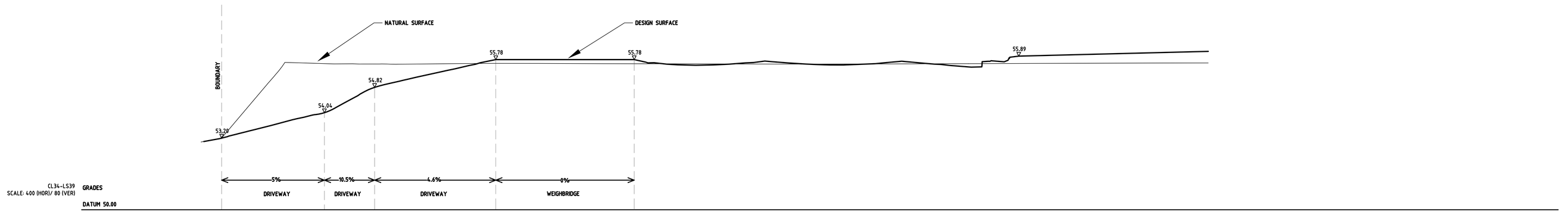
Scale: 1:300

Project	Status Revision	Drawing No.	Original
25067	3 - 1	DA03	A0 Sheet

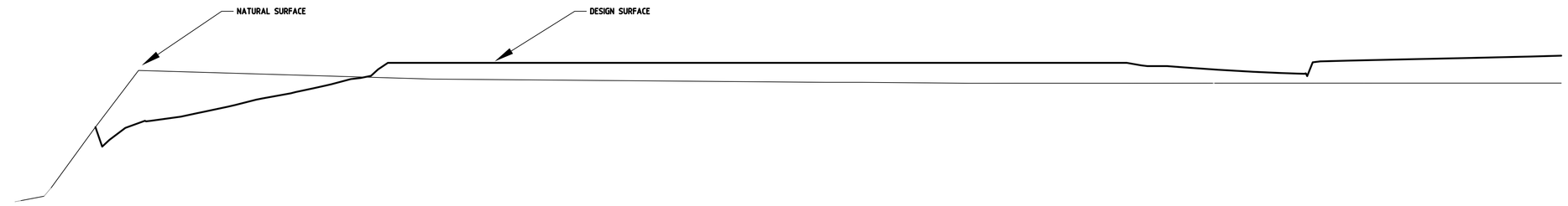
Plot Date: 08/07/08 - 11:23 Plotted By: Bryan.O Cad File: I:\25067\CADD\25067-DA03_31.dwg

Goodman Fielder Erskine Park Production Facility

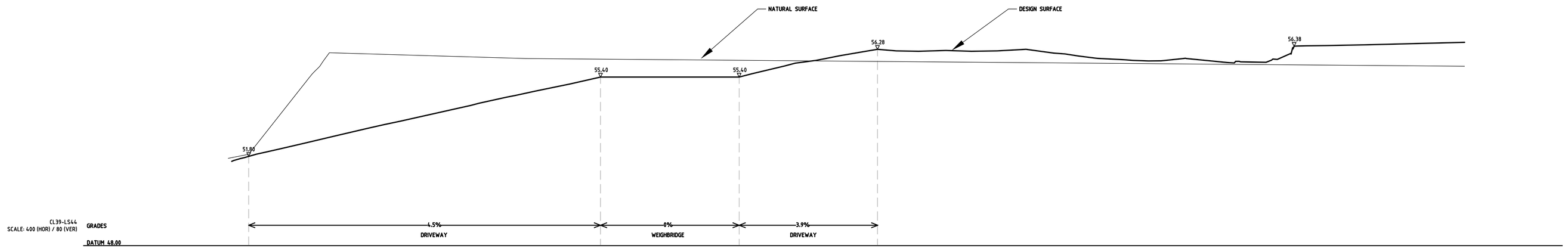
Response to Submissions – Attachment 5



SECTION A
25067DA03



SECTION B
25067DA03



SECTION C
25067DA03

NOT FOR CONSTRUCTION

REFERENCE DOCUMENT REGISTER Q.A.

BUCKTON LYSENKO REV No.	1-0	1-1	1-2	1-3	3-0	3-1	.
DISCIPLINE: DRAWING No.	REVISION No. OR DATE						
ARCH: .	.	.	.	.	.	.	.
STRUCT: .	.	.	.	.	.	.	.
MECH: .	.	.	.	.	.	.	.
ELECT: .	.	.	.	.	.	.	.
SURVEY: .	.	.	.	.	.	.	.

True North

Drawing by

Drawing by MACHINE AUTOMATION

Consultant Disclaimer

Status Legend

0 PRELIMINARY DESIGN DRAWING
1 DEVELOPMENT APPLICATION
2 AUTHORITY APPROVAL
3 TENDER PURPOSES
C CONTRACT PURPOSES

NOTE- ANY DRAWINGS ISSUED FROM STATUS 0 TO 3 SHALL NOT BE USED FOR CONTRACT PURPOSES

Status/ Revision	Description	Issue By	Issue Date
1-0	ISSUED FOR D.A. APPRDVAL	A.B.	11.04.08
1-1	ISSUED FOR INFORMATION	A.B.	22.04.08
1-2	ISSUED FOR DESIGN MEETING	A.B.	15.05.08
1-3	ISSUED FOR INFORMATION ONLY	GBM	23.6.08
3-0	ISSUED FOR TENDER	GBM	25.06.08
3-1	GRADES NOMINATED ON DRIVEWAY	BOC	08-07-08

Architect

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SPPACE DESIGN Pty Ltd ABN 331 205 286 50

Architect

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Project

TEMPLAR ROAD - ERSKINE PARK
SITE E - SITE PLAN

Title

PAVEMENT GRADING
CROSS SECTIONS
SHEET 1 OF 2

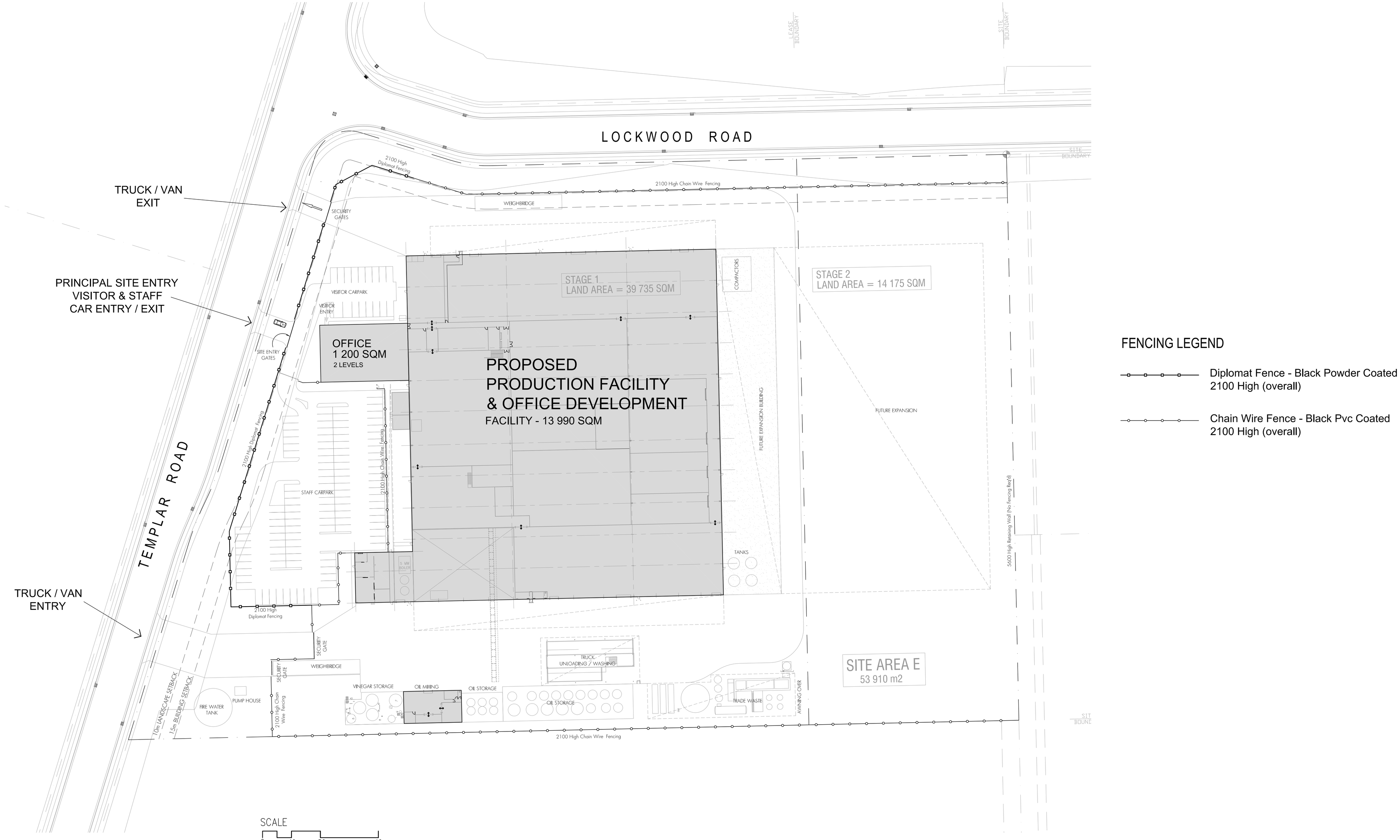
Designer	Drafter	Cad File Path
.	BOC	I:\25067\CADD\25067-DA08-31.dwg

Scale: AS SHOWN

Project	Status	Revision	Drawing No.	Original
25067	3	1	DA08	A0 Sheet

Goodman Fielder Erskine Park Production Facility

Response to Submissions – Attachment 6



SCALE
0 10 20 40m

01 – FENCING PLAN
1:500 @ A1

FENCING LEGEND

- Diplomat Fence - Black Powder Coated 2100 High (overall)
- Chain Wire Fence - Black Pvc Coated 2100 High (overall)

Notes :
DO NOT SCALE OF DRAWING – DIMENSIONS & LEVELS TO BE VERIFIED PRIOR TO COMMENCEMENT OF WORK WITH FIGURED DIMENSIONS IN PREFERENCE TO SCALED DIMENSIONS.
MATERIALS & WORKMANSHIP TO BE IN STRICT ACCORDANCE WITH ALL RELEVANT S.A.A. STANDARDS, BCA & LOCAL AUTHORITIES REQUIREMENTS.

Sheet Size – B1

Revisions :

A	07.07.08	DA PRELIMINARY ISSUED
B	07.07.08	ISSUED FOR COUNCIL CONSIDERATION FOR DA SUBMISSION

Structural Consultant :
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Electrical Consultant :
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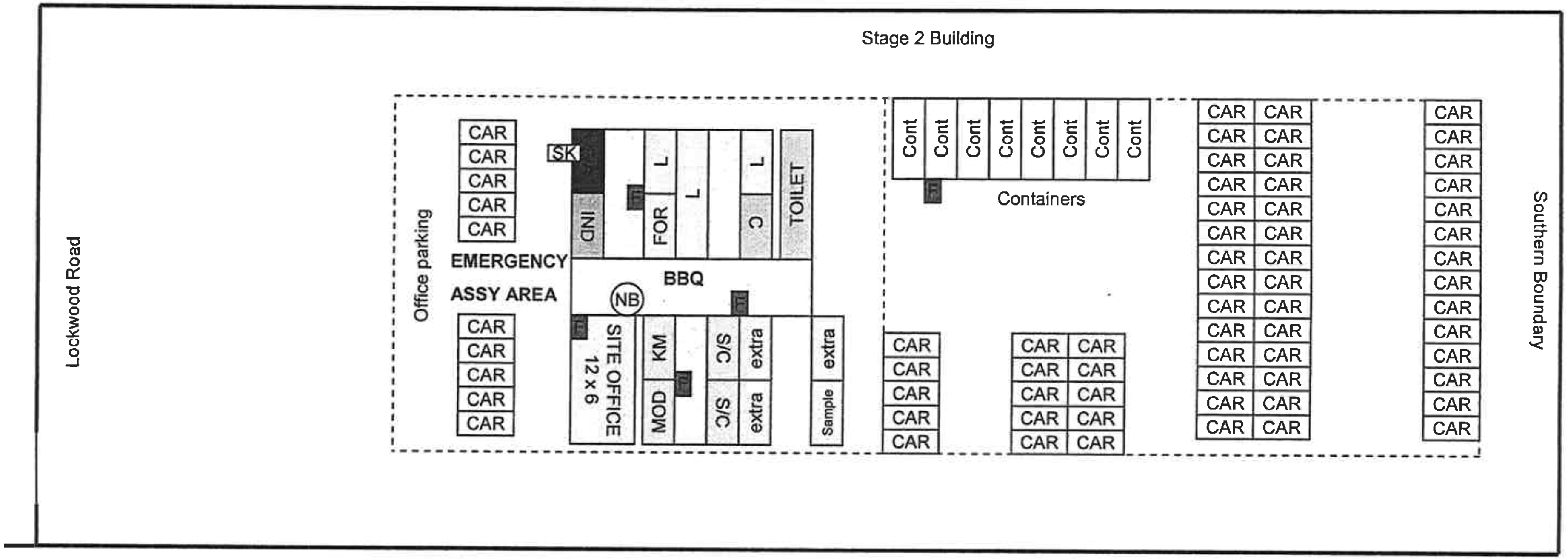
Project : GOODMAN FIELDER
SITE E, TEMPLAR ROAD, ERSKINE PARK
Client : GPT The GPT Group

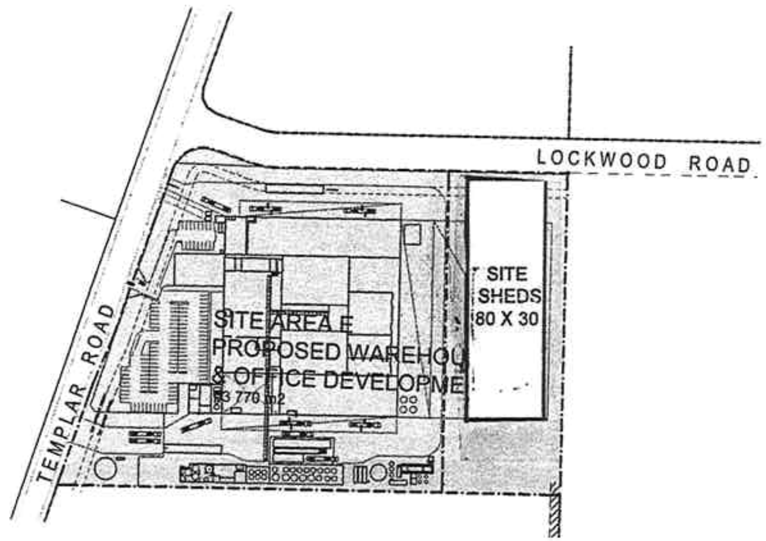
Drawing : DEVELOPMENT APPLICATION
SITE FENCING PLAN
Scales : AS SHOWN
Date : 7th July 2008
Drawn : AW
Project No : 08000
Drawing No : GF-TE-DA-002
Issue : B

Goodman Fielder Erskine Park Production Facility

Response to Submissions – Attachment 7

BUILDING E – GOODMAN FIELDER SITE SHEDS





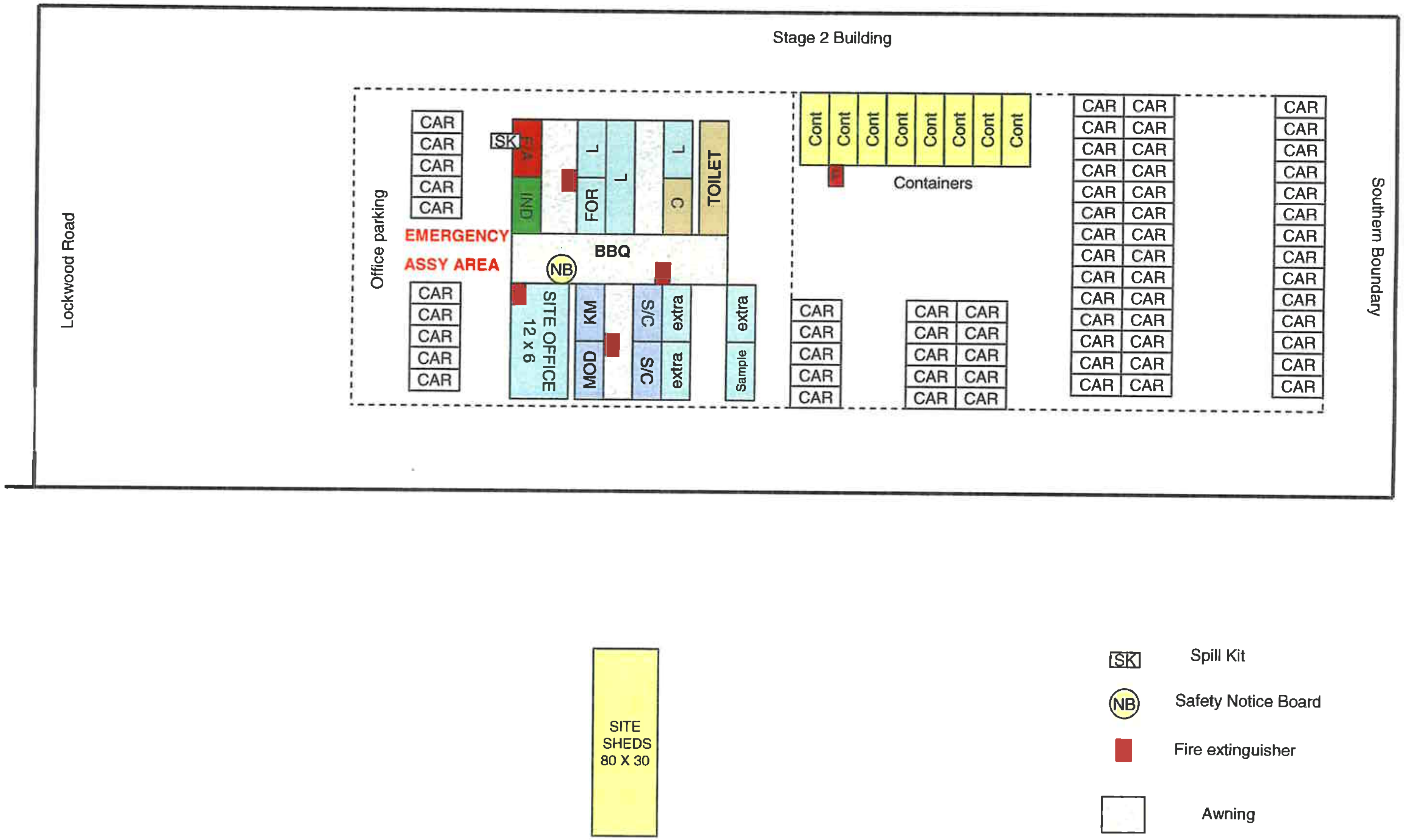
SK Spill Kit

NB Safety Notice Board

Fire extinguisher

Awning

BUILDING E – GOODMAN FIELDER SITE SHEDS



Goodman Fielder Erskine Park Production Facility

Response to Submissions – Attachment 8

Passive Solar Design Features

Building Orientation
The commercial office component aims to achieve sound orientation with respect to solar gain with the major aspect orientated to the east.

Glazing
High performance glazing will be considered for the office building. The benefits include reduced operating costs, improved comfort and reduced air conditioning and heating plant size. The final selection will be based on the optimum solution as determined through thermal modeling of different façade solutions during the detailed design development stage.

Water

Rainwater Harvesting
The Goodman Fielder design has rainwater harvesting initiatives incorporated within the design including the dual piping of roof rainwater, collection into a separate tank and provision for discharge into dedicated trunk infrastructure to enable re-use by the Sydney Catchment Authority to supplement Sydney's available water supply.

Until the initiative comes into effect it is envisaged that the Goodman Fielder development on the site will require us to provide storage capacity of 330k/l per 10,000m² of roof area. It is further proposed to use the rainwater collected for use in toilet flushing and for irrigation where required.

Waterless Urinals and Low Flow Tapware
These two items will be incorporated into all amenity areas for the new Goodman Fielder facility. When combined with the Rain Water Harvesting initiative there should be a resulting decrease in potable water usage by Goodman Fielder when compared against existing facilities.

Hot Water Systems
It is proposed to use a solar hot water system which will reduce overall energy consumption by Goodman Fielder.

Energy

Lighting Comfort Levels
A common occurrence in electrical design is over-design of lighting levels and reduced energy consumption can be achieved by reducing the number of light

fittings wherever possible. Reduction in lighting load can be achieved in the office areas by the use of T5 tri-phosphor lighting.

Lighting Control System
A fully integrated lighting control system which turns lights on and off in accordance with a time centrally controlled timer system can reduce energy consumption. The system provides further control and efficiency gains.

Electronic Ballasts
Electronic ballasts allow fluorescent light fittings to be dimmed which will provide energy cost savings and are standard with T5 technology.

Energy Efficient Light Sources
The most energy efficient light source for general interior lighting is the linear T8 fluorescent lamp however T5's when utilised in a grid system their size and arrangement actually results in an overall increase in efficiency. In common areas with no suspended ceilings T8 fittings will be used (e.g. fire escapes etc).

Car Park Lighting
Car parking lighting energy consumption will be reduced significantly by improving average illuminance and optimising the lighting design. The use of low energy T8 fittings in car parks and control of lights through infrared motion detectors will provide significant energy reductions. Improved lighting levels in basement or deck parking will be achieved by applying white paint to carpark walls, columns and ceilings.

Materials
Materials will be selected on the basis of their low toxicity and low embodied energy.

High Recycled Content Materials
Recycled content materials that can be considered for the development are as follows:
Sub-base: 100% of sub-base to be between 50% and 100% recycled content.
Cement with Fly Ash Content: A by product from burning coal, fly ash can be used as a sand replacement. It does however require the full 14 days curing time to gain its full strength. Target for structural concrete with 20% fly ash content.
Gypsum Wall Board: Target use of high recycled gypsum content with 100% recycled content paper face fibre.

Low VOC Materials
Acoustic Ceiling Tiles: Perlite content ceiling tiles with no VOC emissions. Post industrial recycled perlite content is also recyclable.

Paints, Sealers and Stains: water based acrylic paints that meet accepted standards for low VOC coatings and contain no formaldehyde, petroleum based solvents or other toxins are to be used.