JRPP No.	2011HCC013
DA No.	DA67/2011
Proposal	Industrial Sheds for Panel Manufacturing Plant
Property	Lot: 11 & 12 DP:1126226, Kannar Road, Mount Thorley
Applicant	Questech Pty Ltd
Number of Submissions	0
Recommendation:	Approval with conditions
Report By	Amanda Power
Checked by	Philip Carroll

Assessment Report and Recommendation

Executive Summary

Proposed Development

The following works are proposed as part of the development:

- 2 workshop buildings
- Office block attached to Building 2
- Car parking areas
- Display house
- Landscaping
- Earthworks
- Retaining walls
- Fencing

The proposed buildings will be used to manufacture prefabricated building panels used for building known as EVG 3D Construction System. The panels can be used in place of wood framed walls, metal framed walls, masonry block walls, or pre cast panels.

Referral to Joint Regional Planning Panel

The proposal is referred to the Joint Regional Planning Panel for determination pursuant to clause 13B of State Environmental Planning Policy (Major Development) 2005, given it has a capital investment value of over $10 million.

Permissibility

The site is zoned 4 Industrial pursuant to Singleton Local Environmental Plan 1996. The proposal is categorised as an industry and is permissible within the 4 Industrial zone subject to development consent. All required owner(s) consent has been provided. The proposal is local development.

Consultation

In accordance with Council's Notification policy within the Singleton Development Control Plan 2009, the application was notified from 24 March 2011 to 8 April 2011. No submissions were received during the notification period.

Key Issues

The proposal complies with the statutory provisions of Singleton Local Environmental Plan 1996 and is consistent with the considerations under Singleton Development Control Plan 2009. No submissions were received in response to public notification procedures and the application does not raise any significant issues of a public interest nature.

Recommendation

That development consent be granted to DA67/2011, subject to the conditions contained in APPENDIX A.

1. Background

An application (DA137/2006) for the subdivision of 11 lots into 12 lots in Mount Thorley was received by Council in 2006, and subsequently approved in 2007. This subdivision was created to provide suitable industrial zoned land in an appropriate location to allow for a variety of uses. The subdivision also physically extended Kannar Road, and created O'Hara Place.

The majority of the sites created by the abovementioned subdivision are vacant, with one site having obtained development approval, however no construction work has yet commenced.

The current subject application was received by Council on 15 March 2011 and was publicly notified from 24 March 2011 to 8 April 2011. There were no submissions received during the public notification period. Additional information was requested of the applicant on 12 April 2011, and was responded to by the applicant on 10 May 2011.

2. Site and Locality Description

The site is located within a newer stage of an established industrial estate known as Mount Thorley Industrial Area. The immediate locality consists mainly of cleared, undeveloped land, serviced by Council's reticulated water system for industrial uses.

The development site consists of two separate parcels being Lot 11 & 12 DP 1126226, having a combined area of 2.13ha. The site is located within the Mount Thorley Industrial Area which is located south-west of the Singleton central business district. The Industrial Area is characterised by heavy industrial land uses.

The site is bounded by an open storage area to the north, vacant industrial land to the east and south, and Kannar Road to the west. The site is relatively regular in shape, and has a frontage to Kannar Road of 160m. The site slopes generally from north-east to the south, and has a fall of 15m. Approximately 23m of a larger 45m wide easement for transmission line traverses the southern portion of the site, as well as 3m of a 30m proposed easement for electricity transmission and access thereto. No works are proposed within this easement.

The site is not identified as flood prone land and is not within a mine subsidence district. Approximately 14 trees are proposed to be removed from the site to allow for the earthworks. The trees do not have any significant environmental qualities to warrant their retention. The site is identified as bush fire prone land and this is discussed further in the report.

Map 1: Aerial photo showing locality. Subject site is highlighted in red.

3. Project Description

The proposed development has a capital investment value of $15 million.

The following works are proposed as part of the development:

- Building 1 – 1964.8m^2 in floor area comprising an open planned work area, store rooms, plant room and WC facilities. This building is dedicated to processing Styropor (expandable polystyrene), which is initially stored in the air conditioned storage room to preserve its chemical integrity. The Styropor is then heated to create Expanded Polystyrene (EPS). The EPS is then moulded into blocks and cut into the specified size by the cutting plant. The EPS blocks are then transported to Building 2 via forklift.
- Building 2 – 3240m^2 in floor area comprising open planned work areas, store rooms, workshops, compressed air stations, cooling water station and laboratory. Building 2 comprises the wire drawing machine, cover mesh welding line, automatic welding line, and truss girder welding line. This building is used to add the metal components to the EPS blocks, and manufacture the steel girders. Both Building 1 & 2 have a wall height of 9m and are approximately 15m to the apex of the roof.
- Office building – 559.2m^2 in floor area comprising a two storey office block attached to the front of Building 2. The office building contains a reception area, board room, 5 offices, WC facilities and a lunch room with an outdoor area on the ground floor. The upstairs storey comprises office storage, a kitchenette and WC facilities.
- 73 car parking spaces.
- Recycling and waste collection area behind Building 2.
- Waste water treatment system.
- 30m^2 product display building – located in the northern car park near the entry/exit. The applicant has indicated this will be a small ‘cubby’ sized house displaying the EVG 3D Panels and will not take up any car parking spaces.

- 1.8m high wire mesh fence is proposed along the front boundary of the site, while the remaining site perimeter is to be fenced with 2.1m high wire mesh fence. A sliding security gate is proposed, which will minimise interference with traffic movements and sight distances.
- Provision of landscaping to the Kannar Road frontage, comprising native species to soften the external appearance of the development from the surrounding locality.

The development proposes a combined entry/exit from Kannar Road, separated by an island. Consolidation of the two lots is required due to the on-site sewage management system disposal method, and to ensure compliance with the BCA in terms of the unprotected openings in the southern wall of Building 1.

The manufacturing plant is to operate Monday to Saturday, 7:00am to 11:00pm (consisting of two 8 hour shifts). The office will operate between the hours of 9:00am to 5:00pm.

Refer to **APPENDIX B** for a copy of plans and elevations

4. Consultation

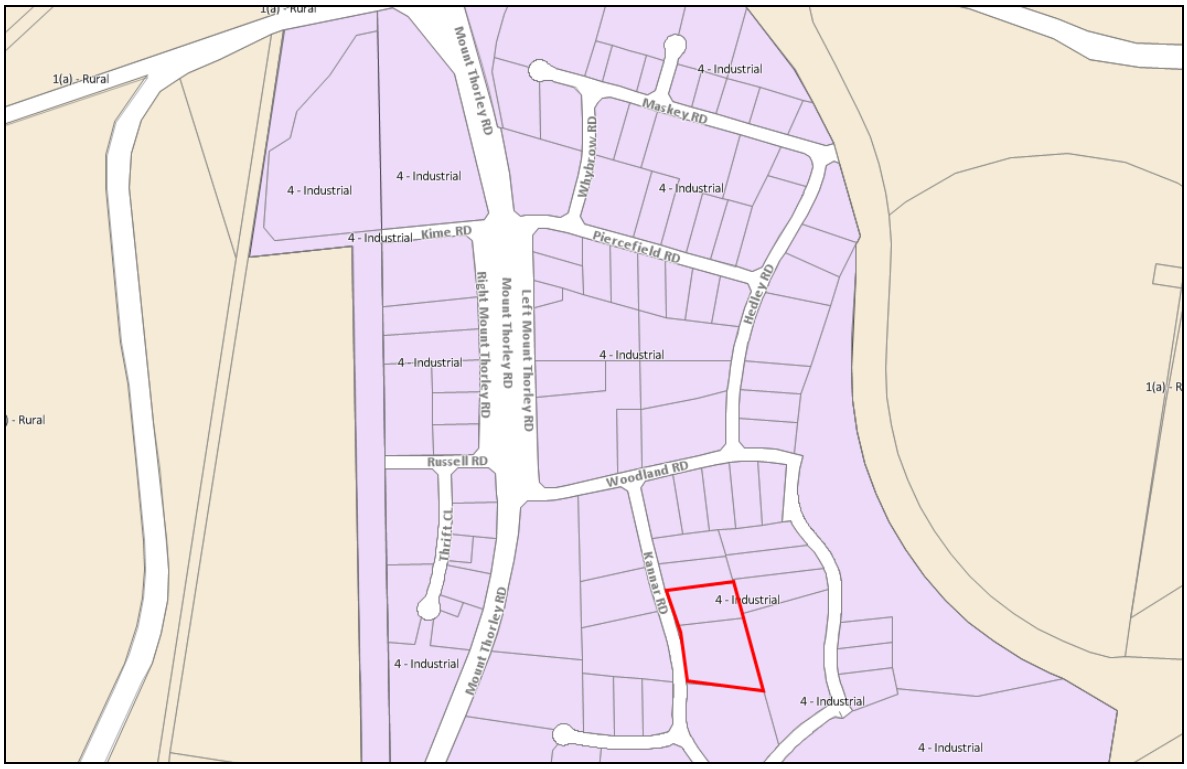
In accordance with Council's public notification policy under Singleton Development Control Plan 2009 the application was publicly notified from 24 March 2011 to 8 April 2011. No written submissions were received.

5 Referrals

No referrals of the development application were made to external bodies.

6. Section 79C Considerations

(a)(i) the provisions of any environmental planning instrument



Map 2: Zoning map extract. Subject site is highlighted in red.

State Environmental Planning Policy (Major Development) 2005

SEPP (Major Development) 2005 is applicable to the proposal which has a capital investment value over $10 million. Consequently, the application is required to be determined by the Joint Regional Planning Panel (JRPP). The proposal is not defined as a Part 3A development under the *Environmental Planning and Assessment Act 1979*, therefore no further criteria under the SEPP applies to the development.

Singleton Local Environmental Plan 1996

The proposal is defined by Singleton Local Environmental Plan 1996 (SLEP 1996) as an "industry", which is permissible with consent in the 4 (Industrial Zone).

The proposal is considered to be consistent with the aims and objectives of the SLEP 1996 in terms of:

- Providing an efficient use of the industrial land for manufacturing purposes.
- Bringing an economic and social benefit to the local community by allowing employment opportunities during the construction process, and once the manufacturing plant is operational.
- Ensuring the environmental impact of the proposal is adequately addressed through the assessment process.
- Progressing development in an orderly and economic matter.

Pursuant to Clause 16(3) of SLEP 1996, the proposed development must be consistent or compatible with one or more objectives of the zone in order for Council to grant consent. The zone objectives and a planning assessment addressing the proposed development against them is offered below:

Zone 4 (Industrial Zone)
Objectives of zone

(a) to allocate sufficient land in suitable locations to facilitate and promote the establishment of a broad range of industrial uses

The development is to be undertaken within a mostly undeveloped area of an existing industrial estate which is predominantly used by mining related industries. The proposal involves a construction based manufacturing industry which will diversify the types of industries in the estate, create employment opportunities and broaden the local economy.

(b) to allow commercial or retail uses only where they are associated with, ancillary to or supportive of industrial development

The proposal is not commercial or retail.

(c) to provide industry-related training establishments in appropriate locations

The proposal does not incorporate a training element.

(a)(ii) the provisions of any draft environmental planning instrument

Not applicable.

(a)(iii) any development control plans

Singleton Development Control Plan 2009 applies to the proposed development. An assessment of the proposal based on the requirements contained therein follows:

Element 4 – Industrial Development

4.1 – Site Analysis
A site analysis plan has not been submitted as part of the application. Positive and negative site attributes have been taken into consideration in the design process to ensure the proposal will have minimal impact on the surrounding locality.

4.2 – Site Planning & Layout
The buildings are provided with large setbacks to accommodate the car parking areas at the front of the site and to reduce their visual impact. The location of the buildings has also been determined by the truck manoeuvring requirements for delivery vehicles around the buildings. Two on-site sewage management disposal areas are provided on the site, one to the east of the northern car park with the other to the south-west of the southern car park. The site layout is considered to be appropriate to the site and suitable in the locality.

4.3 – Building Siting

Development Control	Requirement	Proposal	Compliance
Clause 4.3 – Setbacks	Front building line - 15m BCA compliance for side & rear	37m Minimum 13m	Yes Yes

The development has employed generous front setbacks to reduce the visual bulk of the buildings when viewed from Kannar Road. The side setback to the southern boundary is also greater than required by the DCP due to the easement for a transmission line. The layout has been designed and the buildings sited to accommodate the operational requirements of the development.

4.4 – Building Height, Scale and Bulk

Development Control	Requirement	Proposal	Compliance
Clause 4.4 – Building Height	14m	9m	Yes

The proposal complies with the 14m height limit set by the DCP. The overall height of the building is required to accommodate the specialist machinery required, which will utilise the additional height provided by the roof pitch (15m). To reduce the visual bulk and scale of the buildings, an increased front setback has been employed. The height, bulk and scale of the development is consistent with the existing character of the area.

4.5 – External Appearance

The office component of the development has been located at the front of Building 2 which will assist in breaking up the visual mass of the building. The office building also addresses the street and will enhance the appearance of the development when

viewed from this location. The two buildings will achieve a separation in their bulk and massing by the 12m concrete driveway between them. The increased setbacks and space around the buildings create a visual separation that will allow for views through the site, which will create a sense of greater space and less bulk.

The buildings will be constructed of the EVG 3D Panels with a Colorbond roof in light grey with darker grey trims. The landscaping at the front of the site will assist in enhancing the appearance of the development when viewed from the street.

4.6 – Impacts on the Amenity of the Area

The development is located within an established industrial area – no dwellings are located nearby. The processing operations do not result in any emissions from the site and does not generate offensive noise or odours. Whilst there are very few developed sites in the immediate vicinity of the proposal, the development will not be out of character with future industrial land uses and is consistent with existing developments elsewhere in the estate.

4.7 Vehicular & Pedestrian Access

Suitable pedestrian footpaths have been provided within the site to ensure safe pedestrian passage from the parking areas to the office and buildings. Footpaths are also provided around the rear and side of the buildings for safe staff access and egress.

Vehicle entry and exit for both light and heavy vehicles is achieved off Kannar Road. Adequate manoeuvring areas for trucks servicing the development can be achieved on the site.

4.8 – Loading & Unloading Facilities

The loading and unloading facilities have been located at the rear of the site so as not to impact on the streetscape and to ensure efficient internal traffic management is achieved.

4.9 – Fencing & Gates

A 1.8m high wire mesh fence is to be provided to the front boundary of the site, while the remaining site perimeter is to be fenced with 2.1m high wire mesh fence. This complies with the DCP requirements for fencing. Additionally, a sliding gate will be provided to prevent interference with the traffic movement and sight distances.

4.11 – Operation Details

The manufacturing plant is to employ the following hours of operation:

Monday to Saturday, 7:00am to 11:00pm (consisting of two 8 hour shifts)

The office will operate between the hours of 9:00am to 5:00pm.

Due to the shift arrangements, there will only be 20 employees on the site at one time. The breakdown of employees on site is as follows:

- Machinery operators – 10
- Floor staff (forklift drivers, labourers etc) – 5

- Office staff – 5

The total number of employees for the site is 35.

Element 9 – Vehicle Provision

Development Control	Requirement	Proposal	Compliance
Clause 9.2 – Vehicle Parking	1/40sqm GFA Office 559 / 40 = 14 1/75sqm GFA Industry 4404 / 75 = 59	73	Yes

The proposed development provides 73 car parking spaces which compiles with the numerical requirements of the DCP.

Element 7 – Infrastructure Provision

The site is serviced by the existing public road network and gains access off Kannar Road. The site will be able to be connected to Council's reticulated water supply, as well as electricity and communications networks. The site does not have access to reticulated sewer, and an on-site disposal system has been proposed, as discussed under Element 13 below. Telstra services and a hydrant are currently located in the proposed access. The applicant has indicated that these will be relocated, and a suitable condition has been included in **APPENDIX A**.

Element 10 – Vegetation Preservation and Landscaping

Fourteen trees are to be removed from the site. It is not considered that the trees have any significant environmental qualities to warrant their retention. Extensive landscaping at the front of the site and throughout the car park areas will help to visually soften the development. The landscaping will enhance the appearance of the development and is compatible with the recommendations in the Bushfire Protection Assessment.

Element 11 – Earthworks

The operational requirements of the manufacturing process are such that the two buildings must be located in close proximity and be of a similar finished floor level. The layout and configuration of the buildings are closely related to the ability to provide a function and efficient production line. The size of the buildings are the minimum required to house the specialist machinery in the production plant, and the vehicle manoeuvring, orientation of the buildings, and restriction of building within the easement limit the possible locations of the buildings on site. Accordingly, to accommodate the buildings, significant earthworks are required. The site has a fall of over 15 metres from the northern boundary to the southern boundary, and proposes a 7m high retaining wall at the northern boundary, with a 6.5m retaining wall in the south-eastern corner of the site (not located within the easement for transmission). The site will also comprise internal retaining walls throughout the car parking area, which will utilise the natural contours, and create terracing in these areas. Given the existing topography of the site and industrial estate, the proposed earthworks are not considered to be inappropriate or inconsistent with the character of the area. The

earthworks are not considered to have cumulative negative impacts in terms of overshadowing or redirecting water onto adjoining properties, and are therefore considered suitable given the site constraints.

Element 12 – Management of Stormwater

A concept drainage plan and calculations prepared by Thomas & Associates Consulting was lodged with the development application. The plan proposes to collect stormwater from the buildings and discharge to the existing headwall at the south east corner of the site. Water from the car parking areas will drain to the stormwater pit near the entry/exit on the western boundary. A 43m^3 detention pit has also been proposed on the western boundary. The proposed onsite retention tanks do not meet the requirements of the DCP. Accordingly, a condition has been included in **APPENDIX A** requiring 22,500L of onsite detention.

Element 13 – Waste Management

All construction waste associated with the development is to be recycled or disposed of to an approved waste management facility.

Once operational, the development will be serviced by private contractors for the removal of recyclable material and general waste, as the processes on-site do not generate significant amounts of waste. A waste storage area has been located behind Building 2, and is considered appropriate given it will not be visible from the street.

Discussions between Council's Water and Waste Department and the manufacturers have confirmed a liquid trade waste application is not required.

As reticulated sewer is not available to the site, an on-site sewage management system is to be provided. Two transpiration areas are proposed, and the calculations provided indicate there is suitable area on-site for the disposal of effluent. Due to the proximity of the stormwater inlet pit to the southern disposal area, bund walls are required on the western perimeter of the disposal field, and the lid of the surface pit is to be raised. Additionally, to prevent contamination of the hardstand areas and subsurface drainage system, bund walls are required around the perimeter of the northern disposal field and an impervious membrane is to be placed behind the adjacent retaining wall. These have been included in **APPENDIX A** as conditions of consent. A condition has also been included that requires moisture sensors to be located within the disposal areas, and a wet weather storage area for effluent, being a minimum capacity of 10,000L. If the moisture sensors indicate the site conditions are not suitable for effluent disposal, the effluent must be retained in the storage tanks and removed from the site by a tanker.

As the site uses a combined sewerage management system, consolidation of the lots is required, an appropriate condition has been included in **APPENDIX A**.

Element 15 – Bushfire Risk Management

The development site is identified as bushfire prone land. The site is mainly cleared of vegetation, with a few scattered trees, while heavier vegetated forests and woodlands exist to the east and south-east of the site. The Bushfire Protection

Assessment indicates that the development is suitable based on the following recommendations:.

1. The industrial buildings are to comply with BCA Fire Safety Provisions.
2. The entire site shall be managed as an Inner Protection Area for the life of the building.
3. A dedicated 20,000 litre static firefighting water supply having 65mm Storz outlet with a Gate or Ball valve for fire fighting should be provided.

These recommendations have been included in **APPENDIX A** as a condition of consent.

Element 20 – Building Line & Setback Requirements

This has been discussed previously with the consideration of Element 4 – Industrial Development.

(a)(iiia) any planning agreement that has been entered into or any draft planning agreement that the developer has offered to enter into

Not applicable.

(a)(iv) any matters prescribed by the regulations

Not applicable.

(b) the likely impacts of the development

Air Quality
The manufacturing process generates steam from boilers associated with the Expanded Polystyrene process and isolated emissions associated with welding processes. There are no identifiable pollutant emissions.

Noise
Noise generated by the development will mostly be contained within the buildings. Given the location of the development within an industrial area, the noise produced by the manufacturing process is anticipated to have a negligible impact on the amenity of the locality.

Traffic
A traffic assessment report has been prepared in respect of the proposal which is consistent with the RTA Guide to Traffic Generating Developments.

The conclusions of the report are that the proposal is not considered to have any significant impacts in terms of traffic. The road network has scope to accommodate the additional traffic and truck movements generated by the development, and there is adequate car parking and truck manoeuvring areas on and around the site.

(c) the suitability of the site for development

The subject land is considered suitable for the development in terms of:

- Providing sufficient land for the development - the two allotments have a combined area of 2.13ha and accommodate the development on the land

with adequate areas for parking, manoeuvring, on-site sewage management system and site services.

- Shape - the rectangular shape of the land is conducive to the development and the proposed buildings.
- Access to a public road – the subject site provides a 160m frontage to Kannar Road allowing for a suitable access to the property.
- Topography – the topography of the site is such that for the development to be accommodated, earthworks are required to be undertaken. The site is large enough to allow these earthworks without impacting on adjoining properties.
- Vegetation – Fourteen trees are to be removed from the site. It is not considered that the trees have any significant environmental qualities to warrant their retention.

The site attributes are therefore considered conducive to the development.

(d) any submissions made in accordance with this Act or the Regulations

There were no submissions received for the proposed development.

(e) the public interest

The development proposal represents a suitable use of the industrial land and will support the production of the EVG 3D Panels, which will have flow-on effects in the local economy and building industry. The development is therefore considered to be in the public interest.

7. Conclusion

The application is compliant with the requirements of the relevant State Environmental Planning Policies, Singleton Local Environmental Plan 1996 and the relevant elements of Singleton Development Control Plan 2009.

An assessment of the application has been carried out under Section 79C(1) of the Environmental Planning and Assessment Act, 1979 as amended. The proposed development is considered satisfactory in terms of the relevant matters for consideration under the Act and the development application is recommended for approval subject to conditions.

8. Recommendation

That the Joint Regional Planning Panel grant consent to DA67/2011, subject to the conditions contained in **APPENDIX A**.

APPENDIX A - Conditions of Consent

APPENDIX A - Conditions of Consent

A General Conditions

A1 The development shall be carried out in accordance with the stamped approved plans and documentation detailed in the following schedule and any amendments arising through conditions to this consent or as shown in red colour on the plans:

Drawing Title	**Drawing No.**	**Prepared by:**
Site Plan (Existing), Site Plan (Proposed), Planting Schedule, Planting Method	10565~A01	Thomas & Consulting Pty Ltd
Floor Plans, Front Elevation	10565~A02	Thomas & Consulting Pty Ltd
Roof Plan, Rear Elevation	10565~A03	Thomas & Consulting Pty Ltd
Southern Elevations, Northern Elevations, Sections	10565~A04	Thomas & Consulting Pty Ltd
Site and Water Management Plan	10565 S02	Thomas & Consulting Pty Ltd
Concept Drainage Plan	10565 S01	Thomas & Consulting Pty Ltd

Document Title	**Dated**	**Prepared by:**
Statement of Environmental Effects	March 2011	Orbit Planning

Please note, in respect to the Concept Drainage Plan your attention is drawn to condition of consent number D6.

A2 Consent for the development will lapse after 5 years. Note that this relates to the period within which the development must commence.

***Reason*:** To specify the period for the lapsing of consent.

B Conditions which must be satisfied prior to the commencement of any development work

B1 Prior to the commencement of construction works, the following provisions of the Environmental Planning and Assessment Act 1979 (the 'Act') are to be complied with:

a) A Construction Certificate is to be obtained in accordance with Section 81A(2)(a) of the Act.

b) A Principal Certifying Authority is to be appointed and Council is to be notified of the appointment in accordance with Section 81A(2)(b) of the Act and Form 7 of Schedule 1 of the Regulations.

c) Council is to be given at least two days notice of the date intended for commencement of building works, in accordance with Section 81A(2)(c) of the Act and Form 7 of Schedule 1 to the Regulations.

Reason: To advise of matters to be resolved prior to the commencement of work.

B2 The Construction Certificate cannot be issued by the Principal Certifying Authority until Council is supplied with certified structural engineer's details on the means of stabilising the cut banks during earthworks, the means of sediment and erosion control, and retaining wall designs for the wall heights proposed.

Reason: To protect adjoining properties and to ensure that retaining walls are structurally adequate.

B3 Erosion and sediment control measures are to be designed and implemented in accordance with LANDCOM's Managing Urban Stormwater, Soils and Construction current edition prior to the commencement of works and being maintained during the period of construction in accordance with the details set out in an Erosion and Sediment Control Plan. Controls are not to be removed until the site is stable with all bare areas supporting an established vegetative cover.

Reason: To ensure that appropriate measures are taken to prevent surface erosion and the emission of sediment from the site as a result of the proposed development.

B4 Suitable provision for the containment of building waste materials generated by the building process shall be provided within the boundaries of the site prior to any construction work being commenced. The following is to be provided:

a) Containment measures are to be either by means of a screened area of silt stop fabric or shade cloth, having dimensions of 1.8 x 1.8 x 1.2 metre high area, or an equivalent sized waste disposal bin;

b) The enclosure or bin shall be maintained for the term of the construction to the completion of the project;

c) The enclosure or bin shall be regularly cleaned to ensure proper containment of the building wastes generated on the construction site;

d) Building waste shall be disposed of at an approved waste disposal or recycling facility. Building waste shall not be disposed of by burning on site.

Reason: To protect the amenity of the adjoining area by the management of building waste materials within the building site to maintain a clean environment and promote safety on site.

C Conditions which must be satisfied during any development work

C1 A temporary closet shall be provided on site from the commencement of building work. No inspections will be made until the closet is installed.

A temporary closet shall be:

a) A chemical closet supplied by a contractor approved by Council.

Reason: To ensure that adequate sanitary provisions are provided and maintained on the building site for use by persons engaged in building activity.

C2 The placing of building materials and equipment (including water closets), or the carrying out of building operations upon or from Council's footway or roadway is prohibited unless prior consent in writing is obtained from Council.

Reason: To maintain pedestrian passage and public safety.

C3 The owner/applicant ensuring that all building material is kept clear of the public footway and carriageway as well as adjoining premises.

Reason: To ensure that the proposed work is undertaken in a manner that does not intrude upon adjacent public or private property.

C4 The fire hydrant and Telstra services located within the proposed access are to be relocated. The registered proprietor of the land shall be responsible for the costs incurred in the relocation.

Reason: To ensure that the required alterations to utility infrastructure are undertaken to acceptable standards at the developer’s cost.

C5 The registered proprietor of the land shall be responsible for all costs incurred in the necessary relocation of any services affected by the required construction works. Council and other service authorities should be contacted for specific requirements prior to commencement of any works.

Reason: To ensure that any required alterations to utility infrastructure are undertaken to acceptable standards at the developer’s cost.

C6 The building is to be provided with adequate means of access for persons with disabilities in order to comply with the Building Code of Australia and the Disability Discrimination Act 1992.

Reason: To ensure compliance with the provisions of the Environmental Planning and Assessment Act, 1979, the Building Code of Australia and the Disability Discrimination Act 1992 in relation to the provision of equity in access for disabled persons.

C7 All building work must be carried out in accordance with the provisions of the Building Code of Australia.

Reason: To confirm a condition of consent prescribed by the Environmental Planning & Assessment Regulation 2000.

C8 All excavations and backfilling associated with the erection of a building must be executed safely and in accordance with appropriate professional standards.

Reason: To confirm a condition of consent prescribed by the Environmental Planning & Assessment Regulation 2000.

C9 All excavations associated with the erection of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

Reason: To confirm a condition of consent prescribed by the Environmental Planning & Assessment Regulation 2000.

C10 Filling shall not be placed in such a manner that natural drainage from adjoining land will be obstructed, or surface water will be diverted to adjoining land.

Reason: To ensure that filling placed on land does not affect natural drainage, and does not result in water being diverted to adjoining land.

C11 All proposed driveways, parking bays, loading bays and vehicular turning areas being constructed with a basecourse of adequate depth to suit design traffic, being sealed with either bitumen seal, asphaltic concrete, concrete or interlocking pavers and being properly maintained.

Reason: To facilitate the use of vehicular access and parking facilities and to minimise any associated noise and dust nuisance.

C12 No kerb and gutter at driveway crossings are to be constructed across Council's road reserve that could present a trip hazard to pedestrians. Concrete access crossings are to comply with Council's specifications for industrial driveways.

Reason: To ensure the safety of pedestrian within Council's road reserve.

C13 The proposed building(s) must be constructed in accordance with the current requirements for efficient energy use. The Principal Certifying Authority (PCA) is to be satisfied that the proposed building(s) will comply with Section J of the Building Code of Australia (BCA).

Reason: To reduce greenhouse gas emissions by the efficient use of energy.

C14 All plumbing and drainage works shall be carried out by a licensed plumber in accordance with the provisions of the National Plumbing and Drainage Code AS 3500, and Singleton Council where applicable.

Reason: To ensure that all plumbing and drainage works comply with the relevant standards.

D Conditions which must be satisfied prior to any occupation or use of the building

D1 Prior to the occupation of a new building, or, occupation or use of an altered portion of, or an extension to an existing building, an Occupation Certificate is to be obtained from the Principal Certifying Authority appointed for the proposed development. An application for an Occupation Certificate must contain the information set out in Clause 155 of the Environmental Planning and Assessment Regulations.

Please be advised that Section 109H (1B) of the Environmental Planning and Assessment Act, 1979 prevents the Principal Certifying Authority from issuing an occupation certificate until all pre-determined conditions of development consent have been completed.

***Reason**:* To ensure compliance with Section 109M of the Environmental Planning and Assessment Act 1979, as amended.

D2 The following measures are required to contain effluent within the nominated disposal areas:

a) Bund walls to the western perimeter of the southern disposal field;
b) Bund walls to the entire perimeter of the northern disposal field;
c) Placement of an impervious membrane between the northern disposal field and the subsurface drainage line behind the adjacent retaining wall; and
d) Raising of the lid of the surface inlet pit adjacent the southern disposal field 100mm above finished ground level.

Note that the bund walls are not to reduce the total area available for effluent disposal to less than 816 square metres.

Reason: To ensure that effluent is not discharged onto adjacent landscaped areas and off-site.

D3 The proposed development must incorporate a system for the wet weather storage of effluent. This system must include storage tanks having a minimum volume of 10,000L and moisture sensors located within the disposal areas. When moisture sensors indicate that site conditions are not suitable for effluent disposal, It must be retained in the wet weather storage tanks and removed from site by tanker to an approved waste disposal facility.

Reason: To ensure that effluent is disposed of in an environmentally sensitive manner.

D4 Prior to the issue of any Occupation Certificate for the building the applicant shall ensure that Council, being the regulatory authority under the Local Government Act for the sewage management system, has been requested to and carried out inspection of the development at the following stages of construction:

a) Internal drainage lines before the floor is laid, or concrete placed.
b) External drainage lines before backfilling of the trenches.

c) On Site Sewage Management installation when completed.

Requests for inspections may be made either by telephone (02) 65 787 290 or in person at the Customer Services Counter.

Inspection requests are subject to the following:-

1) Applicants are required to nominate the relevant development application number and location prior to the inspection request being granted.

2) Clerical staff only will receive <u>all</u> requests for inspections.

3) Where work is not prepared, ready for inspection, applicants will be required to re-book inspections through the Customer Service Centre for the next available day and a re-inspection fee may be charged.

4) Inspections must be received before 3.30 pm on the working day prior to when the inspection is required, except as detailed below.

5) Inspections within the township of Singleton will generally be carried out as AM or PM inspections.

6) Inspections in outlying areas eg. Putty, Howes Valley, Lambs Valley, Mt Royal etc, may not be available on the next working day and will generally be carried out within two working days (48 hours) or on days specified by Council in those areas. <u>Applicants should contact Council to determine when inspections are available in these areas and advise all contractors of inspection availability.</u>

7) Where Council has been appointed as the PCA, inspection requests will not be accepted if evidence of payment of building insurance under the Home Building Act, 1989 or evidence of an owner builders permit has not been received by Council.

Reason: To ensure that adequate notice is given to Council for a required inspection.

D5 The development is to have an on-site stormwater water quality & disposal system generally in accordance with the Concept Drainage Plan numbered 10565 S01 and prepared by Thomas & Consulting Pty Ltd, and will include as a minimum the following:

a) Rainwater tanks to comply with Council's DCP, being 22,500L minimum;
b) The overflow to be piped to the stormwater reticulation system

A copy of Singleton Council's Onsite Stormwater management Policy is available on Singleton Council's web page www.singleton.nsw.gov.au or from Council offices, Queen Street, Singleton.

Reason: To ensure that the proposed development does not decrease the stormwater quality of the runoff from the site and adversely affect the stormwater infrastructure's capacity to operate as a water quality/quantity control located downstream within the catchment.

D6 Prior to the issue of any Occupation Certificate for the building, the applicant shall submit to Council a Final Fire Safety Certificate in respect of each essential fire safety measures installed in the building indicating that:

a) the measure has been inspected and tested by a person (chosen by the owner of the building) who is competent to carry out such an inspection and test; and

b) the measure was or was not (as at the date on which it was inspected or tested) found to have been designed and installed, and to be capable of operating, to a standard not less than that required by or under the Environmental Planning and Assessment Regulation or by the Council.

The building owner shall cause Council to be given a Fire Safety Statement every 12 months after the first Fire Safety Statement is supplied, certifying that the fire safety measures have been maintained in an operable condition.

The Fire Safety Statement shall be in a form approved by Council. One copy shall be displayed in a prominent position on the premises, one copy being submitted to Council and one copy to the NSW Fire Brigade.

Reason: To ensure that each of the essential services is installed and is capable of operating to the appropriate standard.

D7 A reinforced concrete access crossing shall be constructed from the kerb and gutter to the property boundary at each access, including a layback in the kerb, in accordance with Council's Engineering Specifications and AS 2890.

All works within a public road must be inspected and approved by Council under the Roads Act 1993 as the Roads Authority. Driveway levels across Council's footpath are to be submitted to and approved by Council. Access crossing construction is to be inspected by Council after excavation and placement of reinforcement and on completion.

Where water main cocks are under the access crossing approved cast iron main cock covers are to be placed. The covers are to be fixed plumb and square to the centreline of each main and 100mm NS uPVC minimum Class 9 pressure pipe is to be used as a protective sleeve between the cover and the main cock.

All works within a public road reserve are to be completed at no cost to Council and approved by Council prior to occupation of the development.

Reason: To ensure the provision of safe, adequately defined and properly constructed means of vehicular access from the road to the development.

D8 All driveways, access corridors and carparking areas are to be designed in accordance with AS2890.1 & 2 - Parking Facilities. The carparking areas, driveways and vehicular turning areas shall be constructed with a base course of adequate depth to suit design traffic loadings with concrete surface in accordance with

Council's Development Engineering Specifications. Construction is to be completed prior to issue of the Occupation Certificate.

Reason: To ensure the orderly and efficient use of on-site parking facilities and ensure that adequate provision is made on-site for the loading and unloading of goods.

D9 A work as executed stormwater drainage plan, drawn to scale, indicating down pipe locations, tank location(s) (if applicable) and discharge points must be forwarded to Council with the Occupation Certificate.

Reason: To ensure that an accurate record is kept of all stormwater drainage work.

D10 All public footways, footpaving, kerbs, gutters and road pavement damaged during the works being immediately repaired following the damage, to a satisfactory state that provides for safe use by pedestrians and vehicles. Full restoration of the damage is to be carried out to Council's satisfaction prior to the occupation of the development.

Reason: To ensure that safe conditions are maintained on the site during construction and that the required restoration is undertaken to acceptable standards, without demand on public sector resources.

D11 A Registered Surveyor's Certificate showing the boundaries of the site, the proposed building plotted thereon, and the excavated pad level is to be submitted to Council with the occupation certificate.

Reason: To ensure the building is being erected in the correct position on the allotment in accordance with the Development Consent.

D12 Prior to issue of an occupation certificate, Lot 11 and Lot 12 in DP 1126226 are to be consolidated and any redundant easements expunged. Appropriate legal documents demonstrating compliance with this condition of consent shall be submitted to Council's Manager Development & Regulatory Compliance prior to the issue of the occupation certificate.

Reason: To ensure the effluent is disposed of wholly within the site on which the development operates.

E Conditions which must be satisfied during the ongoing use of the development

E1 The hours of operation or trading of the premises shall not be more than from:

Monday to Saturday 7:00am to 11:00pm.

Reason: To protect the likely and future amenity of the neighbourhood and to ensure the use of the premises does not intensify without the prior consent of the Council.

E2 The use and occupation of the premises including all plant and equipment installed thereon, not giving rise to any "offensive noise", as defined under the Protection of the Environment Operations Act, 1997, as amended.

Note: Should Council consider that offensive noise has emanated from the premises, the owner/occupier of the premises will be required to submit an acoustic consultant's report recommending appropriate acoustic measures necessary to ensure future compliance with this condition and will be required to implement such measures within a nominated period. Furthermore, written certification from the said consultant confirming that the recommended acoustic measures have been satisfactorily implemented will be required to be submitted to Council before the expiration of the nominated period.

Reason: To ensure that appropriate noise control measures are implemented if required.

E3 Any proposed floodlighting of the premises being so positioned, directed and shielded as to not interfere with traffic safety or detract from the amenity of the adjacent premises.

Reason: To ensure that the proposal does not interfere with traffic safety and to protect the existing amenity of the neighbourhood.

E4 Proposed parking areas, service bays, truck docks, driveways, vehicular ramps and turning areas being maintained clear of obstruction and being used exclusively for purposes of car parking, loading and unloading, and vehicle access, respectively. Under no circumstances are such areas to be used for the storage of goods or waste materials.

Reason: To ensure the proposed/required parking, loading/unloading facilities and associated driveways are able to function efficiently for their intended purpose and are not otherwise used in a manner which detracts from the overall appearance of the development.

E5 The vehicular entrance and exit driveways and the direction of traffic movement within the site being clearly indicated by means of reflectorised signs and pavement markings.

Reason: To ensure that clear direction is provided to the drivers of vehicles entering and leaving the premises in order to facilitate the orderly and efficient use of on-site parking spaces and driveway access and in the interest of traffic safety and convenience.

E6 Vehicles being loaded or unloaded standing wholly within the premises and within loading bays designated on the submitted plans or as otherwise provided in accordance with the conditions of this consent and under no circumstances are vehicles to be loaded or unloaded at the kerbside, across the public footpath or in a manner which obstructs vehicular access to the site.

Reason: To ensure that the proposed development does not give rise to street loading or unloading operations or obstruction of internal driveways with consequent accident potential and reduction in road and driveway efficiency.

E7 All vehicular movement to and from the site being in a forward direction. Vehicle entry and egress points off and onto a public road respectively are to be designed to ensure that a 19 m semi-trailer vehicles does not illegally cross the centreline of a public road or alternatively any illegal manoeuvour is to be carried out under an approved traffic control plan.

Reason: To ensure that the proposed development does not give rise to vehicle reversing movements on or off the public road with consequent traffic accident potential and reduction in road efficiency.

E8 The landscaped areas being kept free of parked vehicles, stored goods, garbage or waste material and being permanently maintained.

Reason: To ensure that the proposed/required site landscape works are conserved and properly maintained so as to enhance the overall appearance of the premises and add to the landscape quality of the locality.

E9 The security gates are not to open outward onto Council land or into the road reserve.

Reason: To ensure sight distances, and traffic and pedestrian safety is preserved.

Advices

F1 Please advise all subcontractors of conditions of approval.

F2 Your plans and specifications have been endorsed and are enclosed together with information from other authorities that may relate to the proposed works.

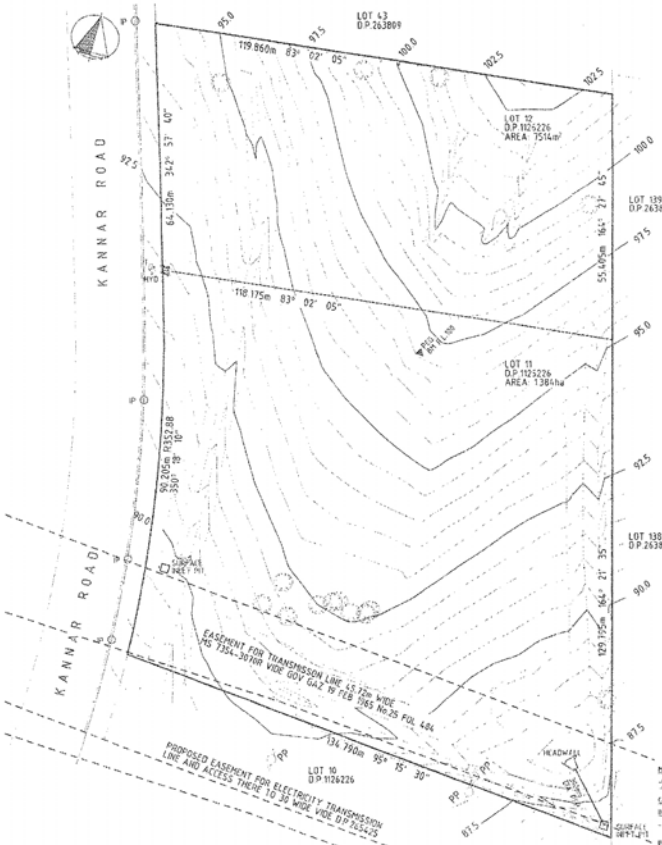
F3 The plans enclosed with your development consent are not approved for construction. A Construction Certificate must be issued prior to work proceeding.

F4 Overflow relief gullies are not permitted within any enclosed structure.

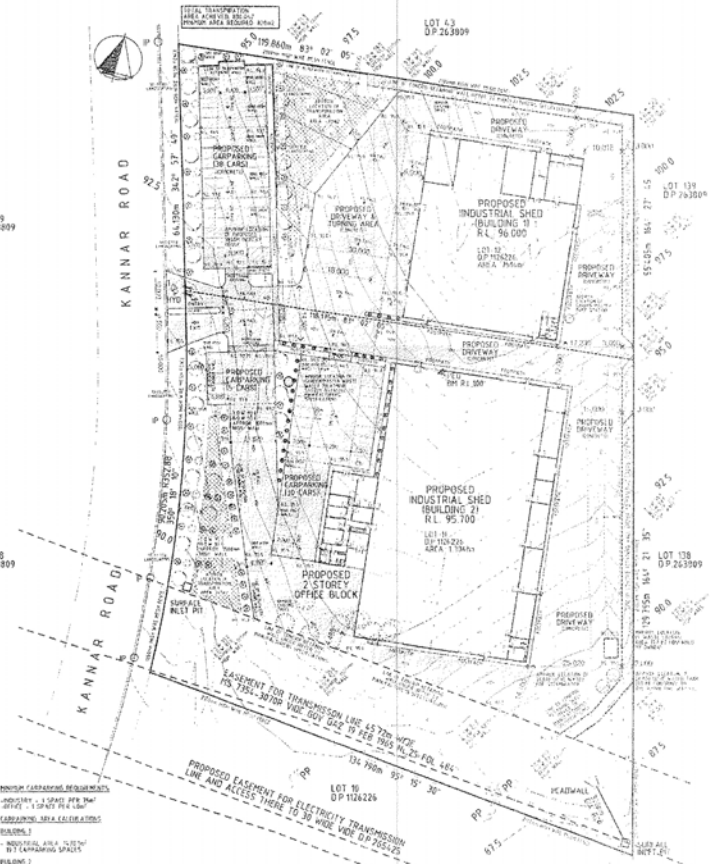
Should a screened enclosure or similar be planned, consideration should be given to the relocation of the gully, at this time, by a licensed plumber and in accordance with Council's requirements.

F5 Signage has not been approved as part of this application. Any signage requiring approval will be subject to a separate development application.

APPENDIX B – Plans and Elevations



SITE PLAN (EXISTING)



PLANTING SCHEDULE

PLANTING METHOD

SITE PLAN (PROPOSED)

NOTES

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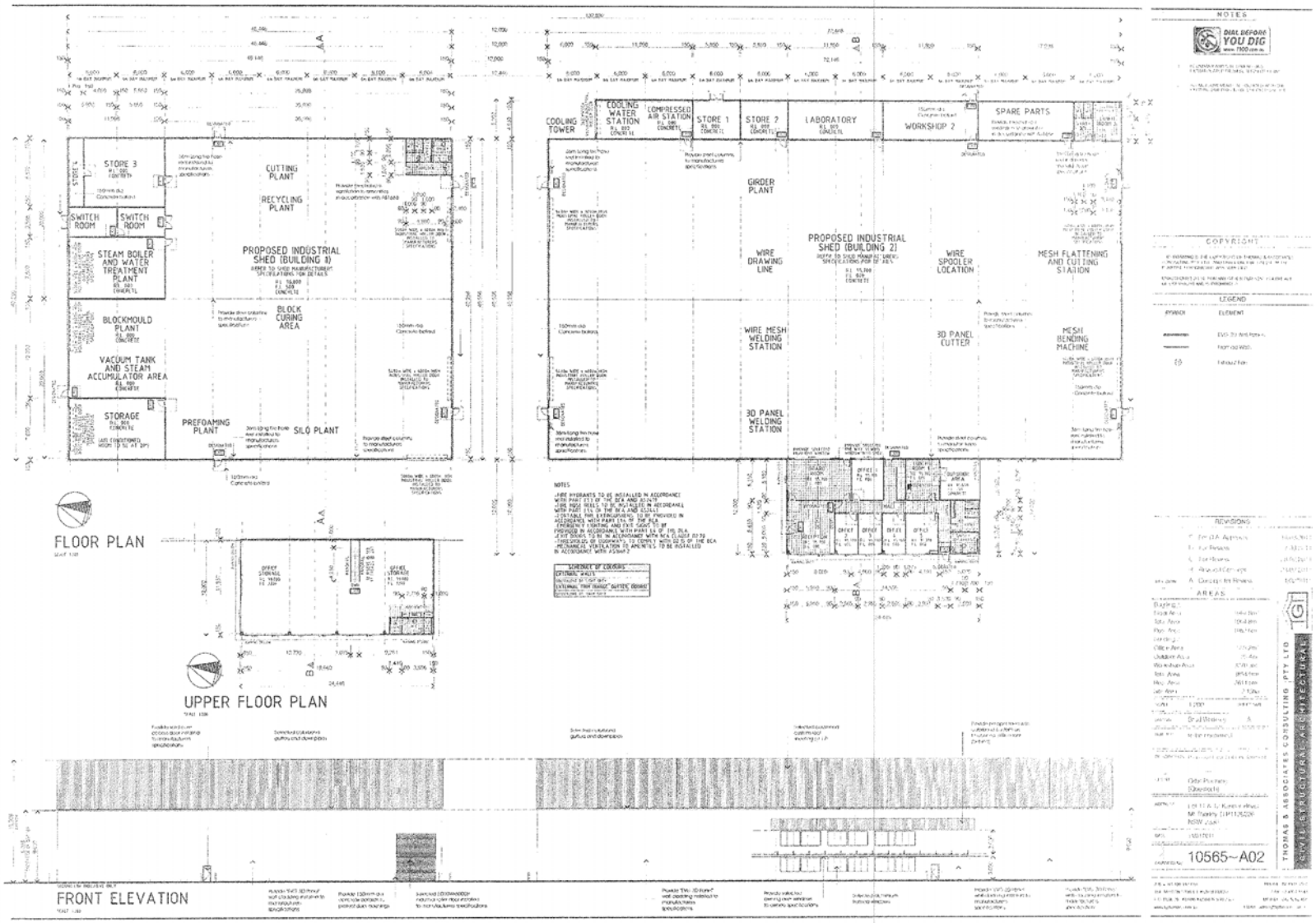
CIVIL STRUCTURAL ARCHITECTURAL


STORE 3
CUTTING PLANT
RECYCLING PLANT
SWITCH ROOM
SWITCH ROOM
STEAM BOILER AND WATER TREATMENT PLANT
PROPOSED INDUSTRIAL SHED (BUILDING 1)
BLOCKMOULD PLANT
BLOCK CURING AREA
VACUUM TANK AND STEAM ACCUMULATOR AREA
STORAGE
PREFOAMING PLANT
SILO PLANT
COOLING TOWER
COOLING WATER STATION
COMPRESSED AIR STATION
STORE 1
STORE 2
LABORATORY
WORKSHOP 2
SPARE PARTS
GIRDER PLANT
WIRE DRAWING LINE
PROPOSED INDUSTRIAL SHED (BUILDING 2)
WIRE SPOOLER LOCATION
MESH FLATTENING AND CUTTING STATION
WIRE MESH WELDING STATION
3D PANEL CUTTER
MESH BENDING MACHINE
3D PANEL WELDING STATION
OFFICE STORAGE
OFFICE
FLOOR PLAN
UPPER FLOOR PLAN
FRONT ELEVATION
NOTES
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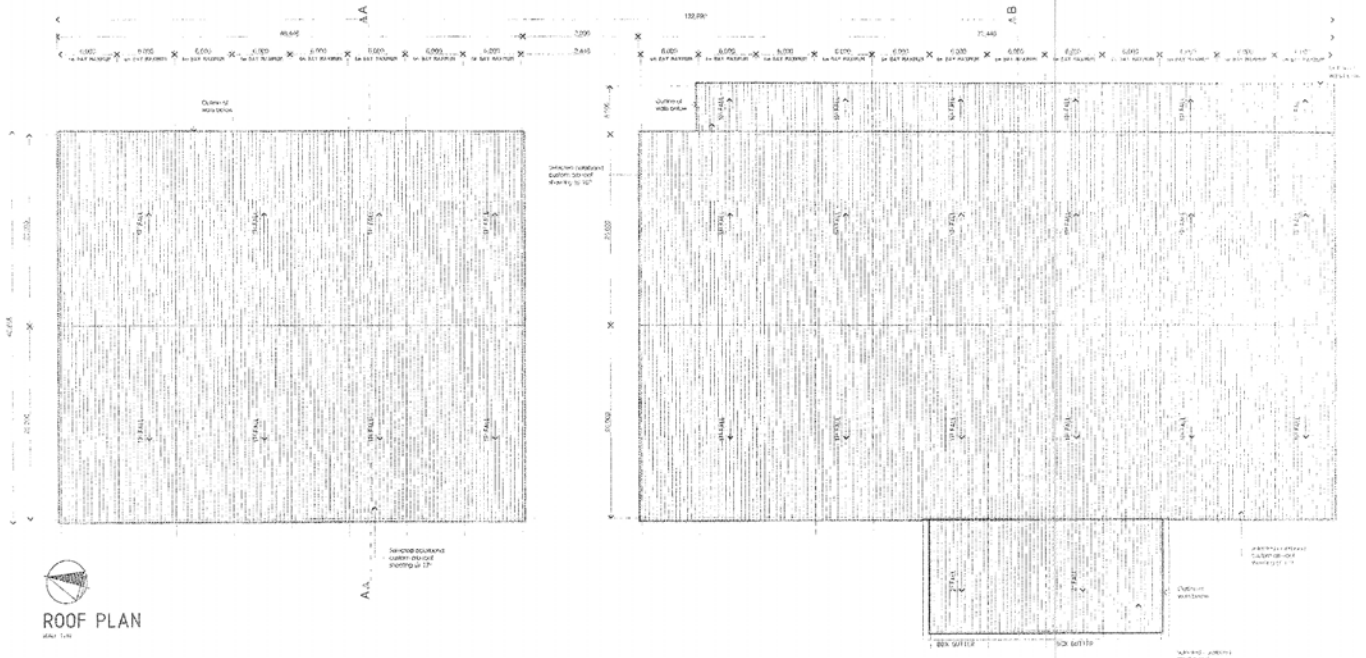
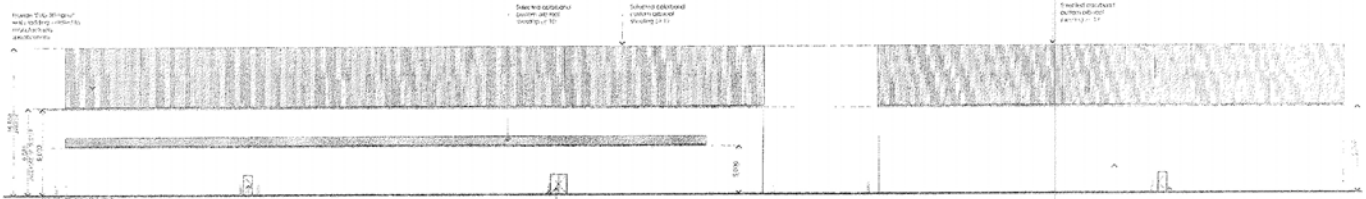
SYMBOL
ELEMENT
REVISIONS
AREAS
SCHEDULE OF COLOURS
EXTERNAL WALLS
EXTERNAL TRIM FRAME GUTTER DOWNS
THOMAS & ASSOCIATES CONSULTING PTY LTD
CIVIL & STRUCTURAL ARCHITECTURAL
10565~A02



ROOF PLAN



REAR ELEVATION

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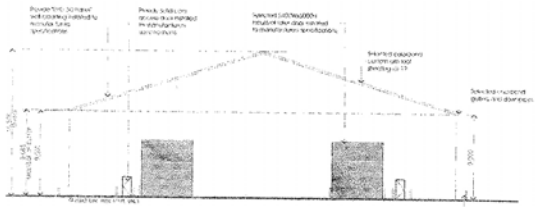
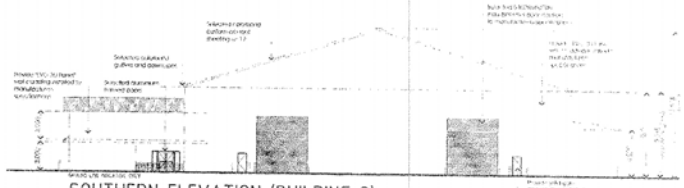
CIVIL STRUCTURAL ARCHITECTURAL

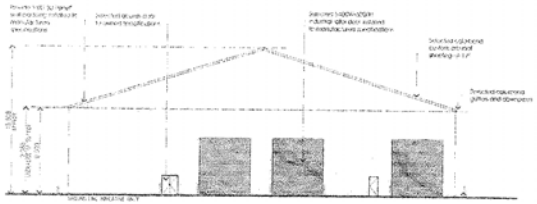
10565—A03



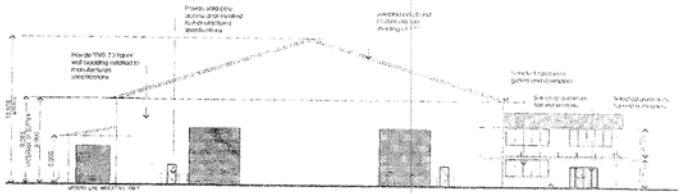
SOUTHERN ELEVATION (BUILDING 1)



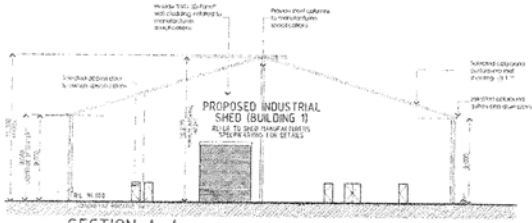
SOUTHERN ELEVATION (BUILDING 2)



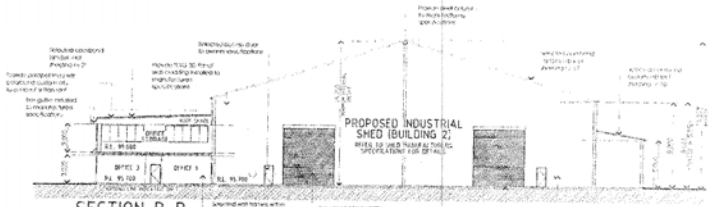
NORTHERN ELEVATION (BUILDING 1)



NORTHERN ELEVATION (BUILDING 2)



SECTION A-A



SECTION B-B

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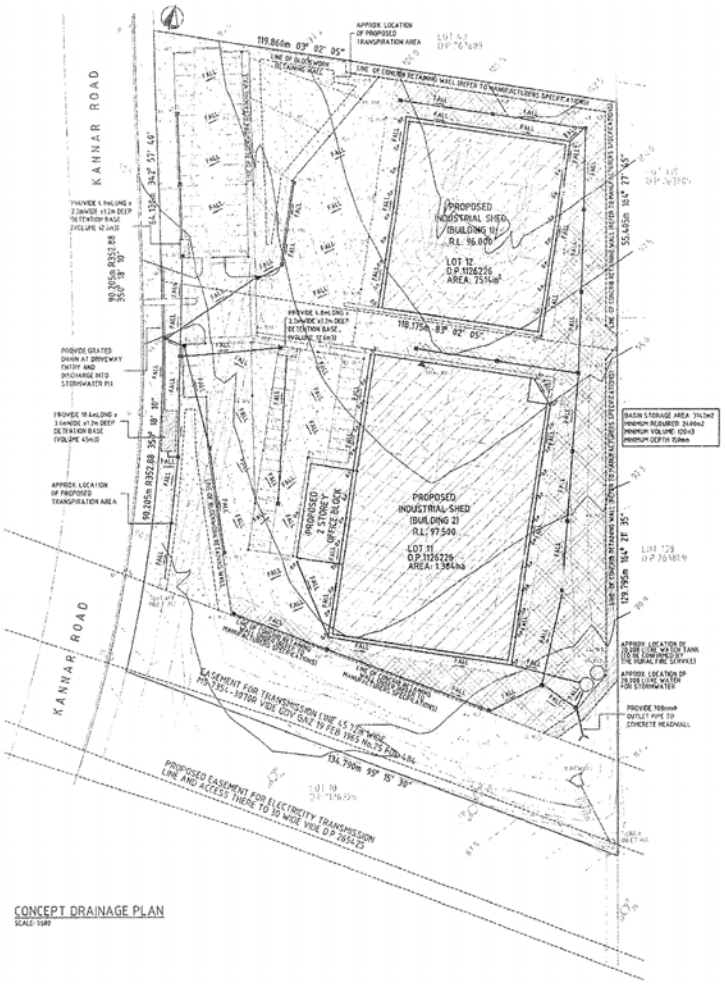


CONCEPT DRAINAGE PLAN
SCALE: 1:500

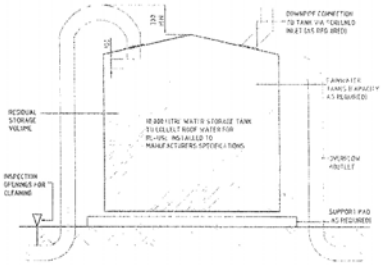
DRAINAGE NOTES

- ALL WORK IS TO BE DONE IN ACCORDANCE WITH AS 3500.3
- ALL EXISTING SERVICES ARE TO BE IDENTIFIED AND LOCATED BY CONTRACTOR PRIOR TO COMMENCING WORK.
- REFER TO ARCHITECTURAL PLANS FOR BUILDING AND DRIVEWAY SETOUT
- ALL PIPES TO BE UPVC UNLESS NOTED OTHERWISE.
- UPVC PIPES TO BE SEWER GRADE SH TO AS 1260
- MINIMUM PIPE FALLS 1%
- LEVELS SHALL BE 100mm MAXIMUM UNLESS NOTED OTHERWISE EXCEPT IN INSTANCES WHERE SUCH DEVIATION COULD HAVE ADVERSE EFFECTS, IN WHICH CASE, THE ENGINEER SHALL BE CONTACTED
- ALL DOWNPIPES TO CONNECT TO NEAREST UPVC PIPE
- 500mm MIN COVER TO ALL PIPES
- PIPE LOCATIONS ARE DIAGRAMATIC. FINAL POSITIONS SHALL CONFORM WITH THE INTENT OF THIS DESIGN
- THE CONTRACTOR SHALL ADEQUATELY SHIELD PIPES AGAINST CONSTRUCTION AND PERMANENT LOADS. WHERE ADEQUATE COVER CANNOT BE PROVIDED, PIPES SHALL BE ENCASED IN CONCRETE
- UNLESS NOTED OTHERWISE, WHERE A PIT INVERT IS BELOW THE INVERT OF THE LOWEST OUTLET PIPE, THE CONTRACTOR SHALL EITHER PROVIDE DRAINAGE HOLES IN THE BASE OF THE PIT OR ELSE FILL THE BASE OF THE PIT WITH MASS CONCRETE TO THE INVERT OF THE LOWEST OUTLET PIPE.
- WHERE REQUIRED BY REGULATIONS, STEP IRONS IN ACCORDANCE WITH AS3996 SHALL BE INSTALLED IN DEEP PITS/TANKS TO ALLOW ACCESS FOR MAINTENANCE. PIT COVERS OVER DEEP PITS SHALL BE "CHILD-PROOFED" BY BOLTING THEM DOWN, EXCEPT WHEN THE COVER WEIGHS MORE THAN 20Kg.
- ALL IMPERVIOUS SURFACES SHALL BE GRADED SUCH THAT THEY ARE FREE DRAINING. YARD PITS SHALL BE PROVIDED AS REQUIRED.
- WHERE REQUIRED BY THE PRINCIPAL CERTIFIER WORK AS-EXECUTED DETAILS SHALL BE PREPARED BY A REGISTERED SURVEYOR/CHARTERED PROFESSIONAL ENGINEER VERIFYING THAT THE DRAINAGE SYSTEM HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE DRAWINGS. ANY DEVIATIONS FROM THE APPROVED PLANS SHALL BE NOTED AND BROUGHT TO THE ATTENTION OF THE ENGINEER. ADEQUATE INSPECTIONS SHOULD BE CARRIED OUT DURING THE COURSE OF CONSTRUCTION.
- ANY PROPOSED ALTERATIONS TO THE DETAILS SHOWN ON THE DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL
- LEAF SCREENS, SILT CONTROLS AND ANY OTHER POLLUTION CONTROL DEVICES SHALL BE REGULARLY SERVICED TO ENSURE THAT THE DRAINAGE SYSTEM REMAINS UNBLOCKED AND OPERATES AS ORIGINALLY INTENDED
- OVERLAND FLOW PATHS SHALL BE REGULARLY MAINTAINED AND KEPT FREE OF OBSTRUCTIONS TO THE FLOW OF WATER.

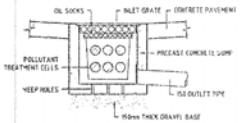
ALL LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORK

LEGEND

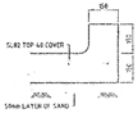
- GPP - CONCRETE DRAINAGE PIT
- DP - DOWNPIPE
- UPVC PIPE UN D
- DIRECTION OF SURFACE FALL
- 97.500 - DESIGN SPOT LEVEL
- EXISTING SPOT LEVEL
- 98.000 - DESIGN CONTOUR
- EXISTING CONTOUR
- DRIVEWAY DETENTION BASIN
- NEW BUILDING
- LANDSCAPED AREA
- CONCRETE AREA



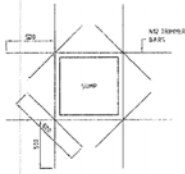
TYPICAL RAINWATER TANK ARRANGEMENT
AS PER COUNCIL REQUIREMENTS
SCALE: 1:20



BCP "STREAMGUARD" 600x600x600 POLLUTION CONTROL PIT OR EQUIVALENT
SCALE: 1:20



KERB DETAIL
SCALE: 1:10



TYPICAL SUMP TRIMMER ARRANGEMENT
SCALE: 1:20

A	FOR D.A. APPROVAL	B.W.	A.G.	N.S.W.
ISSUE	DESCRIPTION	DRAWN	CHECKED	DATE

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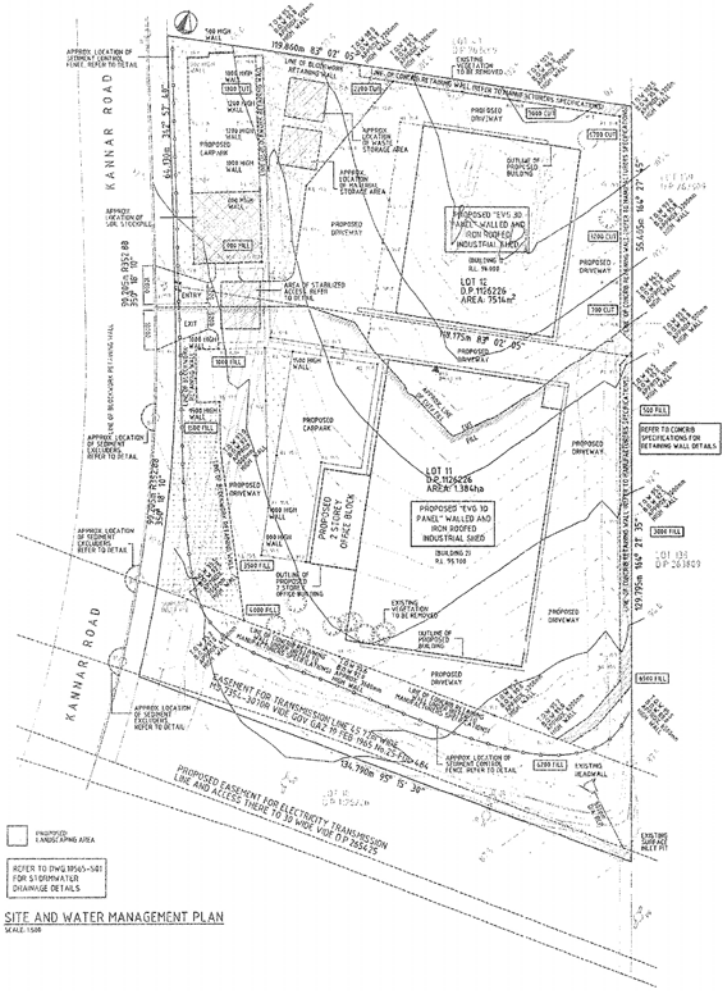
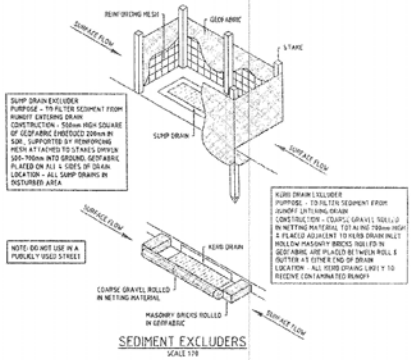
FAX: (02) 4937 8941
MOBILE: 0429 212 465
EMAIL: admin@tyltheman.com.au

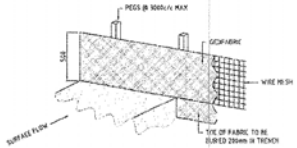
CLIENT	ORBIT PLANNING (QUESTECH)
ADDRESS	LOT 11 & 12 D.P 1126226 KANNAR ROAD, MT THORLEY NSW 2330
DESCRIPTION	CONCEPT DRAINAGE PLAN
CERTIFIED AS STRUCTURALLY ADEQUATE	ADAM DAVIES BE, ME Aust., CP Eng, NPER-3
SCALES	1:500, 20, 10
SHEET SIZE	A1
JOB NUMBER	10565
SHEET NUMBER	S01
DRAWN BY	BRAD WHITELEY



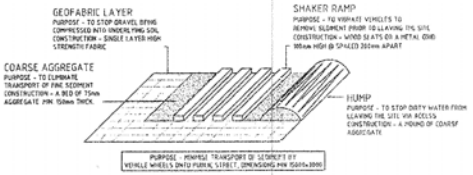
SITE AND WATER MANAGEMENT PLAN
SCALE 1:500



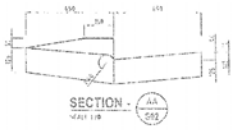
SEDIMENT EXCLUDERS
SCALE 1:10



SILT FENCE
SCALE 1:20



STABILIZED ACCESS
SCALE 1:20



SECTION - A/A 502
SCALE 1:10

FOOTPATH CROSSING
SCALE 1:10

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A	FOR D.A. APPROVAL	B.W.	A.D.	16.3.11

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FAX: (02) 4937 5649
MOBILE: 0426 202 465
EMAIL: admin@tgthomas.com.au

CLIENT	ORBIT PLANNING (GUESTECH)
ADDRESS	LOT 11 & 12 D.P.1126226 KANNAR ROAD, MT THORLEY NSW 2330
DESCRIPTION	SITE AND WATER MANAGEMENT PLAN
CERTIFIED AS STRUCTURALLY ADEQUATE	ADAM DAVIES B.E. MIE Aust., CPEng, NPER-3
SCALE	1:500 @ A1
DRAWN BY	BRAD WHITELEY
SHEET SIZE	A1
JOB NUMBER	10565
SHEET NUMBER	S02

APPENDIX C – Referral Comments

- Council Engineer
- Council Building Surveyor

Civic Centre
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Singleton COUNCIL
for a better future

Development Engineer Referral Response

To:	**Amanda Power**
From:	**Ajith De Alwis**
Date:	**26 May 2011**
File:	**DA 67/2011 – Industrial shed** **Lot:11,DP:1126226,Kanna Road, Mount Thorley**

DA Only	DA/CC	DA/SA
☑	☐	☐

Stormwater Management/Drainage		
Applicable ☑	**Preliminary Assessment Undertaken** ☑	**Further Information likely to be required prior to issue of Construction Certificate** ☑
	Complete Assessment Undertaken ☐	
Comments		

A Concept drainage plan was submitted by Thomas & Associates which indicated disposal of stormwater from the proposed site. Stormwater runoff and overflows from the site will be directed to the stormwater drainage system at the southern side of the property through stormwater pipe net work which is acceptable in accordance with the Council Engineering Specifications.

Development proposal for industrial sites are to demonstrate that the total of the sites stormwater runoff after development does not exceed the calculated run-off for the site prior to the development for all stormwater events in accordance with the Council DCP.
The on-site detentions which are proposed for the development appears satisfactory.

Stromwater tanks with 20,000ltr capacity has been provided for the proposed development. Stromwater tanks with a total capacity of 22,500 liters is to be required to comply with the Council DCP. Detail design of the stormwater management system including stormwater quality measures are to be provided to the PCA.

The development has been conditioned to require the submission and approval of a detailed design and to provide Stormwater tanks with the required capacity.

Utilities		
Applicable	**Preliminary Assessment Undertaken** ☑	**Further Information likely to be required prior to issue of Construction Certificate** ☑
☑	**Complete Assessment Undertaken** ☐	
Comments		

Water and power services are available to the site.

Roads/Driveway/Access/Traffic		
Applicable	**Preliminary Assessment Undertaken** ☐	**Further Information likely to be required prior to issue of Construction Certificate** ☑
☑	**Complete Assessment Undertaken** ☑	
Comments		

Concrete surface with an adequate base is to be required for the car parking areas and vehicle turning areas within the development site. Manoeuvering of vehicles within site appears satisfactory.
It appears that the proposed access crossing for the development has been located over the Fire Hydrant which is not acceptable in accordance with Council standards. Therefore, the Fire hydrant is to be relocated away from the proposed driveway.

CAR PARKING

Car parking requirement has been assessed using the current DCP which requires 59 spaces for the industry,14 spaces for the office and a total of 73 spaces. Seventy three (73) car parking spaces have been provided for the proposed development which complies with the Council DCP.

Landscaping		
Applicable	Preliminary Assessment Undertaken	Further Information likely to be required prior to issue of Construction Certificate
	Complete Assessment Undertaken	
Comments		

Landscaping has not been assessed.

Earthworks/Geotechnical		
Applicable	Preliminary Assessment Undertaken	Further Information likely to be required prior to issue of Construction Certificate
	Complete Assessment Undertaken	
Comments		

Earthwork has not been assessed.
Details of cut and fill, batter slopes and retainer walls are to be submitted to the PCA prior to the issue of a Construction Certificate.

Pollution Control/Design/Other Engineering Matters		
Applicable ☑	Preliminary Assessment Undertaken ☐	Further Information likely to be required prior to issue of Construction Certificate ☐
	Complete Assessment Undertaken ☐	
Comments		

Erosion, sediment control and pollution control have been conditioned.

Concluding Comments	
Additional Information Required prior to issue of DA	**Yes** ☐
	No ✓
Proposal Generally Satisfactory	**Yes** ☑
	No ☐

There are no engineering impediments to the development of the site once all the conditioned have been satisfied.

MEMORANDUM

TO: **Amanda**

FROM: **Andrew Henry**

DATE: **30/3/2011**

SUBJECT: **BUILDING ASSESSMENT REPORT (DA 444/2011)**

Building 1

- Area = 1965 sqm
- Volume = 24 000 cubm
- Building must satisfy the requirements of Type A construction under the BCA;
- Lots 11 and 12 must be consolidated for the purposes of effluent disposal as the development proposes to use a combined ossm system. Consolidation is also required to remove the fire source feature located within 3metres of the unprotected openings in the southern wall of Building 1;
- Provided consolidation carried out the FRL of external walls would need to be 240/180/90;
- Building cannot be assessed under the DTS requirements of C2.3 and C2.4 because of the proximity of adjacent buildings and retaining walls etc;
- More details are required to determine compliance with AS 1428 for the disabled wc;
- Essential fire safety measures are required as per the BCA. Hydrant coverage appears inadequate.

Building2

- Workshop Area = 3270.3 sqm;
- Office Area =559.2 sqm
- Volume > 30000 cubm
- Building does not appear to comply with Type A construction because of building volume;
- The development however does not meet the DTS requirement for large isolated buildings either because of the proximity of Building 1 (within 18m) and the proximity to boundaries etc;
- FRL of external wall same as building 1;

- Upper floor of office does not appear to have fire hose reel coverage.

Effluent Disposal Issues

- Proposals for disposal of effluent on-site are unsatisfactory. Daily loading calculations are required;
- A surface inlet pit is located immediately adjacent the southern disposal area. Proposals in this regard are unsatisfactory as there is the likelihood of effluent being discharged on a long term basis into the surface water system;
- The shape of the disposal fields is not conducive to adequate on-site disposal. Both areas are too narrow to be effective;
- The location of the retaining wall and car park adjacent the northern disposal field has potential for effluent to enter the subsurface drainage line and also to discharge onto the car park area in wet weather;
- Additional area is required to discharge effluent safely.

Other Matters

- Elevations do not accurately depict the appearance of the development as retaining walls and height of excavation has not been shown on the elevations;
- Retaining walls are very extensive but appear to comply with manufacturer's guidelines

Summary

- The most significant items are listed in red;
- New proposals for discharge of effluent disposal on-site are required;
- The proposal cannot comply with the DTS provisions of the BCA so a performance assessment will be required. This will potentially involve NSW Fire and Rescue and extend the construction certificate process;
- Consolidation of the two lots is required.

Andrew Henry