

1. EXECUTIVE SUMMARY

WA Planning and Logistics Pty Ltd provides the following report for the purpose of lodging a development application upon Lot 3 & Lot 1167 Bootenal Road, Bootenal. The proposal ultimately seeks the approval of the following use:

- Agriculture – Intensive

Lot 3 is an existing intensive agriculture site (growing of cucumbers) and it is proposed that this land use be expanded across to Lot 1167. Lot 1167 will have additional greenhouses constructed (also for the growing of cucumbers) with all product being transported internally along access roads through to Lot 3 where the produce will be processed and packed within the existing sheds.

This report seeks to provide a comprehensive overview of the proposed development and how the development and use is intended to be managed.

Ultimately the proposal seeks the construction of 75 greenhouses over 3 stages of development upon Lot 1167. There will also be additional ablutions and storage for equipment and workers upon Lot 1167.

A site plan, floor plan and elevations for all buildings have been provided in support of this proposal, as well as a Transport Impact Statement.

It is considered that given the scale of the lots within the area and the land uses that the extension of the intensive agriculture land use will not impact upon the character of the property or adjoining land and that the use of the lot for both the growing of vegetables to sow and reap those products is in keeping with the rural pursuits expected for this zoning.

4. PROPOSED DEVELOPMENT

4.1 LAND USE

The application seeks the approval for green houses to be constructed upon Lot 1176 for the purpose of 'agriculture intensive' for the growing of cucumbers. This is essentially an extension of the current activities upon Lot 3. All product grown upon Lot 1167 will be internally transported through to Lot 3 to be processed and packed within the existing sheds.

4.2 BUILT FORM

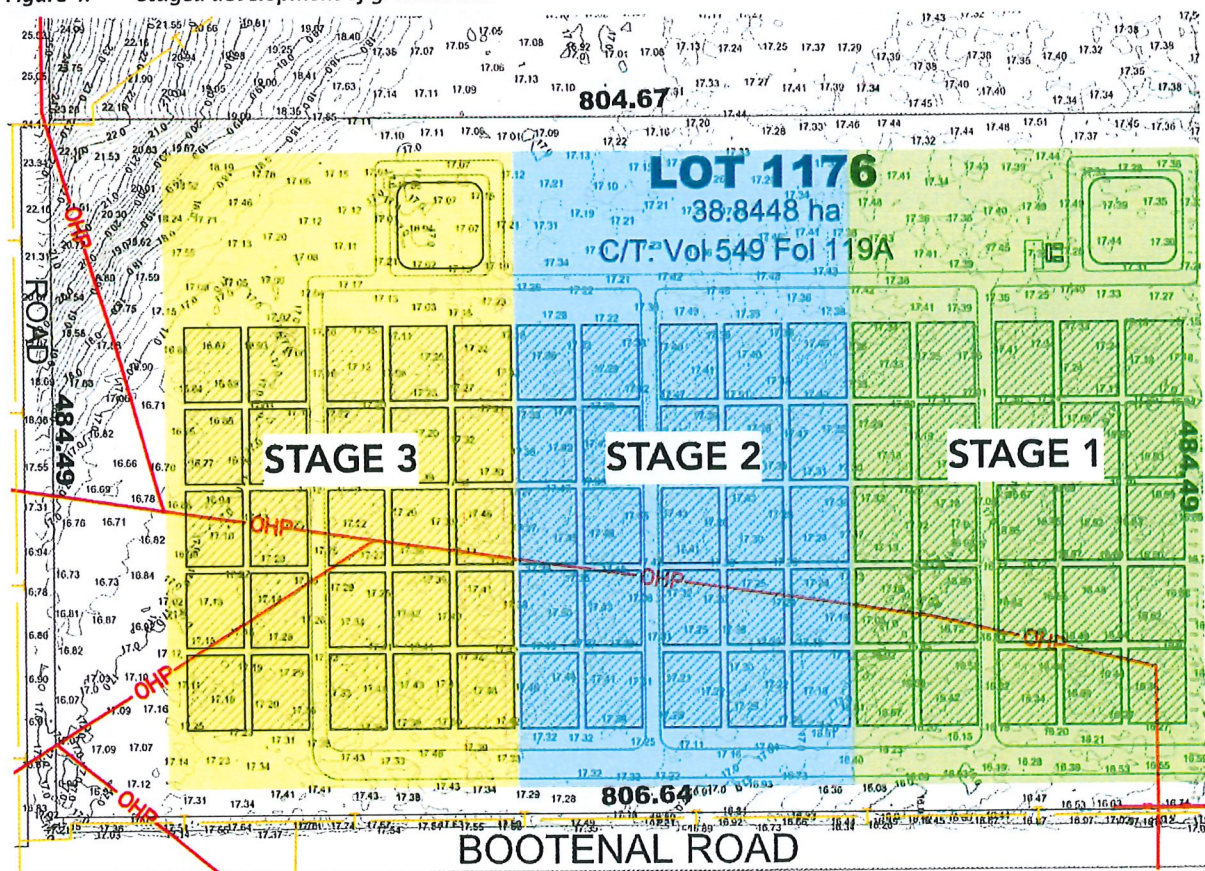
A full copy of the development plans (including site, floor and elevation plans) for each form of development has been included separately.

Propagation Tunnels

Each greenhouse is 52m x 40m in area and consists of 5 tunnels. Development of the tunnels will occur in 3 stages. Each stage will see the construction of 25 greenhouses (125 tunnels).

The first stage is anticipated to be undertaken in late 2022 with stage 2 in 2025 and stage 3 in 2027.

Figure 4: Staged development of greenhouses



Transportable dining/recreation room

- This building will be constructed as part of Stage 1
- dimensions – 13.31m x 10.2m (including verandahs and laundry), having a total combined floor area of 131.7m².
- Second hand transportable dining room comprises CCS Mesa Profile wall cladding and custom orb roof sheeting in good condition.

Figure 5: *Photos of actual building to be bought to site*



Sea container and Dome Structure

This structure will be constructed as part of Stage 1. The applicant seeks the construction of a sea container and dome shelter structure to provide ablution facilities, enclosed storage and a covered area for the parking of equipment. The sea containers will be painted colorbond colour 'wilderness' (mid green tone) and the dome will be white which will match with the surrounding landscape and the white of the greenhouses.

Figure 6: 3d Rendering of proposed structure (red containers will be 'wilderness' green)

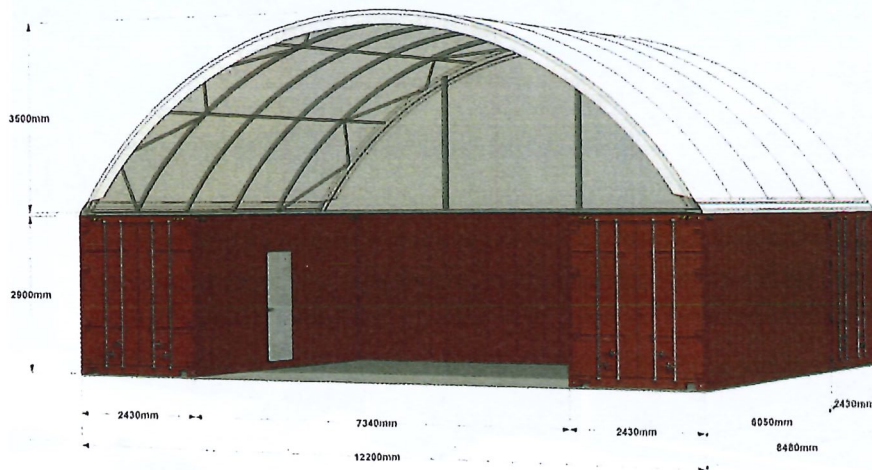


Figure 7: Example of colorbond colour 'wilderness'



5. MANAGEMENT MEASURES

Environmental issues and potential impacts arising from the operation of an extractive industry can be managed in such a way as to minimise or eliminate those factors. The following information contains the processes and measures that the company has initiated to provide confidence in its operation of the extractive industry to ensure there is no detrimental impact on the surrounding land, land uses or the environment.

5.1 Visual Management Plan

As the application is for an agricultural use, upon agricultural land it is considered that the view of development is in keeping with the expectations of the rural zoning.

In assessing the visual impact of the development and ongoing operations, the applicant also proposes the following additional actions to manage visual impacts from neighbouring properties and roads:

- Maintain the site in a clean and orderly manner;
- Store any plant and equipment out of sight;
- Store all goods within existing outbuildings up lot 3, no open air storage;
- Maintain access roads in good condition;
- Maintain greenhouses in good conditions with no rips or tears;
- Ensure that the security fencing, signage and gates are of a design and scale that is in keeping with a rural area.

Figure 8: Existing development on Lot 3 demonstrating a neat and tidy development



5.2 Noise Management Plan

Noise has the ability to impact those operating on a site, however noise can also impact on those outside of the facility and it is therefore important to reduce the potential for detrimental impact through sound operational practices and mitigation measures.

The noise generated from this site will be noise associated with the movement of tractors within the site to transport cucumbers from the greenhouses to the existing sorting and packing sheds upon Lot 3. The use of tractors is common place in a rural area and therefore not considered detrimental to the amenity of the

area. This is a low level of noise and a noise source that is typical for the area. The most major sources of noise for the area are the brickworks, trains traversing along the railway line and traffic movement along Edward Road which is one of the major haulage routes for the area.

Although the operation of tractors is not considered an issue, the applicant proposes the following actions to assist in the management of noise:

- Provide appropriate PPE to workers;
- Ensure equipment is turned off when not in use;
- Ensure equipment is in good repair;
- Maintain internal access roads in good condition;
- Ensure transport vehicles do not exceed 10km/hour along internal roads;
- Signage to be erected at the frontage of the property providing contact details for the site
- Ensure any noise complaints are followed up promptly.

5.3 Dust Management Plan

There are two sources for potential dust emissions associated with the use of the land; dust generated during construction and dust produced during ongoing operations. Dust emissions will be continually monitored to ensure preventative and proactive measures are taken immediately.

Dust is not anticipated to be an issue for this development given that the only source of dust will be from the movement of vehicles along the internal compacted gravel access ways. Given these vehicles will be travelling at very low speeds dust is not going to be an issues in relation to this.

To address the potential sources of dust emissions during construction, the following mitigation measures will be undertaken:

- Water carts will be used as necessary to wet down areas to reduce potential dust emissions, this will include:
 - Areas of land to be disturbed for construction purposes prior to commencement of works
 - Gravel stockpiles prior to spreading
 - Access roads under construction and/or already constructed. Please note that limited water is to be applied at a time to remove dust emissions but avoid the production of mud issues for the site. Multiple applications per day with the water cart will ensure that this balance can be achieved between dust suppression and avoiding over wetting the accessways
- Speed restriction of 10km/hour on internal access roads supported by signage
- Sewing of grass species within undeveloped areas of land to ensure there are no bare areas of earth to be affected by wind and water erosion

To address the potential sources of dust emissions during ongoing operations, the following mitigation measures will be undertaken:

- Speed restriction of 10km/hour on internal access roads supported by signage
- Sewing of grass species within undeveloped areas of land to ensure there are no bare areas of earth to be affected by wind and water erosion
- Signage to be erected at the frontage of the property providing contact details for the site
- Ensure any dust complaints are followed up promptly.

5.4 Odour Management Plan

The source of potential Odour would primarily come from the cucumber chemicals applied within the green house. A list of insecticides and fungicides and associated odour scape is shown in the below Table.

Table 1: Odour characteristics of chemicals used onsite (GHD, 2020)

Product	Odour characteristic
Insecticide	
Movento	Weak
Acramite	Sweet
Success	Musty
Vertimec	Hexanol
Fungicide	
Flute	Aromatic
Switch	Weak
Vivando	Musty
AgriFos 600	Neutral
Kusabi	Neutral

Although there is spaying within the green houses, the green houses are enclosed during the spaying process. Therefore, the likelihood of these odour sources causing a nuisance offsite due to spray drift is unlikely. Spraying is also only undertaken if there is a pest issue, which is uncommon based on the history of operations upon Lot 3, a trend that is highly likely to continue through the expansion to Lot 1167.

Due to the lack of odour impacts, there is no requirement to mitigate potential effects of odour. There will be no odorous impacts from spray drift due to emissions related to fungicide or insecticide.

To address the potential sources of odour emissions during ongoing operations, the following mitigation measures will be undertaken:

- Greenhouses to be closed during any spraying efforts
- Workers to be supplied with appropriate PPE during application
- Signage to be erected at the frontage of the property providing contact details for the site
- Ensure any odour complaints are followed up promptly

5.5 Traffic Management Plan

Traffic Impact Statement

A Traffic Impact Statement has been undertaken for the development which takes into consideration the existing traffic counts for the brickworks and other existing developments within the area as well as the existing traffic movements upon Lot 3 for the current intensive agriculture operations.

The applicant is to implement the recommendations of the TIS in perpetuity for the life of the development.

Access and Crossovers

Lot 3 contains two existing access and egress points to Bootenal Road, with the closest crossover being 230 metres from the Edward Road and Bootenal Road intersection. This provides a clear in and out pathway through the development for ease of access for incoming and outgoing traffic movements. These crossovers have been used for many years and are maintained to a high standard.

The compacted road standard of Bootenal road and the long and clear sightlines both at the crossover to the property and the intersection of Edward and Bootenal Roads does not warrant any upgrades in association with this land use.

Figure 9: Photographs of existing access points and driveways to lot from Bootenal Road



Figure 10: Photograph showing the Edward Road and Bootenal Road intersection



Figure 11: Photographs showing the sightlines north-west along Edward Road



Figure 12: Photographs showing the sightlines south-east along Edward Road



Figure 13: Photographs showing the approach to the intersection from the lot's driveway, respectively.



5.6 Environmental Management Plan

The Environmental Protection Act 1986 is the principal legislation for the prevention, control and abatement of pollution and environmental harm, the regulation of clearing, and the conservation, preservation, protection, enhancement and management of the environment. Clearing of native vegetation is an offence unless a clearing permit has been granted or an exemption applies.

The site contains no remnant vegetation as the land has been cropped for broad acre agricultural purposes for many decades.

Under Section 51B of the Environmental Protection Act, the Minister for Environment may declare a specified area to be an 'environmentally sensitive area (ESA)'. A search of Department of Environment Regulation (DER) records indicates that this property is not within an environmentally sensitive area.

5.7 Lighting Management Plan

No lighting is proposed as part of this application as all activities are undertaken within daylight hours only.

5.8 Stormwater & Drainage Management Plan

There are no Department of Environment Regulation Environmentally Sensitive Areas, RAMSAR Wetlands, or Department of Water Public Drinking Water Source Areas within the proposed development area.

All stormwater from the green houses is to be collected and stored within a new dam upon the property. This water in turn is reused to water the vegetable products.

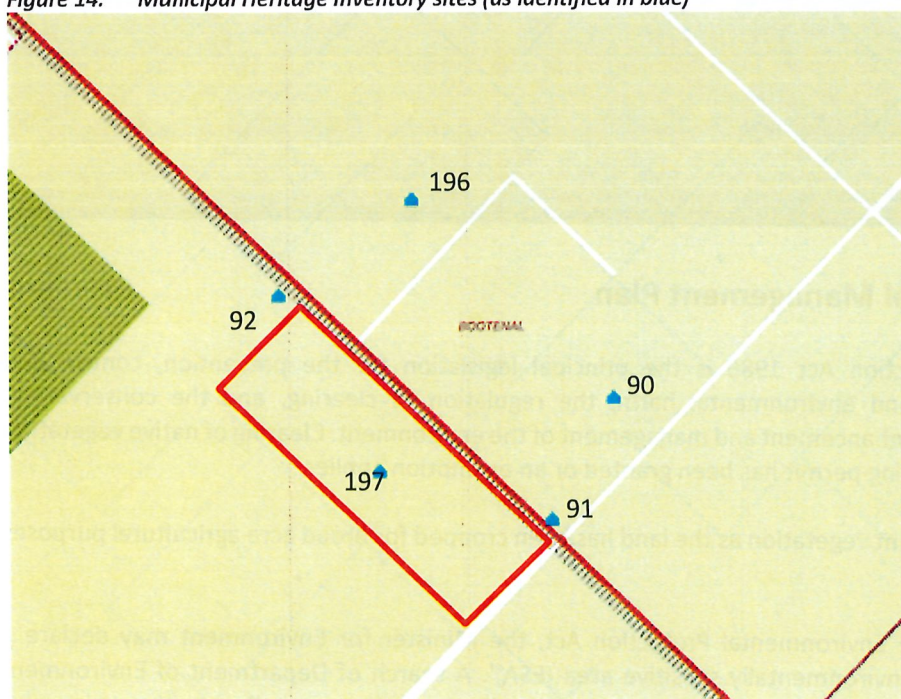
Effluent disposal for the ablution facility will be via a commercial septic tank and soak well system, with the design of this system currently being prepared by a licensed plumber to meet Department of Health requirements. The effluent disposal system application will be lodged together with a Building Application at a later date.

A detailed stormwater plan for Stage 1 of development will be provided on application for a building permit and will show all drainage being captured within the proposed dam.

5.9 Heritage Management

There are five sites listed upon the City of Greater Geraldton's Municipal Inventory of Heritage Places that are located upon, or are adjacent to, Lot 3, as shown in the figure below.

Figure 14: Municipal Heritage Inventory sites (as identified in blue)



These five sites are as per the details in Table 2, below:

Table 2. Heritage sites in proximity to Lot 3

Name	Address	MI No.	Mgmt Category	State/ Scheme Heritage list
Railway Gatekeeper's Cottage Site	Lot 3 Bootenal Road	197	6	No
Bootenal Light Tavern	1175 Edward Road	91	2	No
McGuinness Cottage Site	1035 Edward Road	196	6	No
Haunted Cottage	1034 Edward Road	92	4	No
Murphy Cottage Ruin	Edward Road	90	4	No

None of the above sites are listed on a Local Government Heritage List or State Heritage List and therefore are not subject to additional statutory provisions. It is noted for further information, however, that the (onsite) Railway Gatekeeper's Cottage has been demolished and therefore that Municipal Inventory listing (MI 197) has been archived.

Furthermore, it is considered that the setback distance between the proposed development and the Bootenal Light Tavern (with a Management Category of 2) is approximately 400 metres, with there being substantial existing built infrastructure located between the two. Therefore, it is unlikely that the proposed development would impose any significant additional impacts upon that heritage place.

A search of the Department of Aboriginal Affairs Aboriginal Heritage Inquiry System demonstrated no Registered Sites or other heritage applications at this time.