FINAL

Response to Submissions

Proposed S96 Modifications to Timber Manufacturing Facility

Borg Panels

124 Lowes Mount Road, Oberon NSW

Borg Panels Pty Ltd

7th June May 2018

Revision History

Rev No.	Revision Date	Author / Position	Details	Authorised	
				Name / Position	Signature
0	06/03/18		Draft	Victor Bendevski Environmental and Regulatory Compliance	
1	23/03/18		Draft	Victor Bendevski Environmental and Regulatory Compliance	
3	31/05/18	Mark Daniels Planning and Development Manager	Final	Victor Bendevski Environmental and Regulatory Compliance	
4	7/6/2018			Victor Bendevski Environment and Regulatory Compliance	

Table of Contents

1 Introduction

1.1 Background

Borg Constructions Pty Ltd proposed a number of s96 modifications to Development Consent SSD 7016, granted by the Minister for Planning on 29 May 2017.

A Statement of Environmental Effects (SEE) (Borg Construction, 19 January 2018 Rev 1) was submitted to Department of Planning and Environment (DP&E) for review. DP&E then provided the SEE to relevant government agencies for comment. Submissions received from all agencies are considered in this report.

1.2 Purpose of this Report

The purpose of this report is to detail and provide responses to issues raised in the submissions received from various departments as part of a recent application to the Department of Planning and Environment for modification of State Significant Development approval 7016

Additionally, a further change to the finished board automated warehouse facility is proposed. The potential environmental impacts of the further extension are consistent with the original modification and hence are assessed within this report.

1.3 Structure of this Report

This Response to Submissions Report has been set out to address each of the issues raised in the submissions and is structured as follows:

- **Section 1 Introduction** – provides the Response to Submissions Report purpose and structure
- **Section 2 Proposed s96 Modifications** – provides an overview of the proposed modifications
- **Section 3 Further Proposed Modifications and Impact Assessment** – provides an overview of additional proposed modifications and assesses any potential environmental impacts of the proposal
- **Section 4 Summary of Submissions** – provides a summary of the submissions received and outlines the key issues raised in the submissions
- **Section 5 Response to Submissions** – provides responses to each of the issues raised in submissions received from government agencies
- **Section 6 Statement of Commitments** – presents the final Statement of Commitments
- **Appendix A** – presents the submissions received from government agencies
- **Appendix B** – presents the supporting evidence prepared by various specialist consultants.
- **Appendix C** – presents the further modified plans as detailed in Section 3.

2 Proposed S96 Modifications

The proposed modifications to the approved particleboard and medium density fibreboard manufacturing facilities include:

1) Reorientation of the materials handling building in the South Western corner of the site from an east west orientation to a north south orientation. This change to orientation will allow for more efficient process connections when introducing recovered wood sources. The orientation change better suits the process making it more reliable, saving power and utilising the area available for plant more effectively.

   This change will include modification of the building construction material type from a short wall concrete panel (2400mm high) and colour bond building to a high wall concrete panel (9000mm high) and colour bond building. The building height will also increase from 8000mm to 12000mm.

2) Extension of the mouldings warehouse facility located near the Gate 6 entry to improve in process material flow. This extension will allow conveyor transfer within the building between the laminating lines and storage warehouse, while retaining vehicular access around the periphery of the equipment within the buildings.

   This modification includes building extension, filling of land to match existing floor levels in the immediate vicinity and minimal modification to the surface water management system. A fire rated egress tunnel will also be installed.

3) Extension and further enclosure of the new particleboard chipper/debarker building footprint to assist in transfer of wood materials and increase the storage volume for bark. The debarker and chipping plant utilise concrete and acoustic panelling for the building cladding. The extension would incorporate these design features.

4) Extension of the existing 6-metre high noise bund on the northern boundary by approximately 150m in length using structurally unsuitable soil materials excavated from site. Height will be variable and up to approximately 8 metres at the eastern end of the bund.

5) Design changes to the surface water management system resulting from detailed design outcomes to achieve required flow gradients. The dirty stormwater swale has been realigned to pass water through the existing stormwater first flush basin, prior to entering the new 11000m^3 first flush basin before being discharged to the unnamed creek.

3 Further Proposed Modifications and Environmental Impact Assessment

3.1 Further Extension to Warehouse Facility

A further extension to the previously proposed S96(1a) modification to the mouldings warehouse facility (Point 2 of **Section 2**) is proposed. This design ensures site process, job security and business efficiencies are maintained throughout the life of the project. Whilst the warehouse is probably larger than immediately required, it allows Borg to put forward a design that clearly depicts the commitment to the region and its manufacturing operations at the Oberon township for many years.

The automated warehouse facility located in the North Western area of the site was approved in the original Development Consent SSD 7016 as a 35 metre high building to allow for vertical storage of finished board. The previously proposed S96 modification extended the mouldings warehouse facility to improve in process material flow. The extension was to allow for conveyor transfer within the building between the laminating lines and the automated storage warehouse, while retaining vehicular access around the periphery of the production equipment within the buildings.

A further modification to the finished board automated warehouse building (no longer automated), incorporating the mouldings warehouse facility extension is now proposed. This northern extension will convert the finished board automated storage system from vertical storage to horizontal storage, allow extra room required for the different style of laminating press to be installed and provide further area for storage, loading and unloading of transport vehicles within buildings. The new extended warehouse building will have a reduced height to 12 metres from 35 metres, and extend a total of 207 metres to the north; the width would be approximately 264m.

The previously proposed s96 modification to the mouldings warehouse extension increased the approved warehouse floor area by 2,847m^2, the further proposed s96 modification increases the warehouse to a total footprint of 43,000 m^2.

The construction of the proposed further warehouse extension will take place in 3 stages, details are provided in drawing plan set - Appendix C *Staging plan S96-325* . These stages are proposed as follows:

- 1st stage - Construction of the centre section of the further proposed warehouse, to the maximum distance to the North. Including the new swales, filling to required level for the relevant stage and connection to the existing stormwater first flush basin, including required site access roads
- 2nd stage - Alteration to the stormwater flow path at Gate 6, re alignment of the gate 6 site entry and construction of the remaining western part of the proposed warehouse building.
- 3rd stage - Construction of the remaining Eastern part of the building, remaining surrounding access roads and reclamation of part of the spring dam.

3.2 Environmental Impact Assessment

3.2.1 Traffic and Transport

Due to the increased size of the warehouse, a greater quantity of structural and civil materials will be required for construction. As the construction will be staged, deliveries to site will be conducted over a greater time period and therefore reduce any impacts on the local road network.

In addition to the original approved automated warehouse and hardstand area a further 90,000m3 of VENM and ENM fill will be required to raise the height of the ground for the new proposed warehouse, this will require an additional estimated 3000 truck movements. It is proposed that this will be carried out over a greater length of time, if this is spread over 6 months movements increase by 15 or 16 per day. When taken in context of the larger development this results in a modest increase to the sites overall truck movements and impacts to surrounding road network.

Materials required for the construction of the proposed warehouse building will be delivered sporadically throughout the project; total deliveries are estimated to be less than 500. However, as the structural columns and beams are generally freighted to Oberon by Borg trucks, which are frequently heading to the Oberon site unladen to pick up manufactured board products, which will be utilised to the maximum extent possible and thus will reduce the impact on the local road network.

These minimal impacts discussed above are further supported by Original SSD project application *Request for further information prepared by SMEC, dated 21st September 2016*. The investigation calculated findings for various compounding growth scenarios for the development and surrounding area to determine when the road network would reach capacity. This concluded:

> *The 3 assessments undertaken all indicate that the key intersections on the surrounding road network consist of ample spare capacity to accommodate a substantial amount of additional traffic. In addition, Assessment 3 indicates that the estimated traffic generation can be exaggeratedly substantially and it will still not result in the need to introduce upgrades to the surrounding road network. As such, it is concluded that the proposed development will not have any significant adverse impact on the surrounding road network.*

An additional 30 car parking spaces have been incorporated into the new design, as the area is predominantly warehouse space we do not foresee any further requirements.

3.2.2 Air Quality

The further proposed S96 modifications will result in no change to predicted air quality impacts resulting from operation. The proposed modifications are predominantly to building design; processes conducted within the buildings remain functionally the same, and therefore have not changed inputs or findings of the air dispersion modelling undertaken for the development (Todoroski Air Sciences, 16 Feb 2017).

3.2.3 Noise and Vibration

The further proposed warehouse extension aims to enclose more activities within buildings ultimately improving noise attenuation around the site. The proposed extension requires limited earthwork activities to provide uniform floor levels across the site; hence, there will be no impacts from vibration due to construction activities.

Global acoustics were engaged to provide advice and assess the potential impacts from the proposed warehouse operation and related construction activities at the nearest sensitive receptors. Primary findings from this modelling assessment are;

> *Whilst the contribution from the truck movements is predicted to increase by 3 dB during noise enhancing temperature inversion conditions, site total noise emission is predicted to increase by an insignificant 0.1 dB, and remain 4 dB less than the most stringent night period criterion.*

Further details of the assessment are provided in **Appendix B**, *Global Acoustics report* ***18090_L01_ Revision1***

3.2.4 Soil

The proposed further warehouse extension will require realignment of the outer clean water conveying swale and the noise mound at the area parallel to Lowes Mount road.

It is proposed any spoil excavated from work in this area will be re used in the construction of the extended noise mound along the Northern and Western boundary of the project site.

The stormwater swale conveying runoff from Lot 1 DP868536 and Lot 1 DP 155561 comingled with the runoff from Lowes mount road will require some realignment along the western boundary of the project site. It is noted that this swale is ephemeral and the works are only required in a limited area upstream, 1047m, of the intersection with King Stockyard creek. Furthermore, as there is significant post activity treatment available in the swales following the works and the fact that the works will be conducted in accordance with *Managing Urban Stormwater - Blue book* it is anticipated there will be limited impacts.

The area for the footprint of the proposed further warehouse extension (over Lot 24,DP 1148073) primarily requires fill and therefore will not disturb any existing soil layers. As part of the original State Significant Development project application Return to Submission, remediation of the above land parcel had been effected by CSR prior to the Borg purchase in 2015. However, Borg confirms that fill from excavations in this area will be retained in the area.

3.2.5 Ecology

A Biodiversity Assessment (Peak Land Management, May 2016) was prepared to inform the assessment of the original Project application. This report concluded;

> *the Project site is severely disturbed, with most native vegetation under and around the existing facility being cleared, and exotics or planted species occurring around the northern, western and parts of the eastern sides of the site*.

The proposed further warehouse extension develops land further into a heavily disturbed area of the site. Native vegetation of any significance will be retained post development.

These proposed extensions are anticipated to have no significant impact to ecological matters. Although Apple Box – Yellow Box Dry Grassy Woodland of the SE Highlands Bioregion is recorded on the eastern parts of the site, the proposed S96 modifications do not impact the area of this Endangered Ecological Community (EEC).

3.2.6 Water

Sustainability Workshop were engaged to asses potential impacts from construction of the further proposed warehouse building, these findings are detailed below:

The site surface water management model prepared as part of the projects SSD application utilised a nominal length of 300m for the northern dirty water swale. The proposed modification details the length of this swale at 470m, detailed modelling concluded;

> *The proposed increase in impervious area will have no detrimental impact on water quality leaving the site or on volumes of runoff*

The further proposed warehouse extension at the north west of the building footprint will encroach on the spring fed dam located at the north of the site. This area will require reclamation to provide suitable structural footing for the new building, driveway and allow sufficient space for the changes to the surface water management system.

Reclamation of the spring fed dam on site has been assessed and it is concluded that the;

> *Reclamation should not impact on long-term viability of the groundwater source if the advice with in the assessment was followed.*

The existing site Effluent overflow dam is proposed to be reduced in area however; it is anticipated to increase the depth to restore the original storage capacity. As this is a site effluent processing dam that is not deemed necessary for the operation of the project, hence it has not been assessed by The Sustainability workshop.

Further details of the assessment are provided in **Appendix B,** *Sustainability workshop* ***Proposed S96 Mod Borgs Oberon****.*

3.2.7 Conclusion

Section 3 details the further proposed warehouse extension and provides the necessary assessments to conclude the proposed modification remains significantly the same and that the impacts to environment are relatively minor. Therefore, it is requested that the Department review the increase in size of the Northern warehouse, detailed within, concurrently with the previously submitted request for modification*, Statement of Environmental Effects (SEE) (Borg Construction, 19 January 2018 Rev 1).*

3.2.8 Modification of conditions of consent

Part A: Administrative conditions of development consent 7016 requests Modification of existing development consent for the project site, as follows

> *A.26 - Within 6 months of the date of this consent, the applicant must modify DA 27/95 as specified in Schedule 3 of this consent, in accordance with Clause 97 of the EP&A Regulation*

Borg requests that Clause A.26 and its related Schedule 3 be removed from the consent as the modification cannot be carried out due to the land considerations referenced.

4 Summary of Submissions

4.1 Submission Process

Submissions in relation to the S96 (1a) modification were received from DP&E and relevant government agencies. These submissions were then provided to the proponent for response and are attached in Appendix A. All submissions were reviewed and issues raised have been addressed in this Response to Submissions Report.

4.2 Submissions Received

In total, four (4) submissions were received:

- Department of Planning and Environment;
- Department of Industry – Lands & Water and Department of Primary Industries;
- Office of Environment & Heritage; and
- NSW EPA.

A copy of the above submissions are provided in **Appendix A**.

5 Response to Submissions

Table 1 – Agency Issue and Borg Response to Submission

Issue	Response
Department of Planning and Environment	
Construction Traffic Movements – I note the increase to construction traffic is internal only (pg. 15). Can you explain further, as to why this is the case? Are there any additional external traffic movements associated with the modification works?	Construction of the proposed s96 modifications will require transport of additional building materials to site via road. These materials will include steel, concrete panelling and pre-mixed concrete for slab construction. It is anticipated these additional truck movements would include approximately 150 trucks staged over several months. The original EIS application accounted for the truck movements required to fill the area required for the Automated warehouse and Northern hardstand. The existing designated heavy vehicle routes to the site would be utilised by trucks associated with the construction phase. The routes include Duckmaloi Road to Albion Street and O'Connell Road to Albion Street, which form the heavy vehicle routes from the Sydney and Bathurst regions, respectively. The Traffic Impact Assessment Report (SMEC, 06 May 2016) concluded that the existing road network was capable of absorbing any traffic increase from the original Project as unmodified without any significant compromise. An additional 150 trucks arriving at different times across different days would have minimal, if any impacts, on the road network when compared to the approved Project.

Issue	Response
Clarify whether the modification will result in the update of any management plans.	The Construction Environmental Management Plan (CEMP) will require updating to include: • Erosion and Sediment Control Plan that incorporates control measures for the modification. The Operational Environmental Management Plan (OEMP) will require updating to include: • Crown Lands in the External Notification Protocol for incidents causing or threatening material harm to Kings Stockyard Creek. Prior to commencement of operation of the Project, the Surface Water Management Plan will be revised to include updated details of the modified surface water management system. Prior to commencement of operation of the Project, the Operational Noise Management Plan will be revised to include proposed noise mitigation measures.
Please include any additional mitigation measures and include this in your response and/or updated statement of commitments.	Refer **Section 5**

Issue	Response
Department of Industry – Lands & Water and Department of Primary Industries	
The proponent should clarify whether the proposed diversion of water into the stormwater treatment pond will result in a change to the water balance at the site. Should this result in an increase in water extractions from the stormwater treatment pond and a reduction in discharge from the site any reductions will need to be considered in terms of impacts to downstream users and the environment.	The approved first flush basin, to the east of the emergency catchment, was included in the original Project design. Detailed design has identified improved water quality discharge from site if all dirty stormwater passes through this first flush basin. This modification includes constructing a swale directly from the existing stormwater flush basin to the new first flush basin. In the approved design, water passes from the existing stormwater flush basin through a small basin, immediately east of the Spring Dam, and could either be discharged directly from site or diverted into the first flush basin prior to discharge. The first flush basin also accepts dirty stormwater from the whole site, including the southern and central portions of the site. The modification now proposes an increase, by 7ML annually, to the site harvesting scheme. This is primarily a run off control measure but also benefits the town water supply by reducing the demands from the project site. Details of the effects of the proposed modification to the site surface water management are detailed in the response prepared by Sustainability workshop. The Sustainability Workshop (12 September 2016) concluded in their response to submissions to the EIS, that the proposed harvesting scheme, when taken in its industrial context of extensive impervious areas, is most likely to result in an improvement in creek health and therefore lead to an improvement in the diversity and abundance of biota downstream of the site. Furthermore it clarified the expansions increased the water flow from site and therefore had a net effect on the downstream users Prior to commencement of operation of the Project, the Surface Water Management Plan will be revised to include updated details of the modified surface water management system.

Issue	Response
In the event of approval of the project, the following should be included as conditions of consent:	
• An Erosion and Sediment Control Plan must be developed in consultation with DoI Water (water.referrals@dpi.nsw.gov.au) prior to commencement of construction.	The CEMP will be revised to include an updated Erosion and Sediment Control Plan.
• The proponent must update the Stormwater Management Plan in consultation with DoI Water prior to commencement of construction.	Prior to commencement of operation of the Project, the Surface Water Management Plan will be revised to include updated details of the modified surface water management system.
• Works within waterfront land must be carried out in accordance with the Guidelines for Controlled Activities on Waterfront Land (2012).	Noted.
• The proponent must provide notification to Crown Lands of any uncontrolled discharge from the 'First flush basin' to the unnamed creek that discharges to Kings Stockyard Creek.	The Operational Environmental Management Plan (OEMP) includes notification procedures and actions for exceedances and incidents at the site. The External Notification Protocol will be updated to include notification to Crown Lands for incidents causing or threatening material harm to Kings Stockyard Creek.
Office of Environment & Heritage	
OEH understands that the proposed modifications will be restricted to areas identified as non-native vegetation in the environmental assessment for the original proposal. The proposed modification will not impact on the endangered ecological community (Apple Box -Yellow Box Dry Grassy Woodland) located on the eastern part of the premises or the established vegetation located at the northern noise bund. As a result, OEH have no specific comments to make on the proposed modification.	The proposed modification will not impact on the endangered ecological community (Apple Box -Yellow Box Dry Grassy Woodland) located on the eastern part of the premises or the established vegetation located at the northern noise bund.

Issue	Response
NSW EPA	
The EPA has reviewed the SEE for the proposed modifications and considers that the proposed changes will not lead to any significant impacts on air, water or noise quality beyond the site boundary. The current conditions on the environment protection licence for the Borg premises are appropriate to control the impacts associated with the proposed modifications. The EPA recommends, however, that the Department of Planning and Environment includes the following commitments from the SEE in any conditions of consent if the modification application is approved:	Noted.
1. Build an acoustic wall to the specifications described in Section 2.1 of Appendix A. The EPA recommends that this acoustic wall be positioned so that it abuts the Material Handling Building, such that there is no gap between the commencement of the wall and the building.	Borg commits to the construction of an acoustic wall abutting the Materials Handling Building. The minimum dimensions of the wall are 30 metres long and 7.8 metres high. Borg may investigate other options for mitigating noise from the affected noise sources, which could include construction of a suitable building on the southern site boundary and/or providing further attenuation at the source for key plant items. In this case, a suitable evaluation will be undertaken to ensure predicted compliance with relevant noise criteria is maintained. Prior to commencement of operation of the Project, the Operational Noise Management Plan will be revised to include construction of the noise wall.
2. That the Erosion and Sediment Control Plan prepared under consent condition C2 of SSD 7016 is updated to reflect the proposed changes described in the SEE for the modification application.	The CEMP will be revised to include an updated Erosion and Sediment Control Plan.

6 Statement of Commitments

Borg will implement the following reasonable and practical measures to avoid or minimise impacts to the environment that may arise as a result of the proposed s96 modifications to Development Consent SSD 7016.

1. The Construction Environmental Management Plan (CEMP) will be updated to include an Erosion and Sediment Control Plan that incorporates control measures for the modification.
2. The Operational Environmental Management Plan (OEMP) will be updated to include Crown Lands in the External Notification Protocol for incidents causing or threatening material harm to Kings Stockyard Creek.
3. Prior to commencement of operation of the Project, the Surface Water Management Plan will be revised to include updated details of the modified surface water management system.
4. Borg commits to the proposed mitigation measures detailed in response prepared by- *Sustainability workshop* ***Proposed S96 Mod Borgs Oberon****.*
5. Prior to commencement of operation of the Project, the Operational Noise Management Plan will be revised to include construction of the noise wall.
6. Borg will construct an acoustic wall abutting the Materials Handling Building. The minimum dimensions of the wall are 30 metres long and 7.8 metres high.
7. The proposed modification will not impact on the endangered ecological community (Apple Box -Yellow Box Dry Grassy Woodland) located on the eastern part of the site, or the established vegetation located at the northern noise bund.

Appendices

Appendix A – Submissions from government agencies

Our ref: DOC18/87726

Your ref: SSD 7016 MOD 1

Ms Pamela Morales
Planning Officer, Industry Assessments
Department of Planning and Environment
pamela.morales@planning.nsw.ogv.au

Dear Ms Morales

Notification of s96(1A) modification application - Borg Panels Timber Processing Facility - Oberon (SSD 7016 MOD 1

Thank you for your invitation for the Office of Environment and Heritage (OEH) to comment on the proposed modification to the approved Borg Panels Timber Processing Facility.

OEH understands that the proposed modifications will be restricted to areas identified as non-native vegetation in the environmental assessment for the original proposal. The proposed modification will not impact on the endangered ecological community (Apple Box -Yellow Box Dry Grassy Woodland) located on the eastern part of the premises or the established vegetation located at the northern noise bund. As a result, OEH have no specific comments to make on the proposed modification.

If subsequent information indicates that any areas within the OEH's responsibility require further investigation, OEH may provide future input.

Should you require further information regarding issues that are the responsibility of the OEH please contact Erica Baigent on 02 6883 5335 or erica.baigent@environment.nsw.gov.au .

Yours sincerely

PETER CHRISTIE
Director Regional Operations
North West

15 February 2018
Contact Officer: Erica Baigent
02 6883 5335

NSW GOVERNMENT Department of Industry

OUT18/1989

Ms Pamela Morales
Industry Assessments
NSW Department of Planning and Environment

pamela.morales@planning.nsw.gov.au

Dear Ms Morales

Borg Panels Timber Processing Facility (SSD 7016 MOD 1)
Comment on the Statement of Environmental Effects (SEE)

I refer to your email of 1 February 2018 to the Department of Industry in respect to the above matter. Comment has been sought from relevant branches of Lands & Water and Department of Primary Industries.

Any further referrals to Department of Industry can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

The department has reviewed the SEE and provides the following recommendations.

- The proponent should clarify whether the proposed diversion of water into the stormwater treatment pond will result in a change to the water balance at the site. Should this result in an increase in water extractions from the stormwater treatment pond and a reduction in discharge from the site any reductions will need to be considered in terms of impacts to downstream users and the environment.

- In the event of approval of the project, the following should be included as conditions of consent:

    - An Erosion and Sediment Control Plan must be developed in consultation with DoI Water (water.referrals@dpi.nsw.gov.au) prior to commencement of construction.

    - The proponent must update the Stormwater Management Plan in consultation with DoI Water prior to commencement of construction.

    - Works within waterfront land must be carried out in accordance with the Guidelines for Controlled Activities on Waterfront Land (2012).

    - The proponent must provide notification to Crown Lands of any uncontrolled discharge from the 'First flush basin' to the unnamed creek that discharges to Kings Stockyard Creek.

Yours sincerely

Alex King
Director Cabinet and Legislation Services
15 February 2018

Your reference :
Our reference : EF13/3921; DOC18/59794-02
Contact : Mr Andrew Helms; (02) 6332 7604

Ms Pamela Morales
Senior Planning Officer
Department of Planning & Environment
GPO Box 39
SYDNEY, NSW, 2001

14 February 2018

Dear Ms Morales

BORG PANELS – PROPOSED EXPANSION OF OBERON FACILITY (SSD 7016 MOD 1)
EPA comment on Statement of Environment Effects

I refer to your e-mail dated 1 February 2018 and request for the Environment Protection Authority (EPA) to provide comment on the Statement of Environmental Effects (SEE) prepared for the modification application submitted by Borg Construction Pty Limited for the above project.

The EPA has reviewed the SEE for the proposed modifications and considers that the proposed changes will not lead to any significant impacts on air, water or noise quality beyond the site boundary. The current conditions on the environment protection licence for the Borg premises are appropriate to control the impacts associated with the prosed modifications. The EPA recommends, however, that the Department of Planning and Environment includes the following commitments from the SEE in any conditions of consent if the modification application is approved:

1. Build an acoustic wall to the specifications described in Section 2.1 of Appendix A. The EPA recommends that this acoustic wall be positioned so that it abuts the Material Handling Building, such that there is no gap between the commencement of the wall and the building.

2. That the Erosion and Sediment Control Plan prepared under consent condition C2 of SSD 7016 is updated to reflect the proposed changes described in the SEE for the modification application.

If you have any questions regarding this matter, please contact Mr Andrew Helms at the Central West (Bathurst) Office of the EPA on (02) 6332 7604 or via e-mail at central.west@epa.nsw.gov.au.

Yours sincerely

SHERIDAN LEDGER
A/Manager Central West
Environment Protection Authority

PO Box 1388 Bathurst NSW 2795
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Tel: (02) 6332 7600 Fax: (02) 6332 7630
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Appendix B – Specialist consultant assessment reports.

14th May 2018

Head Office
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Dear Victor,

RE: Proposed S96 Mod for an increase building footprint at Oberon – surface water quality and quantity considerations

We have assessed the proposed S96 modifications to the approved development plans at Borgs Oberon. This letter addresses the implications of the proposed modifications on water quality and quantity.

1.1. Proposal

The S96 proposal includes an expansion of the main production building footprint to the north of the existing building, i.e. toward Gate 6. There would be a trafficable hardstand located around the periphery of the building as shown on the plan.

Previously this area was largely assumed and modelled as a hardstand that was to be used for car parking and storage. This S96 modification sees much of this hardstand area change its landuse and become roof area.

The existing "clean water" swale, which conveys runoff from the paddock on the western side of Lowes Mount Road, and which skirts the northern end of the Borgs site will be modified to have a top width of 10m and a base width of 1m. This swale will be slightly relocated to the north.

Previously we had proposed a grassed swale to accept runoff from the CHH site on the western side of Lowes Mount Road and part of the Borgs site which drained directly to the "inner swale". This swale was known as the "dirty inner swale" as it would accept runoff from the industrial land and be

located adjacent to but inside of the clean water swale. The previous MUSIC water quality model included the inner swale, modelled as a grass swale, with a total swale length of 300m.

This swale remains a key part of the S96 modification proposal however the total length of swale available will be increased to approximately 470m.

The proposal would see some of the spring fed dam reclaimed with a rock and or earth platform and building over the top. Creation of additional impervious area associated with this activity has been accounted for in a revised MUSIC model.

The modification also includes reclaiming part of the spring fed dam. Assessment of this activity is also included below.

1.2. Method and Results

The proposed modification sees additional impervious area constructed. It sees a change in land use from existing pervious area and proposed hard stand to proposed roof and hardstand. On a first principles basis this should result in additional volumes of runoff (from a net increase in impervious area) combined with a fairly neutral impact on runoff quality (roofs are considerably cleaner than hardstands and so will see some improvement in water quality. Conversely, changing a pervious area to either roof or hardstand will see a decline in water quality leading to a fairly neutral position).

The proposed modification was modelled in MUSIC to more accurately determine the impact on water quality using the same method previously adopted. This involved changing the proposed land uses, running the 20 year MUSIC water quality model 10 times (i.e. simulating 200 years) and selecting the maximum water quality values obtained for TSS, TP and TN. Apart from the land use changes described above, two other changes to the model were undertaken. These were:

1) Increasing the volume of the storage pond to reflect a preferred pond volume of 11.1 ML. Previously this was modelled as 6 ML. A design for a pond achieving 11.1 ML has been undertaken and this design allows for the system to function hydraulically while remaining as high above the groundwater as feasible. The footprint of the dam has not changed, the depth will be increased to 1.2m to create the extra volume.
2) Previous MUSIC modelling, which was conservative, allowed for 300m of grassed swale. More detailed construction plans show that there will be 470m of swale. The MUSIC model was amended to reflect the increase in swale length.

1.2.1. MUSIC Water Quality Results

Predicted maximum concentration values for TSS, TP and TN from MUSIC are shown in Table 1 below.

Parameter	Previous Approved Model Results	S96 Mod Proposed Results	EPL limit (mg/L)
Total Suspended Solids (mg/L)	44.1	42	50
Total Phosphorus (mg/L)	0.227	0.229	0.3
Total Nitrogen (mg/L)	9.515	8.92	10

Table 1 Predicted maximum concentration values for TSS, TN and TP

Table 1 shows that the worst case TSS discharge concentration will improve slightly from approved values as will TN while TP will slightly increase but remain below the EPL.

Results for the predicted yield of stormwater from the proposed pond and the volumes of runoff are shown below in Table 2.

Parameter	Previous Approved Model Results (ML/a)	S96 Mod Proposed Results (ML/a)	% change
Volume of runoff from the site	287.5	286.5	0.35%
Stormwater yield from the proposed water quality pond	118.9	126	6%

Table 2 Changes in the volume of runoff and yield – Sec96 mod versus approved

The runoff volume row in Table 2 shows that the proposed additional impervious area will be mitigated by increasing the length of swale from 300m to 470m and increasing the volume of the proposed treatment and reuse pond by 2ML. That is, there is practically no change in site runoff volume.

It is concluded that the proposed increase in impervious area will have no detrimental impact on water quality leaving the site or on volumes of runoff, i.e. runoff regime. The increase in pond volume will see an additional 7 ML of runoff treated and harvested and leave an equivalent volume of water in the town water supply.

1.3. Spring Fed Dam Reclamation

The Spring Fed Dam is a groundwater dependent dam that does not impound surface waters. It is understood that the Spring Fed Dam was created many years ago by previous owners of the site when they had extracted clean fill for construction on the site from this area. This location has a shallow groundwater table and as a result a permanent waterbody was inadvertently created. It is understood that the excavation was abandoned when water started to seep into the pit at a rate

faster than could be economically pumped out. The dam has no notable upstream catchment and is simply a whole in the ground which is filled with groundwater.

This S96 proposal would see a maximum of 30% of the dam reclaimed. Impacts form this proposed activity could occur during both construction or operation.

During Operation: Provided that a porous fill material is chosen to reclaim the dam i.e. allows groundwater to flow through it at a rate equal to or greater than the site clays and is also low in dispersible materials (i.e. less than 10% dispersibility) it is unlikely that there will be any long-term groundwater implications.

If anything, it is concluded that there will be a reduction in evaporation from the surface as the surface area of the dam is reduced. Use of a dispersible clay material would not only be detrimental for water quality it would also be an unsuitable construction material and must be avoided for both of these reasons.

Use of a fill material which had a lower permeability may result in localised groundwater mounding. Because the Spring Fed Dam is located in the low point in the terrain mounding may result in groundwater impacts on the site or adjacent to the site. To avoid having to determine such impacts it is noted that fill material will need to have a permeability greater than or equal to site clays in the area surrounding the Spring Fed Dam.

During Construction: Construction phase impacts to water quality are more likely to occur than long term risks to water quality or water levels. Dewatering of the dam (if it were feasible) is one key risk and the risk here is of causing water pollution.

Construction phase impacts could be mitigated as follows:

- Temporarily reduce the water level of the dam by pumping using the existing water access licence. The purpose of water level reduction is to ensure that spring flows do not leave the site during any period of construction when the dam water quality may be more turbid than normal.
- Engage a geotechnical engineer and investigate both a source of suitable fill material and fill placement method and place the fill material into the dam. This statement assumes that it would not be economically viable to dewater the dam prior to placement of fill.
- It is noted that dewatering by lowering the water table may have substantial local groundwater impacts on surrounding groundwater users. Alternately, isolating the area to be filled in a cofferdam and dewatering the cofferdam would be a resource intensive exercise and may not be economically viable either.
- Do not discharge the pumped dam water off the site into King's Stockyard Creek unless it is free of sediment. Preferentially use it for on-going operations on the site, i.e. as raw process water by pumping into the existing stormwater quality pond. If this is not an option, then

disperse this water across the land downstream of the dam ensuring that it does not runoff into the creek.

- If necessary, apply a flocculant such as Chitosan to the water to settle any silt prior to allowing the groundwater in the spring fed dam to return to a level at which it could flow off the site.
- Provided that a "closed site" approach was adopted whereby for the duration of construction, no dam water left the site then the risk of causing "pollution" under the POEO Act will be minimised. Critical to achieving this outcome is the need to source suitable, non-dispersive material and finding a suitable method of placement for that fill.

Provided the advice contained herein is followed the proposed reclamation should not impact on long term viability of the groundwater source. The reclamation works are unlikely to affect the yield or viability of this valued groundwater source. The proposal does not see any additional extraction of groundwater and so should not affect your existing water access licence.

Yours sincerely,

Mark Liebman, CPEng, MIEAust, MIPWEA.

Director, Principle Engineer

Global Acoustics

Noise and Vibration Analysis and Solutions

12 May 2018

Borg Manufacturing Pty Ltd
2 Wella Way
Somersby NSW 2250
Attention: Victor Bendevski

Dear Victor,

Regarding: Borg Panels Oberon, Proposed Expansion to Mouldings Warehouse Building

1 INTRODUCTION

This letter provides acoustics advice regarding a proposed extension to the mouldings warehouse building at the Borg Panels timber manufacturing facility in Oberon, NSW.

Borg recently submitted a Statement of Environmental Effects (SEE) for a proposed S96(1A) modification to Development Consent SSD 7016, the Borg Panels Oberon Project Approval. One element of the SEE included extension of the mouldings warehouse facility located near the Gate 6 entry to improve material flow. Borg propose to further extend this building approximately 110 metres to the north to provide additional storage capacity.

Plans illustrating the approved mouldings warehouse facility and proposed changes are included as Attachment A.

2 ACOUSTICS ADVICE

This modification includes building extension, filling of land to match existing floor levels in the immediate vicinity and minor modifications to the surface water management system.

The building extension to the north has potential to increase noise emission toward residences to the north of the site due to noise sources advancing closer in that direction. In particular, product truck movements in the north end of site will move approximately 110 metres closer to these residences.

Borg has advised the nearest private residential receivers to the warehouse building are located on Clover Lane (approximately 700 metres north of the existing building). These are shown in Figure 1. The nearest receiver to the site was added to the existing site noise model to evaluate potential noise impact associated with the building extension. 12 truck movements per hour at 10 km/h were modelled travelling around the

northern end of both the existing warehouse alignment and the proposed building extension. Whilst the contribution from the truck movements is predicted to increase by 3 dB during noise enhancing temperature inversion conditions, site total noise emission is predicted to increase by an insignificant 0.1 dB, and remain 4 dB less than the most stringent night period criterion.

On this basis, the proposed building extension should have no significant acoustic implications to long term operational noise emission from the site. Construction noise associated with this modification should be managed in accordance with the approved Construction Noise Management Plan.

Figure 1: Clover Lane Residences

3 CONCLUSION

Based on the above it is my opinion that the proposed extension to the mouldings warehouse building should not materially change noise emission levels from the site. Construction noise associated with the proposed modifications should be managed in accordance with the approved Construction Noise Management Plan.

I trust this information meets your requirements. If you have any questions or need further details please contact me.

Prepared: Jeremy Welbourne
Acoustics Consultant

QA review: Tony Welbourne
Director

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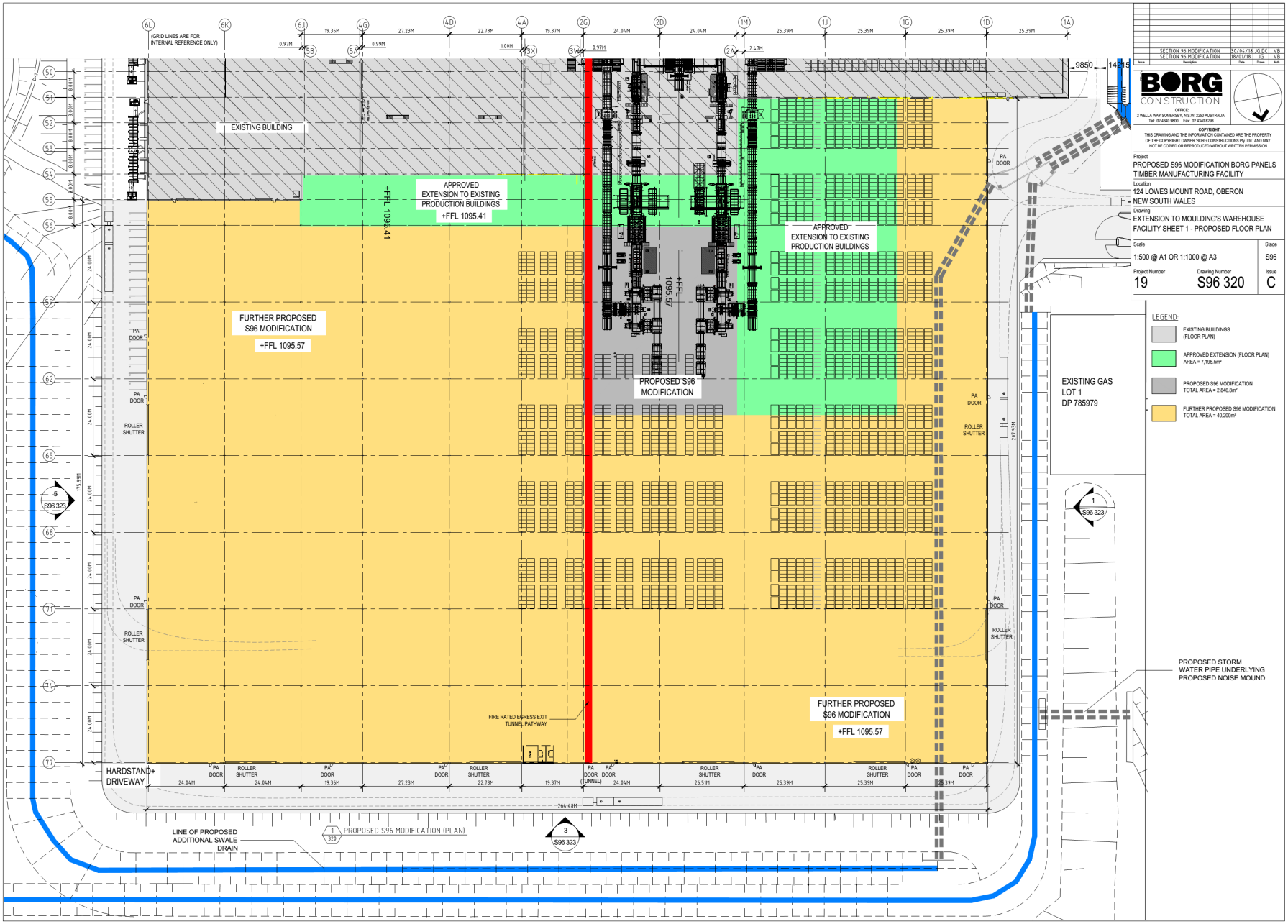
ABN 94 094 985 734

Attachment A



Issue	Description	Date	Drawn	Auth
C	SECTION 96 MODIFICATION	30/04/18	JG	DC VB
B	SECTION 96 MODIFICATION	18/01/18	JG	VB

BORG CONSTRUCTION

OFFICE:
2 WELLA WAY SOMERSBY, N.S.W. 2250 AUSTRALIA
Tel: 02 4340 9800 Fax: 02 4340 9200

Project
PROPOSED S96 MODIFICATION BORG PANELS TIMBER MANUFACTURING FACILITY

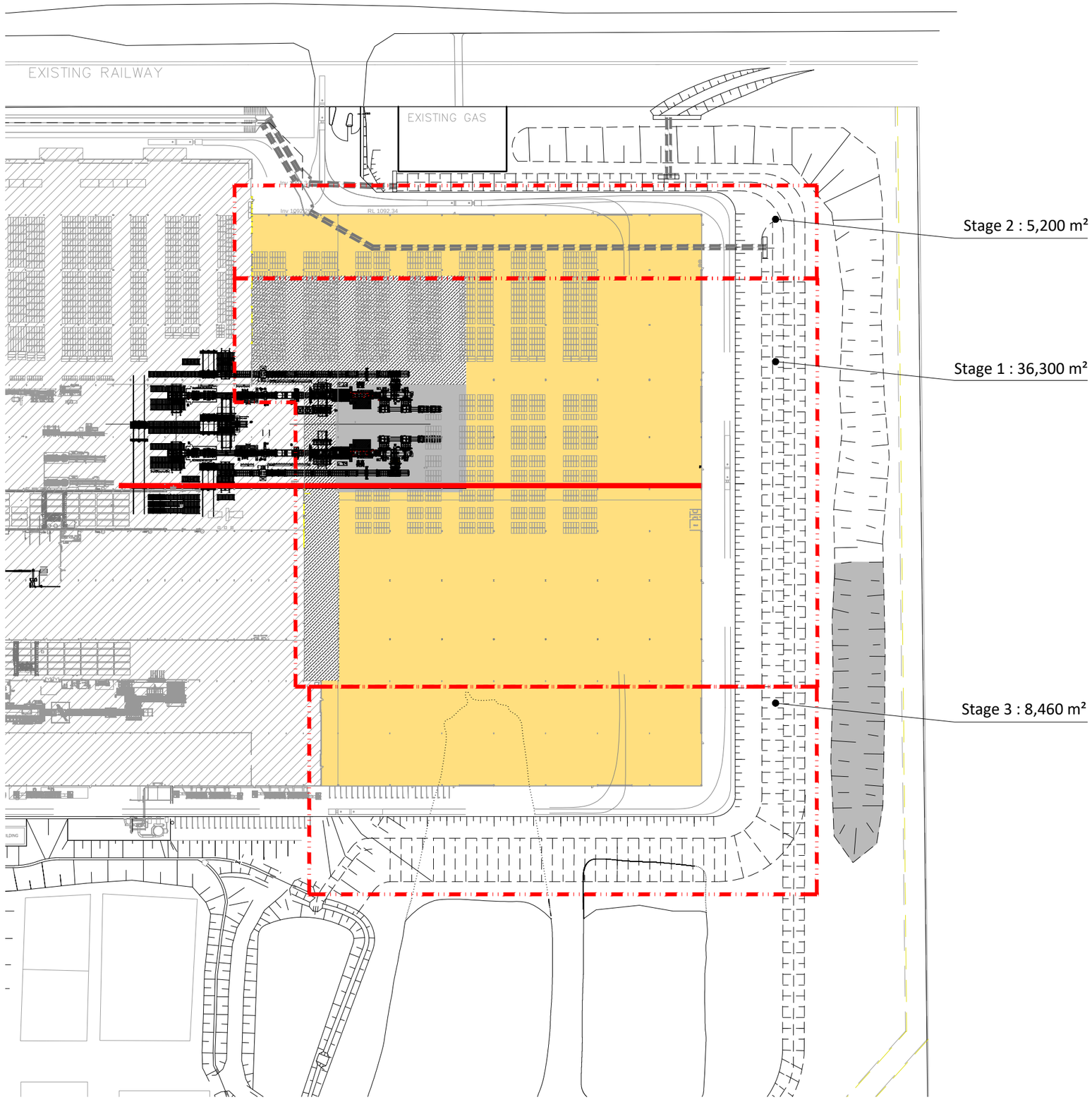
Location
124 LOWES MOUNT ROAD, OBERON NEW SOUTH WALES

Drawing
EXTENSION TO MOULDING'S WAREHOUSE FACILITY SHEET 1 - PROPOSED FLOOR PLAN

Scale	Stage
1:500 @ A1 OR 1:1000 @ A3	S96

Project Number	Drawing Number	Issue
19	S96 320	C

Appendix C – Further proposed warehouse extension plan.



LEGEND:

- EXISTING BUILDINGS
- APPROVED NEW BUILDING
- PROPOSED S96 MODIFICATION
- FURTHER PROPOSED S96 MODIFICATION
- STAGING LAYOUT

0 10 20 30 40 50 70 90m

Issue	Description	Date	Drawn	Auth
A	SECTION 96 MODIFICATION	31/05/18	JG	DC VB

BORG CONSTRUCTION
OFFICE:
2 WELLA WAY SOMERSBY, N.S.W. 2250 AUSTRALIA
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Project
PROPOSED S96 MODIFICATION BORG PANELS TIMBER MANUFACTURING FACILITY

Location
124 LOWES MOUNT ROAD, OBERON
NEW SOUTH WALES

Drawing
STAGING PLAN

Scale	Stage
1:1000(@ A1)	S96

Project Number	Drawing Number	Issue
19	S96 325	A