

TWEED SAND PLANT

MOD1 Operational Traffic Management Plan

Prepared for:

Hanson Construction Materials C/- Tweed Sand Plant
PO Box 2010
Kingscliff NSW 2487

SLR Ref: 620.12479-R02
Version No: v1.3
March 2019



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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Hanson Construction Materials C/- Tweed Sand Plant (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Status	Date	Prepared	Checked	Authorised
620.12479-R02-v0.4	Draft for Road Authority Review	1 November 2018	Chris Lawlor (Associate – Transport Advisory)	Jeffrey Baczynski (Principal – Transport Advisory)	Jeffrey Baczynski (Principal – Transport Advisory)
620.12479-R02-v1.2	Final	20 November 2018	Chris Lawlor (Associate – Transport Advisory)	Jeffrey Baczynski (Principal – Transport Advisory)	Jeffrey Baczynski (Principal – Transport Advisory)
620.12479-R02-v1.3	Revised Final based on DPE Feedback	7 March 2019	Chris Lawlor (Associate – Transport Advisory)	Jeffrey Baczynski (Principal – Transport Advisory)	Jeffrey Baczynski (Principal – Transport Advisory)

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1 Operational Traffic Management Plan Context

1.1 Background

SLR Consulting Australia Pty Ltd (SLR) has been commissioned by Hanson Construction Materials Pty Ltd (Hanson) to prepare an Operational Traffic Management Plan (Operational TMP) for Hanson's Tweed Sand Plant (TSP) operation in Cudgen, NSW.

The Operational TMP is required to satisfy Schedule 3 (*Specific Environmental Conditions*), Condition 25 (*Transport Management Plan*) of the Notice of Modification for Development Consent DA 152-6-2005 issued by the New South Wales (NSW) Department of Planning and Environment (DPE) on 20 August 2018. The notice was issued following an application lodged by Hanson on 7 February 2017 to change the site's condition from an annual extraction limit of 150,000 m³ to transporting no more than 500,000 tonnes of product (sand) from the site per financial year. This modification will potentially result in increased haulage from the site, and therefore an Operational TMP is required to manage the potential traffic impacts associated with this change.

The Notice of Modification constitutes a revision of the Notice of Modification conditions issued in July 2006 for Phases 3 and 4 of TSP and requires the preparation and update of various management plans to guide management of the site.

1.2 Operational TMP Requirements

This Operational TMP has been prepared to satisfy the requirements of Schedule 3, Condition 25 of the Notice of Modification and in turn minimise the impact of site traffic on the safety and efficiency of the road network.

The specific requirements of the condition to prepare an Operational TMP are reproduced in Table 1. In addition, Table 1 details which section of this Operational TMP addresses each of the individual components identified within Condition 25, in order to validate that all components of the condition are addressed by this Operational TMP.

Further to this, Schedule 5 (*Environmental Management, Reporting and Auditing*), Condition 2 (*Management Plan Requirements*) of the Notice of Modification stipulates further generic requirements in relation to the preparation of management plans. The requirements of this condition are reproduced in Table 2 along with references to the sections of the Operational TMP that address each individual component.

This document has been prepared under the supervision of Jeffrey Baczynski, whom DPE has approved as 'a suitably qualified and experienced person'. A copy of this approval is included at Appendix A.

It is noted that the Operational TMP is not intended to replace the need to prepare Construction Traffic Management Plans to support the road upgrade works imposed under various conditions within the Notice of Modification. The required Construction Traffic Management Plans will be prepared at the time the upgrade work designs are prepared, which is appropriate given that the upgrade works are not required until certain triggers are met, which may mean that the works do not commence for potentially several years depending on commercial conditions. Nevertheless, a high level overview of the mitigation strategies potentially implemented as part of future Construction Traffic Management Plans is detailed herein.

Table 1 Operational TMP Requirements: Schedule 3, Condition 25

Item	Condition Requirement	TMP Section
25	<i>The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:</i>	
(a)	<i>be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;</i>	Section 1.2 Appendix A
(b)	<i>be prepared in consultation with RMS and Council, and in accordance with the RTA – Traffic Control at Worksites Manual;</i>	Section 2
(c)	<i>describe the processes in place for the management of truck movements entering and exiting the site;</i>	Section 4
(d)	<i>prohibit trucks departing the site from turning right from Crescent Street to Tweed Coast Road;</i>	Section 4.3
(e)	<i>include a Drivers’ Code of Conduct that includes:</i> <ul style="list-style-type: none"> • <i>details of the safe and quiet driving practices that must be used by drivers travelling to and from the quarry;</i> • <i>a map of the primary haulage route;</i> • <i>safety initiatives for haulage through residential areas, school zones and along school bus routes;</i> • <i>an induction process for vehicle operators and regular toolbox meetings;</i> • <i>complaints resolution and disciplinary procedures; and</i> • <i>details of community consultation measures for peak haulage periods.</i> 	Section 4 Appendix C
(f)	<i>describe the measures to be put in place to ensure compliance with the Drivers’ Code of Conduct;</i>	Section 5 & 6
(g)	<i>include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during road upgrade works; and</i>	Section 4.5
(h)	<i>propose measures to minimise the transmission of dust and tracking of material onto the surface of public roads from vehicles leaving the quarry.</i>	Section 4.4.3
-	<i>The Applicant must not commence operations under Modification 1 until the Traffic Management Plan is approved by the Secretary.</i>	
	<i>The Applicant must implement the approved Traffic Management Plan as approved from time to time by the Secretary.</i>	

Table 2 Generic Management Plan Requirements: Schedule 5, Condition 2

Item	Requirement	TMP Section
2	<i>The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</i>	
(a)	<i>a summary of relevant background or baseline data;</i>	Section 3.1
(b)	<i>a description of:</i> <ul style="list-style-type: none"> • <i>the relevant statutory requirements (including any relevant approval, licence or lease conditions);</i> • <i>any relevant limits or performance measures/criteria; and</i> • <i>the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</i> 	Section 1.2, 3.2 & 3.3
(c)	<i>a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</i>	Section 4
(d)	<i>a program to monitor and report on the:</i> <ul style="list-style-type: none"> • <i>impacts and environmental performance of the development; and</i> • <i>effectiveness of any management measures (see (c) above);</i> 	Section 6 & 7
(e)	<i>a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible.</i>	Section 6
(f)	<i>a program to investigate and implement ways to improve the environmental performance of the development over time;</i>	Section 7
(g)	<i>a protocol for managing and reporting any:</i> <ul style="list-style-type: none"> • <i>incidents;</i> • <i>complaints; and</i> • <i>non-compliances with statutory requirements;</i> 	Section 5, 6, 7 & 8
(h)	<i>a protocol for periodic review of the plan; and</i>	Section 7
(i)	<i>a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of the person/s who prepared and reviewed the management plan, a description of any revisions made and the date of the Secretary's approval.</i>	Document Control Table
	<i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i>	-

2 Road Authority Consultation

2.1 Consultation Requirements

Schedule 5, Condition 6 (*Evidence of Consultation*) of the Notice of Modification states the following with regard to consultation for management plans:

“Where the conditions of this consent require consultation with an identified party, the Applicant must:

- (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and***
- (b) provide details of the consultation undertaken, including:***
 - the outcome of that consultation, matters resolved and unresolved;***
 - and details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed any unresolved matters.”***

Schedule 3, Condition 25 of the Notice of Modification requires that the Operational TMP ***“be prepared in consultation with RMS and Council”***, and therefore the Road and Maritime Services (RMS) and Tweed Shire Council (TSC) were contacted by SLR.

2.2 TSC Consultation

2.2.1 Initial Consultation

A representative of TSC (Colleen Forbes – Team Leader Development Assessment) responded to a SLR/Hanson consultation request by email on 2 October 2018, stating:

“With reference to the Traffic Management Plan for the Tweed Sand Quarry, Council’s Traffic Engineer has reviewed Schedule 3 Condition 25 and Schedule 5 Condition 2 of DA152-6-2005 MOD1. Please be advised that TSC considers that the information required appears to be sufficient in breadth and scope. Accordingly, no additional traffic considerations are requested by TSC.

Please also be advised that TSC would like to receive a copy of the draft Plan for review / feedback prior to its submission to the Department.”

A copy of this response from TSC is included at Appendix B. SLR provided a draft of this Operational TMP to TSC for review prior to submission with DPE.

2.2.2 Review of Draft Operational TMP

A representative of TSC (Colleen Forbes – Team Leader Development Assessment) confirmed the following review of the Operational TMP:

“Council’s Traffic Engineer has briefly reviewed the draft TMP. No concerns / objections are raised from Council’s perspective.”

A copy of this response from TSC is included at Appendix B.

2.3 RMS Consultation

2.3.1 Initial Consultation

A representative of the RMS (Greg Sciffer – Development Assessment Officer – Northern Region) provided comments in response to a SLR/Hanson consultation request during a phone conversation with Glyn Cowie (SLR) on 27 September 2018. RMS’s verbal advice is summarised in Table 3, followed by a response to each comment as to how these have been incorporated into the drafting of the Operational TMP.

Table 3 RMS Initial Consultation Summary

RMS Advice	SLR Response
<p>RMS identified that the term ‘Traffic Management Plan’ is a term that is typically used when referring to managing the traffic associated with road construction activities rather than operational activities, and hence RMS would prefer that the document is instead referred to as an ‘Operational Traffic Management Plan’ or similar.</p>	<p>SLR agrees with the RMS’s assertion that a condition to prepare a ‘Traffic Management Plan’ in isolation of greater details of the required content could potentially be confused with a requirement to prepare a plan that relates to managing traffic associated with road construction activities. This confusion could also be potentially exacerbated by Schedule 3, Condition 25(b) of the Notice of Modification, which includes a generic requirement for the TMP to be prepared “<i>in accordance with the RTA – Traffic Control at Worksites Manual</i>”.</p> <p>Due to this potential for confusion, SLR has previously advocated the use of alternative terms such as “<i>Road Use Management Plan</i>” to identify where a TMP relates to the management of operational activities.</p> <p>In this instance, the naming of this TMP is, however, largely semantics as Schedule 3, Condition 25 of the Notice of Modification specifically stipulates the requirements of the plan and clearly articulates that these requirements relate to the operational activities associated with the site itself and not remote road construction activities, hence the generic reference to the worksite manual for example is not overly confusing in this instance.</p> <p>In response to this specific input received from RMS, this document has been referred to as <i>Tweed Sand Plant: MOD 1 Operational Traffic Management Plan (Operational TMP)</i> to minimise the potential for confusion.</p>

RMS Advice	SLR Response
<p>RMS provided a copy of a sample Operational Traffic Management Plan that has recently been prepared for another extractive industry project. The sample document provides guidance as to the style of TMP that RMS would prefer is prepared for TSP.</p>	<p>SLR appreciates RMS seeking to assist by providing a sample Operational Traffic Management Plan prepared for another project.</p> <p>The content of the <i>Tweed Sand Plant Operational TMP</i> is however dictated by the requirements of Schedule 3, Condition 25 of the Notice of Modification. It would therefore not necessarily be appropriate to replicate the structure of a plan prepared for another facility that responds to a different set of conditions and circumstances.</p> <p>In drafting the <i>Tweed Sand Plant Operational TMP</i>, SLR has specifically sought to ensure that the structure of the reporting and the aspects considered herein directly respond to the conditioned requirements (i.e. to aid verification that the conditioned requirements have been fully addressed). As a result, SLR has not directly replicated the structure of the sample reporting provided by RMS.</p>
<p>RMS offered to review the TMP prior to formal lodgement of the draft to DPE.</p>	<p>SLR has provided a draft of this Operational TMP to RMS for review prior to submission with DPE.</p>

2.3.2 Review of Draft Operational TMP

A representative of the RMS (Greg Sciffer – Development Assessment Officer – Northern Region) provided the comments detailed in Table 4 on the 6 November 2018 following review of the Draft Operational TMP. Table 4 also provides a response as to how this feedback has been incorporated into the drafting of the final Operational TMP.

Table 4 RMS Draft Operational TMP Summary

RMS Advice	SLR Response
<p>The Drivers Code of Conduct should include:</p> <ul style="list-style-type: none"> • Safety initiatives for haulage through residential areas, school zones and along school bus routes. • Regular toolbox meetings • Details of community consultation measures for peak haulage periods 	<p>During the current and historic planning application process the minimisation of impacts on residential areas and school zones has been considered and hence the adopted safety initiative was that the defined haulage route would exclude access through Cudgen Village except for local deliveries for example. Additional commentary has been added to Section 4.3 (Haulage Route) to reflect this safety initiative in response to the feedback provided.</p> <p>In relation to toolbox meetings no trucks are based at TSP so it is not possible to hold toolbox meetings involving drivers. TSP does however hold regular toolbox meetings, but the only attendees are site personnel.</p> <p>No change has been made in relation to community consultation measures as this is already considered to be sufficiently dealt with within Section 8.1 that details the Community Consultative Committee arrangements for the site.</p>
<p>Details of measures to be implemented to minimise traffic safety issues and disruption to local road users during road upgrade works.</p>	<p>The Operational TMP is not intended to replace the future need to prepare Construction Traffic Management Plans associated with any external road works delivered by Hanson.</p> <p>In response to the feedback provided by RMS this limitation of the Operational TMP has been clarified by additional commentary being added to Section 1.2.</p> <p>It is however premature to include the Construction Traffic Management Plan considerations within this Operational TMP as the design of the upgrade works to which the Construction Traffic Management Plans relate have not been prepared and are not required to be prepared until certain output thresholds are met as detailed in Section 3.2.</p> <p>It is not possible for example to prepare Traffic Control Plans (TCPs) that are a component of the Construction Traffic Management Plans in the absence of at least conceptual design drawings.</p> <p>This approach is appropriate in this instance as the external works are not required to be completed prior to commencement of use, but rather once certain output thresholds are exceeded, which may not occur for several years depending on commercial conditions.</p> <p>Nevertheless, a high level overview of the mitigation strategies potentially implemented as part of future Construction Traffic Management Plans is provided in Section 4.5 of this document.</p>
<p>Measures to minimise tracking of materials onto the surface of public roads.</p>	<p>In response to this feedback additional commentary has been added to Section 4.2 to identify that a shaker grid is provided on exit to minimise the tracking of materials onto the surface of public roads.</p>

3 Project Overview

3.1 Site Details

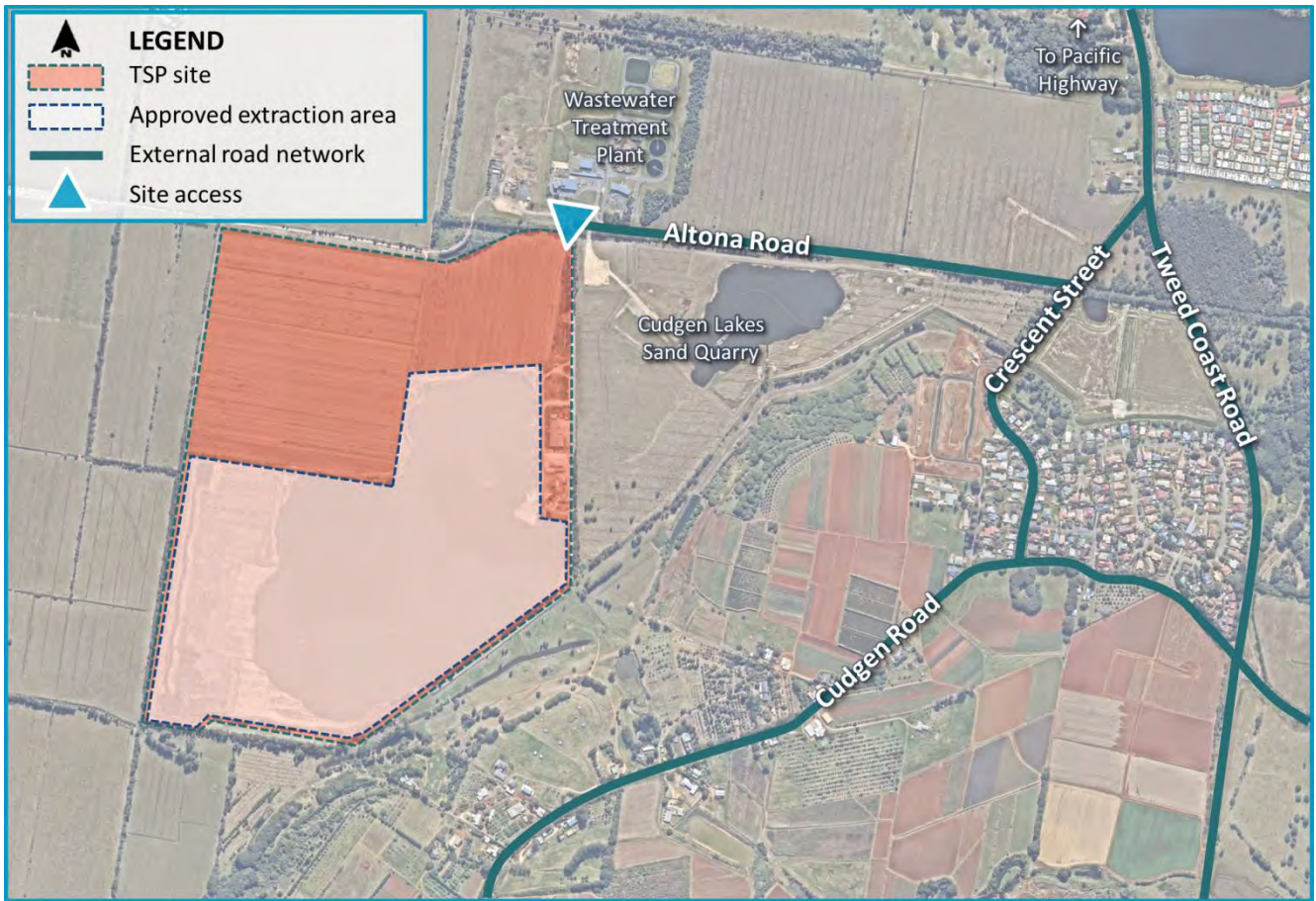
TSP is located off Altona Road in Cudgen, Northern NSW. The site is formally described as Lot Plans 22DP1082435, 23DP1077509 and 494DP720450, with a total area of approximately 77 hectares (ha), of which 46 hectares (ha) form the approved extraction area. An overview of TSP and the surrounding area is presented on Figure 1.

Sand extraction has been undertaken on the site since 1983, with Hanson taking over operation of the existing site in 2005. TSP operates a single dredge unit which is linked to an onshore wash plant via a floating flow line. Sand product is processed through the wash plant, stock piled and loaded via a front end loader into standard highway trucks. Loaded trucks pass across the site weighbridge (logging product weight and truck departure date/time), exit the site, and then follow the standard haul route of Altona Road, Crescent Street, Tweed Coast Road, and the Pacific Highway to their ultimate destination.

TSP is located within the Tweed Valley flood plain and is surrounded by the following land uses/receptors:

- **North:** Tweed Shire Council's wastewater treatment facility, the proposed Carbrook Sands Quarry isolated residential receptors; agricultural land (cane, grazing), Pacific Motorway and township of Chinderah in the distance (approximately 2 km);
- **East:** Cudgen Lake Sand Quarry (Cudgen Lakes), township of Cudgen (approximately 1 km), Township of Kingscliff in the distance (approximately 3 km);
- **South:** Residential receptors located along Cudgen Road ridge;
- **West:** Australian Bay Lobster Producers Pty Ltd, Melaleuca Station Memorial Gardens and Crematorium, Pacific Motorway, agricultural land (cane, grazing).

Figure 1 TSP and Surrounding Area



Source: Nearmap. Note: Site bounds indicative only.

3.2 Road Use Conditions

Schedule 3, Condition 20 of the Notice of Modification requires that the **“Applicant must ensure that all heavy vehicle access to and from the site is via the Tweed Coast Road/Crescent Road (sic)/Altona Road route. Heavy vehicles must not travel via Crescent Street through Cudgen Village, except for local deliveries to Cudgen Village.”** Furthermore, Schedule 3, Condition 25 (d) of the Notice of Modification requires that the Operational TMP **“prohibits trucks departing the site from turning right from Crescent Street to Tweed Coast Road”**.

Schedule 2, Condition 9 also requires certain upgrades, which are discussed subsequently herein, to be completed before the applicant can dispatch more than 10 laden trucks from the site in any hour. Following completion of these upgrades and the relevant notification requirements as outlined in Schedule 2, Condition 22 the applicant may dispatch up to 18 laden trucks from TSP in any given hour.

Schedule 2, Condition 16 and Schedule 3, Condition 22 impose obligations on the applicant to contribute towards road maintenance activities relating specifically to Altona Road and also the broader local road network.

Schedule 2, Condition 10 details the permissible hours of operation as detailed in Section 3.5 of the Operational TMP.

3.3 Operating Conditions

Relevant to the Operational TMP Schedule 3, Condition 24 requires that:

“The Applicant must:

- (a) provide sufficient parking on the site for all project-related traffic and visitors, in accordance with any applicable Council parking code and ensure that no on street parking is undertaken;***
- (b) ensure that on-site parking and pedestrian facilities are adequately signposted;***
- (c) ensure that all laden trucks entering or exiting the site have their loads covered;***
- (d) ensure that all laden trucks exiting the site are cleaned of material that may fall from vehicles, before leaving the site;***
- (e) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport quarry products from the development so they can be easily identified by road users; and***
- (f) keep accurate records of all laden truck movements to and from the site and publish a summary of these records on its website every month.”***

3.4 Surrounding Road Network

3.4.1 Altona Road

Altona Road extends approximately 1km from the TSP access to Crescent Street, and incorporates a rural formation with varying seal width. The western section of Altona Road, extending for approximately 400m from the TSP access east towards Crescent Street, incorporates approximately a 6.0m-6.5m wide seal. The remaining approximately 600m long section of Altona Road that ultimately intersects with Crescent Street incorporates approximately a 3.5m wide seal and three passing bays located on the northern (outbound) side of the seal.

Signage is installed on Altona Road near its intersection with Crescent Street and 150m east of the TSP access advising drivers of the presence of soft road edges, the presence of three passing bays and requiring that vehicles give-way to trucks. Additional signage is also currently installed advising that no sand trucks are permitted on Altona Road before 7am (NSW time). The current posted speed limit on Altona Road is 40km/h.

Schedule 3, Condition 21 and 22 of the Notice of Modification also impose obligations on the applicant to contribute towards providing two additional passing bays along Altona Road and contribute towards the maintenance of Altona Road.

3.4.2 Crescent Street

Crescent Street extends approximately 900m from Tweed Coast Road to Cudgen Road. The northern section of Crescent Street extending approximately 250m between the Tweed Coast Road intersection and the Altona Road intersection incorporates a rural formation with approximately an 8m wide seal. The southern section of Crescent Street which extends for approximately 650m between the Altona Road intersection and the Cudgen Road intersection has a varying width and formation with a Gross Load Limit of 14.5t also applicable to this southern section.

Schedule 3, Condition 20 of the Notice of Modification requires that heavy vehicles must not travel via Crescent Street through Cudgen Village, except for local deliveries to Cudgen Village.

3.4.3 Tweed Coast Road

Tweed Coast Road extends approximately 1.5km from Crescent Street to the Pacific Motorway. Tweed Coast Road also extends much further south to Wooyung. The section of Tweed Coast Road between Crescent Street and the Pacific Motorway incorporates approximately a 7.5m wide seal, centre and edge line markings.

Schedule 3, Condition 25 (d) prohibits trucks departing TSP from turning right from Crescent Street into Tweed Coast Road (i.e. southbound). Furthermore, Schedule 3, Condition 23 (d) of the Notice of Modification also imposes obligations on the applicant to contribute towards upgrading of the existing Tweed Coast Road/Crescent Street intersection to include an acceleration lane for vehicles turning left out of the western Crescent Street approach to Tweed Coast Road (northbound), and right from the northern Tweed Coast Road (i.e. southbound) approach into Crescent Street (westbound).

3.5 Permissible Hours of Operation

Schedule 2, Condition 10 of the Notice of Modification states the hours within which TSP may operate. These are reproduced in Table 5.

Table 5 Schedule 2 Condition 10 – Hours of Operation

Activity	Permissible Hours ¹
Quarrying operations (excluding loading and dispatch of trucks)	<ul style="list-style-type: none"> 7 am to 5 pm Monday to Friday; 7 am to 4 pm Saturday; and At no time on Sundays or public holidays
Loading and dispatch of trucks	<ul style="list-style-type: none"> 7 am to 5 pm Monday to Friday; 7 am to 12 pm Saturday; and At no time on Sundays or public holidays
Maintenance	<ul style="list-style-type: none"> May be conducted at any time, provided that these activities are not audible at any privately-owned residence

Note 1: These hours of operation relate to a NSW operating site which will be one hour ahead of Queensland during daylight saving periods (relevant to interstate truck movements).

In addition to the Hours of Operation stated in Table 5 above, Schedule 2 Condition 11 of the Notice of Modification states:

“The following activities may be carried out outside the hours specified in [Table 5] above:

- (a) delivery or dispatch of materials as requested by Police or other public authorities; and***
- (b) emergency work to avoid the loss of lives, property or to prevent environmental harm.***

In such circumstances, the Applicant must notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.”

4 Heavy Vehicle Management

This Operational TMP provides additional details to supplement the Hanson *Tweed Sand Plant: Drivers' Code of Conduct* document, which is included at Appendix C. As part of the mandatory site induction required for drivers entering TSP, all drivers are required to read the *Tweed Sand Plant: Drivers' Code of Conduct* and this Operational TMP. Drivers are to complete and sign the *Confirmation of Understanding* provided within the *Tweed Sand Plant: Drivers' Code of Conduct*, and return to an authorised TSP staff member for secure storage onsite.

4.1 General Requirements

All heavy vehicle drivers hauling sand products from TSP must abide by the following:

- Undertake a site induction carried out by an authorised TSP staff member or suitably qualified person under the direction of the site manager;
- All drivers must hold a valid driver's licence which is appropriate for the class of vehicle under their operation;
- All drivers must comply with Chain of Responsibility legislation;
- All drivers are required to operate vehicles in a safe and courteous manner, within and external to TSP;
- All drivers are to comply with the instructions of authorised site personnel when within TSP;
- Any accidents, incidents, complaints, hazards, spillages or near misses must be reported immediately to the site manager. This includes incidents along the designated haulage route on the external road network; and
- Appropriate signage is to be displayed on all trucks used to transport product from TSP so that they can be readily identified by road users.

4.2 Site Management

The following procedures are to be observed by all heavy vehicle drivers accessing TSP:

- Haulage heavy vehicle access to TSP is to be restricted to the following hours (noting that these hours are more restrictive than the permissible hours detailed in Section 3.5 to minimise the potential for non-compliance with the permissible hours):
 - 7:15AM – 4:45PM Monday to Friday (NSW time);
 - 7:15AM – 11:45AM Saturday (NSW time).
- Hanson has a drug and alcohol policy which includes random testing;
- Drivers are to obey all site signage and the directions of TSP staff;
- All site mobile equipment has right of way at all times;
- Vehicles entering TSP are to be registered, roadworthy, and of sound mechanical condition. Hanson may request to inspect any vehicle or request maintenance records for any vehicle. Hanson reserves the right to prohibit any vehicle from TSP should there be any indication that the vehicle is not roadworthy or safe to operate;
- Upon entry to TSP, drivers are required to communicate with the loader operator on UHF channel 19 prior to entering the stockpile area;

- Drivers are to remain within the truck cabin unless instructed by a loader driver;
- Prior to leaving TSP, vehicles are to be weighed using the on-site weighbridge. Vehicles are required to be within the legal Gross Vehicle Mass (GVM) limit before being permitted to leave TSP;
- A shaker grid is installed at the site entry/exit such that all vehicles, including loaded trucks, must pass over the grid prior to leaving site, to minimise the tracking of materials onto the surface of public roads. The layout and fencing of the site is such that the shaker grid cannot be bypassed.

4.3 Haulage Route

To minimise the safety impact on residential areas and school zones the designated haulage route for heavy vehicles for TSP is Altona Road, Crescent Street, Tweed Coast Road and the Pacific Highway. This haulage route is mapped on Figure 2.

Figure 2 TSP Standard Haulage Route



Source: Nearmap. Note: Site bounds indicative only.

Drivers are to abide by the following instructions at each of the specific locations identified:

1. Altona Road:

- Altona Road is not to be accessed by trucks prior to 7:00AM (NSW time) on any day;

- Heavy vehicles travelling outbound from TSP along Altona Road (eastbound) are to give way using the provided passing bays. Heavy vehicle drivers travelling inbound to TSP along Altona Road (westbound) are to centre vehicles on the carriageway to avoid the soft shoulders on either side, and are to provide adequate passing clearance to any vehicles propped in the passing bays; and
- All vehicles must observe the posted speed limit on Altona Road (40km/h).

2. Crescent Street/Altona Road intersection:

- All trucks must STOP at the corner of Altona Road and Crescent Street after exiting TSP;
- Heavy vehicles leaving TSP are not permitted to turn right from Altona Road onto Crescent Street (with the exception of making local deliveries to Cudgen Village); and
- Any vehicle turning right from Altona Road onto Crescent Street to access Cudgen Village must also observe the sign posted load limit (Gross Load Limit 14.5t).

3. Crescent Street/Tweed Coast Road: Heavy vehicles leaving TSP are not permitted to turn right from Crescent Street onto Tweed Coast Road.

Through minimising haulage along roads in the vicinity of the site that include either school zones or that facilitate lower speed residential property access, the designated haulage route minimises the safety impacts on residential areas and school zones through limiting the potential for haulage vehicles to interact with the following:

- Students walking or cycling to school, or boarding/alighting buses;
- Pedestrians and children around residential properties;
- Vehicles or cyclists entering or leaving residential property accesses.

The typical framework applied to risk management seeks to (1) Avoid; (2) Manage, and (3) Mitigate risks (in order of preference). By avoiding residential areas and school zones, the proposed haulage route is consistent with this framework.

As noted, haulage vehicles may be required on occasion to make local deliveries to residential areas or travel past school zones. Safety impacts on residential areas and school zones in these instances will be managed through the driving standards detailed in Section 4.4, and through the *Tweed Sand Plant: Drivers' Code of Conduct*, which is included at Appendix C.

4.4 Driving Standards

4.4.1 Speed Management

Posted speed limits along the haulage route indicated on Figure 2 are as follows:

- Within the subject site: 30km/h;
- Altona Road: 40km/h;
- Crescent Street: 80km/h; and
- Tweed Coast Road: 80km/h / 60km/h.

Drivers are to observe posted speed limits at all times, and vehicle speeds should be adjusted in consideration of the road environment (e.g. geometry and traffic conditions) and prevailing weather conditions (e.g. rain and fog).

4.4.2 Heavy Vehicle Noise Management

To limit heavy vehicle noise associated with TSP haulage activities, drivers are to abide by the following requirements:

- Vehicle access to TSP is to be via the designated haulage route of Altona Road - Crescent Street - Tweed Coast Road - Pacific Motorway;
- Trucks slowing to use the Altona Road/Crescent Street and Crescent Street/Tweed Coast Road intersections are not to use engine or compression braking systems (when accessed from either direction) except where required for safety reasons;
- Posted speed limits on the external road network are to be observed, and vehicle speeds are to be restricted to 30km/h within TSP site;
- TSP is not to be accessed by heavy vehicles outside of the site operating hours (loading and dispatch of trucks) as follows:
 - 7:15AM – 4:45PM Monday to Friday (NSW time);
 - 7:15AM – 11:45AM Saturday (NSW time).
- Vehicles are to be turned off when not in use.

4.4.3 Heavy Vehicle Load Restraint and Dust Suppression

To minimise the potential for load spillages and dust production, drivers are required to act in accordance with the following measures:

- Drivers are to ensure their load is legal, secure and side bars, draw bar and tailgate are clear of material;
- Drivers are to ensure that vehicle tailgates are locked following any tipping activities;
- Drivers are to ensure that all loads are tarped prior to leaving TSP. The tarp must cover the whole body without air gaps;
- Haul road watering will be conducted within TSP site on a regular basis to suppress dust as per Schedule 3, Condition 5 (*Operating Conditions*) of the Notice of Modification:

“The Applicant must:

(a) Implement best management practise to minimise the dust emissions of the development, including routinely watering haul roads being used by heavy vehicles and equipment”.

- Drivers are to report excessive haul road dust (i.e. internal to TSP) to the site manager.

4.5 Construction Traffic Management Plans for Road Upgrade Works

Conditions 21, 22, and 23 of Schedule 3 of the Notice of Modification require that road upgrade works and/or maintenance works be undertaken at a future stage should certain output thresholds be exceeded, as detailed in Section 3.2 of this document. Should these works be triggered at a future stage, Construction Traffic Management Plans and associated Traffic Control Plans would be required to manage any operational or safety impacts of construction activities associated with the works.

Given that the upgrade works are not yet required, conceptual designs of the upgrade works have not been prepared, and hence no detailed assessment of the likely requirements can be undertaken at this stage. Nevertheless, a high level overview of the mitigation strategies that could potentially be implemented as part of future Construction Traffic Management Plans or Traffic Control Plans, which may be required to support future upgrade works, are discussed below.

4.5.1 Altona Road Upgrade and Maintenance Works

Schedule 3, Condition 21 and 22 of the Notice of Modification impose obligations on the applicant to contribute towards providing two additional passing bays along Altona Road and contribute towards the maintenance of Altona Road.

At a high level, upgrade or maintenance works on Altona Road have the potential to impact users of Altona Road and potentially also Crescent Street. To manage any safety impacts during future road upgrade works, and also to minimise the disruption to local road users, the future Construction Traffic Management Plans associated with the upgrade works may therefore need to consider the following:

- Conceptual design of the proposed upgrade works;
- Traffic demand profiles and speed environment of Altona Road and Crescent Street;
- Consultation with Tweed Shire Council and local Stakeholders (i.e. landowners of adjacent properties accessed off Altona Road) so that construction works can be scheduled to occur at times which minimise inconvenience and disturbance for local road users and landholders;
- Traffic Control Plans that are prepared by a suitably qualified person in accordance with the following relevant references:
 - *Traffic control at work sites: Technical Manual* (RMS, 2018);
 - *Australian Standard 1742.3, Manual of uniform traffic control devices - Traffic control for works on roads.*

4.5.2 Tweed Coast Road/Crescent Street Intersection Upgrade Works

Schedule 3, Condition 23 of the Notice of Modification also imposes obligations on the applicant to upgrade the existing Tweed Coast Road/Crescent Street intersection to include an acceleration lane for vehicles turning left out of the western Crescent Street approach to Tweed Coast Road (northbound), and right from the northern Tweed Coast Road (i.e. southbound) approach into Crescent Street (westbound). Should these works be triggered at a future stage, Construction Traffic Management Plans and associated Traffic Control Plans would be required to manage any operational or safety impacts associated with the works.

At a high level, upgrade works at the Tweed Coast Road/Crescent Street intersection have the potential to impact users of Tweed Coast Road and Crescent Street. To manage any safety impacts during potential future road upgrade works, and also to minimise the disruption to local road users, the future Construction Traffic Management Plans associated with the upgrade works may therefore need to consider the following:

- Conceptual design of the proposed upgrade works;
- Traffic demand profiles and speed environment of Tweed Coast Road and Crescent Street;
- Consultation with road authorities to ensure that construction works are scheduled to occur at times which minimises inconvenience and disturbance for local road users and landholders;
- Consideration of the need for the temporary installation of Variable Messaging Signage (VMS) in appropriate locations in the vicinity of the Tweed Coast Road/Crescent Street intersection for a period prior to the construction works occurring to alert motorists to the timing of the upgrade works, and that delays could be expected. This would enable motorists to allow for delays (i.e. start journey earlier), travel outside construction periods, or select an alternate travel route;
- Traffic Control Plans that are prepared by a suitably qualified person in accordance with the following relevant references:
 - *Traffic control at work sites: Technical Manual* (RMS, 2018);
 - *Australian Standard 1742.3, Manual of uniform traffic control devices - Traffic control for works on roads.*

5 Incident Reporting

5.1 Relevant Conditions

Schedule 5, Conditions 9 to 11 of the Notice of Modification requires the following:

9. ***“The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident.***
10. ***Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested. This report must include the time and date of the incident, details of the incident, measures implemented to prevent re-occurrence and must identify any non-compliance with this consent.***
11. ***Any written requirements of the Secretary or relevant public authority (as determined by the Secretary) which may be given at any point in time, to address the cause or impact of an incident must be complied with and within any timeframe specified by the Secretary or relevant public authority.”***

In accordance with the Definition section of the Notice of Modification, an ‘Incident’ is defined as:

“A set of circumstances that:

- i. causes or threatens to cause material harm to the environment; or***
- ii. results in non-compliance with this consent.”***

For the purposes of this Operational TMP, it is foreseen that the most likely cause for a potential ‘incident’ will be due to a non-compliance with the hourly truck dispatch limit criteria detailed in Section 3.2, use of sections of the road network not approved for haulage as also detailed in Section 3.2 or alternatively haulage that occurs outside the permissible hours identified in Section 3.5.

6 Protocol for Managing Complaints and/or Non-Compliances

6.1 Managing Complaints

All complaints received regarding traffic movements associated with TSP will be responded to within three dispatch days following receipt of the complaint. Dispatch days are taken to be those days during which loading and dispatch of trucks is approved to occur as detailed in Section 3.5.

TSP will keep a record of any complaint made to the site or to any employee or to agent/contractor of TSP in relation to traffic associated with TSP. Records will include:

- Date and time of the complaint;
- Method by which the complaint was made;
- Personal details of the complainant (if provided);
- Nature of the complaint and location;
- The driver/heavy vehicle details;
- Action taken by TSP and any follow up actions;
- If no action was taken, the reason why no action was taken; and
- A copy of the reply made to the complainant.

The Hanson website will include Contact Details and a Complaints Register, in accordance with Schedule 5, Condition 16 of the Notice of Modification.

6.2 Compliance Monitoring and Non-Compliance Response Procedure

Compliance of this Operational TMP with the Notice of Modification conditions will be measured according to the following performance indicators:

- Compliance with the hourly traffic volume dispatch criterion detailed in Section 3.2;
- An authorised TSP staff member or suitably qualified person under the direction of the site manager will undertake formal observations of compliance at yearly intervals;
- Contractor and employee awareness of this Operational TMP; and
- The frequency and nature of complaints reported to TSP in relation to traffic associated with TSP.

Incident reporting is to be undertaken as per the requirements in Section 5.1. In the event of non-compliance, the following actions will be undertaken:

- Establish the details in relation to the incident (location, vehicle, driver etc.);
- Confirm that the reported incident is therefore actually related to a vehicle associated with TSP;
- Conduct an investigation into why the incident occurred and evaluate the effectiveness of the current mitigation strategy; and
- Report details of any non-compliance to DPE in accordance with Section 5.1.

Should any driver be found to have acted in breach of the *Tweed Sand Plant: Drivers' Code of Conduct*, through either the formal complaint process detailed above, or through observations by authorised TSP personnel, disciplinary action will be taken, which could include the following:

- Verbal notification (if possible) and written confirmation to the driver of non-compliance with the *Tweed Sand Plant: Drivers' Code of Conduct*;
- Refusal to load affected trucks and direction to the driver to leave the site;
- Implementation of a temporary ban of the affected vehicle or driver until such time as sufficient evidence has been provided to authorised TSP staff that the breach has been rectified and/or will not occur again;
- In the case of a serious breach or repeated non-compliance with the *Tweed Sand Plant: Drivers' Code of Conduct*, a permanent site ban of the affected vehicle or driver will be considered.

7 Periodic Review

This Operational TMP shall be reviewed and revised and/or updated, in accordance with Schedule 5, Condition 4 of the Notice of Modification, within three (3) months of any of the following:

- The submission of an incident report under Schedule 5, Condition 10;
- The submission of an Annual Review under Schedule 5, Condition 13;
- The submission of an Audit report under Schedule 5, Condition 14; or
- The approval of any modification to the conditions of the Notice of Modification.

Where a review results in revisions to the Operational TMP, within six weeks of the review the revised Operational TMP will be submitted for DPE approval.

Review of this Operational TMP will also take place if monitoring records indicate that it is warranted, or in the event of any significant change to the form of the external road network from that contemplated herein.

8 Community Consultation and Performance Monitoring

8.1 Community Consultative Committee

Schedule 5, Condition 8 of the Notice of Modification states that TSP must operate a Community Consultative Committee (CCC) for the site. The CCC must be operated in general accordance with DPE's *Community Consultative Committee Guidelines: State Significant Projects* (2016), for the duration of TSP operations and for at least 6 months following the completion of TSP operations. TSP already has an existing CCC in place that meets biannually.

The CCC is to facilitate communication, consultation and information sharing between TSP and the local community.

8.2 Public Performance Reporting

Schedule 3, Condition 24 (f) of the Notice of Modification requires that TSP keep accurate records of all laden truck movements to and from the site and publish a summary of these records on its website every month.

APPENDIX A

DPE Approval of Expert



Planning Services

Resource Assessments

Contact: Genevieve Seed

Phone: (02) 9274 6489

Email: genevieve.seed@planning.nsw.gov.au

Mr Murray Graham
Development Manager
Hanson Construction Materials Pty Ltd
PO Box 1636
Toombul QLD 4012

Dear Mr Graham,

**Tweed Sand Quarry (DA 152-6-2005)
Approval of Experts**

I refer to your email dated 19 September 2018, seeking the approval of various experts to prepare management plans for the Tweed Sand Quarry, including:

- Adam McArthur, Phoebe Chapman and Nicole Davis from JWA Ecological, to prepare the Rehabilitation Management Plan; and
- Jeff Baczynski of SLR, to prepare the Transport Management Plan.

The Secretary has approved the appointment of these experts.

Should you have any enquiries in relation to this matter, please contact Genevieve Seed.

Yours sincerely,

Meg Dawson 20/9/18

Megan Dawson
A/Director
Resource Assessments
as nominee of the Secretary

APPENDIX B

Evidence of Consultation

Jeffrey Baczynski

From: Colleen Forbes <CForbes@tweed.nsw.gov.au>
Sent: Wednesday, 7 November 2018 3:49 PM
To: Glyn Cowie
Cc: Jeffrey Baczynski; Graham, Murray (Skygate) AUS; Erin Holton (holton.el@access.gs); Chris Lawlor
Subject: RE: 620.12479 - Tweed Sand Plant MOD1 - Traffic Management Plan Stakeholder Consultation

Hi Glyn,

Council's Traffic Engineer has briefly reviewed the draft TMP. No concerns / objections are raised from Council's perspective.

Regards,
Colleen

Colleen Forbes

Team Leader Development Assessment



p (02) 6670 2596

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From: Glyn Cowie [mailto:gcowie@slrconsulting.com]
Sent: Friday, 2 November 2018 2:03 PM
To: Colleen Forbes
Cc: Jeffrey Baczynski; Graham, Murray (Skygate) AUS; Erin Holton (holton.el@access.gs); Chris Lawlor
Subject: RE: 620.12479 - Tweed Sand Plant MOD1 - Traffic Management Plan Stakeholder Consultation

Hi Colleen,

Thank you for your below response.

Further to your request, please see attached the draft Traffic Management Plan for TSP. We would appreciate your review and any feedback you have so this can be considered prior to Hanson's submission to DPE.

Please note that due to the current time critical nature of the TMP, we would appreciate your feedback no later than COB Friday 9 November 2018.

Should you have any questions that you'd wish to discuss over the phone, please don't hesitate to contact either Jeff Baczynski (07 3858 4800) or myself (0438 763 516).

Kind regards,
Glyn

From: Colleen Forbes <CForbes@tweed.nsw.gov.au>
Sent: Tuesday, 2 October 2018 12:14 PM
To: Glyn Cowie <gcowie@slrconsulting.com>
Cc: Jeffrey Baczynski <jbaczynski@slrconsulting.com>; Graham, Murray (Skygate) AUS <Murray.Graham@hanson.com.au>
Subject: RE: 620.12479 - Tweed Sand Plant MOD1 - Traffic Management Plan Stakeholder Consultation

Dear Glyn,

With reference to the Traffic Management Plan for the Tweed Sand Quarry, Council's Traffic Engineer has reviewed **Schedule 3 Condition 25** and **Schedule 5 Condition 2 of DA152-6-2005 MOD1**. Please be advised that TSC considers that the information required appears to be sufficient in breadth and scope. Accordingly, no additional traffic considerations are requested by TSC.

Please also be advised that TSC would like to receive a copy of the draft Plan for review / feedback prior to its submission to the Department.

Regards,
Colleen

Colleen Forbes

Team Leader Development Assessment



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From: Glyn Cowie [<mailto:gcowie@slrconsulting.com>]
Sent: Monday, 24 September 2018 4:15 PM
To: Colleen Forbes
Cc: Jeffrey Baczynski; Graham, Murray (Skygate) AUS
Subject: 620.12479 - Tweed Sand Plant MOD1 - Traffic Management Plan Stakeholder Consultation

Hi Colleen,

You would be aware of the recently approved Tweed Sand Plant (TSP) MOD1 approval relating to an increase in extraction limit and associated heavy vehicle numbers. In accordance with the approved MOD1 *Notice for Modification Development Consent* (DA 152-6-2005 dated 20 August 2018, 'the Consent'), a traffic management plan is required to be prepared for the development to the satisfaction of the Secretary (DPE). SLR Consulting has been engaged by Hanson Construction Materials (HCM, the operator of TSP) to prepare a traffic management plan in accordance with the Consent.

The specific requirements for the traffic management plan are detailed in Schedule 3 Condition 25 of the Consent, which are copied below.

Transport Management Plan

25. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified and experienced person/s whose appointment has been approved by the Secretary;
 - (b) be prepared in consultation with RMS and Council, and in accordance with the *RTA – Traffic Management at Worksites Manual*;
 - (c) describe the processes in place for the management of truck movements entering and exiting the site;
 - (d) prohibit trucks departing the site from turning right from Crescent Street to Tweed Coast Road;
 - (e) include a Drivers' Code of Conduct that includes:
 - details of the safe and quiet driving practices that must be used by drivers travelling to and from the quarry;
 - a map of the primary haulage route;
 - safety initiatives for haulage through residential areas, school zones and along sensitive routes;
 - an induction process for vehicle operators and regular toolbox meetings;
 - complaints resolution and disciplinary procedures; and
 - details of community consultation measures for peak haulage periods.
 - (f) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct;
 - (g) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during road upgrade works; and
 - (h) propose measures to minimise the transmission of dust and tracking of material onto the surrounding public roads from vehicles leaving the quarry.

In addition to Schedule 3 Condition 25, Schedule 5 Condition 2 details the broader requirements for management plans supporting this MOD1. These are copied below.

Management Plan Requirements

2. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
- (a) a summary of relevant background or baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of the development, and the measures to be implemented to guide the implementation of, the development or any management measures;
 - (c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:
 - impacts and environmental performance of the development; and
 - effectiveness of any management measures (see (c) above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
 - (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (g) a protocol for managing and reporting any:
 - incidents;
 - complaints; and
 - non-compliances with statutory requirements;
 - (h) a protocol for periodic review of the plan; and
 - (i) a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of the person/s who prepared and reviewed the management plan, a description of any revisions made and the date of the Secretary's approval.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for the management plans.

With regard to specific traffic management plan requirements, it is stated that the plan must be prepared in consultation with Council. To satisfy this requirement, this email serves to commence that consultation. We kindly request a response to the following two (2) points:

1. Could you please confirm whether you require any additional considerations into developing the traffic management plan above those specifically stated in the Consent and copied into this email? If you do, could you please state your considerations.
2. Do you request a copy of the draft plan for review/feedback prior to HCM's submission to DPE for ultimate approval?

I appreciate your response on this matter. Please note that in accordance with the Consent, HCM must not commence operations under the Consent until a traffic management plan has been approved by DPE. The Stakeholder consultation process will need to be completed prior to HCM submitting the traffic management plan for approval. As the traffic management plan is considered critical path, I would appreciate your response as soon as practical.

Please do not hesitate to contact me should you wish to discuss further.

Kind regards,
Glyn

All official correspondence requiring a formal written response should be addressed to the General Manager, PO Box 816, Murwillumbah, 2484; or emailed to tsc@tweed.nsw.gov.au; or faxed to 02 6670 2429.

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Jeffrey Baczynski

From: Glyn Cowie
Sent: Tuesday, 6 November 2018 11:44 AM
To: SCIFFER Greg
Cc: Development Northern; Gen Seed; Jeffrey Baczynski; Graham, Murray (Skygate) AUS; Erin Holton (holton.el@access.gs)
Subject: RE: 620.12479 - Tweed Sand Plant MOD1 - Traffic Management Plan Stakeholder Consultation

Thank you Greg for your prompt feedback.

Our Principal Transport Consultant, Jeff Baczynski, will review your below points and be in touch should he wish to discuss further.

Kind regards,
Glyn

Glyn Cowie

Associate - Acoustics & Vibration

 20819

 +61 438 763 516

 +61 7 3858 4800

 gcowie@slrconsulting.com

SLR Consulting Australia Pty Ltd
Ground Floor, 194 Varsity Parade, Varsity Lakes, QLD, 4227

From: SCIFFER Greg <Greg.SCIFFER@rms.nsw.gov.au>
Sent: Tuesday, 6 November 2018 11:24 AM
To: Glyn Cowie <gcowie@slrconsulting.com>
Cc: Development Northern <development.northern@rms.nsw.gov.au>; Gen Seed <genevieve.seed@planning.nsw.gov.au>
Subject: RE: 620.12479 - Tweed Sand Plant MOD1 - Traffic Management Plan Stakeholder Consultation

Glyn

Thank s for the opportunity to comment on the Draft OTMP for Tweed Sand Plant. Generally the Draft OTMP has addressed most of requirements of Schedule 3, Condition 25. The following comments are provided for your consideration:

1. The Drivers Code of Conduct should include:
 - Safety initiatives for haulage through residential areas, school zones and along school bus routes.
 - Regular toolbox meetings
 - Details of community consultation measures for peak haulage periods
2. Details of measures to be implemented to minimise traffic safety issues and disruption to local road users during road upgrade works.
3. Measures to minimise tracking of materials onto the surface of public roads.

Regards
Greg Sciffer
Development Assessment Officer
Northern Region

From: Glyn Cowie [<mailto:gcowie@slrconsulting.com>]
Sent: Friday, 2 November 2018 2:08 PM
To: SCIFFER Greg
Cc: Jeffrey Baczynski; Chris Lawlor; Graham, Murray (Skygate) AUS; Erin Holton (holton.el@access.gs)
Subject: RE: 620.12479 - Tweed Sand Plant MOD1 - Traffic Management Plan Stakeholder Consultation

Hi Greg,

Further to the below email, and your verbal request, please see attached the draft Operational Traffic Management Plan for TSP. We would appreciate your review and any feedback you have so this can be considered prior to Hanson's submission to DPE.

Please note that due to the current time critical nature of the TMP, we would appreciate your feedback no later than COB Friday 9 November 2018.

We also note the example OTMP that you provided following our discussion. Please note that this OTMP has been drafted to specifically address the relevant conditions of the TSP Notice of Modification. Those specific conditions are referenced in Section 1.2 of the attached.

Should you have any questions that you'd wish to discuss over the phone, please don't hesitate to contact either Jeff Baczynski (07 3858 4800) or myself (0438 763 516).

Kind regards,
Glyn

From: SCIFFER Greg <Greg.SCIFFER@rms.nsw.gov.au>
Sent: Thursday, 27 September 2018 9:31 AM
To: Glyn Cowie <gcowie@slrconsulting.com>
Subject: RE: 620.12479 - Tweed Sand Plant MOD1 - Traffic Management Plan Stakeholder Consultation

Glyn

I have been reviewing, preparing advice and liaising with DEP for RMS regarding Tweed Sand Quarry. Could you ring me on 02 6604 9328 to discuss your email before RMS formally replies.

Thanks
Greg Sciffer
Development Assessment Officer
Northern Region

From: Glyn Cowie [<mailto:gcowie@slrconsulting.com>]
Sent: Monday, 24 September 2018 4:17 PM
To: Development Northern
Cc: Jeffrey Baczynski; Graham, Murray (Skygate) AUS
Subject: 620.12479 - Tweed Sand Plant MOD1 - Traffic Management Plan Stakeholder Consultation

Attn: Liz Smith/John Perkins.

Hi Liz/John,

You may be aware of the recently approved Tweed Sand Plant (TSP) MOD1 approval relating to an increase in extraction limit and associated heavy vehicle numbers. In accordance with the approved MOD1 *Notice for Modification Development Consent* (DA 152-6-2005 dated 20 August 2018, 'the Consent'), a traffic management plan is required to be prepared for the development to the satisfaction of the Secretary (DPE). SLR Consulting has

been engaged by Hanson Construction Materials (HCM, the operator of TSP) to prepare a traffic management plan in accordance with the Consent.

The specific requirements for the traffic management plan are detailed in Schedule 3 Condition 25 of the Consent, which are copied below.

Transport Management Plan

25. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified and experienced person/s whose appointment has been approved by the Secretary;
 - (b) be prepared in consultation with RMS and Council, and in accordance with the *RTA – Traffic Management at Worksites Manual*;
 - (c) describe the processes in place for the management of truck movements entering and exiting the site;
 - (d) prohibit trucks departing the site from turning right from Crescent Street to Tweed Coast Road;
 - (e) include a Drivers' Code of Conduct that includes:
 - details of the safe and quiet driving practices that must be used by drivers travelling to and from the quarry;
 - a map of the primary haulage route;
 - safety initiatives for haulage through residential areas, school zones and along sensitive routes;
 - an induction process for vehicle operators and regular toolbox meetings;
 - complaints resolution and disciplinary procedures; and
 - details of community consultation measures for peak haulage periods.
 - (f) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct;
 - (g) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during road upgrade works; and
 - (h) propose measures to minimise the transmission of dust and tracking of material onto the surrounding public roads from vehicles leaving the quarry.

In addition to Schedule 3 Condition 25, Schedule 5 Condition 2 details the broader requirements for management plans supporting this MOD1. These are copied below.

Management Plan Requirements

2. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
- (a) a summary of relevant background or baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of the development, and the measures to be implemented to guide the implementation of, the development or any management measures;
 - (c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:
 - impacts and environmental performance of the development; and
 - effectiveness of any management measures (see (c) above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
 - (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (g) a protocol for managing and reporting any:
 - incidents;
 - complaints; and
 - non-compliances with statutory requirements;
 - (h) a protocol for periodic review of the plan; and
 - (i) a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of the person/s who prepared and reviewed the management plan, a description of any revisions made and the date of the Secretary's approval.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for the management plans.

With regard to specific traffic management plan requirements, it is stated that the plan must be prepared in consultation with RMS. To satisfy this requirement, this email serves to commence that consultation. We kindly request a response to the following two (2) points:

1. Could you please confirm whether you require any additional considerations into developing the traffic management plan above those specifically stated in the Consent and copied into this email? If you do, could you please state your considerations.
2. Do you request a copy of the draft plan for review/feedback prior to HCM's submission to DPE for ultimate approval?

I appreciate your response on this matter. Please note that in accordance with the Consent, HCM must not commence operations under the Consent until a traffic management plan has been approved by DPE. The Stakeholder consultation process will need to be completed prior to HCM submitting the traffic management plan for approval. As the traffic management plan is considered critical path, I would appreciate your response as soon as practical.

Please do not hesitate to contact me should you wish to discuss further.

Kind regards,
Glyn

Before printing, please consider the environment

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APPENDIX C

Tweed Sand Plant: Drivers' Code of Conduct

Site Specific Requirements:

- All trucks must only access site via Tweed Coast Rd/Crescent St/Altona Rd (see map below).
- No trucks are permitted on Altona Road before **7:00am** NSW time.
- Trucks are not permitted to turn right from Crescent Street onto Tweed Coast Road.
- **UHF 19** must be used to communicate with sales loader.
- Operating Hours for sales:
Mon – Fri = 7:15am to 4:45pm NSW time
Saturday = 7:15am to 11:45am NSW time
- Maximum speed limits:
Altona Road = 40kmh
Sand Plant site = 30kmh
- Tweed Sand Plant is a 'No Smoking' site.
- In addition to this Drivers' Code, drivers are required to read the *Tweed Sand Plant: MOD1 Operational Traffic Management Plan* prepared by SLR. A copy will be kept onsite and made available to drivers as part of the site induction.

Note: Non-compliance with any directive included in this Drivers' Code, either on or off site, may lead to refusal to load truck and/or further disciplinary action against the driver.

Site Contact Details:

Manager: John McQueen, ph. 0407 180 038



Hanson Construction Materials Pty Ltd

Tweed Sand Plant



Drivers' Code of Conduct

Updated: March 2019

Tweed Sand Plant – Drivers' Code of Conduct

Transport routes may require travel through, or in close proximity to residential areas. Hanson has made a commitment to local authorities and the local community to undertake all activities including delivery of product in a manner which protects the environment and amenity of the local community.

It must be remembered that your driving behaviour is the Company image that the general public see and if tarnished, can severely impact our reputation with the local community.

All heavy vehicle drivers are required to be responsible, professional and drive in accordance with this Drivers' Code.

Hanson will enforce this code and follow up on any complaints. Breaches or blatant disregard of the Drivers' Code of Conduct may lead to exclusion from site and/or further disciplinary action.

This Drivers' Code of Conduct is required to be read and completed by all drivers; signed confirmation will be held on site.

- *Professional road courtesy must be displayed at all times towards other road users. Drivers must obey all signage, given directions and instructions.*
- *The use of engine brakes is prohibited in residential areas in close proximity to all Hanson sites.*
- *All loads with material <150mm must be tarped prior to exiting site. The tarp must cover the total surface of the truck and trailer body.*
- *All loads must be secure, with drawbars, tailgates and side combings cleaned down prior to leaving site.*
- *All drivers must comply with current Chain of Responsibility legislation.*
- *All site mobile equipment (FEL, dump truck, water truck, etc) has right of way at all times.*
- **POSITIVE COMMUNICATION MUST** be established when approaching any site vehicle, mobile equipment or machine and/or before entering the site vehicle's work area.

- *All trucks entering site must be fully maintained and roadworthy.*
- *No truck will be allowed to leave site if weight is in excess of the Registered Gross Mass of the vehicle.*
- *You must remain in the truck cabin whilst being loaded unless directed otherwise by the loader driver. Apply park brake if leaving vehicle.*
- *No children are allowed on site, including in truck cabins. Any vehicle containing children will not be loaded (organised school visits and apprentices under 18 are excluded).*
- *Inappropriate or unnecessary use of UHF radios is not permitted, so as to allow clear and concise communications on site.*
- *Steel cap boots and high visibility clothing must be worn on site at all times. Hard hats must be worn if exiting truck.*
- *Hanson has a Drug and Alcohol Policy which includes random testing. If you refuse to be tested you will not be loaded.*
- *No soil, fill or other materials are to be brought onto site without the Site Manager's prior approval. All trucks must be free of soil build-up prior to entering site.*
- *All trucks must drive through the wheel wash and/or across the shaker grid when exiting any site where installed, to remove loose material from tyres and truck body.*
- *No truck maintenance or repairs are to be performed on site without Site Manager's approval.*
- *Any litter must be placed in litter bins on site.*
- *Any accidents, incidents, complaints, hazards, spillages or near misses that occur on or off site, must be reported to the Site Manager as soon as possible after the occurrence.*

Hanson Construction Materials Pty Ltd

Tweed Sand Plant Drivers' Code of Conduct

Confirmation of Understanding

I, _____ (print)

of _____ (company)

have read/had explained to me, the Tweed Sand Plant Drivers' Code of Conduct and understand my obligations with regard to its content.

I further confirm I will comply with all requirements of the Tweed Sand Plant Drivers' Code of Conduct.

Signed: _____

Date: _____

Endorsed By: _____
(Hanson Representative)

Please detach and retain in site files



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