

Tweed Sand Plant

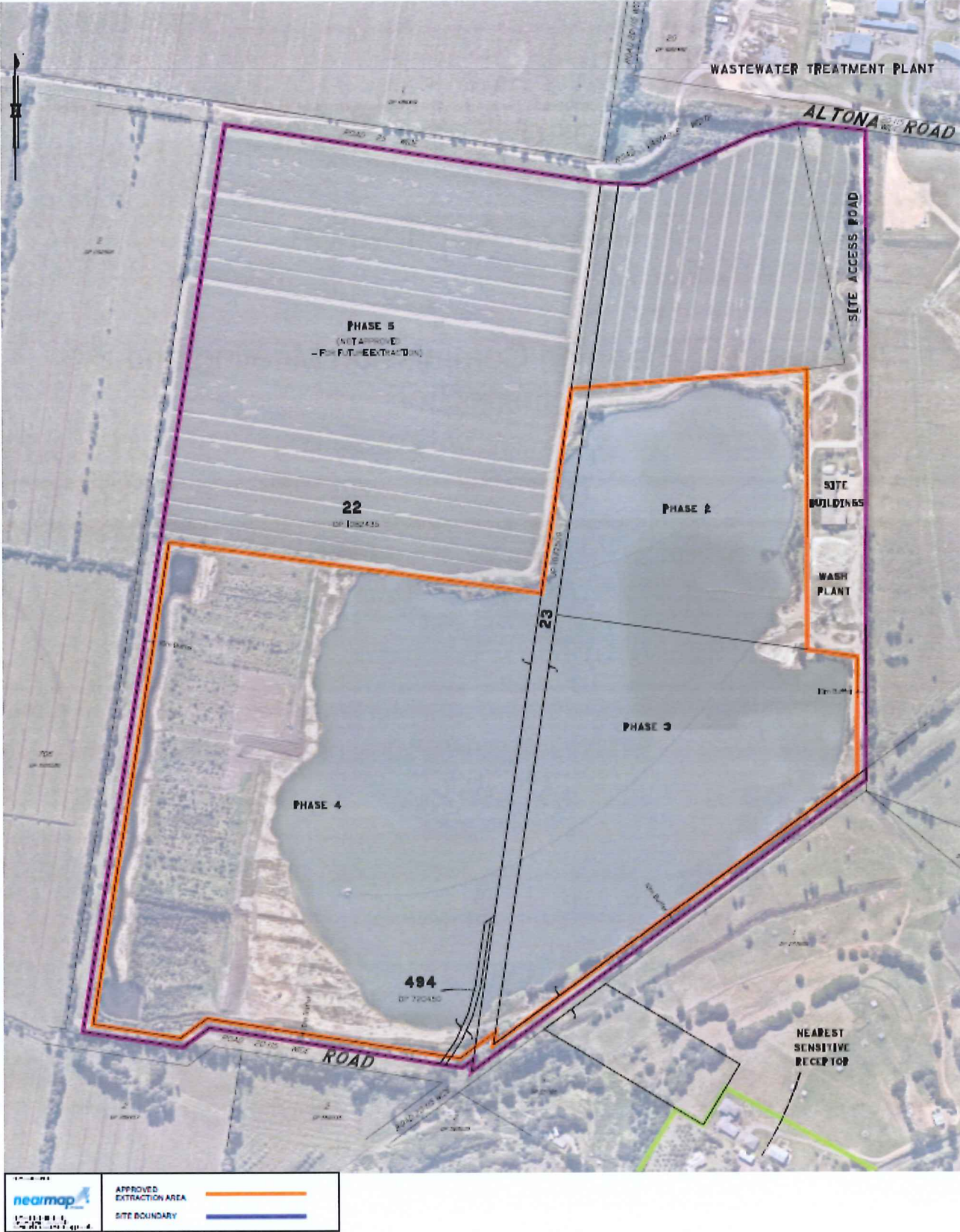
MOD1 Application

Independent Planning Commission Meeting and Site
Inspection



Thursday 9 August 2018

Site Plan



Overview

Current Approval

- EIS completed by previous owners, P Guinane Pty Ltd in 2005.
- DA 152-6-2005
- Approved by NSW Department of Planning on 31 July 2006.
- Lapses 1 July 2036.
- Granted for Phases 3 and 4 only, across L2 DP1082435, L23 DP1077509 and L494 DP720450 (refer Site Plan).
- Produce and transport a maximum of 150,000 m³ of sand products per year. * see note below
- Access/egress via Altona Rd, Crescent St, Tweed Coast Rd.
- Heavy vehicle movements (in and out) not to exceed:
 - 20 per hour (peak); *210 M 1000L*
 - 200 per day (peak); and
 - 80 per day (rolling quarterly average)
- Operating hours:
 - Sand extraction and processing:

Mon-Fri	7.00am to 5.00pm
Saturday	7.00am to 4.00pm
 - Sand delivery and distribution:

Mon-Fri	7.00am to 5.00pm
Saturday	7.00am to 12.00pm
- Hanson acquired the business in February 2007.

* Note: Historically Hanson has equated this to maximum sales of 285,000tpa, based on a conversion rate of 1.9t/m³. In December 2017 however, DPE raised concerns with the appropriateness of this conversion factor and at a later meeting, indicated the condition (Schedule 2 Condition 8) was ambiguous.

MOD1 Proposal

- All conditions remain as per Current Approval, other than:
 - Produce and transport from site, up to a maximum 500,000 tonnes of sand products per year (265,000m³)
 - This results in an increase up to 36 heavy vehicle movements, or a maximum 18 truck loads per hour.
- These additional heavy vehicle movements allow for the increase in extraction limit, whilst also providing contingency for peak periods.
- It is not proposed to increase the current approved extraction area, ie. the site footprint will not change from the current approval, with sand extraction continuing only from the existing Phase 3 and Phase 4 areas.

- The total volume of sand extracted from Phases 3 and 4 will not increase, rather there will be an increase in the rate at which sand is removed.
- No change to the extraction depth is proposed.
- No changes to the current loading procedures or haul roads are proposed.

What Prompted the Mod 1 Application?

Background and Timeline

- Hanson exceeded the 150,000m³ limit in the 2015-16 financial year by 26,821m³, due to an increase in demand for its sand product throughout south-east Queensland (SEQ) and northern New South Wales (NSW).
- The exceedance was self-reported to DPE on 7 July 2016.
- ✕ • DPE issued a Show Cause notice and subsequent penalty notice for \$15,000 on 21 July 2016.
- Hanson accepted the fine issued by DPE and the matter was settled on 9 September 2016.
- Hanson (via environmental planning consultants, Gilbert & Sutherland) wrote to DPE in October 2016 seeking a modification to the approved annual extraction limit.
- DPE requested an Environmental Assessment (EA) be prepared to address a number of issues.
- An original EA submission was provided to DPE on 7 February 2017 addressing the broad categories:
 - Background and comprehensive description of the development
 - Traffic impact assessment and road maintenance
 - Noise impact assessment
 - Dust impact assessment
 - Flora and Fauna, site rehabilitation, and development footprint
- A subsequent supplementary submission was provided on 15 May 2017 to address DPE and Council feedback from the original EA submission.
- The final EA for MOD1 application was submitted to DPE on 12 June 2017 and released for Exhibition between 29 June and 31 July 2017.
- No submissions were received during this period.
- Late 2017, DPE queried (Bitzios) traffic reports following a number of submissions made by neighbouring development Gales-Kingscliff Pty Ltd.
- Hanson responded to these submissions, including additional analysis and comments from Bitzios traffic consultants on 2 March 2018.

- Hanson met with DPE Resource Assessments in Sydney on 27 March 2018 to discuss the MOD1 application, with the department indicating they were moving away from volumetric conditions, instead applying conditions based on mass.
- Also whilst meeting in Sydney on 27 March 2018, the Department's Compliance Branch indicated that Schedule 2 Condition 8 of the current approval is 'ambiguous'.
- DPE provided draft MOD 1 conditions for review to Hanson and Tweed Shire Council (TSC) on 12 April 2018.
- Hanson suggested a number of amendments, as did TSC Development Assessment and Compliance officers in correspondence dated 17 May 2018.
- TSC Planning Committee subsequently met on 7 June 2018 and wrote to DPE on 8 June 2018 endorsing the officers previous submission, but also noting that "Council does not support this application....".
- DPE issued a revised version of draft Notice of Modification (NoM) for the Tweed Sand. MOD1 consent on 15 June 2018, including the requirement for roadworks to be undertaken on Altona Road and Tweed Coast Road / Crescent Street intersection prior to any increase from 10 trucks per hour to 18 trucks.
- Hanson confirmed to DPE that we were comfortable with all proposed revised draft conditions on 29 June 2018.
- DPE representatives, Howard Reed and Genevieve Seed visited Hanson Tweed Sand for further discussions and site inspection on 2 July 2018. At this meeting Hanson reconfirmed to DPE that we were comfortable with all revised draft conditions, including the requirement to upgrade the current alignment of Altona Road to include two additional passing bays, plus construction of a 200 metre acceleration lane on Tweed Coast Road, prior to an increase from 10 trucks per hour to 18 trucks. In addition, Hanson confirmed that we were prepared to undertake the full cost of these road upgrades. This undertaking was formalised by letter to DPE on 3 July 2018.
- DPE also met with TSC representatives on 2 July 2018, who confirmed their objection to the MOD1.
- In view of the late objection from TSC, on 18 July 2018 DPE referred the MOD1 draft NoM and Environmental Assessment Report to the IPC for determination.

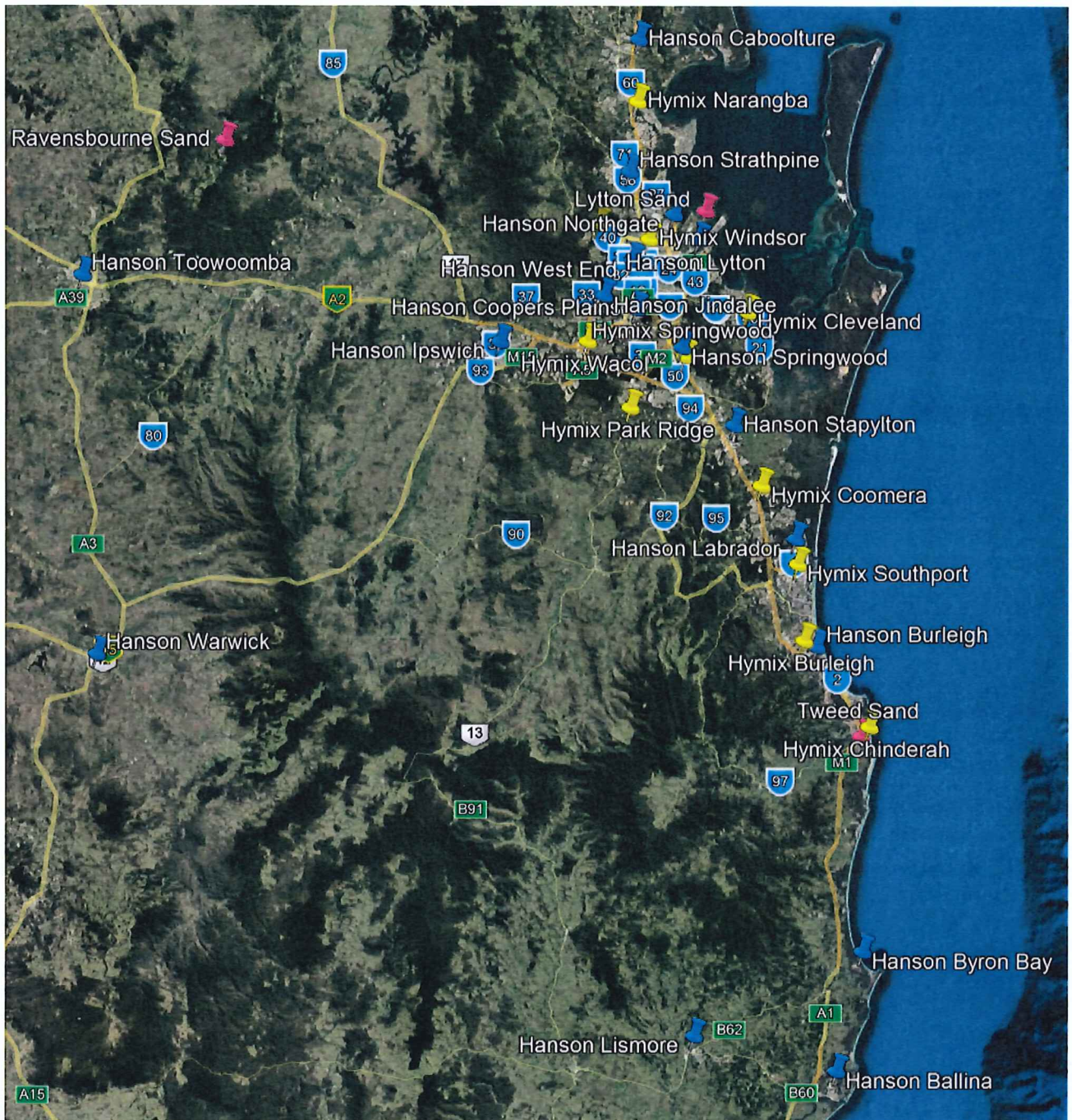
Demand for Sand

- In the SEQ/NNSW region, the concrete market has been experiencing substantial growth in recent years (as detailed below) with demand for fine sand increasing at a similar rate.

2013	Base year
2014	+14.4%
2015	+10.6%
2016	+ 7.1%
2017	flat
2018	- 3.8%
2019	+ 5.8%

- The increase in demand for sand in the Northern NSW and SEQ regions is anticipated to continue for the foreseeable future.
- The original 2005 approval for sand extraction at Tweed was 150,000m³. From the figures above, it can be seen that demand has increased by approximately 32% in the last 5 years alone, with this growth forecast to continue in upcoming years.
- Tweed Sand is a state significant resource producing high quality sands for supply to the construction industry and is in a strong and unique position to meet these predicted demand trends.
- Hanson Tweed Sand MOD1 application will allow the operation to respond to the growing market, with the proposed maximum of up to 500,000 tpa enabling Hanson to meet historical, current and forecast future demand.
- The location of Hanson and associated company Hymix concrete plants in SEQ/NNSW is shown on the figure below. Tweed Sand currently supplies internal concrete plants from Ballina in the south to Central Brisbane in the north, as well as a number of third party concrete plants in Northern NSW and the local Tweed area.
- Besides Tweed Sand, the only alternate Hanson owned sites capable of supplying fine sand suitable for concrete production are Lytton Sand 116km to the north in Brisbane and Ravensbourne Sand north east of Toowoomba.

Hanson Concrete Plant Sites in SEQ/NNSW



Hanson response to Tweed Shire Council letter to DPE re Proposed MOD1 to DA 152-6-2005, dated 8 June 2018.

Council officer comments:

1. Schedule 2 Condition 9 – Quarry Product Transport

Accordingly, it is requested that Condition 9 be amended to reflect the following:

9 The Applicant must not dispatch more than 10 laden trucks from the site in any hour until the upgrade of Altona Road as entered into by the agreement referenced by Condition 23 of Schedule 3 has been completed.

Following the upgrade of Altona Road, the Applicant must not dispatch more than 18 laden trucks from the site in any hour.

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018). Hanson confirmed to DPE on 3 July 2018 that we were comfortable with the requirement to upgrade the current alignment of Altona Road to include two additional passing bays, plus construction of a 200 metre acceleration lane on Tweed Coast Road, prior to an increase from 10 trucks per hour to 18 trucks. In addition, Hanson confirmed that we were prepared to undertake the full cost of these road upgrades.

2. Schedule 2 Condition 14 – Contributions

Accordingly, it is requested that Condition 14 be amended to reflect the following:

14 Prior to carrying out any increase in truck movements associated with Mod 1, or as otherwise agreed by Council, the Proponent shall pay Council \$46,630.00 in accordance with Council's Tweed Road Contribution Plan.

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018). Hanson had previously agreed to this commitment during meetings and discussions with Council in May 2017.

3. Schedule 3 Condition 23 – Upgrade and Maintenance of Altona Road

As previously noted, Council are happy to facilitate an agreement between parties for the upgrade and maintenance of Altona Road, but object to the requirement for such an agreement as a condition of consent. It is considered that the agreement needs to be reached prior to the determination of this application and then the Mod condition can make reference to the actual agreement.

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018).

4. Schedule 3 Condition 24 – Upgrade of the Crescent Street and Tweed Coast Road Intersection

As previously discussed, Council has serious concerns with the upgrade being delayed until 2023 and consider that the construction should be undertaken prior to the increase in traffic volumes from the Tweed Sand Quarry.

Accordingly, it is considered appropriate that Condition 24 be modified such that any final agreement between Tweed Sand Quarry and Cudgen Lakes Sand Quarry (arranged prior to determination) be referenced in the condition and that the timing of the upgrade to the intersection of Tweed Coast Road and Crescent Street (i.e. constructing a northbound acceleration lane on Tweed Coast Road to the appropriate Austroads requirements) be prior to any increase in truck movements associated with Mod 1.

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018).

Hanson confirmed to DPE on 3 July 2018 that we were comfortable with the requirement to upgrade the current alignment of Altona Road to include two additional passing bays, plus construction of a 200 metre acceleration lane on Tweed Coast Road, prior to an increase from 10 trucks per hour to 18 trucks. In addition, Hanson confirmed that we were prepared to undertake the full cost of these road upgrades.

5. Rehabilitation and Landscaping

- The intent of the final landform to be of 'natural form' as per the existing Condition 3 of Schedule 3 has not been sufficiently reflected in the Draft Conditions;
- The requirement to identify the boundaries as per the existing Condition 1 of Schedule 3 appears to have been deleted. The metes and bounds of the quarry footprint should be surveyed to ensure all required buffers are not encroached upon;
- The restriction of activities within the minimum 10 buffer zone as per the existing Condition 2 of Schedule 3 do not appear to be as prescriptive in Draft Condition 18;
- There is no timeframe stipulated for the submission of the Rehabilitation Management Plan pursuant to Draft Condition 32. It is considered appropriate this should remain at 6 months from the date of the consent;
- Given that the nominated '5 year' rehabilitation timeframe has been deleted from the Draft Conditions, the short, medium and long term rehabilitation time frames should be stipulated in accordance with the Revised Rehabilitation and Landscape Management Plan dated December 2016 prepared by JWA Ecological Consultants, with the exception of the following:
 - The 'Medium Term Rehabilitation' timeframe (referred to in the current RLMP) to commence at Year 6 (this should not change as operations have extended beyond this time-period) to be completed by the end of the 13th year of operation;
- It is considered that the incorporation of a variety of lake bank treatments to achieve a natural looking bank design as referred to in the notes of existing Condition 24 of Schedule 3 should be reflected in the Objective – Dredge Pond (Table 4) of Draft Condition 30; and
- The requirement for a pest and weed management plan (existing Condition 27) is not reflected in Draft Condition 32 of Schedule 3, nor appears as an Objective in Table 4 of Draft Condition 30. It is considered that this should be reinstated, given the high likelihood of weed and pest fauna species incursion if not appropriately managed.

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018). Extensive Rehabilitation objectives, monitoring and reporting have been conditioned – refer Schedule 3 Conditions 26 to 30.

6. Noise and Air Quality

No objections are raised with regard to the draft conditions associated with noise and air quality, with regard to potential amenity impacts.

Hanson response: N/A

Council Planning Committee comments:

7. Additional Comments

Council does not support this application due to the inappropriateness of allowing such intensive extractive industry in this National Iconic Landscape, and the high level use of large trucks on Tweed Coast Rd in this populated residential and iconic coastal tourist area that will invariably reduce both safety and amenity, and impact on the economic values of the area as well as its attractiveness in regard to the low key coastal village aspirations and the green belt clearly identified as the preferred scale and intensity of development by the community through numerous strategic planning documents over many years.

Hanson response: Tweed Sand is a state significant resource producing high quality sands for supply to the construction and concrete industry with uses including roadworks, housing, schools, hospitals, infrastructure projects, etc. Whilst it is acknowledged there will be an increase in heavy vehicle movements as a result of this modification, the Bitzios traffic analysis concluded this would be minimal in terms of overall total traffic.

If this development is supported the following matters are requested for inclusion in conditions of consent:

- *Council has serious concerns about the environmental impacts of this proposed expansion and the lack of available data on the annual compliance and reporting since 2011. The lack of available data makes it difficult to assess the current and future impacts of this operation.*

It is requested that all annual compliance and reporting data is made publicly available.

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018). Schedule 5 Condition 16 requires data to be made publicly available on the Hanson website.

- *Council requests that water quality is a key consideration in this assessment to ensure improved water quality of the drainage systems and the Tweed River, and that any impacts are avoided or at least offset by generous enhancements to the marine environment.*

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018). Extensive Soil and Water monitoring and reporting has been conditioned – refer Schedule 3 Conditions 9 to 19.

- *Council notes the international significance of the Tweed Caldera, the proximity of the highly significant Stotts Island Nature Reserve, the lack of interconnecting vegetation corridors across the landscape in this area, and strongly requests that appropriate revegetation is required to contribute to addressing this deficit.*

Hanson response: It is not proposed to increase the current approved extraction area, ie. the site footprint will not change from the current approval, with sand extraction continuing only from the existing Phase 3 and Phase 4 areas. Schedule 3 Condition 27 requires progressive rehabilitation of the site.

- *Council raises serious concerns about residents health and safety from air pollution particulate matter and requests that operations are such that increases in particulate matter, especially fine and ultra fine particulate matter are not accepted.*

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018). Extensive Air Quality monitoring and reporting has been conditioned – refer Schedule 3 Conditions 4 to 7.

- *Council raises serious concerns about long term carbon emissions from these operations and requests that green energy is sourced and/ or offsets are provided in this Shire in the form of revegetated areas.*

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018). Refer Schedule 3 Condition 8 Greenhouse Gas Emissions and Schedule 3 Condition 33 Waste.

- *Visual impacts should be reduced wherever possible by minimising the operational areas at any one time, and requiring landscaping of all available areas wherever possible and as soon as possible.*

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018). Schedule 3 Condition 27 requires progressive rehabilitation of the site and Schedule 3 Condition 31 requires a tree screen along the southern boundary.

- *Council requests that the health of the aquatic environment and marine life should be thoroughly tested, monitored and reported on by the proponent for the lake, surrounding drains and receiving waters of the river for the duration of the activity, and for 30 years after the activity ceases or longer if any issues are not resolved, and that any concerns are adequately remediated.*

Hanson response: DPE have incorporated this request into the latest draft NoM (July 2018). Extensive Soil and Water monitoring and reporting has been conditioned – refer Schedule 3 Conditions 9 to 19. It is not considered practical to continue this for at least 30 years after sand extraction ceases.

- *Council requests a meeting with the Department of Planning to further discuss these matters.*

Hanson response: DPE met with Council on 2 July 2018.

- *Council notes the request from the Cane Growers that an agreement be established enabling the areas to be utilised for cane farming until such a time that it is required for quarry development, and Council strongly supports this request to ensure the ongoing viability of this industry.*

Hanson response: It is not proposed to increase the current approved extraction area, ie. the site footprint will not change from the current approval, with sand extraction continuing only from the existing Phase 3 and Phase 4 areas. Both of these areas are predominantly the extraction lake with only a small area of land between the western lake edge and site boundary not feasible for cane farming.

- *Council requests a deferred commencement condition be imposed to restrict this expansion until Tweed Coast Rd is upgraded to 4 lanes.*

Hanson response: It is not considered feasible to deter commencement of the MOD1 operation until some 'undetermined' time in the future. Hanson has confirmed to DPE that we are prepared to undertake the full cost of constructing a 200 metre acceleration lane on Tweed Coast Road, prior to an increase from 10 trucks per hour to 18 trucks. In any event, the Bitzios traffic analysis concludes "that the current intersection layouts can adequately cater for TSP's maximum additional traffic. Further, the cumulative impact of both TSP and Cudgen Lakes (ie. Gales–Kingscliff) developments maximum traffic does not warrant the need for any significant upgrades to the intersections".



Tweed Sand Plant - caring for our community

Who is Hanson?

Hanson is part of the HeidelbergCement group, which employs 60,000 people at more than 3,000 locations, in around 60 countries. In Australia, Hanson has 62 quarries, 275 concrete plants and two precast concrete product sites located around the country.

What we do at Tweed Sand Plant

Hanson has operated the Tweed Sand Plant off Crescent Street, Cudgen for more than 10 years.

We produce fine sand commonly used in the construction industry.

How we're working for your community

The Tweed Sand Plant invests more than \$1 million into the local community annually, employing local people and utilising local contractors and service providers wherever possible.

Did you know?

- Building a typical house requires about 100 tonnes of aggregate.
- Constructing just 1km of highway requires approximately 25,000 tonnes of crushed rock.
- Just 1km of suburban road requires 5000 tonnes of crushed rock.
- It takes hundreds of tonnes of concrete and asphalt to create footpaths, kerbs and gutters in your community.
- One high rise building can use up to 1000 tonnes of aggregate for every floor.

We know you need us – and we need you too – as customers, employees and neighbours.

Contact us for more information - we are committed to our community.

Visit www.hanson.com.au or call Rebecca Grisman,
Community Relations Coordinator 0438 797 613



Quarry Life Awards

In 2015 the Quarry Life Awards were held at the Tweed Sand Plant and five student researchers were invited to conduct their individual projects at the plant. The plant was recognised for its leadership in best practice and environmental responsibility.

Researcher Christopher Stuart Jones was named the national competition winner for his research into vegetation protection and management.

Bond University

We regularly host Bond University students visiting the plant for research studies in environmental management, flora and fauna protection on site and rehabilitation.

Young Driver Safety

Hanson has won local, state, national and international awards for its innovative program developed in high schools to help teach students driver safety, including alongside trucks and heavy vehicles. This year the Tweed Sand Plant plans to deliver the program with a local high school in the area.

Environmental management and rehabilitation

Hanson is widely recognised as an industry leader for our environmental management. The company has won national awards for our innovative environmental and native flora rehabilitation programs within quarries throughout Australia.

The Tweed Sand site has a total footprint of 75 hectares, with an approved sand extraction area of 42 hectares, including the lake which is currently 29 hectares. The remainder of the site consists of a tea-tree plantation and agricultural lands.

Our products are used by many local customers and we ensure that we responsibly manage travel distances and market delivery to reduce fuel and energy usage and ensure competitive pricing.

Our professional drivers are world class

- Our fleet is certified through the National Heavy Vehicle Regulator (NHVR), which is recognised for industry best-practice.
- The company has a zero tolerance policy for unsafe driving and requires all our drivers to be responsible, professional and highly trained, in keeping with Hanson's Driver Code.
- All trucks are numbered to ensure any complaints are followed up fast.
- We complete road worthiness, driver fatigue and other checks of vehicles every day.
- There are up to 40 Hanson trucks at work, travelling through the local area each day.
- Hanson is continually seeking sustainable solutions for transporting products across Australia.

