Brandy Hill & Seaham Action Group

The Minister for Planning
Department of Planning & Environment
GPO Box 39
Sydney NSW 2001

Dear Minister,

Brandy Hill and Seaham Action Group is **opposed** to all aspects of the Brandy Hill Quarry expansion, but is **not opposed to extending** its operations into new rock reserves at similar output rates in order to continue operating.

The following document explains that position on behalf of the local community.

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1. EXECUTIVE SUMMARY

Abbreviations Used:

BHD Brandy Hill Drive
BHSAG Brandy Hill and Seaham Action Group (a subcommittee of VOWW)
BHQ Brandy Hill Quarry
CCC Community Consultative Committee. An informal voluntary group formed by Hanson.
DPE Department of Planning and Environment
EIS The Environmental Impact Statement from Hanson, regarding Brandy Hill Quarry Extension
MCC Maitland City Council
MCQ Martins Creek Quarry
PSC Port Stephens Council
VOWW Voice of Wallalong and Woodville Inc

Overview

The Brandy Hill and Seaham Action Group (BHSAG), vehemently opposes the proposed expansion of both tonnage and hours of operation of the quarry. Adding cement batching and batching plant waste recycling also does not have our support for the reasons stated below.

BHSAG does support the extension of the quarry in order to access new reserves and to continue operating at a similar annual output. We do not want to jeopardise existing jobs and the state's access to an essential natural resource, but instead of exhausting the resource in 30 years, make it last 60 by limiting the output rate. The justifications for this will be explained in detail.

Consultation and CCC

After 4 years of consultation through an informal CCC where our concerns were frequently tabled, we find that the EIS offers almost NOTHING to alleviate or mitigate the bases of our concerns. Hanson, the Australian arm of the German Multi-national Company HeidelbergCement, has not adequately acknowledged the loss of amenity for people who need, or want, to walk or cycle on Brandy Hill Drive, nor have offered any compromise or concessions as a result of community feedback. Based on the EIS, it would appear that Hanson's consultation was only a façade to tick one of the boxes in the SEARS/DGRs. However, there is just one glimmer of acknowledgement, in section 6.6.5 of the EIS that states:
"Hanson will mitigate any impacts by:

- *Minimising road traffic impacts on the environment, by limiting truck movements outside of standard operations where reasonable and feasible.*
- *Maintaining its commitment to building the footpath along Brandy Hill Drive in some capacity and giving it further consideration with Port Stephens Council".*

There is no explanation of what they mean by the first point. At the last CCC meeting on 30th March, Hanson stated they have chosen to NOT be proactive by including any "offers" in the EIS, but instead will wait for the "Response to Submissions" and VPA negotiation phases before making any commitments. We find that very disappointing, and it is in clear disregard for the SEARS, though it leaves us with some hope that they expect to have their "arms twisted" by DPE and PAC during the review process.

Hanson management often gave sympathetic and encouraging feedback on the key mitigation measures sought by BHSAG, but we are also disappointed that none of the matters that would need to be handled in

conjunction with Port Stephens Council (PSC) have been discussed at all with council (which was represented at a number of CCC meetings). These include the pathway, bus stops and road surface and shoulder improvements.

The EIS regards Seaham 3km to the east as the closest town or residential area and completely disregards the much larger residential community of Brandy Hill and Nelsons Plains at its front gate and on its major haul route. The community of Brandy Hill and adjacent areas are zoned RESIDENTIAL, and the EIS pays no regard to this.

BHSAG Primary Concerns

Through surveys, website feedback and general input from the community affected by quarry operations, BHSAG's primary concerns have been and continue to be as follows:

- The highest concern is in changing from currently restricted operating hours (6am- 6pm 6 days per week, (see section 4.2 that explains this) to 24/7, for all activities except primary crushing. Overnight quarry operations and particularly transport through a residential area will have a hugely adverse impact on the health and wellbeing and amenity of residents.
- The overwhelming increase in truck traffic is the second major concern because of the consequential loss of social amenity. The cumulative impact of the current rate of haulage from Brandy Hill quarry plus that from Martins Creek quarry (which is currently the subject of a court case challenging its legality) from 2013 to the present day, has given residents a taste of what an expanded Brandy Hill Quarry alone would be like in terms of both pre-dawn and late evening haulage and increased truck volumes/frequency. Cumulative quarry haulage during peak contract times is unbearable, and must not be allowed to continue. The loss of amenity arose from noise at extended times of day and night in an otherwise very quiet residential area. Very few (<15) non gravel heavy trucks use this route daily, so gravel trucks from two quarries currently far exceeds 90% of all heavy truck movements. Any expansion in output will push that percentage toward 100%. Waste recycling from concrete batching plants might not increase incoming truck movements, but it will markedly increase noise from fully laden incoming trucks powering up the hills that the outgoing trucks otherwise coast down.
- Amenity has been and will be further degraded by any cumulative increase in quarry truck movements, through resident's loss of ability to walk or cycle along the road corridor to access neighbours, bus stops and local facilities. Once upon a time, residents made do using the shoulders of the road to walk and cycle as there is no formed off road pathway. Trucks were infrequent and would move across to give pedestrians and cyclists on the shoulder a wide berth. But with the existing cumulative impact of two quarries, truck movements are more frequent and with more oncoming traffic, trucks can no longer give pedestrians and cyclists that wide berth. Walking and cycling on the shoulder with the cumulative impact of two quarries is only an option for the foolhardy, if they can also tolerate the intimidation of huge trucks, their noise, wind blast, and being hit with grit or grimy road spray when the road is wet.
- The third set of primary concerns is about safety. The safety of pedestrians (particularly school children), cyclists, buses using bus stops, residents entering and exiting BHD and Seaham Road from their driveways and from side streets, and also the general safety of all road users particularly at the many intersections between the quarry gate and the RMS controlled main highways, will be unacceptably diminished by any expansion in output.

- The current speed limits are 80kph on Brandy Hill Drive, 90kph on Seaham Road and 100kph on Clarence Town Road. This, in combination with the lack of an off-road pathway, adequate off-road bus stops with waiting areas for passengers, safe pedestrian crossings near bus stops in the residential areas, and poor intersections, mean that safety will be unacceptably diminished by any expansion of quarry output. And particularly so at morning school bus times, which will also be the peak trucking time. We have letters from PSC advising that it is NOT safe to walk on Brandy Hill Drive or Seaham Road, but school children and residents are forced to do this daily.
- BHSAG will explain the nexus between any expansion of BHQ output and or operating hours, along with any cumulative effect of Martins Creek quarry, and how amenity and safety issues will be pushed beyond what is acceptable and reasonable for a residential area.

BHSAG Requests for limitations or mitigation measures

BHSAG is echoing residents' views in imploring DPE to:

a) Reject the proposal to allow 24/7 dispatch through a residential area and 24/7 crushing. There must be a complete curfew on operations between 8pm – 6am weekdays, and from midday Saturday until 6am Monday. Principally for the sake of amenity.
b) Reject the proposal to install a second weighbridge to enable up to 60 loaded vehicle dispatches per hour. Retain the current dispatch rate of 30 loaded vehicles per hour. For the sake of amenity and safety.
c) Reject the proposed recycling of concrete batching plant waste, as the loaded gravel trucks returning to the quarry will be much noisier ascending the hills than the current empty trucks. This also for the sake of amenity and safety.

   The following conditions should be imposed if approval is granted, irrespective of whether that is to continue operations at a similar or at a greater level than current.
d) Require the quarry, and any other quarries that the DPE may authorise in the future to use the same roads (eg: Martins Creek Quarry), to pay a road maintenance levy that exceeds the current rate, to reconstruct the haul roads, bus stops and intersections to a standard suitable for whatever level of heavy vehicle traffic is approved. In particular, paving with fine gravel or preferably hot-mix to reduce road noise.
   Note that quarry trucks are currently in the order of 92% of all of the heaviest vehicles travelling on Brandy Hill Drive, and that would rise to over 96% if Hanson's EIS were to be approved as-is. See appendix 5). Heaven forbid, if Martins Creek also got 1.5mtpa then gravel trucks would comprise up to 97% of heavy trucks on Brandy Hill Drive on an annual basis.
e) Require the quarry, and any other quarries that the DPE may authorise in the future to use the same roads, to contribute either materials or monies toward the construction of infrastructure to address the amenity and safety issues outlined above. The infrastructure that must be built as a precursor to adopting any future consent includes:
   i. An off road pathway, in accordance with PSC's cycleways plan, along the full length of Brandy Hill Drive and on Seaham Road linking to Brandon Park to the north and to the Jacaranda Grove preschool to the south.
   ii. Off road bus stops on both sides of the road to service all side streets along Brandy Hill Drive and Seaham Rd to Hinton Road. The stops must include a paved area for those waiting for the

bus, to be able to stand well clear of the roadway and bus stop, ie: either on the pathway outlined above or a pad if there is no path on that side of the road.

iii. Signage must be installed at each end of this section of road reminding all drivers of
- "School children ahead", and "40 when lights flash" on buses means **40kph**

iv. Install pedestrian refuge crossings at all side streets and near the above bus stops, or at places where the pathway changes to the other side of the road.

v. A reduction in speed limits on all of Brandy Hill Drive, Seaham Road between Eskdale Drive and Hinton Road, and on Clarence Town Road in the vicinity of Brandy Hill Drive. Our recommendation is 60kph.

f) Require all trucks that deliver to or from the quarry, and any other quarries that use these roads, to have a short, large and therefore easily readable unique ID on both sides and the back of the rear trailer, as used for coal-mine vehicles. This is to facilitate the identification of vehicles that are subject to complaints from the public. There is no point having a code of conduct and then having no way that the public can lodge complaints about specific vehicles. The complaint process should also ensure that if the complaint is about a truck from another quarry, then it is forwarded to the other quarry on behalf of the complainant.

g) Require quarry operators to establish, in conjunction with the DPE's nominated Sound Expert, BHSAG and the quarries environmental representatives, a best practice code for sound attenuation for all trucks that carry the quarry's product, and a system to monitor compliance and enforcement of the code. In other words, a system to refuse entry to the quarry if a truck exceeds the code.

2 INTRODUCTION

This section will introduce the Brandy Hill, Nelsons Plains, Giles Road and Seaham communities which are the ones most affected by quarry operations and will continue to take the brunt of any future operations. BHSAG will also be introduced and its major activities outlined.

Affected Communities

While Seaham is the closest town located approximately 3km from the quarry, it is not the closest residential community. Few quarry vehicles pass through Seaham, being only those making local deliveries to Seaham and towards Dungog. 165 houses were counted within the town's 60kph speed limited area. The major impacts of the quarry are blasting noise & vibration, and residents sharing the haul roads with quarry trucks into Raymond Terrace and Maitland, from Brandy Hill onwards.

The Giles Road residents in about 31 houses are the most seriously affected by blasting and crushing noise and vibration, as quarry trucks do not use their road, but they also must contend with quarry trucks on the roads to service and employment centres. An additional 28 lot subdivision has been submitted to PSC for approval on Giles Road.

Eskdale estate and Alexander Drive are residential areas similar to Brandy Hill, located adjacent to Brandy Hill and accessed from Seaham Road just north of Brandy Hill Drive. There are 76 houses counted in this area, which is mainly affected by quarrying noise and dust, as quarry trucks do not use their road, but they also must contend with quarry trucks on the roads to service and employment centres, and operations noise.

The largest nearby community and the one most affected by quarry transport as well as quarrying noise and dust, is that of Brandy Hill and Nelsons Plains, starting from the front gate of the quarry just a few hundred metres from the proposed processing facilities, and straddling the quarry's primary haul route. The route is 4.5km through Brandy Hill and a further 2.8km past residences and businesses to Hinton Road. There are 3 major traffic intersections on this section of road (each end of Brandy Hill Drive, plus at Hinton Road), a further 10 side streets to cul de sacs (Ralston, Noongah, Sofia Jane, Leumeah, Elouera, Merindah, Warrigal, Neika, Werii and Tandara), and 75 and 33 property driveways respectively directly onto Brandy Hill Drive and Seaham Road.

There are currently 233 houses in Brandy Hill, 16 is Sofia Jane Close, and 65 along Seaham Road Nelsons Plains, that use these roads to get to and from home. There are also 3 chicken farms and a pre-school. It may be an "Inconvenient truth" that such a large residential area is along the primary haul route of the quarry. The EIS fails to fully acknowledge this. History shows that Brandy Hill was developed by the original quarry owner in tandem with the quarry, so the quarry industry has no one to blame but itself!

Daily there are 7 school buses travelling along Brandy Hill Drive between 7am and 9am in the morning and again in the afternoon between 3 and 4:30pm, servicing the various primary and high schools in Seaham, Mount Kanawary, Raymond Terrace, Newcastle and Maitland.

It is also necessary to note that the route to the Pacific Highway through Raymond Terrace includes major T-junctions with Adelaide Street, and Raymond Terrace Road which links to Maitland and is a major accident site. There are busy roundabouts at Port Stephens Street and at the highway interchange on

Richardson Road. All of these have not been mentioned in the EIS. Failure to examine the impact of increased quarry truck activity at these intersections is a deficiency within the EIS.

BHSAG

This residents group was formed subsequent to the July 2013 meeting at Seaham School, which was attended by staff from DPE and Hanson plus 140 residents, following the announcement of the quarry expansion plan. BHSAG operates as a subcommittee of VOWW (The Voice of Wallalong and Woodville) which is an incorporated not for profit organisation that champions the interests of residents in the western part of PSC West Ward.

The committee initially consisted of 10 local residents although 3 of these have now left the area and 1 member left due to work commitments. 5 of these people also joined the CCC.

We have a website https://brandyhillaction.org/ to distribute and receive information.

Through mailbox and online surveys, we ascertained both the nature and importance of respondents concerns about the quarry expansion, and also their view on appropriate limitations and necessary mitigation measures. The results were supplied to Hanson via the CCC and have been included in the EIS Appendix 17 section 9.2.1 page 34. Interestingly, Hanson never conducted any surveys of their own to ascertain public opinion and through this inaction contradict their own corporate commitment to Community.

SECTION 3: BACKGROUND.

Brandy Hill Quarry was established after PSC approved the application from Hunter Valley Mining dated June 1983 and the EIS prepared by Resource Planning dated May 1983, for 100,000tpa rising to 400,000tpa and a proposed life of 30 years. But the approval conditions included:

- Condition 4 (see below) referring to all the environmental measures in the EIS, which included 6am-6pm, 6 day operations.
- A new access road (Brandy Hill Drive) to be constructed so that the initial 27 deliveries per day rising to 67 could avoid travelling through Seaham or Wighton Street. (See point 12 below). This followed submissions from the Seaham and District Community Association and 27 other residents, opposing the quarry because of noise and vibration concerns but mainly objecting to the proposed traffic route through Seaham.
- Bus bays were also to be provided on main road 601 (Seaham Road), (see point 13 below).

These are extracts from the 1983 PSC consent:

4) The applicant is to undertake all those environmental protection measures outlined in the Environmental Impact Statement prepared by Resource Planning and shall ensure that every effort is taken to minimise any adverse impact upon the existing environment.

12) No work is to commence upon the development of this land unless and until the road proposed within the subdivision of Development Application No 2157 is constructed and dedicated to Council.

13) This application is subject to a Section 94 Contribution under the provisions of the Environmental Planning and Assessment Act, 1979 in respect ot the upgrading of communication and transport facilities within the area and in this regard widening of Main Road 601 to provide bus lay-bys for the picking up of and setting down of school children will satisfy this requirement.

14) Should claims for compensation in respect of damage or loss of value of property within 2 km of the centre of the quarry arise, the applicant shall accept the verdict of an independent board in respect to payment of damage claims or in the case of gross devaluation of property, acquisition thereto. The board shall consist of:-

(a) A Chairman being the nominee of the Valuer General who shall have a casting vote,

Brandy Hill Drive was constructed and even before it was sealed, lots in the subdivision along Brandy Hill Drive (see point "12" above) went on sale. The quarry was developed, and deliveries commenced about 1986. The subdivision and the quarry were thus developed in tandem. Residents could have their box trailers filled with gravel by the quarry, for driveways etc, and with the relatively low volume of gravel trucks, there was harmony.

It is pertinent to note that the subdivision lots were sold on the merits of the rural lifestyle, with horse riding and clean air featured. It is also pertinent that due to the objections of a relatively few Seaham residents (compared to now) concerned about fewer than 60 trucks/day or 6/hr, an alternative route was established that would soon have over 75 house driveways along its length, and another 33 on Seaham Road. However, there was an expectation that the quarry life of 30 years would see an end to the inconvenience before 2020.

The next milestone according to the GIPA documents was in 1992 when an amendment removing clauses 14 and 15 relating to compensation for property devaluations was granted by PSC. Clearly there had been a common concern about property damage and/or devaluation of property values from the expected loss of local amenity, and the new quarry owner (Hymix) wanted to avoid that issue.

There was progressive release of new stages of the subdivision as additional side roads were developed. A total of 7 side roads leading to cul de sacs were developed, so that today there are 234 homes in the subdivision, approximately 800 people, with fewer than 5 vacant lots.

Brandy Hill thus came to exceed the population of Seaham. To avoid confusion for emergency services trying to find addresses in Brandy Hill that was then still called "Seaham", there was sufficient support for the subdivision area to be renamed "Brandy Hill" in 2000.

Other subdivisions were established along Eskdale and Sophia Jane Drives. Under PSC's Rural Residential Policy, it is likely that there will be more subdivisions in the future along the quarry haul routes and in Giles Road.

Hanson took over the quarry in 2001.

There is no further information from the GIPA on PSC regarding changes to the quarry consent conditions, but we understand that in 2011, Hanson had the extraction limit increased to 700,00tpa. The 2016 EPA EPL has a note saying "*During 2011 the licensee made application to increase production to 700,000 tpa*". This was done without any public consultation, resulting in the poor and inadequate state of the local infrastructure we see today. No paths, no adequate bus stops etc. The increased tonnage from 400,00 to 700,000 started seeing the tipping point where the amenity along the road corridor markedly deteriorated. Then from 2013, amenity further deteriorated when the Martins Creek Quarry under Daracon's operation (in violation of the consent according to Dungog council) commenced sending large volumes of trucks through Brandy Hill that had never been seen before, and at much earlier times pre-dawn and into the evening, than had occurred before.

The cumulative impact of these two expansions that were not subjected to any environmental assessment has had a devastating impact on the roads and amenity in our area. The Martins Creek Quarry Action Group described the onslaught of huge numbers of trucks from the early hours of the morning into the evenings through Paterson as "Trucking Hell". A huge proportion of those trucks used Brandy Hill Drive to service projects including those at Hexham and the Williamtown airport, so we experienced Trucking Hell x 2, because the trucks were 30 minutes earlier in the mornings here, and on top of the un-reviewed expanded number of trucks from Brandy Hill Quarry.

The uproar over Daracon's operations at Martins Creek, from the community groups in Paterson (PPA & MCQAG), Bolwarra, VOWW and BHSAG, was barely contained by the knowledge that Dungog Council were

taking Daracon to court over many breeches of the consent. Daracon has since then stalled and delayed the court proceedings. As a result, all those communities have been experiencing "Trucking Hell" ever since. We all are hopeful that the judge will impose severe penalties and limitations on that operation to give all residents a huge respite. We also hope that the DPE and PAC will take the judgement into consideration regarding the current Martins Creek Quarry SSD and not allow that "Trucking Hell" to happen again in Paterson, or in Brandy Hill as a result of any future cumulative impact. At the moment cumulative impact is very real. BHSAG's concerns over the proposed expanded Brandy Hill quarry operations are not hypothetical, as we have been living a doubling of truck traffic through the unregulated cumulative impact from BHQ and MCQ.

Residents and PSC continue to be appalled by the impact on roads and amenity from MCQ trucks, knowing that they pay no levy for roads to either PSC or MCC, even though the routes through those council areas are respectively about three times and double the distance travelled in Dungog Shire where MCQ is located.

Brandy Hill Drive is not a radial distribution road that links a city or major town to the surrounding region, like Clarence Town Road links Seaham and Clarence Town to Maitland, and Seaham Road links Seaham and beyond to Raymond Terrace. Apart from quarry trucks, there is a very low number of heavy vehicles that use Brandy Hill Drive. Causal observation as a resident supports the traffic counts we have conducted, which concluded that the average weekday number of very heavy vehicles that are not quarry trucks, is only about 15 per day.

Today we have both Martins Creek and Brandy Hill Quarries seeking increases to 1.5mtpa, and neither has taken any feedback from "Community consultation" into account in any tangible way. Neither EIS has addressed the likely cumulative impact of the other quarry on any of the key areas of traffic, noise, amenity for residents, or safety for road users including cyclists and pedestrians. Particularly, as the MCQ EIS clearly predicts that on average 25% of their trucks will use Brandy Hill Drive. We have already seen peaks where almost 100% of MCQ trucks using Brandy Hill Drive, when the projects are to the east or north, and it is reasonable to expect that will happen again in the future.

Our main concerns with heavy vehicles including gravel trucks are:

- One heavy vehicle imparts the same wear and tear on a road as approximately 1000 cars.
- Heavy vehicles are disproportionally involved in serious injury and deaths
- Heavy vehicles are much more noisy than light traffic, emanating from engine, exhaust, tyres, rattling bodies when empty and braking (compression, squeaky or juddering)
- Heavy vehicles due to size, noise and mass are much more intimidating to pedestrians, cyclists and car drivers.
- Fine diesel emission particulates that are health risks.

SECTION 4 Explanation of Principal Concerns

4.1 Amenity and Social Impact

Firstly let's define "amenity":

amenity
/əˈmiːnɪti,əˈmɛnɪti/

noun

a desirable or useful feature or facility of a building or place.
"the property is situated in a convenient location, close to all local amenities"
synonyms: facility, service, convenience, resource, utility, system, appliance, aid, advantage, comfort, benefit, arrangement, opportunity; More

- the pleasantness or attractiveness of a place.
"developments which would clash with amenity"
synonyms: pleasantness, agreeableness, pleasurableness, enjoyableness, niceness
"gravel working means lorries, dust, noise, and a general loss of amenity"

Every definition of amenity revolves around physical and mental wellbeing, comfort, attractiveness. *(NB. Even the dictionary meaning above uses the example of quarrying as loss of amenity.)*

> "A feature that is intended to make life more pleasant or comfortable." (Cambridge)
>
> "A key word in our social culture with reference in particular, to being pleasant and agreeable." (Collins)
>
> "A feature that increases attractiveness or value, especially of a piece of real estate or geographical location." (The Free Dictionary)

It is clear that the area surrounding BHQ for quite a distance and in all directions is rural farmland with residential pockets such as Seaham, Eskdale, Brandy Hill, Wallalong, Woodville and Nelsons Plains. Each of these pockets relies on roads that will be impacted upon by quarry haulage trucks and each of these roads are maintained by PSC and are not to the standard that one would expect could tolerate well over 1000 trucks from two quarries per day at peak production. We have experienced "peak" before and the roads became a dangerous place to be; potholed and normal traffic was overwhelmed by the physical presence of the trucks.

Residents in these areas affected, and the combined population is about 2,500, chose to live here because of the semi-rural features and the amenity they offered.

A quiet, safe, aesthetic environment with no industry or the hustle and bustle of city/town living.

Original residents were aware, but tolerated, the minimal truck movements and noisy trucks were reported to the quarry. Many later residents, if they came from outside of the area, were not told about the quarry. In fact, the original sales brochure for Brandy Hill Estate made no mention of the quarry and it was not marked on the accompanying map.

For many years the truck movements were considered acceptable until the new owners, Hanson, gained approval to extract 700,000 tonnes/annum and suddenly our amenity was changed. This became even more so unbearable when "peak" contracts were being serviced along with the cumulative effect of MCQ. Hanson now wants to make those peaks the new normal in their expansion plans.

Most of this disruption to our amenity revolves around truck movements, but does not exclude the residents along Giles Road who are much closer to the quarry - those of noise, dust and vibration due to quarry operations. Concerns have recently been expressed about the late night crushing which carries through to their homes and the dust which is of concern in particular, to those families with young children. New families to Giles road were aware of the quarry but not of the proposed expansion and already feel that their joy of the outdoors is being curtailed.

- The noise of the trucks and their frequency along Clarence Town Road, Brandy Hill Drive and Seaham Road is of major concern. Along some areas of Brandy Hill Drive and Seaham Road truck noise can be heard from quite a distance. For example, trucks travelling along Seaham Road towards BHD can be heard from up to a kilometre away. At night, with no other background noise, truck noise carries even further. 'Rogue' truck drivers who use engine braking, contrary to the posted signs, amplify the noise even more dramatically. Other noise issues associated with trucks such as tyres on poor pavement, engine noise, braking noise etc., drowns out all that is pleasant in this area: bird song, insects, frogs - this is what makes life worth living here.
- The personal value of working in a quiet garden is greatly diminished.
- The joy of riding or taking riding lessons or grooming your horse is lessened with truck noise as your companion.
- Reading a book on the verandah is disturbed.
- Local garden club members who live along BHD can no longer host meetings in their yards because of the interference of the noise.
- Residents feel uncomfortable and unsafe walking or cycling along BHD and Seaham Road because there is no safe shoulder and in wet weather the grassed verges also become the drains.

This is what Hanson has spectacularly ignored even though the SEARS statement requires it to be seriously considered.

The SEARS statement for amenity/ the Socio-Economic issues notes that:

- **An assessment of potential impacts on local and regional communities including impacts on social amenity.**
- **A detailed description of the measures that would be implemented to minimise the adverse social and economic impacts of the development including any infrastructure improvements, or contributions and/or voluntary planning agreement…..**

The EIS makes no attempt to address the social impact of loss of amenity. There is no mention of health and wellbeing, sleep disturbance or the safety for other road users.

Our quiet, clean lifestyle is already being impacted upon and will be seriously threatened by the proposal. There has been no mention of devaluation of property which is causing angst amongst some in the community. Any loss of amenity brings an associated loss of property values. The potential for expansions

of two quarries has already had a profound effect in suppressing property values. The cloud hanging over anyone selling has been the prospect of “Trucking Hell” for another 30 years. This cloud must be dispersed as soon as possible.

In 1983 residents of Seaham and Wighton Street, in particular, had issues with the original quarry development. These included the same issues we have today – noise, dust, blasting vibration and loss of amenity. These same residents are still being impacted upon today and will be more so with an expanded quarry.

It is unconscionable that such a small amount of time has been spent on **LOCAL** impact with most of the "Socio-Economic Impact Assessment" (appendix 17), assessing National and Regional impact. Based on GDP and national employment in quarrying in general!

Very little attention is given to the truly local area other than a table of the survey results provided by Brandy Hill/Seaham Action.

As a community we cannot condone the changes we will have to make to our lifestyle in order for Hanson to "ensure a competitive market in the region".

From the point of view of AMENITY alone we feel that Hanson’s expansion plans must be opposed.

4.2 Health

In the modern age everything is subject to a review of Health and Safety aspects and Risk Assessment. When considering the proposal by Hanson to increase output from the Brandy Hill quarry there should be no exception by the Department of Planning to applying these principles. Further to this, it should not just be the Health and Safety of those 30 or so in the employ of Hanson that is considered, but also the 200+ residents in the near proximity of the Quarry who have just as much right to live in a safe environment, free from negative health impacts.

The proposal to double the output from the quarry and the EIS to justify this does nothing to address any of the Health and Safety issues which will impact the residents living in the vicinity. These include areas such as:

1. Sleep deprivation,
2. Lack of walking opportunity,
3. Poor road conditions with high speed limits, inadequate shoulders and school bus stop bay, increased risk of accident and fatality due to an increase in heavy vehicle traffic,
4. Air Pollution due to dust and diesel particulates.

1. **Sleep Deprivation** – It is well documented in recent Health studies the importance of maintaining both regular and quality sleep patterns for general health and the ability to function in the workplace and on a daily basis. Hanson have proposed to operate the quarry on a 24/7 basis with regular movements of trucks during the night hours. While they recognise the need to provide adequate rest and 'down time' for their own workers and truck drivers, the same needs to be considered for the residents along the travel routes of these night trucks. The impact will ultimately affect many more residents than Hanson employees. Despite the houses being set back off the road at an average of 50 metres, in the still night air the rumble of both laden and un-laden trucks can be heard over large areas. Business hours are set for a reason, to minimise negative aspects of noise and activity at a time when Circadian rhythms are preparing an individual to 'rest and repair'. Local councils can prosecute individuals for breaking regulations regarding the operation of lawn mowers and leaf blowers outside of accepted hours. Truck movements and noise and vibration from plant operation would ultimately be worse than a lawn mower. Why should these conventions be bypassed by a business operating in a Rural Residential area?

We see no reason to grant a licence to operate at these times, and urge the Department to impose night time curfews on the operation, not exceeding 8pm and not commencing before 6am.

2. **Lack of walking opportunity** – Throughout the Community Consultation process suggestions were put forward by the Action Group that in the event of increased truck movement the already dangerous situation endured by those people who attempt to walk along the narrow shoulders of the roadways of Brandy Hill Drive, Clarence Town Road and Seaham Road would be rendered completely unsafe. Like studies regarding effects of Sleep deprivation, the benefits of walking in regard to general health, overcoming obesity and relieving depression and anxiety are widely available. As recently as last Wednesday 5/4/17 an article in the Newcastle Herald by Damon Cronshaw highlighted one woman's path to overcoming anxiety by simply getting out and walking. While it could be suggested that there is ample

space in residents' backyards to do that, it is actually counterproductive as part of the benefits are obtained from interaction with neighbourhood and walking companions. Hanson has suggested in their EIS that this sort of recreational activity is possible at Medowie, Nelson Bay and Karuah (Appendix 17) only 10 – 20kms away. This would be completely unreasonable and certainly not accessible on a daily basis! To create a safe roadside walking and cycling possibility a shared pathway needs to be constructed along the length of Brandy Hill Drive and onto Seaham Road as far as the Jacaranda Preschool as a minimum. A large International company such as Hanson who prides itself on their Website for being sympathetic to its neighbours needs and actively engaged in the community could certainly manage to arrange the construction of such a vital infrastructure to facilitating Health and Safety.

3. **Poor road conditions with high speed limits and inadequate shoulders and school bus bays** – Increased truck movements are not only going to negatively impact the ability for residents to walk along the road, but also the road itself is not adequate to cater for the amount of traffic expected. Hanson states in the EIS that their independent study of the road capabilities meets ***minimum*** standards, as set out in the Australian Standards 2009, however as any resident can attest the road condition, even at present usage, does not remain in a safe condition for any length of time. If current usage is operating at minimum levels then there is no room for the increase in traffic expected with the increased output. Port Stephens Council already struggles to provide maintenance in a timely manner and it is only by sheer luck that there have not been any major incidents as yet. The road was originally constructed to cater for considerably less traffic than it presently deals with and has had little or minimal upgrade in the last 30 years. With increased truck movements the level of risk is exponentially increased and the likelihood of a fatality becomes only a matter of time.

The condition of the road is exacerbated by the fact that the speed limit along Brandy Hill Drive is 80kph and Seaham Road is 90kph. At these speeds a fully laden truck in good conditions would require 70m to stop, more if the road is wet. Many of the 75 driveways along Brandy Hill Drive have less than that in sight lines for entering and exiting the road. Add to this the possibility of the vehicle towing a horse float or trailer and the added time required to perform the manoeuvre adds to the level of risk and the likelihood of a fatality.

Residents are obliged to use the shoulders of the road to take children to catch School buses, a task of enormous risk to safety in present conditions. It is inconceivable to imagine how that might be accomplished with a doubling of truck movements. The traversing of the road is one of the issues, but this is compounded by the inadequate bus stop bays. In the State Government document 'Advice for choosing locations of informal school bus stops – Centre for Road Safety' Version 1 December 2016 it states: *Pedestrian route to and from the bus stop: "School students require a safe route to their bus stop, this includes those walking to the bus stop and those dropped off by carers. The route should not contain roadway features that would force or encourage a child to walk in traffic lanes or shoulders". "Bus stops should not be located in areas that require pedestrian access via narrow bridges or culverts, roads with no shoulder, or a non-signalise rail crossing".* According to this document none of the bus stop bays or approaches comply with the guidelines. Without significant improvement of the bus stop bays and an increase in truck movements from the quarry, there exists a recipe for impending disaster. Parents already deal with the difficult situation on a daily basis, they do not need to add to their anxiety or risk to life from an increase in truck movements in and out of the quarry under present road conditions.

4. **Air pollution due to dust and diesel particulates** – An increase in production at the Brandy Hill Quarry will ultimately increase both dust particles and diesel particulates in the local area. This is yet another example of the negative impact to local residents' health which an upgrade would create. Local residents already notice the dust cloud when conditions present, but they have probably not identified the risk to their health from diesel particulates emitted from heavy vehicles. A recent research paper produced by the NSW Health Hunter New England Local Health District and able to view in You Tube*, 'The health impact of air pollution – A Hunter Perspective 2016', indicates that the impact on health from diesel particulates is similar to the known effects of asbestos.* They were using coal train movements in the Hunter Valley mines to demonstrate the impact on lungs of the fine particles produced by diesel vehicles. The level of truck movements indicated in Hanson's EIS is at levels which would have a similar effect.

BHSAG has been fortunate that one of our residents has some expertise in this area and has compiled a comprehensive review of Appendix 11 – Air Quality Impact Assessment. It has been attached separately but also forms Appendix 11 in BHSAG's submission.

The questions and issues raised in that document are an important part of BHSAG's submission.

Health and wellbeing cannot be underestimated and minimum standards should not be considered 'good enough' in assessing this EIS. Hanson has not done enough to allay the fears local residents have with respect to the health and wellbeing of their children or, for that matter, for themselves.

SECTION 4.3 ROAD SAFETY

The intent of this submission is to document a case for the rejection of the proposed increase in production and operating hours at the Hanson Brandy Hill Quarry. We are of the opinion that the Traffic Impact Assessment may have measured traffic movements but has failed to asses any risks associated with the change, and in failing to assess the spread of trucks in any 24hr period have failed to assess the impact on the amenity of the community in which they operate.

The web site (http://www.hanson.com.au/About/Sustainability/Our-Approach) seeks provides an insight into Hanson's corporate culture towards Sustainability.

Approach

"*Our approach can be summed up in one word: Excellence. That's what we aim for, in everything we do, right across the enterprise. From our work with local communities to our environmental and financial management. From our stakeholder consultation to our workplace health and safety*".

Community

"Hanson is committed to giving back to the community. We contribute to local initiatives, like charities and community groups. We host open days and sponsor education programs. We employ locally. And we always consult with the community in our work.

But we don't just do it out of the goodness of hearts. We do it because we're actually part of the community. We're not merely a business that works within the community.

So, we know from first-hand experience, that when we all do our bit, everyone benefits. We know, for instance, that when we engage proactively with community stakeholders to garner wider community support, we minimise disruption for everyone – including us. And our clients.

Likewise, when we create local employment opportunities or reduce traveling times for locals by contributing to vital infrastructure, we're bettering their lives and, in the long run, we're improving our business prospects."

Commendable statements, and that is all they may be unfortunately, as the actions of Hanson locally do not appear to embrace this culture.

Community Concerns

Increase in traffic: Hanson's proposes to ramp up from 380vtpd to 904vtpd, with a potential hourly rate increasing from 84vtph to 150vtph, which equates to a heavy quarry vehicle from Hanson's quarry passing a single point every 24 seconds. Add other road users to the equation and residents will be either locked in or locked out of their properties. It will be an unconscionable act by the approval authority if this proposal by Hanson were approved.

The largest community nearby the quarry and the one most affected by quarry transport as well as quarrying noise and dust, is that of Brandy Hill and Nelsons Plains, starting from the front gate of the quarry just a few hundred metres from the proposed processing facilities, and straddling the quarry's primary haul route. The route is 4.5km through Brandy Hill and a further 2.8km up Seaham Road past residences and businesses to Hinton Road. There are 3 major traffic intersections on this section of road (each end of Brandy Hill Drive, plus at Hinton Road), and a further 10 side streets that lead to cul de sacs (Ralston, Noongah, Sofia Jane, Leumeah, Elouera, Merindah, Warrigal, Neika, Weri and Tandara). There are in excess of 120 intersection points in this 7.3km strip of road with some 75 residential driveways directly off Brandy Hill Drive and 33 directly of Seaham Road.

The safety of the, pedestrians (particularly school children), buses using bus stops, cyclists, residents entering and exiting Brandy Hill Drive and Seaham Road from their residence, and those from the side streets, and also the general safety of all road users, particularly at the many intersections between the quarry gate and the RMS controlled main highways, will be unacceptably diminished by any expansion in output.

School Buses: Daily there are 7 school buses travelling along Brandy Hill Drive between 7.00am and 9.00am in the morning and again in the afternoon between 3.00pm and 4:30pm, servicing the various primary and high schools in Seaham, Mount Kanawary, Raymond Terrace, Newcastle and Maitland. The supposed "bus stops" do not provide a safe haven for the children or those supervising the children, and there has been witnessed near misses between quarry trucks and school buses

Speed Limits: The current speed limits are 80kph on Brandy Hill Drive, 90kph on Seaham Road and 100kph on Clarence Town Road. This in combination with the lack of an off road pathway, adequate off road bus stops with waiting areas for passengers, safe pedestrian crossings near bus stops in the residential areas, and poor intersections, mean that safety will be unacceptably diminished by any expansion of quarry output. Particularly at morning school bus times, which will also be the peak trucking time. We have letters from PSC advising that it is NOT safe to walk on Brandy Hill Drive or Seaham Road, but school children and residents are forced to do this daily

Route to Pacific highway: It is also necessary to note that the route to the Pacific Highway through Raymond Terrace includes a major T-junction with Adelaide Street, and also Raymond Terrace Road (which links to Maitland and is a major accident site.) There are busy roundabouts at Port Stephens Street and at the Highway interchanges on Richardson Road, and at Adelaide Street at Heatherbrae. Failure to examine the impact of increased quarry truck activity at these intersections is a deficiency within the EIS.

Assessing the Risk to Community

It should be noted that no documentary evidence has been provided that a Community Risk Assessment was undertaken prior to the granting of an increase in production rates in 2011.

*Clause 1.3.6 of the EIS notes a requirement for "a detailed EIS, to **assess the risks associated with** expanding into undisturbed areas, **increased production, increased sales and transportation,** as well as changes to the final rehabilitated form of the quarry. This EIS has been prepared to assess the impacts of the proposal to expand the current extraction boundaries to access required materials. (Clause 1.3.6, Extraction Boundary)*

The proposed increase in quarry truck traffic presents a significant change to the operation of the existing transport corridor from the quarry through Raymond Terrace and onto the connecting Roadways and Highways through to the customer's location.

This is Hanson employee's workplace, and the communities space interface. The nature of change proposed should have seen both a ***Quantitative and Qualitative*** Risk Assessments(RA) undertaken. The EIS provides no evidence that such Risk Assessments (RA), were undertaken, whereas the nature of change proposed demands such be undertaken and submitted as a component of the EIS report.

The ***Quantitative RA*** is data in numerical form.

The Information Sheet No.78 issued by the **Australian Government / Department of Infrastructure and Regional Development** and published in 2016 provides ***Quantitative data*** on heavy truck safety: crash

analysis and trends, and extracts from this are presented below. It is provided to set context around the community observations and the discussion that will follow, and represents a worthy reference as a component of the Quantitative Risk Assessment. (Note: Tables and Figures are not reproduced here. See report for the data.)

Heavy truck safety: crash analysis and trends

This paper examines road crashes which involve heavy trucks and makes comparisons with crashes involving light vehicles. At a glance the outcomes include.(Note: Bolded italic text done to highlight issues relevant to this submission)

- Heavy trucks account for around 2.4 per cent of all vehicle registrations
- Heavy trucks are disproportionately involved in casualty crashes: approximately 16 per cent of road crash fatalities and 4 per cent of injuries involve these vehicles. ***In general, involvement of a heavy truck is associated with more severe injury outcomes.***
- Approximately 60 per cent of persons killed in heavy truck crashes are light vehicle occupants. Another 20 per cent are vulnerable road users (motorcyclists, pedal cyclists or pedestrians)
- Approximately 80 per cent of fatal crashes involving heavy trucks are multi-vehicle crashes.
- Available Australian evidence suggests that ***in approximately 84 per cent*** of fatal multiple-vehicle crashes involving heavy trucks, ***fault is not assigned to the heavy truck***. Note however that assignment of fault (or key-vehicle-status) is not necessarily feasible for all crashes.

Recent literature

A detailed scan of research by Raftery et al (2011) discussed many issues around heavy vehicle (HV) safety and made some key recommendations for future research.

In regards to road and vehicle design, the report pointed out:

- The design of heavy vehicles is such that ***they have high aggressivity, presenting a significant risk to other road users,*** and poor crashworthiness, presenting a risk to HV occupants. Improvement in either or both of these areas would produce safety benefits.

Many studies focus on specific components of risk and how to mitigate them. These may be grouped as vehicle-related, ***vehicle-road interaction, person-related*** etc. Kipling (2011) provides a good summary of the multitude of interacting factors that relate to crash risk—grouped as follows:

- enduring driver factors (eg. knowledge / skill / medical);
- temporary driver factors (eg. time–on–task / sleep / moods / drugs / local familiarity);
- vehicle (safety technologies / mechanics);
- ***roadway and environmental (design / intersection / traffic / weather);***
- management (safety-focused practices / pay rates / training opportunities); and
- government (licensing / regulation / enforcement).

Kipling (2011) then analyses research findings on factors related to the driver, roadway and management.

Tziotis (2011) summarises ARRB work on heavy vehicle crashes, separately analysing urban and rural areas. ***Some of their findings on crash risk are related to road delineation/marking, road pavement and intersection design, including sight distance.***

Section 4 deals with **Crash/Casualty Data and Overview**

The main source of crash data in this report is the National Crash Database (NCD).

Heavy trucks are defined here as a freight vehicle with Gross Vehicle Mass (GVM) weight of 4.5 tonnes and over. This threshold accounts for approximately 70 per cent of registered rigid trucks and 99 per cent of registered articulated trucks

All fatal tables are at the national level and relate to the years 2008–2014 unless otherwise specified. Many tables compare involvement of heavy trucks in crashes/casualties with involvement of light 4-wheeled motor vehicles.

While only 30 per cent of Australia's population live in Regional or Remote areas, these areas account for 65 per cent of fatal crashes

Table 3A tabulates Fatalities by traffic units involved in the crash

Light 4-wheeled vehicles (predominantly passenger cars) are involved in 80-90 per cent of fatalities and injuries. Heavy trucks are involved in 16 per cent of fatalities and 4 per cent of reported injuries.

Approximately 60 per cent of fatal crashes involving a heavy truck also involve a light vehicle. Approximately 26 per cent involve a vulnerable road user (33 per cent for fatal heavy rigid crashes, and 21 per cent for fatal articulated crashes).

Vulnerable road users (motorcyclists, pedal cyclists or pedestrians) account for a greater percentage of fatalities in heavy rigid-involved crashes

In approximately 2 per cent of crashes where a pedestrian was injured, there was also an injury to another road user. Under 0.5 per cent of crashes where a pedestrian has died also involve the death of another road user.

There is a significant increasing trend in the proportion of light vehicle occupant fatalities which occur in crashes involving heavy rigid trucks.

Table 7 Casualty Crashes -Distribution by posted speed limit(km/h)

presents casualty crashes by posted speed limit. Approximately 50 per cent of all fatal crashes occur in posted ***speed zones of 90 km/h or higher***. In comparison, the distribution for injury crashes is skewed towards lower speed limits. Fatal rigid truck crashes are largely similar to fatal light vehicle crashes.

The final analysis in this section***, Figure 3 page.12*** categorises casualty crashes by day-of-week and time-of-day.

The ***Qualitative RA***

This RA is normally facilitated by an expert and undertaken by a competent team that has knowledge and experience with the issues, and the potential hazards associated with the change. Such an RA has not been undertaken on any aspect of the transport corridor. It is reasonable to expect that the following issues would have been considered both for the present operations and the proposed changes to the operation.

- The varying nature of the localities of the haul routes
- Current and alternate speeds in km/h for vehicles using the haul routes
- Interaction at intersections inclusive of but not limited to
    - Intersection configuration and its compliance with road design standards now and
    - Entry and exit paths from the intersection
    - Time of day and climatic conditions
    - visibility and

- approach speeds

The applicable standard for the qualitative RA is

The Australian Standard AS/NZS ISO 31000:2009 Risk management— Principles and Guidelines.

In the introductory pages there are Terms and Definitions

***2 Terms and definitions**: For the purposes of this document, the following terms and definitions apply.*

2.1 risk effect of uncertainty on objectives
***NOTE 1:** An effect is a deviation from the expected — positive and/or negative.*
***NOTE 2:** Objectives can have different aspects (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organization-wide, project, product and process).*
***NOTE 3:** Risk is often characterized by reference to potential **events** (2.17) and **consequence**b (2.18), or a combination of these.*
***NOTE 4:** Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood (2.19) of occurrence.*

Because of the variable and unknowns there is always a risk to persons and property when on or near a traffic thoroughfare.

- An increase in traffic brings about an increase in risk due to the increase potential for interaction. ie in the range of likely to almost certain
- The consequences of an adverse interaction will vary between medical treatment to death, ie in the range of likely to almost certain
- This brings into play a severity factor of **Very High to Extreme** for the risk factor to both the community and to Hanson, if there is no change in the current mode of operation. (**iso 31000 risk matrix)**

One serious accident between heavy vehicles brings about trauma not only to the victims but often to the operator of the heavy vehicle. As a community we firmly believe we need to pressure the decision makers to support right decisions about road safety in rural areas.

Brandy Hill/Clarence town Road Intersection

The above intersection is not compliant with Road Design standard, and will in the long term prove to be a "Black Spot"

A review of traffic accident data for the Clarence Town Road / Brandy Hill Drive intersection has determined that there is no significant accident history at the intersection and no obvious trends within the data that indicates existence of a safety problem. It is therefore considered that the intersection provides a suitable level of road safety for existing traffic volumes and should continue to do so for at least a further ten years. (TIA 13.0 Conclusion)

The review of reported traffic accidents within a 500m radius of the intersections does not and cannot analyse the history of near misses, as in the public area they are not reported.

When one sits and observes the daily interactions at this intersection one can objectively note its deficiency, and the moderate level of near misses that have a high potential for impact that may have devastating outcomes. Of importance is the observation of the speed of approach by west bound vehicles

The concerns that are raised and that the community requires to be addresses include but are not limited to the following:

- The alignment of the intersection is significantly influenced by the curvature of Clarence Town Rd resulting in angular approach of Brandy Hill Drive and the exit road from Hanson's quarry and a mix of obtuse and acute angles formed at the intersection. Consequently, vehicles crossing, or entering the east bound lane of Clarence Town Rd, are not provided ease of vision to west bound traffic on Clarence Town Rd, and those turning across Clarence Town Rd into Brandy Hill Drive experience an awkward turn with the diameter of the turning circle reduced by the northern extremity of the median strip.
- Clarence Town Rd is the through road with a speed limit of 100km/hr
- Vehicles travelling west crest a rise within 200metres of the intersection
- Many vehicles approached the intersection at less than 100km/h, with light twin cab vehicles the predominant, but not the only, vehicle noted to be travelling at speed
- Varying shoulders conditions exist on the approach roads and the shoulders at the intersection, particularly east bound, are repeatedly used at speed for illegal inside passing of vehicles turning right at the intersection
- The two stop signs there bring to a stop traffic turning into Clarence Town Rd. This means that loaded quarry trucks coming from Hanson's quarry and empty trucks returning up Brandy Hill Drive must come to a dead stop. By observation it takes at least six and often up to eight seconds for these trucks to clear the 100km/hr through traffic. The line of vision to the east up Clarence Town Rd is limited to around 150 to 200 metres dependent upon vehicle type, and it has been observed that there are times that operators have had to abort a planned crossing due to the sudden appearance of a fast-moving vehicle approaching from the east.
- The stop sign on the Hanson exit road is placed way back from the intersection, not at the alignment of Clarence Town Rd
- Loaded trucks coming up Clarence Town Rd are on an uphill grade and have to turn across the line of fast moving vehicles approaching from the east. By observation it takes at least eight and often up to twelve seconds for these trucks to clear the 100km/hr through traffic.
- The median strip on the north bound end of Brandy Hill Drive protrudes into the turning circle of vehicles travelling east on Clarence Town Rd and turning into Brandy Hill Drive.
- On a limited number of occasions there was undue queuing. Undue queuing can and does produce frustration with road users and brings about risk taking behaviour that may have severe consequences.

It is questionable that the Sidra model used to determine performance of the intersection is capable of inputting the community's observations and modelling the risk of the hazard associated with the design and operation of this intersection.

The community seeks to have these risk hazards removed irrespective of the granting of an increase in production, and offer the following to significantly reduce the hazards presented at this intersection, thereby ensuring "*excellent levels of service.*"

Reduction in speed limits

There is a case to argue for a reduction in the speed limit to improve road safety, even if there is no production increase. This is consistent with community standards and expectations. There is a precedent already set by the RMS on the New England Highway where every town between Singleton and Uralla (except for Tamworth that has multiple routes) has the through speed limit set at 50km/hr for significant lengths where there is the likelihood of interaction with pedestrians and children

A reduction is speed limit brings about a real reduction is the stopping distances of any vehicle. Stopping distance is not dependent upon vehicle mass, rather heavily dependent upon vehicle speed, condition of road surface, condition of tyres, and vehicles braking system in general the competence of driver, and attentiveness of driver. Taking all these factors into consideration, assuming the driver is fully focused on driving and nothing else, and a reaction time of 1.5 seconds the following outcomes are achievable.

	Dry Road Condition	Wet road Condition	Time to travel 7.3km
Speed km/hr	Stopping Distance metres.		Minutes
80	70	84	5.5
60	45	53	7.3
50	35	41	8.8

Despite the increase in stopping distance of 14m for wet conditions, a reduction in speed from **80km/h to 60 km/h** brings about a reduction in the order of 36% for the stopping distance for both dry and wet conditions.
Likewise, despite the increase in stopping distance of 6m for wet conditions a reduction in speed from **80km/h to 50 km/h** brings about a reduction in the order of 50% for the stopping distance for both dry and wet conditions,

For the safety of all users the community is seeking the **reduction of speed limits to 60km/hr** on our three significant roads and intersections over the following distance.

- **Clarence Town Road-** 200 m east of the Brandy Hill Drive intersection, and 200m west of the Brandy Hill Drive intersection
- **Brandy Hill Dive**: the full length of Brandy Hill Drive in the order of 4.5km
- **Seaham Road**:- North of the intersection of Eskdale Drive Park to 200m south of Hinton Road in the order of 1.8km

A reduction in speed from **80km/h to 60 km/h** brings about an increase in travel time from Clarence Town Road to the south of Hinton Rd in the order of 1.8minutes or less than 4 minutes' travel time for a round trip.

There is no argument that can stand up against improved safety and amenity that could say this increase in travel time will be a financial burden on quarry trucks.

For the safety of all users the community is seeking the reconstruction of the **Clarence Town Road and Brandy Hill Drive intersection** to achieve compliance with **Austroad's** Guide to Road Design Part4: Intersections and Crossing - General

Part 4 of the Guide to Road Design is limited to the design of intersections. Designers should be aware that there are nine other subject areas spanning the range of Austroads publications that may also be relevant to road design and the design of intersections.
Part 4 of the Guide to Road Design, when used in conjunction with other relevant parts of the Guide to Road Design and Guide to Traffic Management, provides the information and guidance necessary for a road designer to prepare detailed geometric design drawings that are adequate to facilitate the construction of intersections and crossings

To this end, we see the following is the minimum required

- Approach speed on all approaches to the intersection reduced to 60km/h
- A left hand turning lane into the Hanson quarry that will also provide a compliant through lane for east bound traffic when vehicles are using the centre lane for the right-hand turn into Brandy Hill Drive
- A left hand turning lane into Brandy Hill Drive, that will also provide a compliant through lane for west bound traffic when vehicles are using the centre lane for the right-hand turn into Hanson quarry
- Compliant left hand turning lanes onto Clarence Town Road from both Brandy Hill Drive and Hanson quarry
- Stop signs installed at the four entries of the intersection.

The reduction of the speed at all intersections significantly reduces the potential for collisions and in the event of a collision the consequences of that collision, thereby significantly reducing the risk and increasing the safety for all road users, including those charged with operating the quarry trucks.

As noted earlier it is the community's positions that these changes are required irrespective of any increase in production and urge Port Stephens Council to make provisions for its undertaking.

BROKEN WINDSCREENS

An added safety issue is that of broken windscreens. BHSAG committee members have experienced breakages on the quarry delivery routes and have received feedback from the community about other instances where breakages occurred on the quarry delivery routes. Seemingly, the frequency increases in the vicinity of the quarry. One windscreen repairer said he would have visited most houses in Brandy Hill! The source of a flung up stone can never be determined, but there seems to be a clear correlation between breakages and quarry trucks. That points to inadequate washdown and removal of loose material from trucks before they leave the quarry, or from inadequately secured/tarped loads.

Broken windscreens are both a high total cost to the community, but are also a safety hazard.

The loss of one life is one life too many.

SECTION 4.4 NOISE

We have attached a professional review of the NIA provided by Bridges Acoustics. We gratefully acknowledge the generosity in the donation of time and expertise in making this available to BHSAG, and the residents.

The report raises many technical issues with both methods, criteria and standards used and also the conclusions drawn. There are many recommendations that need to be addressed, and cast a cloud over the NIA's conclusions, and thus also over the mitigations that are proposed in the EIS. We will leave it to your experts to assess that report in detail.

However, as lay people we continue to be aghast at the statement in the EIS that it would be acceptable to operate up to 78 trucks through the night-time period.

We are also concerned for residents in closer proximity to the quarry regarding night-time operations and blasting noise and vibration. Will there be a case to imposing a curfew on night-time operations? Will additional sound proofing be required on crushing and other processing operations, as was offered by the Gunlake Quarry?

The consensus view of residents along the delivery roads is that we sleep with most windows open for most of the year, and with some windows open for the remainder. Our casual observation, formal traffic counts, and the PSC traffic counters show that there are very few vehicles using BHD overnight and almost no heavy trucks overnight. We also know that it takes only one noisy vehicle to disturb sleep, resulting in the adverse effects of a "poor sleep".

This is supported by research that confirms that it only takes one sleep disturbance when a person is in R.E.M. sleep, to nullify the benefit. It is REM sleep that is the most beneficial regeneration period, and it is usually only achieved after a few hours of normal sleep. This aspect was covered in section 4.2, and underpins our opposition to 24/7 operations and dispatch, our primary concern with the EIS.

The intent of this submission is to document a case for the rejection of the proposed increase in production and operating hours at the Hanson Brandy Hill Quarry.

The NIA has also failed to asses any risks associated with the operation and product haulage 24X7 and has failed to assess the impact on the amenity of the community in which they operate. A direct contradiction to Hanson's corporate culture towards Sustainability.

"Our approach can be summed up in one word: Excellence. That's what we aim for, in everything we do, right across the enterprise. From our work with local communities to our environmental and financial management. From our stakeholder consultation to our workplace health and safety".

Community Concerns

Increase in traffic: Hanson's proposes to ramp up quarry truck haulage from 380vtpd to 904vtpd, with a potential hourly rate increasing from 84vtph to 150vtph. This equates to a heavy quarry vehicle from Hanson's quarry passing a single point every 24 seconds. The impact of this on the residences of Brandy Hill Drive (BHD) exiting their residential properties is enormous, and will present both safety risks and loss of amenity.

2014-2015 Noise levels

BHD is classified as Sub-arterial Road, with road noise level specified by the NSW Road Noise Policy (NRNP) of 60dBA for day time (7.00am to 10.00pm) and 55dBA for night time (10.00pm -7.00am)

A series of noise logging equipment was deployed between September 2014 and March 2015 (ie Spring and Summer), by Vipac Engineers & Scientist Ltd. (Vipac) at seven locations to measure baseline environmental noise. Two of these locations N02 and N07were on Brandy Hill Drive (BHD)

Appendix A of the NIA contains a series of figures that graphically illustrate the variation in Sound Pressure Levels (dBA) at each of these locations across a one week period. The data collected from N02 and N07 indicates a Sound Pressure Level ranges from a low of 35dBA to a high in excess of 80dBA (80dBA appears to be the upper limit of the receptor.) Both receptors indicated day time levels ranging consistently above 60dBA, with receptor N07 consistently ranging above 60dBA from around 5.30am through to 11.00pm.

One then may take the position that traffic noise on BHD as measured in 2014 – 2015 failed to comply with community expectations as articulated in the NRNP

The largest community nearby the quarry and the one most affected by quarry transport as well as quarrying noise and dust, is that of Brandy Hill and Nelsons Plains.

Brandy Hill Drive starts at the front gate of the quarry and just a few hundred metres from the proposed processing facilities, and straddles the quarry's primary haul route. The route is 4.5km through Brandy Hill and a further 2.8km up Seaham Road past residences and businesses to Hinton Road. The nearest residence along this sector is on Seaham Road and is around 20m from the road and consequently will experience the highest noise levels.

It is to be noted that within the NIA there is no program to mitigate the impacts of noise from the proposed expansion of the Hanson quarry and the significant effect of the traffic generated impacts on the residential area.

Generation of road noise

The NSW Road Noise Policy (NRNP) identifies *that general levels of road traffic noise throughout NSW have increased significantly… Road traffic noise was identified as the main issue affecting neighbourhood amenity*.

The growth in motor vehicle numbers, persistent undesirable levels of road traffic noise, and the community response to road traffic noise confirm the need to continue to develop programs to minimise the impact of such noise. Gains anticipated from tougher noise emission limits from individual motor vehicles through Australian Design Rules are likely to be limited to a few decibels. More significant gains may come from:

- *reducing noise from tyres*
- *strategies that reduce motor vehicle use*
- *programs that enforce existing laws and standards for maintaining the condition of vehicles and modifying noisy vehicles*.

However, the most significant benefits are expected to come from the effective environmental impact assessment of road projects and traffic-generating developments adjacent to roads.

Noise Source Control (1.1.3)

Noise source control Incorporating technologies that address the sources of road traffic noise is very effective. In particular, road network managers, planners and pavement engineers must look at incorporating advances in the development of low noise road pavement surfaces. The quality of the pavement surface finish can affect the amount of road traffic noise generated. However, the choice of road pavement surfaces and textures must meet a number of criteria including skid resistance, water shedding and design life as well as potential noise generating characteristics.

The road pavement surface's noise performance throughout its duration and the need to maintain that performance when the pavement is replaced are also important considerations.

Reduction in speed limits

It has been previously put that there is a case to argue for a reduction in the speed limit to improve road safety, regardless of any production increase or extension of operating hours. This is consistent with community standards and expectations.

Traffic noise is generated by both tyre type and vehicle speed. There is a wide range of legal tyres available and fitted to vehicles within Australia. This is outside our control. Reducing vehicle speed is within our control
Therefore, reducing the legal speed limit through the residential area will reduce the level of noise generated not only from the heavy vehicles but also the light vehicles.

There are other benefits to be made from a reduction of the speed limit that the whole community will benefit from namely

- a reduction in the drumming noise effect from the light weight tailer side walls
- damage to the road surface,
- reduction in road deformations and failures, and
- reduced operating costs

Road Pavements – Design, construction and maintenance

We note that a source of noise generation, particularly with older vehicles, comes the following

- transition joints between the sections of road replacement works
- transition joints between repair sections and the retained road surface
- potholes and long standing depressions
- failure to timely repair potholes
- temporary repairs to potholes
- irregularities in the running surface or corrugations (often the consequence of speed)

The quality of the pavement surface finish can affect the amount of road traffic noise generated. There is also the opportunity for the Port Stephens Council (PSC) to make a contribution to the reduction of road noise through the road design engineers and pavement engineers looking at incorporating advances in the development of low noise road pavement surfaces. We understand that there may be an increase in unit cost associated with this and urge that the Section 94 contributions be fully assigned to the road network from which they are collected. Our understanding is that PSC must budget for road maintenance and these improvements can only be delivered over time. Now though is the right time to start.

There is an opportunity for PSC to review its procedures and standard associated with design , construction and maintenance of roadways .

Vehicle standards and compliance

Motor vehicle standards such as Australian Design Rules reduce noise from motor vehicle engines and transmissions. ….Limiting noise emissions from new vehicles via Australian Design Rules and identifying heavy vehicles with excessively noisy engine brakes will also benefit the community. (NRNP)

It is acknowledged that Hanson operates a fleet of trucks that set a high standard in presentation and operate with low noise emission. However, there are quite a few sub contactors that fall well short of acquiring and maintaining this standard, and consequently are contributors to noise generation through

- the use of exhaust brake systems,
- loose suspension,
- loose connections between the prime mover and trailer, and
- general body and panel noise

The quarry operators cannot renege on their obligation to manage the subcontractors that haul product from their site

This community seeks that a condition of approval requires any quarry operator that uses BHD as part of its transport corridor, whether be it by its own fleet or a sub-contractor, to establish, in conjunction with the Department of Environment, nominated Sound Expert, the quarries Environment representatives, and BHSAG, a best practice code for sound attenuation for all trucks that carry the quarry's product, and a system to monitor compliance and enforcement of the code.

Fixed Plant

It is noted that in Stage 5 of the proposed project, the fixed processing plant is proposed to be moved to the south of the operational area, and significantly close to Clarence Town Road. Whilst located behind a noise bund, it is a known fact that dump hoppers, primary crushers, secondary crushers and vibrating screens all generate dust and significantly high sound pressure levels.

Noise emissions from crushing plants and vibrating screens can be mitigated against through judicial alignment of the plant, structural designs of supporting systems and enclosures.

Large vibrating screens have a propensity to generate low frequency high amplitude sound power levels that have the ability to carry high vibration levels over large distances if not screened with interceptors.

In Summary

As noted earlier it is the community's positions that these changes are required irrespective of any increase in production and urge Port Stephens Council to make provisions for its undertaking, where applicable.

The loss of the community's amenity is not an option.

SECTION 5. OTHER CONCERNS WITH THE EIS

5.1 CUMULATIVE IMPACT

It has already been stated that the SEARS requirement relating to cumulative impact have not been addressed in detail. The figures used are miniscule, when the MCQ EIS clearly states that the average proportion of annual output that would be expected to be transported via the BHD route is 25%.

It is also a reasonable assumption, that depending on the projects, that from 0 to almost 100% of MCQ output could use this route on any particular day, week or month. Close to 100% was experienced when MCQ had the airport and Hexham rail siding contracts. Basically, a reasonable assumption for average and peak MCQ traffic would be the same as BHQ predictions time a factor of 0.25 for the average and say 0.9 – 1.0 for peak, as both quarries have applied for 1.5mtpa.

It is a fair point that Hanson make that theirs are not the only heavy trucks using BHD, but the majority of the others are MCQ trucks, which should pay an equal contribution to PSC roads and for any of the amenity and safety infrastructure. We have already shown that the non quarry trucks numbers only about 15/day, meaning that gravel trucks already account for over 90% of the very heavy vehicles on BHD.

5.2 OTHER ENVIRONMENTAL CONCERNS

VOID

Like VOWW and many residents, we are also concerned with the proposed steep sided void that is likely to become a lake. With its remoteness and accessibility, will it become a dumping site for stolen cars and rubbish? Will it be adequately fenced or bunded to prevent the above, and to prevent stock or wildlife falling in?

Will it become a designated refuse dump, with the associated smell, greenhouse gas emissions and traffic?

Will the proposed rehabilitation be funded until it is completed? What guarantees are there if Hanson is sold or goes into administration etc.

WILDLIFE

We are also concerned about wildlife on the delivery routes, particularly if overnight deliveries are allowed.

The following native animals are regularly seen in this area, and unfortunately, are often killed on the roads particularly at wildlife corridors.

Wallabies, brushtail and ringtail possums, phascogales, squirrel gliders, koalas (infrequently).

SECTION 5.3 Current Consent

Hanson asserted in their PEA, at CCC meetings and in the EIS (section ?) that they currently have consent to operate 24/7 with no limit on tonnage. The documents submitted in this EIS do not support either assertion. Documents that Hanson failed to include in the EIS clearly contradict their assertions.

The 2016 EPA EPL License obtained from http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=83696&SYSUID=1&LICID=1879 states:

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.
Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

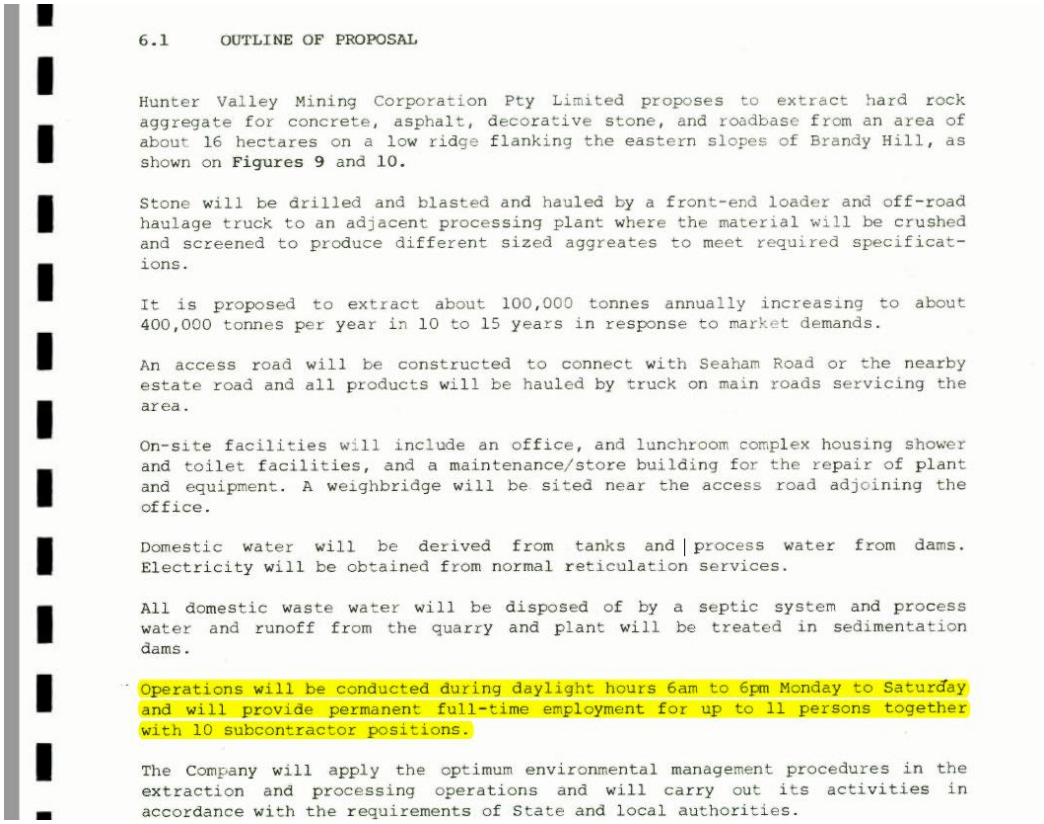
Scheduled Activity	Fee Based Activity	Scale
Crushing, grinding or separating	Crushing, grinding or separating	> 500000 - 2000000 T annual processing capacity
Extractive activities	Land-based extractive activity	> 500000 - 2000000 T annual capacity to extract, process or store

A1.2 Production at the premises must not exceed 700,000 tonnes per annum (measured over the licensing reporting period) of material obtained.

From the 1992 update of the PSC consent, which removed clauses on property devaluations but left the following reference to the 1983 EIS, which still applies today:

4) The applicant is to undertake all those environmental protection measures outlined in the Environmental Impact Statement prepared by Resource Planning and shall ensure that every effort is taken to minimise any adverse impact upon the existing environment.

From the 1983 EIS prepared by Resource Planning, the hours of operation are there for all to see:



6.1 OUTLINE OF PROPOSAL

Hunter Valley Mining Corporation Pty Limited proposes to extract hard rock aggregate for concrete, asphalt, decorative stone, and roadbase from an area of about 16 hectares on a low ridge flanking the eastern slopes of Brandy Hill, as shown on **Figures 9** and **10.**

Stone will be drilled and blasted and hauled by a front-end loader and off-road haulage truck to an adjacent processing plant where the material will be crushed and screened to produce different sized aggreates to meet required specifications.

It is proposed to extract about 100,000 tonnes annually increasing to about 400,000 tonnes per year in 10 to 15 years in response to market demands.

An access road will be constructed to connect with Seaham Road or the nearby estate road and all products will be hauled by truck on main roads servicing the area.

On-site facilities will include an office, and lunchroom complex housing shower and toilet facilities, and a maintenance/store building for the repair of plant and equipment. A weighbridge will be sited near the access road adjoining the office.

Domestic water will be derived from tanks and process water from dams. Electricity will be obtained from normal reticulation services.

All domestic waste water will be disposed of by a septic system and process water and runoff from the quarry and plant will be treated in sedimentation dams.

Operations will be conducted during daylight hours 6am to 6pm Monday to Saturday and will provide permanent full-time employment for up to 11 persons together with 10 subcontractor positions.

The Company will apply the optimum environmental management procedures in the extraction and processing operations and will carry out its activities in accordance with the requirements of State and local authorities.

Based on the above, we conclude that Hanson's assertions are completely wrong, and were presented as a fait accompli to both support their request for 24/7 and 1.5mtpa in the proposal, and also to minimise complaints about noise in the period leading up to this point in time. Note that Hanson in this regard were somewhat successful, because they have been dispatching up to 6 trucks at 5:30am that are loaded the night before, and have also dispatched trucks after 6pm.

Section 5.4 Footpath History

Since BHSA was formed, restricting operating hours and having reasonable caps placed on truck volumes to reduce the noise, safety risk and the intimidation from heavy vehicles have all been high priorities for residents.

One of the most serious risks is when we or our children need to walk or cycle along the road corridor through Brandy Hill and Nelsons plains. The lack of a pathway has always been the principle issue that would need to be addressed in any approval for the quarry to continue operating, and particularly if a higher annual extraction rate were to be granted and also if there is any ongoing cumulative impact from other quarries.

PSC has advised that it is unsafe to walk on Brandy Hill Drive or Seaham roads, but we and our school age children are forced to do that daily. The senior Hanson truck driver has stated that Brandy Hill drive needs a footpath to get people off the road shoulders. BHSAG surveys have identified an off road footpath as one of the highest priority mitigation measures that are needed to restore/preserve some amenity and to reduce the safety risk to pedestrians.

With support from PSC councillors we eventually succeeded in getting PSC to provide a senior staff representative at some CCC meetings, and do a drive through assessment with one of the councillors. Other than conclude that there are some difficulties with constructing a pathway to standards and that it would be a costly exercise, the issue has not progressed.

Recent discussions with PSC indicated that Hanson has not engaged in any discussions with PSC on either the VPA for road maintenance or any “amenity” infrastructure.

SECTION 6 PRECEDENTS

The Gunlake quarry expansion that was refused yesterday by the PAC has many similarities to this EIS with 3 of the 4 reasons for refusal being in common. The summary from the PAC was as follows:

SCHEDULE 2

The Commission's reasons for refusing the development application are:

1. the Applicant has not given sufficient consideration to the provision of an appropriate upgrade to the local road network to account for the significant increase in heavy vehicle traffic movements in accordance with Austroads standards;

2. the Applicant has provided insufficient information to justify that the use of the local road network for haulage without compliance with Austroads standards would not create a potential road safety issue;

3. the Applicant has provided insufficient information to allow an accurate and genuine consideration of road versus rail based haulage; and

4. the Project as proposed will have unacceptable social impacts, including negative road safety outcomes, and is not in the public interest.

This EIS has similar if not greater issues with inadequate provisions for the upgrade of the road network, the creation of a potential safety issue and that it will have unacceptable social impacts, and is not in the public interest.

Gunlake has even more similarities with the MCQ expansion where a rail siding already exists but is not planned to be utilised for the majority of dispatch in order to limit truck traffic through the village of Paterson, across one lane bridges and along delivery routes of 30 or 40km through rural and residential council areas and roads. The MCQ cumulative impact with BHQ has created the perfect storm of trucks already, and will continue to do so unless both Quarry EISs are either refused or have severe restrictions placed on any approvals.

The limited time to prepare this submission based on the actual EIS has restricted our capacity to explore the compatibility of the land use of the dispatch routes with the stated intent of the PSC rural and residential land use policy. While we do not dispute the compatibility of the quarrying operations on the quarry site, the impost of the traffic through residential areas, to us, is in conflict with the PSC land use policy. Hopefully PSC will explore this aspect in more detail in its submission.

SECTION 7 CONCLUSION

The body of our submission and the appendices have elaborated on the highest ranked concerns of residents, explaining both what those concerns are and the reasons behind the concerns. We have also elaborated on the highest ranked mitigation measures that are requested. The outline of those is in the Executive Summary.

To condense BHSAG's submission into a brief statement risks over simplification, but here are the highlights:

1. BHSAG is not opposing the continued operation of the quarry at current levels, but strongly opposes the expansion in output and the addition of other activities that will increase truck movements. Any approval to continue operating must also take into account the cumulative impacts from any other quarries that have or may be granted licences in the future, which use or will use the same traffic routes.

2. Due to the loss of amenity and the associated health and wellbeing issues that would arise from 24/7 operations and dispatch, we respectively request that a curfew be placed on operations between 8pm and 6am weekdays, and from midday Saturday to 6am Monday.

3. Due to the unacceptable, health, amenity and safety issues that would arise from any increase in traffic volumes, we request that any increase in output or activities also be rejected.

4. Due to the existence of a residential community on the main delivery route that did not exist or was not considered when prior consents were granted, any approval for ongoing operations must be conditional on safety and amenity infrastructure being built before that consent can be enacted. That includes the pathway, bus stops, safe crossings, improved intersection and signage.

5. Ensure that an increased levy for road maintenance is paid to ensure the road itself is upgraded to cope with the traffic volumes, taking into account that quarry trucks are currently over 90% of the heaviest vehicles on BHD.

6. Require all quarry trucks to comply with a code of conduct that includes both identification and noise emission standards. Unique and easily readable identifications are required for accurate recording in complaint lodging and handling process, which must not require any presumption of which quarry was involved. Also any truck that does not meet a noise test, or does not hold a record of passing the test, must be refused entry to the quarry.

7. Speed limits must be reduced on these roads, as outlined.

Thank you for taking the time to review our community submission. The EIS offered no concessions based on community consultation, so our submission has had to take a similar approach. We believe that what we have asked for in restrictions and mitigation measures, are fair and reasonable and supported by current legal and social standards.

BHSAG Committee.

APPENDIX 3 CCC DRAFT MINUTES 2ND FEBRUARY 2017

BRANDY HILL QUARRY COMMUNITY CONSULTATIVE COMMITTEE
(INFORMAL)
MINUTES OF MEETING HELD THURSDAY 2 FEBRUARY 2017
AT RAYMOND TERRACE BOWLING CLUB

PRESENT	NAME	ORGANISATION
	Lisa Andrews (LA)	Independent Chairperson
	Chris Dolden (CD)	Hanson (Operations Manager)
	Brad Nelson (BN)	Hanson (Quarry Manager)
	Andrew Driver (AD)	Hanson (Development Manager)
	Shaun Boland (SB)	Hanson (Quarry Supervisor)
	Dan Taylor (DT)	Hanson
	Rob Adams (RA)	Community Representative (Resident)
	Les Fisher (LF)	Community Representative (Resident & member of Brandy Hill/Seaham Action Group)
	Peter Rees (PR)	Community Representative (Resident & Member of Voice of Wallalong & Woodville Inc. [VOWW])
	Margarete Ritchie (MR)	Community Representative (Resident & member of Brandy Hill/Seaham Action Group, Martins Creek Quarry Action Group and Voice of Wallalong & Woodville [VOWW])
	Neil Ritchie (NR)	Community Representative (Resident & member of Brandy Hill/Seaham Action Group and Voice of Wallalong & Woodville [VOWW])
	Cr Paul Le Mottee (PLM)	Port Stephens Council delegate *(left at 7.12pm)*
APOLOGIES	John Maretich (JM)	Port Stephens Council

WELCOME	The Chair opened the meeting at 6pm and welcomed all attendees to the meeting.	
DECLARATION OF INTEREST	LA advised that she is an approved Independent Chairperson with the Department of Planning and Environment and engaged by Hanson to chair the CCC. Chair asked all present if there were any declarations that they wished to make.	**No declarations from CCC members present.**
CONFIRMATION OF PREVIOUS MINUTES	The minutes of the previous meeting of 25 February 2016 were confirmed. (There was some discussion on whether there has been another CCC in the last 12 months; however it was agreed that two previous meetings had been postponed due to a lack of quorum.)	**Moved:** MR **Seconded:** NR
BUSINESS ARISING	**ACTION ITEMS FROM LAST MEETING** 1. NR to put survey on the Brandy Hill Action Group website. 2. Contact Port Stephens Council regarding 80km sign on Brandy Hill Drive – position on wrong side. 3. Compression Braking Sign missing from Seaham Road.	**Item 1 – complete.** **Item 2 - repositioned.** **Item 3 – replaced.**
CORRESPONDENCE	• 22/12/16 – Email from Hanson to CCC members with the meeting notice for this meeting	**Moved:** LA **Seconded:** RA

	• 28/1/17 – Email from Chair to CCC members with a reminder for the meeting and attaching the new Department of Planning & Environment's Guidelines for State Significant Developments as well as membership forms • 29/1/17 – Email from Dom Swinkels resigning from the CCC • 30/1/17 – Email from Chair to Dom thanking him for his service and contribution to the CCC	
PRESENTION ON PROJECT	An update on the project was provided by AD from Hanson. Questions were asked and answered throughout the presentation: 1. Hanson is currently working with DPE, OEH & its consultants regarding biodiversity issues, koalas, etc associated with the proposed amendment. 2. The final draft of the EIS has been peer reviewed and is currently being finalised prior to submission with DPE. 3. The EIS has been prepared in accordance with legislative guidelines; noise, environmental, traffic, planning, etc 4. S94 Contributions are paid to Port Stephens Council on a per tonne basis, which should be used for the maintenance of roads and installation of community infrastructure, such as footpaths, etc 5. Hanson should enter into a Voluntary Planning Agreement (VPA) with Port Stephens Council (PSC) and hope to ensure that the funding provided is used specifically to assist the residents around the Quarry that are most affected by its operations 6. Need to reach a balance between demand, customer requirements and compliance with legislative requirements. Issues raised by community: • The NSW government's push for development of major infrastructure projects effects neighbours at a local level • Preference to stock piling product during daylight hours to lessen impacts at night • Pedestrian & cyclists' safety • Noise • 24/7 operations • Lack of sleep from truck movements in the early hours of the morning (from 4.30am) to late evening and night • Lack of bus bays/shelters • Difficulty in identifying noisy trucks. *(It was noted that generally Hanson's trucks are compliant.)*	**It was impressed upon by the CCC members that Hanson address the concerns from the community in its EIS in relation to traffic movements, operation times (24/7), cumulative impacts, noise, amenity, pedestrian movements, safety, the installation of footpaths and bus bays/shelters.** **Action Item:** **MR to meet with PLM to go through the conditions imposed on the original licence to operate that was approved in 1983.**

	• Cumulative impacts from noise and truck movements associated with the other quarries in the vicinity.	
	Meeting suspended at 6.47pm & recommenced at 6.51pm to allow Hanson representatives CD & AD to discuss concerns raised by members.	**AD advised CCC that amenity concerns will be addressed in the EIS and propose that footpaving & bus stops be specified in VPA with PSC as part of its contribution levy.**
GENERAL BUSINESS	No General Business	
NEXT MEETING	Following discussions on whether to proceed with the informal meetings, it was agreed that the next meeting of the CCC will take place approximately 2 weeks following the EIS going on formal exhibition.	**LA to liaise with Hanson and advise CCC members with proposed meeting date, once known.**

Meeting closed at 7.22pm with LA thanking all CCC members for their attendance.

ACTION ITEMS

ITEM	ISSUE	RESPONSIBILITY
1	MR to meet with PLM to go through conditions of original Licence to Operate	MR & PLM
2	Advise CCC members of next meeting	LA

APPENDIX 4 TRAFFIC COUNT AND ANALYSIS

The following results are from a traffic count by BHSAG members over two periods:

- 4:30am-6:00pm on Monday 3/4/2017 and
- 5:00am–10:00am on Tuesday 4/4/2017.

PSC had an automatic counter on Brandy Hill Drive in the same period, so we were very careful to make a true and accurate record as we know the counts will be checked by PSC. We have already provided this information to PSC for this purpose.

The count was conducted at the Clarence Town Road end of Brandy Hill Drive, counting all vehicles that used Brandy Hill Drive. We were able to identify the gravel trucks that entered or left Brandy Hill quarry, and that came from or went toward Martins Creek quarry.

Our count differs from automated traffic counters because we could distinguish both the type of vehicle, and of the gravel trucks which quarry they were servicing. Our main objective was to identify the background level of heavy vehicles that are NOT quarry trucks.

The following 2 pages have the details of the counts, with Northbound toward the top of the pages and Southbound at the bottom.

On 3/4/2017 there were a totals of 68 Northbound and 76 southbound very heavy vehicles (2> axles with dual tyres) and of those only 6 and 9 respectively were not gravel trucks.

On the morning of 4/4/2017 there were a totals of 40 Northbound and 43 southbound very heavy vehicles (2> axles with dual tyres) and of those only 4 and 5 respectively were not gravel trucks.

The overall total very heavy vehicles were 227, of which only 24 were not gravel trucks. Because the 4th was only the peak morning period, we estimate that the average of heavy non- gravel trucks per day is only 15. The types of trucks are listed below. The percentage of heavy vehicles on the days recorded was therefore 24/227=89.4%.

The 15 per day non quarry trucks is expected to be the ongoing average that will grow slowly probably in line with population growth. The quarry truck numbers will grow with output and will also experience daily variation depending on markets and weather. These count days were showery, and in a period following heavy rain the in the month and week preceding the count, and were markedly down on previous levels.

Basic math says that for 700,000tpa over 50 weeks and 5.5 days and 32t/truck would be 80 deliveries/day and 160vtpd.

For 1,500,000tpa the average is about 170, which happens to be the figure Hanson quoted at the last CCC. Multiply by 2 for an average of 340vtpd.

So our figure of 15 Other trucks will be only 8.5% of all very heavy trucks on an average quarry day now, and only 4% on an expanded quarry average day (if only BHD was used). The % will be even less if 25% of MCQ trucks also use BHD.

	North Bound Total for time period					Date: MONDAY 3/04/2017		
Time	Light vehicles (< 4.5T GVM)		Small	Heavy	Vehicles	(2> axles	Dual tyres)	
	Eg Cars, Utes, Vans, 4WDs, also with trailers (without dual rear tyres)	School Bus	Trucks, Vans 1 axle dual tyres or long wheelbase see note *	Other heavy (list, eg grain, milk tanker, low loader	Martins Ck Quarry – Daracon Gravel Trucks	Martins Ck Quarry – Contractor Gravel Trucks	Brandy Hill Quarry – All Gravel Trucks 1st truck 5.43am	Total Vehicle Movements
4:30-5:00AM	3							3
5:00-5:30 AM	7							7
5:30-6:00 AM	10		1			1	1	13
6:00-6:30 AM	21			1		2	5	29
6:30-7:00 AM	20		3			3	6	32
7:00-7:30 AM	24	1	2				1	28
7:30-8:00 AM	30	1				1	4	36
8:00-8:30 AM	36	1	1			1	2	41
8:30-9:00 AM	26						6	32
9:00-9:30 AM	13		2		1		4	20
9:30-10:00 AM	18		1	1			3	23
10:00-10:30AM	15			1		2	1	19
10:30-11:00AM	13					1		14
11:00-11:30AM	27						2	29
11:30-12:00AM	24						1	25
12:00-12:30PM	24					1	1	26
12:30-1:00PM	13				1	1	3	18
1:00-1:30PM	26			2		1	1	30
1:30-2:00PM	15							15
2:00-2:30PM	26							26
2:30-3:00PM	28						2	30
3:00-3:30PM	29	1		1				31
3:30-4:00PM	43	1						44
4:00-4:30PM	28	4					2	34
4:30-5:00PM	35							35
5:00-5:30PM	45							45
5:30-6:00PM	41						1	42
Time								
TOTALS	640	9	10	6	2	14	46	724
				6	2	14	46	68
				Ratio Other to Quarry	6:68	8.82%		
			Other Heavy Vehicles	Refrig Van				
				low loader (2)				
				grain				
				water tanker				
				garbage				

	South Bound Total for time period					Date:MONDAY 3/04/2017		
Time	Light vehicles (< 4.5T GVM)		Small	Heavy	Vehicles	(2> axles	Dual tyres)	
	Eg Cars, Utes, Vans, 4WDs, also with trailers (without dual rear tyres)	School Bus	Trucks, Vans 1 axle dual tyres or long wheelbase see note *	Other heavy (list, eg grain, milk tanker, low loader	Martins Ck Quarry – Daracon Gravel Trucks	Martins Ck Quarry – Contractor Gravel Trucks	Brandy Hill Quarry – All Gravel Trucks 1st truck 5.43am	Total Vehicle Movements
4:30-5:00AM	7							7
5:00-5:30 AM	15							15
5:30-6:00 AM	19		2				4	25
6:00-6:30 AM	20		1	2			2	25
6:30-7:00 AM	28		2	1	1		8	40
7:00-7:30 AM	26		1			4	2	33
7:30-8:00 AM	42		2	1		1	4	50
8:00-8:30 AM	40	1	1				2	44
8:30-9:00 AM	40						6	46
9:00-9:30 AM	16	1	1	2		2	6	28
9:30-10:00 AM	18		1				3	22
10:00-10:30AM	15		1				1	17
10:30-11:00AM	13		2			1	2	18
11:00-11:30AM	22		1	2		2	1	28
11:30-12:00AM	26		1	1		1	1	30
12:00-12:30PM	9						1	10
12:30-1:00PM	11		1				4	16
1:00-1:30PM	15		3				3	21
1:30-2:00PM	12				1	1	1	15
2:00-2:30PM	22		2					24
2:30-3:00PM	19		1			1		21
3:00-3:30PM	28						1	29
3:30-4:00PM	36		4					40
4:00-4:30PM	20		3					23
4:30-5:00PM	40	2	1					43
5:00-5:30PM	35		1					
5:30-6:00PM	39		1					40
Time								0
TOTALS	633	4	33	9	2	13	52	710
				9	2	13	52	76
				Ratio Other to Quarry	9:76	11.84%		
			Other Heavy Vehicles	garbage Truck				
				Grain Truck (2)				
				Low loader (3)				
				Removalist B Double				

Quarry trucks were 90.6% of all the heavy trucks including both directions

North Bound Total for time period — **Date: Tuesday 4/04/2017**

Time	Light vehicles (< 4.5T GVM)		Small	Heavy	Vehicles	(2> axles	Dual tyres)	
	Eg Cars, Utes, Vans, 4WDs, also with trailers (without dual rear tyres)	School Bus	Trucks,Vans 1 axle dual tyres or long wheelbase see note *	Other heavy (list, eg grain, milk tanker, low loader	Martins Ck Quarry – Daracon Gravel Trucks	Martins Ck Quarry – Contractor Gravel Trucks	Brandy Hill Quarry – All Gravel Trucks 1st truck 5.43am	Total Vehicle Movements
5:00-5:30 AM	5							5
5:30-6:00 AM	11		1			5	2	19
6:00-6:30 AM	21			1		3	1	26
6:30-7:00 AM	21		2	2		1	4	30
7:00-7:30 AM	23	1	2				2	28
7:30-8:00 AM	31	1				2	2	36
8:00-8:30 AM	30	1	1			1	4	37
8:30-9:00 AM	17			1			3	21
9:00-9:30 AM	18		2				3	23
9:30-10:00 AM	21		1	1	1	1	1	26
Time				Grain Truck				
TOTALS	198	3	9	5	1	13	22	251
				4	1	13	22	40
				Ration Other to Qaurry	4:41	10.00%		

Cell G12	Sewage Pump System ->Hanson's
Cell F8	Low Loader With D10 Dozer

Note This trip is infrequent, and could be discounted as "noise", and I have done so in this exercise.
However dure construction phase there will be quite a few of these events as crusher, screens and equipment come in. But again these

South Bound Total for time period — **Date: Tuesday 4/04/2017**

Time	Light vehicles (< 4.5T GVM)		Small	Heavy	Vehicles	(2> axles	Dual tyres)	
	Eg Cars, Utes, Vans, 4WDs, also with trailers (without dual rear tyres)	School Bus	Trucks,Vans 1 axle dual tyres or long wheelbase see note *	Other heavy (list, eg grain, milk tanker, low loader	Martins Ck Quarry – Daracon Gravel Trucks	Martins Ck Quarry – Contractor Gravel Trucks	Brandy Hill Quarry – All Gravel Trucks 1st truck 5.43am	Total Vehicle Movements
5:00-5:30 AM	11							11
5:30-6:00 AM	23		2			1	5	31
6:00-6:30 AM	22		3					25
6:30-7:00 AM	18		10	2		3	4	37
7:00-7:30 AM	30	1	1	1		1	3	37
7:30-8:00 AM	37	1	1			1	4	44
8:00-8:30 AM	44	1	1			1	4	51
8:30-9:00 AM	31			2		1	4	38
9:00-9:30 AM	26	1	1				2	30
9:30-10:00 AM	17		2	1	1	2	1	24
Time								
TOTALS	259	4	21	6	1	10	27	328
				5	1	10	27	43
				Ration Other to Qaurry	5:44	11.63%		

Cell F34	5 off 4WD maintemace vehicle
	1 off 10ton + carrying excavator
	3 off light truck
	off light truck with Hy-Ab crane
Cell G35	Returning Low Loader
Cell G40	Sewage Pump System

Appendix 7 – Map of the area