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6.0 CONCLUSIONS

From the report provided, it is not possible to comfortably state the noise from the site will not be above the typically accepted criterion, due to the following reasons:

- a) Noise limit criterion determination and background noise data is not provided;
- b) Impacts at actual receivers is not clear – a table with a list of noise receivers and the predicted impact level would make the assessment of the impacts clearer;
- c) Modelling conditions were not clearly stated in relation to the assumed operational characteristics of the track (e.g. how many tracks were in use, was a "pack" of motorcycles used in modelling, or spread widely around the track);
- d) The location and actual height of acoustic barriers required is not clearly set out in the report;
- e) The use of soft materials such as hay bales is not acceptable, as they are prone to decay and damage from impacts with motorcycles.

As a final note, the graphics in the report provided were not clear, with aerial photography being a solid black square with little detail – it was not possible to locate the site, track layout, or receiver locations in most of the diagrams provided.

We trust the above is of assistance; please do not hesitate to contact the undersigned regarding any queries in relation to the above information.

Yours faithfully
CRG TRAFFIC & ACOUSTICS PTY LTD

JAY CARTER BSc
DIRECTOR



7 May 2007

General Manager
Tweed Shire Council
PO Box 816
MURWILLUMBAH NSW 2484

Attention: Rebecka Groth

Dear Sir/Madam

RE: FURTHER SUBMISSION TO PROPOSED MOTORBIKE TRACK @ LOT 503 DP 1000612, DONALYN COURT, DURANBAH.

I wish to advise that we act for a number of residents potentially affected by the proposed Dirt Bike Track at Donalyn Court, Duranbah.. We previously made a submission in reference to the proposal on the 26 April 2006.

This correspondence specifically is in response to your letter dated 20 April 2007 inviting a submission in reference to the revised track layout and acoustic report.

In response to the revised acoustic report CRG Traffic and Acoustic Consultants were engaged to review the revised report. The findings of this review concluded that:

"From the report provided, it is not possible to comfortably state the noise from the site will not be above the typically accepted criterion, due to the following reasons:

- a) *Noise limit criterion determination and background noise data is not provided;*
- b) *Impacts at actual receivers is not clear – a table with a list of noise receivers and the predicted impact level would make the assessment of the impacts clearer;*
- c) *Modelling conditions were not clearly stated in relation to the assumed operational characteristics of the track (e.g. how many tracks were in use, was a "pack" of motorcycles used in modelling, or spread widely around the track);*
- d) *The location and actual height of acoustic barriers required is not clearly set out in the report;*
- e) *The use of soft materials such as hay bales is not acceptable, as they are prone to decay and damage from impacts with motorcycles."*

Attached is a full copy of CRG's report.

Noise generated by the proposal has the potential to significantly impact on the rural amenity of the area and the enjoyment and lifestyle of residents living in the area. Many of the measures proposed in the acoustic assessment such as limiting numbers of bikes, noise levels of bikes, vehicles entering the site per hour etc will be very difficult, if not impossible to enforce. It is submitted that the application should be rejected on the basis of the precautionary principle due to the level of uncertainty provided by the proposal



We once again refer you to our original submission which we are of the view that many of the issues raised in that submission remain valid with the revised concept.

Should you require any further information, please do not hesitate to contact Planit Consulting on the numbers below.

Yours Faithfully

A handwritten signature in black ink, appearing to read "Stephen Enders".

Stephen Enders
Planning Co-ordinator
Planit Consulting Pty Ltd



CARTER RYTENSKILD GROUP
Traffic and Acoustical Consultants

GOLD COAST

2563 Gold Coast Highway
Mermaid Beach Queensland 4218

POSTAL
PO Box 441
Mermaid Beach Queensland 4218

BRISBANE

90 Wilmore Street
West End Queensland 4101

POSTAL
PO Box 3429
South Brisbane BC Queensland 4101

CRG Traffic & Acoustics Pty Ltd ACN 118 733 734

T 1300 798 830 F 1300 798 831 E info@crg.net.au www.crg.net.au

04 May 2007
CRGref Letter 04_04_07

Mr Stephen Enders,
Planit Consulting
PO Box 186
SURFERS PARADISE QLD 4217

Dear Sir,

REVIEW OF ACOUSTIC IMPACT ASSESSMENT, MOTORCYCLE TRACK, DURANBAH

Thank you for your request for CRG to provide a review of the DRAFT Acoustic Impact Assessment produced by James Heddle Pty Ltd, dated 14 November 2006. We have reviewed the draft assessment, and report on the outcome of our review:

1.0 AMBIENT NOISE MONITORING

The James Heddle report states on page 6 that existing ambient noise information were derived from measurements undertaken for previous reports, and from attended 1/3 octave band testing. One report cited was an assessment of road traffic noise 4 kilometres to the south of the subject site conducted by James Heddle, and the other a report by Craig Hill Acoustics. The ambient noise results from the James Heddle road traffic noise assessment provided some detail regarding the acoustical effects of road traffic on the Pacific Highway, although, it is noted that the data used does not specifically relate to the subject site and locals, and it appears that levels taken from this road traffic noise assessment were not used on determining the noise limit criterion for the use

The Craig Hill report was cited by James Heddle as the basis of the Rating Background Levels (RBLs), and therefore, the applicable noise criterion for the proposed use. There is no indication in the Heddle report provided of the measurement methodology of the Craig Hill testing procedure, including the following details





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- Presentation of the results of the measurement in graphical format;
- Equipment used (e.g. make and model of meter used);
- Weather conditions (e.g. wind speed and direction, temperature, relative humidity, barometric pressure) during the ambient noise testing;
- Calibration details (both NATA Laboratory and field calibration);
- Length of time of the ambient noise testing (7 days continuous monitoring should be conducted in accordance with the *Industrial Noise Policy*);
- Measurement location;
- Observations of the make-up of the ambient sound at the monitoring position;
- Standards applied to monitoring (e.g. was the test conducted in accordance with Australian Standard AS 1005, which is cited as the required methodology under the *Industrial Noise Policy*).

From the above points, it is not possible to determine if the background noise levels measured are representative at potentially affected residents, and therefore, it is not clear that the noise limit criterion for the assessment has been properly set.

2.0 NOISE LIMIT CRITERIA

We agree with the application of the *Industrial Noise Policy*, as the definition of Offensive Noise under the *Protection of the Environment Operations Regulation* does not provide a definitive and easily tested criterion to determine if noise is excessive. By applying the *Industrial Noise Policy*, a numeric limit can be defined testing is repeatable, rather than the opinion of a person on the day of observation.

We also note that it appears that the maximum noise levels are used in the James Hoddle report rather than the L_{eq} (or "average") levels. This is a more conservative approach than the standard application of L_{eq} as specified under the *Industrial Noise Policy*, and is acceptable.

3.0 AUDIBILITY TESTING

The James Hoddle report presented results from audibility testing of actual motorcycle use within the proposed subject site. This section concluded that motorcycle usage was not audible at some of the receiver locations and audible at others. We note that there was no discussion of the effect of ambient noise levels during these observations – was the background noise at the time of observations congruent with a "worst case scenario" of low ambient noise levels.



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4.0 PREDICTION MODELLING

We note that the modelling has been conducted to assess various weather conditions, from "best case scenario" (e.g. wind blowing from receiver to noise source) to "worst case scenario" (e.g. wind blowing from noise source to receiver). This is necessary to provide the potential range of impacts due to changes in weather conditions.

It is not clear in the James Huddle report how many motorcycles were used in modelling, nor the spread of the motorcycles around the track. We note that at the start of a race that all the motorcycles would be grouped into a pack, and as the race progresses, they tend to spread out. For this reason, there is the potential for propagation to be between a point and line source, depending upon the distance between the motorcycles. The end result of this is that the noise may decay at a lower rate than that assumed in the modelling (which assumed that noise will decay at the higher rate for point sources).

The report does not state if the effect of all three tracks simultaneously in operation was assessed. There is the potential for an additive effect if more than one track is in use. We also note that it is useful to provide numeric impact values at actual receiver locations in a table that can be easily compared to the noise limit criterion.

5.0 RECOMMENDED ACOUSTIC TREATMENTS

Although meeting the mass requirements for acoustic barrier construction, we note that hay bales may (in time) organically break down, or be damaged upon impacts with a motorcycle (we note that the barriers need to be within 1m of the edge of the track). For this reason, we view use of hay bales as not an acceptable barrier material to be used.

There are not any clear diagrams showing the recommended location of barriers required. It is necessary to provide drawings of the locations and heights of such structures to assist the Operators in determining the location of these barriers when installing them, and also to confirm that the barriers have been located within the correct areas, to the correct height.

Should an approval be given, that the approval be subject to detailed noise testing conducted prior to commencement of use. Such a test would ensure that the final location and heights of acoustic barriers was effective, and that the use is in compliance with the noise limit criteria determined.