

8 May 2019

To Director Transport Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

By email: information@planning.nsw.gov.au

Dear Mr Snow

**F6 Extension Stage 1 - SSI-8931
RMS Submissions Report and Preferred Infrastructure Report
James N Kirby Holdings Pty Ltd**

We act for James N Kirby Holdings Pty Ltd, the landowner of 429 West Botany Street and the Kirby Industrial Park located at No's 415-443 West Botany Street, Rockdale.

In response to RMS's Submissions Report and Preferred Infrastructure Report relating to the F6 Extension Stage 1 Project, we attach a table of our client's comments together with a letter from GHD dated 8 May 2019. This letter, the enclosed table and the letter from GHD comprise our client's submission.

In relation to the table, our client's comments in the left hand column adopts the categories of issues as outlined in Appendix A of the RMS Submissions Report and references the key points of concern (shown in bold type) raised in our submission (numbered 204 on the Major Projects website) relating to the exhibited EIS. In the middle column is a summary of the RMS's response to the relevant issue. In the right hand column are our client's supplementary comments.

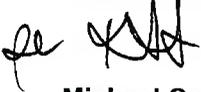
Specifically, in relation to the Preferred Infrastructure Report, our client relies on its previous submission but reiterates that there will be a number of issues in relation to the Kirby Industrial Estate tenants. These issues specifically are in relation to:

1. the ability of all vehicles (including trucks that currently access the site) to safely enter and leave the site in compliance with Australian Standard 2890;
2. the ability of all vehicles (including trucks that currently access the site) to efficiently enter and leave the site based upon changes in traffic flow levels along West Botany Street during construction stages and post F6 works; and
3. details of any additional time required for deliveries and haulage vehicles related to any changes to the road network and existing driveways that serve the Kirby Industrial Estate during construction stages and post F6 works.

Our client requests more information and certainty from RMS on the access arrangements and proposed mitigation measures, including an opportunity to actively engage with RMS at the appropriate time.

Further technical advice can be provided by our client if required by RMS.

Yours sincerely



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This communication and any attachments are confidential and may be privileged.

Category	RMS Response	Supplementary Comments
<p>Construction of ancillary facilities.</p> <p>(Impact of dust on sensitive receptors)</p>	<p>-Construction related air quality mitigation measures relevant to sand, cement and aggregate were omitted from the EIS.</p> <p>-A Construction Air Quality Management Plan (CAQM) will be developed prior to the commencement of construction activity.</p> <p>-In response to submissions raised, Environmental Management Measures have been updated and will form part of the CAQM. These measures include:</p> <ul style="list-style-type: none"> ➤ Sand/aggregate will be stored in bunded areas and will not be allowed to dry out. ➤ Minimise dust generation from stockpiles, haulage routes and spoil sheds. ➤ Manage the transport, storage and handling of sand/aggregate ➤ Modify or cease dust generating works in unfavourable weather conditions. ➤ Employ a dust monitoring framework 	<p>James N Kirby Holdings Pty Ltd:</p> <ol style="list-style-type: none"> 1 Seeks an opportunity to make a submission on the draft CAQM. 2 Intends to of an on-site point of contact throughout the project to whom issues can be directed. 3 Requires access to the RMS's dust monitoring framework.
<p>Access impacts during</p>	<p>-Outer lanes of West Botany Street would need to be</p>	<p>James N Kirby Holdings Pty Ltd:</p>

Category	RMS Response	Supplementary Comments
<p>construction phase.</p> <p>(Impacts of increased travel times)</p>	<p>closed outside of peak operating hours.</p> <p>-Access to properties not acquired, leased or occupied for project purposes would be maintained at all times throughout construction.</p> <p>-The northern entrance to Kirby Industrial Park along West Botany Street would be maintained during construction, however the southern access may not always be able to be maintained.</p> <p>- Where access impacts are unavoidable, consultation will be carried out with landowners/tenants to provide equivalent standards of access.</p>	<p>1 Requires an appropriate notification period to ensure access outside peak operating hours is not impeded by the planned lane closure.</p> <p>2 Will further investigate on-site circulation issues relating to the periodic impeded access to the southern entrance to the Kirby Industrial Park.</p> <p>3 Requires more information from RMS regarding the consultation period and process for unavoidable access impacts.</p>
<p>Construction traffic and transport impacts.</p> <p>(Impacts of increased travel times)</p>	<p>-A Construction Traffic and Access Management Plan (CTAMP) will be developed prior to the commencement of construction activity, identifying management measures relating to construction movements to minimise disruptions to the public road network.</p> <p>- Haulage routes to the Kirby Industrial Park would be affected by changes to traffic conditions on West Botany Street, however the Traffic Assessment predict this impact to be "minimal".</p>	<p>James N Kirby Holdings Pty Ltd:</p> <p>1 Seeks an opportunity to make a submission and actively engage in the resolution of the access arrangements to be identified in the CTAMP.</p> <p>2 Requires more information and certainty from RMS regarding the mitigation measures to be implemented if traffic conditions are above the 5% daily variation limit.</p>

Category	RMS Response	Supplementary Comments
	<p>- An additional 36 heavy vehicle movements are anticipated in the AM peak hour and 52 in the PM peak hour representing an increase of 5% of total vehicle movements which would fall within the typical daily variation of road users.</p> <p>- Restrictive access to Kirby Industrial Estate and the temporary diversion on to West Botany Street would be subject to further assessment through the CTAMP in order to minimise delays and disruptions to tenants of the estate.</p>	
<p>Level of air quality assessment.</p> <p>(Impact of tunnel ventilation)</p>	<p>- The predicted contribution of tunnel ventilation outlets to pollutant concentrations is very small for all receptors.</p> <p>-Any predicted changes in pollutant concentrations would be driven by changes in traffic volumes on the surface road network and not by the tunnel ventilation outlets.</p> <p>- As at February 2018, ventilation outlets will be regulated by the NSW EPA which will require:</p>	<p>James N Kirby Holdings Pty Ltd:</p> <p>1 Requests site-specific air quality monitoring and its independent review.</p> <p>2 Requests a guarantee that the ventilation facility will not affect sensitive receptors without need for further investment in air filters or other mitigation infrastructure.</p> <p>3 Requires future review of tunnel usage and pollution emissions and, if required, implementation of additional mitigation measures.</p>

Category	RMS Response	Supplementary Comments
	<ul style="list-style-type: none"> ➤ tunnel operators to meet air quality limits and undertake air quality monitoring where appropriate. ➤ the Advisory Committee on Tunnel Air Quality (ACTAQ) will coordinate a scientific review of emissions from ventilation outlets. ➤ NSW Chief Health Officer will release a statement on the potential health impacts of emissions of ventilation facilities ➤ the Minister of Planning will not approve a motorway tunnel project until the ACTAQ scientific review is considered. <p>-The ATAQ scientific review found that the EIS “constitutes a thorough review of high quality” and “the benefit of exploring alternative approaches would be questionable or marginal.”</p> <p>-The Chief Health Officer Review found “that the contribution of emissions from road tunnel ventilation outlets to community exposures is small relative to the contribution of emissions from traffic on surface roads.”</p>	

Category	RMS Response	Comments
<p>Construction air quality impacts.</p> <p>(Impact of dust on sensitive receptors)</p>	<p>- Risks associated with construction related dust emissions have been assessed in the EIS and cover demolition, earthworks (including tunnelling), construction and movement of vehicles.</p> <p>- Several locations and activities have been determined to be at high risk at the proposed construction sites at Rockdale, President Avenue and the Princes Highway.</p> <p>-Management measures have been proposed in Part D of the submissions report and will be further explore in the CAQMP prior to the commencement of construction works.</p> <p>-Mitigation measures have been designed to minimise potential impacts on the Kirby Industrial Estate and other locations.</p>	<p>James N Kirby Holdings Pty Ltd:</p> <p>1 Advises that the Kirby Industrial Estate is in a high risk location;</p> <p>2 Requires an opportunity be involved in, and to be consulted on CAQMP is required.</p> <p>3 Requests further details and certainty from RMS regarding any additional measures to be taken by RMS for sensitive receptors, as well as food preparation and distribution.</p> <p>4 Requests further details from RMS as to whether it has considered (or will consider) mitigation/compensation for affected tenants of Kirby Industrial Estate.</p>
<p>Operational air quality impacts</p> <p>(Impact of tunnel ventilation)</p>	<p>- Road tunnels over 1km long are not permitted to have emissions at portal entrances.</p> <p>-As a result, polluted air must be expelled from one or more elevated ventilation outlets.</p>	<p>James N Kirby Holdings Pty Ltd:</p> <p>1 Requests further details from RMS as to whether consideration was given to alternative locations for ventilation outlets.</p> <p>2 Requests information from RMS as to how often ventilation emissions will be monitored.</p> <p>3 Requests more information from RMS regarding the framework for managing exceedances in allowed emissions.</p>

Category	RMS Response	Supplementary Comments
	<p>-The tunnel ventilation system has been designed to meet ACTAQ's In Tunnel Air Quality (Nitrogen Dioxide) Policy.</p>	
<p>Air quality impacts of ventilation facilities.</p> <p>(Impact of tunnel ventilation)</p>	<p>- Ventilation outlets have been designed to ensure that local communities will experience little if any change in air quality.</p> <p>- Air quality and health assessments have been reviewed by experts who advise: <i>"Well designed and operated road tunnel ventilation outlets discharge in-tunnel air to the atmosphere at a height and velocity that promotes dispersion of the in-tunnel air, minimising ground-level impacts."</i></p> <p>-Under NSW Government Tunnel Ventilation Initiative, the NSW EPA will license the operation of the ventilation facilities and set the discharge limits and monitoring requirements.</p> <p>-Ventilation outlets would be controlled using real time air quality sensor data to ensure compliance with the emission limits.</p>	<p>James N Kirby Holdings Pty Ltd repeats questions set out above.</p>

Category	RMS Response	Supplemental Comments
	<p>- The predicted contribution of tunnel ventilation outlets to pollutant concentrations was considered to be negligible for all receptors at ground floor level.</p>	
<p>Air quality environmental management during construction.</p> <p>(Impact of dust on sensitive receptors)</p>	<p>- Dust management procedures will be outlined in the CAQMP prior to construction. This strategy will be prepared in consultation with the local council and other relevant stakeholders.</p> <p>- Specific management measures will be adopted such as the installation of acoustic shed around tunnelling sites and all spoil trucks will be covered and transported via arterial roads.</p> <p>- Measures will be taken to ensure dust sensitive work ceases during unfavourable weather conditions.</p>	<p>James N Kirby Holdings Pty Ltd:</p> <p>1 Requires more detail from RMS regarding the commencement of consultation activity.</p> <p>2 Requires confirmation from RMS that the land owner/ tenants of Kirby Industrial Estate will be involved in these discussion.</p> <p>3 Proposes to establish a key contact to deal with issues relating to dust management.</p>
<p>Noise impacts during construction.</p>	<p>- The proposed tunnel alignment is deep overall and therefore sensitive receptors are unlikely to be adversely impacted by tunnelling activity.</p>	<p>James N Kirby Holdings Pty Ltd:</p> <p>1 Requests RMS clarify how it defines "adversely impacted".</p> <p>2 Wants more information from RMS about mitigation measures it</p>

Category	RMS Response	Supplementary Comments
<p>(Impact of vibration on sensitive receptors)</p>	<p>- Potential vibration contours have been mapped in the EIS to include the area of Kirby Industrial park.</p> <p>-Tunnelling activities are predicted to be compliant with both the preferred and maximum human comfort peak particle velocity criteria. Potentially affected receptors will be notified that they may feel vibration.</p>	<p>3 will take for any of the tenant's sensitive businesses. Wants to know whether tunnelling activity to be limited to off-peak hours.</p> <p>4 Seeks clarity from RMS on the framework for reporting incidents relating to vibration.</p>
<p>Social and economic impacts during construction.</p> <p>(Impacts of increased travel times)</p>	<p>- The impacts upon businesses and residents have been addressed in the Submissions Report (Part D- Environmental Management Measures).</p> <p>- A Site Establishment Management Plan will be prepared prior to the commencement of construction activities seeking to minimise impacts on adjacent sensitive receptors.</p> <p>- There will be some disruption in terms of access, however in most cases modifications to local road networks will be temporary.</p>	<p>James N Kirby Holdings Pty Ltd:</p> <p>1 Seeks details from RMS about the consultation period for the Site Establishment Management Plan.</p> <p>2 Wants more details from RMS regarding mitigation measures RMS will take as a result of restricted access and potentially harmful works on sensitive receptors.</p>
<p>Business and industry</p>	<p>- Changes to the road network would potentially affect servicing and the delivery of goods.</p>	<p>James N Kirby Holdings Pty Ltd formally requests an opportunity to have input on the Business Management Plan as large number of tenants in the</p>

<p>impacts during construction.</p> <p>(Impacts of increased travel times)</p>	<p>- A Business Management Plan will be prepared prior to construction to detail identification and communication with businesses adversely affected by construction works.</p>	<p>Kirby Industrial Estate are likely to face some sort of disruption to day-to-day operations.</p>



8 May 2019

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Our ref: 21-27917
Your ref:

Dear Sir/Madam

**429 West Botany St Air Quality Review
Air Quality Advice – Supplementary letter: Submissions report and preferred
infrastructure report**

1 Overview

King & Wood Mallesons work on behalf of James N Kirby Holdings Pty Limited (Kirby Holdings), the owner of Lot 2 in DP 100164 and Lot 3 in DP 322338, known as 429 West Botany Street, Rockdale (Property).

RMS proposed to acquire the property for purposes associated with the F6 Extension Stage 1 road project which is to provide a new motorway connection between the new M5 Motorway at Arncliffe and President Avenue at Kogarah.

King & Wood Mallesons initially instructed GHD on behalf of Kirby Holdings to prepare a preliminary air quality advice to assist with providing legal advice to Kirby Holdings in relation to the proposed acquisition and Kirby Holdings entitlement to claim compensation. King & Wood Mallesons have subsequently asked GHD to respond to the following supplementary requests:

- King & Wood Mallesons provided the Submissions Report and the Preferred Infrastructure Report (PIR) and have asked GHD to review these and provide any additional supplementary comments relating to air quality impacts.

GHD's responses are provided below.

2 Supplementary comments

GHD have reviewed the Submissions Report and the PIR. With regards to air quality, GHD provide the following additional comments:

2.1 Increase in air quality at elevated receptors

NSW Health have noticed the increase in air quality impact for the elevated receptors (B13-1):

- "At a height of 45 metres, the maximum annual average PM2.5 (1.58 pg/m3) and maximum 24- hour PM2.5 (15 pg/m3) at any receptor location was markedly higher than at ground level.

- The increase in PM2.5 at elevations of 45 meters (sic) are greater than those predicted at ground level resulting from surface road traffic.”

Despite the decreasing influence of surface road contribution, it is the plume from the ventilation structure outlets (VSO's) causing the issue at height. NSW EPA also noted similar impacts (B2-13):

- “The Air Quality Technical Report predicts, a noticeable change in concentration for a receptor height of 45 metres for both annual average and 24-hour average PM2.5.”

Both agencies conclude that acceptable impacts due to concentration levels are a low percentage of acceptable assessment criteria – this is expanded upon in Appendix B of the submissions report.

While noting that there is a development height limit in the local planning scheme over and around the clients landholdings, these VSO plume impacts have previously been noted by GHD.

2.2 Development of a CAQMP

All of the government agencies RMS, NSW EPA and NSW Health identify that the development of a Construction Air Quality Management Plan (CAQMP) to address air quality impacts associated with construction is a key consideration (see for example, Section B13.2.1).

To date, only a qualitative assessment is possible based on a risk assessment approach (for example B13-3):

- “It is difficult to reliably quantify dust emissions from construction activities, due to the variability of the weather at times when specific construction activities are undertaken.”

This is similar to the conclusion previously drawn by GHD where it is the CAQMP that becomes all-important. As discussed at the top of C6-3 “Good practice on construction sites” will be included.

2.3 Bentonite plant

Construction concrete batching plant(s) are now not considered although there will be a bentonite plant (see Chapter A2 (clarifications)) near President Avenue.

2.4 Access impacts during construction

Access impacts during construction are discussed in Section C6.5, including;

- “Access to the Kirby Industrial Park along West Botany Street during construction including alternative arrangements to maintain access for long B-double trucks”

While not directly related to Air Quality, GHD concur that construction impact will be significant for the Kirby Industrial Park – especially when the ‘cut and cover structures’ occur across West Botany Street (with significant dust management required).

2.5 Adequacy of assessment

While the Air Quality ‘adequacy of assessment’ has been questioned, GHD concur with the international expert that: “the benefit of exploring alternative approaches would be questionable or marginal” (p. C8-2).

This includes “Use of the GRAMM modelling domain is not appropriate, as it allows homogenisation of meteorological characteristics” (p.C8-4).

2.6 Planning buffer

GHD identified that a 3D planning buffer be developed. Due to the differences in building height limits, this was noted for Arncliffe but not Rockdale (C8-10 and Appendix B):

- “The future development of land (including rezoning) in the vicinity of the project ventilation outlets that may involve multistorey buildings above 30 metres in height would need to consider the air dispersion performance of the outlets. Roads and Maritime would assist Bayside Council in determining relevant land use considerations applicable to future development for inclusion in local environmental plans or development control plans, where required.”

2.7 Dust generation from construction of the cut-and-cover structures

Concern about dust generation from the construction of the cut-and-cover structures at the President Avenue construction ancillary facility (C3) is discussed in section C8.2.

The RMS response mirrors that of GHD (p. C8-2):

- “The findings of these assessments detailed the risks of dust impacts without the application of mitigation measures.”

These measures are to be outlined in a Construction Air Quality Management Plan (CAQMP) to be developed prior to construction.

These are to “minimise potential impacts on locations such as Brighton Le-Sands Public School and the industrial properties on West Botany Street” (ibid.).

“Physical barriers (such as stacked shipping containers)” get a mention, as included in the GHD submission used by the client, in Section C8.6.1.

2.8 Future property developments

The issue of “future property developments, such as basement works” is raised in section c13.4.

The RMS response includes:

- *“In circumstances where tunnel depths are at the shallowest point (around the tunnel portals and exit and entry ramps), the introduction of the subsurface stratum, and the tunnel itself, has the potential to limit development above the alignment”* (p. C13-4).

3 Conclusion

GHD has provided additional advice to King & Wood Mallesons relating to the supplementary RMS comments, Submissions Report and the Preferred Infrastructure Report.

4 Limitations

This report has been prepared by GHD for King & Wood Mallesons and may only be used and relied on by King & Wood Mallesons for the purpose agreed between GHD and King & Wood Mallesons as set out in Section 1 of this report.

GHD otherwise disclaims responsibility to any person other than King & Wood Mallesons arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

GHD has prepared this report on the basis of information provided by King & Wood Mallesons and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

Sincerely
GHD



Barry Cook

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