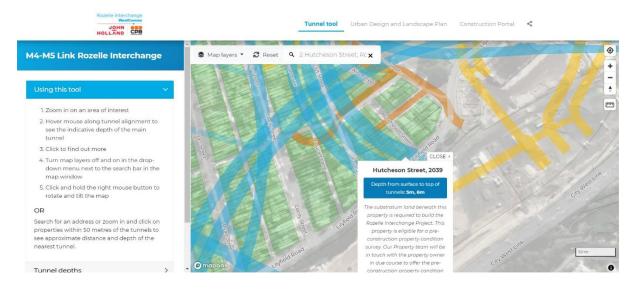
# INQUIRY INTO IMPACT OF THE WESTERN HARBOUR TUNNEL AND BEACHES LINK

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Submission from Kirstine Murray of Hutcheson Street, Rozelle NSW 2039.

Our family including our two school age daughters live at Hutcheson Street, Rozelle. Our home is five metre above one of the three Western Harbour Tunnels that will connect with Stage 3 of the WestConnex project, Rozelle Interchange. Construction of the tunnel under our home began in May.

We have valuable insights to share about our experience of living with tunnelling noise and vibration. This is in addition to having already lived next door to the Rozelle Interchange construction where work began on the site four years ago. During this time there has been constant noise day and night, associated vibrations, regular flood lights trained on our home during out of hours work plus an influx of West Connex workers around the clock six days out of seven so at times we're unable to park anywhere near our home.



Source: https://caportal.com.au/ric/rozelle-interchange

The location of our home in relation to the Rozelle Interchange site.



In sharing our experience will also offer recommendations in a bid they inform adjustments can be made to how the Western Harbor Tunnel project is rolled out.

There are still two years of construction work for us to survive on Stage 3 of the West Connex Rozelle Interchange project and a further five years before the Western Harbour Tunnel will be complete. We hope the time and effort involved in making this submission will go some way to seeing residents who live nearby decade long projects receive fair noise treatment measures, avoid being kept awake at night six days out of seven and be able to park within the vicinity of their home.

#### Noise and vibration

Even in the earliest stages of the construction of the Western Harbour Tunnel there is no recognition of the cumulation of 24 hours a day, six days a week noise and vibration. The same noise standards apply as if it's the first time we're hearing any form of construction noise or vibrations. For us construction of the tunnel that will eventually sit five metres below us, follows years of day and night construction work associated with Stage 3 of WestConnex Rozelle Interchange.

Our youngest daughter was eight years old when out of hours noise from the site first kept her awake at night. She will be 17 and be preparing to sit her HSC before construction noise and heavy vehicle traffic ceases with the completion of the Western Harbour Tunnel. For more than half of her life she will be regularly kept awake at night because of construction and tunnelling noise.

While reports will tell you construction of Stage 3 began in 2019, as a family we've already lived with considerable day noise from February 2017 when geotechnical investigations began and vacuum trucks parked in our surrounding streets for days on end. Separate Western Harbour Tunnel and Beaches Link geotechnical investigations began in August the same year. On August 21 an RMS appointed contractor, Fulton Hogan Constructions, started work on clearing the Rozelle Rail Yards. This work took 12 months and involved noisy night work where electrical saws and excavators were used to remove vegetation keeping our family awake. So we've regularly being unable to sleep six days out of seven since at least 2018.

There have been three opportunities for us to qualify for noise mitigation measures during the construction of the Rozelle Interchange. Despite being located mere metres from the site we never qualified for the first two rounds which included the current construction phase. Oddly, we qualify for the operational noise program designed for when the Rozelle Interchange is functioning. All we are eligible to receive is an air ventilator to recognise noise from vehicles using the Rozelle Interchange will be so loud we'll be able to open our windows and let in fresh air. When our property was accessed for this treatment, the contractor told us the noise we're projected to hear will be much less than the construction noise we currently live with.

I've shared all of this information in a bid to demonstrate how adjustments should be made for residents affected by the Western Harbour Tunnel project. The noise and vibration levels set for the Rozelle Interchange fail to consider the number of years residents are affected. While we're constantly told, out of hour noise is "compliant" we are woken regularly all the same. It may be within project approvals however it's morally wrong to consistently deny, in particular school age children a reasonable night's sleep for years.

**Recommendation** - Recognition some residents will be cumulatively affected by noise and vibration. In our experience we've had to spend hours making written complaints about how our family including two school aged children are woken regularly six days out of seven by out of hours construction noise on top of daily rock hammering and tunnelling mere metres from our home.

#### Lack of transparency

Again I'm sharing our experience of living next door to the Rozelle Interchange and the difficulties we've faced with reasonable requests for information and noise monitoring results. I hope our experience will inform recommendations that adjust Western Harbour Tunnel project approval rules for affected residents.

Our experience when making noise and vibration complaints reveals a major flaw in the process that needs to be adjusted. The flaw is twofold; a contractor can refuse to conduct airborne noise monitoring despite numerous complaints. Alternatively if they do agree to monitor noise the contractor chooses when and where that monitoring takes place. This runs the risk of the contractor being able to conduct monitoring when they know it will be quieter or it could even be argued ask certain workers to hold off on certain activities until 8am when there are no constraints around the amount of noise generated.

We've had two recent experiences that illustrate how the contractor JHCPB is opaque in their operations and lack independence when asked to monitor noise following our complaints.

#### Experience one

Since December 2020 air borne noise from the Rozelle Interchange has worsened as the project has ramped up. Our family are regularly woken overnight and kept awake Monday to Saturday. Since February 3 we have been woken before 5am six days out of seven. All of this noise is deemed "compliant" by the contractor, JHCPB who refuses to do air borne noise monitoring on our property or inside it.

While we have already lived through constant noise and dust generated from the Rozelle Interchange site, now being woken at 4:47am Monday to Saturday from spoil being loaded into trucks at Site B is unbearable. From April spoil loading has been waking us even earlier, for example early on Tuesday April 27 we were woken at 2:30am and 3.11am.

We first made complaints on December 14 and again from February 3 this year. We have since made a further seven written out of hours noise complaints.

In relation to the spoil loading noise we've been told it will continue until at least the end of year. There is no ability for our family to go to bed earlier in the evening as there is night time piling work Monday to Friday in addition to up to three "noisy night shifts" a week that keep us awake. (See Night Work ongoing - evening night time piling work Notification Number #307 and the weekly Noisy Night Work Notification #376) Our daughters are unable to sleep and it's affecting their ability to concentrate at school during the day. I work from home and since COVID my husband also works from home.

We believe the noise levels we are experiencing at times are above the allowable levels however the contractor has refused to conduct monitoring at our home and claims the noise levels particularly overnight and early in the morning are compliant.

My husband, William Forster and I met on March 11 with seven members of the JHCPB community relations team and a representative from Transport for NSW who was a Senior Manager Stakeholder and Community ( has since left the organisation). We were told at this meeting JHCPB Environment Advisor undertook noise monitoring at the end of Hutcheson Street in which we live. He found noise levels were "compliant". I've been noting down the date and time we have been woken since February 3 and coincidentally this was the first morning there was no spoil loading noise. We were almost thrilled our alarm woke us at 6am rather than noise from the construction site.

I have kept diary records showing the times the spoil loading noise has woken us since February 3. My records clearly show the morning the contractor monitored

near our house we never heard the noise that had been waking us for a month. Interestingly the early morning noise resumed following the meeting.

Please note in my diary entries there are periods where I haven't recorded dates and times. To be frank it's demoralising to be consistently told by JHCPB their noise levels are compliant despite our family being woken Monday to Saturday overnight and before 5am. By having the contractor decide when and where they will monitor noise level lacks independence and is opaque. Does JHCPB practice ethical walls or information barriers within their organisation to prevent communication that could lead to conflicts of interest? We have no idea. We simply told noise levels are "complaint".

We are consistently told by JHCPB in response to written noise complaints "Out of hour (OOH) tunnel support activities are planned works to ensure noise generated is less than 5dba above the RBL. This is called the Noise Management Target (NML). The NML for your Noise Catchment Area is 49 dba (RBL being 44dba). Noise monitoring undertaken determined that tunnel support activities were below the NML and therefore compliant."

Even if the noise levels are "compliant" as they state our family of four is consistently woken overnight and before 5am Monday to Saturday. This is wrong. Regular noise monitoring by an independent acoustic specialist should be undertaken in particular when numerous written complaints are received by nearby residents. Alternatively consideration needs to be given to the acceptable level of noise nearby residents can live with over many years.

Here are my diary notes recording when our family was woken by the spoil being loaded in acoustic shed B from Feb 3 onwards. This was shared with the contractor JHCPB.

Date	Time	Noise complaint
3/2/21	5:15am	Woken by noise that sounded like metal being dropped from a height. It was only brief but it woke us. There were then similar metal clanging noises six to ten minutes apart until closer to 6am. We do all try and go back to sleep so as a result I didn't log the exact times.
4/2/21	5:30 am onwards	Same noise as yesterday but unlike other mornings there was a lot of truck noise accompanying the clanging noise I initially described. Yesterday was the loudest the procession of trucks has been in the very early morning in recent weeks. It sounded like there a lot of them – was there an increase or did they do something different like exiting from a different gate to what they've done previously?
4/2 into 5/2/ overnight shift	Midnight	Extremely loud rock breaking or hammering noise that woke the family and kept us awake for some time. Know it was deemed a "noisy overnight shift" but want it noted we were woken and kept awake for some time. It is the continual and ongoing sleep deprivation rather than a one off occasion
8/2/21	2:28am	Woken by same noise as reported on 3/2.

8/2/21	5:08am	Woken by same noise as reported on 3/2. The noise continues through the early morning at intervals. Appreciate the
		investigation points towards the noise as the spoil loader within
		the acoustic shed at tunnel site C however given we're woken
		before 5:30 when the doors are open to let in trucks it can't be
		this noise?
9/2/21	3:39 am	Woken by reversing truck (the growly noise rather than beeping
		but it still disturbs)
//////	///////	STOPPED TAKING NOTE OF BEING WOKEN UP BUT IT HAPPENS EACH MORNING SHORTLY AFTER 5AM
16/2/21	2.46am	Same noise as reported on 3/2 plus hammering on metal
16/2/21	5.58am	Same noise as reported on 3/2
16/2/21	6.01am	Same noise as reported on 3/2
17/2/21	2.24am	Woken by same noise as first reported on 3/2 but also
		accompanied by reverse "beeping" noise rather than the other
		one normally used.
17/2/21	5:09 am	Woken by same noise as first reported on 3/2
17/2/21	6.01 am	Same noise again and it continues until other work noise drowns
		it out
18/2/21	5:48am	Woken by same noise again as first reported on $3/2$
18/2/21	6:14am	Same noise as reported on 3/2
22/2/21	5.12am	Woken by same noise again as first reported on $3/2$
24/2/21	5:07am	Woken by same noise again as first reported on $3/2$
25/2/21	1:47 am	Woken by same noise again as first reported on $3/2$
25/2/21	5:33am	Woken by same noise again as first reported on $3/2$
26/2/21	4:47 am	Woken by three big bangs in quick success – the three are like
		the singular bang we hear each morning since Feb 3
26/2/21	4:57am	Woken by loud noise as reported on Feb 3
27/2/21	4:57am	Woken by loud noise as reported on Feb 3
1/3/21	4:55am	Woken by loud noise as reported on Feb 3
	5:07	Repeated at this time
	5:11	Repeated at this time
	5:22	Repeated at this time
	5:25	Repeated at this time
	5:32	Repeated at this time
2/3/21	5:03	Woken by loud noise as reported on Feb 3
3/3/21	5:04	Woken by loud noise as reported on Feb 3
4/3/21	4:47am	Woken by loud noise as reported on Feb 3 continues every five to six minutes until well after 6am
5/3/21	5:30am	Woken by loud noise as reported on Feb 3
5/3/31		Phone call from JHCPB Community Relations Advisor
		confirming the noise we've been hearing is spoil being loaded into trucks in Shed B
9/3/21	4:57am	Woken by noise from spoil being loaded in Shed B

10/3/21- this is the morning , Environment Advisor, JHCPB undertook noise monitoring in our street and reported levels were compliant		<ul><li>This is the only morning this year we've been woken by our own alarm we set for 6am rather than spoil noise from Shed B.</li><li>This is the morning noise monitoring was undertaken near our home.</li><li>There was no spoil noise from Shed B before or around 5am unlike other mornings since Feb 3.</li></ul>
11/3/21	5:05am	Woken by noise from spoil being loaded in Shed B. There's also a new noise, we're hearing from early in the morning a high pitched whine which we believe to be the air ventilation system (or scrubber) near a shaft closer to Shed C. (Update - we were later told it wasn't from the air ventilation system – this noise continues daily from 5am)
11/3/21	11.50am	Meeting with seven JHCPB team members and one representative from Transport for NSW
12/3/21	5:07am	Woken by high pitched whine and spoil being loaded in Shed B
15/3/21		Noise continued to wake us the week starting March 15, eldest daughter having surgery in hospital 16/4
18/3/21	21:10	Noise wakes youngest daughter (11 year old) who had gone to sleep at 20:30
23/3/21	4.23am	Spoil loading from Shed B
24/3/21	620 am	High pitched squealing noise
26/3/21	4:47am	Spoil loading from Shed B
20/4/21	9pm	Youngest daughter goes to bed at 8:30pm at night – unable to get to sleep because of noisy work, in particular loud banging at 9pm
21/4/21	12:39 am	Woke the family – loud banging noise – like sheet metal banging on sheet metal
21/4/21	2:30am	Woke the family – loud banging noise – like sheet metal banging on sheet metal
27/4//21	2:30am	Woke the family – loud booming noise from spoil being loaded into Shed B.
27/4/21	3:11am	Family re-woken by same loud booming noise from spoil being loaded into Shed B

## Experience 2

Construction of the first Western Harbour Tunnel began in May. We've been informed by the contractor JHCPB noise modelling has predicted our family will experience noise levels above 45 decibels when the road header tunnelling machine is excavating directly beneath our home. As per the Project's Environmental Protection Licence and Construction Noise and Vibration Management Plan, we'll be offered respite for the duration of the excavation period that noise levels are predicted to exceed 45 decibels. For us we've been told respite is likely to be offered for around three to four weeks from September or October. However we've also been told respite may only be for 18 days and the dates the tunnelling is expected to take place may change. We're told we will be given two weeks notice of when we'll be offered respite. There are respite options to chose from. We'll move into an Airbnb.

As we are already unable to sleep because of construction noise we're incredibly concerned about what the noise and vibration from tunnelling will be like as the road header gets closer to our home but doesn't trigger the 45bd threshold for respite. We've heard horror stories from others in the community who are unable to sleep but don't qualify for respite.

In expressing our concerns to the JBCPB Community Relations team at an information session in May we were surprised to hear they would install unattended ground borne monitoring equipment inside our home. We were told *"The Project Manager* — suggested we install the monitor next week in order to ascertain the noise and vibration levels when excavation is closest to your property to determine if the predicted levels are correct. The tunnelling then moves away from your property so we think this is the best period to get the readings as this is likely to be the loudest noise level."

It turned out the period the monitoring was undertaken, from May 25 to May 29 wasn't when the road header was closest to our property nor were noise and vibration levels the loudest. We hardly heard anything during the five days monitoring equipment was installed by JBCPB. This was confirmed in the report presented to us. Noise and vibration levels were far worse in the days and weeks that followed as the road header moved closer to our home. We know the road header came closer to our property as the Community Relations team send updates on it's location. During this time our family were woken by the tunnelling noise on more than two consecutive nights. When we asked why monitoring was undertaken before we heard the loudest tunnelling noise were given no answer. The contractor also refused to provide details of the raw converted data collected during the monitoring conducted nor did they answer why they wouldn't share the information. Again it's another example of the contractor choosing when they monitor noise and vibration, knowing the levels would be low rather than undertaking it when we'd experience the highest levels.

In speaking to experts more familiar with project approvals we now understand the contractor needs to "validate" predicted ground borne tunnel noise and vibrations before a road header is directly beneath a property. So we now know it was never the contractor looking to monitor levels to inform us better of what our experience

might be like later in the year but merely for their reporting requirements. We feel manipulated by the contractors' opaque practices.

## **Recommendation**

Independent acoustic specialists should be asked to monitor air and ground borne noise and vibrations, in particular when numerous written complaints are received by residents.

If contractors collect noise and vibration readings inside a home or on a private property it should be mandatory the raw converted data is shared with residents.

Recognition for residents who live with constant construction noise and vibration for years rather than two consecutive nights. The bar is far too low when a cumulative impact is taken into account.

#### Local parking impact

Again I share our experience with the impact of an influx daily of more than 1000 workers on site at the Rozelle Interchange project in a bid to inform what adjustments can be made to the Western Harbour Tunnel project approvals in relation to this issue.

We are often unable to secure a park near our home or even within several blocks of it because workers park in local streets. While we would never argue ownership of the car space outside our home it's an entirely reasonable expectation you can park within five blocks of your home.

It makes ordinary tasks like unloading groceries frustratingly difficult. When our eldest daughter recently required a third round of unexpected urgent ankle surgery in March it added to an already stressful situation. The thought there will be no park close by our home when she returned from an overnight stay in hospital was horrible. JHCPB provided us with traffic bollards to mark a car space outside our home. This was the only viable solution to what is an ill thought through but incredibly predictable issue that has plagued the West Connex project in all its stages.

In late 2019 all the residents in the tiny cul-de-sac that is Hutcheson Street and consists of 16 homes signed a petition for the introduction of timed residential parking. The Inner West Council told us we had to wait until a broad survey of residents was conducted. It took until late in 2020 to be undertaken and as the area survey was too big and many residents were unaffected by workers parking in their streets.

The contractor JHCPB offered parking to its workforce at nearby Glebe Island and was running a shuttle bus to the Rail Yards. This also failed. During a meeting in mid-March, the Community Relations Manager at the time, said it was human nature workers would park in nearby streets rather than park at Glebe Island and then catch a 10 - 15 minute shuttle bus to their worksite.

Another residential parking scheme is currently being proposed by the Inner West Council however with the introduction of no stopping 10 metre set backs from intersection our tiny street loses parking space. This is all because there are no mandated parking obligations included in the West Connex project approvals.

In addition to workers taking local car spaces, many are inconsiderate in their behaviour. Many noisily park along Lilyfield Road from 4am in the morning, setting off car alarms, talking loudly to each other, slamming car doors, sitting in their car for 20 minutes with their car lights flooding our home and with their engines running waking our family on a daily basis. Written complaints are regularly made but no change in behaviour occurs.

#### **Recommendation**

Mandated rules around a contractor providing onsite parking to a large workforce that will never willing catch public transport, carpool or take up shuttle bus options when they can park in nearby local streets.

# Out of hours lighting

Again sharing our experience of out of hours construction flood lighting trained on our home that keeps us awake at night. When this happens it requires a written complaint to direct the light away from our home despite the contractor stating they would never shine flood lights into residential homes.

Since December 2020 we've made at least four written complaints however there have been several more occasions when lights are trained on us. It feels like the contactor does what it can get away with until a written complaint is received.

This is in addition to living next door to an already illuminated site which conventional blinds are unable to block out.

Images of floodlights directed at our home follow. All require a written complaint to redirect the lights away from our home despite assurances from JHCPB they wouldn't ever do this in the first place.

# December 14 2020



Floodlight erected on January 24. We had this shining into our bedroom until after the Australia Day public holiday on January 28 so it meant four days of day floodlight overnight.

January 24 2021 take at 9:30pm



Still shining at 6:10am January 28, 2021



February 21, 2021, 10:15pm. Email complaint sent next day on Feb 22.

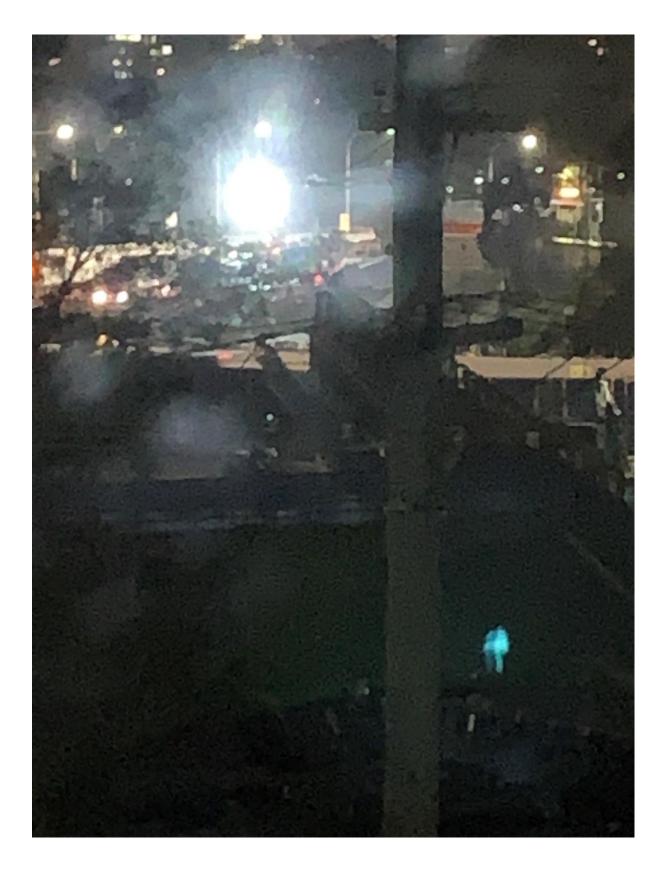
Email received three days later which stated "We've completed our investigation and identified the light as a light on a new generator at the Western Harbour tunnel cut and cover site. This generator was recently installed and has now had a shield placed on it to stop the light from entering your property and other residential properties."

So while a shield was placed over the light it was only because we complained and

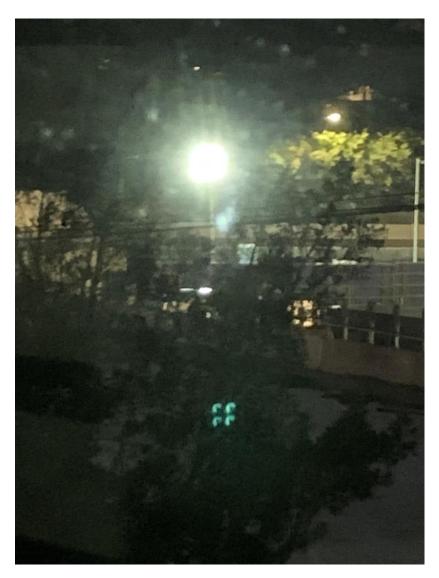


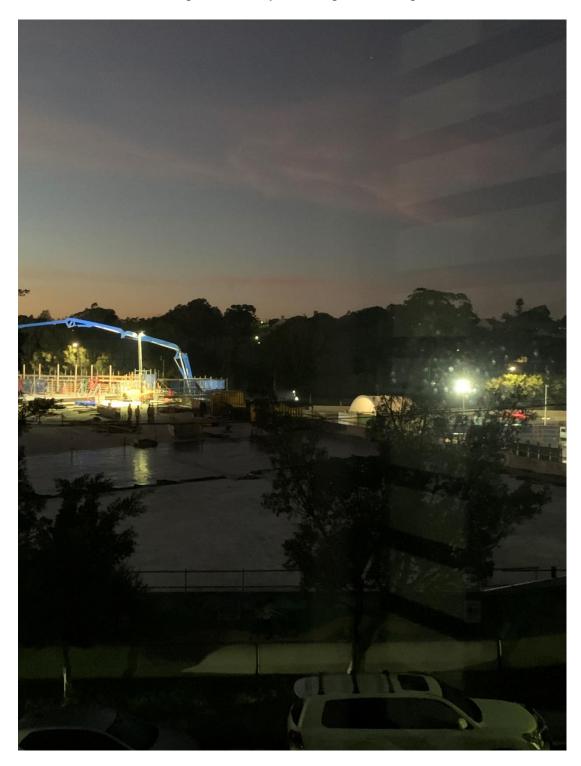
now there's an additional generator noise metres from our home.





June 7, 6.19am





June 7, 6.20am - floodlight and early morning concreting

# Recommendation

Enforce project rules around lighting directed at residential homes. When this repeatedly occurs, meaningful penalties are applied to the contractor.