I am a Seaforth resident with kids going to Seaforth Public school and I object the proposed Beaches Link Tunnel due to the following reasons:

- Biodiversity:

- O The tunnel will cause a permanent loss of up to 96% of the base water flow of the Burnt Bridge Creek which means there will be no creek left. My family uses the cycle and walk way at least twice a month for recreational purposes, either walking or cycling, to visit Manly and Balgowlah. The pathway along the creek provides shade and being away from the traffic and major roads allows us to take our smaller children. The ecological impact of the tunnel on the Burnt Bridge Creek is huge and will impact all the vegetation, flora and fauna. It's also unacceptable that the Balgowlah Golf Course construction support site (BL10) will discharge 428,000l of waste water to the local storm water system Burnt Bridge Creek before it comes out at Queenscliff Lagoon, a place where we currently go to the beach sometimes. This again will destroy this ecosystem. Another route and way to source water for tunneling needs to be found, it's not acceptable that the tunneling will draw from our ground water risking all vegetation and flora along the Seaforth to Manly Lagoon corridor! There needs to be a review assessing the impact the reduced baseline flows in Burnt Creek will have on the ecosystem and vegetation.
- Contamination of Middle Harbour and Clontarf Reserve: There is a significant risk to Middle Harbour from disturbance of sediment. The sediment is known to contain unsafe levels of heavy metals, lead, hydrocarbons, pesticides, and other toxins. The EIS states that sediment curtains will be used to attempt to restrict sediment spread during construction, however Bill Maher, professor of environmental chemistry and toxicology, has stated "I personally have never seen a sediment curtain that's worked 100 per cent". This means that sediment leaks are inevitable, and the impact on aquatic life including endangered marine species as well as people like us enjoying swimming, at Clontarf, will be severe. We go to Clontarf every second week during summer and to know that the beautiful water will be contaminated is unacceptable. I request that a review of this impact is done to assess how exactly water quality will change during and after construction and that a monitoring hotline will be available for residents to find out water quality at Clontarf. I also request an alternative design such as tunneling under the harbour side the same as under land is to be considered so we'd not need coffer dams and a construction site at Spit Reserve West.

- Health impacts:

Chapter 10 of the EIS states that up to 532 residential receivers could be exposed to ground-borne noise levels above 45 dB(A) for a number of weeks on multiple occasions. The potentially affected residential receivers are mainly within Seaforth and in particular in NCA 53.3 where we live. This is unacceptable especially considering NCA 53.3 is not considered for at-property noise treatment. As tunneling will be taking place 24/7 this will impact sleep and cause increased stress levels, especially as also after Covid, my husband and I will be working from home for the majority for the time and we have 2 school aged children who need to do their school work at home. We expect mitigation strategies like double glazing to our windows. I am also concerned that tunneling close to our house will result in structural damages to the house. Residents near the tunnel need to be provided with a free structural assessment prior, during and after the construction takes

- please to ensure we will be compensated if the tunneling causes damages to our properties.
- On top of that Seaforth Public School will endure increased noise levels through-out the construction, so both of my kids will be exposed to an increase of noise for years. The school needs to be upgraded with double glazed windows to allow for better learning and concentration. Indoor halls need to be updated / build to allow kids to play inside during construction if the dust coming from the Balgowlah golf course construction site is bad. An independent dust and noise monitor station need to be installed during construction which will alert parents when the air quality measures exceed what is considered safe and healthy.
- o Poor air quality once the tunnel is completed due to unfiltered ventilation stacks. My son is currently attending Seaforth Public School and then might transition to Balgowlah Boys High School. It is unacceptable building unfiltered stacks so close to so many schools, with Bally Boys being one of them. On top of that, we will live in the middle of both ventilation stacks so no matter the wind direction will be impacted by the ventilation stacks. These stacks need to be filtered and the argument that air quality will only worsen a little bit and it's much better still than in other parts of the world doesn't count since as a civilized and modern society we should not strive to match worse but always should look for ways to improve the status quo. On tunnel- completion, independent and regular (at least 4 times a year) monitoring of the air quality around Seaforth Public and Balgowlh Boys High School need to happen for at least 5 years to ensure the air quality is safe for children. Independent air quality monitoring also needs to be done throughout Seaforth for at least 5 years to ensure measures are not exceeding what's been proposed in the EIS (which is bad enough).
- o Increased noise and danger due to a massive increase in light and especially heave vehicle movements. The EIS states that it is up to the contractor later to organize what route the heave vehicle trucks will take to move the spoil away. So there's a risk trucks leaving the Balgowlah golf course construction site will move through Seaforth. This needs to be avoided as Frenchs Forest route and the roundabout at Seaforth Village would not cope with that, particularly not during school drop-off and pick-up times as the corner at Frenchs Forest and Bangaroo Street already experiences high traffic volume during those times with lots of children around. Adding 40-50 heavy vehicles an hour to this scenario will cause accidents and chaos during this time. NSW Transport needs to provide regulations on what way and at what times these tracks can move during Seaforth. Furthermore, there needs to be independent monitoring of construction and truck movements with a reporting hotline as well as independent monitoring of operation and publicly available data.

- Traffic impacts:

- Spit Reserve West, Wakehurst parkway, Burnt Bridge Deviation are all planned to become construction sites for the tunnel, during the 6 years of construction, we will be completely caught amid 3 construction sites unable to move in and out of Seaforth. On top of that we have a major increase of heavy vehicle movement, on the days we do have to go the office, how are we meant to commute to the city or elsewhere.
- In the EIS it states that in 2027 on tunnel completion it is estimated that the commute from Seaforth to Frenchs Forest will increase by 10min. My daughter was meant to go to Forest High so will be impacted immensely by this. So albeit the

- tunnel is meant to improve traffic, locally it does the reverse. We'll have longer wait times on Sydney Road intersection, a longer commute to Warringah Mall and to Frenchs Forest and anywhere locally just to be able to commute quicker further away, i.e. the city.
- Local roads will not cope with the increased traffic the tunnel will bring. Parking and traffic on weekends at Clontarf is chaotic already and bringing more people in without adequately updating local roads, facilities and parking lots at Clontarf, Manly, and most of the other Northern Beaches will create chaos. I demand that an impact study is done which reviews the impact on the local Northern Beaches roads, to Clontarf, Palm Beach and Ku-Ring-Ghai National Park as it's questionable to build a tunnel but not update the rest of the local road network.

As an overall summary, it seems that the only people gaining by the construction of the tunnel are people in Mossman as traffic will decrease by 10% on Military Road. 10% is ridiculous and surely could be achieved by better public transport. Residents around Seaforth will not have easy access to the tunnel but will bear most tunnel construction impacts. It is very disappointing that recent traffic movements at for example Spit Bridge show a decrease of traffic in 2020 and 2021 but have not been properly taken into account for the tunnel planning. The whole project seems to be very rushed and more of a political undertaking than a project which has people's and the environment's best interest at heart. Assuming life post Covid will not have an impact on future traffic movements is just short sided. Only time will tell what is to come so to fully understand what will happen this project needs to be given more time and a more thorough review of the status quo in 1-2 years' time needs to happen instead of using the past as a predictor of the future. Modelled traffic savings, i.e., to save 35 minutes when commuting to Balgowlah to the city in 2037, are not adequate as these models have been done without Covid and a change of working arrangements in mind, plus they are based on worst case scenarios in peak traffic, as well as based on not improving public transport which is very disappointing. Even more disappointing is that it is quite apparent that the recent changes to bus routes 169 and E69 have been made to get more people using their cars so the tunnel can be justified. Why were no other public transport solutions considered instead of the tunnel which will destroy so much fauna and ecosystem, removing 2000 trees, costing an estimated \$14 billion, and requiring 6 years of construction. Building this tunnel will encourage the usage of cars instead of public transport!

Kind regards,

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