BEFORE AUCKLAND COUNCIL

IN THE MATTER of the Resource Management Act 1991 (“RMA”)

AND

IN THE MATTER of a resource consent application by Auckland Council for the St Mary’s Bay and Masefield Beach Water Quality Improvement Project

SUBMISSION BY LAKE LTD IN OPPOSITION TO THE PROPOSED ST MARY’S BAY AND MASEFIELD BEACH WATER QUALITY IMPROVEMENT PROJECT

19 June 2018
1. INTRODUCTION AND BACKGROUND

1.1 This submission is made on behalf of Lake Ltd, who owns the property at 2/17 Ring Terrace, St Mary’s Bay (the “Property”). The storage pipeline associated with the St Mary’s Bay and Masefield Beach Water Quality Improvement Project (the “Project”) is proposed to traverse the Property and the neighbouring property at 19 Ring Terrace. As shown in Figure One below, the pipeline traverses part of the Property that directly abuts structures on the neighbouring property at 19 Ring Terrace.

Figure One:1 plan showing Project route in relation to the Property and neighbours

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1 Figure One is reproduced from the plans attached to the Council’s “Local Government Act Notification” letter dated 21 May 2018.
1.2 Lake Ltd supports the overall aims of the Project. However, Lake Ltd has significant concerns with the Project as currently proposed, such that it opposes the Project pending satisfaction of its concerns by Auckland Council.² Reasons for Lake Ltd’s submission are outlined below.

2. REASONS FOR SUBMISSION

2.1 In April 2018, Lake Ltd met with Auckland Council representatives to discuss its concerns with the Project and how they may be addressed. To date, Auckland Council has taken no material steps to address Lake Ltd’s concerns. Lake Ltd remains willing to explore potential avenues to satisfy its concerns, outlined below:

Geotechnical: stability, settlement, ground movement etc, including potential damage to land and structures

2.2 As shown in Figure One and the application documents, tunnelling for the storage pipeline will take place under a steep cliff face at/near the Property, and will be close to structures on the Property and the neighbouring property at 19 Ring Terrace. Lake Ltd has concerns regarding the Project’s potential effects on the geotechnical integrity of the Property and neighbouring property, and potential damage to structures located on those properties, both during and after construction.³

2.3 While the Project application documents address the potential for such effects, and conditions of consent and management plans⁴ have been recommended by the applicant’s consultants in relation to such effects, considerable uncertainty remains regarding the level of effects, monitoring, and the Council’s mitigation/repair obligations with respect to land and structures.

2.4 Lake Ltd has not identified in the application documents a suite of consent conditions proposed by the Council, which prevents an understanding of the Project’s adverse effects, and of how such effects will be managed. Of particular relevance to the Property, while one diagram included with the original AEE showed ground and building monitoring stations at and around the Property,⁵ other diagrams submitted with the application did not.⁶ In addition, the Council’s obligations/undertakings with respect to

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² This submission relates to the entire Project.
³ The properties at 1/17, 2/17 and 19 Ring Terrace are separated by party walls, so damage to one structure could risk damage to other adjoining structures.
⁴ See in particular the proposed Groundwater and Settlement Monitoring and Contingency Plan.
⁵ See page 25 of the AEE Appendix R: Groundwater and Settlement Monitoring and Contingency Plan - Aurecon and PDP (Drawing No. 1011; Rev. B).
⁶ See page 45 of the AEE Appendix Q: Assessment of Effects on Ground Settlement – Aurecon (Drawing No. 1029; Rev. B); and the final concept design drawing (Drawing No. 1011; Rev. A).
repair/remediation of any damage remain entirely unclear (including, for example, how long after construction the Council is proposing monitoring and repair obligations extend). The application states that pre-condition property/land surveys are not proposed, meaning that identifying damage from the Project and determining causation will be very difficult. (Lake Ltd considers that pre and post construction surveys for both buildings and ground/property are essential). Lake Ltd has also not identified any assessment in the application documents of the potential for planting on or near the cliff for stability, as a mitigation measure.

2.5 In the above context, Lake Ltd remains concerned with geotechnical effects from tunnelling associated with the Project. Proposed monitoring and response mechanisms are inadequate, uncertain, and are subject to change through the resource consent process.

Ground-borne noise and vibration from tunnelling, including potential damage to land and structures

2.6 Tunnelling is proposed to be undertaken on a 24/7 basis, and the application documents state that proposed ground-borne noise and vibration levels at the Property and neighbouring property will both exceed relevant limits.8

2.7 From the tunnelling vibration contours provided with the application, the Property and neighbouring property (and the houses on the properties) are amongst the worst affected, if not the worst affected, residential properties in terms of vibration from tunnelling, being subject to – or very near to land subject to – the 1mm/s tunnelling vibration level.9 The Property appears to be potentially the only residential property subject to the 1mm/s contour, with the other land subject to the contour being Council/NZ Transport Agency land near Point Erin Park and St Mary’s Road Park. With respect to vibration, Lake Ltd’s key concern is the potential for damage to land and structures on the Property and the neighbouring property.

2.8 In terms of ground-borne noise, part of the Property (and neighbouring property) is within the highest 55 dB LAeq noise contour for ground-borne noise; and the house on the

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7 AEE page 83.
8 See the AEE, section 8; and the Noise and Vibration Assessment – Aurecon, for example the Executive Summary (Section 1, pages 6 and 7).
9 See Appendix D of the Noise and Vibration Assessment – Aurecon. The house on the Property is not shown as being subject to the 1mm/s tunnelling vibration level, but is well within the 0.3mm/s tunnelling vibration level.
Property is primarily within the 45 dB LAeq noise contour. Lake Ltd considers that the Council’s proposal to apply a night-time noise limit of 35 dB LAeq(15min) (which the Council’s noise expert considers is appropriate) only in response to complaints by landowners is not best practice and is inappropriate. The onus should be on the applicant to comply with the appropriate standards, and to monitor for such compliance.

2.9 In the above context, Lake Ltd remains concerned with ground-borne noise and vibration effects from tunnelling associated with the Project. Proposed monitoring and response mechanisms are inadequate, uncertain, and are subject to change through the resource consent process.

Conclusion

2.10 In the absence of side-agreements between property owners and the Council, the Council’s obligations with respect to the above potential effects (proposed by the Council through as-yet-unknown resource consent conditions only, including management plans which are in draft form) remain entirely uncertain and subject to change through the resource consent process. This creates unnecessary and inappropriate uncertainty for landowners whose properties the Project will be located within, and requires their continued involvement in the RMA and Local Government Act 2002 processes.

3. RELIEF SOUGHT

3.1 Lake Limited seeks:

(a) that the applications for the Project be declined; OR

(b) other relief satisfying Lake Ltd’s concerns outlined above, including (without limitation):

(i) Auckland Council providing certain and detailed undertakings by way of resource consent conditions (and/or private agreement) with respect to potential damage to the Property (and neighbouring property) and structures on the Property (and neighbouring property), including regarding: ground monitoring and building monitoring station(s) at or near the Property (and neighbouring property) and an appropriate monitoring regime; pre and post-condition land/property and building surveys; appropriate remediation/repair undertakings from the Council; formal indemnification for any damage to the

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10 See Appendix C of the Noise and Vibration Assessment – Aurecon.
11 See recommended condition 5 at section 9.1 of the Noise and Vibration Assessment – Aurecon.
Property (and neighbouring property) caused by the Project; and formal indemnification against any third-party claims against Lake Ltd for damage to other properties caused by the Project; and/or

(ii) realignment of the storage pipeline to avoid the Property and neighbouring properties, or other Project design and/or management changes; and/or

(iii) Auckland Council acquiring the northern “finger” portion of the Property through which the Project traverses; and/or

(c) such consequential and/or related relief as may be necessary or appropriate to give effect to Lake Ltd’s concerns.

4. GENERAL

4.1 Lake Ltd is not a trade competitor for the purposes of section 308B of the RMA.

4.2 Lake Ltd wishes to be heard in support of its submission.

4.3 Lake Ltd requests that – to the extent practicable – the RMA and Local Government Act 2002 processes associated with the Project, including any hearings, be coordinated for efficiency.

4.4 If others make a similar submission, Lake Ltd may consider presenting a joint case with them at any hearing.

4.5 Lake Ltd requests, pursuant to section 100A of the RMA, that Auckland Council delegates its functions, powers, and duties to hear and decide the application to one or more hearings commissioners.

Lake Ltd

by its solicitors and duly authorised agent ChanceryGreen:

Jason Welsh and Steve Mutch

19 June 2018
BEFORE AUCKLAND COUNCIL

IN THE MATTER of the Resource Management Act 1991 (“RMA”)

AND

IN THE MATTER of a resource consent application by Auckland Council for the St Mary’s Bay and Masefield Beach Water Quality Improvement Project

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SUBMISSION IN OPPOSITION TO THE PROPOSED ST MARY’S BAY AND MASEFIELD BEACH WATER QUALITY IMPROVEMENT PROJECT

12 June 2018
To: Auckland Council

Name of submitters: Jeannette Raynish and Carol Anne Campbell as Trustees of the Dark Horse Trust (owners of 27 New Street, St Mary’s Bay); and Steve Rosenbaum and Jeannette Raynish (occupiers of 27 New Street, St Mary’s Bay)

Address for service: c/- ChanceryGreen
PO Box 47516
Ponsonby 1144
Attention: Jason Welsh / Steve Mutch

Telephone: 09 357 0600
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1. INTRODUCTION AND BACKGROUND

1.1 This submission is made on behalf of the trustees of the Dark Horse Trust, who own the property at 27 New Street, St Mary’s Bay (the “Property”); and on behalf of Steve Rosenbaum and Jeannette Raynish, who live at the Property (together, the “Submitters”). As shown in Figure One below, the New Street/London Street retrieval shaft associated with the St Mary’s Bay and Masefield Beach Water Quality Improvement Project (the “Project”) is proposed to be located adjacent to the Property. In addition, up to four 8-10m high air exchange points (ventilation stacks) are proposed to be located very close to the property.

1.2 The Submitters are not opposed to the stated overall aim of the Project, being to improve harbour water quality. However, the Submitters have significant concerns with the Project as currently proposed, such that they oppose the Project.¹ The Submitters’ concerns relate primarily to the significant adverse effects that the Project will have on the Property at 27 New Street and its residents, and on the residential neighbourhood surrounding the New Street/London street shaft and ventilation stacks. Reasons for the Submitters’ position are outlined below.

¹ This submission relates to the entire Project.
2. REASONS FOR SUBMISSION

Odour effects

2.1 As shown in **Figure One**, up to four ventilation stacks are proposed in the residential neighbourhood close to the Property. The high sensitivity of the receiving environment is acknowledged in the application material. In addition to residential properties, there is also a school and a Church in close proximity to the proposed stacks. Discharges – which the application acknowledges may contain “**odourous compound(s) generated by the stored effluent**” – will occur during filling and while the storage pipeline is not being forced ventilated. At times, the Submitters consider that odour will be offensive and objectionable at nearby properties – it is hard to imagine a more offensive or objectionable smell than anaerobic raw sewage, potentially many days old.\(^4\) The

\(^2\) **Figure One** is reproduced and annotated from the Council’s application documents: AEE Appendix A: Concept Drawings – Part 2, “Vehicle Tracking Path” (Drawing No. 1400; Rev. A).

\(^3\) See the AEE, section 8.5.1.

\(^4\) The application material confirms that anaerobic wastewater/stormwater is “**generally considered to be unpleasant and often offensive**” (AEE Appendix P: Technical Odour Assessment, section 4.2.)
Submitters simply cannot understand or accept the assertions in the AEE that odour effects will be less than minor, or that odours will not be offensive or objectionable. The Submitters consider that the stacks near the New Street/London Street shaft will have significant and unacceptable adverse odour effects on nearby residents, including at the Property.

2.2 The Submitters consider that the Property will be one of the worst affected in terms of odour, and that odour effects at the Property will be significant, offensive and objectionable, and unacceptable overall. The south-eastern stack is in the order of only 5m away from the house at the Property, and approximately 2.5m from the Property boundary. Since the house at 27 New Street is directly east of the proposed south-eastern stack, it will frequently be downwind of the stack. Given the very small separation distances involved, the potential for dispersion will be extremely limited/almost non-existent.

2.3 The AEE acknowledges that the Property and others to the east and north of the stacks could “frequently be exposed to odours emitted from the storage pipe if they are not adequately controlled”. The proposed activated carbon filters are acknowledged in the application to only “reduce” (not eliminate) odour effects, and only if they are adequately sized and maintained. Even if the filters operate to eliminate in the order of 99% of sewage type odours (as asserted in the application), given that the application material states that sewage odours can be detected in the order of parts per billion, and the storage pipeline will contain air contaminants at concentrations many magnitudes higher than this, residents can have no confidence as to actual levels of odour effects.

2.4 The application acknowledges that odour effects will be elevated during filling of the storage pipeline. The application also acknowledges that odour effects will be even worse during anaerobic conditions associated with periods of storage: “the potential risk of an odour nuisance effect is considered to be greatest during this period”; and “[d]uring these conditions the generated odour is expected to have a higher odour intensity and is likely to be more offensive in character”. (Notably, only for the St Mary’s Bay site – not the New Street/London Street site – does the application material assert that “no offensive or objectionable odour is expected to be observed at any of the nearby

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5 See the AEE, section 8.5.5.
6 Measured using Auckland Council GeoMaps. The application provides inconsistent distances from the stacks to the nearest homes.
7 AEE Appendix P: Technical Odour Assessment, section 5.4.3.
8 AEE Appendix P: Technical Odour Assessment, section 5.4.3.
9 AEE Appendix P: Technical Odour Assessment, section 4.2.
10 AEE Appendix P: Technical Odour Assessment, section 5.4.3.
residential properties”). The application states that anaerobic conditions will occur “on average at least 10 times per year” and that during these periods the pipe could be passively ventilated for up to 4 days before being emptied. Requiring residents to potentially put up with anaerobic passively ventilated odour discharges (being the worst smelling discharges) for in the order of 40 days a year is simply unacceptable. Nearby residents have a legitimate expectation of high amenity at/in their homes, as recognised in the Unitary Plan (Operative in Part). In light of the above, the Submitters consider that, especially during anaerobic conditions, odour will be a significant adverse effect, and will overall be unacceptable for residents.

2.5 On the above basis, the Submitters consider that the application is incorrect that the discharges from the stack are a permitted activity under the Unitary Plan (Operative in Part), because the relevant permitted activity standard (E14.6.1.1) requires that the discharge “…must not cause noxious, dangerous, offensive or objectionable odour… beyond the boundary of the premises where the activity takes place”. While noting that the application documents incorrectly focus on the location of homes, as opposed to property boundaries, given that the boundary of the Property at 27 New Street will be in the order of 2.5m horizontal distance from the outlet of the nearest proposed stack, it is simply not plausible for the application to assert that the permitted activity standard will be met.

2.6 In the context of the Project’s likely significant odour effects, the application material provides an inadequate assessment of such effects, and unacceptable uncertainty remains, including with respect to the below:

(a) The location and design (including height) of the four ventilation stacks at New Street/London Street have not been finalised. This is inappropriate given their importance in determining the adverse effects experienced by residents. For residents to understand and respond to adverse odour effects, and for the consent authority to assess adverse odour effects, it is necessary to have precise known locations and designs for the ventilation stacks.

(b) To date, the Submitters have not identified any proposed conditions of consent relating to odour, rendering concerned residents unable to assess controls on the design and operation of the Project. While the application documents address the potential for a range of effects, and conditions of consent and management plans have been recommended by the applicant’s consultants in

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11 See the AEE, section 8.5.3.2; and AEE Appendix P: Technical Odour Assessment, section 5.4.2.
12 AEE Appendix P: Technical Odour Assessment, section 5.4.3.
relation to certain effects; the applicant has not proposed a consolidated set of conditions, meaning that at this stage it is unclear what is actually proposed by the Project.)

(c) Despite acknowledging that dispersion modelling is recommended best practice, the applicant has not commissioned dispersion modelling. Given the extreme proximity of the proposed New Street/London Street ventilation stacks to nearby homes, such modelling is necessary for residents to understand potential effects on them. The onus is on the Applicant to provide such information.

(d) Throughout the application material the point is made that the proposed activated carbon filters will only be effective if they are appropriately sized and maintained. Given that the application states that “no reliable odour emission rate information is available” (as a purported justification for the lack of dispersion modelling), it is difficult to understand how filters will be reliably sized. The application also acknowledges that there may be occasions when the filters are ineffective, if the rate of filling of the storage pipeline exceeds the design capacity of the filters during heavy rainfall events. (Unlike the public parks at Point Erin and St Mary’s Bay Road, residents near New Street and London Street will still be in close proximity to the ventilation stacks during rain events (i.e. in their homes)). Given that the design of the odour filter for the New Street site has not been finalised, and in the absence of proposed conditions of consent, at this stage residents can have no confidence regarding the operational effectiveness of the proposed filters, including with respect to design capacity and maintenance obligations.

(e) The Submitters have not identified any assessment of potential odour effects in terms of what development could be undertaken as of right on nearby properties, including at 27 New Street (for example in terms of building height); and the application is defective in its identification of the relevant existing environment within which the application is proposed.

2.7 Reinforcing the significant uncertainty regarding odour effects, the AEE and supporting documentation contains a range of uncertain and/or qualified language, which does not allow residents or the consent authority to confidently assess the nature or levels of adverse odour effects. For example, the application material states with respect to odour

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13 AEE Appendix P: Technical Odour Assessment, section 5.1.
14 AEE Appendix P: Technical Odour Assessment, section 5.4.3
15 See for example AEE Appendix P: Technical Odour Assessment, section 5.4.3.
discharged during filling: discharges “...will occur for a relatively short period...”\textsuperscript{16} and are “not expected to be particularly offensive...”\textsuperscript{17} or are “...unlikely to be offensive...”\textsuperscript{18} and “[i]n general any observed odours are not expected to be offensive”\textsuperscript{19} and will “…undergo some level of treatment...”\textsuperscript{20}

2.8 The Submitters also consider that some of the language used in the AEE does not appropriately convey the nature and scale of odour effects that will be experienced by residents in and around their homes, and that the AEE does not exhibit the degree of objectivity and independence required. Reference to those people as “high sensitivity receptors” glosses over the human impact that offensive odours will have on the community. And while the 8-10m high ventilation stacks are euphemistically termed “air exchange points” in the application; they will not facilitate a like-for-like exchange. Fresh air will go in, and often rotten/sewage smelling air will come out.

2.9 Overall, the Submitters consider that adverse odour effects from the ventilation stacks at New Street/London Street will be significant for nearby residents, including at the Property, and will be unacceptable. This is based primarily on the sensitivity of the receiving environment, the very small separation distances involved, the nature of the odour, and the frequency and duration of discharges. Odour effects from the stacks will reinforce adverse visual effects (addressed below) and vice versa, severely degrading the amenity value enjoyed by local residents.

Visual / landscape effects

2.10 The visual assessment provided with the AEE states with respect to the ventilation stacks at New and London Streets that “[t]heir final location is not yet known so they have not been assessed”\textsuperscript{21} (i.e. the visual assessment expressly limits its scope to the Point Erin and St Mary’s Bay Road sites). Likewise, the AEE ignores visual or landscape effects associated with the New Street/London Street site. The applicant has therefore provided no independent expert assessment relating to the adverse visual/landscape effects of the ventilation stacks at New Street/London Street. The Submitters consider that this approach is unacceptable given the potentially significant adverse visual and landscape effects on nearby residents. Such an approach does not allow the consent

\textsuperscript{16} AEE Appendix P: Technical Odour Assessment, section 5.4.3.
\textsuperscript{17} AEE Appendix P: Technical Odour Assessment, section 5.4.3.
\textsuperscript{18} AEE Appendix P: Technical Odour Assessment, section 4.2.
\textsuperscript{19} AEE Appendix P: Technical Odour Assessment, section 5.4.3.
\textsuperscript{20} AEE Appendix P: Technical Odour Assessment, section 5.4.3.
\textsuperscript{21} AEE Appendix O: Landscape and Visual Assessment, section 4.4.
authority or residents to understand the nature and scale of adverse effects, and is inappropriate for a project of the scale proposed.

2.11 The Submitters consider that the proposed New Street/London Street ventilation stacks will likely have significant adverse visual/landscape effects for nearby residents, including with respect to the Property. Factors contributing to the adverse visual effects of the structures include the following:

(a) The number of stacks, being up to four, in a relatively confined cluster around New and London Streets.

(b) The proximity of the stacks to nearby houses in what is a relatively enclosed/intimate residential viewing catchment. The closest stack is in the order of 5m away from the house on the Property, and even closer to the Property boundary itself.\(^{22}\)

(c) The fact that the stacks are utilitarian structures designed solely to ventilate infrastructure storing sewage and stormwater. Their presence will carry that association for residents, which will exacerbate their visual effects for residents.

(d) The height and bulk of the structures, which will look dominant, out of place, and unsightly in the residential neighbourhood. The Submitters do not accept that the appearance of the stacks will be similar to light poles, as suggested in the AEE, especially when their true purpose will be well known to residents, and reinforced by odour emissions.

(e) While visitors to the area using the roading network will catch relatively fleeting views of the stacks as they move through the area in/on vehicles or by foot, for those living in the area the stacks will be constantly present.

(f) Unlike for the Point Erin or St Mary’s Bay Road sites, no effective visual/landscape mitigation is proposed or possible for the ventilation stacks.

2.12 There is a tension between the Project’s adverse odour effects and adverse visual effects which cannot easily be overcome. While the application states that “[i]f required the height of the site air exchange points could be increased to improve disperse and reduce downwind odour levels”,\(^{23}\) this will clearly increase visual effects, and vice versa.

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\(^{22}\) As shown in Figures 4.3, 4.4, and 4.5 of the AEE.

\(^{23}\) AEE Appendix P: Technical Odour Assessment, section 5.4.3.
**Construction: airborne noise effects**

2.13 Works at the New Street/London Street shaft will generate a range of airborne noise effects, including from site establishment, piling, excavation, and tunnelling / pipe-jacking works. Numerous homes are located very close to the shaft, and the house on the Property is one of the worst affected houses with respect to airborne construction noise. For example, it is one of only a few homes partially within the 70 dBA Leq noise contours for site establishment activities.

2.14 Given that the application documents state that noise level predictions will need to be updated based on subsequent design phases, the predicted noise levels (and therefore compliance with the applicable limits) are subject to considerable uncertainty. In addition, with no proposed conditions or draft Construction Noise and Vibration Management Plan provided with the application material, the details around proposed controls remain largely unknown. For example, while the noise and vibration modelling undertaken for the Project assumes the use of rotary-bored piling methodology and local screening, the Submitters have not identified any proposed conditions of consent securing such controls, which will be very important for local residents. Given the uncertainty around controls on noise generation, the Submitters have no confidence that airborne noise from the New Street/London Street shaft will be acceptable.

2.15 The Submitters consider that if consent is granted for the Project it is imperative that construction work on the New Street/London Street shaft occurs only during the daytime, as is proposed. If consent is granted for the Project, the Submitters also support noise monitoring stations at/near the Property, with appropriate response mechanisms (proposed monitoring and response mechanisms are currently inadequate/uncertain).

**Construction: ground-borne noise and vibration**

2.16 Tunnelling is proposed to be undertaken on a 24/7 basis, and the application documents indicate that proposed vibration levels at the Property will exceed relevant limits. From the tunnelling vibration contours provided with the application, the Property is subject to the 0.3mm/s peak particle velocity tunnelling vibration level. In terms of ground-borne noise, part of the Property is within each of the 55, 45, and 35 dB LAeq noise contour for ground-borne noise; with most of the house being within the 35 dB LAeq noise

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24 Notwithstanding the proposed “monitoring plan” and other information provided with the application.
25 AEE Appendix M: Noise and Vibration Assessment, section 5.
26 See the AEE, section 8; and AEE Appendix M: Noise and Vibration Assessment, for example the Executive Summary (section 1, pages 6 and 7).
27 See Appendix D of the Noise and Vibration Assessment (above).
28 With respect to vibration from piling, the property is outside the 1mm/s contour, but the Submitters understand that is on the basis of a rotary-bored piling methodology, which is as yet unsecured through proposed conditions of consent. 29 (The application states that rotary-bored piling is necessary due to the closeness of homes to the New Street/London Street shaft).

2.17 In the above context, including the uncertainties previously outlined, the Submitters remain concerned with ground-borne noise and vibration effects associated with the Project. If consent is granted for the Project, the Submitters support ground-borne noise and vibration monitoring stations at/near the Property, with appropriate response mechanisms (proposed monitoring and response mechanisms are currently inadequate/uncertain).

Construction: traffic effects

2.18 Works near the New Street/London Street shaft will cause considerable disruption to local traffic, including for residents in what is a quiet residential neighbourhood. Key disruptions relate to construction traffic (up to 25 heavy vehicle movements per day); and restrictions to roads, parking, and footpaths. Without elaboration, the AEE also notes that “[a]ccess to private property for residents of New Street, London Street and Harbour Street could be restricted during some parts of construction.”

2.19 While the application documents refer to the preparation of a Construction Traffic Management Plan (“CTMP”) as the key mechanism to manage construction traffic effects, the applicant has not provided a detailed draft CTMP. In addition, as already highlighted, the applicant has also not provided proposed conditions of consent relating to traffic, and construction methods/Project designs remain subject to change and/or

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28 See Appendix C of the Noise and Vibration Assessment (above).
29 AEE Appendix M: Noise and Vibration Assessment, section 5.3, 5.5, and 7.1.1.
30 AEE Appendix T: Integrated Traffic Assessment, section 5 states that daily vehicle movements are not expected to exceed 25 per day. Inconsistent figures are provided in the s92 response (by email) dated 30 May 2018.
31 AEE, section 8.14.3.3. Elsewhere in the AEE, contradictory assessments are provided, for example: “[a]ccess to private property will be maintained during the works to minimise disruption to residents” (section 8.14.4.3).
32 Some recommended conditions are proposed in AEE Appendix T: Integrated Traffic Assessment, section 8, however it is not clear whether the applicant is formally proposing such conditions.
refinement. As a result, and coupled with inconsistent references to construction traffic details at the New Street/London Street site in the application material, residents cannot understand the potential traffic effects on them, nor the detail around how such effects will be managed. While temporary, construction traffic effects may be significant for nearby residents.

**Geotechnical: stability, settlement, ground movement, groundwater effects etc**

2.20 The application material indicates that the New Street/London Street shaft will be 5-6m in diameter, 25m deep, and involve the excavation of around 700m³ of material. Given the significant works at the site, including piling, excavation, tunnelling, and dewatering, the Submitters have concerns regarding the Project’s potential effects on the geotechnical integrity of the Property, including potential damage to land and structures on the Property.

2.21 While the application documents address the potential for such effects, and conditions of consent and management plans have been recommended by the applicant’s consultants in relation to such effects, considerable uncertainty remains regarding the level of effects, monitoring, and the Council’s mitigation/repair obligations with respect to land and structures. The Submitters have not identified in the application documents a suite of relevant consent conditions proposed by the Council, which prevents an understanding of the Project's adverse effects, and of how such effects will be managed.

2.22 In the above context, the Submitters remain concerned with geotechnical/groundwater effects from tunnelling and shaft works. If consent is granted for the Project, the Submitters support geotechnical/groundwater monitoring stations at/near the Property, with appropriate response mechanisms (proposed monitoring and response mechanisms are currently inadequate/uncertain).

**Arboricultural effects**

2.23 The arboriculture assessment provided with the application states that the Project may adversely affect the mature camphor tree located on the Property. The tree currently provides significant amenity value to the Property and the surrounding area. Potential adverse effects of the Project include vehicle strike (by construction vehicles) and the lowering of groundwater associated with the New Street/London Street shaft

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34 See footnote 31 above, for example.
35 AEE Appendix T: *Integrated Traffic Assessment*, section 5. Inconsistent descriptions are provided elsewhere in the application material.
36 See in particular the proposed *Groundwater and Settlement Monitoring and Contingency Plan*.
37 AEE Appendix H: *Arboriculture Assessment*, paragraphs 6.64-6.68.
construction. Despite the arboriculture assessment recommending traffic management and tree health monitoring to deal with such effects (without providing any detail), the Submitters have identified no concrete proposed measures to protect or monitor the condition of the tree.

3. OTHER REASONS FOR SUBMISION

3.1 In addition to the detailed reasons for the Submitters’ opposition to the Project outlined above, other reasons include that:

(a) the Project is contrary to the objectives and policies of the Auckland Unitary Plan (Operative in Part);

(b) the Project is contrary to Part 2 of the RMA;

(c) important aspects of the application/AEE are deficient and do not enable the consent authority and submitters to adequately assess adverse effects;

(d) the applicant has not undertaken any personal consultation with the Submitters, despite the nature and scale of adverse effects on them, which is contrary to best practice (especially when coupled with the deficient assessment noted above); and

(e) individually and cumulatively, adverse effects of the Project will be significant and unacceptable.

4. RELIEF SOUGHT

4.1 The Submitters seek:

(a) that the applications for the Project be declined; OR

(b) other relief satisfying the Submitters’ concerns outlined above (including such consequential and/or related relief as may be necessary or appropriate).

5. GENERAL

5.1 The Submitters are not trade competitors for the purposes of section 308B of the RMA.

5.2 The Submitters wish to be heard in support of their submission.
5.3 If others make a similar submission, the Submitters may consider presenting a joint case with them at any hearing.

5.4 The Submitters request, pursuant to section 100A of the RMA, that Auckland Council delegates its functions, powers, and duties to hear and decide the application to one or more hearings commissioners.

Jeannette Raynish and Carol Anne Campbell as Trustees of the Dark Horse Trust; and Steve Rosenbaum and Jeannette Raynish

by their solicitors and duly authorised agent ChanceryGreen:

Jason Welsh and Steve Mutch

12 June 2018
19 June 2018

Submission in OPPOSITION to the proposed St Mary’s Bay and Masefield beach water quality improvement project.
Address: Multiple addresses in St Mary’s Bay, including Pt Erin and St Marys Road Park.
Application Reference details: BUN60319388

To: Auckland Council
Name of submitter: PAUL MEAD

INTRODUCTION:

Auckland Council - Healthy Waters, has applied for resource consents for the St Mary’s Bay and Masefield Beach Water Quality Improvement Project (the “Project”). The Project involves: the installation – via three shafts (at Point Erin Park, St Mary’s Road Park, and New Street/London Street) – and operation of a new underground stormwater and sewage conveyance and storage pipeline; establishment of a weir and pump station structure and an odour control system and ventilation stacks in Point Erin Park; establishment of a smaller weir structure and odour control system in St Marys Road Park; installation of up to four 8-10m high ventilation stacks near the New Street/London Street intersection, St Mary’s Bay; installation of a new rising main in the road reserve along Sarsfield Street, Herne Bay; and replacement and extension of a marine pipeline outfall in the Waitemata Harbour.

I own the property at 16 Waitemata Street, St Mary’s Bay

SUBMISSION:

This submission relates to the entire Project. I strongly oppose this project. It is a very poor option to address it’s stated objectives, particularly as there are other more effective alternatives available that do not appear to have been given due consideration. This project should not be allowed to proceed for two broads reasons:

(i) It is not the best option available to address the problems it is attempting to solve – both from a technical and a financial basis. The Commissioners should mandate an independent review of the feasibility of this solution against other options as part of this approval process.

(ii) On a stand-alone basis, this Project is at best expected to perform poorly in addressing harbour water quality issues and also introduces unacceptable construction risks, health and sanitation risks for the community (including a school), unsightly aesthetic effects and smells across the whole neighbourhood, and ongoing physical risks to properties near the works. It is, in effect, creating a small sewage works scheme in a densely populated residential area. This should be totally unacceptable in the first world city of Auckland.
1. Solving issues from the current combined Sewage & Stormwater system:

There is no need for this submission to go into detail on the problems caused by the current combined stormwater and sewage system in St Mary’s Bay. Suffice to say that this needs to be addressed to ELIMINATE SEWAGE OUTFLOWS INTO ST MARYS BAY, MASEFIELD BEACH AND THE SURROUNDING INNER HARBOURS BAYS.

It is my understanding that the LONG TERM GOAL of Healthy Waters and Watercare to remedy this is for SEPARATION OF SEWAGE AND STORMWATER SYSTEMS in St Mary’s Bay. This Project does not address this, rather it has the effect of allowing this to be deferred by Council.

Healthy Waters will argue that the Project reduces the frequency of outflows into the harbour. This does not effectively address the cause or effects of the problem.

(i) Effects:
Merely reducing the frequency of sewage flows into the harbour is an unsatisfactory outcome – particularly given the stated goals of the various Council entities involved. I would ask the Commissioners to consider whether they themselves would prefer to swim, dragon boat, sail etc in water that has a lot of sewage in it or just some sewage? I would anticipate that the answer would be neither – which is why only reducing the outflows, as this Project aspires to do, is a strong reason to reject it, rather than a reason to proceed as advocated by Healthy Waters. This rationale is further strengthened when it is considered that there are alternative solutions that are likely to provide a proper long term solution.

(ii) Cause:
A credible alternative to be considered must be applying the money earmarked for this project towards separation of the stormwater and sewage pipe system within St Mary’s Bay (and Herne Bay). This will allow both the sewage and stormwater to be addressed separately with proper long term solutions. This is also likely to have the added benefit of addressing the necessary upgrade to what is an very old pipe network that is in a very poor state of repair.

(iii) Solutions:
This Project is not the only feasible solution to the problems it seeks to address. A number of other alternatives are available. As well as separation of the local pipe network, there is also the Western Isthmus Water Quality Improvement Project (WIWQIP) that, if extended to St Mary’s Bay, would offer a credible and likely more cost effective long-term solution. I would ask that the Commissioners undertake an investigation of the merits of the WIWQIP alternative before any consideration is given to granting this Project approval. Furthermore, I understand that within the various Council entities, there may be a difference of opinion on the best solution. In contrast to Healthy Water’s application, I would ask the Commissioners to examine/subpoena Watercare’s analysis of the potential solutions to provide further qualified opinion.

2. Specific Failings of this Project:

This Project is, in effect, a mini sewage scheme within a densely populated residential area. The Project introduces a number of major effects to the community which cannot be addressed by a few modifications to any implementation. It should therefore be declined. These failings include:
(i) Health and Odours:

The Beqa Limited report dated 17 April and titled "St Marys Bay and Masefield Beach Water Quality Improvement Project - Technical Odour Assessment" ("The Beqa Report") provides some rather disturbing information on potential effects on the community of the venting of gases from the Project into a densely populated residential area.

Firstly, it states categorically that there will be frequent and sometimes heavy discharges into the community – even with various mitigation techniques. This in itself should be enough to compel the Commissioners to decline the project. Periods when the sewage in the storage pipeline becomes anaerobic – which will occur relatively frequently according to the application – are particularly concerning. Effects from the New Street/London Street air exchange towers will be especially severe, including because of the proximity of nearby homes and the nature/intensity of the sewage odours emitted.

It is suggested that the effects of emissions from the scheme can be mitigated by carbon filters, fans etc. This is clouded with various unqualified assumptions of the filters, fans etc being "appropriately sized and maintained". Council already has a very poor record with maintenance of drains, lifts & stairs (Jacobs Ladder and overbridge) in the area, with many facilities out of action for months on end (e.g. the overbridge lift). This Project suffers from a major flaw in that there is very little room for any kind of failsafe. Everything must be working perfectly, all the time, otherwise harmful and objectionable gases will pollute the community and residents for extended periods.

Furthermore, when it rains and emissions are extreme, it is assumed that no-one will be using these areas because it is raining – so the severe emissions will have no effect? This is inaccurate. Dogs need to be walked in any weather, children still need to be walked to school, and exersize and walks etc are all undertaken in the rain. The areas that will be subject to sever emissions are used by the St Mary’s Bay community in all weather.

We do not want to live within a sewage works. Venting harmful and offensive material, at times at high levels, into a residential area should never be allowed. It should certainly not be allowed directly opposite a school playground, 7m from peoples windows, directly below people’s homes and into two popular local parks heavily used by the community.

(ii) Visual and Landscape Effects

I consider that the adverse visual and landscape effects of the permanent above-ground infrastructure at Point Erin Park; St Mary’s Road Park; and New Street/London Street (being up to four 8-10m air exchange towers) will be inappropriate. Overall, the above-ground infrastructure will be out of place in the open space (Point Erin Park/St Mary’s Road Park) or residential (New Street/London Street) areas in which it is located. With respect to the New Street/London Street towers, the application does not include assessment of their visual/landscape effects, which is unacceptable given their significant visual impact, particularly on nearby residents. The design and locations of the towers is also stated as yet to be finalised, which is also unacceptable at this stage. The number, size, closeness to homes and properties, and lack of effective visual mitigation will mean that the air exchange towers will have unacceptable permanent visual effects on residents.

(iii) Construction Risks and Effects

Construction of this project involves tunnelling under people’s homes along former seaside cliffs. Applications for any sort of private development of land and properties in this same area is already subject to considerable consideration of potential effects of subsidence and collapse of cliffs etc. It is therefore a high risk area in this respect. The construction of the tunnel and vents etc under and around people’s homes is surely a high risk exersize and subject to massive effects should
assumptions about underground stability etc prove wrong. One never really knows what they will find until they start into such civil works. It is unacceptable that Council be allowed to take these risks, when the effects of an adverse outcome will be borne by local residents and their homes and properties. The proposed construction introduces unquantifiable and potentially massive property risks for local residents and should be declined

RELIEF SOUGHT:

I seek that the consent authority decline the applications for the Project.

GENERAL:


I wish to be heard in support of my submission.

If others make a similar submission, I will consider presenting a joint case with them at the hearing.

I request pursuant to section 100A of the Act, that Auckland Council delegate its functions, powers, and duties to hear and decide the application to one or more hearings commissioners who are not members of the local authority.

PAUL MEAD
19 June 2018

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16 Waitemata Street, St Mary’s Bay
94 Shelly Beach Road, St Marys Road Park and Pt Erin Park - St Marys Bay and Masefield Beach Improvement Project

Application number:
BUN60319388
LUC60319406, DIS60319407, CST60319409, WAT60319451

Applicant:
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Submitter(s):
Cameron Loader and Alison Loader

We are the owners and occupiers of 9 Ring Terrace St Marys Bay. Our property looks directly over the St Marys Bay Road Park. Cameron Loader holds a BBS (Property) and Alison Hunter holds a BSc in Estate Management. Both Cameron and Alison have had extensive careers in all forms of property management and development both locally and internationally.

Summary
We support the desire to achieve an improvement in the water quality in our local area, however we do not consider this application should be advanced as is currently proposed, and we seek that the application is DECLINED.

**Specific Comments on the Application:**

1. **Assessment of Alternatives - A.E.E (cl 6.1)**

We note in clause 6.1 of the AEE that 3 primary methods for addressing water quality improvements have been considered by Council to address the stormwater/wastewater overflows issues in this area. The two main Alternatives being

- The current proposal subject to this application
- Separation of the combined network in St Marys Bay and Herne Bay.

Auckland Council recognises ‘that separation of the combined network may occur in the future as part of the longterm programme. However, it was considered unlikely separation would be able to achieve as much waste quality improvement in the medium-term timeframe at a comparable cost’. However this premise and the outcome that it has lead Auckland Council to, seems to be at odds with overseas experience, in particular Sydney Water which has faced similar issues, most recently in the Woolloomooloo area with a combined system built in the 1800’s (link attached) [https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/documen/nt/zgrf/mdgw/~edisp/dd_080353.pdf](https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/documen/nt/zgrf/mdgw/~edisp/dd_080353.pdf).

Sydney Water are achieving significantly better waste quality improvement with Separation of the existing combined pipe modelled to meet discharge frequency targets of **20 overflow events in 10 years**. By comparison Auckland Council’s proposal is aiming for **20 discharge events every year**.

The Sydney Water Woolloomooloo Separation project provides for 4.2 km of new waste water pipes adjacent to the existing combined pipe/ connection of 220 properties/ retaining existing combined pipe as the stormwater pipe. This is a staged 2-year project, similar to the timeframes proposed by Auckland Council.
The Woolloomooloo project is part of a long-term project being undertaken by Sydney Water which in total to date has cost Sydney $1.5 billion – the parallels to Auckland’s long-term issues and projected costs are clear.

Yet despite Auckland Council’s stated claim in cl 1.1 of the AEE that ‘the project has been designed to integrate with all potential long-term options for the network improvements’ the Council has adopted an alternative which in fact is achieving less waste quality improvement in a comparable medium timeframe and the costs of the project are much more likely to be redundant than the Separation alternative.

Why not do it Well and do it Right the first time?

2. Peer Review

While the premise and conclusions of the Council Assessment of Alternatives above, appears to be at odds with International experiences, we note that neither the Assessment of Alternatives or indeed any of the current Council Application has been peer reviewed. We consider that this application in its entirety should be independently peer reviewed - and that this review should be made public. For example, we note that the long-term effects of the works on this heritage suburb have not been considered i.e. The visual impact of the odour control pipes or the impacts of a large structure in St Marys Road Park on the social well-being of residents. Likewise, with regard to noise and vibration the assessment has been complied by Aurecon who are an engineering and infrastructure advisory company rather than specialist acoustic consultant.

3. Cost

We understand that this project is estimated to cost in the region of $40M, with considered opinions that the likely cost will be nearer to $60M. This project will be a substantial cost burden for Auckland Council ratepayers. It is our view that ratepayers should be able to have confidence that the proposed project represents the best outcome possible and value for money expended, both in the short, medium and longer term. For example, separation of wastewater and stormwater outflows, over a longer period of time, may actually achieve the best cost benefit result.

4. Construction

We note the application proposes Tunnelling will be 7 days per week/24 hours/day.
The Erin Point main construction site is away from residents areas, however St Marys Bay Park and New Street are located closer and/or within residential areas, and that the latter area according to Council Executive Summary advice will ‘during construction have potential for effects associated with elevated noise and vibration levels in exceedance of noise and vibration standards’.

- **Noise and Vibration**

The Aurecon report (figure 11) noise logging results shows a 10 – 20 dBA difference in noise levels between daylight hours and 10 pm – 4 am in the morning (most people’s primary sleeping hours). However, as the results table 18 shows this gets distorted as the average night time hours period is taken as 10 pm – 7.30 am minimising the difference between night and day to 5 – 10 dBA. Aurecon then use the latter as a basis for its night time noise level recommendations. We consider this to be a flawed approach and not appropriate for the St Marys Bay area, particularly in regard to the St Marys Park/ New Street section of works.

Aurecon’s Recommended Conditions of Consent for construction noise is perplexing. As a result of an untested project timeframe Pt Erin is deemed to be a longer term project and therefore subject to lesser noise constraints. Accordingly, an area of the project located further away from residential areas has a recommended lower noise limit requirement of 5 dBA at any time of the day than the residents area of St Marys Bay. If the project is capable of adopting lower noise levels for a substantial portion of the project timeframe the same noise limits should be applied to the residential area (St Marys Park/New St) portion of the project as well.

Aurecon’s Recommended Conditions of Consent for vibration limits in buildings provides Occupied activity sensitive to noise with a nighttime limit of 0.3 mm/s. Aurecon state that ‘Vibration modelling shows approximately 100 properties have been identified where vibration levels exceed nighttime vibration limits of 0.3 mm/s which may be perceivable but likely to be tolerable to nearby residents if given warning’.

We consider this to be unacceptable and that the Guidelines in Auckland Councils Plans and regulations should be adhered to for noise, vibration, dust, hours, construction traffic etc. We consider that tunnelling in the areas of the 100 houses should be restricted to daylight hours only, to ensure vibration levels are not exceeded.
We consider that the noise and vibration report and recommendations should be reviewed by a specialist acoustic organisation. We understand that residents abut a motorway. However, as noted, the sound from the motorway drops considerably at night and at times during the weekend. For example, the motorway hum becomes a ‘white noise’ above which other noise can be clearly heard - loud hailers, machinery, beepers etc. We consider that noise monitoring and testing by a specialist acoustic organisation over a longer period and 24 hours/day is required and at strategic and regular intervals directly at the boundaries with residential properties.

We note that it is proposed that residents will be given prior notice of loud noise events and vibration where this is to occur at night. Other than assuring residents that a catastrophe isn’t occurring this is not really of much help (we have work to go to, families to care for, and this is where we live and try to sleep). The project is to run for at least two years - not two months.

5. Specific local effects

The Resource Consent application and appendices concentrate on the wider locale i.e. organisations which use the area for boating activities etc and how the proposed works will improve water and beach quality etc. However, there is little or no consideration given to the impacts of the proposed solution upon the residents and occupiers of St Marys Bay – particularly on the opposite side of the motorway, where the infrastructure is to be located. St Marys Bay is an attractive heritage suburb made up of mainly single standalone low-level dwellings, with wonderful views of the harbour.

Some of the specific impacts of the project on the direct local area include:

- Visual

The visual impacts of the odour towers upon sight lines and views, particularly around New Street.

The visual impact of the pumping stations at both St Marys Road Park and Pt Erin Park.

While cl 8.3.4 envisages ‘preparation of a detailed landscape mitigation plan by a Landscape Architect with input from key stakeholder, based on the proposed
concept design’ – currently the proposed concept design looks like a public toilet facility/small factory.

Maintenance of the pumping station - if the infrastructure isn’t maintained it will soon be covered in graffiti and surrounded in weeds and rubbish. Council currently has a poor record of park maintenance, with noxious weed growth being prolific.

- Olfactory

Smells from both the odour towers and pumping stations.

- Noise

Noise from the pumping station and associated required maintenance activities,

- Social

Currently St Marys Road Park is heavily used both by walkers, dog walkers and for local social and gathering activities – it is very much a community facility and gathering area. The location of the pump station will minimize and curtail the expanse of these activities. Potentially the pumping station will also create a ‘hiding location’ for criminals, sexual predators etc. Additionally, the likely odours won’t be conducive to continuing social activities occurring.

**OUR RECOMMENDATION**

We wish that the application be declined in full and that the St Mary’s Bay/Masefield Beach water quality improvement project be put on hold until:

- A business case for separation in the St Mary’s Bay and Herne Bay waterfront catchments has been undertaken as part of the Western Isthmus Water Quality Improvement Programme.
- An independent peer review of that business case is completed.
- That the independent peer review is made public.
- That in the event the current application is not declined, an independent peer review of the application be provided for public review.
- That amendments reducing noise limits in the St Marys Bay Park/New Street be undertaken and hours of operation to tunnelling in the vicinity of 100 affected houses be implemented
• That the visual elements of the shafts and odour stacks be reviewed in consultation with the local community and with a sufficiently generous budget.