

KIWIRAIL FREIGHT HUB SUBMISSION FORM

**Form 21 – Submission on a Notice of requirement from KiwiRail Holdings Limited
for a designation to accommodate a new regional freight hub**

TO: Palmerston North City Council

Private Bag 11-034

Palmerston North 4410

ATTENTION: Democracy and Governance Manager

Number of Pages: 46

SUBMITTER DETAILS

NAME: Danelle O’Keeffe and Duane Butts

ADDRESS: 7 Orakei Road, Palmerston North

PHONE: 021612903 or 0274947237

EMAIL: duane.danny@xtra.co.nz

1. THE SPECIFIC PARTS OF THE NOR MY SUBMISSION RELATES TO ARE:

This submission covers these main points:

1. Documents from MBIE and GrowRegions show that the area in the NEIZ was specifically mentioned by KiwiRail in an application for the PGF and in a business case as early as August 2018. This indicates the MCA process had a fatal flaw from the outset, it appears as though the MCA process was completed merely to meet compliance requirements, as the outcome appeared to have already been agreed between stakeholders.

2. The suitability of the location for the proposed KiwiRail Freight hub, with respect to the significant number of negative impacts on community identified, potential negative mental and physical health effects, and the proximity to the city with regards to risk and the restriction on future residential and industrial growth and the effects on existing residential areas.
3. The objectivity/neutrality of the Multi Criteria Assessment process due to apparent inconsistent and inaccurate application of weightings applied at various similar sites. Bringing into question the both the accuracy of the data supplied to participants, and whether there were any potential conflicts of interest and/or site selection bias during this process.
4. Inspection and technical reports have gaps, omissions and contradictions (with other reports) in their analysis and assessments due to time and scope limitations, and 'desktop' analysis, subsequent assessments/analysis regarding effects of the site and mitigation proposals also contain errors (contradictions) and gaps in detail. These reports were carried out by either KiwiRail specialists or contracted out. See submission sections for additional detail.
5. Difficulties identifying any evidence of clear, coherent and coordinated plans between the RFH and the rest of the transport network (roads, NZTA) and future growth areas for the city of this land is utilised.
6. Why no apparent independent business case/economic study has been completed on the likelihood of benefits, as outlined by KiwiRails projected forecasts of increased freight, actually being realised/delivered. If unlikely, or if the negatives for the city (due to increased infrastructure costs, maintenance and risk to residents) outweigh the perceived benefits, why proceed with the designation in this form.

The submission relates to topics within the NOR as follows:

1. Multi Criteria Analysis Report
2. Planning/Strategic/Vision
3. Design and Construction
4. Rail Design and Operational Issues
5. Lighting Design
6. Transport - Impacts on the Road Network Freight Ring Road
7. Noise and Vibration - Accoustic
8. Landscape and Visual
9. Storm water / Flooding
10. Contaminated Land - Geotech
11. Social Impacts
12. Economic Impacts

2. MY SUBMISSION IS: (Comment whether you support, oppose or are neutral regarding specific parts of the NOR or wish to have them amended and the reasons for your view).

I oppose the proposed location of the hub for the reasons mentioned above and discussed in the attached document.

Largely as there are aspects of the PGF and MCA assessment processes that indicate possible site bias existed well prior to public engagement commencing. In addition that, although various sites were declared flawed, other sharing similar flaws were treated differently. MCA reports indicate that subsequent deliberation and decisions appear to have been influenced by opinion and/or preference of individuals at the time, with changes were made to criteria/weighting in the final stages significantly altered the outcome, indicating that a preferred site bias may have been in force prior.

The proposal as it stands is largely KiwiRail centric in terms of benefits with very few mitigations in terms of constraints placed on their operations or requiring them to fully mitigate the negative impacts. Suggested mitigations/approaches often lacked depth and/or scope of analysis, lacking full appreciation of the short and long term impacts across a number of areas in the NOR; noise/vibration, the community, health (physical and mental), strategic transport and connectivity, planning and environmental issues. Also apparent at times in some areas showed a lack of understanding or knowledge of local issues creating the potential for both short and long term harm. Some mitigation proposals are extremely generic at and lack any meaningful attempt at actively reducing the known impacts/harm of conditions as a result of both the construction and a fully operational freight hub, on the populace and environment. See submission for additional detail.

Note - Where 'KiwiRail' is used when referencing reports and findings this term has been used for convenience and includes personnel contracted by KiwiRail to produce these reports.

3. I SEEK THE FOLLOWING RECOMMENDATION OR DECISION FROM THE PAMERSTON NORTH CITY COUNCIL:

Overview: Request independent reviews, investigations on the issues detailed in this submission prior to a decision on the KiwiRail NOR designation.

Please refer to the individual areas or to Summary at the end of the submission for a complete listing of specific requests.

Summary:

Request a review of the Multi Criteria Assessment process with a view to ascertaining the transparency, accuracy and objectivity of the procedure and resultant outcome decision(s), and whether inaccuracies, assumptions or undue emphasis was placed on some criteria in order to achieve a specific outcome.

Request review of various report/assessments and subsequent mitigation proposals to ascertain whether the scope and depth of analysis is appropriateness and fully discusses/outlines the issues created, and to assess the suitability/relevance of the proposed actions for the mitigation and/or elimination of identified issues. Please refer to the Summary at the end of this document.

Full requests can be found at the end of this document following submission details.

4. I wish to be heard in support of my submission. Yes

5. If others make a similar submission would you be prepared to consider presenting a joint case with them at any hearing? No

6A. I am NOT a trade competitor for the purposes of section 308B of the Resource Management Act 1991

6B. I am directly affected by an effect of the subject matter of the submission that: i. adversely affects the environment and ii. does not relate to trade competition of the effects of trade competition.

The parts of the NOR that this submission relate to are:

1. Multi Criteria Analysis Report
2. Planning/Strategic/Vision
3. Design and Construction
4. Rail Design and Operational Issues
5. Lighting Design
6. Transport - Impacts on the Road Network Freight Ring Road
7. Noise and Vibration - Accoustic
8. Landscape and Visual
9. Storm water / Flooding
10. Contaminated Land - Geotech
11. Social Impacts
12. Economic Impacts

1. Multi Criteria Analysis Report (MCA)

ISSUE:

Documents from MBIE and GrowRegions show that the area in the NEIZ was specifically mentioned in applications for both PGF and a KiwRail business case as early as August 2018. This indicates the MCA process had a fatal flaw from the outset, as although the MCA process was completed to meet compliance requirements, the outcome appeared to have already been agreed between stakeholders.

Review of the MCA process shows a significant number of contradictions and errors throughout the assessment process and within criteria and report areas, which brings into question both the accuracy of the data/information and therefore the validity of the decision processes used. Additionally evidence suggests criteria and weighting has been significantly influenced by PNCC representatives and the desire to expand into the NEIZ as opposed to the use of the existing also industrial zoned 'inland port' areas near Longburn (NWIZ).

Site options reduced from 6 to 3 without clear evidence or justification as to why this occurred.

Inconsistency in evaluations were evident, conditions that deemed some sites as 'fatally flawed' in the Longburn area were not considered a 'fatal flaw' in the Bunnythorpe area e.g. proximity to residential areas, effects on existing roads, infrastructure and utilities.

DISCUSSION:

As mentioned, documents were found from MBIE and GrowRegions which show that the area in the NEIZ was specifically mentioned (or easily identifiable in heavily redacted documents) in both the KiwiRail application for the PGF, and a KiwiRail business case, as early as August 2018. This indicates the MCA process had a fatal flaw from the outset, the outcome appeared to have already been agreed between stakeholders, and the MCA process completed merely to satisfy compliance requirements. This also brings into question the integrity of the community consultation process. (Documents available on request- can also be found using Google search engine).

Site Suitability questions: The suitability of site and initial assessments appear to have been more influenced by PNCC direction and desire to 'make the hub fit in this zone', rather than actually assessing the suitability of site both in terms of construction, and for the proposed activities. This observation is supported by the initial assessments of 'specialists' in preliminary assessments and their subsequent comments following decision/follow-up meeting processes. See MCA reports Workshop 1-3.

MCA Impact assessment appear to have been influenced by a bias, in that although various sites were flawed, or shared similar flaws, were treated differently. For example with reference to sites 1-4 located around the Bunnythorpe area and Options 5 & 6 located near the Longburn area. Options 5 & 6 were later combined and renamed Option 5 which also appeared to cause confusion in subsequent analysis. Some examples provided below – note, this is not a complete list of errors, conflicts found.

- MCA Summary Table 5-33 Community Cohesion records 'Community severance' was considered for the Longburn site Opt 5 due to road closures, despite connectivity to No. 1 Line and SH 56, however this was not considered with the Bunnythorpe (NEIZ Option 3(c)) site which involves the closure of a number of roads, significantly Railway Road and Roberts Line, Clevely Road level crossings and proximity to Bunnythorpe village, Kelvin Grove and Whakarongo urban residential and lifestyle blocks. Opt 3c conflict with utilities not mentioned in this assessment except the PNCC bore – also affects Sewer line, First Gas line, and power pylons.
- Conflict with utilities also appears to have been more priority In the Longburn site (combined option 5/6) with regards to power, road closure and an overpass requiring as upgrade, whilst the Bunnythorpe (Opt 3) site has a number of significant utility conflicts identified (refer NOR para 5.2.4 and MCA reports) affecting Electrical – pylon location, First Gas line, PNCC water bore, Bunnythorpe sewerage system, including the closure of Railway road defined as a strategically significant road (as referenced in the PNCC District Plan).
- MCA Summary Table 5-27 Visual and Landscape; identifies roads, utilities and residential land use as issues for option 5, however, even though these same issues exist within Option 3 and 4 they have

not been noted as such. The mitigation in assessment applied in Option 3 (proximity to NEIZ), is not applied to revised Option 5 (proximity to NWIZ)

- The Engineering Degree of difficulty assessment (MCA Summary para 6.5.2) contained an error which assigned conflict with water bores and transmission lines to Option 2, whereas this conflict is in the Option 3 site.
- Other significant conflict identified associated with the Opt 3 site include; the high number of property/resident acquisitions, the lack of connectivity to main road routes, including the closure of strategically significant Railway road and number of smaller roads that will impact a number of residents, current NEIZ occupants and a wider community area, however these factors, including the high degree of engineering difficulty associated with the site, appear to have been 'glossed over' given less weighting than those associated with the Longburn site resulting in the Bunnythorpe site Option 3 being selected.

As mentioned the Longburn option(s) Site 5 and 6, were combined in later workshops whereas sites 1-3 were assessed as multiple options, intimating a desire for a certain outcome for the NEI area and merely 'going through the motions' for the NWI area assessments. Also noted in later assessments, the combining of Option 5 & 6 sites appeared to have caused confusion in later assessments, and constraints identified in the original Option 5 & 7 sites were attributed to the combined site when assessed later. The option 5 and 6 sites (combined) were later discounted due to 'significant constraints', or as a result of discussions prior to Workshop 3, this term is used in a number of follow-up MCA reports, however it is not clear, or obvious what those constraints were, why they were considered so significant, whether these were accurately assigned to the area in question (refer comments on combined site confusion), or whether those were more significant than those found in the NE areas which had similar constraints.

As mentioned, despite Longburn having an existing 'inland' port designation, including rail access and connectivity to SH 56, including an industrial area also earmarked for expansion, the proximity to the airport of the NEIZ appears to take precedence, and has been given priority. This has and had significant influence throughout all MCA assessments, irrelevant of the lack of and existing connectivity (identified in MCA Community Cohesion report). The proximity of the airport, whilst given significant weighting in connectivity and strategic importance, is not verified by any evidence of either existing or future interoperability.

KiwiRails initial assessment of future freight growth, (Ref. Master Plan) does not include any mention of increase (or any) rail to air freight link, nor does the type of freight listed in the report lend itself to being suitable for domestic air transport - growth groups listed as; building materials, fertiliser, other minerals, steel and aluminium, logs and timber products, milk and dairy and general freight. The transfer of freight to air and vice versa would be uncommon, there is no evidence presented for the requirement or shape of rail/air integration/opportunity, even though considerable (no other existing Rail sites appear to require

rail/air connectivity), however, the emphasis is placed on this on this 'connectivity' in particular, following interactions with PNCC, again indicating undue influence and a bias for a particular site outcome.

PNCC maintained they had little to do with the site selection process (throughout both community meetings and independent queries) yet they have been recorded in assessments as significant input into the MCA process and decision making, including adjustment of MCA scores. KiwiRail application for the PGF in 2018 specifically mentions Palmerston North NEIZ as the site selected for the regional growth hub, indicating prior consultation with the PNCC in some form.

REQUEST: Prior to a decision on the NOR and designation

- Request an independent review of findings and MCA process records including minutes and recordings, for evidence of significant influence or undue pressure on participants to achieve a desired 'site' outcome.
- Request an independent review is carried out of the MCA process, and justification for the decisions to eliminate Options 5 and 6 to be clearly shown, including assessment of concept plan 'fit' (overlay). Clarification of the level of utility conflicts and constraints associated with the sites 1-4 and 5-6 to be provided.
- Review of the suitability of the site selection with respect to the changes in both scope and scale of the development and the resultant increase in impacts on the local community, local industry, and wider area as a whole. Due to (but not limited to) increased land acquisition, boundary changes and mitigation measures, road closures, loss of available land for individual industry development, lifestyle, residential/urban growth, and road user safety.
- Review the priority/weighting given to the proximity of the Airport in site selection/MCA decisions, and justification given as to why this was allocated this level importance. Please provide evidence of significant volumes of air/rail freight movements currently and expected significant increases in these levels to support this weighting.

2. Planning/Strategic/Vision

ISSUE:

In light of current social and economic issues the support of a designation for a development of this size and scale without review of processes and decision would be irresponsible. Fully investigating the impacts of social, health, long term environmental effects and future planning, particularly in light of the changes to the size and scope of the development has increased the affected areas and conflicts with a number of utilities, since the original proposal, should be a priority prior to any decision on this designation and NOR. The 'best

practices' for re-zoning do not appear to have been applied to any great effect (Ref. MCA Strategic Fit Criterion).

The future impact of the site location and extent of the development with reference to its proximity to Bunnythorpe/Whakarongo and the restrictions imposed on the future development/expansion of the city both urban/residential and industrial in these areas, do not seem to have been effectively considered, particularly in light of supporting further industrial expansion in Longburn, which will effectively result in 'hemming' in the city and preventing from growth in both the east and west directions.

The location of this site appears to conflict with the Palmerston North 10yr plan 2018/28, Strategic goal(s) for an Eco city. The Rail hub is located on the main flight path into Palmerston North, therefore, visitors first impression of the character, and visual landscape of Manawatu will be of a large industrial rail centre. The Hub will also increase the number of heavy vehicle traffic into the area for freight distribution, thereby reducing the ability to reach the 25% reduction in carbon emissions goal as a result.

DISCUSSION:

Project Creep: The site location has significant implications for city expansion/development in the future and the immediate and long term effects on the community/social environments and the transportation patterns/routes. There has been a significant amount of project 'creep' post initial proposals, in particular relating to the proposed size of the operation, yet this does not seem to have been subsequently factored in or considered in terms of the effects on site suitability or additional issues as a result.

Reputation: Manawatu District Council has gone to great efforts to market the region as a recreational hub, (Strategic Goal 4), clean and green, a place to visit to breath the fresh air, go to markets, enjoy the walks and trails – however the first (and last) thing visitors will see as they approach the gateway to the Manawatu will be a 177+ hectare rail yard. This location is on the main flight path into the city, no amount of perimeter planting, or landscaping can change the aerial view, nothing can hide it for what it is, a large industrial site encroaching on a village, residential areas, and rural properties. These are areas that the plan talks about as being important to the city, Safe healthy communities, connected and eco-friendly.

Environmental/Visual: Assessment is not limited to visual effects, change is also considered to be to the character of the environment. Whilst technical reports routinely refer to the NEIZ and Bunnythorpe, the land actually zoned as NEIZ is less than 1/3 of the total site, on its most western edge. The remainder is rural land, with a small portion of urban residential to the East in Bunnythorpe (affected due to the expansion of the project), therefore the environment that should be considered as being the most affected is the rural one, and its 2000+ residents, this site **significantly** alters the character of the area.

Noise mitigation practices have been proposed, however, the fact that the noise produce will not be intermittent (such as a passing train) it will instead become sustained, a significant, permanent increase in ambient noise in an otherwise largely rural area. This fundamental change has not been addressed in reports, the focus has been on the immediate area and the comparison to the existing rail yard (within a highly built up, busy urban area) and the developing NEIZ, not the existing (predominant) landscape. The rural zone is designed to protect against unplanned urban expansion (ref NOR para 5.2.2), however the Hub in this location (forecast to 2050) will effectively prevent both urban and industrial expansion for Palmerston North in the future.

Zoning: This site also uses over 50% of the NEIZ zone allocation (ref Economic report) this has been noted as creating serious issues in the near future as additional land will need to be sourced sooner to provide for the growth of industrial area, however with the airport to one side (and subsequent restrictions) and the hub to the other, the future expansion of this zone is now limited. The Economic Report notes that the if the current Rail land is released, it would only be suitable for industry, due to contamination, however, the release of this land would not be until well after operations at the hub has been achieved. The NOR indicates that NO decision as to the disposition of this land has been made, therefore any assumed economic or, transportation network benefits associated with 'freeing up' this land are in question. These limitation should be considered against the suitability of the proposed site against an alternate site which has fewer restrictions, but also zones industrial.

The NOR states that bulk fuels/and liquids (LPG) will be stored on site, whilst these are required to be bunded to comply with regulations, has a risk assessment been carried out on the effects should a fire or explosion occur in one (or more) of these storage facilities? Has the risk, potential harm and health issues as a result been assessed for the residents, not only in the immediate area, but also 'downwind' of the site. This would include the wider Kelvin Grove/Whakarongo area, urban residential, recreation, schools and early education centres. Who bears the responsibility/liability for this? This again raises the question as to the suitability and wisdom of supporting the site location on the fringes of the city. Will the proximity of this site affect the private insurance of residents?

The NOR Zoning and Land use para 5.2.2 states that this land (NEIZ) due to it's proximity to the airport makes it unsuitable for urban (residential) use. Whilst this is true for the NEIZ land from Roberts Line through to Milson line (adjacent to Richardsons Line), this is not true for the land designated by KiwiRail for the hub. This is a misleading statement, as the area is not only rural, but has been steadily developed by lifestyle type properties in the Clevely Line, Te Ngaio Road areas – most recently in 2019. This raises doubts as to the validity of MCA data used.

Emphasis placed on the need to transport freight locally, however travelling 5 minutes to a depot or 15 minutes to a depot will make little difference in the scope of an entire trip when delivering to various locations in an area, connection to suitable main road(s) in good condition however is likely to be more important to freight carriers.

Planning: PNCC plan indicates intention to further develop the Longburn/Braeburn site and rail sidings, this will result in the city being hemmed in by two industrial sites (W and E), with a river to the south and flood plains to the north (noting land to the north and NW of Cloverlea and toward the river (including the proposed Kākātangiata site) are flood plains and unsuited to residential building, also noting that The Accelerate 25 plan indicates the desire to reduce builds on hills in the area. This will impact on future growth, and 'desirability of location' to either live in or visit will be affected, the city may become known as the Rail or Industry/factory city of the Manawatu.

Utilities: A significant number of utilities are affected through this proposed designation, the PNCC bore on Roberts Line (recently refurbished at a cost of ~ \$920,000), First Gas main line, Bunnythorpe water water (sewer line), Transpower pylon(s) and the closure of a large portion of a strategically significant road – Railway Road. Have the associated costs with moving, relocating these assets, including upgrade and remedial actions required on roading to ensure safety, been assessed? Would these be at the cost of KiwiRail, or is the expectation that the Palmerston North city and district ratepayer is expected to fund this development activity to support KiwiRail a State Owned Enterprise (SOE).

REQUEST: Prior to a decision on the designation or NOR, request the following:

- Independent review of suitability of site with reference to the impact of future city urban/residential, industrial and recreational developments - considering availability of land for future developments (ie: not flood prone, or hill based) using growth patterns based on recent data (Whakarongo towards Bunnythorpe and Ashurst), and consolidating industry further out from the city limits and environs.
- Review of suitability of the site based on the aerial visual/landscape impact (on the main flight path) that the location of this site will have on visitors to the Manawatu, including the 'character' of the city in terms of how we wish to be viewed e.g. as a green/recreational city, or an industrial/rail hub.
- Review of economic/transport impacts based on the existing rail land either not being released, or released post fully Hub operational ability (2050) and as only suitable for industry.
- Assessment and costing forecast of funding responsibility expectations for relocation of utilities impacted by designation.
- Confirmation of a city and environment planning forecast, based on actual growth data, not preferred options.

- Require a firm future proofed industrial zoning plan, and roading network plans prior to a decision on the designation.
- Review of suitability of the site with respect to its proximity to large urban developments and the risks posed as a result of an industrial accident (and councils liability), vs the site being located outside city limits, although reduced proximity to the city, poses significantly less risk to the population.

3. Design and Construction

ISSUES:

Environmental and resource issues created for the local area environs and residents due to the prolonged construction timeline of this site do not appear to be fully considered by KiwiRail and PNCC. Construction estimated at 6+ years – hence KiwiRails request for an extension to the Lapse period from 5 years to 15 years (Ref. NOR para 6.4).

The MCA Engineering Degree of Difficulty assumed that the road network integrity would remain, no consideration was given to diversions/closures, roads or bridges, therefore affecting the accuracy of the overall assessment. The Transport network effects and current site impacts on roads were deemed highly complex.

Issues relating to effects of the increased extent of land requirement, the degree of engineering difficulty requiring extensive land disturbance/relocation, resulting in short and long term effects on ecology, and health and safety risks associated with dust and particulate contamination of the environment and water supplies, as identified in the Preliminary Site survey, are not fully addressed.

Management plans for various issues such as Storm water, Noise and Vibration only required to be provided to council **20 days** prior to construction commencement.

DISCUSSION:

Initial construction activities are expected to take ~ +6 years, operating 6 days a week, Mon-Sat from 7am to 7pm. KiwiRail reports estimates ~1.5 million m³ fill required to be sourced for this site (45%), up to 5-6 m deep in some places – this is contrary to community briefings where it was said to be a ‘cut and fill’ using existing land and minimum fill. The demand for this (which will need to be completed prior to construction beginning) has the potential to create conflicts between projects as contractors compete for existing (finite) raw material resources, which may adversely impact other projects in the area such as the Manawatu Gorge road, housing developments, Ohakea extensions, and roading projects identified in the PNCC 10yr District

Plan (and highlighted by KiwiRail NOR), as **required to be complete** to ensure the safety of road operations. Considerations of these factors should be carried out against the suitability of the site, and the use of the Longburn site which was given a low degree of difficulty in the construction/design assessment. (Ref. NOR Construction para 6.3.5 and Design, Construction and Operation Report (Tech. Repot A).

Geology/Contamination Risks: Significant changes to the geology will occur as a result of this construction, which need to be investigated to ascertain what effects this may have on storm water runoff, sediment, flooding characteristics of the site (in regards to 'settling ponds') and in particular investigate the potential for ground water contamination.

The Preliminary Site Repot identified HAIL actions as a result of both construction and operational activities including expected and known contaminants that may be found on site and/or be evident in subsequent operational activities, including the potential for concentrations of contaminated sediments in the settling ponds over time. Although HAIL activities were identified in the Preliminary Site assessment as affecting groundwater, such as contaminants from vehicle movement, refuel/defuel, maintenance actions, transport depots (Freight storage) such as (but not limited to) dust, hydrocarbons (PAH), solvents, metals, BTEX, lead and chemicals (fertilisers), the effects of these were not further explored in the subsequent Geotechnical assessment (Tech Repot B), the Stormwater Flooding Assessment (Tech Repot G) or Contaminated Soil Preliminary Site Investigation (Tech Report I). Surface water and water courses are mentioned, however they do not discuss the water bores (qty 16) or the ground water height at around 2m (ref NOR para 5.2.5 and Tech Report G).

A risk assessment has not been carried out to assess the potential for contamination of the PNCC bore (recently refurbished for ~920K) and the additional 15 private bores covered by the extent of the site, this should be undertaken prior to any decision on the designation or progression of the NOR, covering risks to water supplies during construction and the future use of the site. The results of which need to be considered against the suitability of this site against the health risks posed by contaminated ground water supplies and effects on Palmerston North residents. The Roberts line bore regularly supplies up to 1/3 of the city's water in high demand situations and up to 50% of the supply during the summer months, this is particularly important as water restrictions are regularly required. Noting that the NOR para 6.6 Regional Consents and Para 6.7 Regional Plan Rules, no mention is made of the risks to groundwater.

Air and Water Quality: Airborne dust and particulates contamination was identified as a HAIL activity during the Preliminary Site Investigation, subsequent mitigation has suggested using water to keep dust levels down in the construction site environs, this is estimated at upwards of 100,000 litres per day, sourced either from a secure onsite source or from the PNCC water supply (Ref. NOR para 9.2.3). On site secure sources have not been elaborated on, it is unclear whether the intention is to use one of the 16 existing bores onsite,

which increases the risk of ground water contamination, or an external source that is stored on site. The alternative of using the PN city supply will place added demand on the city's already strained water supply, as mentioned – the Roberts line bore regularly supplies up to 1/3 of the city's water in high demand situations and up to 50% of the supply during the summer months. PNCC actively encouraging city residents to engage in water conservation and to make use of rainwater to reduce demand on city supply, yet this proposed development and location of this site is putting that very supply at risk. Another suggested option is to use polymer soil stabilisers – however, there is no information as to the disposition of these agents, nor the effects on the environment and whether they may pose health risks to residents if particulates should enter rainwater catchment supplies, including whether there is the likelihood of damage to water pumps, or excessive clogging of filters, and sediment in tanks, in addition to the known dust and particulate pollution from the site during construction.

No apparent mitigation provision has been suggested for the existing residents to address the potential contamination of their water supply (excepting intent to 'supress' dust on the site), an increase in airborne contaminants as a result of construction/operational activities may result in residents needing to increase the frequency of in water filter replacements, or damage to equipment through tank sludge or increase in tank cleaning requirements.

KiwiRails request reasoning for an extension to the Lapse period from 5 years to 15 years (ref. NOR para 6.4.), is due to the length of the construction timeline as a result of the complexity of the initial earthworks and build, therefore an extension to the assessment of any management plan presented to authorities, from 20 to 60 working days, due to the complexity of the design and construction should not be considered unreasonable.

REQUEST:

- Require an extension be applied to the assessment of any Management Plan/Fframework presented to authorities (PNCC, Horizons, RMA authorities). Extension from 20 to 60 working days, to be applied to allow for effective analysis of the data presented, due to the complexity of the design and construction.
- Independent review of site suitability criteria considering but not limited to:
 - Future residential and local industry expansion and
 - effects on community,
 - evidence of site bias, and weighting influence,
 - construction difficulty and conflict with utilities,
 - geology and risks to ground water contamination and monitoring,
 - contamination of residential water supply,

- connectivity and transport routes.
- PNCC and KiwiRail to facilitate the installation of filters to water tank supplies of residents, to recompense residents for any additional costs incurred through the need to replace filters more frequently, including additional water tank cleaning requirements and replacement of pumps if failure deemed to be due to wear from particulate ingestion.

4. Rail Design and Operational Issues

ISSUE:

Lack of 'future proofing' in design aspects of the rail yard, Attachment 3 Design, Construction and Operation. Indications that current standard KiwiRail track designs will be used, in the hub and NIMT realignment. The intent is to purchase and use larger engines to move longer trains (increasing noise/vibration and emissions). There appears to be no intent or plans to increase/enable the use of electric engines beyond what is currently enabled in this area, despite significant investment from the government.

DISCUSSION:

Answers to questions regarding Track design, are referred to existing KiwiRail standards. As this is a brand new proposed build facility expected to see KiwiRail into the future, shouldn't future proofing the site be at the forefront of design and construction, they are expanding due to forecasted demand, therefore issues relating to the mitigation of noise and vibration should be prioritised, not only for the workers within the hub but also the wider community. Refer comments in Noise and Vibration.

KiwiRail indicates the intent to use longer trains and larger engines, the NOR mentions refurbishment of 15 engines to electric for haulage to Hamilton, however the presence of large bulk fuel storage tanks indicates that diesel powered engines will likely continue to be a major part of this operation. Forecasted increase of northbound freight indicate these larger trains will be used to transport freight to points north of Hamilton, and shorter trains for south bound freight, frequency of movements is also expected to increase.

Future proof design should factor in all available means to mitigate the noise of operations – train movements, shunting, freight, logging and container movement. It should incorporate the use of noise/vibration buffers on carriage couplings, in track design and include all vehicles/equipment used to move freight within the hub. The intent should not be to reducing the effects of operation noise within limits for the purposes of initial start-up operations, but should be geared to the future, with a view to reduce noise and emissions to a minimum at every stage – particularly if freight movement forecasts are correct.

REQUEST:

- Request that PNCC ensure KiwiRail include the use of noise/vibration buffers, in all track design and construction, including the use of noise reducing couplings on new carriage and engines.
- Request the increased/complete use of electric vehicles within the rail hub area at all times of operation, or at minimum during night operations.
- Noise limits for an industrial site, as detailed in the PNCC District Plan (May 2018), to be the maximum allowable within the hub, with a view to reducing below these levels wherever possible, rural limits to be applied outside the designation footprint.

5. Lighting Design

ISSUE:

Construction Design has mentioned the use of Low level/track lighting as a safety feature for workers at night. (Refer s92 response Lighting).

DISCUSSION:

Noting that PN airport is home to Massey Aviation and is also utilised by NZDF pilots in training, the airspace is particularly busy and utilised by a significant number of inexperienced/in-training aircrew. Due to the sites location, size and proximity to the airport proposed low level lighting has the potential to introduce a danger to air traffic through mis-identification of the airport and result in confusion of pilots on night approaches or poor weather.

REQUEST:

- Prior to a decision on the designation NOR request that a review/assessment of the potential for the rail low level and track lighting to cause an incident due to aircraft pilots mis-identifying the rail lighting as the PN airport lighting in poor weather conditions or when the airfield is unattended during night operations/diversions. (nil lights).
- Require all lighting to be assessed with reference to aviation risk, including the impacts on Navigation System inputs, to be completed prior to a decision on land designation.

6. Transport – Impacts on the Road Network / Freight Ring Road

ISSUE:

The Transportation assessment on the road network, are largely based on modelling, and rely on proposed, planned or assumed road network plans. Assumptions are made as to the alternative freight routes, using preferred routes, irrelevant of whether these have been assessed as suitable. This analysis was a desktop activity based on previous traffic studies/reports and information provided by PNCC, typically regarding the numbers of vehicles on a particular road, there does not appear to have been any meaningful assessment of the suitability of those roads for the changes in traffic demands, and types of vehicles, that is, increased heavy traffic volumes.

PNCC have stated the hub will reduce traffic congestion and make roads safer, however the NOR para 9.3.2.1 states that an increase of heavy traffic movement can be expected as a result of the hub, in and around the city and environs. Expected increases are not only the result of construction, road closures and diversions, but also as a result of the freight forwarding aspect of the hub itself.

The designation site was identified in MCA Connectivity assessment and the Noise and Vibration Criterion as having no direct access to a main/State highway, this is concerning as at this late stage there still appears to be no coherent roading/transport plan, various reports have roading plans, scenarios and timelines however these can be significantly different and conflicting. KiwiRail has indicated that their best option is to close Railway Road, delay the construction of the Perimeter Road and divert all traffic to 'outer roads', including redirection of traffic onto Tremain. There are also a number of outstanding questions around who is responsible for the various upgrades, at what stage they are required, or even if they will be carried out.

Noting that in the Design, Construction and Operation report, that there is no confirmed or funded upgrades to the wider road network in this area – potentially creating road safety and connectivity issues for both the Hub, community and existing NEIZ residents. Attach 9 transport

There does not appear to be any consolidated roading plan not only to mitigate the effects of construction, on the safety of road users and minimise damage to existing roads, but to manage future traffic flows once the hub is operational.

DISCUSSION:

The NOR acknowledges that it was prepared during a period of uncertainty over road changes and wider regional freight routes. Therefore assumptions, assessments and decisions made around connectivity with roads are essentially flawed and should be re-evaluated with updated data. Although the Perimeter Road is

presented as an alternate to Railway Road, the construction of this road was a necessity for the operation of the freight hub to allow access to and from the site.

The NOR states that roading 'plans' and projections are based on the 'do minimum' the basis of which is the assumption that in order to assure the safety of road users all upgrades identified in the PNCC 10yr District plan and NZTA upgrades, are completed, including 3 additional intersection upgrades – putting the onus and **safety liability/responsibility squarely on PN city and district councils and NZTA** to address roading issues in order to ensure the safety of road users, as a direct result of traffic changes created by the rail hub. It should be noted that the PNCC District Plan upgrades typically refer to intersections, however the upgrade of entire road sections will be required in order for some roads to be adequate to deal with the additional heavy traffic demands and traffic diversions.

MCA Connectivity report identifies safety impacts as a result of increased demand on 3 high risk intersections – along Kairanga-Bunnythorpe Road / SH3 and 54, Kairanga-Bunnythorpe / Milson Line, Kairanga-Bunnythorpe / Roberts Line, in addition to the high risk Kairanga-Bunnythorpe Road corridor this is due to an estimated 200% increase in traffic. Sites to the western edge of the city have direct access to SH56 and No.1 Line mitigating a number of these issues.

Traffic increases (ref NOR 9.3), in particular heavy traffic, can also be expected to be seen on various routes, identified as **Stoney Creek Road, Roberts Line, Kairanga-Bunnythorpe Road and Railway Road south of El Prado Drive**, following road closures during constructions and once operational – this will also result in flow on effects to associated connecting roads as a result such as Tremain Ave. Airport Drive and Milson Line. It should be noted that a wider area of affected residents/businesses are affected by these changes in traffic flows and associated noise and vibration, than were notified by KiwiRail in the public consultation process – limited to a 1km radius from the designation only.

Although at times during the traffic analysis, affected road users in the immediate area were approached for feedback pertaining to the closure of Railway Road, the assessment uses assumed and 'preferred' routes in analysis and as such, there does not appear to have been any further consultation with road users (freight and distribution, businesses, schools and commuters) who regularly use the various roads in the area, as to their actual alternate route options, to ascertain the likely 'actual' traffic flows, alternate routes, for assessment the impact on users, community, road conditions and safety.

The Integrated Transport Assessment identifies that that various roading upgrades by the **controlling authorities**, as per the 10yr District Plan, and also includes additional upgrades identified as required as a result of the impact of the hub on existing transport routes, will be complete and/or prior to the initial stage

that is the 1st year of Hub operations, see para 11.2 and 11.3 for the full listing of upgrades required, and expected to be in place to ensure the 'safe and efficient operation of the road network'.

This indicates that, although the effects on the transport network congestion/safety issues have been created or are the result of the location and operations of the Hub, **the liability and responsibility for the risk** to users as a result, lies with the PNCC and Waka Kotahi as the controlling authorities.

As stated assumptions include that that major works such as the Perimeter Road will be in place, however the Design, Construction and Operations plan recommends that this road is not completed until the hub footprint construction is complete and nearing initial operations (ref. s92 Response Design, Construction and Operation Appendix 2), it also assumes the PNCC and Waka Kotahi proposals regarding the Freight Ring Road and other roading upgrade works will be underway/completed (noting that there is currently no funding allocated or confirmed route for the Ring Road construction at this stage).

Other points to note from the NOR as follows:

- Para 9.3.1 – 3 additional intersection upgrades to the 'do minimum' – in addition to the PNCC 10yr plan proposals
- Para 9.3.2 - increase in traffic and higher percentage of heavy vehicles localised near the hub, predicts a shift in 10,000 vehicles from Railway road to the new perimeter road – these predictions conflict with PNCC and consultation process which touted, reduced volumes of traffic
- Para 9.3.2.3 – increase in traffic volumes on Railway Road south of El Prado, Flyers Line nominated as a heavy traffic re-direct, requires Campbell Road/Kairanga-Bunnythorpe Road intersection and Railway Road/Bunnythorpe Road intersection will require significant work by **controlling authorities** to cope with added congestion, KiwiRail expectation that these will be implemented prior to the initial stage of operations - responsibility for the risk and upgrades assumed to be PNCC and Waka Kotahi.
- Safety benefits as noted in para 9.1.1 and 9.3.4.1 due to the closure of rail level crossings are largely negated due to the increase of safety risks some roads (para 9.3.4.2) – these roads are not identified in the NOR, however the MCA Connectivity report discusses these (along Kairanga-Bunnythorpe Road / SH3 and 54, Kairanga-Bunnythorpe / Milson Line, Kairanga-Bunnythorpe / Roberts Line, in addition to the high risk Kairanga-Bunnythorpe Road corridor).
- The summary also identifies that a safety risk assessment is required on Campbell Road/Kairanga-Bunnythorpe Road level crossing, and the Waughs Road/Campbell Road level crossings – there is no indication as to who is responsible for either the assessment, responsibility for the risk and upgrades if required, assumed to be PNCC and Waka Kotahi.

KiwiRail have based a number of assumptions of traffic, and traffic flow based on the development of the freight ring road, it should be noted that during the community consulting phase, representatives from KiwiRail and associated specialists were unaware that the ring road had not passed a concept phase, nor were they aware that the same proposal had been a concept for over 20 years without being progressed. As the Manawatu Gorge road is now the priority, potentially the timeline for either the planning or development of the Ring road will be pushed even further out to the right, extending the period of risk to road users due to diversions and increased heavy traffic.

The intent to move freight down Tremain in the interim seems to be exacerbating the traffic problems PNCC were hoping to resolve through this site location, again this highlights the lack of cohesion consistency and collaboration between stakeholders. This lack of reliable information has resulted in a number of assumptions being made which have affected MCA decision making, subsequent reviews and future planning, as previously discussed.

Questions are raised as to the suitability of the site, and lack of cohesive plans have so far placed it as a 'Rail Hub to nowhere', it is far removed from not only a connection with the proposed ring road, but even a substantial main road. Many of the diversion/interim roads intended/proposed to be utilised by KiwiRail (Ref. Transportation report) are unsuited to large numbers of heavy traffic, in particular 80km limited local roads, others with weight restricted or one lane bridges and others that remain unrepaired from flood damage over 5 years ago (Flygers Line). Again this raises the question of site suitability and whether a site to the west of the Longburn rail track between No. 1 Line and SH56 would have provided not only wider scope for expansion, enable a number of ingress/egress routes to the site and enable immediate connectivity to state highway road freight routes north and south.

As mentioned KiwiRails preferred option during the staged construction is the early closure of Railway Road, and to delay the construction of the perimeter road until close to the Initial opening stage, diverting traffic to local roads. This would result in road diversions being in place for 6+ years, impacting not only on the road condition, but also the safety of users for that period, this would affect Kairanga-Bunnythorpe Road, Roberts Line and Stoney Creek Roads as a minimum, and potentially increasing congestion on those road intersections and additionally the roundabouts in Bunnythorpe and Airport Drive. The Transport assessment report notes that its analysis is reliant on the assumption of the proposed Perimeter Road being in operation.

REQUEST: Prior to a decision on designation or NOR, request the following;

- Request that any land designation or preliminary construction is delayed until the freight ring road location is fully designed and funding confirmed and ideally with preliminary road construction

underway. Also any proposed Bunnythorpe by-pass/overpass and other roading improvements in the area (including weight limited bridges, widening and inclusion of bike lanes etc.) have been either completed or significantly upgraded to improve safety of users and to cope with additional heavy traffic demands both during RFH construction and following operational activities.

- In consultation with NZTA, Horizons, PNCC carry out a review and report on the Ring road priority, funding availability, route proposal and its suitability for connectivity with proposed freight, impacts on local roads and route both through and around the City to all route (N, S, E, W), to provide an updated timeline for Ring Road based on current economic climate, available funding and national priority prior to committing to rail hub in present location.
- Review of the impacts on local roads and proposed 'diversion' route both through and around the City to all route (N, S, E, W), to ascertain the probable deterioration due to the increase in heavy freight over a prolonged period, and cost analysis for repair to ensure road user safety – assuming PNCC 10yr Strategic Plan road upgrades are not completed with the construction timeline (+6yr).
- Due to the lack of confirmed schedule or plan for roading upgrades/traffic patterns, request a review of impact assessments of road routes, based on feedback from road freight distributors and businesses located in NEIZ and Tremain Ave, Airport Drive and Kelvin Grove locations, with regards the potential actual movement – changes to routes of heavy freight traffic - that is north bound from Hub and NEIZ, west, east and south bound Hub and NEIZ traffic, the potential affects on road user safety, commuters, cyclists, and pedestrian. Review to include an assessment of the suitability of those roads for this type of traffic short and long term. Review to also include a wider area – distance travelled - than currently considered in the immediate area around the NEIZ and proposed Hub, examining the links to outer roads.
- Review and report on likely traffic congestion and safety issues likely to be encountered as a result traffic diverted onto Kairanga-Bunnythorpe and Stoney Creek Roads to the intersection in Bunnythorpe **with no realignment, upgrade mitigation**, closure of Railway Road and no Perimeter Road as suggested by KiwiRail design and construction. To include safety concerns, with regards to level crossings, and other road users pedestrian and cyclist (in particular children walking/cycling to school)..

7. Noise and Vibration

ISSUE:

This site was identified in MCA Noise and Vibration assessment as having a high noise impact due to the proximity to residents in Bunnythorpe, also noted was that screening was likely to have only limited effectiveness for homes over 200-500 meters away.

Planning response to s92 question 182 states that compliance with cannot be achieved with District Plan R12A.10.1 Noise, however the NOR para 9.4, and Accoustic Assessment Tech Report D, indicate that these levels should be achievable through various mitigation effects.

What the reports/assessment(s) fail to note is that not only is there a significant change to the environment noise levels, this noise will be continuous. As operations are intended to be 24/7, there will be no respite from noise or vibration for local residents, this sustained disturbance can have an adverse effect on physical and mental health and wellbeing.

DISCUSSION:

Noting that the original Accoustic Report in the MCA placed this site as the least desirable with reference to noise and vibration effects on the environment. It follows that significant mitigation, restrictions and or compensation should be expected to be applied to activities on this site.

Construction expected to be 2 ½-3 years Mon-Sat 7am to 7pm, noting that the Planning response to s92 stated compliance with R12A.10.1 PNCC District Plan cannot be achieved, it is assumed the standard requirement to 'protect' the people in nearby rural areas is not in force. During construction phase of approx. 2-3 years residents will be subject to 12 hours of noise during daylight hours, 6 days a week, with the usual freight noise during the night, then, once operations begin this disturbance will become a permanent fixture 24/7, using heavier engine, and longer trains which has the potential to exacerbate both noise and vibration issues.

Construction/Design of tracks refers to KiwiRail standards –as this is a new facility and both noise mitigation and 'future' proofing should be at the forefront of all design of the new facility to reduce noise and vibration as much as possible, therefore considerations should be given to making every effort to incorporate noise buffer/damper elements in all rail track construction, rail car couplings, and all vehicle movements and equipment utilisation, as this is a known problem with known negative health effects (see NOR par 9.4 recommendations). Levels of and type of operational noise for particular activities should be known based on current operational activities and be able to be applied to enable modelling of expected noise levels and durations to enable mitigation and effective constraints to be placed around activities.

KiwiRail report/assessment detail actions on the site to protect workers (as for dust and contamination) however little is detailed to protect those residents who will be in close proximity, downwind of the environment 24/7. Sound proofing is suggested for some homes if assessed as necessary, once the hub is operational, the use of barriers 'walls' is acknowledged as mitigation, however, noting the Noise specialist points out that these are only effective for locations within 50-150m from the walls. This indicates that there is little/no guaranteed mitigation afforded to those properties further away, even though it is acknowledged that the noise footprint will impact on their environment. Also noting that no projections are given to factor in the effects of the prevailing winds on noise levels, which raises the question regarding the notification of residents being limited to 1km – should this have included a wider area to be notified, to achieve compliance with regards to community consultation efforts.

Noting report NOR para 9.4.4 states 'Residual noise/vibration 'should' be acceptable in this environment' in what context does this refer to? Is this acceptable for a rail yard, or a rural environment, or the existing environmental noise parameters and who is this acceptable to? Assessments based on the effect of the environment in a NEIZ context, however the bulk of the site is in an existing rural zone, therefore the assumptions of acceptable noise based on this criteria is flawed.

The expectation that rural residents should accept disturbed sleep, closed window living, vented fresh air, disruption to outdoor activities, loss of peace and quiet and enjoyment of the country environment, due to the significant impacts and changes to the environment as a result of this development, is not acceptable.

No investigation appears to have been carried out with regards to the short/long term effects of sustained noise/vibration disturbance and health, such as loss of sleep, fatigue, anxiety, learning problems, behavioural issues. There are a number of academic papers available that have researched the effects of sleep disturbance, both in the Human Factors fields and effects on shift workers in industry and medical settings that have found numerous negative effects on both physical and mental health.

Mitigation proposals as suggested during community consultations such as, 'move away' from the area, or 'stay inside with doors and windows closed' this was not a. practical or b. helpful. While these might suit KiwiRail/PNCC, these are not acceptable responses for residents, noting current financial and housing issues facing the Manawatu district and wider national area with respect to the issues associated with availability and affordability of both rental properties and those for sale.

REQUEST: Prior to decision on designation or NOR, request the following;

- PNCC to mandate that 'resilient' track forms are to be used in the hub footprint (NOR 9.4.3) that is construction/design of all tracks to include noise/vibration buffer/dampers are to be installed for all tracks within the hub, including any new of realigned tracks as a result of the construction of the

hub. All new carriages/engines to be fitted with dampening couplers, and all carriage engines to be retro fitted with the same following refurbishment or servicing activities. All Engines/vehicles to be used for shunting, carriage movement within the Hub to be fitted with the same.

- Prior to decision on designation/NOR additional noise baseline measurements to be taken at various cardinal points 500m, 1000m, 1500m and 2000 from the proposed designation boundary to create a base line for future monitoring. This is to account for the effects of prevailing winds on acoustics, as this was not factored in at the time of assessment. Measurement period to be no less than 30 days. Largely to more populated areas such as Bunnythorpe environs, Te Ngaio Road, Clevely Line, Parrs road, Stoney Creek road, Tutaki road, Orakei Road, Roberts line. Should the experts be convinced the outcome is adequate, then it is anticipated there should be little resistance to doing this (low cost). Further work may highlight a high number of houses that will be impacted and may require modifying, which would be beneficial to know in advance of any land designation.
- Noise limits as per District Plan (May 2018) in force at the time of Acoustic assessment stated, to be used construction/operational noise limits. Limits for NEIZ to be applied within the Hub designation, and limits for rural zone to be applied outside the designation. Any exceedances to be addressed and remedied as soon as practicable. Such as required mitigation for residents such as noise insulation mitigation and ventilation options for the summer months at nil cost to the resident.
- Ongoing noise/vibration complaints to be reviewed (at minimum) 6 months periods with findings and follow-up actions to be advised to the complainant within that period and PNCC/Horizons to be advised of all complaints/actions for on-going monitoring and assessment. Mitigation measures to be actioned as soon as practicable.
- As the proposed Hub hours of operation are 24/7, if this site is selected, then significant noise limitations should be imposed between certain hours and for certain periods, similar in approach to mitigation as per the airport, limit high noise 'creating' activities to the hours of daylight, loading, unloading logs, container movement to daylight hours. Mandate noise reduction activities such as: electric vehicles to be used for all movements in the yard including cargo, freight loading unloading and container movement (this will also be in keeping with PNCC goal to reduce its carbon footprint). All diesel engine operation on site to be kept at a minimum (inwards and outwards bound freight only), both to reduce noise and emissions. International studies should also be referred to for mitigation measures.
- Ongoing vibration monitoring and actions to be in place, and remedial actions/or constraints applied when certain levels are consistently breached, in particular if attributable to certain activities e.g. container, log movement, shunting and/or vehicle movements, maintenance activities.

- Independent investigation to be carried out into **health issues related to noise and vibration**, such as loss of sleep, fatigue, anxiety (depression), behavioural and learning issues, to enable a better understanding of the effects of the hub location on the community. Results to be submitted to PNCC and made publically available prior to designation decision. Results to be considered with respect to the suitability of this site for a rail hub, in conjunction with mitigation requirements. To include research into meaningful mitigation, with proposals suggested, such as noise restrictions, retrofitting double/triple glazing, sound proofing/insulation of homes, support for medical/health, behavioural or learning issues associated with the hub.
- Mandate that all Accoustic report (Tech. Report B and s92 Responses) recommendations are implemented as a minimum..

8. Landscape and Visual

ISSUE:

Assessment of Sensory values and factors, are not limited to visual attributes (Ref. s92 response) for identification and assessment. Whilst visual assessments at ground level have been considered, no apparent consideration has been made regarding the aerial view, and effects on perceptions, as the proposed site is on the main flight path into Palmerston North.

DISCUSSION:

Substantial work on the eye-level visual aspects of this site, concerns that the main flight path approach to PN airport, the 'gateway' to the Manawatu will now consist of over 177 hectares of industrial land, ~130 hectares of which is the operational footprint, rail, container storage, logging, vehicle movement, buildings and bulk fuel/liquid storage, that do not allow for 'park and gardens' type planting, To estimate, based on the layout, over 2/3 of the site will be open tracks, containers, freight carriage, logging and bulk liquid storage.

This has the potential to have an adverse impact on the 'clean green' image of the city and region and desirability to visit, Palmerston North could certainly become known as the 'Rail City', a name that will be easy to earn, but hard to shake. Manawatu Horizons District and Palmerston North City Council has gone to great efforts and investment to market the region as clean and green, a 'hidden gem', 'the' place to visit to experience nature, breath the fresh air, go to markets, enjoy the walks and trails. However the first (and last) thing visitors will see as they approach the gateway to the Manawatu will be a 170+ hectare rail yard. This location is on the main flight path into the city, no amount of perimeter planting, or landscaping can change

the aerial view, nothing can hide it for what it is, a large industrial site encroaching on a village, residential areas, rural and lifestyle properties.

REQUEST: Prior to designation/NOR decision request;

- PNCC and the Manawatu District Council to re-evaluate the suitability of this site for the Rail hub, considering the adverse impacts on the reputation of the city and effects on tourism vs the benefits of this site as opposed to one further from the 'gateway' to the city. Consideration to be given to site selection further away from the city environs. See also comments in Planning section.

9. Storm water / Flooding

ISSUE:

Although groundwater (water table) contamination was identified in the Perimeter Site Report HAIL activities, there was no further assessment carried out in any other report – this is a significant omission.

The assessment is essentially related to surface run-off/storm water effects and mitigation. Other than a statement which mentions the positive effects of developing the land from rural that is, a potential drop in nitrates, there does not appear to be any significant assessment on the risks of the contaminants expected to be found on the site, such as petroleum products, chemicals etc likely to be in runoff, or the accumulative effects of contaminated sediments in settlement ponds with regards to contamination of land, including groundwater.

Apparent gaps in the Storm water Flooding Assessment (Tech. Report G) and subsequent follow-up reports/responses in relation to operational runoff/flooding, and contamination risks including risk assessment of the potential for long term impacts. Assessment methodology assumed that 90% of the hub was 'impervious' to water post development – as approx. 1/3 -1/2 the site will consist of main tracks, marshalling yards, associated lines and logging facilities it is evident that this assumption is flawed.

DISCUSSION:

As mentioned the type of contamination expected does not appear to have been fully examined, the Boffa Miskell report briefly mentions the treatment of some runoff on site, with other 'untreatable' contaminants diverted to the PNCC for treatment – adding to the existing burden on the city waste water treatment issues.

Responses to s92 questions from the Council note that the Stormwater Management Framework (SMF) is expected to be developed, the outline of which mentions ground water quality and quantity, however the

risk to, and effects on groundwater during construction/operations, have not been examined or explored in any way during this process. Potential issues regarding contaminated runoff have not been fully addressed to assess the effects of likely contaminants from the site – based on existing site operations contaminants, proposed operations, and freight movements. Contaminants may include (but not limited to) oils, lubricants other petroleum products, cleaning and degreasing agents (from maintenance activities), other chemicals, fertilisers, timber products (treated and untreated) from freight movements, (also see discussion on contaminated land), therefore the questions around the protection of the city and local area ground water supply remains unresolved.

Noting that KiwiRail assessment that during high rainfall/flooding events the discharge from this site may negatively impact areas downstream. How this will impact residential areas such as Milson, Cloverlea and potential the proposed housing development site of Kākātangiata (areas which already face issues with flooding), it is assumed the residents will not be responsible for the clean-up, and that the PNCC and Hub will take responsibility for costs involved, has not been discussed.

REQUEST: Prior to decision on designation/NOR

Require independent investigation and report into;

- Investigation and report into the effects/risks of accumulated sediment contaminants and run-off contaminates likely to be found in the Hub settlement ponds, including assessment of risk posed to wild life in contact with these ponds.
- Investigation and report into the risk/effects of an accumulate of contaminates in pond sediments with respect to ground water, including risks posed due to a flooding event and potentially contaminated pond sediment being discharged downstream, including risks to water supplies.
- Review of storm water run-off and contamination assessment based on an unsealed area no less than 50% of the site. To be assessed with reference to contaminants likely to found onsite during construction/operational activities.
- Investigation and report into the effects/risks of ground water contamination as a result of construction and operational activities. To be assessed with reference to contaminants likely to found onsite during construction/operational activities, and the potential health effects as a result of contaminated supply.
- Investigate the likelihood of downstream flooding of residential areas as a result of discharge, controlled or uncontrolled, from the site, and remediation proposals. The ability of the Mangone Stream existing stop banks and city stormwater capacity to cope with a flood event downstream, and identify potential risks to residential areas that boundary it's banks. Identify mitigation measures and means to recompense affected residents.

- Require additional investigation/analysis carried out as to the impacts of the additional storm-water runoff from the 170 hectare site, including effects of the changed geology (drainage/pooling) due to the significant use of fill (45% of site), including assessment of: the effects on the contaminant and sediment levels in the settling ponds.
- Reassessment of suitability of designation based on risk assessment of contaminated city water supply and downstream residential properties. Review of these reports and risk assessment carried out as to the suitability of mitigation and whether mitigation/controls are suitable.

10. Contaminated Land

ISSUE:

The NOR para 9.11, discusses contaminated land, existing HAIL sites and mitigation at some length. However little mention is made nor assessment carried out on the potential for ground water contamination due to activities on site, both during construction phase and subsequent operational activities, all of which were identified within the Preliminary Site Investigation Report (Tech. Report A). This report also identifies that rain water (roof catchment) supplies are likely to be contaminated as a result of dust created during construction, and to a lesser extent hydrocarbons as a result of operational activities. This is a significant omission particularly in light of the water restrictions that annually affect Palmerston North residents.

DISCUSSION:

This gap in analysis with regards to ground water contamination, suggests non-compliance with the National Policy for Freshwater management 2020 objective (1) (b) (to ensure) health needs of people are met (such as drinking water) ref. NOR para 10.1.2. Due to the location of the site immediately adjacent to the PNCC bore, which during summer can supply up to 50% of the city's water supply, and an addition 15 smaller bores located within the footprint, the potential for groundwater is a real concern and should be fully investigated prior to any works being approved or permitted.

The Preliminary Site Investigation Report identifies the 16 existing bores on the site, one of which is the recently refurbished PNCC water bore, this area is deemed to have high ground water, which increases the risk of contamination from surface contaminants, with ground water levels found from as little as 2m from the surface to 18m at the PNCC bore (noting levels can fluctuate with seasons).

Site construction activities will involve significant earthworks which can put ground water at risk of contamination, subsequently the operational area encompassed by rail tracks, will be largely unsealed, therefore any spills/leaks from engines, freight, maintenance activities or bulk storage facilities, including

underground lines/plumbing, may result in small to large scale contamination of the site. Contaminants that are likely to be present can be identified from the operational activities, bulk storage and refuelling facilities (which can be mitigated by bunds), however other freight movement activities, may involve; petroleum, chemicals related to maintenance activities, timber or building products that may be treated, and freight that may include other chemicals, fertilisers or minerals that may be transported by rail, and/or stored onsite in the container area, any one of which may have adverse accumulative effects on the ground water/ water tables in the area.

Whilst storm water/flooding aspects of the site have been discussed, ref. Boffa Miskle report(s) little has been found regarding the assessment of the risks posed to ground water and water tables that may result due to the location of a large industrial area in proximity to the bores. Whilst the original contaminated land report listed these as HAIL risk activity it has not been mentioned in subsequent reports, for either risk or mitigation.

One of PNCC main water bores, located at the orner of Roberts line and Railway Road, immediately adjacent to the proposed site, was recently refurbished, at a cost of ~ \$920,000, the water table for this bore (although drilled to a depth of over 250m – but less than 300m) was found at a higher level that expected with water levels at ~ 50m, the 16 smaller shallow bores (<50m) bores that dot the site are also potential points of contamination Horizons water monitoring reports logging these as shallow bores, that is ~50m deep.

Recommendations are to 'cap' these smaller bores, however, due to the significant amount of earthmoving activities, and changes to the soil and substrata that will result, raises question as to whether the potential for contamination of ground water in the area has increased and could pose a significant risk to not only residents/landowners who rely on bore water, but also long term effects on the PNCC Roberts Line bore.

Further risks to public health may result from construction dust contamination of rain water catchment that residents rely on as a source of their main drinking water. Although controls and mitigation have been suggested to reduce dust, such as water and/or polymers (Ref. s92 response attachment 5 – Contaminated land). There are further issues that need to be addressed as a result of this such as; managing/reducing the effects of contaminates on water supplies through the provision/installation of filters on water supplies, increasing the frequency of filter replacements, and tank cleaning. However these actions will incur new or additional cost for residents.

REQUEST: Prior to any decision on designation/NOR request the following;

- Request a complete review of groundwater contamination and risk analysis, short term and long term effects, including factors such as construction/earthmoving activities, flooding, settlement

pond sediments and contaminant in addition to known and expected rail freight yard contaminants. (see KR report on freight types and economic report on contaminated land including identified rail yard/maintenance activities). Refer also to request in Storm water/Flooding.

- PNCC and KiwiRail to provide for free biannual testing of private bore water in the area, facilitate and fund the installation of first flush diverters and filters to water tank supplies of residents, provide recompense to residents for any additional costs incurred through the need to replace filters more frequently, including additional water tank cleaning requirements and replacement of pumps if failure deemed to be due to wear from particulate ingestion.

11. Social Impacts

ISSUE:

Assessment and mitigation recommendation offered by Social Impact Assessment lacks any in depth analysis, and show little understanding or appreciation of the wider issues facing residents as a result of this proposal, particularly in light of the current economic environment. It also lacks any acknowledgement of potential for adverse effects on mental and physical health, difficulties in relocation and effects on financial matters, not only in the immediate future but also in the long term as a result of the Hub in this location. The Report conclusion states that mitigation was focused on timely and appropriate information and feedback.

Direct notification of the community (via letter drop) was limited to 1km radius by KiwiRails definition of 'affected' properties, meaning that large numbers of residents in the Bunnythorpe, Whakarongo and Kelvin Grove areas that will be ultimately affected by either road closures, increased traffic, and noise, were not notified at any time during the 'consultation' stage or NOR. This narrow view/scope of notification ignores the impacts on the wider community,

DISCUSSION:

The Social Impacts assessment (Tech. Report J) and NOR Summary para 9.15.3 states it is based on reports from the MCA, technical reports, web based activities and community consultations. As attendees at these consultations, and later zoom meetings, it was evident that KiwiRail was making use of these to enable them to form mitigation proposals in making a case for the NOR, and utilising local knowledge to counter resistance to the hub, subsequently attendance and feedback from residents at these meetings significantly reduced, particularly as the site approval and allocation was implied as a foregone conclusion.

As noted by residents, and supported by various Tech. Reports, this site will fundamentally alter the community and character of the environment in which they reside, from quiet rural area, to an industrial

area operating 24/7. This fundamental change in the character and amenity of the area is not adequately addressed in the assessment. The NEIZ environment, approx. 4km away (and subject to noise restrictions), is used as a basis for a comparative assessment of effects, this is a flawed approach to the assessment as over 2/3 of the hub site is a rural zone where the majority of the residents reside.

As noted, direct notification of the community (via letter drop) was limited to 1km radius by KiwiRails definition of 'affected' properties, large numbers of residents in the Bunnythorpe, Whakarongo and Kelvin Grove areas that will be ultimately affected by either road closures, increased traffic, and noise, were not notified at any time during the 'consultation' stage or NOR. This narrow view/scope of notification ignores the impacts on the wider community, not only through connectivity with Feilding, Bulls, Sanson, and Ohakea but also increases in heavy traffic volumes and a safety concerns on local roads, due to not only diversions/road closures during a protracted construction phase (+6 yrs) but additionally projected traffic volumes once the Hub is operational (ref Tech. Report C), and the resulting noise and vibration from construction and ultimately as a result of 24/7 operations that cannot be mitigated by 'walls' or plantings (refer Tech Report D).

Social issues identified are limited to; uncertainty, financial implications, noise/vibration, housing and travel, whilst these are useful as categories, they fail to fully address the wider implication on the mental and physical wellbeing of those affected as a result of this hub. For example;

- Uncertainty: this is cited in a number of areas, in particular relating to the future and what will happen to families, homes, businesses etc. (see community comments). Mitigation proposed in the assessment is to merely have a POC and to keep people informed. This shows a lack of depth in analysis, as prolonged uncertainty, worry etc. causes stress, **stress is a known precursor to a number of health issues, both physical and mental, from high blood pressure, to increased risk of stroke and related illnesses, mental stressors can manifests as fatigue, anxiety, behavioural/mood swings, depression and suicide.**
- Financial: Proposals for mitigation do not address the practical issues arising from the forced relocation of families and households - of finding new homes in the current limited market, and the resulting financial impacts, which are not limited to just buying or renting a home.
 - There is no apparent consideration or appreciation of the actual issues involved in finding a comparable location and home for similar cost. For example finding a similar rental in todays market without significant rental increase – current Bunnythorpe median rental at \$320 current Palmerston North rental \$440 (Figures Mar 2021) assuming these are for comparable properties (ie: 3bd 1 bath), would mean an increase of ~\$100 per week for a family/individual (not including bond or moving costs).

- Assumption that existing home owners have an 'advantage' in finding a new home as they are already in the market is flawed. Owners of new built/bespoke homes (e.g. Clevely Line, Te Ngaio Road residents) would not being able to replicate this in the area without considerable financial cost due to; lack of available land for comparable lifestyle development, increased building costs, current debt/mortgage or existing properties for sale.
- Also the associated implications costs arising from any relocation, finding new schools for children and subsequent cost of uniforms, or the added expense for travel, or childcare to enable children to remain at the same school.
- Stress associated with financial concerns has a number of mental and physical health issues. See previous comment in Uncertainty regarding mental and physical health **in bold**.
- Noise/Vibration: With reference to the NOR Social Impact Summary para 9.15.3 and the Social Impact Assessment (Tech. Report J) The assessment does not adequately investigate the potential for harm and adverse effects on health and mental wellbeing as a result of noise and vibration. There have are a multitude of studies and research that discuss the effects of sleep disturbance and mental fatigue as a result of noise and vibration. Effects include, but are not limited to fatigue, anxiety, deterioration in physical health such as high blood pressure, and also effects on mood, interpersonal relationships and learning. The long term effects of these has been discussed See previous comment in Uncertainty regarding mental and physical health **in bold**.

In summary a number of mental and physical issues may arise due to the uncertainty and anxiety associated with major changes such as; due to the requirement to move, find a new home and the associated financial issues. The narrow view/scope of this assessment does not fully address the likely issues created as a result of this development. These are not just immediate effects through forcible movement and displacement of persons, but the ongoing effects on those who either chose, or have no choice but to stay. The changes to the environment are significant, from a quiet rural zone with the occasional plane or train transiting through to one subject to sustained and prolonged noise and vibration associated with an industrial zone working 24/7. The mitigation measures suggested which involve approaches such as a 'hotline', a communication and an engagement plan are insufficient for the issues that arise as a result of a development this significant.

REQUEST: Prior to a decision on the designation/NOR request;

- An independent review is carried out into the effects of the hub on the community, individuals and family groups as a result of, but not limited to; displacement/forced relocation, financial issues, prolonged uncertainty and stress, including effects of prolonged (constant) exposure to noise and vibration. An independent investigation, review/report and risk analysis is carried out into the

potential effects of this development on the community as a whole, and specifically including analysis of the adverse effects on individuals and family groups physical and mental health, relationships, learning and personal wellbeing that may result. Including but not limited to; stress/anxiety or depression mood and behavioural changes related to displacement/forced relocation, financial issues, prolonged uncertainty and stress, and including analysis of the effects of prolonged (constant) exposure to noise and vibration on the individual.

- Following this an assessment should be made as to the suitability/viability of this site against a site further out with significantly less people around the negative effects identified which constitute a real risk to the community's health and well-being.
- These issues should be addressed in a follow-up review and practical assistance methods proposed, including consideration given to the provision of additional funding to cover legal expenses, real estate costs, loss of income, moving/relocation, school uniform, travel expenses, bond payments etc. Not limited to those defined as 'immediately' impacted (through relocation) but to include any resident in the wider community who can show negative effects as a result of the development.

12. Economic Impacts

ISSUE:

Assumptions were made in reports on the projected values for employment and impact on land values. Beyond KiwiRail projected forecasts, has any independent study has confirmed whether this is likely or not.

MCA Community Cohesion report identified that residential property values will be impacted by this development, through either difficulties in selling, loss of development opportunities and effects on property 'desirability' as a result of the proximity of the hub. Therefore what recompense will be available from KiwiRail/PNCC should this designation be approved.

A Rail Freight Hub consuming this land will have a negative impact on land distribution overall, it negatively impacts the availability of land for local industry in the NEIZ, it disadvantages those currently near existing yard, who either elect to stay, invest in a move to the NEIZ, or lease space at the new hub location – essentially a monopoly has been created on available real estate in the NEIZ.

The proposed site has increased from the initial 80 hectares proposed in 2018/19 to over 177 hectares with indications this could increase either due to additional commercial demands or if further mitigation measures are necessary. Any additional further increase to the size of this development, will again significantly reduce the commercial land available in the NEIZ for other commercial interests, and further

negatively impact the community, also land availability and suitability of land for further housing demands to the east of the city (based on recent expansion and urban growth in this area).

Economic benefits associated with the hub are based on forecasted freight growth, however, the forecasted growth of rail is also acknowledged to be dependent on road freight transitioning to rail. Therefore as general benefits can be seen for KiwiRail the as direct result of both PGF enabling the consolidation of their business model, and additional government funding, the benefits to the community are less tangible and dependant on the freight forecast and road/rail transition. Significant weighting was applied to the proximity of the hub to the airport (mentioned in NOR and a number of MCA assessments (including Economic assessment), Tech reports, and related documents), however there is little evidence of rail/air freight movement to support this stance.

DISCUSSION:

The Economic report acknowledges that the biggest effect will be the unavailability of land for future development of local industry, it assumes the release of existing rail land to PNCC, however this is unlikely to be suited for anything other than commercial use due to contamination from rail activities. It should also be noted that KiwiRail have stated that disposition of this land **is yet to be decided**.

Employment details: There are interim employment opportunities due to construction, figures given as 300, however these are not permanent, and would typically be employed in the construction industry elsewhere in the region. The NOR presumes up to 2000 personnel will be employed by 2050, current figures put KiwiRail employees at 3400, does this mean they expect their staff to almost double in size? What are the actual figures relating to job opportunities, how many of these are **new** long term employment opportunities that will be created? How many of this 2000 include existing positions that will be as a result of operations transferred to the site, or employed by a freight/distributor using onsite facilities.

Interim, existing construction/building trades, are already in short supply, exacerbating this issue for the region. Numbers of jobs merely transferred as a result of the relocation or centralisation of KiwiRail facilities, do these figures include those that may be related to the private freight forwarding facilities, these persons would already be employed irrelevant of the hub location.

Infrastructure: KiwiRail has received (and will receive further) significant funding through the government, not limited to the \$40m from the PGF, and including government funded refurbishment of engines. Should this designation be approved, who is responsible for the additional costs associated with the removal/relocation of utilities, and roading upgrades in addition to those forecasted? Is it PNCC/Horizons expectation the local/regional ratepayer will fund the integration of the rail hub (WRT to the recent proposal to a 30% rate increase).

The effects on properties adjoining/adjacent to the site have not been fully addresses. As identified by the MCA Community Cohesion report residential property values in the area will be impacted by this development, through either difficulties in selling, loss of development opportunities and effects on property 'desirability' as a result of the proximity of the hub. Interesting this aspect of economic impact was not discussed in the Economic report, any follow-up report or included in the NOR. The MCA Property Degree of difficulty used only the RV of properties for its evaluation, not market rates. As a result, what recompense will be available from KiwiRail/PNCC should this designation be approved?

Economic: As discussed expansion appears to be more to the benefit of KiwiRail more than either the greater Manawatu or the local community. The PNCC expectation is that land will be made available post relocation from the existing rail site, this is not guaranteed, it is noted that KiwiRail have advised that no decision as to the disposition of land has been made at this time. Any land would not be suitable for residential use due to long term rail yard contamination (see Economic report) therefore would likely only be suitable for industrial/commercial use, which in turn would increase traffic congestion in the area.

Due to the lack of land availability there will be significant restrictions for businesses looking to purpose build their own facility in the NEIZ, businesses that have decided to locate near rail on Tremain Ave. will be adversely affected, by increased travel and congestion to reach the new site, forced to relocate to NEIZ at considerable cost, or require on-site facilities at the Hub. Road closures and diversions will impact current NEIZ users, whose business connectivity is affected by road closures access and connectivity.

REQUEST: Prior to a decision on the designation or NOR;

- Analysis of the effects on property values as a result of the hub and propose means of recompense from either KiwiRail or PNCC, for property owners who may experience financial loss as a result of this development.
- Review and report on actual figures relating to job opportunities, how many of these are **new** long term employment opportunities, and how many of the quoted 2000 include existing positions that will be transferred to the site as a result of relocation of operational/administrative activities, does this figure include predicted numbers employed by a freight/distributor using onsite facilities.
- Review of economic proposal considerations to include the non-availability of Rail land due to non-release, contamination, and effects on business on Tremain Ave through loss of connectivity with rail services at current site, and PNCC plans for land use.
- Review on the impact on the local business economy due to lack of available industrial land for use by local industry and recreational use due to the extent and location of the designation.
- Require a cost analysis/breakdown of how PNCC/Govt/NZTA intends to fund the additional costs associated with the removal/relocation of utilities, the existing and additional roading and

intersection up grades requirements to ensure safety of users, prior to the hub becoming initially operational (within 6-10 years). To include alternatives to rate increases, such as applying for government funding to support this government supported initiative.

- Priority to be given to affected roading networks as a result of the designation, in preference to cosmetic improvements in the inner city.

I SEEK THE FOLLOWING RECOMMENDATION OR DECISION FROM THE PAMERSTON NORTH CITY COUNCIL:
Give precise details including the general nature of any conditions sought.

Summary of requests:

Prior to designation of NOR Land designation approval, request the following be addressed and resolved to parties satisfaction. Seeking the following decisions, follow-up actions, requests for further information and recommendations from council – refer below:

1. Multi Criteria Analysis Report
2. Planning/Strategic/Vision
3. Design and Construction
4. Rail Design and Operational Issues
5. Lighting Design
6. Transport - Impacts on the Road Network Freight Ring Road
7. Noise and Vibration - Accoustic
8. Landscape and Visual
9. Storm water / Flooding
10. Contaminated Land - Geotech
11. Social Impacts
12. Economic Impacts

1. Multi Criteria Analysis Report

- Request an independent review of findings and MCA process records including minutes and recordings, for evidence of significant influence or undue pressure on participants to achieve a desired 'site' outcome.
- Review is carried out of the MCA process toward clearly articulating the justification for the decisions to eliminate Options 5 and 6. Specifically, clarify the level of utility conflicts, weightings and constraints associated with the sites 1-4 and 5-6, including assessment of concept plan 'fit' (overlay). Comparison of notes from early parts of MCA process identifies a number that are at odds with notes made in latter parts of the MCA process.
- Review of the suitability of the site selection with respect to the changes in both scope and scale of the development (65Ha in PGF to 177Ha today) and the resultant increase in impacts on the local community, local industry, and wider area as a whole. Due to (but not limited to) increased land acquisition, boundary changes and mitigation measures, road closures, loss of available land for

individual industry development, lifestyle, residential/urban growth, and road user safety plus local residents directly (in the designation area) and indirectly impacted (those nearby).

- Review the priority/weighting given to the proximity of the Airport in site selection/MCA decisions, and justification given as to why this was allocated this level importance. Please provide evidence of significant volumes of air/rail freight movements currently and expected significant increases in these levels to support this weighting.
- Review of the rational of the site MCA selection process criteria and weightings based on; the increase in size of the operation and level of impacts (short and long term) on the Bunnythorpe, Whakarongo community including availability of land for residential and industrial development, and the parameter/criteria and weighting changes made in the later stages of the process that significantly altered outcomes based on preliminary results, with a view to review the Western side of the Longburn rail line location (Option 6) near the designated industrial inland port area, with direct links to No.1 line and SH 56. Consideration be given to advantages immediately offered by this site:
 - reduced construction costs and land disturbance due it's flat contour, reducing the demand on 'fill' required for the site,
 - the immediate increased connectivity through access to No. 1 line and SH 56, use of existing 'inland port' facilities in the Longburn Industrial Zone, increased safety and reduced costs using these existing main road freight routes,
 - zone provides room for expansion to the West for additional freight forwarding warehouses, including mitigation/elimination of existing; conflicts with utilities such as electrical, gas, PNCC bores, and road connectivity issues,
 - mitigation of; contamination/pollution of groundwater (PNCC bore), and risk of residential flooding downstream from the site due to release of water from the settlement ponds.

If the above review is not sought, please provide full justification and rational behind the decision, and means of mitigation, resolution and recompense that will be put in place to remedy the physical, mental and environment harm and financial hardship as a result of KiwiRails proposals and PNCC decisions.

If current site to remain as is and no review sought consideration to be given to the following requests:

- Planning/Strategic/Vison
- Design and Construction
- Rail Design and Operational Issues
- Lighting Design

- Transport - Impacts on the Road Network Freight Ring Road
- Noise and Vibration - Accoustic
- Landscape and Visual
- Storm water flooding
- Contaminated Land – Geotech – RMA2
- Social Impacts
- Economic Impacts

2. Planning/Strategic/Vision

- Independent review of suitability of site with reference to the impact of future city urban/residential, industrial and recreational developments - considering availability of land for future developments (ie: not flood prone, or hill based) using growth patterns based on recent data (Whakarongo towards Bunnythorpe and Ashurst), and consolidating industry further out from the city limits and environs.
- Review of suitability of the site based on the aerial visual/landscape impact (on the main flight path) that the location of this site will have on visitors to the Manawatu, including the 'character' of the city in terms of how we wish to be viewed e.g. as a green/recreational city, or an industrial/rail hub.
- Review of economic/transport impacts based on the existing rail land either not being released, or released post fully Hub operational ability (2050) and as only suitable for industry.
- Assessment and costing forecast of funding responsibility expectations for relocation of utilities impacted by designation.
- Confirmation of a city and environment planning forecast, based on actual growth data, not preferred options.
- Require a firm future proofed industrial zoning plan, and roading network plans prior to a decision on the designation.
- Review of suitability of the site with respect to its proximity to large urban developments and the risks posed as a result of an industrial accident (and councils liability), vs the site being located outside city limits, although reduced proximity to the city, poses significantly less risk to the population.

3. Design and Construction

- Require an extension be applied to the assessment of any Management Plan/Framework presented to authorities (PNCC, Horizons, RMA authorities). Extension from 20 to 60 working days, to be applied to allow for effective analysis of the data presented, due to the complexity of the design and construction.
- Independent review of site suitability criteria considering but not limited to:
 - Future residential and local industry expansion and
 - effects on community,
 - evidence of site bias, and weighting influence,
 - construction difficulty and conflict with utilities,
 - geology and risks to ground water contamination and monitoring,
 - contamination of residential water supply,
 - connectivity and transport routes.
- PNCC and KiwiRail to facilitate the installation of filters to water tank supplies of residents, to recompense residents for any additional costs incurred through the need to replace filters more frequently, including additional water tank cleaning requirements and replacement of pumps if failure deemed to be due to wear from particulate ingestion.

4. Rail Design and Operational Issues

- Request that PNCC ensure KiwiRail include the use of noise/vibration buffers, in all track design and construction, including the use of noise reducing couplings on new carriage and engines.
- Request the increased/complete use of electric vehicles within the rail hub area at all times of operation, or at minimum during night operations.
- Noise limits for an industrial site, as detailed in the PNCC District Plan (May 2018), to be the maximum allowable within the hub, with a view to reducing below these levels wherever possible, rural limits to be applied outside the designation footprint.

5. Lighting Design

- Prior to a decision on the designation NOR request that a review/assessment of the potential for the rail low level and track lighting to cause an incident due to aircraft pilots mis-identifying the rail lighting as the PN airport lighting in poor weather conditions or when the airfield is unattended during night operations/diversions. (nil lights).

- Require all lighting to be assessed with reference to aviation risk, including the impacts on Navigation System inputs, to be completed prior to a decision on land designation.

6. Transport - Impacts on the Road Network Freight Ring Road

- Request that any land designation or preliminary construction is delayed until the freight ring road location is fully designed and funding confirmed and ideally with preliminary road construction underway. Also any proposed Bunnythorpe by-pass/overpass and other roading improvements in the area (including weight limited bridges, widening and inclusion of bike lanes etc.) have been either completed or significantly upgraded to improve safety of users and to cope with additional heavy traffic demands both during RFH construction and following operational activities.
- In consultation with NZTA, Horizons, PNCC carry out a review and report on the Ring road priority, funding availability, route proposal and its suitability for connectivity with proposed freight, impacts on local roads and route both through and around the City to all route (N, S, E, W), to provide an updated timeline for Ring Road based on current economic climate, available funding and national priority prior to committing to rail hub in present location.
- Review of the impacts on local roads and proposed 'diversion' route both through and around the City to all route (N, S, E, W), to ascertain the probable deterioration due to the increase in heavy freight over a prolonged period, and cost analysis for repair to ensure road user safety – assuming PNCC 10yr Strategic Plan road upgrades are not completed with the construction timeline (+6yr).
- Due to the lack of confirmed schedule or plan for roading upgrades/traffic patterns, request a review of impact assessments of road routes, based on feedback from road freight distributors and businesses located in NEIZ and Tremain Ave, Airport Drive and Kelvin Grove locations, with regards the potential actual movement – changes to routes of heavy freight traffic - that is north bound from Hub and NEIZ, west, east and south bound Hub and NEIZ traffic, the potential affects on road user safety, commuters, cyclists, and pedestrian. Review to include an assessment of the suitability of those roads for this type of traffic short and long term. Review to also include a wider area – distance travelled - than currently considered in the immediate area around the NEIZ and proposed Hub, examining the links to outer roads.
- Review and report on likely traffic congestion and safety issues likely to be encountered as a result traffic diverted onto Kairanga-Bunnythorpe and Stoney Creek Roads to the intersection in Bunnythorpe **with no realignment, upgrade mitigation**, closure of Railway Road and no Perimeter Road as suggested by KiwiRail design and construction. To include safety concerns, with regards to level crossings, and other road users pedestrian and cyclist (in particular children walking/cycling to school).

7. Noise and Vibration – Acoustic

- PNCC to mandate that 'resilient' track forms are to be used in the hub footprint (NOR 9.4.3) that is construction/design of all tracks to include noise/vibration buffer/dampers are to be installed for all tracks within the hub, including any new or realigned tracks as a result of the construction of the hub. All new carriages/engines to be fitted with dampening couplers, and all carriage engines to be retro fitted with the same following refurbishment or servicing activities. All Engines/vehicles to be used for shunting, carriage movement within the Hub to be fitted with the same.
- Prior to decision on designation/NOR additional noise baseline measurements to be taken at various cardinal points 500m, 1000m, 1500m and 2000 from the proposed designation boundary to create a base line for future monitoring. This is to account for the effects of prevailing winds on acoustics, as this was not factored in at the time of assessment. Measurement period to be no less than 30 days. Largely to more populated areas such as Bunnythorpe environs, Te Ngaio Road, Clevely Line, Parrs road, Stoney Creek road, Tutaki road, Orakei Road, Roberts line. Should the experts be convinced the outcome is adequate, then it is anticipated there should be little resistance to doing this (low cost). Further work may highlight a high number of houses that will be impacted and may require modifying, which would be beneficial to know in advance of any land designation.
- Noise limits as per District Plan (May 2018) in force at the time of Acoustic assessment stated, to be used construction/operational noise limits. Limits for NEIZ to be applied within the Hub designation, and limits for rural zone to be applied outside the designation. Any exceedances to be addressed and remedied as soon as practicable. Such as required mitigation for residents such as noise insulation mitigation and ventilation options for the summer months at nil cost to the resident.
- Ongoing noise/vibration complaints to be reviewed (at minimum) 6 months periods with findings and follow-up actions to be advised to the complainant within that period and PNCC/Horizons to be advised of all complaints/actions for on-going monitoring and assessment. Mitigation measures to be actioned as soon as practicable.
- As the proposed Hub hours of operation are 24/7, if this site is selected, then significant noise limitations should be imposed between certain hours and for certain periods, similar in approach to mitigation as per the airport, limit high noise 'creating' activities to the hours of daylight, loading, unloading logs, container movement to daylight hours. Mandate noise reduction activities such as: electric vehicles to be used for all movements in the yard including cargo, freight loading unloading and container movement (this will also be in keeping with PNCC goal to reduce its carbon footprint). All diesel engine operation on site to be kept at a minimum (inwards and outwards bound freight only), both to reduce noise and emissions. International studies should also be referred to for mitigation measures.

- Ongoing vibration monitoring and actions to be in place, and remedial actions/or constraints applied when certain levels are consistently breached, in particular if attributable to certain activities e.g. container, log movement, shunting and/or vehicle movements, maintenance activities.
- Independent investigation to be carried out into **health issues related to noise and vibration**, such as loss of sleep, fatigue, anxiety (depression), behavioural and learning issues, to enable a better understanding of the effects of the hub location on the community. Results to be submitted to PNCC and made publically available prior to designation decision. Results to be considered with respect to the suitability of this site for a rail hub, in conjunction with mitigation requirements. To include research into meaningful mitigation, with proposals suggested, such as noise restrictions, retrofitting double/triple glazing, sound proofing/insulation of homes, support for medical/health, behavioural or learning issues associated with the hub.
- Mandate that all Acoustic report (Tech. Report B and s92 Responses) recommendations are implemented as a minimum.

8. Landscape and Visual

- PNCC and the Manawatu District Council to re-evaluate the suitability of this site for the Rail hub, considering the adverse impacts on the reputation of the city and effects on tourism vs the benefits of this site as opposed to one further from the 'gateway' to the city. Consideration to be given to site selection further away from the city environs. See also comments in Planning section.

9. Storm water / Flooding

Require independent investigation and report into;

- Investigation and report into the effects/risks of accumulated sediment contaminants and run-off contaminates likely to be found in the Hub settlement ponds, including assessment of risk posed to wild life in contact with these ponds.
- Investigation and report into the risk/effects of an accumulate of contaminates in pond sediments with respect to ground water, including risks posed due to a flooding event and potentially contaminated pond sediment being discharged downstream, including risks to water supplies.
- Review of storm water run-off and contamination assessment based on an unsealed area no less than 50% of the site. To be assessed with reference to contaminants likely to found onsite during construction/operational activities.

- Investigation and report into the effects/risks of ground water contamination as a result of construction and operational activities. To be assessed with reference to contaminants likely to found onsite during construction/operational activities, and the potential health effects as a result of contaminated supply.
- Investigate the likelihood of downstream flooding of residential areas as a result of discharge, controlled or uncontrolled, from the site, and remediation proposals. The ability of the Mangone Stream existing stop banks and city stormwater capacity to cope with a flood event downstream, and identify potential risks to residential areas that boundary it's banks. Identify mitigation measures and means to recompense affected residents.
- Require additional investigation/analysis carried out as to the impacts of the additional storm-water runoff from the 170 hectare site, including effects of the changed geology (drainage/pooling) due to the significant use of fill (45% of site), including assessment of: the effects on the contaminant and sediment levels in the settling ponds.
- Reassessment of suitability of designation based on risk assessment of contaminated city water supply and downstream residential properties. Review of these reports and risk assessment carried out as to the suitability of mitigation and whether mitigation/controls are suitable.

10. Contaminated Land – Geotech

- Request a complete review of groundwater contamination and risk analysis, short term and long term effects, including factors such as construction/earthmoving activities, flooding, settlement pond sediments and contaminant in addition to known and expected rail freight yard contaminants. (see KR report on freight types and economic report on contaminated land including identified rail yard/maintenance activities). Refer also to request in Storm water/Flooding.
- PNCC and KiwiRail to provide for free biannual testing of private bore water in the area, facilitate and fund the installation of first flush diverters and filters to water tank supplies of residents, provide recompense to residents for any additional costs incurred through the need to replace filters more frequently, including additional water tank cleaning requirements and replacement of pumps if failure deemed to be due to wear from particulate ingestion.

11. Social Impacts

- An independent review is carried out into the effects of the hub on the community, individuals and family groups as a result of, but not limited to; displacement/forced relocation, financial issues, prolonged uncertainty and stress, including effects of prolonged (constant) exposure to noise and

vibration. An independent investigation, review/report and risk analysis is carried out into the potential effects of this development on the community as a whole, and specifically including analysis of the adverse effects on individuals and family groups physical and mental health, relationships, learning and personal wellbeing that may result. Including but not limited to; stress/anxiety or depression mood and behavioural changes related to displacement/forced relocation, financial issues, prolonged uncertainty and stress, and including analysis of the effects of prolonged (constant) exposure to noise and vibration on the individual.

- Following this, an assessment should be made as to the suitability/viability of this site against a site further out with significantly less people around the negative effects identified which constitute a real risk to the community's health and well-being.
- These issues should be addressed in a follow-up review and practical assistance methods proposed, including consideration given to the provision of additional funding to cover legal expenses, real estate costs, loss of income, moving/relocation, school uniform, travel expenses, bond payments etc. Not limited to those defined as 'immediately' impacted (through relocation) but to include any resident in the wider community who can show negative effects as a result of the development.

12. Economic Impacts

- Analysis of the effects on property values as a result of the hub and propose means of recompense from either KiwiRail or PNCC, for property owners who may experience financial loss as a result of this development.
- Review and report on actual figures relating to job opportunities, how many of these are **new** long term employment opportunities, and how many of the quoted 2000 include existing positions that will be transferred to the site as a result of relocation of operational/administrative activities, does this figure include predicted numbers employed by a freight/distributor using onsite facilities.
- Review of economic proposal considerations to include the non-availability of Rail land due to non-release, contamination, and effects on business on Tremain Ave through loss of connectivity with rail services at current site, and PNCC plans for land use.
- Review on the impact on the local business economy due to lack of available industrial land for use by local industry and recreational use due to the extent and location of the designation.
- Require a cost analysis/breakdown of how PNCC/Govt/NZTA intends to fund the additional costs associated with the removal/relocation of utilities, the existing and additional roading and intersection up grades requirements to ensure safety of users, prior to the hub becoming initially

operational (within 6-10 years). To include alternatives to rate increases, such as applying for government funding to support this government supported initiative.

- Priority to be given to affected roading networks as a result of the designation, in preference to cosmetic improvements in the inner city.