PLIMMERTON FARM - PLAN CHANGE PROPOSAL

Supporting Documentation



View from Submitters Property

Karla and Trevor Beamsley 24 Motuhara Road Plimmerton

1. INTRODUCTION

The village of Plimmerton is a northern suburb of Porirua, and is surrounded to the North and East by farmland. It represents the edge of existing residential dwellings. Generally existing homes are stand-alone dwellings on lots greater than $500m^2$ in size. Most residents within Plimmerton and Camborne either commute into Wellington city or work from home. The demand for housing in this area is from professional couples or families looking for 3-4 bedroom family homes on a section with space for kids to run around in, not medium or high density three-storey buildings and apartments, this is reflected in the TPG report to PCC (Dec 2019). Medium density style townhouses, or apartments would be totally out of character of the surrounding residential areas, and would present a stark contrast to the remaining rural areas which bound the site.

The Plimmerton Farm site is not located close to areas of high employment, nor is it close to local amenities like the main shopping areas of Porirua. The site is also not located within an area currently supported by existing infrastructure. Much of the infrastructure in the area is aging, and requires repair or upgrade to support existing demands. Therefore, the idea that Plimmerton Farm would provide homes in a location close to employment, amenities and infrastructure¹ is simply incorrect in terms of a 10-year time frame. Areas where this would be true include the currently developing areas of Aotea, Whitby, Kenepuru, and Porirua East. Aotea and Kenepuru are suburbs that border the CBD of Porirua and would represent an ideal spot for more intensive development.

The proposal also does not meet the visions or objectives set out in the Structure Plan in 2014. This plan highlighted that even standard density residential development in this area would pose a significant risk to the environment and traffic outcomes and stated the area from Plimmerton to Pukerua Bay could support around 1800 households.

The Council's own commissioned report² outlined that medium density development within the outer suburbs of Porirua is "challenging". This proposed housing typology not only doesn't fit with the established surrounding suburbs, the landscape within the Plimmerton Farm zone, or the location within the greater Wellington area, this report² concludes that it would be uneconomical without developers accepting a significantly reduced profit margin and added that demand for this style of home in this area is low. Furthermore, the Councils' Growth Strategy gives a principal of a compact and livable city (not urban sprawl into rural areas) and The Property Group (Attachment 15) found Plimmerton had limited development potential, within the flatter areas.

With more than 80% of the area steeper than 1 in 5, Councils own reports confirm this site does **not** lend itself to high value, medium density residential development, where developers would make a good margin. The resulting development on this site is highly likely to be low cost, high rise dwellings with very little private outdoor space to maximise developer margins.

The outdoor space proposed within the Plan Change documents is below what is acceptable in inner city Wellington suburbs³, and is therefore not appropriate in an area well out of the city centre, and bordering a rural landscape.

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¹ Introduction - The purpose of the Plimmerton Farm Zone

² Attachment 16

³ 35m² within a 3m circle vs the proposed 30m² (no dimensional limits)

The existing site provides a high value rural outlook with rolling farmland leading up to a ridgeline which provides a high degree of landscape amenity for the properties on Mo Street, Ulric Street, Motuhara Road, The Track and Collett Road.

With almost half the site having slopes greater than 45° significant earthworks will be required to create the high-density housing proposed, along with the roading network. The visual assessment of this work neglects the impacts of all the existing houses along Motuhara Road, Corlett Road and The Track. The ecological assessment suggests wetlands destroyed during construction can simply be offset through new constructed wetlands. The value of a wetland is intrinsic and cannot simply be re-created.

With more than 80% of the area steeper than 1 in 5 the quantity of earthworks required to develop the site as indicated within the Precinct Plans would be hundreds of thousands of cubic meters. The efforts to address this within the application are not given sufficient weight, or addressed in any manner which would provide confidence in the ability of the proposal to mitigate the significant effects of these earthworks.

Across the various reports presented as part of this plan change there are also numerous inconsistencies with regards to intensity of development, size of lots, extents of development and style of homes.

For example, within the Urban Design Report Precinct B shows modern two-storey homes, surrounded by significant bush or rural land areas. However, on the following pages, the illustrated yield shows tiny duplex houses measuring 5 x 10m or stand-alone dwellings measuring 6 x 9m with no provision for alternative modes of transport and contours which indicate significant earthworks being undertaken.

I make this submission as an affected party, landowner/resident of 24 Motuhara Road and Chartered Professional Engineer with 16-years' experience in Land Development, Earthworks and Sediment Controls. I have used this experience to review the plan change documentation provided and provide this submission.

I submit to oppose the plan change on the basis of the following significant effects;

- risks to existing sensitive downstream environments,
- Visual and landscape impacts
- loss of rural character
- loss of Plimmerton village character
- increased traffic around Plimmerton village
- effects due to the lack of capacity within existing 3-waters infrastructure to service the site
- no assessment of alternative options are outlined within the infrastructure report
- effects due to the lack of capacity within local roads and schools to accommodate residents before local shopping areas and schools are developed.
- No proposed pre-treatment of stormwater, or even removal of gross pollutants prior to filling a natural wetland with urban runoff.
- erosion, scour and landslide risks on steep landforms, even current best practise fails to provide sufficient protection to sensitive downstream environments
- wide roadways along ridgelines, having large visual impacts, and creating a high-speed traffic environment no conducive to alternative modes of transportation.

2. TRANSPORT

In general, the road typologies proposed are wide, and would promote a high-speed environment. The looping of roads creates unnecessary impacts within Precinct C where there is great potential for erosion, scour and landslides due to the steeper grades within this area.

TR_{PFZ}P2

Road type 3 does not provide for a shared pathway, the street tree represents a visual barrier making crossing the street more dangerous.

2.1 Attachment 7 - Traffic Assessment

The Stantec traffic report provides an assessment of traffic effects at ultimate development, but doesn't consider the impacts during the 15+ year development of the site. For example, the suburb of Aotea started in 2005, and the supermarket was opened 12 years later in 2017 and a school within Aotea is still not planned. A similar trend could be expected for Plimmerton Farm, where the development would need to progress to a certain level before "demand" would drive the creation of shops, a supermarket and school. The traffic impacts associated with this lag in development need to be addressed.

The assumption around internal trips (within the development to schools and shops) therefore likely underestimates the actual number of vehicle movements out of the site in the first 15+ years of the development. Similarly, the use of Camborne vehicle movements as a guideline is not appropriate, as Camborne is solely low density residential development, and would therefore underestimate the traffic movements from the proposed medium to high density residential development within the initial stages of Plimmerton Farm.

There is a forecast 22,000 daily traffic movements associated with the site. The opening of TG predicts a decrease in traffic on Mana Esplanade of 12,000 VPD. The development of the farm site will therefore increase traffic on Mana Esplanade by 38% on current flows (post-TG opening) and exceed the existing flows on SH1 between St Andrews Road and Pukerua Bay by 5,000 VPD. Why are these expected flows so high, and what measures are being implemented to reduce these numbers?

Plimmerton Farm Site	22,000 vpd
Existing Mana Esplanade	26,000 vpd
Estimated Mana Esplanade post TG opening	14,000 vpd
Estimated Mana Esplanade + Farm Site	36,000 vpd
SH1 St Andrews Road	23,000 vpd
Estimated SH1 St Andrews Road	6,000 vpd
Estimated St Andrews + Farm	28,000 vpd

Plimmerton School currently has over 500 students. It could reasonably be expected that pressure on this school, and the nearby St Theresa's would only grow until pressure on the Ministry would result in a new school being developed within the Plimmerton Farms site. Therefore, traffic impacts relating to school drop offs within Plimmerton Village should also be considered.

Traffic impacts should align with the likely development of the area, and assume for the first years residents would make use of Plimmerton Village and Mana shops before demand requires a commercial shopping precinct to be constructed within the Plimmerton Farm zone.

There is no consideration of flows on James Street and the effects on St Theresa's school, or the effects of flooding on vehicle movements, as the James Street roundabout frequently floods. Whilst there is analysis on the intersection of James Street and St Andrews at the roundabout (via a right hand turn out of the development), there is no analysis of the increase in traffic volumes at the alterative intersection of James Street and St Andrews Street, adjacent to the school (left hand turn out of the development).

There is no commentary around the anticipated higher flows (22,000) from the Farm site as opposed to the retired SH1 (6,000) and proposals to minimise these flows.

2.2 Links to public transport

Figure 2.2 within the Stantec report doesn't provide a scale, but if a Park and Ride facility was to be provided within the sites south west corner, pedestrians would face at least a 580m walk from this corner of the site to the train platform via the pedestrian overbridge on SH1. The alternative is a 425m walk across an uncontrolled crossing of SH1. Both routes are exposed and alongside a busy road and involve walking across a large roundabout which frequently floods (annually at least). I would therefore disagree with the statement within the report that this is "an efficient and safe commuter walking/cycling route".



Figure 1 distance measurement of proposed Park and Ride to railway station

The proposal provides for a bus route, but there are currently no public bus routes north of the Paremata bridge for any potential bus route to connect to.

2.3 Road alignments

Based on the high scale, low resolution plans included in the Appendices, it appears as though the main roads into "Lifestyle Living" are up ridge lines, maximise the visual impacts of the development. These ridgelines have existing grades on the lower slopes of around 1 in 6, which would suggest earthworks would be required, even on the shallower lower slopes to achieve acceptable road grades.

Existing farm tracks through area C are also steep. In order to get a road and house sites through this area, earthworks in the head of the wetland would be required.

2.4 Construction Traffic

Construction Traffic is under-estimated. Construction traffic would therefore be significantly more than the movement of roading aggregate onto the site. There will be vehicle movements due to the daily arrival of workers onsite throughout the earthworks, roading and services construction and house building phases of work. Some of these activities could be occurring concurrently, adding significantly to the peak traffic numbers. Construction of a single dwelling produces traffic from the builder, roofer, electrician, plumber etc. None of these activities would be covered by a Construction Traffic Management Plan or a Resource Consent.

2.5 Summary

The Plan Change proposal should be declined on the basis that;

- 1. The Traffic assessment does not adequately cover the effects of the first 10 20 years of the development, prior to the establishment of a new school and shopping area.
- 2. The estimate of construction traffic and its effects is dramatically underestimated.
- 3. Links to existing public transport and the railway station as long, exposed and undesirable, and do not promote alternative modes of transporation.
- 4. The road widths and layout do not promote alternative modes of transporation and do not represent current best practise
- 5. The creation of roading alignments within Precinct C will have significant long term visual and erosion effects.

3. STORMWATER

SW_{PFZ}P1 Water Sensitive Design

- 1. Requires all subdivision to incorporate water sensitive design that is in accordance with the WWL Water Sensitive Design Guideline 2019.
 - This guideline covers the design and implementation of constructed wetlands, Bioretention, Swales and Pervious Paving. The stormwater report by The Urban Engineers states that due to the topography of the site, wetlands, swales and pervious paving won't be possible without significant earthworks to reduce grades from 1 in 5 to 1 in 25. This indicates the applicant either plans on solely implementing bioretention, which isn't mentioned at all in the stormwater report, or they are planning of using the existing natural wetlands to achieve this outcome? This question is answered in point 2.
- 2. Retains and uses existing natural systems (i.e. existing wetlands) without exceeding existing capacities (how will this be measured?) so that stormwater is naturally treated. How will the effects of this proposal on the condition of the existing wetland be measured and mitigated? If they propose to use the natural wetlands, does this mean they will be altered to align with the "constructed wetlands" so they can achieve compliance with the WWL Water Sensitive Design Guide? There is no mention in the report of gross pollutant traps to prevent urban rubbish from filling up the natural wetlands.

7. Requires stormwater runoff from Precinct D and from all roads to be treated to remove contaminants prior to discharge

Need to specify what contaminants are being targeted, and what level of treatment is required.

Based on the Stormwater report (attachment 6) - soakage solutions won't work, wetlands, raingardens and permeable pavements won't work, swales won't work. This leaves rain tanks. I would therefore disagree with the comment in the report that the "site lends itself to water sensitive design" when there are few opportunities for water sensitive urban design which don't include the utilisation and ultimate degradation of existing native wetlands.

No consideration has been given to innovative road typologies to incorporate sensitive urban design or reuse of rainwater onsite, such as that required in Kāpiti to reduce water demands and stormwater discharge volumes.

The Stormwater report suggests a key design objective is the protection of headwater streams, however the infrastructure report shows a potential road that cuts across several headwater streams within the main wetland catchment.

The report also mentions using low lying land as detention storage, how deep was the storage area and what are the health and safety risks associated with having such storage, so close to a commercial area and road?

3.1 Summary

The Plan Change proposal should be declined on the basis that;

- 1. The proposal has presented the site as having few opportunities to implement sensitive urban design concepts
- 2. The proposal seeks to utilise natural wetland for urban stormwater treatment, without regard to the ecological effects of this.
- 3. The sensitive downstream environment requires an innovative, water sensitive urban design approach which treats stormwater at source to reduce downstream impacts.

4. ECOLOGY

We submit against the clearance of any vegetation within a SNA for the development of any earthworks, roading or infrastructure. Biodiversity offsetting should be used as a last resort tool to mitigate the effects of an activity.

ECO_{PFZ}-O3 - Ecological Function

The proposal to utilise the existing wetlands as stormwater management devices is at odds with this objective. The increased runoff, including gross pollutants, silt, and contaminants will degrade the existing health of the natural wetlands on the site.

ECO_{PFZ}-P2 - Subdivision within Significant Natural Areas

We do not support subdivision and development of land for housing or infrastructure within SNA's.

To ensure the hierarchy of **ECOPFZ-P1** is applied consistently the following changes are proposed.

- 4. Replace Limit with Avoid
- 5. Remove and replace with Building platforms and vehicle accessways shall not be located within Significant Natural Areas
- 6. Replace Minimise with Avoid
- 7. Replace Minimise with Avoid

ECO_{PFZ}-P4 - Public Roads within Significant Natural Areas

PCC need to demonstrate how the proposed road typologies would be able to comply with ECO_{PFZ}-P1, it is possible to avoid significant adverse effects when you're building a road through a SNA or would it immediately revert to remedy and mitigate and the natural value of the SNA will be diminished.

The minimum road width is 11.7m. The SNA on the site has an average grade of 1 in 5. In order to get a road of this width on this slope would result in a minimum disturbed width of almost 21m to allow for plantable batter slopes of 50%.

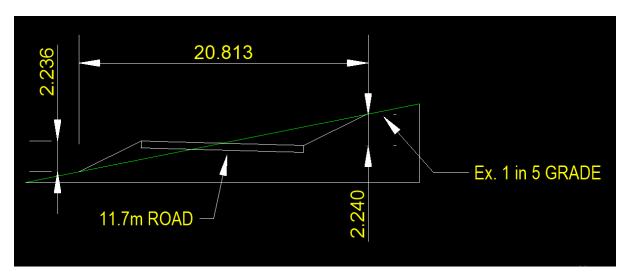


Figure 2 Scale diagram showing an 11.7m road cut into a 1 in 5 slope and the resulting affected area.

Additionally, within the SNA, along the road alignment depicted on the infrastructure plans, grades can reach up to 1 in 2 (or 50%), which would disturb a far greater area, and mean either steeper batter slopes that won't hold topsoil or plants and be more susceptible to scour, or large scale earthworks at the headwaters of the wetland to regrade the natural slopes and potentially alter the highly visible ridgeline. In addition to this, the geotechnical report classed this area as Area D - an area of active, larger scale slope instability.

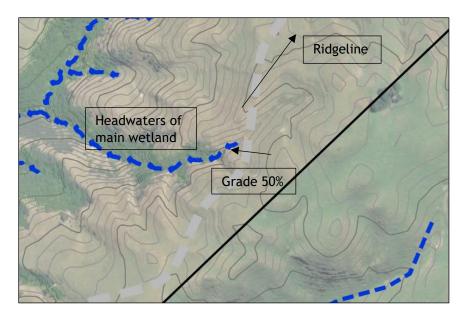


Figure 3 Annotated Screen grab from Attachment 13 drawing OA-930

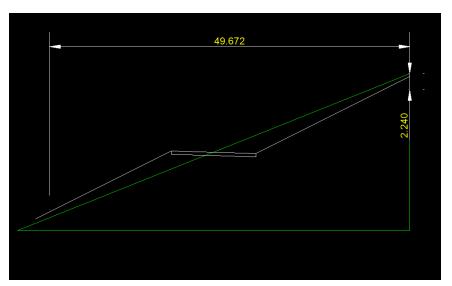


Figure 4 A cross-section through the area in Figure 3, with the resulting affected area.

ECO_{PFZ}-P5 - Subdivision within Biodiversity Offsetting and Restoration Areas

The following changes are proposed.

1. Replace Provide opportunities for with implements

ECO_{PFZ}-R1 Vegetation within a Significant Natural Area

There is an element of reverse sensitivity in this rule. People and property shall not be located in a SNA where there is a risk of piecemeal vegetation removal which overtime results in the SNA losing its significance.

The following changes are proposed:

- 1. a.
 - i. People and property shall not be located in areas where indigenous vegetation may present a hazard.
 - ii. No change proposed
 - iii. Formed public roads shall not be located in areas where indigenous vegetation may present a hazard.
 - iv. and v delete. Amended IP2 5 states accessways and building platforms shall not be in SNA

ECOPFZ-R2 Vegetation within a Significant Natural Area

We do not support the placement of infrastructure or renewable electricity generation activities within a significant natural area, including buildings and accessways and don't see how this rule can meet the objectives set of protecting these areas from development.

ECO_{PFZ}- Appendix 1

The area identified as Precinct C shall be included due to the visual impacts of development in having roads up to this area, the dominance of buildings on the hilltops and ridgelines.

5.1 Summary

The Plan Change proposal should be declined on the basis that;

- 1. The proposal seeks to utilise natural wetland for sediment removal and urban stormwater runoff which will have a significant impact on the wetland both on the site, and adjacent to the site
- 2. The proposal seeks to carve roads through the heads of catchments on steep and potentially unstable land, disturbing around 50m either side, with large cut batters.
- 3. The propose seeks to utilise biodiversity offset areas for housing
- 4. The proposal is to "re-establish" wetlands following construction.
- 5. There is insufficient detail and evidence to demonstrate the impacts of the proposal avoid adverse effects on Taupo swamp and Taupo Stream.

5. EARTHWORKS, EROSION AND SEDIMENT CONTROL

Given the scale of earthworks required to achieve the proposed development, the onsite soils and the highly sensitive downstream environment, Attachment 11 is very light on detail and largely repeats the infrastructure report (Attachment 13). This report does not provide any detail on how the proposed measures could or would be implemented.

This report does not demonstrate how an earthworks balance onsite would be achieved without significant infilling of gullies, and clean filling of unsuitable fill material. Furthermore this report fails to provide an indication as to what volumes of earthworks would be required to create the proposed road network and building platforms. Based on my knowledge and experience I would estimate many hundreds of thousands of cubic metres of material.

Current best practise is quoted as being the Greater Wellington Regional Council, Erosion and Sediment Control Guidelines. This guideline was published in 2002 report, and no longer represents currently accepted best practise.

Based on the recent number of failures on the Transmission Gully project⁴, even current best practise is not sufficient to protect downstream environments from sediment build up.

Given the volumes of earthworks required and the sensitive downstream environment a sediment model should be created for the planned earthworks, similar to that undertaken by TG to determine how long it would take the environment to return to post development sediment levels so the effects of this proposal can be fully understood.

EW_{PFZ}-P1

The following changes are proposed:

- k. Replace with install contour drains to divert clean water away from worked areas
- l. Replace with Sediment retention ponds are to be sized at a minimum of 4.5% of the contributing catchment. All other design requirements for sediment retention ponds much remain compliant with the guidelines and current best practise.
- n. Replace 1.5Ha with 1.0Ha.

As outlined in the comments around ECO_{PFZ} -P4 - Public Roads within Significant Natural Areas above. We have big concerns over mass earthworks to create the road alignments within Precinct C and the effects on the Special Amenity Landscape, there is a risk of removing ridgelines and the filling of headwaters to the wetlands.

EW_{PFZ}- P3 should therefore also include road construction, P4 should be deleted.

The following changes are also proposed;

- 1. Remove the words "characteristics and landscape" so that all values can be protected, including visual, cultural, ecological, amenity etc.
- 2. a. Remove the word "landscape"

EW_{PFZ}- S5 - S7 we do not support development within Precinct C.

EW_{PFZ-} S8 and S9 - A 35° cannot support vegetation growth without an artificial growing medium pinned to the surface. In addition to this, the geotechnical report states shallow soil failure could occur anywhere the slope profiles are greater than 32°.

The following change is proposed to reflect the recommendations in Attachment 12;

1. Replace 35° with 32° and support with growing medium to allow cut batters to be planted.

6.1 Summary

The Plan Change proposal should be declined on the basis that;

1. There is insufficient detail on the proposed earthworks to determine if the measures proposed will successfully mitigate the downstream impacts.

⁴ http://www.sharechat.co.nz/article/2809b89f/environmental-concerns-prompt-tighter-transmission-gully-controls.html

- 2. The proposed additions in volume for sediment control features represents current practise and therefore does not fully mitigate the hazard from this steep site and the sensitive receiving environment.
- 3. The proposal ignores the recommendations within the geotechnical report in terms of stable cut batters and instable land areas.
- 4. The proposal only provides for baffles and flocculation in large catchment areas and makes no mentions of active management of ponds to optimise performance.

6. INFRASTRUCTURE REPORT - GENERAL COMMENTS

Very little detail in this report, lots of "kicking the can down the road" with very little resolution of ideas presented, and if they are indeed possible to implement.

7.1 Earthworks

The wording around earthworks within Significant Natural Areas changes from being avoided to being minimised within the report. It should be excluded, not just avoided/minimised.

Cut batters steeper than 1 in 2 should be covered in geotextile matting to assist in the stabilisation and re-vegetation of slopes. Cut batters greater than 1 in 1.5 shall be avoided and retaining walls up to 2m in height used as an alternative.

The Principals of Erosion and Sediment Control should include;

- Minimisation of areas disturbed
- Protection of steep slopes
- Protection of sensitive areas
- Inspect controls and evolve as required.

The GWRC guideline referenced was released in 2002 and does not represent currently accepted best practise. Current best practise is a minimum of 3.7% of the catchment area be used as a volume of sediment ponds, and all ponds treating areas larger than 1 Ha should have baffles and flocculation treatment to increase sediment removal.

Earthworked surfaces shall be sloped away from steep batter faces, and bunded to prevent flows and scour down these faces.

Secondary Protections shall use "Super Silt Fences" as defined by the GWRC Guidelines. Best practise no longer uses standard Silt Fences.

The report is silent on;

- the isolation of flows prior to them entering the earthworked area, i.e. cleanwater diversion.
- Sediment controls during dwelling construction (excavations for foundations, retaining walls etc)
- Monitoring requirements to ensure measures are meeting expectations; what will be measured, how, when and by whom? Discharge requirements from ponds and enforcement action taken if measures fail.
- Additional measures to be employed for earthworks in SNA's (if not being eliminated)

7.2 Wastewater

The proposed creation of a pump station and wastewater storage tank creates a management and maintenance liability for Council. The costs of this shall fall to the properties who utilise this asset by way of a targeted rate, so other rate payers don't bear the additional costs of these assets.

Consideration should be given on the risks around the potential for wastewater to leak or overflow into the nearby wetland and into the downstream catchments, and swimming beaches. Particular regard should be given for the wastewater tank and pump station located in Precinct D where the soils were identified in the geotechnical report as having a high potential for settlement.

We do not support to location of above ground wastewater pump stations within the highly visual hilltop areas.

7.3 Stormwater and Water Supply

Very little detail is provided in this section about the infrastructure proposed.

We do not support the location of above ground reservoirs within the highly visual hilltop areas.

7.4 Summary

The Plan Change proposal should be declined on the basis that;

- 1. The site is currently not serviced and requires significant investment in new infrastructure, including wastewater storage tanks in areas with high potential for settlement and water reservoirs in SNA's.
- 2. New infrastructure generates a significant cost to Council in terms of management and maintenance of the asset, which places a higher burden on existing rate payers.
- 3. Current infrastructure in the area is failing, with frequent beach closures due to wastewater overflows.

7. ECONOMIC CONCERNS

The Economic Assessment provided an assumption that if Plimmerton Farm was not developed, no new developments would occur⁵ is flawed. As the alignment of Transmission Gully opens up existing rural land, to the main transportation link of State Highway 1, including around the link roads at Waitangirua and Whitby, both of which are in active stages of development with Silverbrook, Silverwood and the government redevelopment of Porirua East. The Whitby developments in particular are actively being provided for within infrastructure currently being built.

Additionally, when we purchased our home in 2008 the property had outstanding views over both Mana Island and the rural landscape. A year later we're informed of Councils proposal to fill up our unique view with construction zones to create three storey high medium density developments. We are therefore concerned about our loss of visual amenity, the ongoing effects of construction activity and open earthworks areas, and the impacts on our property desirability.

⁵ Section 4.1, Attachment 1

8. ASSESSMENT AGAINST NORTHERN GROWTH STRUCTURE PLAN

- 1. The Northern Growth Area Structure Plan (the plan) concluded the area from Camborne to Pukerua Bay on both the western and eastern sides of the existing SH1 could support 1800 households in residential and rural residential enclaves, with a village centre. It was concluded that at this density the ecological and landscape values of Taupo swamp, wetlands and inlet would be protected.
 - The proposal seeks to create 2000 households within approximately 25% of this area.
- 2. The plan specified steeper areas are not suitable for residential development and suit larger lot rural residential development.
 - The proposal seeks to create roads and dwellings across land on grades of around 50%.
- 3. The plan outlined the specific characteristics of the landscape suggest an urban form of discrete pockets of development of varying densities separated by open space, rather than total coverage of houses across the whole area.
 - The proposal seeks to create medium density residential development across most of the lower slopes and across large portions of the upper slopes within the Farm area.
- 4. The movement of people through the area ties into the opening of the Transmission Gully Motorway when new road connections can be made to the current highway. Access to the passenger rail system needs connections and park and ride facilities enhanced.
 - The proposal seeks to create a Park and Ride facility but does not propose any upgrades to the connections from this facility to the rail system

The development proposals outlined in the Structure Plan are significantly different to those proposed in the Plimmerton Farm Plan Change and do not represent a development which could have been reasonably expected when the Structure Plan was published.

9. CONCLUSION

We submit that the proposal as presented as numerous inconsistencies in the information presented and large information gaps in areas of huge concern including but not limited to;

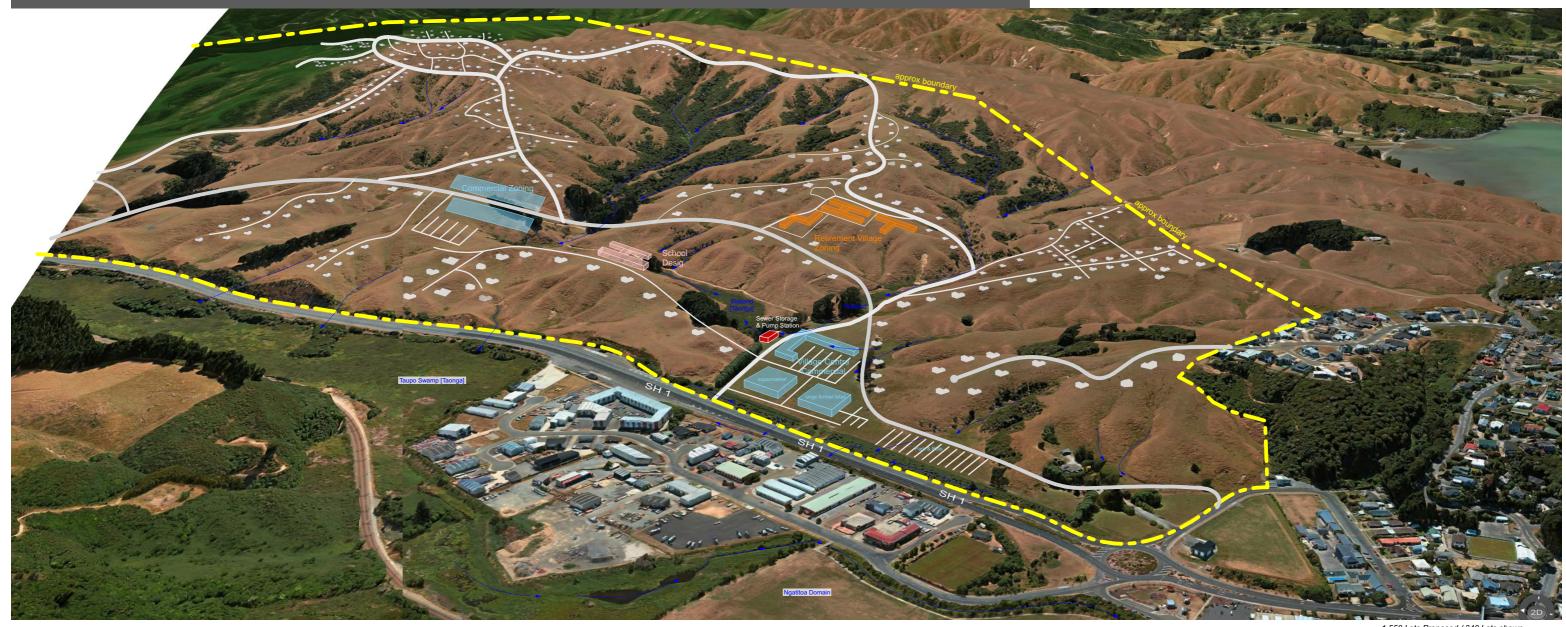
- Evidence to support claims of sediment controls being proposed are better the current best practise
- Evidence to support claims the effects on the sensitive downstream environments can be adequately mitigated by re-creating natural wetlands.
- Visual impacts on existing residential homes along Motuhara Road, Corlett Road and The Track on both the short term (during construction) and long term effects.
- Evidence to demonstrate demand for medium density housing in this area
- Traffic assessment for the first 10 15 years of the development, prior to the establishment of a new school and shopping area.
- An independent assessment on the utilisation of natural wetlands to treat urban runoff and the effects on the natural wetland.
- An independent cost benefit analysis on the suitability of wastewater storage tanks near natural wetland areas, and the risks of pollution of wetlands and nearby swimming beaches during power failures.

We would support a proposal with;

- 1. High quality development in alignment with the 2014 Structure plan, with Precinct A minimised and areas replaced with Precinct B development.
- 2. Development within the Special Amenity Landscape (Precinct C) be deleted, including roads and other infrastructure.
- 3. An assessment of options to consider on-lot water storage for non-potable reuse. To reduce demand for water supply and reduce stormwater runoff volumes into wetlands.
- 4. An assessment of risks vs benefits for the installation of wastewater storage tanks, versus utilising this money to upgrade existing infrastructure.
- 5. Targeted rates to fund management and maintenance of reserves, storage tanks, wetlands within the PFZ

Appendix 1 - Visual Amenity Impact

VISUAL AMENITY IMPACT OF PLIMMERTON FARM PROPOSAL



Plimmerton Farm Masterplan Overlay Scale NTS

The Overlay simulation above is based on Masterplanning documents Attachment 10 Landscape & Visual Assessment provided for the purposes of Public Notification.

- The site overlay is of the partial site only, the northern most boundary is cropped The Plimmerton Farm proposal is for 1,550 house Lots.
- The overlay visualisation shows 340 house Lots far less than the proposed 1,550 Lots.
- Building shape & typology is indicative Conflicting information between Urban Design & Traffic Report with regards to road configuration.

Ecology - Plimmerton Farm existing wetlands & tributary streams

- streams at risk from pollution and run-off from roads









A typical proposal below from the Urban Design Assessment of an indicative road layout for the area noted as Precinct B

The Urban design masterplan is based on flat topography. In order to achieve this proposal at Plimmerton Farm it will involve extensive "flattening/benching" of farm land to create flat building platforms and roads. Potential Impacts:

- Extensive cut & fill earthworks required to build over streams & gullies
 Visual amenity impact of extensive retaining walls and benching
 Significant ridge lines would require cutting resulting in visual impact [suggest] implementing a rule similar to WCC Coastal Escarpment rule with a no build RL



