25 May 2021

Rebecca Perrrett

Acting Manager, Fast-Track Consenting Team

Ministry for the Environment

By email: fasttrackconsenting@mfe.govt.nz

Dear Rebecca

RE: COVID-19 Recovery (Fast-Track Consenting) Act 2020 – Drury Central and Paerata Stations Project – Request for further information

This letter addresses the request for further information (RFI) pursuant to section 22 of the COVID-19 Recovery (Fast-Track Consenting) Act 2020 (FTCA) received on 11 May 2021 in respect of the above referral application. The further information requested is set out below.

Q1. The application refers to realignment of Flanagan Road and construction of a roundabout on Flanagan Road. Please advise whether these works form part of the Project and clarify any additional consenting requirements. If these works do not form part of the Project, please advise whether there is any interdependency of the Project on the roading upgrade.

Works on Flanagan Road will fall within the scope of the Project, and are therefore provided for by the consents identified in the referral application. The works are summarised as follows (see also drawings appended in answer to question 4 of this RFI):

- Under Stage One of the Project, Flanagan Road is proposed to remain in place, with a localised eastward realignment necessitated to accommodate the proposed station platform and entrance buildings;
- In the full build-out, the northern end of Flanagan Road is proposed to be closed to accommodate the future replacement of the Waihoehoe Road bridge (currently the subject of a notified Notice of Requirement (NoR)[1] by Auckland Transport (AT)). Road stopping processes under the Local Government Act 1974 or Public Works Act 1981 may be required to formalise these changes to the layout of Flanagan Road in future;
- Under both stages of the Project, the primary access to the station is proposed via the new accessway from Waihoehoe Road, approximately 150m to the east of the current intersection of Waihoehoe and Flanagan Roads; and

[1] Drury Arterials Network: Jesmond to Waihoehoe West FTN Upgrade NoR. Available: https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/unitary-plan/auckland-unitary-plan-modifications/Pages/details.aspx?UnitaryPlanId=99

- Under both stages of the Project, provision is made to maintain access to the properties at the southern end of Flanagan Road (which are otherwise unaffected by the Project).

For clarity, it is noted that the roundabout described in Part VII of the referral application is proposed at the new station accessway and Waihoehoe Road, and not at the Flanagan Road intersection. In the long term, it is envisaged that this roundabout would ultimately transition to a signalised intersection, as provided for in the notified NoR[2].

Q2. A review of the Auckland Unitary Plan online mapping has identified Private Plan Change 48: Drury Centre Precinct (PPC48), as applying to the application site at Drury. Please comment on the relevance of PPC48 to the Project.

The PPC48 area comprises an area of 95ha to the south of the existing Drury Village, within which a mix of metropolitan centre, mixed use, and open space zones are proposed. The Plan Change applicant, Kiwi Property, owns approximately 52ha of this area. Approximately 6ha of the Drury Central Station Project falls within northernmost portion of the PPC48 area, beyond the applicant's land ownership (see Figure 1).

Figure 1 – Overlay of Drury Central Station design concept onto Kiwi Property masterplan. Note currently understood Kiwi Property ownership in outlined in red, and planned Stage One extent outlined in blue.

[2] Ibid.

The majority of the PPC48 area falls within an 800m radius of the proposed station entrance. Accordingly, there is a clear opportunity to integrate the development to be enabled by PPC48 with the station, and in doing so help to catalyse the mode shift needed for sustainable urbanisation. Given that Kiwi Property plans to stage its development from south-to-north, the integration of land use with the station will be an ongoing, long-term process.

Engagement between KiwiRail, Te Tupu Ngātahi, and Kiwi Property has identified several particular integration opportunities to be explored as both projects advance. These include:

- Provision of northern and southern station entrances in the full station build-out, further consideration of the orientation of these entrances, and their relationship to plaza spaces and the proposed street network;
- Alignment of the 'Drury Boulevard' indicative road identified in PPC48 with the planned station accessway from Waihoehoe Road;
- Alignment of the 'Main Street' indicative road identified in PPC48 with the planned station entrances; and
- Ongoing consideration of the stormwater treatment and flood mitigation approaches of both proposals to maximise integration.

Q3. Please advise whether the regional consents being sought relate to the stage one works only or are also for the future development anticipated under stage two.

Resource consents (both regional consents under the relevant provisions of the AUP:OP, and NES consents) are being sought to allow for the full build-out of the Projects, of which Stage One is a significant subset (see drawings appended in answer to question 4 of this RFI).

While the proposed full build-out configuration at each station is based on anticipated demand, the staging of expansion beyond Stage One is uncertain. Moreover, the layout of Stage One itself is indicative and subject to detailed design. Therefore, the application will adopt an 'effects envelope' approach – that is, that staged implementation of the station is provided for within limits set by the designations and resource consents. KiwiRail intends to give effect to these (by implementing Stage One) within the two-year lapse period prescribed by the FTCA.

Q4. It is acknowledged that the Project is subject to final detailed design, however additional plans are required to assist with understanding the nature and scope of the Project (particularly relating to physical works for stage one). Therefore, please provide additional plans to show:

a. Proposed designation boundaries in relation to cadastral boundaries for NoR DC-S, NoR DC-I, NoR P-S, and NoR-P-I.
b. General location of physical works as relevant to the reasons for consent, site layout, and buildings/structures for stage one at both sites. It may also be useful to provide indicative layout plans for stage two for context if these are available.

The following three indicative concept design plans are appended to this letter:

- General Arrangement Plan Drury Central Station – Staging;
- General Arrangement Plan Paerata Station – Staging; and
- General Arrangement Plan Paerata Station Accessway – Staging.

These plans show the stations in their full build-out configuration, including proposed designation boundaries, and include annotations indicating the proposed extent of Stage One works within the wider proposed footprint. As noted above, the layout of Stage One is indicative and subject to detailed design, and the staging of expansion beyond Stage One is uncertain.

The plans show the nature of expansion provided for between Stage One and the full build-out configuration at both stations. Most significantly, the future-proofing at each station includes provision for changes to the platform length and configuration, and for expansion of the park-and-ride facilities to a maximum of 500 spaces in both locations.

Given the current stage of the process and the intent to adopt an 'effects envelope' approach, the resource consent requirements are yet to be fully itemised according to staging. However, the majority of the requirements are likely to be triggered during Stage One for both sites.

Q5. 'Table 7-1: Potential adverse effects' of the application provides an analysis of the scale of anticipated effects. Please advise whether this analysis has been informed by expert technical assessments (either preliminary or full) and/or represents the opinions of those experts. If brief summaries/conclusions of such assessments are available, please provide a copy of these summaries and conclusions.

The table provided in the referral application was informed by expert technical advice at the time of writing. The table has now been updated to include the latest specialist analysis from draft technical reports to date (noting these have not yet been finalised and therefore are still subject to change). As the assessments are still in draft, we have not provided detailed summaries and conclusions. However, the information in the table below was also informed by the draft assessments. The finalised assessments will be lodged with the application, and summarised in the Assessment of Environmental Effects (AEE).

Table 1 – Potential adverse effects (updated)

Category of effect	Relevant to	Nature of anticipated effect	Scale of anticipated effect (and mitigation assumed)
Construction traffic / transport	Both station projects	Temporary disruption to train services during construction	**Low** adverse effect
		Traffic management during construction, including construction vehicle movements to and from the construction areas, partial or full road closure, temporary speed limits around site access, and impacts on vulnerable road users and property access	**Moderate** adverse effect. Able to be managed/mitigated through Construction Traffic Management Plans (CTMPs) for each stage and engagement before construction commencement. Short term in nature.
		Existing property access may be temporarily removed or altered in the surrounding network. However, access to properties will be maintained (with the exception of properties to be acquired) to allow residents to safely access and exit affected properties.	**Low** adverse effect. Mitigation requirements will be included in a CTMP or Site-Specific Traffic Management Plan, if required.
Operational traffic / transport	Drury Central	Closure and realignment of Flanagan Road and addition of a roundabout at the station access/ Waihoehoe Road intersection to provide access to the interchange and park-and-ride access. These changes could increase delay and reduce convenience for some residents	**Low** adverse effect as the location is within the Future Urban zone; therefore within an urbanising environment. Local road and property access can be redesigned to suit the future urban context.

Category of effect	Relevant to	Nature of anticipated effect	Scale of anticipated effect (and mitigation assumed)
		An increase in traffic volume is predicted between 2016 and 2048+ along all routes near the Station, as the surrounding area is urbanised. However, transport modelling indicates no difference in traffic volumes when comparing the presence and absence of Drury Central Station. In fact, a slight positive effect is predicted as a consequence of reduced intra-regional trips by approximately 2,000-3,000 trips per day. There is predicted to be a slight delay in the PM Peak level of service for the Waihoehoe Road/Great South Road intersection at 2028. Otherwise, there is no difference in the overall level service provided at the Waihoehoe Road/Great South Road and Waihoehoe Road/Station accessway intersections. Overall, the level of service for both intersections is predicted to be maintained at a satisfactory level.	**Low** adverse effect.
	Paerata	An increase in traffic is predicted between 2016 and 2048+ along all routes as the surrounding area is urbanised, aside from SH22 (Paerata Road) which is not expected to change significantly. However, the modelled differences in traffic volumes between the presence and absence of Paerata Station are negligible. In fact, a slight positive effect is predicted as a consequence of the station reducing intra-regional trips by approximately 3,000 trips per day. Overall, the level of service for both the station accessway (future Southern Connector) / SH22 and internal station accessway / future Southern Connector intersections is predicted to be maintained at a satisfactory level.	**Low** adverse effect.
Ecology - Construction	Drury Central	Aquatic habitats (streams): Removal of some riparian vegetation Reclamation and diversion of a low value Hingaia Stream tributary (along Flanagan Road) Permanent or partial loss / modification of instream habitat / ecosystem Potential for killing or injuring fish. Terrestrial habitats and fauna:	**Moderate** adverse effect from stream loss (offset to be provided – a similar stream will be chosen to plant riparian vegetation) **Very Low to Low** adverse effect for all other matters. Fish passage will be provided for, the proposed stormwater wetland will manage any effects on water quality, and ecological planting is planned to improve habitat

Category of effect	Relevant to	Nature of anticipated effect	Scale of anticipated effect (and mitigation assumed)
		Vegetation removal resulting in loss of habitat / ecosystem, fragmentation and creation of edge effects Weed dispersal Disturbance / displacement of fauna Potential for killing / injuring fauna through vegetation removal	The Wildlife Act 1953 will be complied with
	Paerata	Aquatic habitats (wetland and streams) Impacts on Whangapouri Stream tributary. This will result in some stream and riparian loss A moderate value natural wetland comprised of exotic species has been identified where the proposed stormwater pond is to be located Permanent or partial loss / modification of instream habitat / ecosystem Loss of aquatic habitat Potential for killing or injuring fish. Terrestrial habitats and Fauna: Permanent loss of habitat / ecosystem, fragmentation and creation of edge effects through vegetation removal Weed dispersal Disturbance / displacement of fauna Potentially killing / injuring individuals through vegetation removal.	**Moderate** adverse effect from the loss of a moderate value 241m^2 wetland (offset to be provided within designation footprint) **Very Low to Low** adverse effect for all other matters with no mitigation considered necessary. Fish passage will be provided for, the proposed stormwater treatment device will manage effects on water quality and ecological planting is planned to improve habitat The Wildlife Act 1953 will be complied with
Ecology - Operational	Both station projects	Terrestrial Habitats: No operational effects Native fauna: Loss in connectivity Disturbance and displacement of (new and existing) roosts / nests and individuals Disturbance of nocturnal behaviours (lizards and bats) from operational light and noise.	**Very Low to Low** adverse effect due to existing low-quality habitat, lack of threatened species and highly modified environment Ecological planting will be provided in offset to stream / riparian effects (identified above under construction), which will provide quality habitat No mitigation is considered necessary
Construction noise/vibration	Both station projects	Construction noise and vibration will be intermittently in excess of the permitted standards at the site boundaries/on the closest receivers	**Low** adverse effects with mitigation. Any effects are temporary / intermittent and able to be managed through conditions / monitoring /management plans)

Category of effect	Relevant to	Nature of anticipated effect	Scale of anticipated effect (and mitigation assumed)
Operational noise/vibration	Both station projects	Operational noise will meet the permitted noise limits for existing adjoining properties. However, will potentially be in excess of recommended noise limits at adjacent future residential zones during the peak hour operation of the interchange (and park and rides) The anticipated operational vibration levels are permitted.	**Low** adverse effects (noting stations will be ahead of surrounding development, which can plan and design accordingly)
Historic heritage/ archaeology	Both station projects	Potential to impact unidentified sub-surface archaeological remains	**Low** adverse effect. To be managed through Accidental Discovery Protocol and Archaeological Management Plan
	Drury Central	Potential historic heritage effects on recorded railyard site NZAA R12/742/CHI 11388 (potential for disturbance of remaining footings or subsurface structures)	**Low** adverse effect as it is not considered to be an archaeological site under the Heritage New Zealand Pouhere Taonga (HNZPT) Act 2014, nor does it meet the threshold for scheduling in the AUP:OP (able to be managed through management measures and general HNZPT authority)
Contaminated land	Both station projects	Potential for contaminated soil disturbance (areas are rural and near horticulture). The Project Preliminary Site Investigation identified some HAIL sites (A6, A10, G5, A18, F4, F7) within and adjacent the Project sites	**Low** adverse effect. Able to be managed through a Contaminated Land Management Plan.
Water quality during construction / operation	Both station projects	Discharges during construction and ongoing stormwater management. Park and ride areas have high potential for contaminate generation. Constructed wetlands (or raingardens) and sediment retention ponds proposed at each site to treat runoff before discharge.	**Low** adverse effect with mitigation. Provisional ESCPs prepared - appropriate Erosion and Sediment Controls will be implemented during construction. Water quality to be treated through new stormwater wetlands / raingardens at each station during operation
Flooding and hydrogeology	Drury Central	Some historic flooding issues. Options to mitigate all effects are constrained but appropriate attenuation will be provided.	**Low** adverse effect – design – options still being investigated in consultation with Auckland Council
		Groundwater take volumes are very low and any changes in groundwater level are expected to be small. The potential for well interference and contaminant migration due to drawdown is considered low.	**Very Low to Low** adverse effects Settlement Monitoring to be conducted if required - this is still being investigated

Category of effect	Relevant to	Nature of anticipated effect	Scale of anticipated effect (and mitigation assumed)
		Settlement is expected to be 17mm at most.	
	Paerata	Greenfield site and flooding effects are able to be mitigated	**Low** adverse effect through design
		Groundwater take volumes are very low and any changes in groundwater level are expected to be small The potential for well interference and contaminant migration due to drawdown is considered low. Settlement is expected to be 11mm at most	**Very Low to Low** adverse effects Settlement Monitoring to be conducted if required - this is still being investigated
Landscape and visual effects	Both station projects	Adverse visual effects during construction	**Low to Moderate** adverse effects (temporary)
	Drury Central	Potential for low adverse natural character effects associated with modifications to the Hingaia Stream Tributary. Adverse urban landscape effects very low considering future urban context.	**Very low to Low** adverse effect
	Paerata	Potential for low adverse natural character effects associated with modifications to the Hingaia Stream Tributary. Potential visual effects associated with having rail infrastructure visible from adjoining future suburban and terraced housing development, but will reduce over time	**Very Low** adverse effect **Low** adverse effect (reducing over time)
Utilities	Both station projects	Potential impacts on planned future utility networks in future urban areas. Some disruption to existing utility networks. This is being managed through ongoing consultation with utility providers.	**Low** adverse effect
	Drury Central	Physical works for station avoid Watercare Waikato pump station. Waikato watermain pipeline already runs parallel under rail line in protective sleeved section which will be maintained and expanded.	**Low** adverse effect
Property requirement	Drury Central	Refer Part II. Approximately 27 parcels directly affected (some with common owners), including Watercare and AT properties (excluding roads, rivers and unit titles).	**Moderate** adverse effect (engagement with landowners is underway and land/property agreements will be sought under the Public Works Act)
	Paerata	Refer Part II.	**Low** adverse effect

Category of effect	Relevant to	Nature of anticipated effect	Scale of anticipated effect (and mitigation assumed)
		Seven private parcels affected (three of which have common owner).	
Air quality	Both station projects	Dust nuisance during construction	**Low** adverse effect (will be managed through standard dust measures)
Cultural values	Both station projects	As Project partners, Manawhenua have been involved for over two years in optioneering, design development and ongoing regular hui with the Project Team. Stream, ecology and water quality/hydrology effects are key cultural concerns and are the subject of ongoing discussions.	**Low** adverse effect
Social impacts during construction / operation	Both station projects	Construction disruption on existing environment Operational impacts largely positive with exception of property access impacts and construction disturbance for adjacent landowners/occupiers	**Low** adverse effect Continued consultation/ engagement throughout construction Property access will be maintained

Q6. Please provide year-wise direct job numbers in Full-Time Equivalents (FTEs) and differentiate among various types of jobs such as project design jobs (i.e. planning, design, engineering, environmental consultancy), construction jobs, and ongoing operational jobs. In addition, and if available, please provide the indirect new jobs in FTEs that the Project is likely to create.

Employment estimates for the Projects are set out below. These have been derived from a range of sources.

Existing Jobs

As noted in the Referral Request, the Projects already support a multi-disciplinary professional services team of >30 staff, including planners, engineers, urban designers, architects, and environmental specialists. This has equated to approximately ten FTEs over the 2019-2021 period, which has included the completion of a Detailed Business Case, concept design, and preparation of the planning applications. It should be noted that this team has been responsible for the business case and planning inputs for a broader suite of rail projects beyond the scope of this referral application, including Drury West Station, and future widening of the North Island Main Trunk (NIMT) railway.

Project design phase professional services for the upcoming detailed design phase (specific to the projects subject to this referral application) are addressed separately below.

Project Design and Construction jobs

As noted in the Referral Request, Alta Consulting Limited has estimated that the construction of the Stage One stations would support approximately 280 FTE in project design and construction jobs between 2021 and 2024. This analysis has been expanded to include an estimate of the FTE required for the expansion of the stations to their full build-out condition, noting that the date for subsequent construction stages is to be determined.

A summary of this updated analysis is set out in Table 2 below. Full details will be provided in the application materials.

Table 2 – Expected employment demand over project duration

Total FTE roles	Drury Central Stage One[3]	Paerata Stage One[4]	Drury Central expansion[5]	Paerata expansion[6]
Preconstruction professional services				
Project design phase professional services (e.g. planners, design engineers, environmental experts)	10-15	17-25	9-16	9-16
Construction management staff and supervision				
Construction Management Staff (managers, engineers, administrators)	8-10	13-20	7-13	8-15
Design Engineers (construction support)	2-4	4-8	2	2
Construction Supervision (e.g. supervisors, foremen)	5-10	8-15	3-5	3-7
Construction Workers				
Skilled Workforce / Trade Qualified (e.g. carpenters, welders, scaffolders, operators)	20-30	30-45	12-19	30-45
Specialised Subcontractors (asphalters, steelfixers, drainlayers, concrete placers, truck drivers)	30-50	50-80	18-27	50-80
General Labour	10-20	20-40	9-16	20-40
Averaged Total FTE	**105**	**175**	**65**	**175**

It is noted that the average FTE weekly demand may range from as low as 5 FTE per week for preconstruction works (e.g. professional services), and up to 50 FTE per week during the peak construction phase. These estimated values are set out in Table 3 below.

Table 3 – Average weekly FTE demand

Average weekly FTE demand	Drury Central Stage One[7]	Paerata Stage One[8]	Drury Central expansion[9]	Paerata expansion[10]
Preconstruction professional services)	5	10	5	7

[3] Includes the Stage One platforms, interchange facilities (i.e. park-and-ride, bus interchange), and access road (design and construction period – 2021-2024).
[4] As above.
[5] Includes platform extension and park-and-ride expansion – construction period TBC.
[6] Includes platform extension, park-and-ride extension, and additional access road – construction period TBC.
[7] Includes the Stage One platforms, interchange facilities (i.e. park-and-ride, bus interchange), and access road (design and construction period – 2021-2024).
[8] As above.
[9] Includes platform extension and park-and-ride expansion – construction period TBC.
[10] Includes platform extension, park-and-ride extension, and additional access road – construction period TBC.

Average weekly FTE demand	Drury Central Stage One[7]	Paerata Stage One[8]	Drury Central expansion[9]	Paerata expansion[10]
Construction management staff and supervision	16	30	14	10
Construction workers	20	35	26	22

Operational Jobs

Auckland Transport has advised based on the operation of similar stations that three security staff and two customer service staff per station are likely (i.e. ten staff between two stations). There would be a minimum requirement of two shifts on all operational days. In addition, ongoing cleaning and maintenance of the facilities will likely support 1 FTE per station.

The above does not account for the additional operational jobs associated with future bus services planned to run to stations which do not exist today, or station vendors (which are provided for in the design).

Indirect New Jobs

Ascari Partners Limited has provided a summary of expected employment effects arising from the New Zealand Upgrade Programme (NZUP) over a ten-year period. This analysis estimates three standard employment impacts arising from the impact of additional expenditure on output using a multiplier approach defined as follows:

- Direct Impact – An increase in the final demand for a commodity leads to an increase in the output of that commodity and an increase in labour required to directly produce the new level of output;
- Indirect Impact (Type 1 multiplier) – As final producers increase output, there will also be an increase in demand on and requirement for additional labour input for their suppliers and so on down the supply chain; and
- Induced Effect (Type 2 multiplier) – As a result of direct and indirect impacts, the level of household income will increase (e.g. via increased employment). A proportion of this increased outcome is re-spent on final goods and services, again increasing labour input required.

This analysis included a per-annum FTE estimate for the Drury Central and Paerata Station Projects[11] against all three employment impacts, set out in Table 4 below.

Table 4 – Annual additional FTEs for Drury Central and Paerata Station Projects

Per Annum FTE		
Direct Impact	**Indirect Impact (Type 1 multiplier)**	**Induced Effect (Type 2 multiplier)**
52	140	193

Q7. Please provide a more detailed timeline for the anticipated land acquisition process under the Public Works Act 1981 including the anticipated timeframe for resolution of any objections lodged under section 23 of that Act.

The project team is already engaging with affected landowners regarding the land requirement for the Project. The Public Works Act 1981 (PWA) process will commence as set out below, involving good faith

[11] Referred to simply as the "Drury Stations" in the NZUP documentation.

negotiation, and the issuing of section 18 and section 23 notices as required in accordance with the PWA process.

It is proposed that section 18 notices will be served in two tranches, with strategic acquisitions (development land and commercial land) served in November 2021 and with residential and lifestyle land served in February/March 2022. The split is to allow more time to negotiate with residential owners whilst ensuring that strategic land is secured for enabling works. Below is the expected acquisition timeframe for strategic properties.

Table 5 – Approximate Acquisition Timeframe for Strategic Properties

Milestone	Estimated Duration	Estimated Start Date	Estimated Completion
Funding Approved		1 June 2021	
NoR lodged		1 July 2021	
Initial Negotiation / By Agreement		1 July 2021	31 March 2022
S18 Notices served		15 November 2021	
Statutory Negotiation Period	90 days	15 November 2021	15 April 2022
S23 Notices served	60 days	15 April 2022	15 May 2022
Objection Period	30 days	15 May 2022	15 June 2022
S26 Proclamation	60 days	15 June 2022	1 August 2022

The above assumes section 17 agreement, or PWA Proclamation without an Environment Court objection being received. A worst-case scenario has been incorporated into the overall project timeframe which includes allowance for an objection. The project team has been advised that a typical objection will take approximately five months to resolve (according to Ministry of Justice data). This has informed the proposed two-tranche approach.

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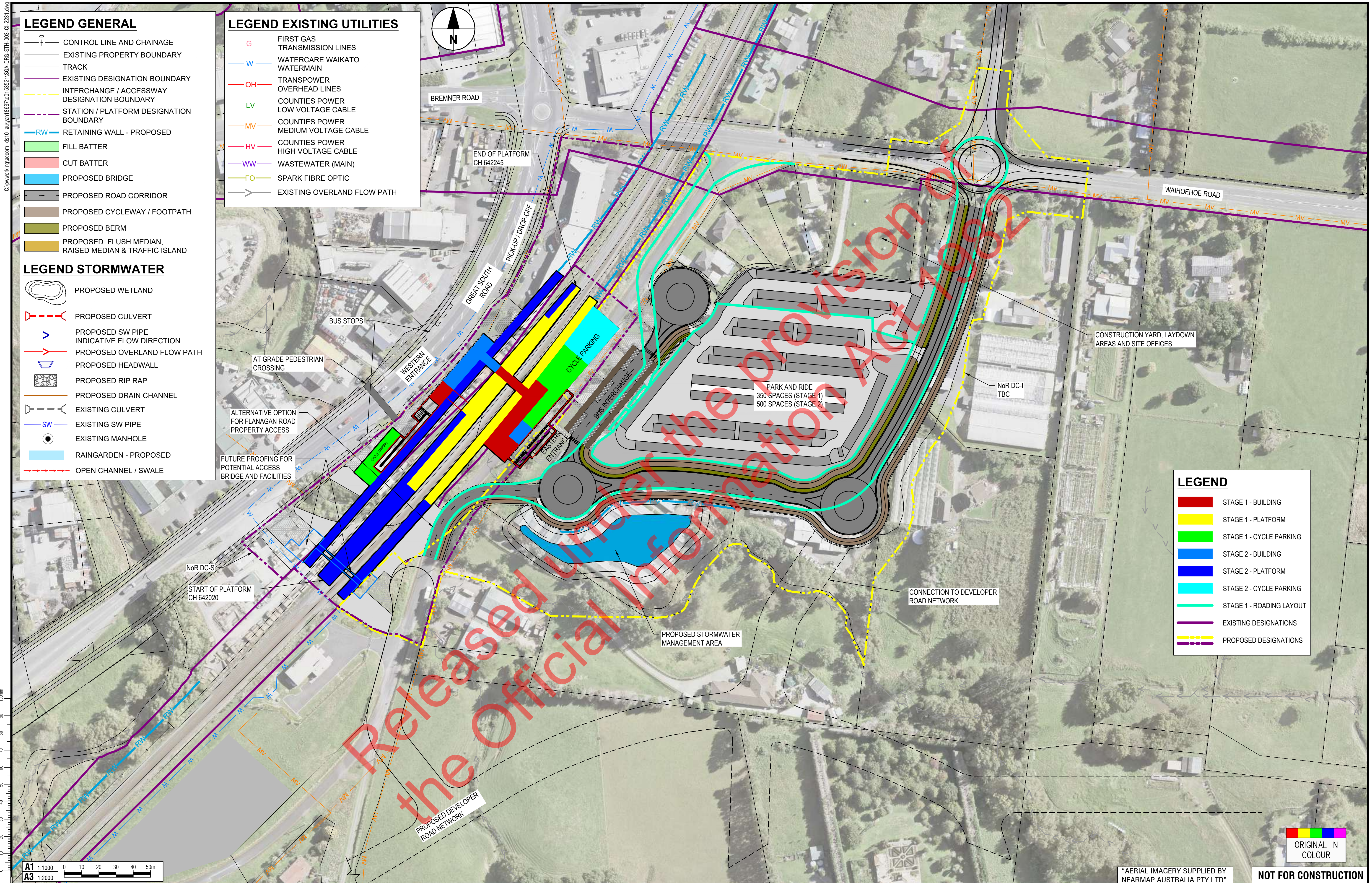
We trust the above responses satisfactorily answer your questions, and that the referral application can now be expeditiously progressed by the Ministry for the Environment. Please let me know should you have any further queries.

Yours sincerely

Andrew Cave
Senior RMA Advisor
KiwiRail Holdings Limited


LEGEND GENERAL
CONTROL LINE AND CHAINAGE
EXISTING PROPERTY BOUNDARY
TRACK
EXISTING DESIGNATION BOUNDARY
INTERCHANGE / ACCESSWAY DESIGNATION BOUNDARY
STATION / PLATFORM DESIGNATION BOUNDARY
RW RETAINING WALL - PROPOSED
FILL BATTER
CUT BATTER
PROPOSED BRIDGE
PROPOSED ROAD CORRIDOR
PROPOSED CYCLEWAY / FOOTPATH
PROPOSED BERM
PROPOSED FLUSH MEDIAN, RAISED MEDIAN & TRAFFIC ISLAND
LEGEND STORMWATER
PROPOSED WETLAND
PROPOSED CULVERT
PROPOSED SW PIPE INDICATIVE FLOW DIRECTION
PROPOSED OVERLAND FLOW PATH
PROPOSED HEADWALL
PROPOSED RIP RAP
PROPOSED DRAIN CHANNEL
EXISTING CULVERT
SW EXISTING SW PIPE
EXISTING MANHOLE
RAINGARDEN - PROPOSED
OPEN CHANNEL / SWALE
LEGEND EXISTING UTILITIES
G FIRST GAS TRANSMISSION LINES
W WATERCARE WAIKATO WATERMAIN
OH TRANSPOWER OVERHEAD LINES
LV COUNTIES POWER LOW VOLTAGE CABLE
MV COUNTIES POWER MEDIUM VOLTAGE CABLE
HV COUNTIES POWER HIGH VOLTAGE CABLE
WW WASTEWATER (MAIN)
FO SPARK FIBRE OPTIC
EXISTING OVERLAND FLOW PATH
N
BREMNER ROAD
WAIHOEHOE ROAD
END OF PLATFORM CH 642245
PICK-UP / DROP-OFF
GREAT SOUTH ROAD
BUS STOPS
AT GRADE PEDESTRIAN CROSSING
WESTERN ENTRANCE
CYCLE PARKING
BUS INTERCHANGE
EASTERN ENTRANCE
ALTERNATIVE OPTION FOR FLANAGAN ROAD PROPERTY ACCESS
FUTURE PROOFING FOR POTENTIAL ACCESS BRIDGE AND FACILITIES
PARK AND RIDE
350 SPACES (STAGE 1)
500 SPACES (STAGE 2)
CONSTRUCTION YARD, LAYDOWN AREAS AND SITE OFFICES
NoR DC-I TBC
NoR DC-S
START OF PLATFORM CH 642020
CONNECTION TO DEVELOPER ROAD NETWORK
PROPOSED STORMWATER MANAGEMENT AREA
PROPOSED DEVELOPER ROAD NETWORK
LEGEND
STAGE 1 - BUILDING
STAGE 1 - PLATFORM
STAGE 1 - CYCLE PARKING
STAGE 2 - BUILDING
STAGE 2 - PLATFORM
STAGE 2 - CYCLE PARKING
STAGE 1 - ROADING LAYOUT
EXISTING DESIGNATIONS
PROPOSED DESIGNATIONS
A1 1:1000
A3 1:2000
0 10 20 30 40 50m
"AERIAL IMAGERY SUPPLIED BY NEARMAP AUSTRALIA PTY LTD"

ORIGINAL IN COLOUR

NOT FOR CONSTRUCTION

REV	REVISIONS	DRAWN	DATE
A	ISSUED FOR AEE/REFERRAL	JY	21.05.2021

SURVEYED	N/A	
DRAWN	J. YANG	19.05.2021
DRAWING CHECK	J. DELA TORRE	19.05.2021
DESIGN	A. REVELL	19.05.2021
DESIGN REVIEW	K. CRAWFORD	19.05.2021
APPROVED	R. MASON	19.05.2021

ORIGINAL SIZE A1

TE TUPU NGĀTAHI Supporting Growth

WAKA KOTAHI NZ TRANSPORT AGENCY

KIWIRAIL

Project: SUPPORTING GROWTH PROGRAMME
SOUTH RAIL - RAIL STATIONS & ACCESSWAYS

Drawing Title: GENERAL ARRANGEMENT PLAN
DRURY CENTRAL STATION - STAGING

Drawing Status: PRELIMINARY DESIGN
Drawing Date: 19.05.2021
Scales: A1 AS SHOWN; A3 HALF SHOWN
Discipline: CIVIL
Drawing No.: SGA-DRG-STH-003-CI-2231
Revision: A

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LEGEND GENERAL

	CONTROL LINE AND CHAINAGE
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	PROPOSED CYCLEWAY / FOOTPATH
	PROPOSED BERM
	PROPOSED FLUSH MEDIAN, RAISED MEDIAN & TRAFFIC ISLAND

LEGEND STORMWATER

- PROPOSED WETLAND
- PROPOSED CULVERT
- PROPOSED SW PIPE INDICATIVE FLOW DIRECTION
- PROPOSED OVERLAND FLOW PATH
- PROPOSED HEADWALL
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- PROPOSED DRAIN CHANNEL
- EXISTING CULVERT
- SW EXISTING SW PIPE
- ● EXISTING MANHOLE
- RAINGARDEN - PROPOSED
- OPEN CHANNEL / SWALE

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W	WATERCARE WAIKATO WATERMAIN
OH	TRANSPOWER OVERHEAD LINES
LV	COUNTIES POWER LOW VOLTAGE CABLE
MV	COUNTIES POWER MEDIUM VOLTAGE CABLE
HV	COUNTIES POWER HIGH VOLTAGE CABLE
WW	WASTEWATER (MAIN)
FO	SPARK FIBRE OPTIC
>	EXISTING OVERLAND FLOW PATH

LEGEND

🟥	STAGE 1 - BUILDING
🟨	STAGE 1 - PLATFORM
🟩	STAGE 1 - CYCLE PARKING
🟦	STAGE 2 - BUILDING
🟦	STAGE 2 - PLATFORM
🟦	STAGE 2 - CYCLE PARKING
	STAGE 1 - ROADING LAYOUT
	EXISTING DESIGNATIONS
	PROPOSED DESIGNATIONS

ORIGINAL IN COLOUR

"AERIAL IMAGERY SUPPLIED BY NEARMAP AUSTRALIA PTY LTD"

NOT FOR CONSTRUCTION

ORIGINAL SIZE A1

REV	REVISIONS	DRAWN	DATE
A	ISSUED FOR AEE/REFERRAL	JY	21.05.2021

SURVEYED	N/A	
DRAWN	J. YANG	19.05.2021
DRAWING CHECK	J. DELA TORRE	19.05.2021
DESIGN	A.REVELL	19.05.2021
DESIGN REVIEW	K. CRAWFORD	19.05.2021
APPROVED	R. MASON	19.05.2021

TE TUPU NGĀTAHI
Supporting Growth

WAKA KOTAHI
NZ TRANSPORT AGENCY

KiwiRail

Project:
SUPPORTING GROWTH PROGRAMME
SOUTH RAIL - RAIL STATIONS & ACCESSWAYS

Drawing Title:
GENERAL ARRANGEMENT PLAN
PAERATA STATION - STAGING

Drawing Status: **PRELIMINARY DESIGN**
Drawing Date: 19.05.2021
A1 Scales: AS SHOWN
A3 Scales: HALF SHOWN
Discipline: CIVIL
Drawing No.: SGA-DRG-STH-003-CI-2233
Revision: A

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LEGEND GENERAL

- CONTROL LINE AND CHAINAGE
- EXISTING PROPERTY BOUNDARY
- TRACK
- EXISTING DESIGNATION BOUNDARY
- INTERCHANGE / ACCESSWAY DESIGNATION BOUNDARY
- STATION / PLATFORM DESIGNATION BOUNDARY
- RW — RETAINING WALL - PROPOSED
- FILL BATTER
- CUT BATTER
- PROPOSED BRIDGE
- PROPOSED ROAD CORRIDOR
- PROPOSED CYCLEWAY / FOOTPATH
- PROPOSED BERM
- PROPOSED FLUSH MEDIAN, RAISED MEDIAN & TRAFFIC ISLAND

LEGEND STORMWATER

- PROPOSED WETLAND
- PROPOSED CULVERT
- PROPOSED SW PIPE INDICATIVE FLOW DIRECTION
- PROPOSED OVERLAND FLOW PATH
- PROPOSED HEADWALL
- PROPOSED RIP RAP
- PROPOSED DRAIN CHANNEL
- EXISTING CULVERT
- SW — EXISTING SW PIPE
- EXISTING MANHOLE
- RAINGARDEN - PROPOSED
- OPEN CHANNEL / SWALE

LEGEND EXISTING UTILITIES

- G — FIRST GAS TRANSMISSION LINES
- W — WATERCARE WAIKATO WATERMAIN
- OH — TRANSPOWER OVERHEAD LINES
- LV — COUNTIES POWER LOW VOLTAGE CABLE
- MV — COUNTIES POWER MEDIUM VOLTAGE CABLE
- HV — COUNTIES POWER HIGH VOLTAGE CABLE
- WW — WASTEWATER (MAIN)
- FO — SPARK FIBRE OPTIC
- EXISTING OVERLAND FLOW PATH

CONSTRUCTION YARD AND LAYDOWN AREA 3000 m²

NoR P-S

NoR P-IA

SH22

0 100 200 300 400 500 600 671

ADDITIONAL DESIGNATION FOR FUTURE INTERSECTION UPGRADE TO ENABLE FUZ DEVELOPMENT

LEGEND

- STAGE 1 - BUILDING
- STAGE 1 - PLATFORM
- STAGE 1 - CYCLE PARKING
- STAGE 2 - BUILDING
- STAGE 2 - PLATFORM
- STAGE 2 - CYCLE PARKING
- STAGE 1 - ROADING LAYOUT
- EXISTING DESIGNATIONS
- PROPOSED DESIGNATIONS

A1 1:1000
A3 1:2000
0 10 20 30 40 50m

ORIGINAL IN COLOUR

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REV	REVISIONS	DRAWN	DATE
A	ISSUED FOR AEE/REFERAL	JY	20.05.2021

SURVEYED	N/A	
DRAWN	J. YANG	21.05.2021
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TE TUPU NGĀTAHI Supporting Growth

WAKA KOTAHI NZ TRANSPORT AGENCY

KiwiRail

Project:
SUPPORTING GROWTH PROGRAMME
SOUTH RAIL - RAIL STATIONS & ACCESSWAYS

Drawing Title:
GENERAL ARRANGEMENT PLAN
PAERATA STATION ACCESSWAY - STAGING

Drawing Status: **PRELIMINARY DESIGN**
Drawing Date: 20.05.2021
A1 Scales: AS SHOWN | A3 Scales: HALF SHOWN
Discipline: CIVIL
Drawing No.: SGA-DRG-STH-003-CI-2235
Revision: A

ORIGINAL SIZE A1