

3 March 2023

V Leddra  
Plans and Places  
Auckland Council  
By email

**Ministry of Education Notice of Requirement  
121 Murphys Road  
Additional Information Request - Transport**

Dear Vanessa

### Introduction

As requested, I have reviewed the material provided by the Ministry of Education in support of a Notice of Requirement for a new primary school. I recommend that further information is requested to enable a full assessment of the merits of the proposal.

### Network Flows

The ITA has estimated the future traffic flow along Murphys Road and Murphys Park Road based on multiple assumptions and used those estimated flows as the basis for the traffic analysis. For example, it is assumed half of the development traffic exiting Murphys Park Road would turn left and half would turn right. There is potential for flows to be higher than the ITA estimate, and potential for the distribution to be different.

The ITA notes that all regional modelling undertaken for this area included the Mill Road corridor (including widening and upgrading of Murphys Road) was complete. While those models may therefore not be accurate with respect to the volume of traffic on Murphys Road, they should still provide useful information with respect to the forecast volumes on Murphys Park Road (and other connections to and from the school catchment), and the proportion of vehicles turning left and right at those locations.

Other sources of data, such as Census 2018 journey to work data from Ormiston East or neighbouring census areas, would also help to inform assumptions on the distribution of journeys.

- T1. Please either provide alternative sources of traffic volume projections and/ or assumptions in the area;  
or;  
provide sensitivity analysis using traffic volumes 20% higher than the ITA estimate.**

### Trip Generation and Distribution

The ITA estimates the trip generation for vehicles using the on-site PUDO area, and the proportion of trips that would use the remote PUDO; however, the total number of vehicle movements in the area (on-site PUDO, remote PUDO area, and casual PUDO activity elsewhere) is not stated. The total number of movements is required to audit the analysis provided and to inform an assessment of the likely effects.

- T2. Please provide the total number of vehicle trips generated by the school, broken down into on-site PUDO, remote-PUDO and other for the main analysis and sensitivity analysis.**

The ITA assessment is dependant on the remote PUDO utilisation. The ITA assumes that the remote PUDO will attract 25% of school traffic, or 14% as a sensitivity test. The only data provided in support of those assumptions is the average value for “Park and Walk” from Auckland-wide Travelwise surveys. The range in the Travelwise “Park and Walk” statistic is not stated.

The Travelwise data is obtained by questioning school children on their travel to school and I do not consider that data to have high accuracy or reliability. The Park and Walk data in particular could be subject to different interpretation depending on how far the child walked from the remote parking location. The ITA sensitivity test is based on the Travelwise average, so half of all Auckland schools would have a Park and Walk proportion less than 14%.

**T3. Please either provide additional data to corroborate the assumed use of the remote PUDO; or; provide analysis assuming the remote PUDO accounts for less than 14% of travel.**

### After-School Period

The ITA assessment only considers the before-school period as traffic volumes are expected to be lower after school. The performance of intersections however can be poorer, even with lower flows, if a higher proportion of traffic is turning right, as would likely be the case in the after-school period.

**T4. Please provide assessment of the after-school period.**

### Murphys Road/ Murphys Park Road Intersection

The ITA states the school would result in no traffic being added to the Murphys Road/ Murphys Park Road intersection, so does not assess the impact of the school on this intersection.

An inspection of the assumed school catchment shows it extends to Redoubt Road. In the absence of the school, it is expected that many parents residing in the southern and eastern parts of the catchment would not travel along Murphys Road (the ITA assumes only half of the traffic in the school catchment would use Murphys Road).

With the school in operation, most parents are expected to use Murphys Park Drive to access the school and then to access Murphys Road after leaving one of the PUDO areas in the before-school peak. That would result in a significant increase in the number of vehicles wishing to enter Murphys Road from Murphys Park Road instead of using one of the other routes, with a similar pattern in the after-school peak.

The impact of that diverted traffic on the road network, and on the Murphys Road/ Murphys Park Road intersection in particular, has not been assessed.

**T5. Please provide analysis and assessment of the Murphys Road/ Murphys Park Road intersection.**

### Impact on Local Roads

It is expected that Road 1 and Road 2 would be like other roads recently constructed in the area, such as Picturesque Drive. These local residential streets are narrow, have traffic calming devices, and are not intended to accommodate high peak flows.

The ITA estimates that a significant number of vehicle movements would be added to Roads 1, 2,3, and to Picturesque Drive, Treeline Lane, Hearth Street and Hodges Road before and after school, although the number of traffic movements added to the latter streets is not stated. The impact of that additional traffic on these streets and intersections has not been assessed or evaluated.

**T6. Please provide an evaluation of the impact of the proposed school on the local streets in the area near the school and the remote PUDO.**

## PUDO Design and Operation

No data is provided about the expected demand for PUDO parking at either location.

The ITA is based on the expectation that the on-site PUDO facility would have “*approximately 16*”<sup>1</sup> or “*at least 16*”<sup>2</sup> spaces and opines an assessment of the number of spaces actually required can be undertaken at the OPW stage. The ITA states that MoE intends to construct additional parking spaces in Picturesque Drive, but no information is provided on how many additional parking spaces could be provided.

The AEE notes that some details of the design will be left to the OPW stage, and the feasibility plans are “*are intended only to inform an assessment to confirm the site is fit for purpose and to provide a realistic framework for assessing the effects of a future school on this site*”

In my view it may be appropriate for the design of the parking to be determined at OPW stage, but the effects of operating a school on the site to determine if the site is fit for purpose are properly determined at this time. In order to assess the effects an understanding of the likely parking demand and supply is required. If analysis is to be deferred until the OPW stage then a clear performance standard to be met at that time should be provided, with the actual number of on-site parking spaces required to meet that standard determined at OPW stage.

**T7. Please provide an estimate, supported by data, of the parking demand generated by the school at each location in the before-school and after-school periods.**

The ITA appears to provide contradictory statements as it expects queues for the PUDO to occur on Road 3<sup>3</sup> and also states the queue will be contained on-site<sup>4</sup>.

**T8. Please clarify the expected extent of queueing at each of the PUDO locations in the before-school and after-school periods.**

**T9. Please provide an assessment of the effects of PUDO queuing on the operation of the local road network (at both PUDO locations).**

I trust this provides the required information. If I can be of any further assistance, please do not hesitate to contact me.

Yours Sincerely



**Wes Edwards**

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<sup>1</sup> Page 19

<sup>2</sup> Page 24

<sup>3</sup> Page 17, last paragraph

<sup>4</sup> Page 29, first paragraph.