

OUR FIRST PUFFIN STORY



Privinn Mwene– Traffic Engineer

Traffic Operations

“operating a transport network with minimal harm, is aligned with legislation, standards and policy, and supports the needs and aspirations of the community”

Pedestrian Improvements Prioritisation

Survey data is collected on the locations crossing facilities have been requested.

- Volume and type of pedestrian using the road.
- Existing land use in surrounding areas.
- Community Interest with requests for particular site.
- Existing facility near by.
- Existing level of service based on crossing time.
- Approaching speeds of traffic and traffic volumes.
- Recorded pedestrians related crash over the 5 year period.

Chosen Location – Hillview Christian School



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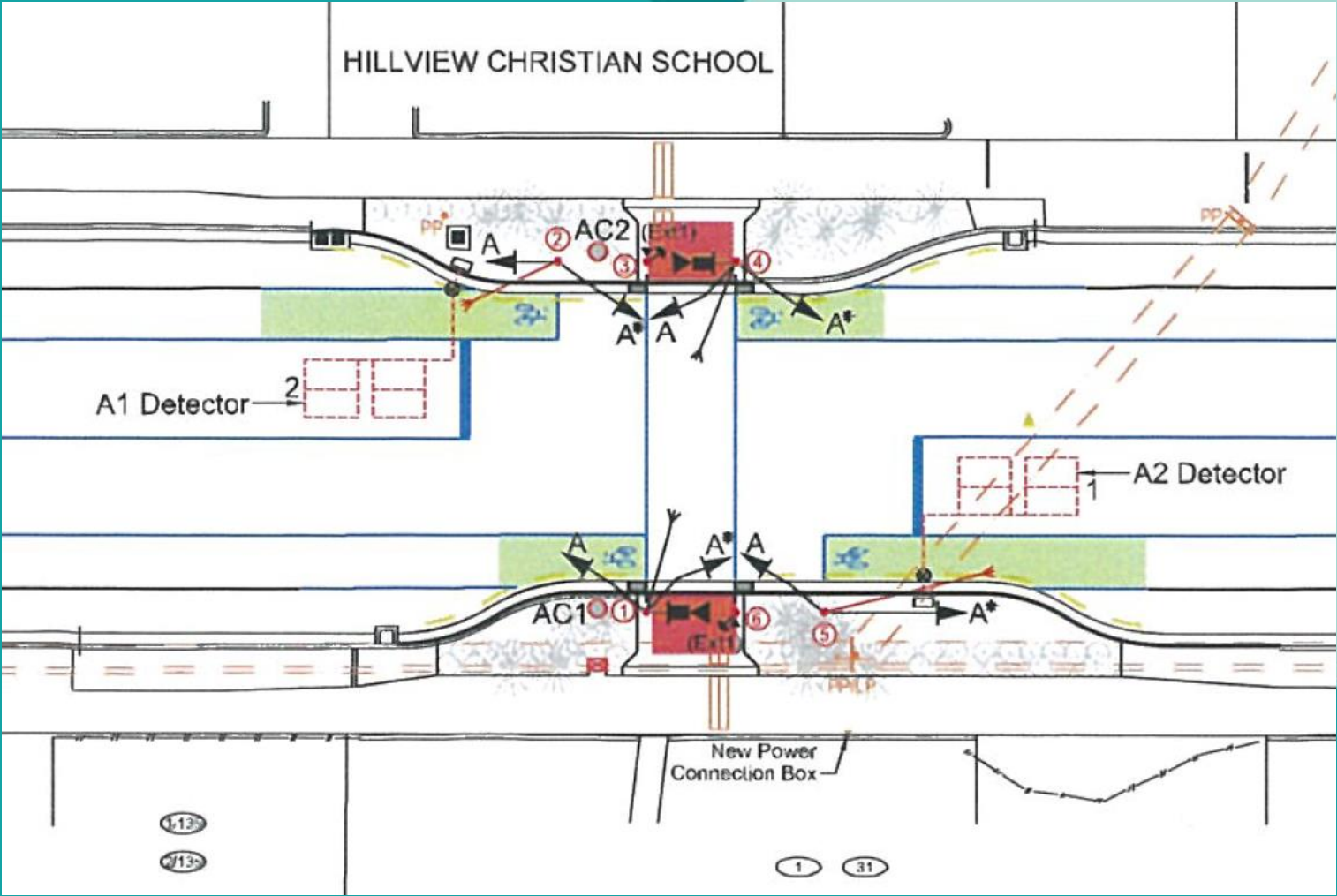
- The school and its community and the Police raised concerns in regards to safety.
- Two school sites are divided by Wilsons Road South, an Minor arterial road with (approx..10,609vpd).
- School children cross the road throughout the day. Total no. of students crossing the road between 8am to 5pm is over 1600 daily.
- The 85% speed of vehicles was found to be around 53km/h.
- Existing Kea Crossing provides protection in the mornings and afternoons, leaving the children to navigate the road throughout the day without supervision.
- The volume of pedestrians is too high to be catered for by pedestrian refuge.

Proposal

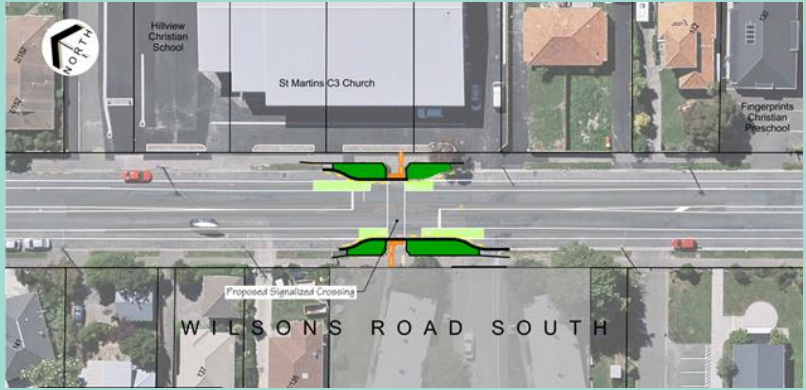
- Proposal is to remove existing Kea Crossing and the pedestrian island and replace it with a fully signalised crossing.

Design

“A *P*edestrian *U*ser *F*riendly *I*ntellige*N*t *C*rossing”



19 761086 Signed off Puffin on Wilsons Rd at Hillview school 5 7 2019.pdf



Benefits

“A Puffin Styled Crossing”

Kerb-side detectors

- Will call or cancel call based on detection.

On-crossing Pedestrian detectors

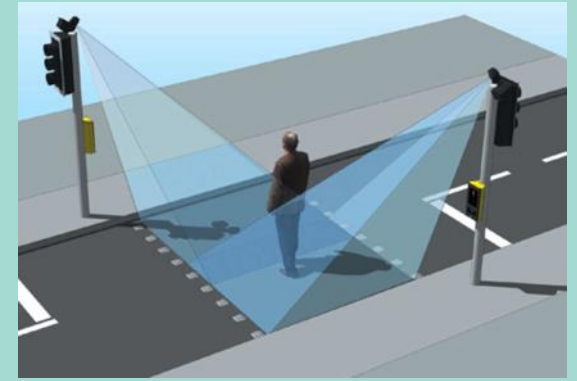
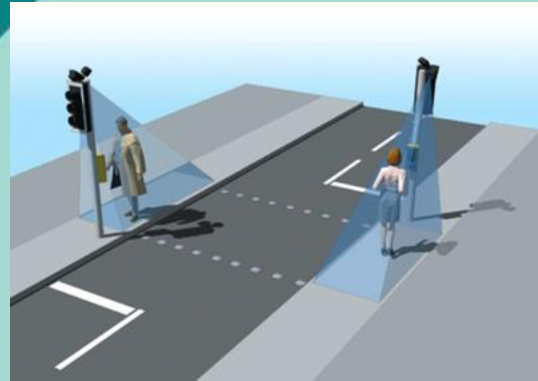
- Will extend phase based on walking pace.

Near side display

- Oriented so pedestrians see on-coming vehicles.
- Beneficial to the visually impaired.

Extra Low Voltage Traffic Signals (ELV)

- Thought to be the first one in ChCh.
- Long Term TTM cost reduction. ELV allows anyone to work safely on the live wiring without full intersection signal lights out.
- Improves electrical safety for contractors and the public.



Community Engagement



Puffin crossing DLE - PROOF 01 (002).pdf

Consultation was undertaken with adjacent property owners, residents and the school

- “How to use a Puffin Crossing” brochures were developed and distributed to local libraries, the local residents and the school.
- The site received an article from Otago Daily Times which helped in broadcasting the project to the wider community.
- Consultation feedback was less engaged by the public. Besides the school and the police no further feedback was received in regards to the proposal.
- The school was in full support of the proposal. School agreed to have supervisors during the school start and end hours.

Benefits of puffin crossings

Safer for pedestrians
Sensors detect you are waiting to cross and control the traffic lights, making sure you have time to cross the road safely.
Drivers will not get a green light to move until you have finished crossing.
The red/green man box is beside you so you can see it and watch approaching traffic at the same time.
The red/green man signal is easier to see than at other crossings, where it is across the road.

Better for drivers
Traffic lights change to green as soon as the crossing is clear, so drivers will not have to stop or wait if there are no pedestrians.
Sensors detect if pedestrians cross early or change their mind and walk away, so the lights won't change if they don't need to.
We're proposing to install puffin crossings around the city. They all look the same and work in the same way.

For more information phone 941 8999 or visit cc.govt.nz/puffincrossings

How to use a Puffin Crossing
Safer for pedestrians. better for drivers.

Christchurch City Council

Otago Daily Times

News Sport Life & Style Entertainment Business Regions Fe

The \$300k crossing with infrared detectors

By Matt Slaughter

Star News > Christchurch

Hillview Christian School principal Steve Frost says there have been too many 'near misses' outside the school. Photo: Geoff Sloan

The South Island's first puffin crossing will be installed in Christchurch.

Puffin Crossings

Puffin crossings make crossing the road safe and easy. The red/green man is easier to see, and you can also keep a better eye on the traffic.

How a puffin crossing works

Most puffin crossings have sensors on top of the traffic lights or under the footpath in the waiting area.
The sensors need to know you are waiting to cross, so be sure to stand where you can clearly see the red/green man box.
Other sensors detect you crossing the road. The traffic lights will turn green for drivers once you are safely across.

Follow the steps below to safely use a puffin crossing.

- 1. Stop**
Before you cross the road at a puffin crossing, look at the red/green man box. It's on your side of the road, usually just to your right as you face the road.
Stand at the crossing and watch the red/green man box.
- 2. Wait**
Push the button on the red/green man box and stand where you can clearly see the box.
The indicator button should light up and stays lit until the green man appears.
If you see the green man, check the traffic has stopped in both directions, then cross the road.
If the red man is showing, do not cross the road.
If the indicator light goes out and the green man is not showing, push the button again and wait for the green man.
- 3. Cross**
When you see the green man, check traffic in both directions has stopped, then cross the road.
Even if the green man turns off before you get across, traffic will be stopped by a red light until you are safely across the road.

Construction

Fulton Hogan won the tender and work is under way and anticipated finish date is the 25th of January 2020

- Estimated construction cost = \$300k.



Challenges & Lessons Learnt

First in Christchurch

- There is expectation the users of this facility will require some getting used to as it will be different from the rest. Some work has been done in regards to this, brochures, etc.

High Volume of school children crossing throughout the day

- To minimise traffic delays the pedestrian phase will be called to a maximum within a given time.

Thank You!

