

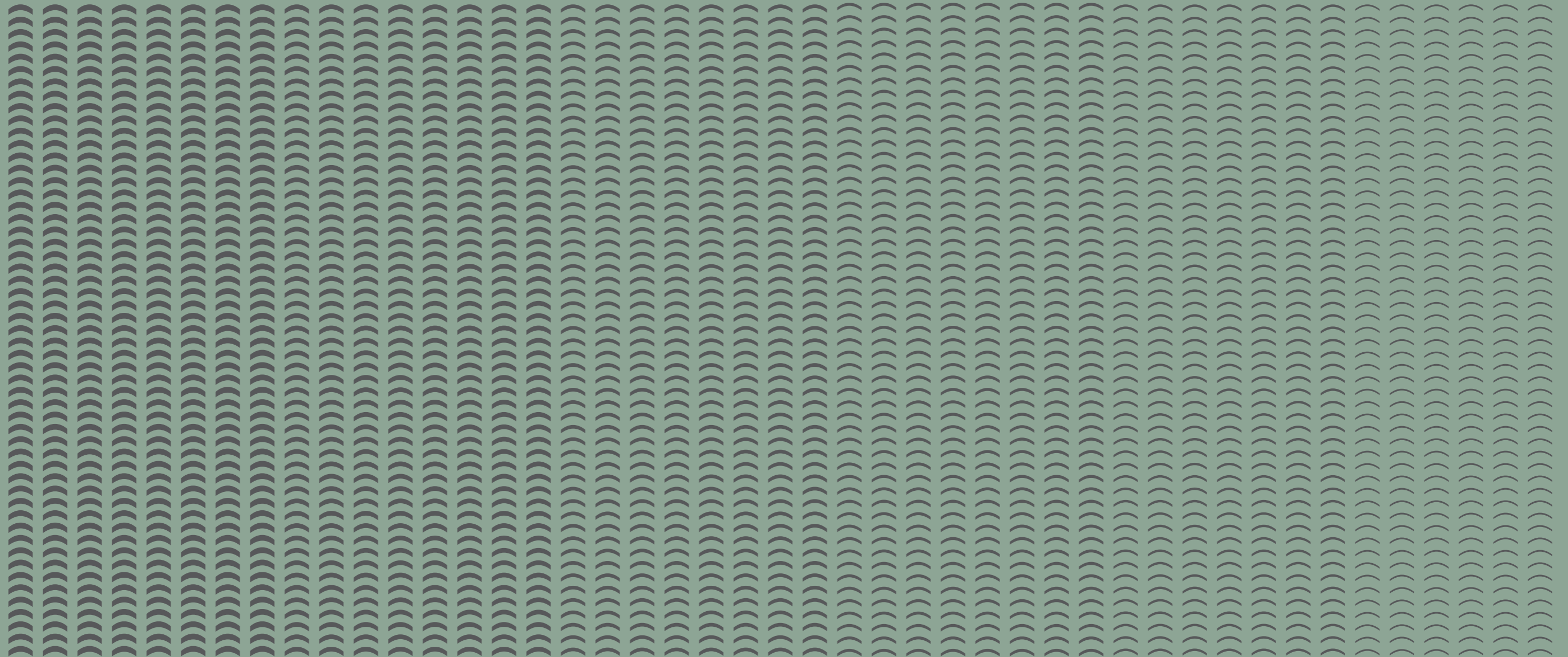
Trig Road- Whenuapai

Bulk & Location Siting Study

Document Prepared by Jasmax for
MoE
Contract number 220211
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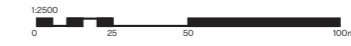
Rev I

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1.1 Current Context

Existing Site Plan.



Zoning:

Unitary Plan Zoning : Future Urban Zone

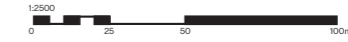
Properties to the North, East, West, South are zoned Future Urban. A small plot to the South is zoned Open Spaces - Informal Recreation, whilst further North-West is a Strategic Transport Corridor zone.



- █ Site
- █ Existing Open Space

1.2 Current Context

Existing Site Plan - Overland Flow 20m Set back on site.



1.3 Design Assumptions

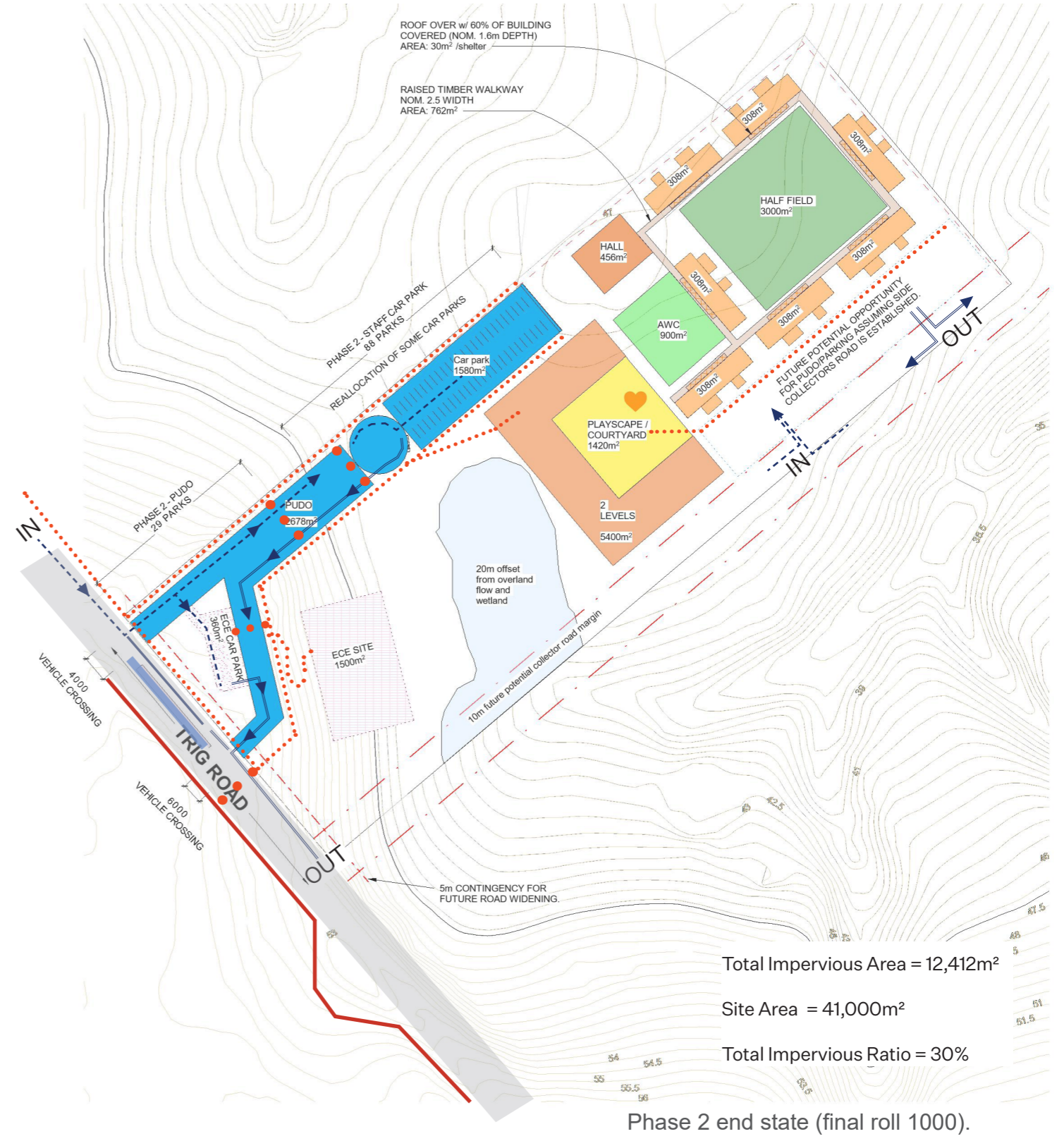
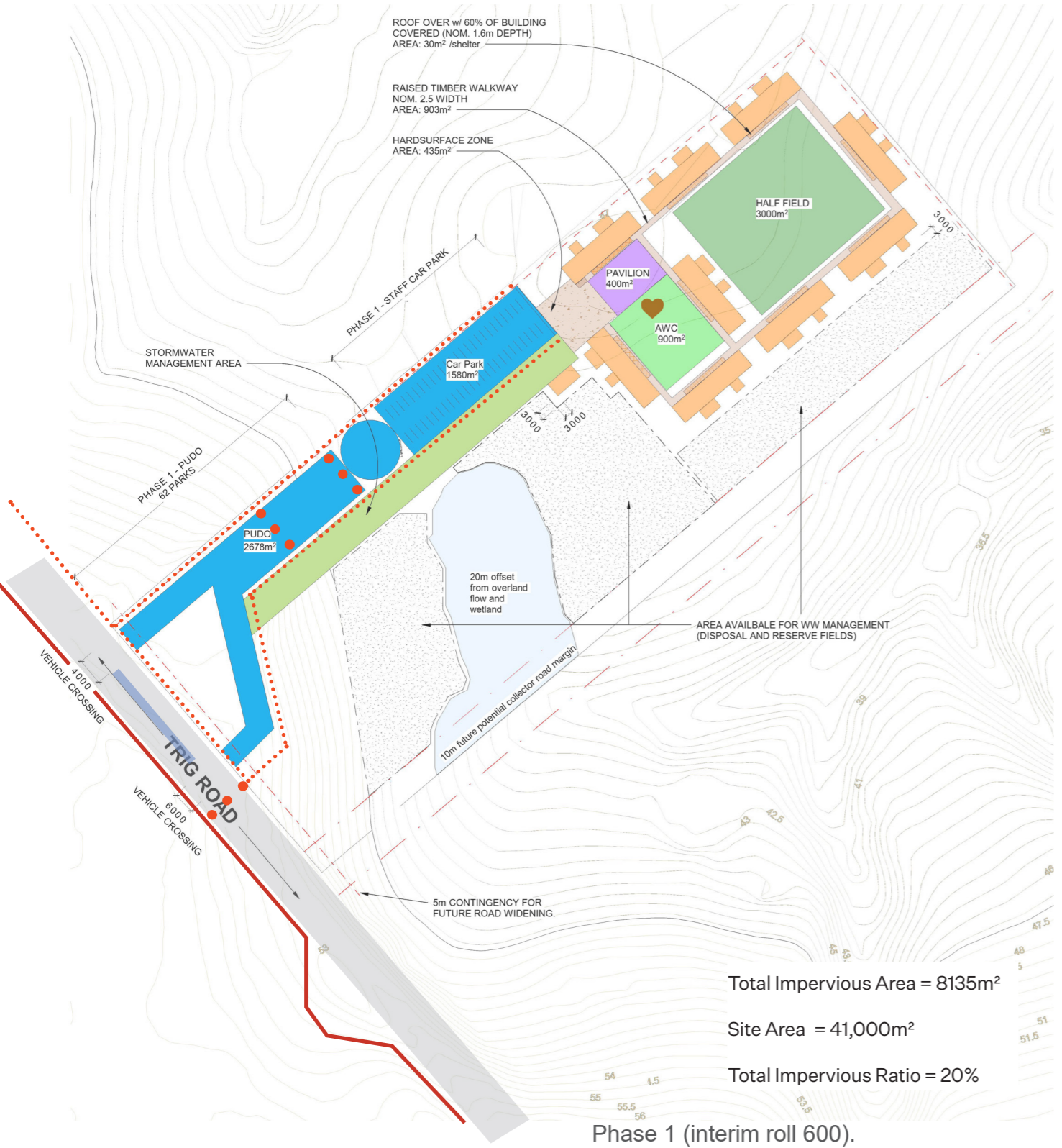
Terminology

Phase 1: Overflow school to serve a shortfall in the school network capacity in Whenuapai North, Redhills and Hobsonville.

Phase 2: School and Early Childhood Education (ECE) to serve the long term needs of the local adjacent school catchment as the adjacent area is live zoned and developed for urban purposes.

- Phase 1 school pudo provisions likely adequate for Phase 2, due to catchment being wider initially hence more vehicle movements. i.e increased roll at Phase 2 will be offset by closer catchment hence Phase 1 pudo not required to expand in same location.
- Site offers opportunity for vehicular access off future potential 'collector' road to south. Site has capacity for an additional pudo and Phase 2 staff parking located adjacent the collector road to account for a more 'distributed network' of journey choices in the future.
- Half playing field assumed adequate for Phase 1&2.
- MoE preference to utilise single storey new modular buildings (as for Scott Point).
- On site waste water management not required beyond Phase 1 (assumes provision of public services prior to Phase 2 being undertaken).

1.4 Phase 1 & 2 Siting Study



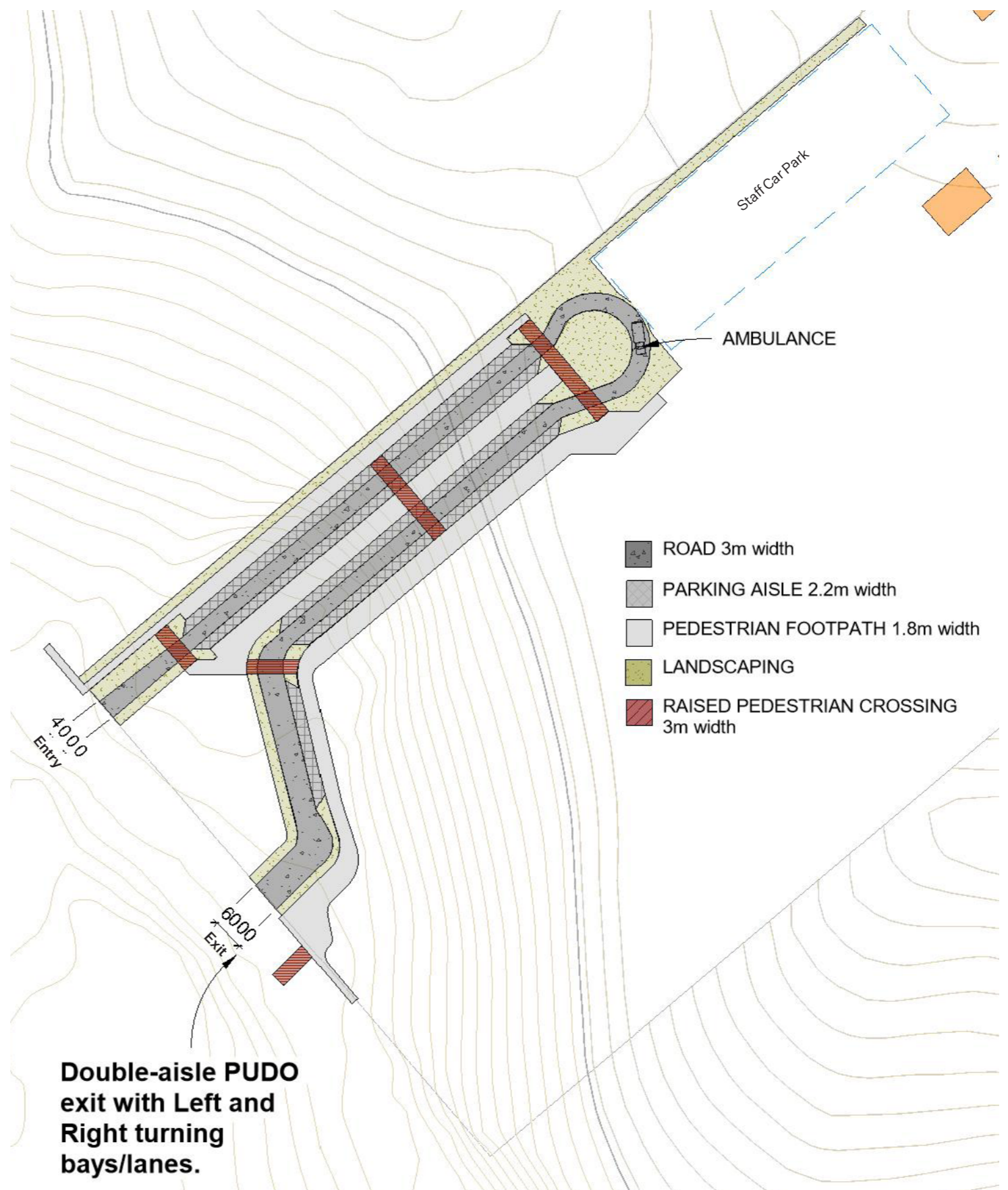
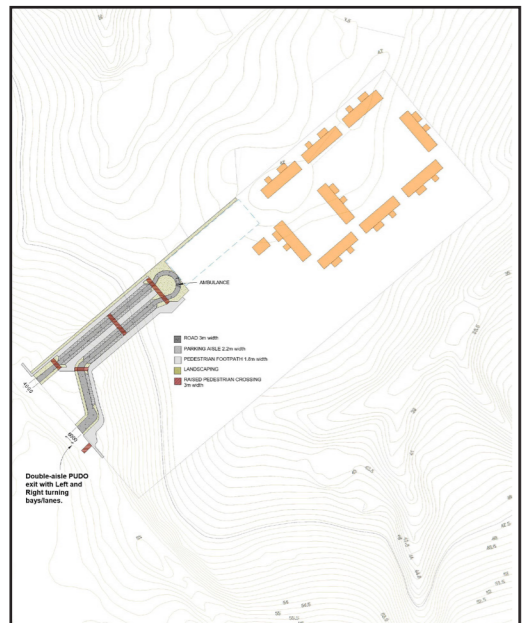
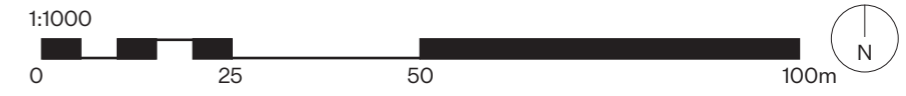
- Modular Buildings
- Conceptual PUDO including footpaths
- Right turn bay/flush median for entry and exit
- Stormwater management Area

- Adjacent Road
- Traffic Flow: Vehicle-in
- Traffic Flow: Vehicle-out
- Existing Pedestrian Pathways

- Proposed Pedestrian Pathways (Indicative Only)
- Proposed Pedestrian Crossing (Raised)

1.5 Conceptual PUDO Design

Potential layout for PUDO - Double Parking Aisles to optimise use of site.



1.6 Siting Study

Built form Precedents.



Albany Senior High Temporary School, Auckland / Jasmx



Albany Senior High Temporary School, Auckland / Jasmx



Scott Point Primary School, Auckland / AQUA



Scott Point Primary School, Auckland / AQUA



Scott Point Primary School, Auckland / AQUA

1.7 Siting Study

Raingarden & Wetland Precedents.



Sidwell Friend's School, Washington D.C / Perkins Eastman



Stonefields School, Auckland / Jasmax



Orlyplein, Amsterdam / City of Amsterdam Department of Environmental Planning and Sustainability

1.8 Siting Study

Proposed Siting Strategy - Open Space Calculations at 'Final' State - Option 1.

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Trig Rd, Whenuapai - Primary (w/ECE)
Areas and Open space calc. for Opt 1

	Combined Total	Secondary School (Y9-15)	Special and/or Satellite	Primary School (Y1-8)	ECE Centre
Site Area (approx. Site Allocation* minimums)	41,000 m2	included in Primary & Secondary		39,500 m2	1500 m2 est
defn.	4.1 ha				
Site A (South)	0 m2				
Site B (North)	0 m2				
Site C (South-West)	0 m2				
Levels (Storeys of construction)				1 to 2	
Floor plates				16-18m wide	
Roll (Masterplan)				1000	TBC
Interim/Opening Roll				600	TBC
Teaching Spaces		0	0	44	
Interim/Opening TS		0	0	27	
Interim net area		0	0	2200	
Interim Gross area	2860	0	0	2860	
defn: multiplier as provided by MoE=1.45		multiplier as provided by MoE=1.45	defn: multiplier as provided by MoE=1.30	defn: multiplier as provided by MoE=1.30	
Phase 2 net area		0		6163	
Phase 2 Gross area	8012	0		8012	
Interim-to-Phase 2 proportion of area	0.26	#DIV/0!		0.26	
GFA (m2)		0 m2	0 m2	10,872 m2	1500 m2
defn: (includes Gym for Secondary, Hall for Primary)					
dims (m)				456	
hall/perform/music dims (m)				24x19	
add Special School coverage (outside of form)		n/a		n/a	
add link					
Total GFA (m2) (excludes ECE)	10,872	0	included in primary & secondary	10,872	
Building Coverage (m2)	5522		included in primary & secondary	5522	

					9 x 308m2 TS (Ph.1, total - 2 TS @ Ph.2), 9 x 30m2 Walkway Coverings (Ph.1, total - 2 Covers @ Ph.2), 1 x 88m2 Admin (Ph.1, removed @ Ph.2), 1 x 400m2 Pavilion (Ph.1, removed @ Ph.2), 1 x 2700m2 Block (Ph.2 - 2 storey) 1 x 456m2 Hall (Ph.2)			
defn.								
Parking Spaces (req'd)	88	0		88				
rate (2 per TS), 4 per teaching space for satellite								
Provided vs Demand		218/236		88/88	10			
Parking Area (m2)	2566	0 m2	0	2566	360m2			
defn. (5.5 stall, 7.0 aisle, 1.0 m central band, 2m planted perimeter margin)				1580m2 + 986m2				
ratio				29.16				
Open Space	22604	0	included in primary & secondary	22604				
defn.	site allocation* less coverage less parking less marginal open space							
Open Space m2/per Student (at final roll)		#DIV/0!	included in primary & secondary	22.60				
defn.	Open Space total / student roll			22604/1000				
Open space at Interim roll m2/per student		-1.80		54.05				
Open Space Breakdown								
Marginal Open Spaces (not readily accessed for use by students)				8808				
	PUDO	0	included in prim.	2678				
defn.				105mx26.5m wide, with 45mx9m wide exit leg				

	Parking Swales	0					
defn.						TBC	
Site A & B wetland and buffer (riparian margin) exclusion area						3686	
defn.						wetland offset zone = 3686m2	
Sloped Site Area						2444	
defn.						sloped part of site 2444m2 to Southern site boundary	
Active Green (Playing fields)						3000	included in ECE site area
defn (at final state)						1 No. x 60x50m	
Active Hard (Hard Courts)						900	included in ECE site area
defn.						1 No. x 32x28m	
Passive Hard (landscaped court, hardstand circulation etc)						3394	
defn.						3394	
Passive Green (remaining area)							
defn.						timber walkway 762m2, playscape 1420m2, hardstand 1212m2	
defn.	open space total less Active Green less Active Hard less Passive Hard				0	15310	
Total Potential Rolls (if 20m2/student)			0	included in Primary		1130	
defn.	open space available (per school divided by 20m2)						
MoE Desired Roll						1000	