

- RETAINING WALLS W DRAINAGE (H=HEIGHT, C=CHAINAGE, ARROWS SHOW FALL DIRECTION)
- MAJOR CONTOURS (5.0m)
- MINOR CONTOURS (1.0m)
- PROPOSED KERB LINES
- STREAM CHANNEL
- 20m STREAM BUFFER
- INDIGENOUS VEGETATION AREA
- IV1 10m BUFFER
- WETLANDS TO BE RETAINED
- WETLAND 10m BUFFER
- PLAN CHANGE AREA
- BUILDINGS
- IMPERVIOUS
- NEW PARCELS
- EXISTING KERBLINES
- EXISTING IMPERVIOUS
- EXISTING BUILDINGS
- EXISTING PARCELS

NOTES:

1. ALL WORK TO COMPLY WITH COUNCIL AND PUBLIC NETWORK OPERATOR STANDARDS. ANY AMBIGUITY BETWEEN DRAWINGS AND STANDARDS TO BE REPORTED TO THE ENGINEER FOR CLARIFICATION
2. THE CONTRACTOR IS TO PEG INFRASTRUCTURE LOCATIONS AND EARTHWORKS LEVELS PRIOR TO ORDERING MATERIALS.
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7. EARTHWORKS TOLERANCES ARE TO BE +25mm
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IMAGERY CREDITS  
Maxar

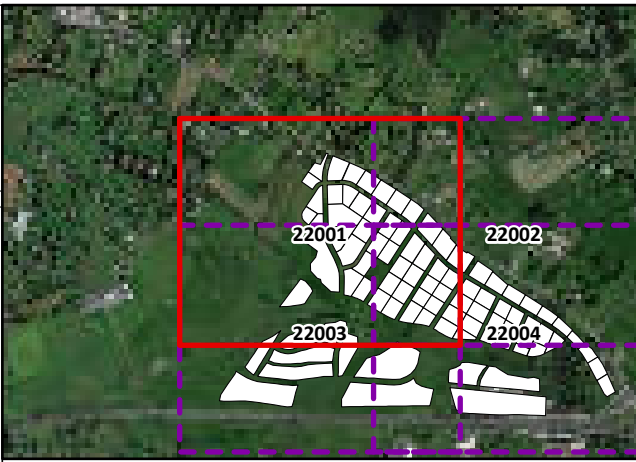
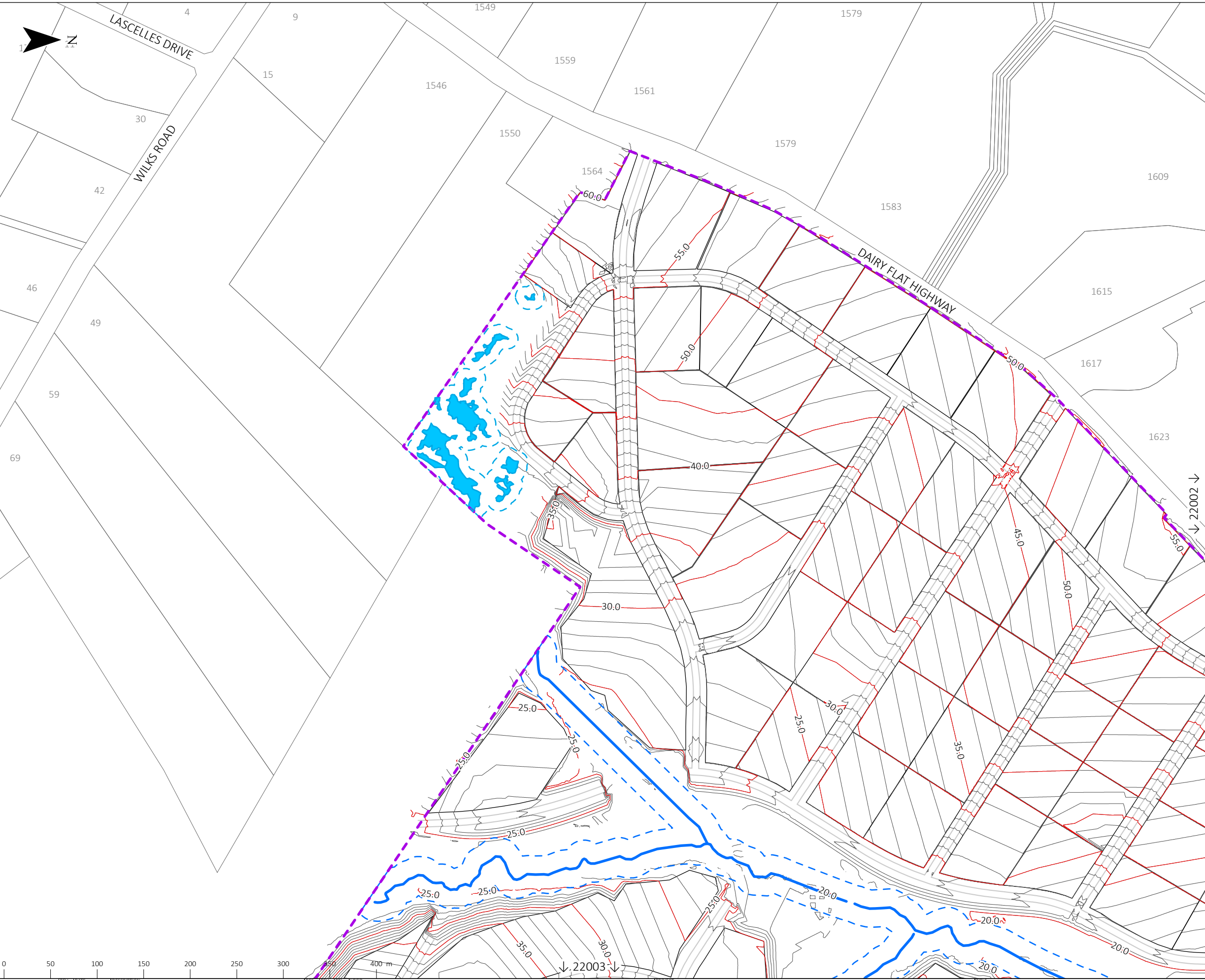
REV.	DATE	DESCRIPTION	DRAWN	CHECKED	APP. BY	LOGG.
A	31/03/23	PRELIMINARY EARTHWORKS AND INFRASTRUCTURE	CT	AT	DSR	



SILVERDALE WEST PRIVATE  
PLAN CHANGE

FINISHED CONTOUR PLAN

STATUS: FOR INFORMATION ONLY			
DRAWING NO: 22000			
SCALE: 1:8,000	SIZE: A3	REVISION: A	DATE: 31/03/23



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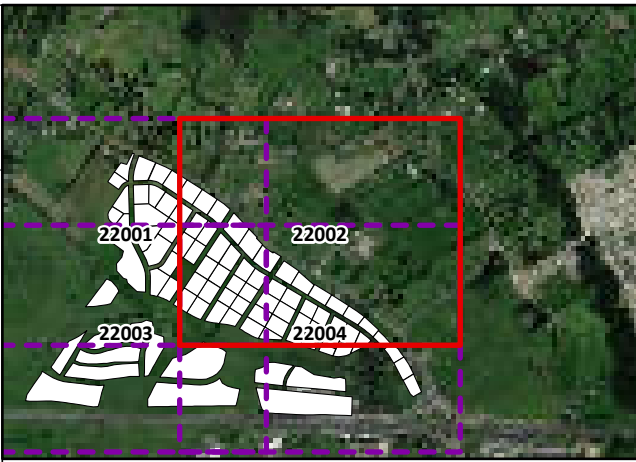
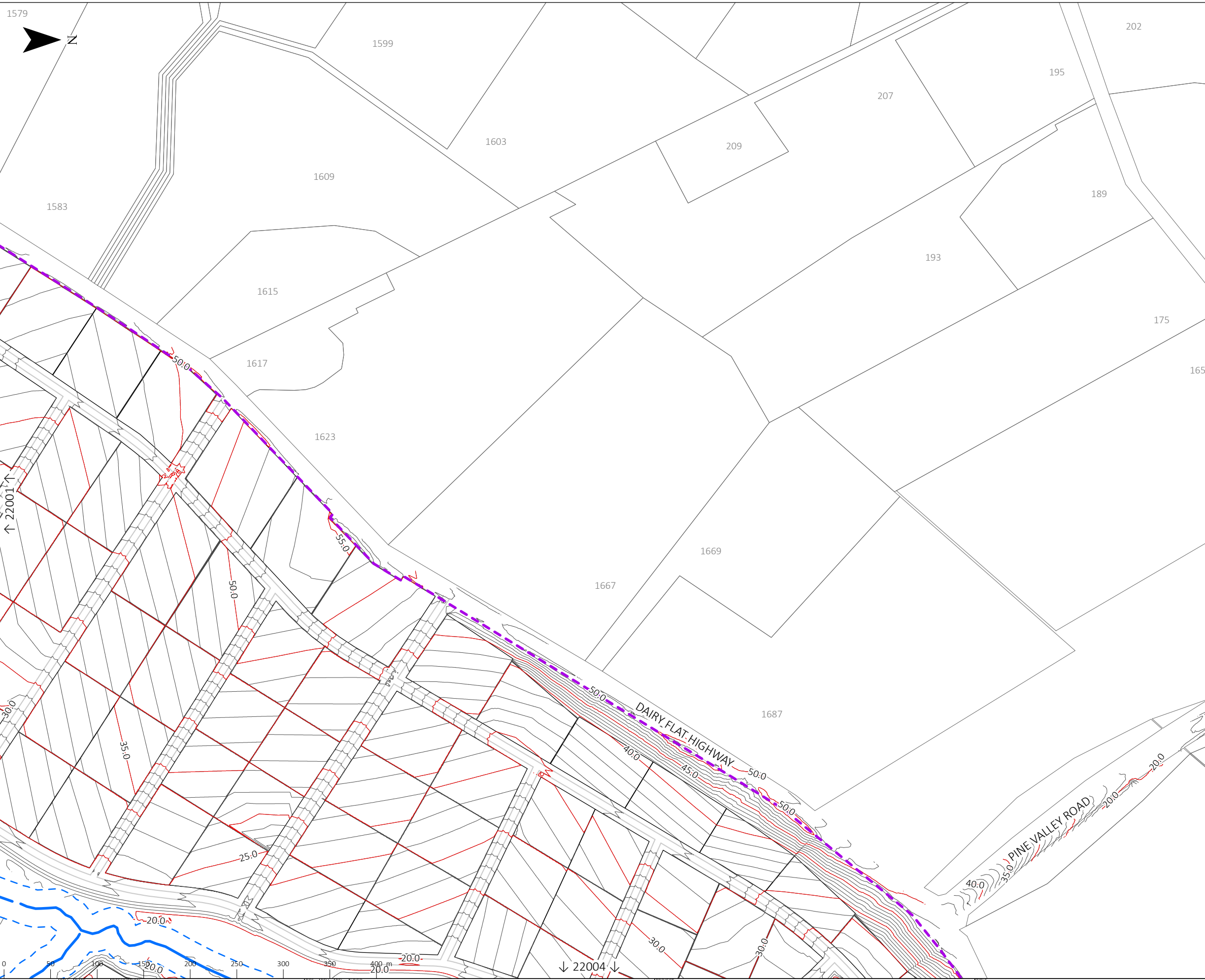
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SILVERDALE WEST PRIVATE  
PLAN CHANGE

FINISHED CONTOUR PLAN

STATUS: FOR INFORMATION ONLY			
DRAWING NO: 22001			
SCALE: 1:4,000	SIZE: A3	REVISION: A	DATE: 31/03/23



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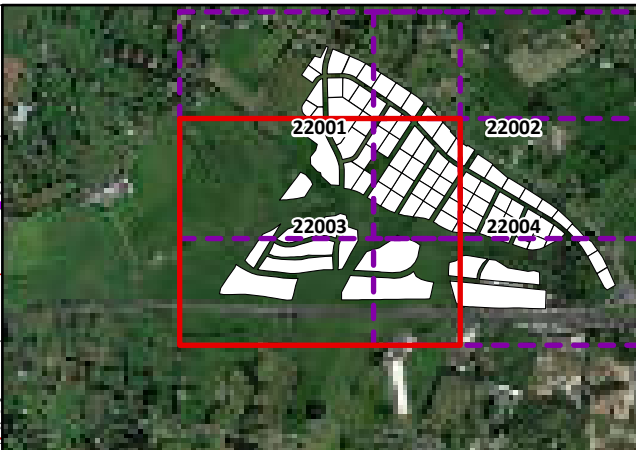
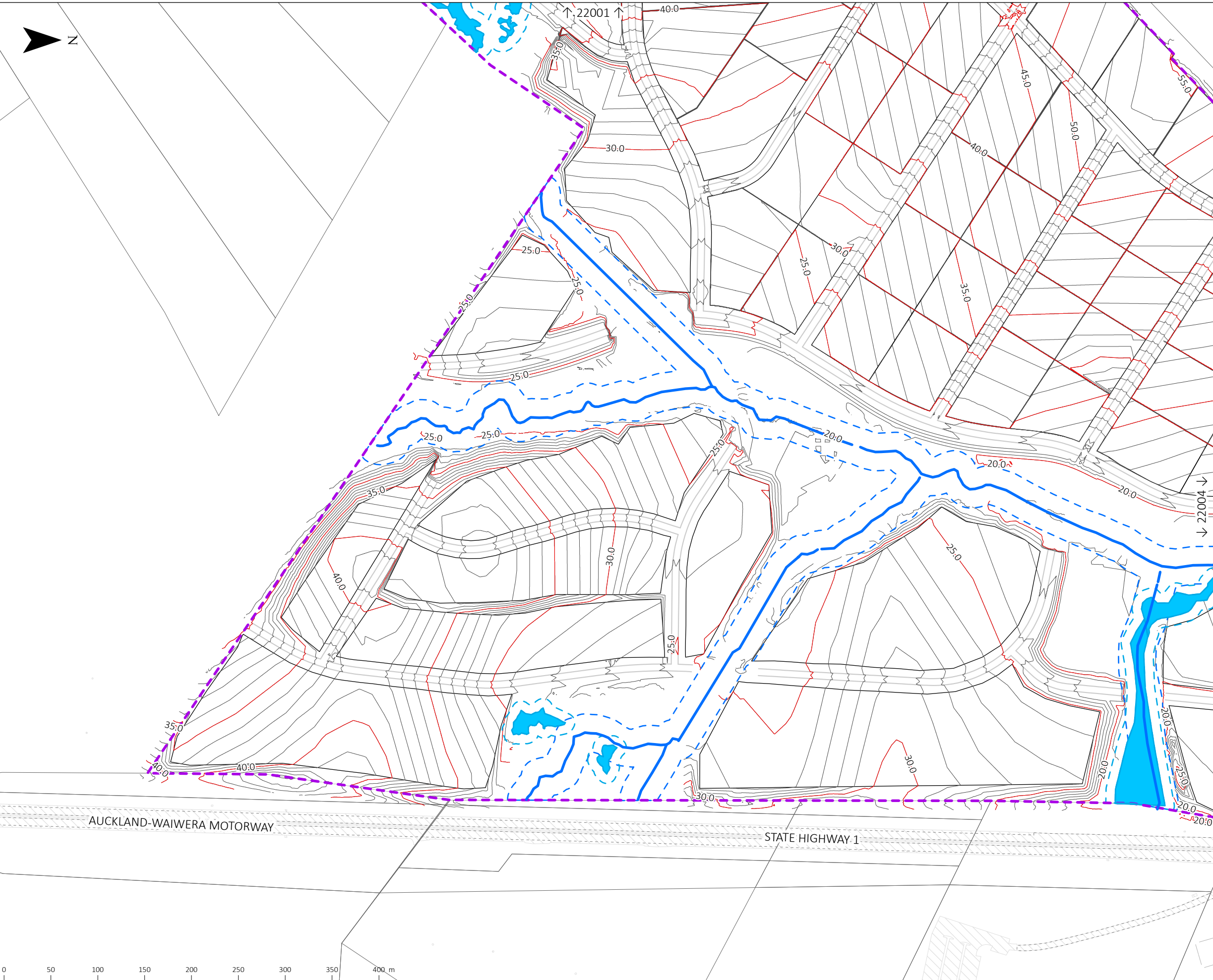
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SILVERDALE WEST PRIVATE  
PLAN CHANGE

FINISHED CONTOUR PLAN

STATUS: FOR INFORMATION ONLY			
DRAWING NO: 22002			
SCALE: 1:4,000	SIZE: A3	REVISION: A	DATE: 31/03/23



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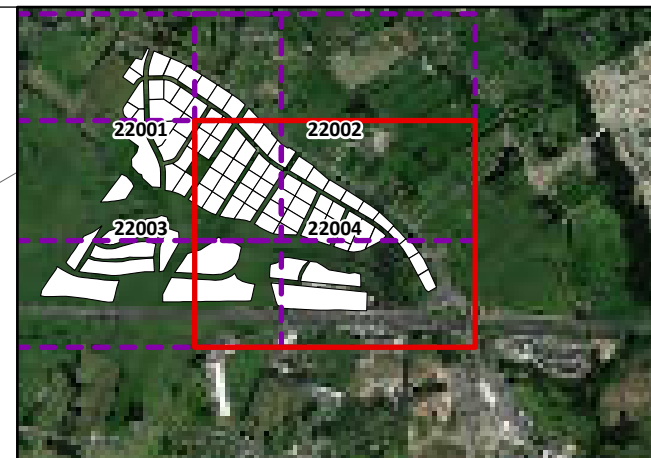
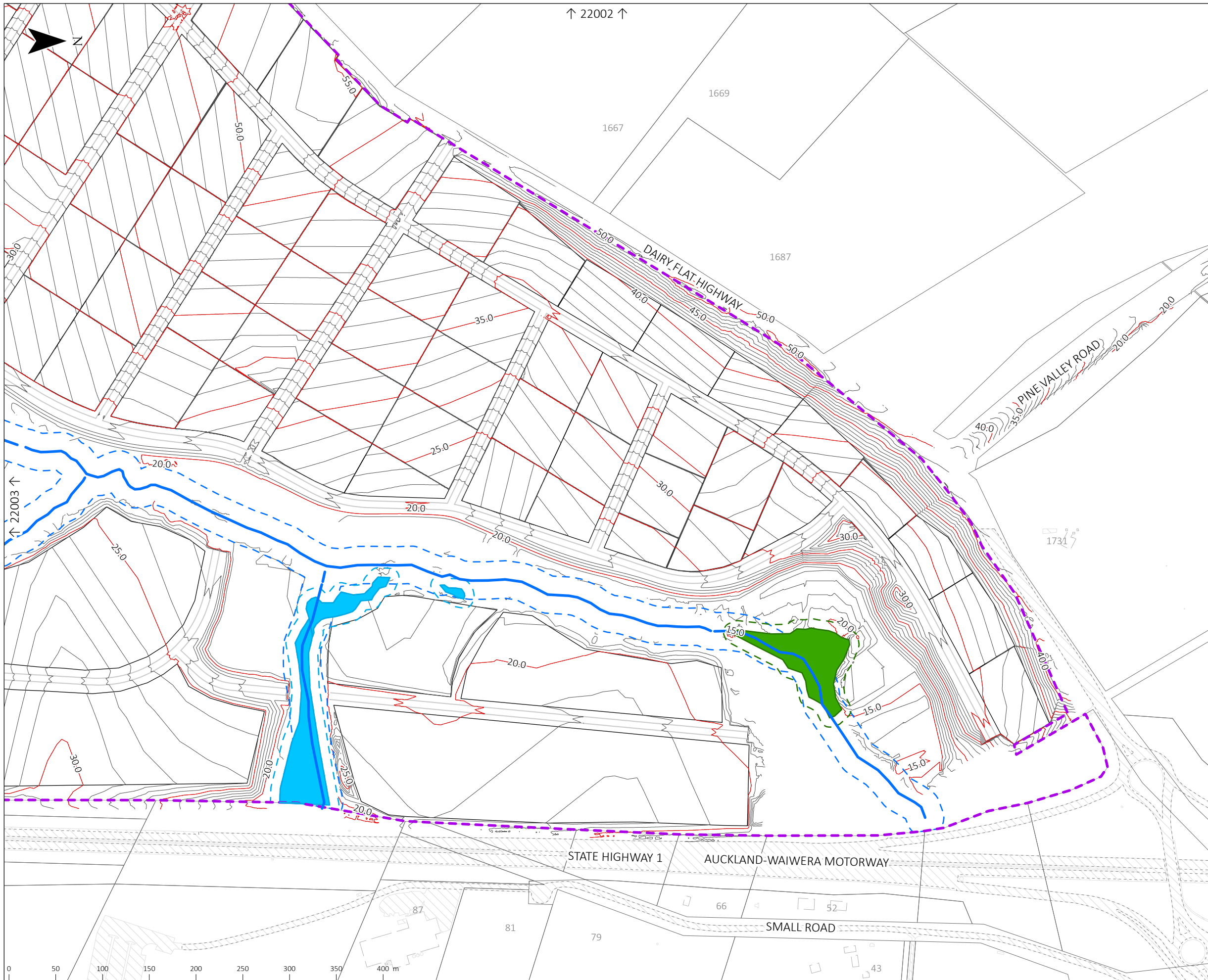
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SILVERDALE WEST PRIVATE  
PLAN CHANGE

FINISHED CONTOUR PLAN

STATUS: FOR INFORMATION ONLY			
DRAWING NO: 22003			
SCALE: 1:4,000	SIZE: A3	REVISION: A	DATE: 31/03/23



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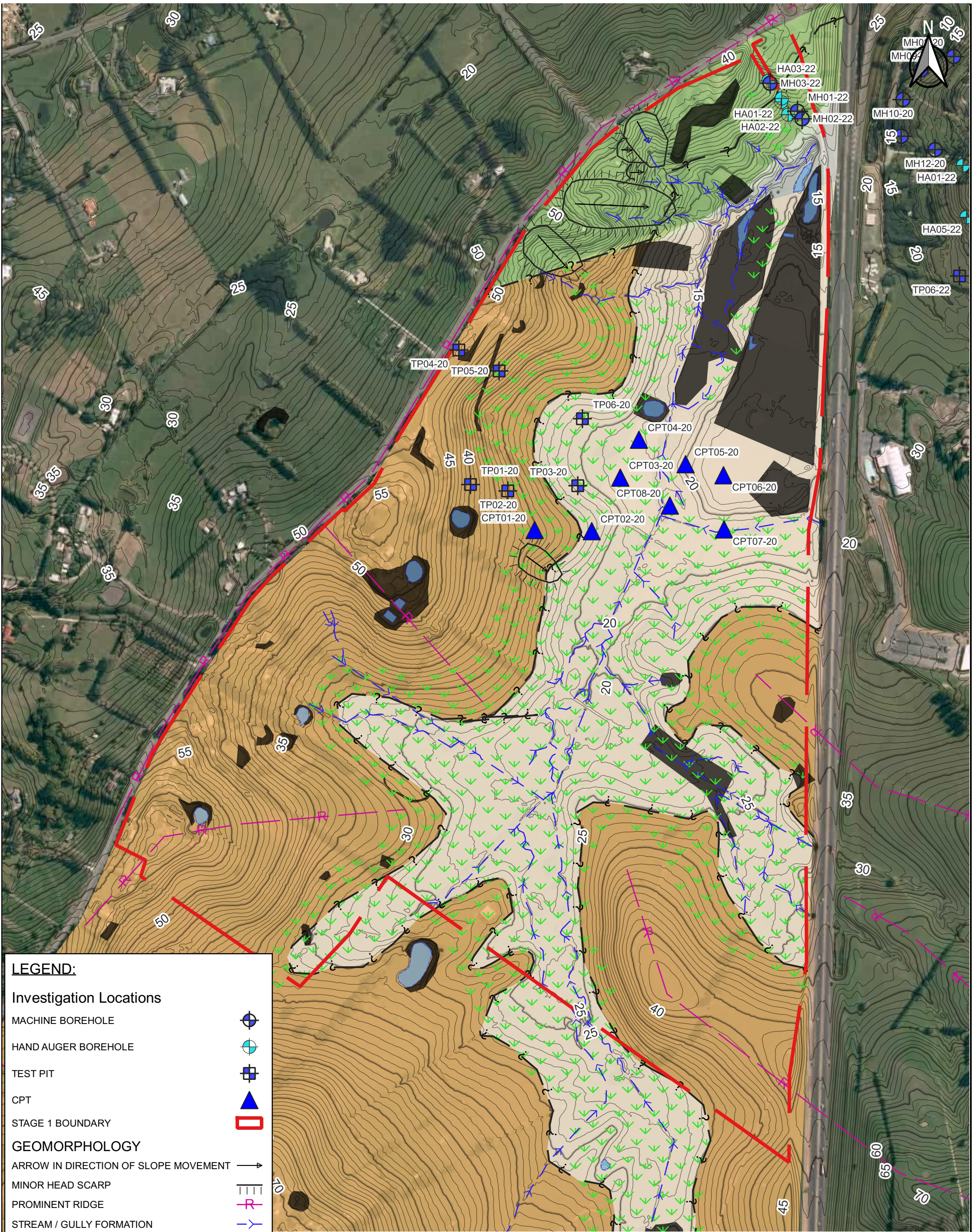
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SILVERDALE WEST PRIVATE  
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DRAWING NO: 22004			
SCALE: 1:4,000	SIZE: A3	REVISION: A	DATE: 31/03/23



**LEGEND:**

**Investigation Locations**

- MACHINE BOREHOLE
- HAND AUGER BOREHOLE
- TEST PIT
- CPT

**GEOMORPHOLOGY**

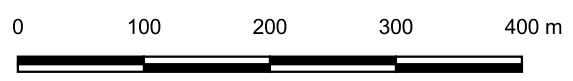
- ARROW IN DIRECTION OF SLOPE MOVEMENT
- MINOR HEAD SCARP
- PROMINENT RIDGE
- STREAM / GULLY FORMATION
- GEOLOGICAL BOUNDARY (INDICATIVE)
- POND
- SWAMPY GROUND

**GEOLOGY**

- FILL
- ALLUVIUM
- MAHURANGI LIMESTONE
- MANGAKAHIA COMPLEX

**NOTES:**

1. BASE MAP ADAPTED FROM LINZ OPEN DATA VIA QGIS
2. GEOLOGY ADAPTED FROM GNS SCIENCE OPEN DATA VIA QGIS



CLIENT:	<b>FLETCHER DEVELOPMENTS LIMITED</b>	DRAWN:	AG	PROJECT:	AKL2022-0152
PROJECT:	<b>SILVERDALE WEST - STAGE 1 DAIRY FLAT HIGHWAY, SILVERDALE</b>	CHECKED:	AG	DRAWING:	01
TITLE:	<b>GEOLOGY AND GEOMORPHOLOGY PLAN</b>	REVISION:	0	SCALE:	1:6000
		DATE:	15/10/2022	SHEET:	A3 P



Figure 2. Watercourses and ponds at the site. Permanent stream (solid blue line), intermittent stream (dashed blue line), ephemeral flow path (dotted blue line), drain (solid purple line), pond (blue polygon with orange outline), and site boundary (turquoise line).



Figure 3. Watercourses and ponds at the northern and central portion of the site. Permanent stream (solid blue line), intermittent stream (dashed blue line), ephemeral flow path (dotted blue line), drain (solid purple line), pond (blue polygon with orange outline), and site boundary (turquoise line). Ponds visible on the aerial but not listed are no longer ponds on the ground.



Figure 4. Watercourses in the central portion of the site. Permanent stream (solid blue line), intermittent stream (dashed blue line), ephemeral flow path (dotted blue line), drain (solid purple line), pond (blue polygon with orange



outline), and site boundary (turquoise line). Ponds visible on the aerial but not listed are no longer ponds on the ground.



Figure 5. Watercourses across south portion of the site. Permanent stream (solid blue line), intermittent stream (dashed blue line), ephemeral flow path (dotted blue line), drain (solid purple line), pond (blue polygon with orange outline), and site boundary (turquoise line).