

NOTES:

Background Image: Auckland 0.075m Rural Aerial Photos (2020), source: LINZ Data Service

10m Contours: Derived from Auckland North LiDAR 1m DEM (2016-2018), source: LINZ Data Service

Property Boundaries: NZ Primary Parcels source: LINZ Data Service & C&R Surveyors Feb 2019

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Water Paths are from Bioresarches (2020)

FINAL PIT, FILL AND ROAD DESIGNS ARE SUBJECT TO GEOTECHNICAL APPROVAL

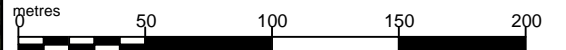
DESIGN PARAMETERS:

Stage 2 Design 4 (A-Pit)
Outline = 6.11ha
15m faces at 2V:1H gradient, 8m berms
Haul Road: 12m wide, gradient = 8H:1V
Overall Pit Slope Angle $\approx 43^\circ$ at steepest point
Estimated Rock Extraction = 654,000 BCM
Estimated Overburden Removal = 306,000 BCM

Stage 2 Design 4 (A-Fill)
Outline = 6.11ha
15m faces at 20° gradient, 6m berms
Access Tracks: N/A
Estimated Overburden Capacity = 1.5 million BCM

Stage 2 Design 4 (B-Pit)
Outline = 26.46ha
15m faces at 2V:1H gradient, (generally) 10m berms
Haul Road: 15m wide, gradient = 10H:1V
Overall Pit Slope Angle $\approx 41^\circ$ at steepest point (southern end)
Estimated Rock Extraction = 8.0 million BCM
Estimated Overburden Removal = 1.2 million BCM

Sediment Retention Ponds
SRP 1 & 2 have 10m x 35m bases, with 10m x 6m forebays.
2m depth gives storage volume of 1080m³ each.
Remaining SRPs have 11.5m x 40m bases, with 11.5m x 6m forebays.
2m depth gives storage volume of 1355m³ each.
A sump provides additional storage as required



Scale: 1:2980.67578501276 @ A3

Projection: NZGD 2000 New Zealand Transverse Mercator

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KINGS QUARRY LIMITED

PROJECT

KINGS QUARRY - STAGE 2

TITLE

STAGE 2 OVERVIEW

Prepared By: Mike Chilton

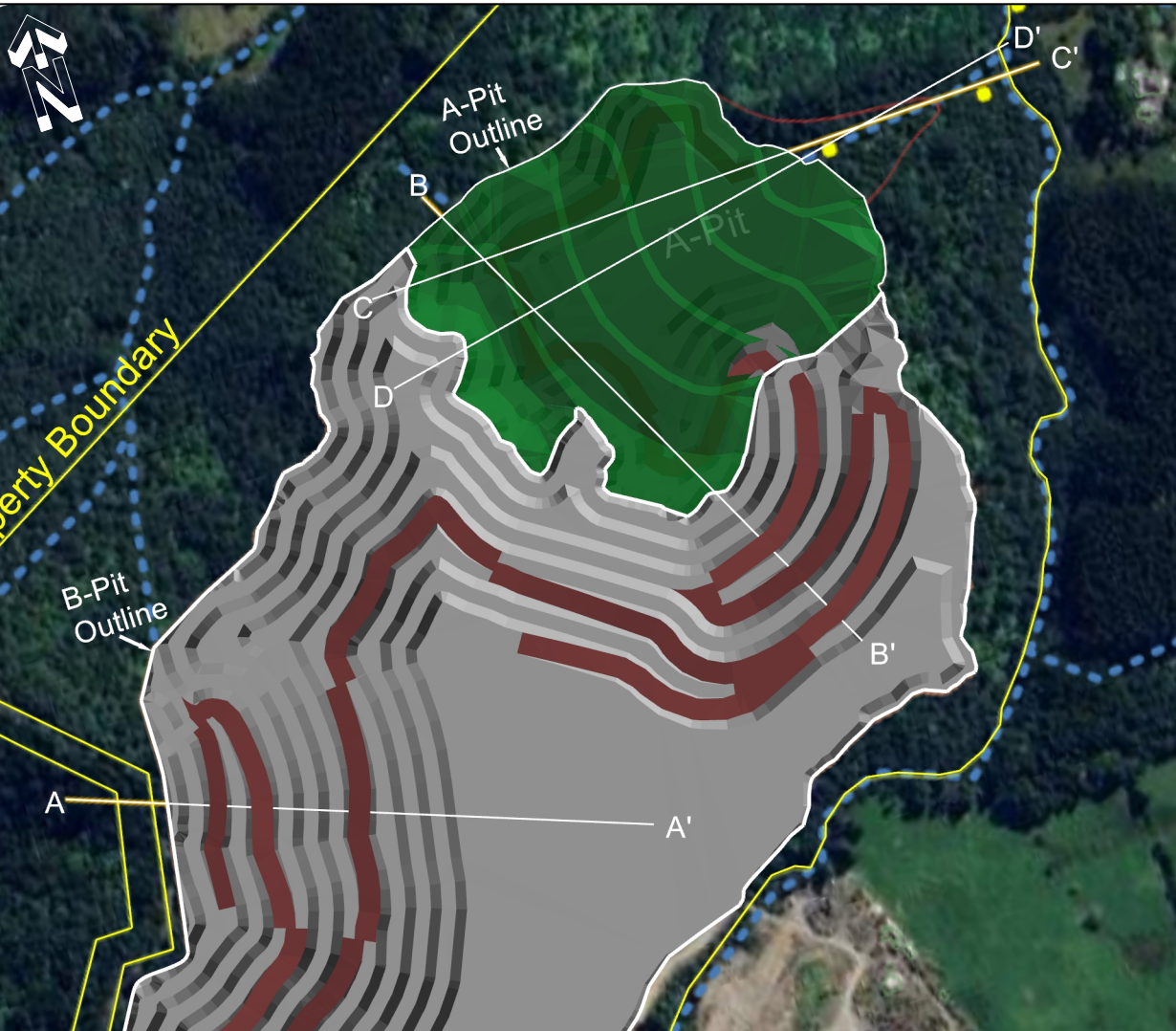
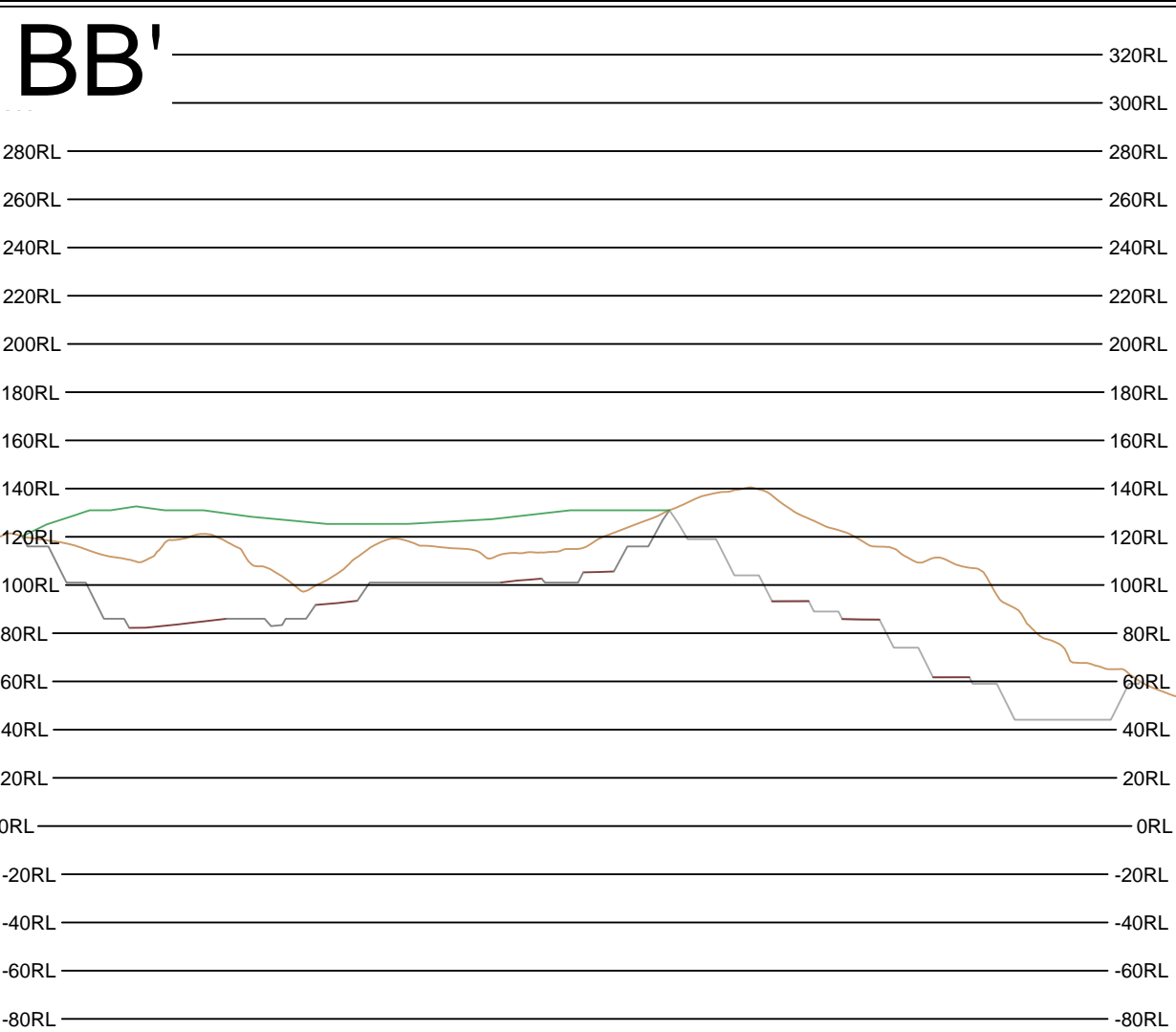
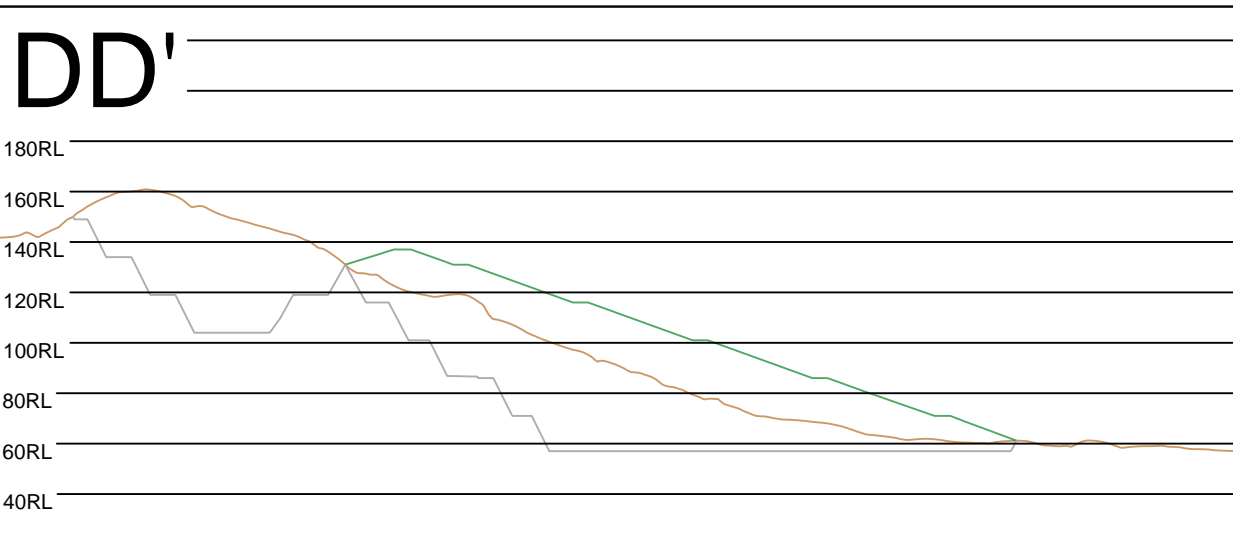
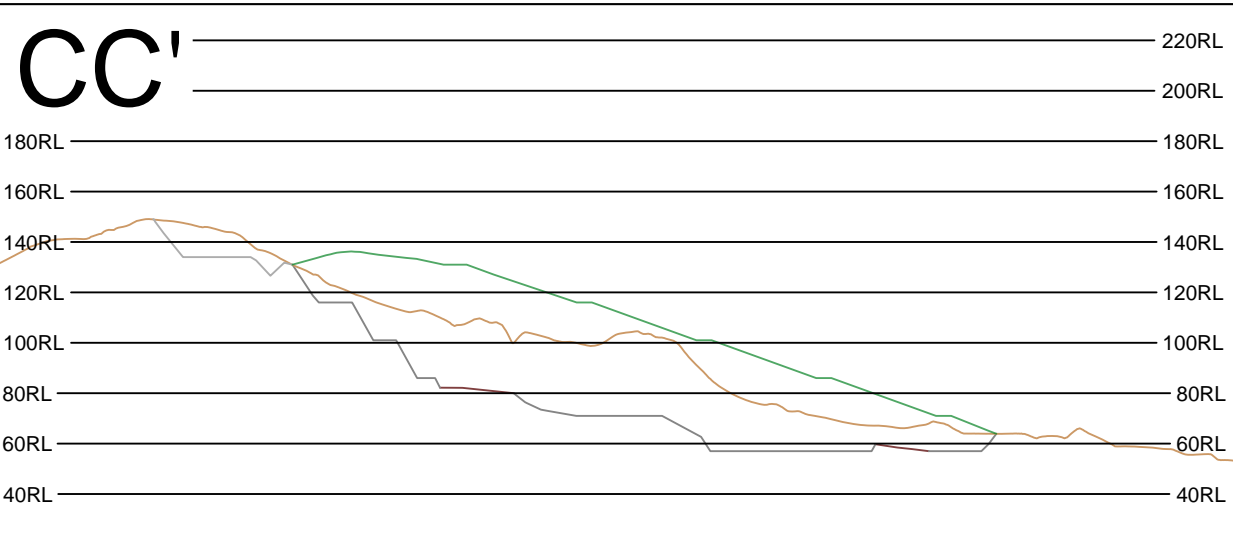
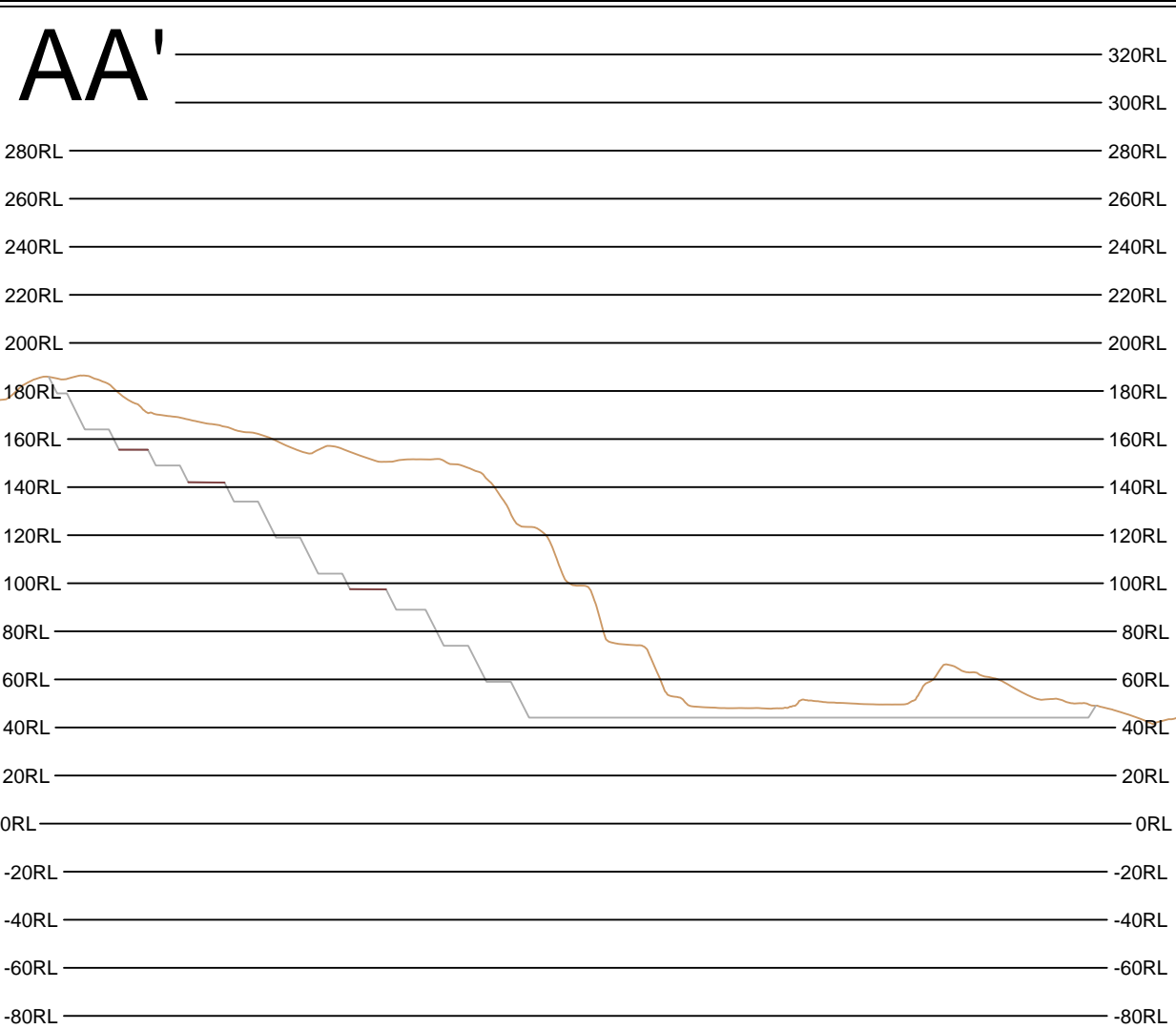
Date Drawn: 04/12/2023

Revision: 5

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NOTES:

Original Surface: Auckland North LiDAR 1m DEM (2016-2018), source: LINZ Data Service

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FINAL PIT, FILL AND ROAD DESIGNS ARE SUBJECT TO GEOTECHNICAL APPROVAL

DESIGN PARAMETERS:
Stage 2 Design 4 (A-Pit)
15m faces at 2V:1H gradient, 8m berms
Haul Road: 12m wide, gradient = 8H:1V
Overall Pit Slope Angle $\approx 43^\circ$ at steepest point

Stage 2 Design 4 (A-Fill)
15m faces at 20° gradient, 6m berms
Berm RL: 71, 86, 101, 116, 131, 138
Haul Road: N/A

Stage 2 Design 4 (B-Pit)
15m faces at 2V:1H gradient, (generally) 10m berms
Haul Road: 15m wide, gradient = 10H:1V
Overall Pit Slope Angle $\approx 41^\circ$ at steepest point (southern end)

Scale: 1:3000 @ A3, Overview 1:5000
Projection: NZGD 2000 New Zealand Transverse Mercator

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PROJECT
KINGS QUARRY - STAGE 2

TITLE
STAGE 2 CROSS SECTIONS

Prepared By: Mike Chilton
Date Drawn: 04/12/2023
Revision: 3

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