1. FOR INFORMATION PURPOSES ONLY.
2. BOUNDARIES, CONTOURS AND OTHER BASE INFORMATION SHOWN IS INDICATIVE ONLY AND PRIMARILY INFORMED BY AERIAL LIDAR SURVEY BY SYNERGY POSITIONING SYSTEMS LTD IN APRIL 2016.
3. COORDINATES SHOWN ARE IN TERMS OF MT EDEN 2000 CIRCUIT AND LEVELS ARE RELATIVE TO THE AUCKLAND 1946 VERTICAL DATUM.
4. THE PROPOSED ROAD ALIGNMENT, TURBINE PLATFORMS, AND OVERALL EARTHWORKS ARE BASED ON AN INDICATIVE ROAD ALIGNMENT AND REMAIN SUBJECT TO DETAILED DESIGN.
1. For information purposes only.
2. Boundaries, contours and other base information shown are indicative only and primarily informed by aerial LIDAR survey by Synergy Positioning Systems Ltd in April 2016.
3. Coordinates shown are in terms of MT EDEN 2000 CIRCUIT and levels are relative to the Auckland 1946 vertical datum.
4. The proposed road alignment, turbine platforms, and overall earthworks are based on an indicative road alignment and remain subject to detailed design.

LEGEND
- EXISTING PARCEL BOUNDARY
- JACKSON PROPERTY BOUNDARY
- ROTOKOHU FARMS PROPERTY BOUNDARY
- DENIZE BROTHERS PROPERTY BOUNDARY
- HDC/MPDC TERRITORIAL BOUNDARY
- EXISTING MAJOR CONTOUR
- DISTRICT MAJOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING EARTHWORK
- PROPOSED EARTHWORK
- PROPOSED TURBINE LOCATION
- PROPOSED MAJOR CONTOUR
- PROPOSED ROAD CENTER LINE AND EDGE OF CARRIAGeway
- EXISTING FENCE
- INDICATIVE MAJOR CONTOUR
- INDICATIVE MINOR CONTOUR
- INDICATIVE QUAURY SITE
- INDICATIVE CLEANFILL SITE
- EXISTING QUAURY
- EXISTING CULVERT
- PROPOSED UPGRADED CULVERT
- STREAM (WRC REGIONAL MAP)
- EXISTING SLOPE TERRAIN GREATER THAN 25°

10/215 ROSEDALE ROAD, ALBANY
AUCKLAND 0632
SYNERGY POSITIONING SYSTEMS LTD
3/52 ARRENWAY DRIVE, ALBANY,
AUCKLAND 0632
KAIMAI WIND FARM
ROTOKOHU ROAD, PAEROA
PRELIMINARY CIVIL ENGINEERING DRAWINGS
EROSION AND SEDIMENT CONTROL OVERVIEW DETAIL PLAN SHEET 4

TEKTUS Consultants Ltd
PO Box 80212 Green Bay
Auckland 0840
p. 09 827 1191
m. 021 1434 874
www.tektus.nz

VENTUS ENERGY (NZ) LTD
10/215 ROSEDALE ROAD, ALBANY
AUCKLAND 0632
1. FOR INFORMATION PURPOSES ONLY.
2. BOUNDARIES, CONTOURS AND OTHER BASE INFORMATION SHOWN IS INDICATIVE ONLY AND PRIMARILY INFORMED BY AERIAL LIDAR SURVEY BY SYNERGY POSITIONING SYSTEMS LTD IN APRIL 2016.
3. COORDINATES SHOWN ARE IN TERMS OF MT EDEN 2000 CIRCUM AND LEVELS ARE RELATIVE TO THE AUCKLAND 1946 VERTICAL DATUM.
4. THE PROPOSED ROAD ALIGNMENT, TURBINE PLATFORMS, AND OVERALL EARTHWORKS ARE BASED ON AN INDICATIVE ROAD ALIGNMENT AND REMAIN SUBJECT TO DETAILED DESIGN.

TEKTUS Consultants Ltd
PO Box 80212 Green Bay
Auckland 0643 NZ
p. 09 827 1191
m. 021 1434 874
www.tektus.nz

VENTUS ENERGY (NZ) LTD
10/215 ROSEDALE ROAD, ALBANY
AUCKLAND 0632

SYNERGY POSITIONING SYSTEMS LTD
3/52 ARRENWAY DRIVE, ALBANY,
AUCKLAND 0632

KAIMAI WIND FARM
ROTKOHU ROAD, PAEROA

PRELIMINARY CIVIL ENGINEERING DRAWINGS

EROSION AND SEDIMENT CONTROL OVERVIEW DETAIL PLAN SHEET 5

1:5000

EROSION AND SEDIMENT CONTROL
OVERVIEW DETAIL PLAN SHEET 5

TURBINE 18
EASTING: 484027.58
NORTHING: 736439.35

TURBINE 19
EASTING: 484423.16
NORTHING: 736382.64

CH 0
CH 200
CH 400
CH 600
CH 624
CH 200
CH 329
CH 400
CH 600
CH 800
CH 1000
CH 1200
CH 1400
CH 1600
CH 1800
CH 2000
CH 2200
CH 2400
CH 2600

EXISTING SLOPE TRIANGLE GREATER THAN 25°
NOTES

1. STRIP TOPSOIL AND PLACE IN LOCATION WITH "INDEPENDENT" EROSION AND SEDIMENT CONTROL CAN BE ESTABLISHED
2. CUT AND COVER TO BE IMPLEMENTED WHERE AS CUT AND FILL OCCURS ALONG TRACK SURFACE IT IS STABILISED PROGRESSIVELY
3. CUT AND FILL BATTERS TO BE STABILISED WITH NATURAL ROCK MATERIAL OR MULCH AND VEGETATION
4. BELOW FILL BATTERS FILTER SOCKS TO BE STRATEGICALLY PLACED AS NECESSARY
5. EARTHWORKS TO ADVANCE NO MORE THAN 24 HOURS IN FRONT OF THE STABILISED ROAD SURFACE
6. BOUNDARIES ARE SHOWN IN TERMS OF MT EDEN 2000 GRID AND LEVELS ARE RELATIVE TO THE AUCKLAND 1946 VERTICAL DATUM
7. THE PROPOSED ROAD ALIGNMENT, TURBINE PLATFORMS, AND OVERALL EARTHWORKS ARE BASED ON AN INDICATIVE ROAD ALIGNMENT AND REMAIN SUBJECT TO DETAILED DESIGN
8. ALL PRINCIPLES AS PER ESCP SECTION 5.0 TO APPLY
9. MONITORING TO OCCUR AS PER ESCP SECTION 11 WITH AN ADAPTIVE CONTINUOUS IMPROVEMENT APPROACH
NOTES

1. QUARRY LOCATIONS ARE INDICATIVE ONLY
2. QUARRY AND TURBINE 10 EROSION AND SEDIMENT CONTROL TO BE INTEGRATED
3. WORKS ARE WELL ISOLATED FROM STREAM SYSTEMS AND HAVE A SIGNIFICANT GRASS BUFFER ZONE BETWEEN WORKS AREA AND HEADWATER STREAMS IN VALLEY FLOOR
4. STEP TOPSOIL WHERE NECESSARY AND PLACE IN LOCATIONS WITH INDEPENDENT EROSION AND SEDIMENT CONTROL CAN BE ESTABLISHED
5. WHERE EXPOSED AREAS ARE GREATER THAN 1500M² THEN DECANTING EARTH BUNDS WILL BE ESTABLISHED
6. DECANTING EARTH BUND MAY BE UPGRADERD TO A SEDIMENT RETENTION POND IF CATCHMENT AREA JUSTIFIABLE
7. DECANTING EARTH BUND TO CAPTURE (THROUGH DIRTY WATER DIVERSION) QUARRY, TURBINE PLATFORM AND ACCESS ROAD
8. QUARRY OPERATION WILL OCCUR ON A QUARRY PLATFORM AND DISCHARGE VIA THE DECANTING EARTH BUND. ANY TOPISTOCK WILL BE ON THE QUARRY FLOOR OR TRANSFORMED IMMEDIATELY TO END USE LOCATION
9. TURBINE PLATFORM AND (ROAD ACCESS) IS STABILIZED AS CUT OCCURS (ILLUSTRATED IN SHEET 251-1)
10. STOCK EXCLUSION TO OCCUR DURING EARTHWORKS ACTIVITY
11. ALL PRINCIPLES AS PER EESC SECTION 9.0 TO APPLY
12. DETAILED DESIGN TO BE ESTABLISHED PRIOR TO ANY EARTHWORKS OCCURRING
13. MRC EROSION AND SEDIMENT CONTROL GUIDELINES TO APPLY
14. MONITORING TO OCCUR AS PER EESC SECTION 11.0 WITH AN ADAPTIVE CONTINUOUS IMPROVEMENT APPROACH

LEGEND - SUPPLEMENTARY

- INDICATIVE CLEAN WATER/STREAM FLOWS
- INDICATIVE DIRTY WATER FLOWS
- PROPOSED DECONTAMINATION BUND
- PROPOSED DECONTAMINATION SILT FENCE
- INDICATIVE EROSION AND SEDIMENT CONTROL
- INDICATIVE CLEANFILL SITE
- INDICATIVE QUARRY SITE
- INDICATIVE CARRERAGWAY
- INDICATIVE FURNIES
- INDICATIVE MAJOR SURVEY
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED ROAD CENTER LINE AND EDGE OF CARREAGWAY
- PROPOSED UPGRADED CULVERT
- STREAM (WRC REGIONAL MAP)

**Notes:**

1. FOR INFORMATION PURPOSES ONLY.
2. BOUNDARIES, CONTURS AND OTHER BASE INFORMATION SHOWN ARE INDICATIVE ONLY AND PRIMARILY INFORMED BY AERIAL LIDAR SURVEY BY SYNERGY POSITIONING SYSTEMS LTD APRIL 2016.
3. COORDINATES SHOWN ARE IN TERMS OF MT EDEN 2000 CIRCUIT AND LEVELS ARE RELATIVE TO THE AUCKLAND 1946 VERTICAL DATUM.
4. THE PROPOSED ROAD ALIGNMENT, TURBINE PLATFORMS, AND OVERALL EARTHWORKS ARE BASED ON AN INDICATIVE ROAD ALIGNMENT AND REMAIN SUBJECT TO DETAILED DESIGN.
5. ALL FLOWS FROM EARTHWORKS OVER GRASS BUFFER ZONE PRIOR TO DECANTING EARTH BUND AND DISCHARGE
6. INDICATIVE QUARRY BOUNDARY