OTAIHANGA RETIREMENT VILLAGE

73 RATANUI ROAD, PARAPARAUMU

CIVIL ENGINEERING DRAWINGS



LOCALITY PLAN

N.T.S.

DRAWING INDEX		REVISION AND ISSUE DATE
Sheet Number	**Sheet Title**	
A25556_0100	COVER SHEET	19.10.2026
A25556 - 2000	EARTHWORKS - FINISHED CONTOURS OVERVIEW PLAN	1
A25556 - 2001	EARTHWORKS - FINISHED CONTOURS SHEET 1	1
A25556 - 2002	EARTHWORKS - FINISHED CONTOURS SHEET 2	1
A25556 - 2100	EARTHWORKS CUT-FILL OVERVIEW PLAN	1
A25556 - 2101	EARTHWORKS CUT-FILL SHEET 1	1
A25556_2102	EARTHWORKS CUT FILL SHEET 2	1
A25556_2200	EROSION AND SEDIMENT CONTROL PLAN OVERVIEW PLAN	1
A25556 - 2201	EROSION AND SEDIMENT CONTROL PLAN SHEET 1	1
A25556 - 2202	EROSION AND SEDIMENT CONTROL PLAN SHEET 2	1
A25556 - 2203	EROSION AND SEDIMENT CONTROL PLAN DRAIN DIVERSION WORKS	1
A25556 - 2300	EROSION AND SEDIMENT CONTROL STANDARD DETAILS SHEET 1	1
A25556 - 2301	EROSION AND SEDIMENT CONTROL STANDARD DETAILS SHEET 2	1
A25556_2302	EROSION AND SEDIMENT CONTROL STANDARD DETAILS SHEET 3	1
A25556_2400	EARTHWORKS CROSS SECTIONS SHEET 1	1
A25556 - 2401	EARTHWORKS CROSS SECTIONS SHEET 2	1
A25556 - 2500	EARTHWORKS RETAINING WALL OVERVIEW PLAN	1
A25556 - 2501	EARTHWORKS RETAINING WALL LAYOUT PLAN SHEET 1	1
A25556 - 2502	EARTHWORKS RETAINING WALL LAYOUT PLAN SHEET 2	1
A25556 - 2510	EARTHWORKS RETAINING WALL LONGSECTIONS SHEET 1	1
A25556_2511	EARTHWORKS RETAINING WALL LONGSECTIONS SHEET 2	1
A25556_2512	EARTHWORKS RETAINING WALL LONGSECTIONS SHEET 3	1
A25556_2513	EARTHWORKS RETAINING WALL LONGSECTIONS SHEET 4	1
A25556 - 3000	ROADING LAYOUT OVERVIEW PLAN	1
A25556 - 3001	ROADING LAYOUT PLAN SHEET 1	1
A25556 - 3002	ROADING LAYOUT PLAN SHEET 2	1
A25556 - 3100	ROADING LONGSECTIONS SHEET 1	1
A25556_3101	ROADING LONGSECTIONS SHEET 2	1
A25556_3102	ROADING LONGSECTIONS SHEET 3	1
A25556 - 3200	TYPICAL ROAD CROSS SECTIONS SHEET 1	1
A25556 - 3201	TYPICAL ROAD CROSS SECTIONS SHEET 2	1
A25556 - 3202	TYPICAL ROAD CROSS SECTIONS SHEET 3	1

A25556 - 4000	STORMWATER LAYOUT OVERVIEW PLAN	1
A25556 - 4001	STORMWATER LAYOUT PLAN SHEET 1	1
A25556 - 4002	STORMWATER LAYOUT PLAN SHEET 2	1
A25556 - 4100	STORMWATER LONGSECTION SHEET 1	1
A25556 - 4101	STORMWATER LONGSECTION SHEET 2	1
A25556 - 4102	STORMWATER LONGSECTION SHEET 3	1
A25556_4200	STORMWATER CATCHMENT PLAN	1
A25556_4300	STORMWATER OVERLAND FLOW PATH PLAN	1
A25556_4500	STORMWATER DETENTION PONDS LAYOUT PLAN	1
A25556_4501	STORMWATER DETENTION PONDS CROSS SECTIONS	1
A25556_4502	STORMWATER DRAIN AND CULVERT LONG SECTION	1
A25556_5000	WASTWATER LAYOUT OVERVIEW PLAN	1
A25556 - 5001	WASTWATER LAYOUT PLAN SHEET 1	1
A25556 - 5002	WASTWATER LAYOUT PLAN SHEET 2	1
A25556 - 5003	WASTWATER LAYOUT PLAN SHEET 3	1
A25556 - 5100	WASTEWATER LONGSECTION SHEET 1	1
A25556 - 5101	WASTEWATER LONGSECTION SHEET 2	1
A25556 - 5102	WASTEWATER LONGSECTION SHEET 3	1
A25556 - 5200	WASTEWATER PUMP STATION STORAGE	1
A25556 - 6000	WATER LAYOUT OVERVIEW PLAN	1
A25556_6001	WATER LAYOUT LAYOUT PLAN SHEET 1	1

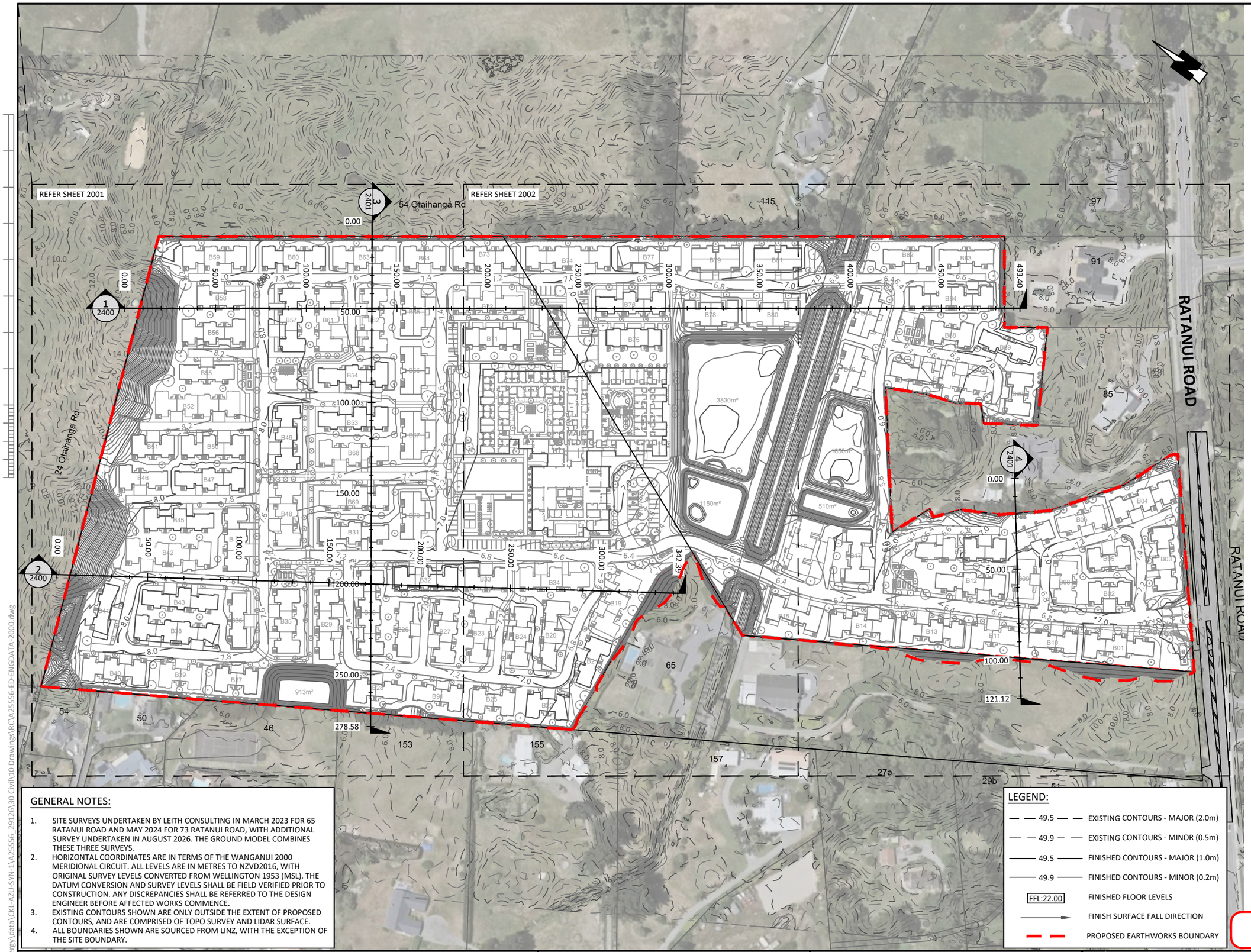
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CKL PROJECT NUMBER : **A25556**
DATE OF ISSUE : **19/10/2026**
ISSUED FOR : **FOR RESOURCE CONSENT**

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EARTHWORKS NOTES:

1. ALL WORKS TO COMPLY WITH THE KCDC ENGINEERING STANDARDS FOR LAND DEVELOPMENT & NZ BUILDING CODE.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE OPERATIONAL PRIOR TO ANY WORKS COMMENCING AND SHALL BE INSTALLED IN ACCORDANCE WITH 'EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES IN THE WELLINGTON REGION'.
3. REFER TO EARTHWORKS SPECIFICATION FOR EARTHFILL REQUIREMENTS AND STANDARDS OF COMPACTION. ALL EARTHWORKS TO BE UNDERTAKEN IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION REPORT, CONTRACTOR TO VIEW THE REPORT TO INFORM THEMSELVES.
4. ALL MATERIAL DEEMED BY THE ENGINEER TO BE UNSUITABLE SHALL BE EXCAVATED AND REPLACED WITH ENGINEERED FILL. ALL SURFACES SHALL BE SURVEYED AFTER CLEARING OPERATIONS (PRIOR TO REMOVAL OF UNSUITABLE) AND THEN AGAIN AFTER UNSUITABLE REMOVAL FOR VOLUMES.
5. ALL SURFACES SHALL BE SURVEYED AFTER CLEARING/STRIPPING OPERATIONS (PRIOR TO BULK EARTHWORKS) AND THEN AGAIN AFTER EARTHWORKS FOR VOLUMES.
6. THE LOCATIONS OF ALL STOCKPILES ARE WHOLLY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED CLEAR OF ALL EARTHWORKS OPERATIONS AND AWAY FROM GEOTECHNICALLY UNSTABLE LAND. NO PAYMENT SHALL BE MADE FOR RELOCATION OF ANY STOCKPILES THAT HAVE BEEN FOUND TO HAVE BEEN PLACED IN THE INCORRECT LOCATION.
7. ALL SETOUT TO BE UNDERTAKEN BY THE CONTRACTOR.
8. IT IS THE CONTRACTORS RESPONSIBILITY FOR HEALTH & SAFETY & SECURITY ON SITE, APPROPRIATE FENCING AND SIGNAGE SHALL BE ERECTED AND MAINTAINED AT ALL TIMES TO KEEP THE GENERAL PUBLIC OFF SITE.
9. FINAL QUANTITIES AND EXTENT OF EARTHWORKS TO BE DETERMINED BY THE ENGINEER.
10. ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED RESOURCE CONSENT AS WELL AS ANY ARBORICULTURAL REPORTS AND/OR IN ACCORDANCE WITH ACCEPTED ARBORICULTURAL PRACTICES WHERE REQUIRED.
11. ALL VEGETATION, STRUCTURES AND UNDERGROUND SERVICES SHALL BE REMOVED PRIOR TO ANY EARTH FILLING TO THE SATISFACTION OF THE ENGINEER.
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14. ANY WORK OUTSIDE OF PROPERTY EXTENTS SHALL BE ON INSTRUCTION BY THE ENGINEER PRIOR TO COMMENCING WORKS.
15. SUITABLE TRAFFIC MANAGEMENT SHALL BE ADOPTED FOR WORKS IN THE BERM TO BE ARRANGED BY THE CONTRACTOR.
16. IN THE EVENT ITEMS OF ARCHAEOLOGICAL INTEREST ARE FOUND DURING WORKS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY AND NO DAMAGE IS TO OCCUR TO ANY SUCH ITEMS IN THE MEANTIME.
17. IN THE EVENT ASBESTOS IS ENCOUNTERED THE ENGINEER IS TO BE ALERTED IMMEDIATELY AND NO WORKS ARE TO TAKE PLACE AROUND THE CONTAMINATED ZONE UNTIL CLEARED IN A COMPLIANT MANNER.
18. ANY EXCAVATIONS OVER 500mm IN HEIGHT SHALL BE BATTERED TO A 1:3 SAFE SLOPE.

GENERAL NOTES:

1. SITE SURVEYS UNDERTAKEN BY LEITH CONSULTING IN MARCH 2023 FOR 65 RATANUI ROAD AND MAY 2024 FOR 73 RATANUI ROAD, WITH ADDITIONAL SURVEY UNDERTAKEN IN AUGUST 2026. THE GROUND MODEL COMBINES THESE THREE SURVEYS.
2. HORIZONTAL COORDINATES ARE IN TERMS OF THE WANGANUI 2000 MERIDIONAL CIRCUIT. ALL LEVELS ARE IN METRES TO NZVD2016, WITH ORIGINAL SURVEY LEVELS CONVERTED FROM WELLINGTON 1953 (MSL). THE DATUM CONVERSION AND SURVEY LEVELS SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE REFERRED TO THE DESIGN ENGINEER BEFORE AFFECTED WORKS COMMENCE.
3. EXISTING CONTOURS SHOWN ARE ONLY OUTSIDE THE EXTENT OF PROPOSED CONTOURS, AND ARE COMPRISED OF TOPO SURVEY AND LIDAR SURFACE.
4. ALL BOUNDARIES SHOWN ARE SOURCED FROM LINZ, WITH THE EXCEPTION OF THE SITE BOUNDARY.

LEGEND:

- 49.5 — EXISTING CONTOURS - MAJOR (2.0m)
- 49.9 — EXISTING CONTOURS - MINOR (0.5m)
- 49.5 — FINISHED CONTOURS - MAJOR (1.0m)
- 49.9 — FINISHED CONTOURS - MINOR (0.2m)
- FFL:22.00 — FINISHED FLOOR LEVELS
- FINISH SURFACE FALL DIRECTION
- PROPOSED EARTHWORKS BOUNDARY

FOR RESOURCE CONSENT

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73 RATANUI ROAD, PARAPARAUMU

EARTHWORKS FINISHED CONTOURS OVERVIEW PLAN

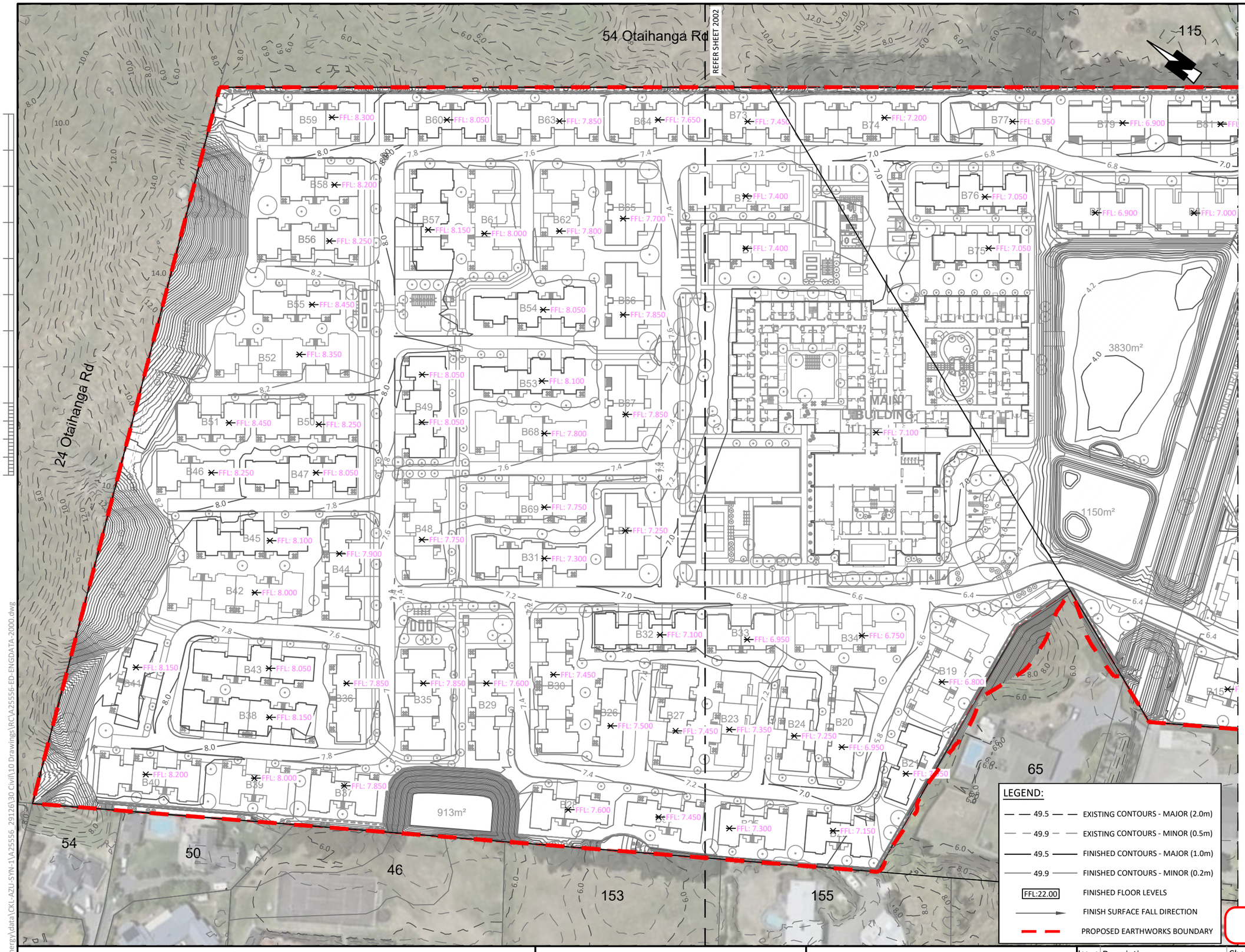
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:2000 (A3 Original)

Job No: A25556 | Dwg No: 2000 | Rev: 1

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EARTHWORKS FINISHED CONTOURS SHEET 1

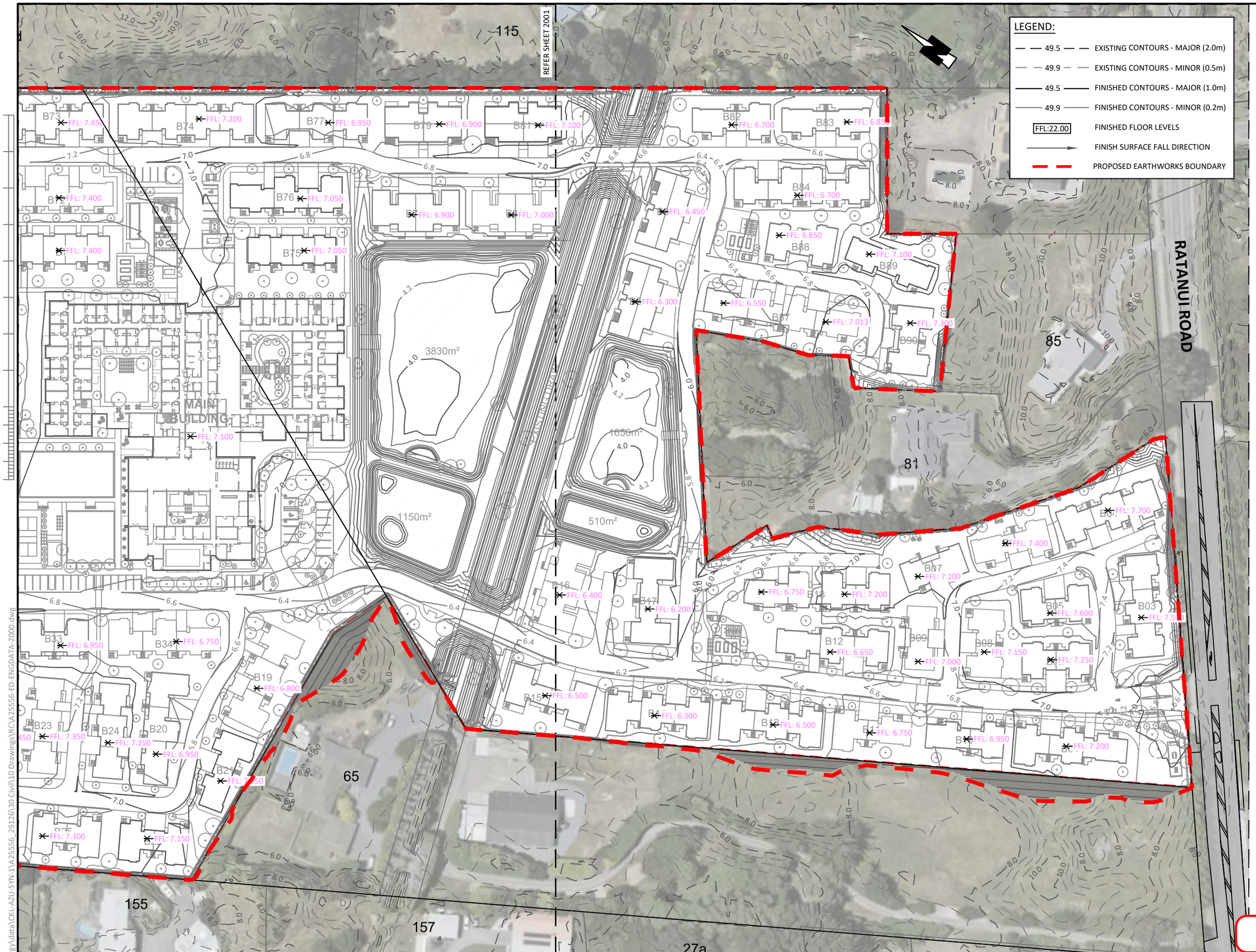
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		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:1250 (A3 Original)

Job No: A25556 | Dwg No: 2001 | Rev: 1

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18. ANY EXCAVATIONS OVER 500mm IN HEIGHT SHALL BE BATTERED TO A 1:3 SAFE SLOPE.

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EARTHWORKS FINISHED CONTOURS SHEET 2

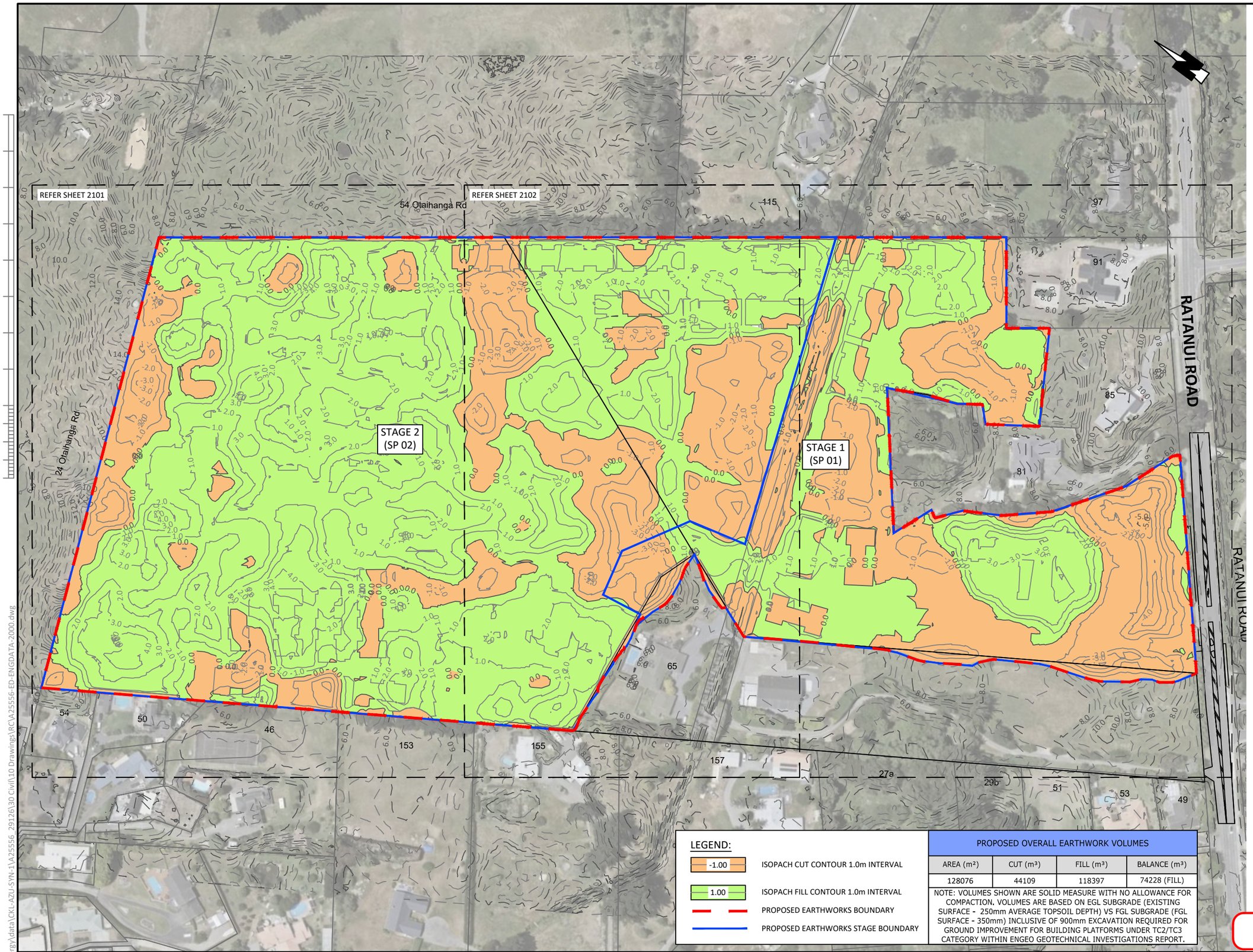
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:1250 (A3 Original)

Job No: A25556 Dwg No: 2002 Rev: 1

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LEGEND:

-1.00 ISOPACH CUT CONTOUR 1.0m INTERVAL

1.00 ISOPACH FILL CONTOUR 1.0m INTERVAL

PROPOSED EARTHWORKS BOUNDARY

PROPOSED EARTHWORKS STAGE BOUNDARY

PROPOSED OVERALL EARTHWORK VOLUMES			
AREA (m^2)	CUT (m^3)	FILL (m^3)	BALANCE (m^3)
128076	44109	118397	74228 (FILL)

NOTE: VOLUMES SHOWN ARE SOLID MEASURE WITH NO ALLOWANCE FOR COMPACTION. VOLUMES ARE BASED ON EGL SUBGRADE (EXISTING SURFACE - 250mm AVERAGE TOPSOIL DEPTH) VS FGL SUBGRADE (FGL SURFACE - 350mm) INCLUSIVE OF 900mm EXCAVATION REQUIRED FOR GROUND IMPROVEMENT FOR BUILDING PLATFORMS UNDER TC2/TC3 CATEGORY WITHIN ENGEO GEOTECHNICAL INVESTIGATIONS REPORT.

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EARTHWORKS CUT FILL LAYOUT PLAN

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:2000 (A3 Original)

Job No: A25556 Dwg No: 2100 Rev: 1

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54 Otaihanga Rd

24 Otaihanga Rd

REFER SHEET 2102

115

STAGE 2
(SP 02)

PROPOSED WORKS WITHIN NEIGHBOURING PROPERTY

65

46

153

155

LEGEND:

-1.00	ISOPACH CUT CONTOUR 1.0m INTERVAL
1.00	ISOPACH FILL CONTOUR 1.0m INTERVAL
	PROPOSED EARTHWORKS BOUNDARY
	PROPOSED EARTHWORKS STAGE BOUNDARY

PROPOSED STAGE 2 EARTHWORK VOLUMES

AREA (m²)	CUT (m³)	FILL (m³)	BALANCE (m³)
89981	21267	100230	78963 (FILL)

NOTE: VOLUMES SHOWN ARE SOLID MEASURE WITH NO ALLOWANCE FOR COMPACTION. VOLUMES ARE BASED ON EGL SUBGRADE (EXISTING SURFACE - 250mm AVERAGE TOPSOIL DEPTH) VS FGL SUBGRADE (FGL SURFACE - 350mm) INCLUSIVE OF 900mm EXCAVATION REQUIRED FOR GROUND IMPROVEMENT FOR BUILDING PLATFORMS UNDER TC2/TC3 CATEGORY WITHIN ENGEO GEOTECHNICAL INVESTIGATIONS REPORT.

EARTHWORKS NOTES:

1. ALL WORKS TO COMPLY WITH THE KCDC ENGINEERING STANDARDS FOR LAND DEVELOPMENT & NZ BUILDING CODE.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE OPERATIONAL PRIOR TO ANY WORKS COMMENCING AND SHALL BE INSTALLED IN ACCORDANCE WITH 'EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES IN THE WELLINGTON REGION'.
3. REFER TO EARTHWORKS SPECIFICATION FOR EARTHFILL REQUIREMENTS AND STANDARDS OF COMPACTION. ALL EARTHWORKS TO BE UNDERTAKEN IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION REPORT, CONTRACTOR TO VIEW THE REPORT TO INFORM THEMSELVES.
4. ALL MATERIAL DEEMED BY THE ENGINEER TO BE UNSUITABLE SHALL BE EXCAVATED AND REPLACED WITH ENGINEERED FILL. ALL SURFACES SHALL BE SURVEYED AFTER CLEARING OPERATIONS (PRIOR TO REMOVAL OF UNSUITABLE) AND THEN AGAIN AFTER UNSUITABLE REMOVAL FOR VOLUMES.
5. ALL SURFACES SHALL BE SURVEYED AFTER CLEARING/STRIPPING OPERATIONS (PRIOR TO BULK EARTHWORKS) AND THEN AGAIN AFTER EARTHWORKS FOR VOLUMES.
6. THE LOCATIONS OF ALL STOCKPILES ARE WHOLLY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED CLEAR OF ALL EARTHWORKS OPERATIONS AND AWAY FROM GEOTECHNICALLY UNSTABLE LAND. NO PAYMENT SHALL BE MADE FOR RELOCATION OF ANY STOCKPILES THAT HAVE BEEN FOUND TO HAVE BEEN PLACED IN THE INCORRECT LOCATION.
7. ALL SETOUT TO BE UNDERTAKEN BY THE CONTRACTOR.
8. IT IS THE CONTRACTORS RESPONSIBILITY FOR HEALTH & SAFETY & SECURITY ON SITE, APPROPRIATE FENCING AND SIGNAGE SHALL BE ERECTED AND MAINTAINED AT ALL TIMES TO KEEP THE GENERAL PUBLIC OFF SITE.
9. FINAL QUANTITIES AND EXTENT OF EARTHWORKS TO BE DETERMINED BY THE ENGINEER.
10. ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED RESOURCE CONSENT AS WELL AS ANY ARBORICULTURAL REPORTS AND/OR IN ACCORDANCE WITH ACCEPTED ARBORICULTURAL PRACTICES WHERE REQUIRED.
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14. ANY WORK OUTSIDE OF PROPERTY EXTENTS SHALL BE ON INSTRUCTION BY THE ENGINEER PRIOR TO COMMENCING WORKS.
15. SUITABLE TRAFFIC MANAGEMENT SHALL BE ADOPTED FOR WORKS IN THE BERM TO BE ARRANGED BY THE CONTRACTOR.
16. IN THE EVENT ITEMS OF ARCHAEOLOGICAL INTEREST ARE FOUND DURING WORKS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY AND NO DAMAGE IS TO OCCUR TO ANY SUCH ITEMS IN THE MEANTIME.
17. IN THE EVENT ASBESTOS IS ENCOUNTERED THE ENGINEER IS TO BE ALERTED IMMEDIATELY AND NO WORKS ARE TO TAKE PLACE AROUND THE CONTAMINATED ZONE UNTIL CLEARED IN A COMPLIANT MANNER.
18. ANY EXCAVATIONS OVER 500mm IN HEIGHT SHALL BE BATTERED TO A 1:3 SAFE SLOPE.

FOR RESOURCE CONSENT

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EARTHWORKS
CUT FILL
SHEET 1

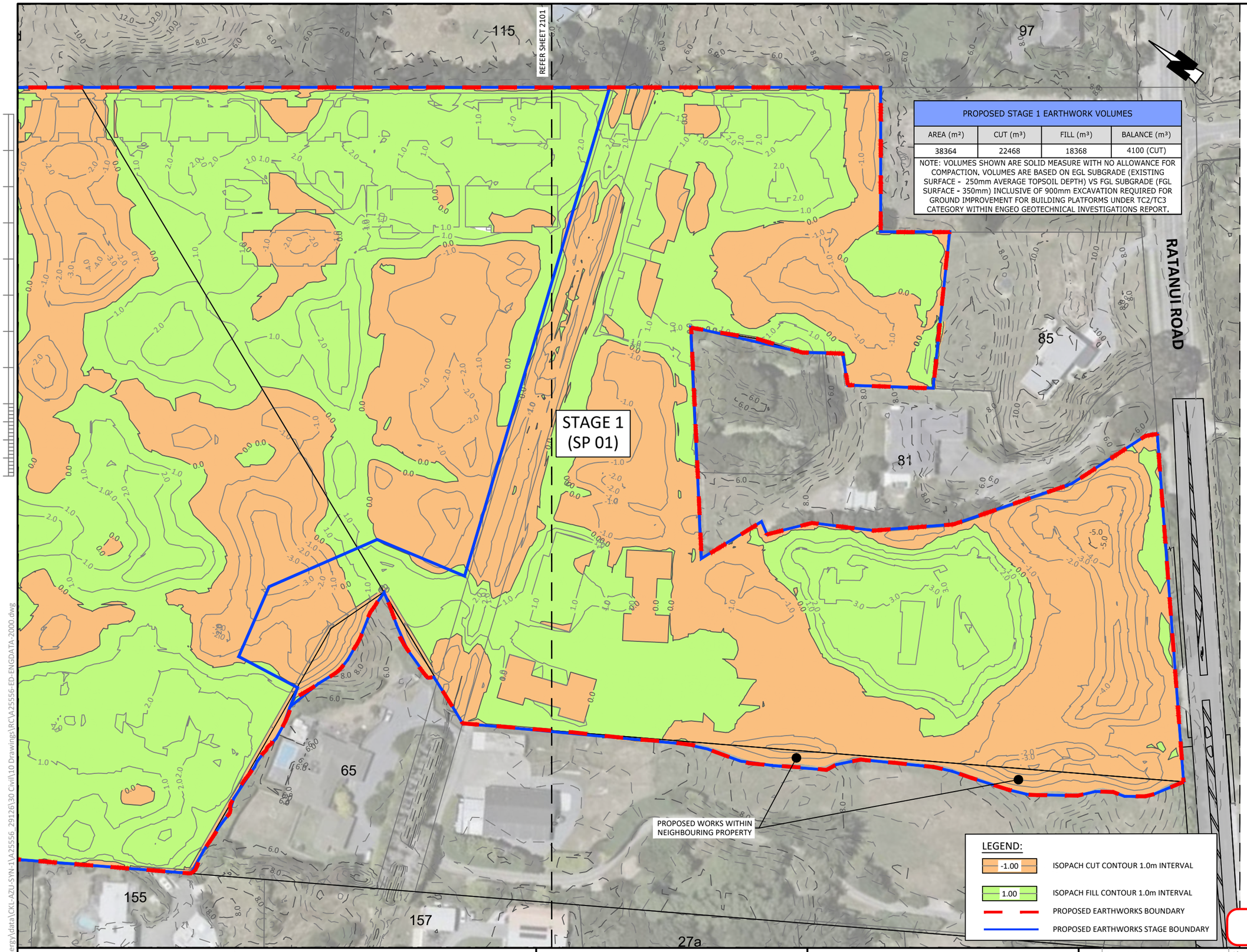
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:1250 (A3 Original)

Job No: A25556 Dwg No: 2101 Rev: 1

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PROPOSED STAGE 1 EARTHWORK VOLUMES			
AREA (m²)	CUT (m³)	FILL (m³)	BALANCE (m³)
38364	22468	18368	4100 (CUT)

NOTE: VOLUMES SHOWN ARE SOLID MEASURE WITH NO ALLOWANCE FOR COMPACTION. VOLUMES ARE BASED ON EGL SUBGRADE (EXISTING SURFACE - 250mm AVERAGE TOPSOIL DEPTH) VS FGL SUBGRADE (FGL SURFACE - 350mm) INCLUSIVE OF 900mm EXCAVATION REQUIRED FOR GROUND IMPROVEMENT FOR BUILDING PLATFORMS UNDER TC2/TC3 CATEGORY WITHIN ENGEO GEOTECHNICAL INVESTIGATIONS REPORT.

LEGEND:

- -1.00 — ISOPACH CUT CONTOUR 1.0m INTERVAL
- 1.00 — ISOPACH FILL CONTOUR 1.0m INTERVAL
- PROPOSED EARTHWORKS BOUNDARY
- PROPOSED EARTHWORKS STAGE BOUNDARY

EARTHWORKS NOTES:

1. ALL WORKS TO COMPLY WITH THE KCDC ENGINEERING STANDARDS FOR LAND DEVELOPMENT & NZ BUILDING CODE.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE OPERATIONAL PRIOR TO ANY WORKS COMMENCING AND SHALL BE INSTALLED IN ACCORDANCE WITH 'EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES IN THE WELLINGTON REGION'.
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EARTHWORKS
CUT FILL
SHEET 2

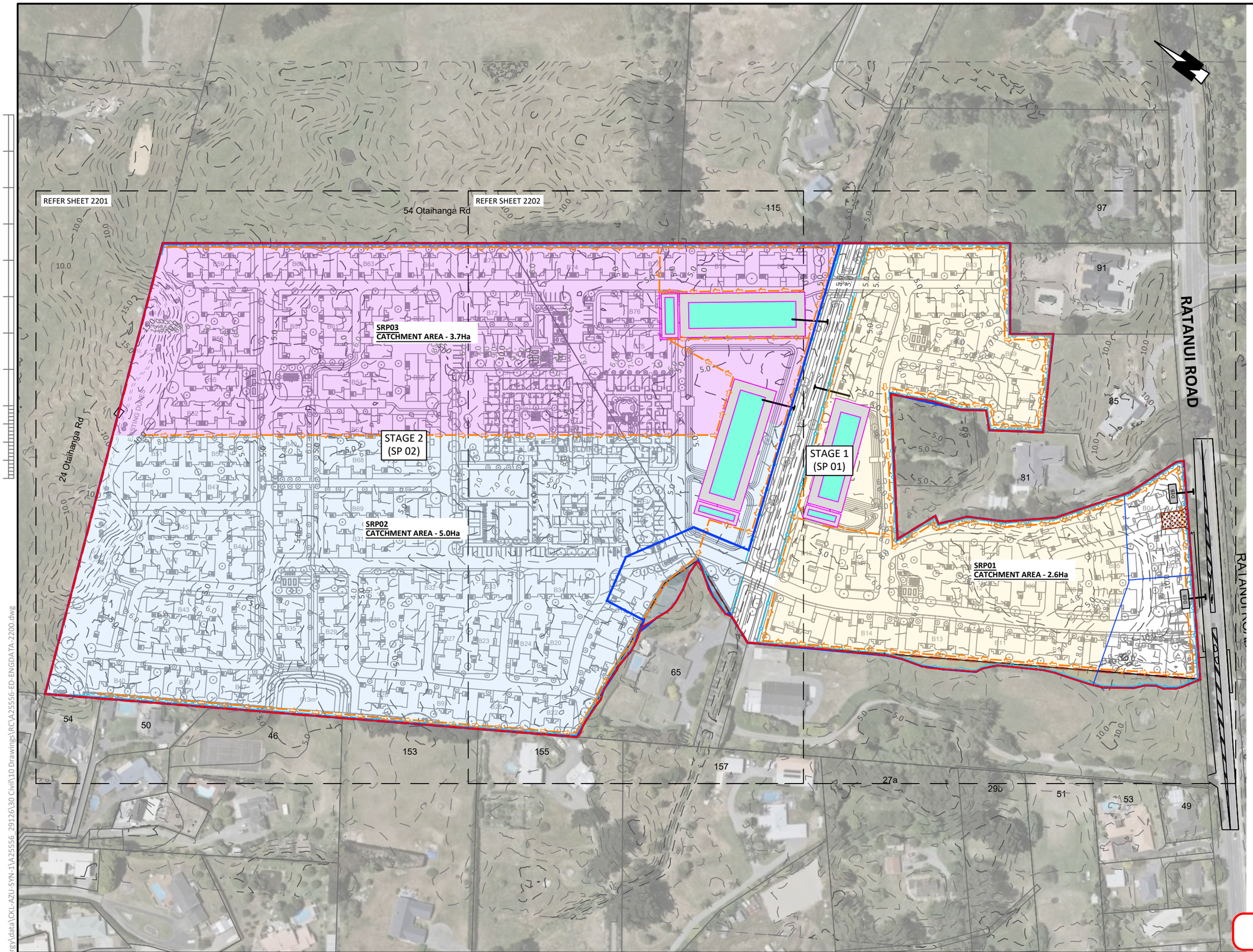
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
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Scale: 1:1250 (A3 Original)

Job No: A25556 | Dwg No: 2102 | Rev: 1

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EROSION AND SEDIMENT CONTROL OVERVIEW PLAN

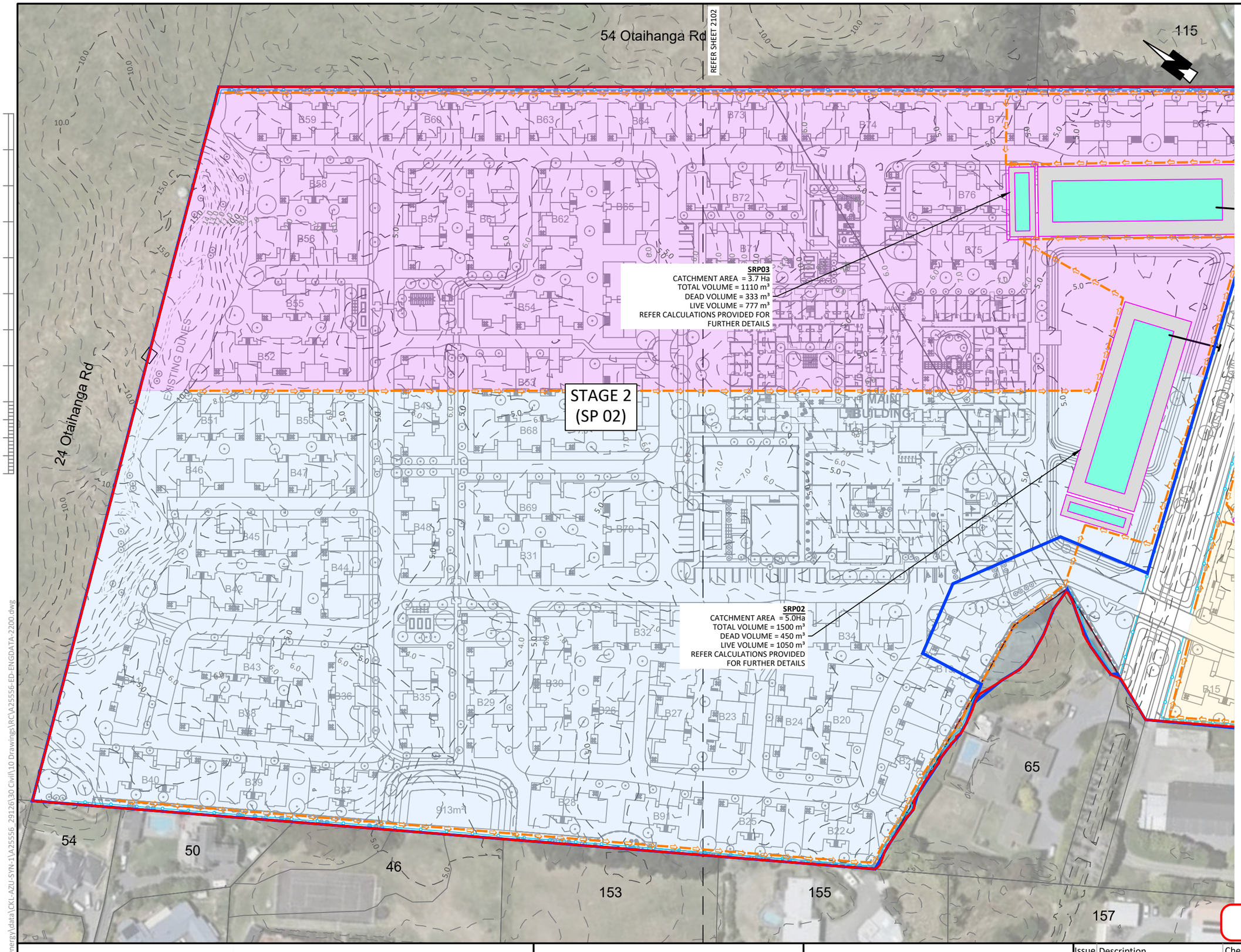
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
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Scale: 1:2000 (A3 Original)

Job No: A25556 | Dwg No: 2200 | Rev: 1

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EARTHWORKS NOTES:

1. REFER TO DWG-2200 FOR NOTES.

EROSION & SEDIMENT CONTROL LEGEND:

- EARTHWORKS CATCHMENT
- EARTHWORK STAGE BOUNDARY
- CLEANWATER DIVERSION DRAIN
- DIRTYWATER DIVERSION DRAIN
- SILT FENCE
- SUPER SILT FENCE
- DEB — DECANTING EARTH BUND (DEB)
- SEDIMENT RETENTION POND
- STABILISED AREA
- EXISTING CONTOURS MAJOR
- EXISTING CONTOURS MINOR
- SRP 1 CATCHMENT AREA
- SRP 2 CATCHMENT AREA
- SRP 3 CATCHMENT AREA
- DEB CATCHMENT AREA

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EROSION AND SEDIMENT CONTROL PLAN SHEET 1

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: **1:1250** (A3 Original)

Job No: **A25556** Dwg No: **2201** Rev: **1**

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REFER SHEET 2201

STAGE 1 (SP 01)

SRP01
CATCHMENT AREA = 2.60 Ha
TOTAL VOLUME = 780 m³
DEAD VOLUME = 234 m³
LIVE VOLUME = 546 m³
REFER CALCULATIONS FOR FURTHER DETAILS

DEB01:
CATCHMENT AREA: 0.25Ha

DEB02:
CATCHMENT AREA: 0.30Ha

FINAL LOCATION OF STABLISED SITE ENTRANCE TO BE DETERMINED ON-SITE PRIOR TO COMMENCEMENT OF THE CONSTRUCTION WORKS

RATANUI ROAD

EARTHWORKS NOTES:

1. REFER TO DWG-2200 FOR NOTES.

EROSION & SEDIMENT CONTROL LEGEND:

- EARTHWORKS CATCHMENT
- EARTHWORK STAGE BOUNDARY
- CLEANWATER DIVERSION DRAIN
- DIRTYWATER DIVERSION DRAIN
- SILT FENCE
- SUPER SILT FENCE
- DEB — DECANTING EARTH BUND (DEB)
- SEDIMENT RETENTION POND
- STABILISED AREA
- EXISTING CONTOURS MAJOR
- EXISTING CONTOURS MINOR
- SRP 1 CATCHMENT AREA
- SRP 2 CATCHMENT AREA
- SRP 3 CATCHMENT AREA
- DEB CATCHMENT AREA

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EROSION AND SEDIMENT CONTROL PLAN
SHEET 2

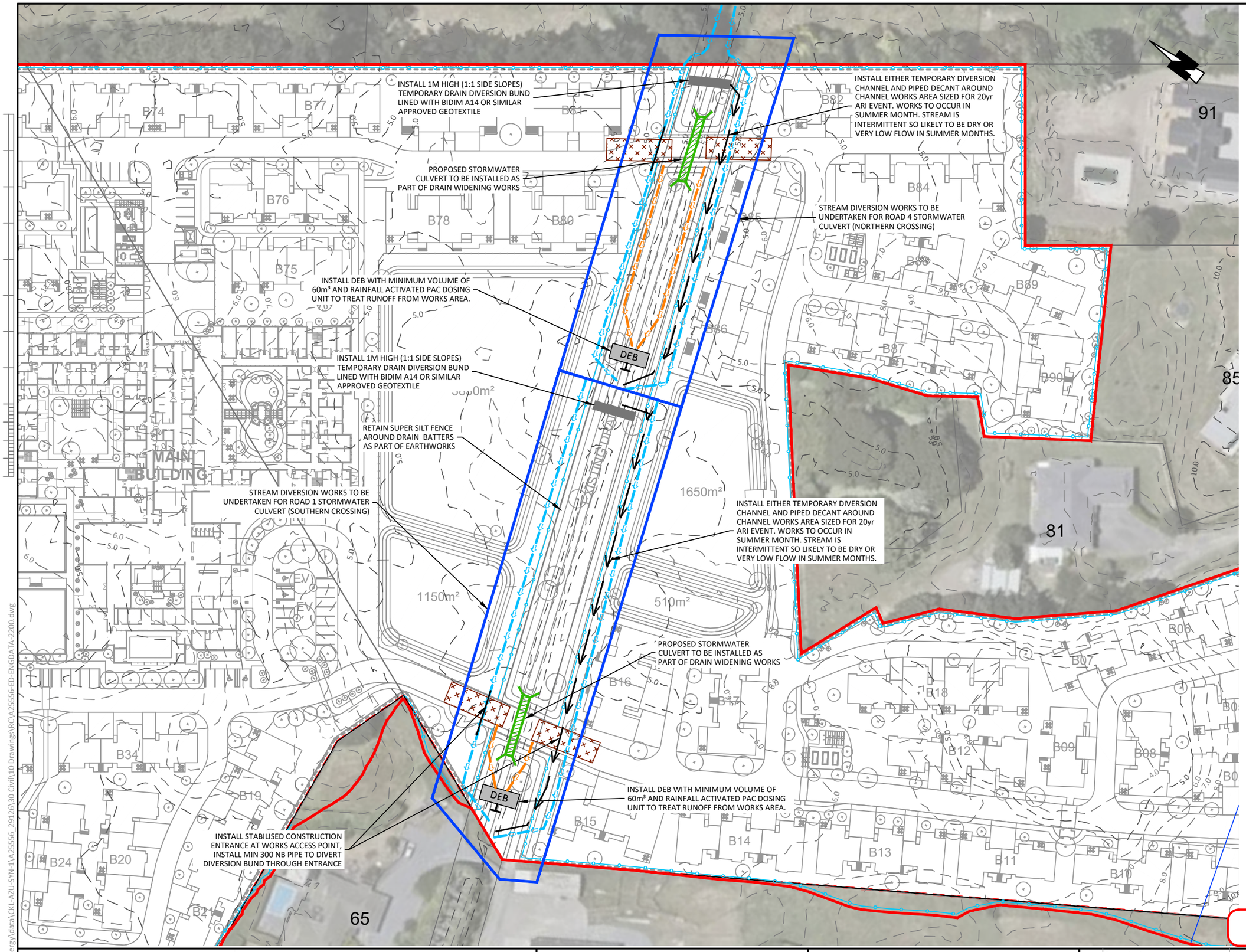
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:1250 (A3 Original)

Job No: A25556 Dwg No: 2202 Rev: 1

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EARTHWORKS NOTES:

1. REFER TO DWG-2200 FOR NOTES.

EROSION & SEDIMENT CONTROL LEGEND:

- EARTHWORKS CATCHMENT
- CLEANWATER DIVERSION DRAIN
- DIRTYWATER DIVERSION DRAIN
- SILT FENCE
- SUPER SILT FENCE
- DEB — DECANTING EARTH BUND (DEB)
- STABILISED AREA
- EXISTING CONTOURS MAJOR
- EXISTING CONTOURS MINOR

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EROSION AND SEDIMENT CONTROL PLAN
DRAIN DIVERSION WORKS

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: **1:1000** (A3 Original)

Job No: **A25556** Dwg No: **2203** Rev: **1**

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STABILISED CONSTRUCTION ENTRANCE SPECIFICATIONS:

APPLICATION

USE A STABILISED CONSTRUCTION ENTRANCE AT ALL POINTS OF CONSTRUCTION SITE INGRESS AND EGRESS WITH A CONSTRUCTION PLAN LIMITING TRAFFIC TO THESE ENTRANCES ONLY. THEY ARE PARTICULARLY USEFUL ON SMALL CONSTRUCTION SITES BUT CAN BE UTILISED FOR ALL PROJECTS.

DESIGN:

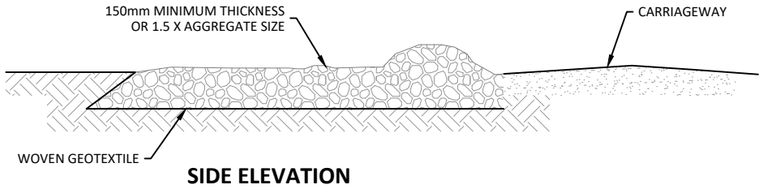
1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS AND OTHER UNSUITABLE MATERIAL AND PROPERLY GRADE IT.
2. LAY WOVEN GEOTEXTILE; PIN DOWN EDGES AND OVERLAP JOINTS.
3. PROVIDE DRAINAGE TO CARRY RUNOFF FROM THE STABILISED CONSTRUCTION ENTRANCE TO A SEDIMENT CONTROL MEASURE.
4. PLACE AGGREGATE TO THE SPECIFICATIONS BELOW AND SMOOTH IT.

STABILISED CONSTRUCTION ENTRANCE AGGREGATE SPECIFICATIONS:

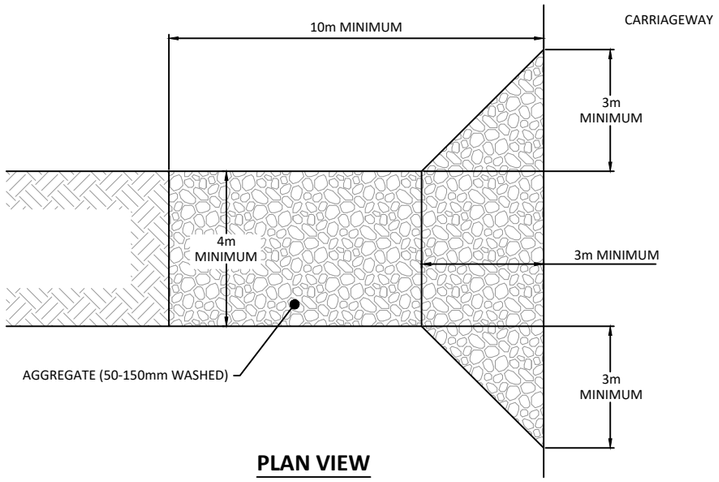
AGGREGATE SIZE	5-150mm WASHED AGGREGATE
THICKNESS	150mm MINIMUM OR 1.5 X AGGREGATE SIZE
LENGTH	10m MINIMUM
WIDTH	4m MINIMUM

MAINTENANCE

1. MAINTAIN THE STABILISED CONSTRUCTION ENTRANCE IN A CONDITION TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. AFTER EACH RAINFALL INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT FROM THE STABILISED CONSTRUCTION ENTRANCE AND CLEAN OUT AS NECESSARY.
2. WHEN WHEEL WASHING IS ALSO REQUIRED, ENSURE THIS IS DONE ON AN AREA STABILISED WITH AGGREGATE WHICH DRAINS TO AN APPROVED SEDIMENT RETENTION FACILITY.



SIDE ELEVATION



PLAN VIEW

STABILISATION NOTES:

GRASSING - STABLISATION ACHIEVED @ 80% GRASS COVER

- MIN. 100mm TOPSOIL
- TEMPORARY SEEDING:
- ANNUAL RYEGRASS
- SEED APPLICATION @ 100-250 kg/Ha
- PERMANENT SEEDING:
- PERENIAL RYEGRASS - 70%
- FESCUES/COCKSFOOT - 20%
- CLOVER/LOTUS & BROWNTOP - 5% EACH (10%)
- SEED @ 200-400 kg/Ha
- FERTILISER:
- N:P:K (15:10:10)
- FERT APPLICATION @ 200-800 kg/Ha

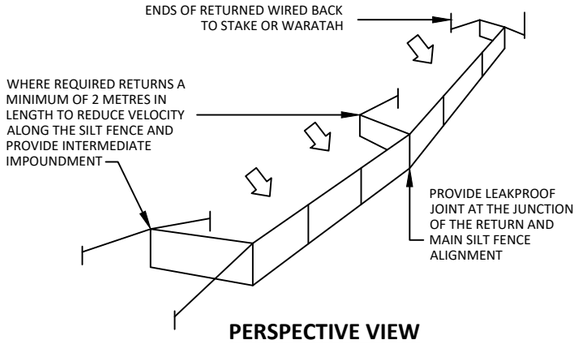
MULCHING

- STRAW OR HAY MULCH TO BE APPLIED AT 4,000 - 6,000 kg/Ha

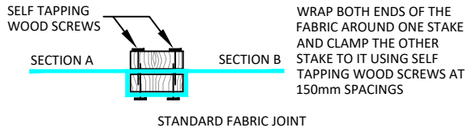
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2. A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE ON THE SITE AT ALL TIMES AND ALL PERSONNEL INVOLVED IN LAND DISTURBANCE ACTIVITIES ON THE SITE (INCLUSIVE OF SUB-CONTRACTORS) SHALL BE FAMILIAR WITH THE CONSENT AND PLAN REQUIREMENTS AS THEY RELATE TO EROSION AND SEDIMENT CONTROL.
3. A PRESTART MEETING SHALL BE HELD BETWEEN THE CONTRACTOR, THE ENGINEER AND THE COUNCIL MONITORING ADVISER/OFFICER PRIOR TO COMMENCEMENT OF EARTHWORKS.
4. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE OPERATIONAL PRIOR TO WORKS COMMENCING ON SITE, UNLESS OTHERWISE AGREED.
5. THE CONTRACTOR SHALL SUBMIT ASBUILTS FOR THE COMPLETED SEDIMENT CONTROL MEASURES TO THE ENGINEER/COUNCIL WITHIN 7 DAYS FOLLOWING THE CONSTRUCTION OF THE CONTROLS.
6. WHERE POSSIBLE, ALL CLEANWATER RUNOFF FROM STABILISED SURFACES INCLUDING CATCHMENT AREAS ABOVE THE SITE SHALL BE DIVERTED AWAY FROM EARTHWORK AREAS VIA STABILISED SURFACES OR THE STORMWATER SYSTEM, SO AS TO PREVENT SURFACE EROSION.
7. THE FINAL LOCATIONS OF ALL SEDIMENT RETENTION PONDS AND DECANTING EARTH BUNDS SHALL BE SELECTED ONSITE BY THE CONTRACTOR IN AGREEMENT WITH THE ENGINEER AND THE COUNCIL MONITORING ADVISER/OFFICER. ALL LOCATIONS SHALL HAVE DUE CONSIDERATION TO NATIVE VEGETATION, TOPOGRAPHY AND ANY OTHER SPECIFIC REQUIREMENTS AS APPLICABLE.
8. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS THROUGHOUT THE WORKS AS REQUIRED AND ENSURING COMPLIANCE WITH THE RESOURCE CONSENT.
9. THE SITE SHALL BE STABILISED WITH TOPSOIL AND GRASS AND/OR MULCH AS SOON AS PRACTICABLE AND IN A PROGRESSIVE MANNER AS EARTHWORKS/SITE WORKS ARE FINISHED OVER VARIOUS AREAS OF THE SITE. STABLISATION IS TO BE COMPLETED BY 30 APRIL OF THE CONSTRUCTION SEASON, UNLESS A LATER DATE IS APPROVED IN WRITING BY THE AUCKLAND COUNCIL.
10. EROSION AND SEDIMENT CONTROL MEASURES SHALL NOT BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER AND/OR COUNCIL MONITORING ADVISER/OFFICER. SEDIMENT CONTROL MEASURES MUST REMAIN IN PLACE UNTIL ALL SURFACES ARE STABILISED SUFFICIENTLY WITH 80% GRASS STRIKE, TOPSOIL AND MULCH OR AGGREGATE ON ROADWAYS/ACCESSWAYS.

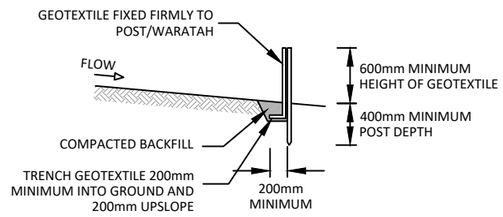
STABILISED CONSTRUCTION ENTRANCE



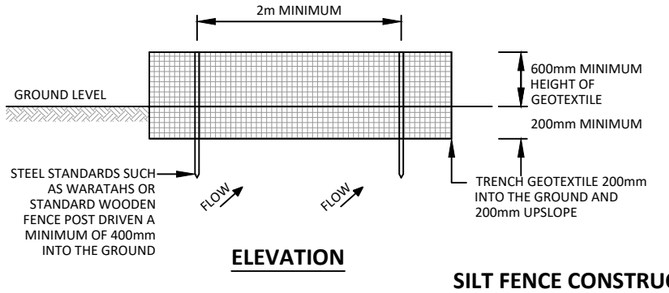
PERSPECTIVE VIEW



STANDARD FABRIC JOINT



CROSS SECTION



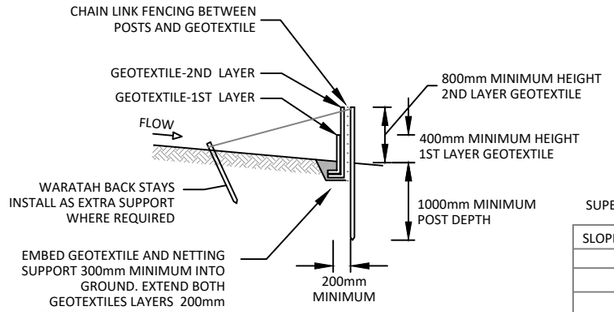
ELEVATION

SILT FENCE DESIGN CRITERIA:

SLOPE STEEPNESS %	SLOPE LENGTH (m) (MAXIMUM)	SPACING OF RETURNS (m)
< 2%	N/A	UNLIMITED
2-10%	40	60
10-20%	30	50
20-33%	20	40
33-50%	15	30
>50%	6	20

GRAB TENSILE STRENGTH: >440N (ASTM D4632)
TENSILE MODULUS: 0.140 pa (MINIMUM)
APPARENT OPENING SIZE: 0.1-0.5mm (ASTM D4751)

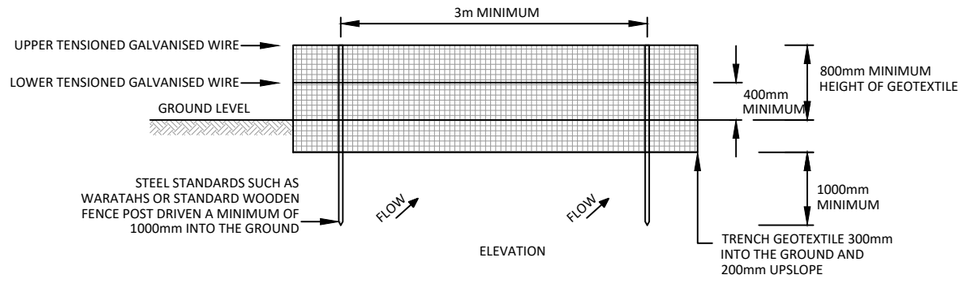
SILT FENCE CONSTRUCTION



CROSS SECTION

SUPER SILT FENCE DESIGN CRITERIA:

SLOPE STEEPNESS %	SLOPE LENGTH (m) (MAXIMUM)	SPACING OF RETURNS (m)
0-10%	UNLIMITED	60
10-20%	60	50
20-33%	30	40
33-50%	30	30
>50%	15	20



ELEVATION

SUPER SILT FENCE CONSTRUCTION

FOR RESOURCE CONSENT

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EROSION AND SEDIMENT CONTROL STANDARD DETAILS SHEET 1

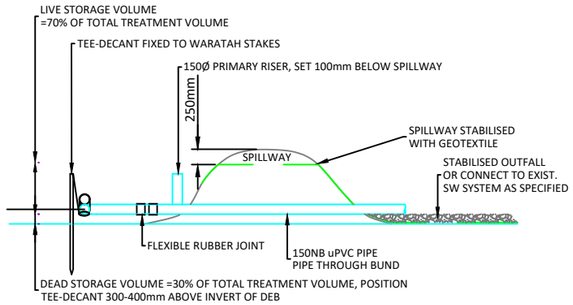
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

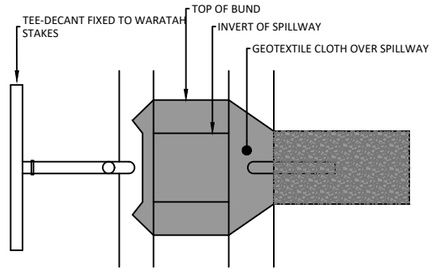
Scale: NTS (A3 Original)

Job No: A25556 Dwg No: 2300 Rev: 1

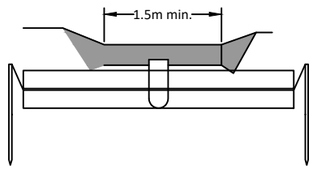
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DECANTING EARTH BUND CROSS-SECTION



DECANTING EARTH BUND LAYOUT



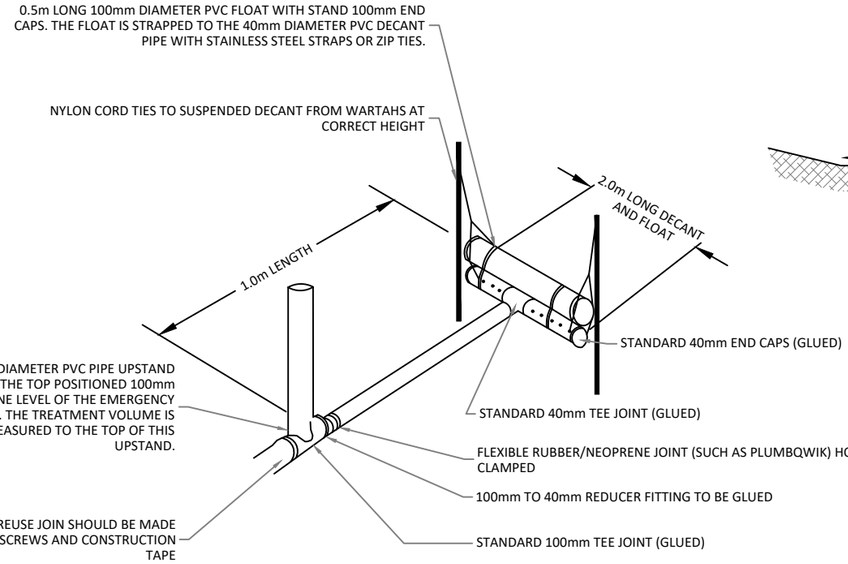
SPILLWAY ELEVATION

DECANTING EARTH BUND

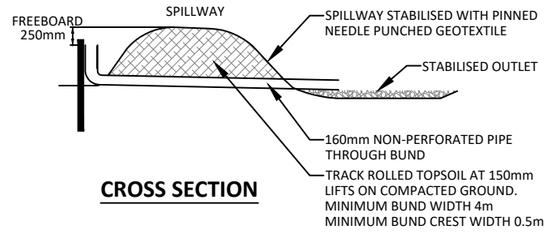
MAXIMUM CATCHMENT 0.3ha
2% VOLUME (60m^3 PER 0.3ha CATCHMENT)

NOTE: THE 100mm DIAMETER PVC PIPE UPSTAND IS ONLY REQUIRED WHERE THE 2m WIDE EMERGENCY SPILLWAY DISCHARGES TO VULNERABLE AREA OR WHERE THE DISCHARGE IS REQUIRED TO BE PIPED TO A SAFE OUTFALL SUCH AS A STORMWATER MANHOLE. IF THE UPSTAND IS NOT REQUIRED THE DECANT CAN BE CONNECTED DIRECT TO A 40mm DIAMETER OUTFALL PIPE AND THE TREATMENT VOLUME IS MEASURED TO THE INVERT OF THE EMERGENCY SPILLWAY.

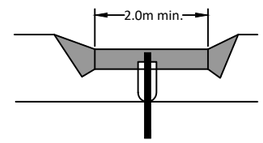
NOTE: THE DECANT HAS A 40mm DIAMETER PVC PIPE WITH A 1.3m LONG ARM (INCLUDING FLEXIBLE JOINT), A 0.5m LONG DECANT AND 20 x 10mm DIAMETER EQUALLY SPACED HOLES POSITIONED HORIZONTALLY AT 10 AND 2 OCLOCK



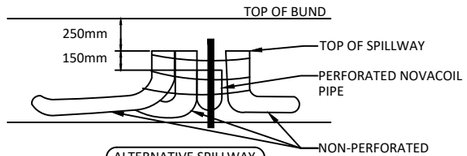
40mm DECANT WITH UPSTAND FOR DECANTING EARTH BUND



CROSS SECTION



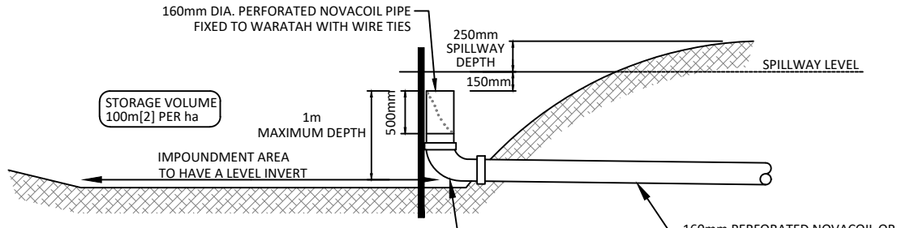
ELEVATION



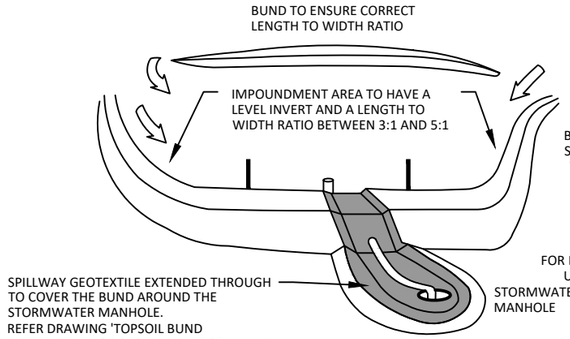
ALTERNATIVE SPILLWAY DESIGN USING NON-PERFORATED NOVACOILS

1% DECANTING TOPSOIL BUND

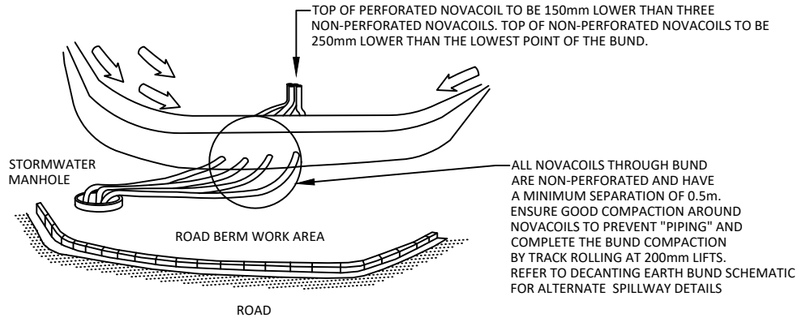
MAXIMUM CATCHMENT IS 1ha IF THE MAXIMUM SLOPE IS LESS THAN 10% AND THE SLOPE LENGTH IS LESS THAN 200m, OTHERWISE THE MAXIMUM CATCHMENT IS 0.3ha. DECANTING TOPSOIL BUNDS ARE ONLY TO BE USED FOR TOPSOILED/STABILISED CATCHMENTS.



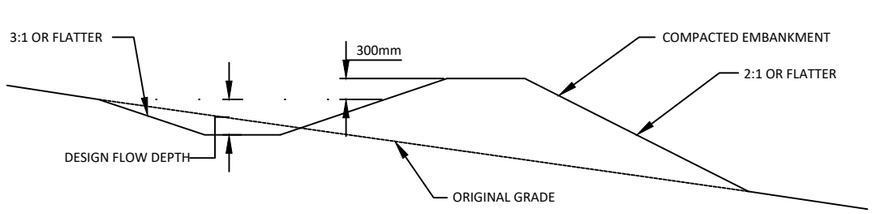
OUTLET DETAIL



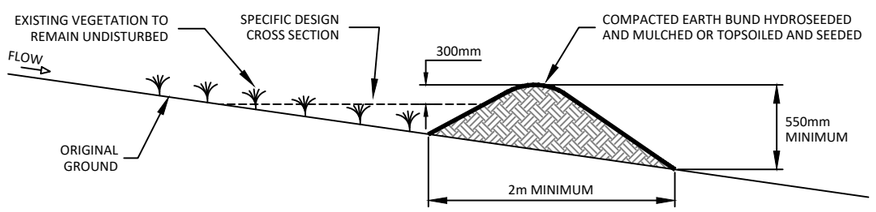
DECANTING EARTH BUND



DECANTING TOPSOIL BUND



RUNOFF DIVERSION BUND - CROSS SECTION



CLEANWATER RUNOFF DIVERSION BUND - CROSS SECTION

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EROSION AND SEDIMENT CONTROL STANDARD DETAILS SHEET 2

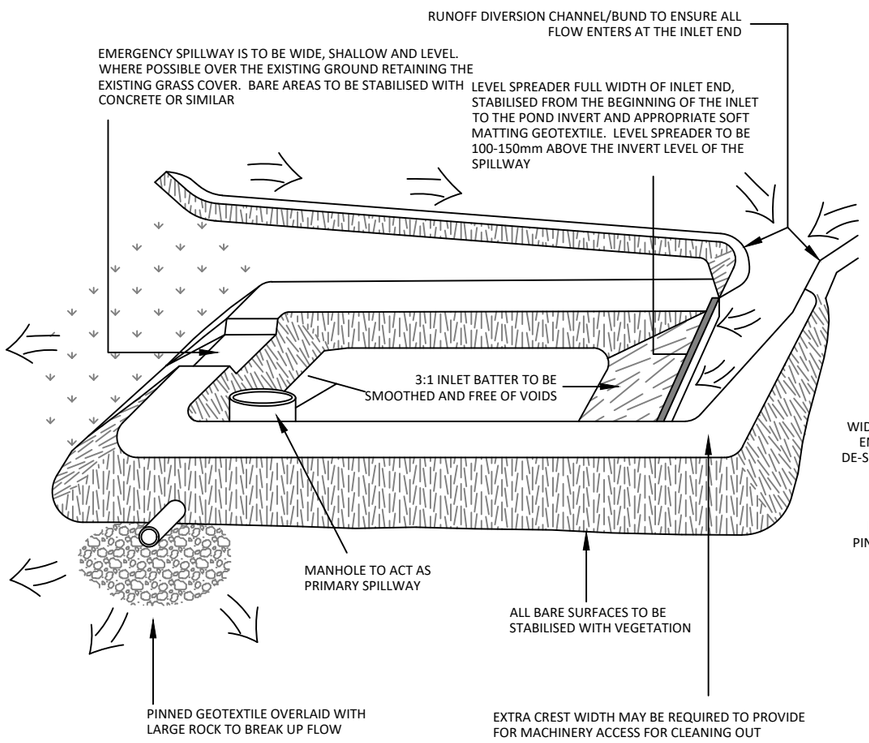
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

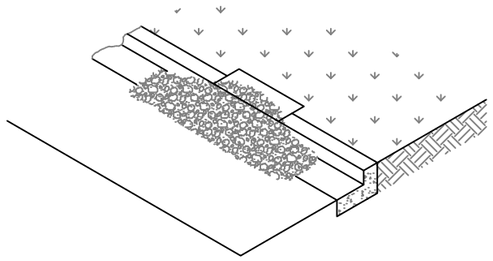
Scale: **NTS** (A3 Original)

Job No: **A25556** Dwg No: **2301** Rev: **1**

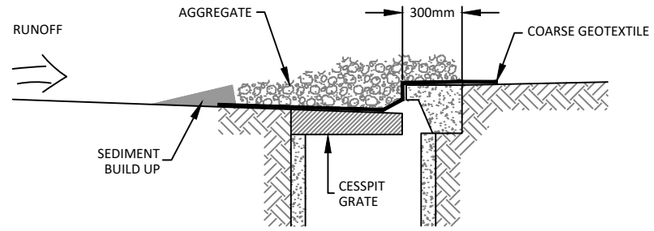
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SEDIMENT RETENTION POND

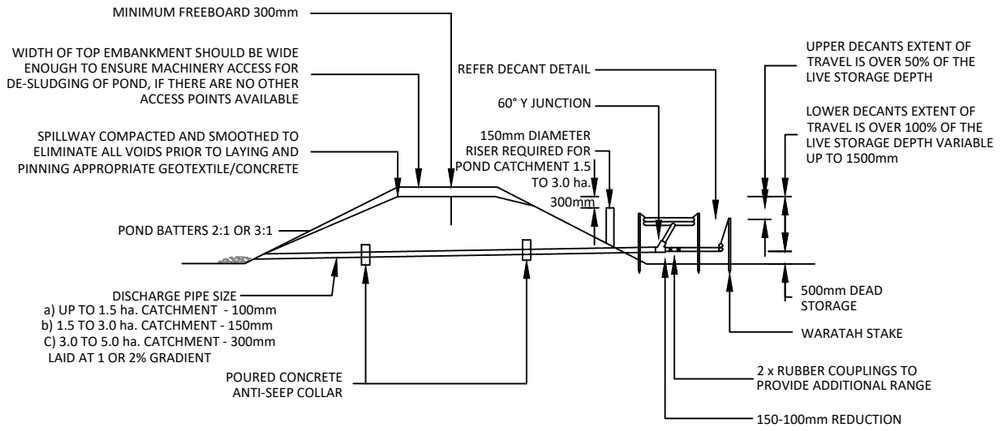


PERSPECTIVE VIEW



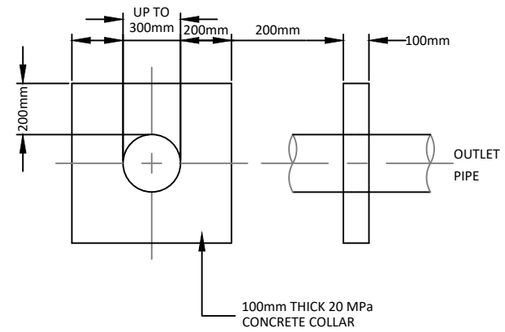
CROSS SECTION

STORMWATER INLET PROTECTION - FILTER MEDIA DESIGN

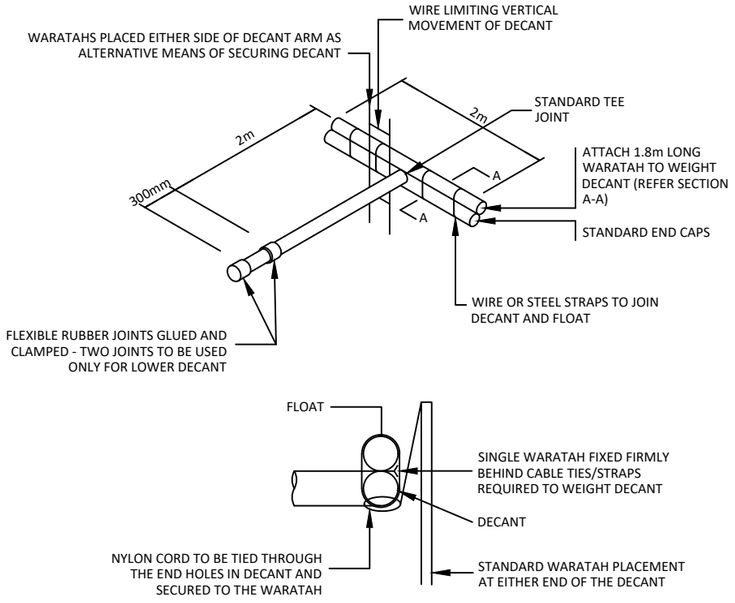


TYPICAL CROSS SECTION

1.5 - 3.0 CATCHMENT

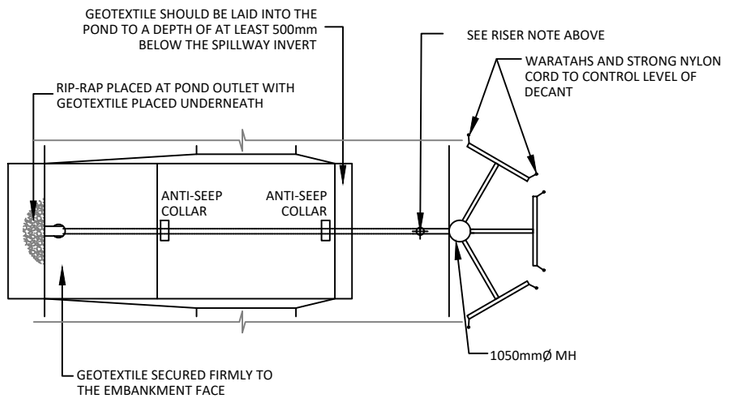


ANTI-SEEP COLLAR



SECTION A-A

SEDIMENT RETENTION POND - DECANT DETAIL

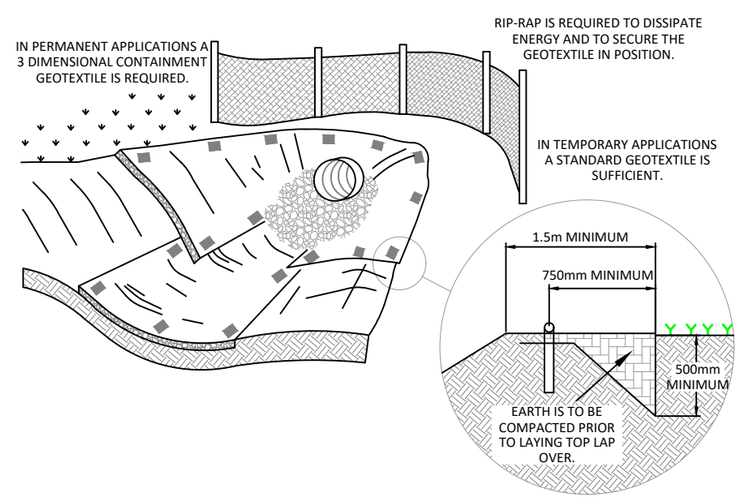


TYPICAL PLAN 3.0-5.0 ha CATCHMENT

SEDIMENT RETENTION POND EMBANKMENT

NUMBER OF DECANTS FOR EACH POND SHALL BE AS FOLLOWS:

i) UP TO 1.5ha CATCHMENT - 1 DECANT
ii) 1.5-3.0ha CATCHMENT - 2 DECANTS
iii) 3 TO 5 ha CATCHMENT - 3 DECANTS-CONNECTED TO 1050Ø MH



GEOTEXTILE AT CULVERT OUTLET

INFORMATION FROM AUCKLAND REGIONAL COUNCIL TP10-EROSION & SEDIMENT CONTROL

FOR RESOURCE CONSENT

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EROSION AND SEDIMENT CONTROL STANDARD DETAILS SHEET 3

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: NTS (A3 Original)

Job No: A25556 Dwg No: 2302 Rev: 1

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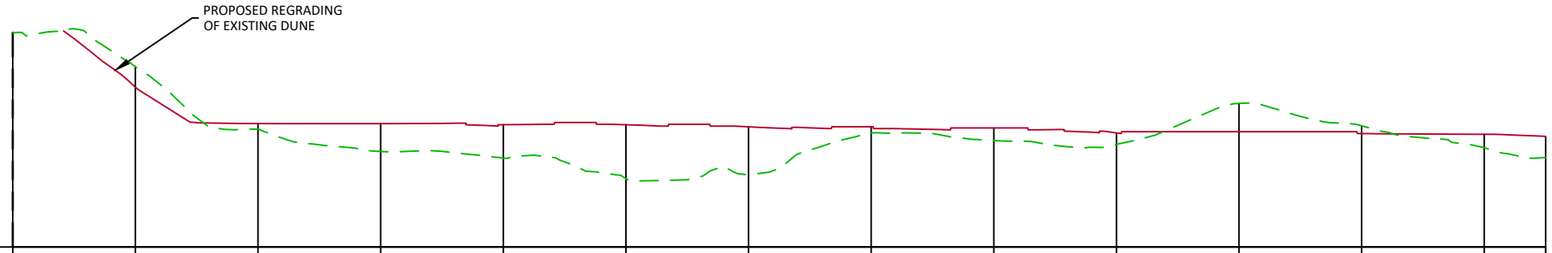
LEGEND:

FINISHED GROUND LEVEL

EXISTING GROUND LEVEL

NOTES:

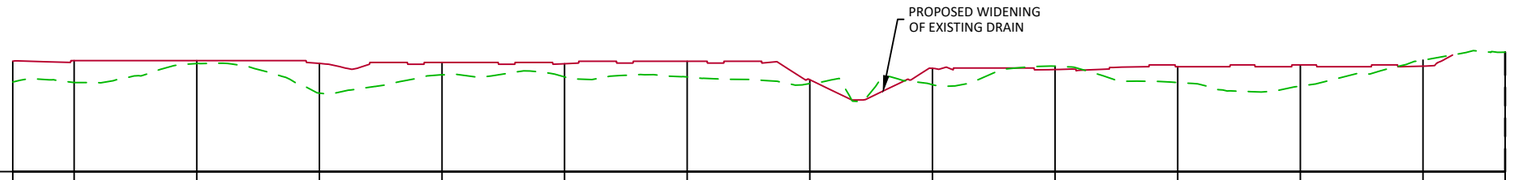
1. LONGITUDINAL SECTIONS DRAWN AT 2x VERTICAL EXAGGERATION.
2. REFER DWG 2500 FOR RETAINING WALL LOCATIONS.



DATUM R.L. -2.00															
CUT/FILL DEPTH		-1.66	0.46	2.27	2.72	4.39	3.87	0.50	1.02	0.92	-2.30	-0.63	1.09	1.69	
DESIGN LEVEL		11.03	8.06	8.05	7.97	7.96	7.79	7.80	7.70	7.30	7.40	7.25	7.19	7.00	
EXISTING LEVEL	15.47	12.69	7.60	5.78	5.25	3.57	3.92	7.30	6.68	6.37	9.70	7.88	6.09	5.31	
CHAINAGE	0.00	20.00	40.00	60.00	80.00	100.00	120.00	140.00	160.00	180.00	200.00	220.00	240.00	250.00	

LONGITUDINAL SECTION FOR EARTHWORKS SECTION 1

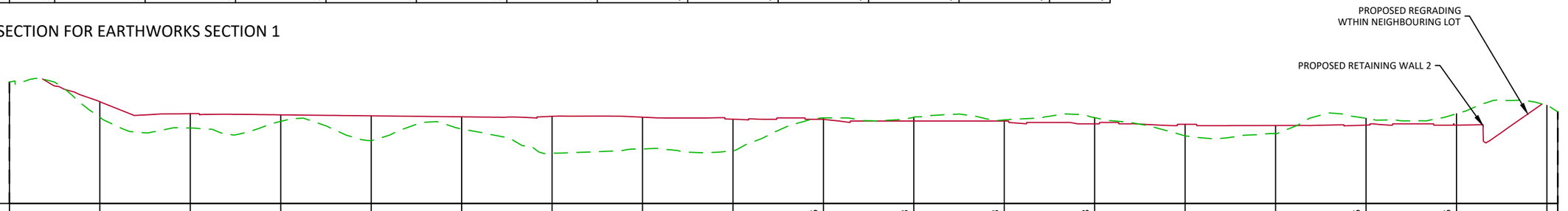
CH 0 TO CH 439.40



DATUM R.L. -2.00																					
CUT/FILL DEPTH	1.69	1.78	0.24	2.42	1.01	1.07	1.29	0.31	1.33	-0.27	1.28	1.72	-0.49								
DESIGN LEVEL	7.00	7.05	7.05	6.82	6.90	6.80	7.00	5.49	6.42	6.32	6.55	6.70	6.60								
EXISTING LEVEL	5.31	5.27	6.81	4.40	5.89	5.72	5.71	5.18	5.09	6.59	5.27	4.98	7.09	7.73							
CHAINAGE	250.00	260.00	280.00	300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	493.40							

LONGITUDINAL SECTION FOR EARTHWORKS SECTION 1

CH 250 TO CH 439.40



DATUM R.L. -2.00																						
CUT/FILL DEPTH		1.73	1.59	0.72	2.75	1.34	4.07	3.51	3.51	-0.16	-0.43	-0.13	-0.68	1.29	0.90	-0.76	-1.26					
DESIGN LEVEL		9.24	7.93	7.79	7.68	7.57	7.63	7.53	7.31	7.30	7.10	7.10	6.80	6.75	6.61	6.66	6.65					
EXISTING LEVEL	11.41	7.52	6.34	7.07	4.93	6.23	3.56	4.02	3.80	7.45	7.53	7.23	7.48	5.46	5.71	7.41	7.91	8.84	8.13			
CHAINAGE	0.00	20.00	40.00	60.00	80.00	100.00	120.00	140.00	160.00	180.00	200.00	220.00	240.00	260.00	280.00	300.00	320.00	340.00	342.39			

LONGITUDINAL SECTION FOR EARTHWORKS SECTION 2

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EARTHWORKS CROSS SECTIONS SHEET 1

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:1000 (A3 Original)

Job No: A25556 | Dwg No: 2400 | Rev: 1

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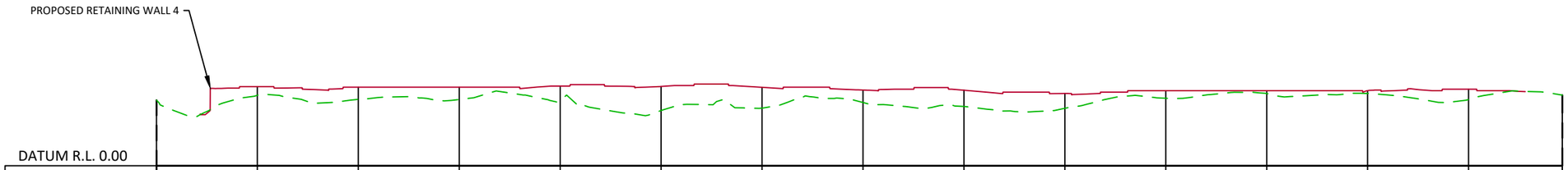
LEGEND:

FINISHED GROUND LEVEL

EXISTING GROUND LEVEL

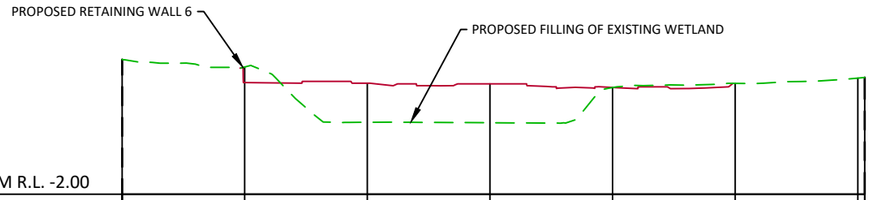
NOTES:

1. LONGITUDINAL SECTIONS DRAWN AT 2x VERTICAL EXAGGERATION.
2. REFER DWG 2500 FOR RETAINING WALL LOCATIONS.



DATUM R.L. 0.00														
CUT/FILL DEPTH	0.85	1.21	1.23	1.35	2.39	2.07	1.24	1.62	1.46	0.75	0.29	0.28	1.03	
DESIGN LEVEL	7.85	7.80	7.80	7.90	7.86	7.78	7.51	7.50	7.16	7.45	7.45	7.45	7.60	
EXISTING LEVEL 6.50	7.00	6.59	6.57	6.55	5.47	5.71	6.27	5.88	5.70	6.70	7.16	7.17	6.57	7.00
CHAINAGE 0.00	20.00	40.00	60.00	80.00	100.00	120.00	140.00	160.00	180.00	200.00	220.00	240.00	260.00	278.58

LONGITUDINAL SECTION FOR EARTHWORKS SECTION 3



DATUM R.L. -2.00							
CUT/FILL DEPTH	-1.27	3.19	3.17	0.01			
DESIGN LEVEL	7.10	7.05	7.00	6.70			
EXISTING LEVEL 8.97	8.37	3.86	3.83	6.69	7.03	7.47	7.52
CHAINAGE 0.00	20.00	40.00	60.00	80.00	100.00	120.00	121.12

LONGITUDINAL SECTION FOR EARTHWORKS SECTION 4

FOR RESOURCE CONSENT

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SUMMERSET VILLAGES (PARAPARAUMU) LTD
73 RATANUI ROAD, PARAPARAUMU

EARTHWORKS CROSS SECTIONS SHEET 2

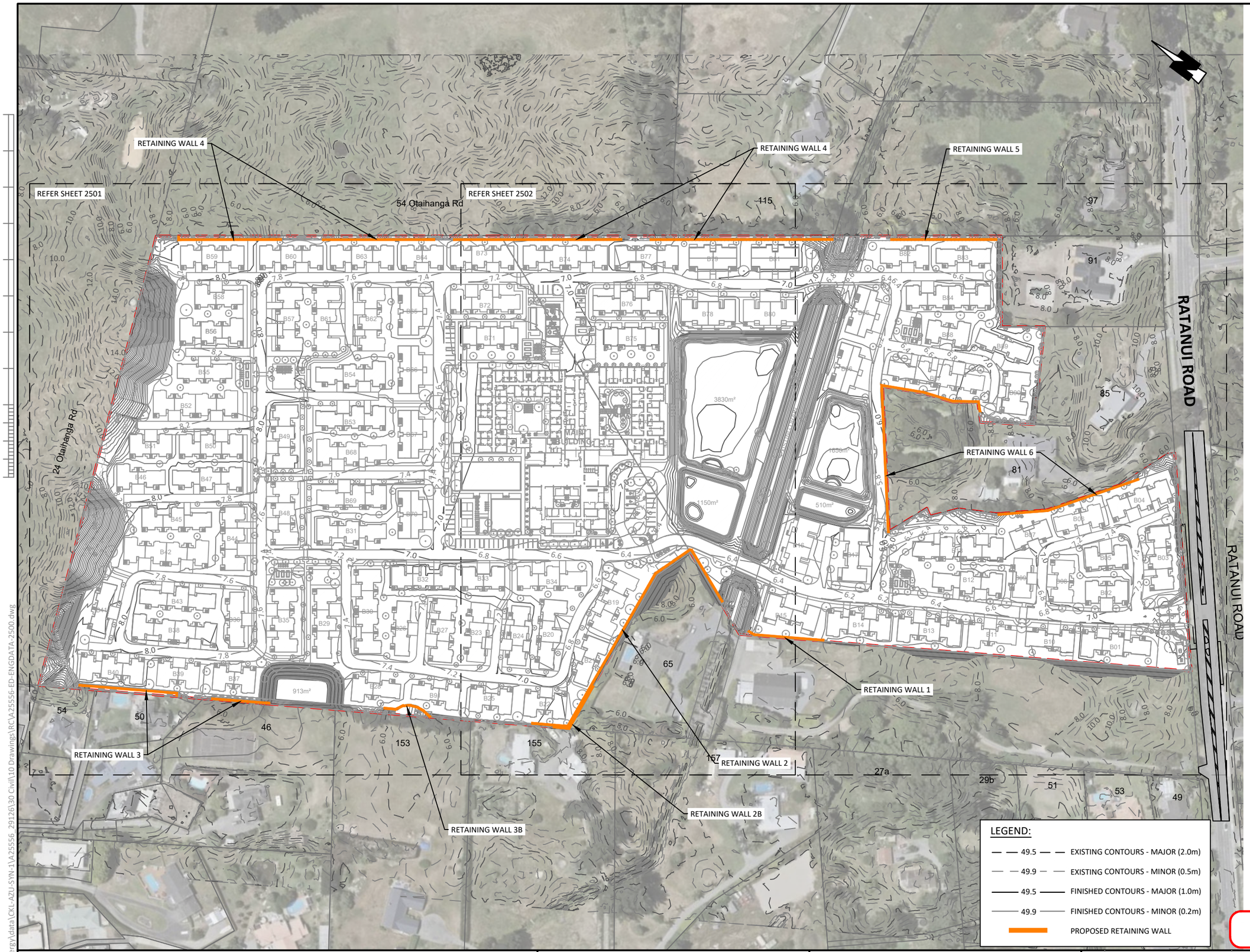
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:1000 (A3 Original)

Job No: A25556 Dwg No: 2401 Rev: 1

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EARTHWORKS NOTES:

1. ALL WORKS TO COMPLY WITH THE KCDC ENGINEERING STANDARDS FOR LAND DEVELOPMENT & NZ BUILDING CODE.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE OPERATIONAL PRIOR TO ANY WORKS COMMENCING AND SHALL BE INSTALLED IN ACCORDANCE WITH AC GD005 'EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES'.
3. REFER TO EARTHWORKS SPECIFICATION FOR EARTHFILL REQUIREMENTS AND STANDARDS OF COMPACTION. ALL EARTHWORKS TO BE UNDERTAKEN IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION REPORT, CONTRACTOR TO VIEW THE REPORT TO INFORM THEMSELVES.
4. ALL MATERIAL DEEMED BY THE ENGINEER TO BE UNSUITABLE SHALL BE EXCAVATED AND REPLACED WITH ENGINEERED FILL. ALL SURFACES SHALL BE SURVEYED AFTER CLEARING OPERATIONS (PRIOR TO REMOVAL OF UNSUITABLE) AND THEN AGAIN AFTER UNSUITABLE REMOVAL FOR VOLUMES.
5. ALL SURFACES SHALL BE SURVEYED AFTER CLEARING/STRIPPING OPERATIONS (PRIOR TO BULK EARTHWORKS) AND THEN AGAIN AFTER EARTHWORKS FOR VOLUMES.
6. THE LOCATIONS OF ALL STOCKPILES ARE WHOLLY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED CLEAR OF ALL EARTHWORKS OPERATIONS AND AWAY FROM GEOTECHNICALLY UNSTABLE LAND. NO PAYMENT SHALL BE MADE FOR RELOCATION OF ANY STOCKPILES THAT HAVE BEEN FOUND TO HAVE BEEN PLACED IN THE INCORRECT LOCATION.
7. ALL SETOUT TO BE UNDERTAKEN BY THE CONTRACTOR.
8. IT IS THE CONTRACTORS RESPONSIBILITY FOR HEALTH & SAFETY & SECURITY ON SITE, APPROPRIATE FENCING AND SIGNAGE SHALL BE ERECTED AND MAINTAINED AT ALL TIMES TO KEEP THE GENERAL PUBLIC OFF SITE.
9. FINAL QUANTITIES AND EXTENT OF EARTHWORKS TO BE DETERMINED BY THE ENGINEER.
10. ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED RESOURCE CONSENT AS WELL AS ANY ARBORICULTURAL REPORTS AND/OR IN ACCORDANCE WITH ACCEPTED ARBORICULTURAL PRACTICES WHERE REQUIRED.
11. ALL VEGETATION, STRUCTURES AND UNDERGROUND SERVICES SHALL BE REMOVED PRIOR TO ANY EARTH FILLING TO THE SATISFACTION OF THE ENGINEER.
12. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE MAINTAIN AND PROTECT ALL LIVE SERVICES PRIOR TO WORKS COMMENCING.
13. CONTRACTOR TO PILOT ANY SERVICES LOCATED IN THE BERM AND ADVISE LOCATION AND DEPTHS TO THE ENGINEER FOR A SOLUTION TO BE DETERMINED WITH RESPECTIVE UTILITY PROVIDERS PRIOR TO EARTHWORKS.
14. ANY WORK OUTSIDE OF PROPERTY EXTENTS SHALL BE ON INSTRUCTION BY THE ENGINEER PRIOR TO COMMENCING WORKS.
15. SUITABLE TRAFFIC MANAGEMENT SHALL BE ADOPTED FOR WORKS IN THE BERM TO BE ARRANGED BY THE CONTRACTOR.
16. IN THE EVENT ITEMS OF ARCHAEOLOGICAL INTEREST ARE FOUND DURING WORKS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY AND NO DAMAGE IS TO OCCUR TO ANY SUCH ITEMS IN THE MEANTIME.
17. IN THE EVENT ASBESTOS IS ENCOUNTERED THE ENGINEER IS TO BE ALERTED IMMEDIATELY AND NO WORKS ARE TO TAKE PLACE AROUND THE CONTAMINATED ZONE UNTIL CLEARED IN A COMPLIANT MANNER.
18. ANY EXCAVATIONS OVER 500mm IN HEIGHT SHALL BE BATTERED TO A 1:3 SAFE SLOPE.

FOR RESOURCE CONSENT

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EARTHWORKS RETAINING WALL OVERVIEW PLAN

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:2000 (A3 Original)

Job No: A25556 | Dwg No: 2500 | Rev: 1

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54 Otaihanga Rd

115

REFER SHEET 2502

24 Otaihanga Rd

RETAINING WALL 4

RETAINING WALL 4

RETAINING WALL 2

RETAINING WALL 3B

RETAINING WALL 2B

RETAINING WALL 3

MAIN BUILDING

3830m²

1150m²

913m²

EXISTING DRIVE

EXISTING DRIVE

EV

EV

54

50

46

153

65

EARTHWORKS NOTES:

1. ALL WORKS TO COMPLY WITH THE KCDC ENGINEERING STANDARDS FOR LAND DEVELOPMENT & NZ BUILDING CODE.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE OPERATIONAL PRIOR TO ANY WORKS COMMENCING AND SHALL BE INSTALLED IN ACCORDANCE WITH AC GD005 'EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES'.
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7. ALL SETOUT TO BE UNDERTAKEN BY THE CONTRACTOR.
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18. ANY EXCAVATIONS OVER 500mm IN HEIGHT SHALL BE BATTERED TO A 1:3 SAFE SLOPE.

LEGEND:

- 49.5 EXISTING CONTOURS - MAJOR (2.0m)
- 49.9 EXISTING CONTOURS - MINOR (0.5m)
- 49.5 FINISHED CONTOURS - MAJOR (1.0m)
- 49.9 FINISHED CONTOURS - MINOR (0.2m)
- PROPOSED RETAINING WALL

FOR RESOURCE CONSENT

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EARTHWORKS RETAINING WALL LAYOUT PLAN SHEET 1

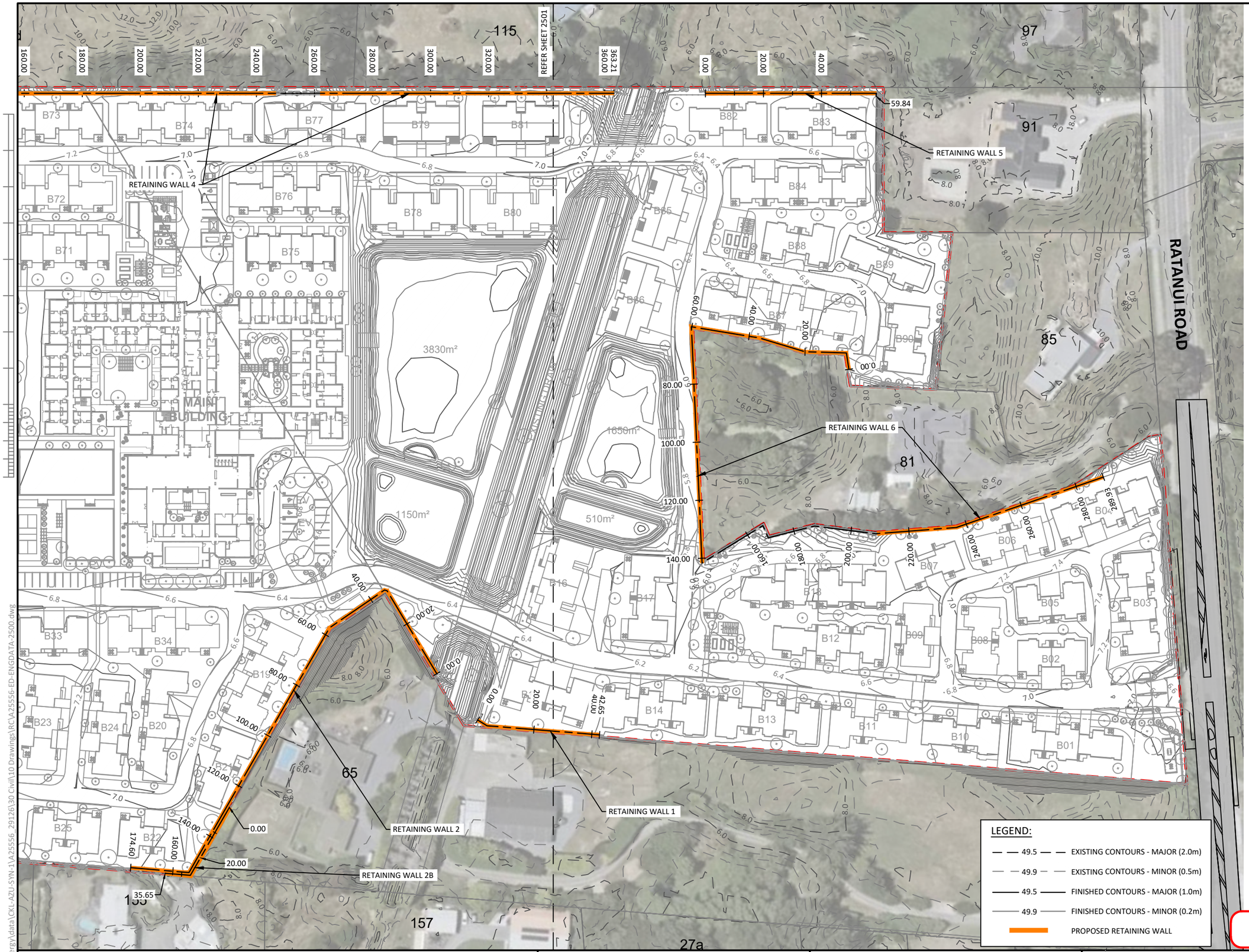
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:1250 (A3 Original)

Job No: A25556 | Dwg No: 2501 | Rev: 1

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EARTHWORKS NOTES:

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18. ANY EXCAVATIONS OVER 500mm IN HEIGHT SHALL BE BATTERED TO A 1:3 SAFE SLOPE.

LEGEND:

- 49.5 EXISTING CONTOURS - MAJOR (2.0m)
- 49.9 EXISTING CONTOURS - MINOR (0.5m)
- 49.5 FINISHED CONTOURS - MAJOR (1.0m)
- 49.9 FINISHED CONTOURS - MINOR (0.2m)
- PROPOSED RETAINING WALL

FOR RESOURCE CONSENT

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EARTHWORKS RETAINING WALL LAYOUT PLAN SHEET 2

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:1250 (A3 Original)

Job No: A25556 | Dwg No: 2502 | Rev: 1

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LEGEND:

TOP OF WALL

BOTTOM OF WALL

NOTES:

1. REFER DWG 2500 FOR RETAINING WALL LOCATIONS.



DATUM R.L. 0.00

HORIZ GEOMETRY		3.83 174°38'09"		8.02 147°52'53"		11.32 147°52'53"		11.32 147°52'53"		8.17 148°13'56"	
WALL HEIGHT	0.00	0.00	0.88	0.93	0.95	0.96	0.77	0.66	0.21	0.00	
TOP WALL	5.87	5.65	6.35	6.35	6.35	6.35	6.35	6.35	6.21	6.15	
BOTTOM WALL	5.86	5.65	5.47	5.42	5.40	5.39	5.58	5.69	6.00	6.15	
CHAINAGE	0.00	3.83	10.00	11.85	20.00	23.16	30.00	34.48	40.00	42.65	

LONGITUDINAL SECTION FOR RW 1



DATUM R.L. 0.00

HORIZ GEOMETRY		26.96 263°09'32"			8.68 327°54'52"	
WALL HEIGHT	0.00	0.55	1.22	1.15	1.07	0.00
TOP WALL	5.10	5.70	6.41	6.38	6.32	5.28
BOTTOM WALL	5.10	5.15	5.20	5.23	5.25	5.28
CHAINAGE	0.00	10.00	20.00	26.96	30.00	35.65

LONGITUDINAL SECTION FOR RW 2B



DATUM R.L. 0.00

HORIZ GEOMETRY		33.31 22°19'44"			0.92 342°12'33"		23.03 288°47'06"		97.20 263°09'32"										20.15 328°03'24"		
WALL HEIGHT	0.03	1.73	1.76	1.78	1.79	1.79	1.82	1.85	1.88	1.87	1.82	1.77	1.75	1.74	1.73	1.72	1.72	1.63	1.60	1.59	1.28	0.32	
TOP WALL	4.57	6.33	6.40	6.48	6.50	6.50	6.55	6.64	6.70	6.70	6.70	6.70	6.73	6.78	6.82	6.86	6.90	6.86	6.89	6.90	6.90	6.98	7.05
BOTTOM WALL	4.54	4.60	4.65	4.70	4.71	4.71	4.74	4.78	4.82	4.83	4.88	4.93	4.98	5.03	5.08	5.13	5.18	5.23	5.28	5.31	5.62	6.66	
CHAINAGE	0.00	10.00	20.00	30.00	33.31	34.23	40.00	50.00	57.26	60.00	70.00	80.00	90.00	100.00	110.00	120.00	130.00	140.00	150.00	154.46	160.00	170.00	174.60

LONGITUDINAL SECTION FOR RW 2

FOR RESOURCE CONSENT

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EARTHWORKS
RETAINING WALL
LONGSECTIONS SHEET 1

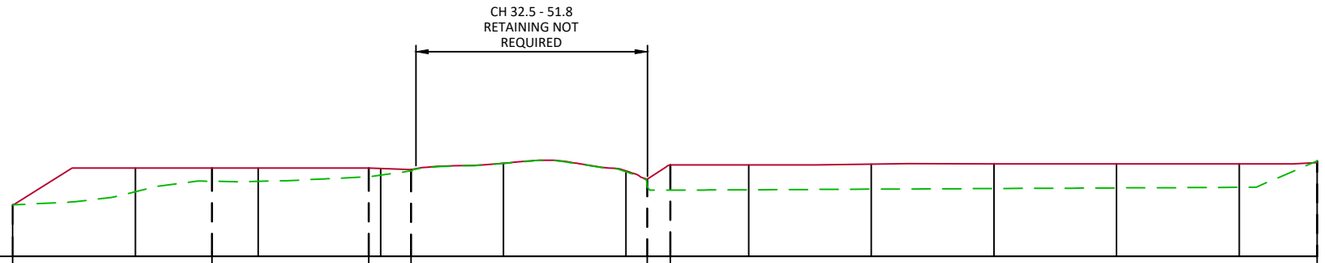
Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: **1:500** (A3 Original)

Job No: **A25556** Dwg No: **2510** Rev: **1**

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CH 32.5 - 51.8
RETAINING NOT
REQUIRED

| | | |

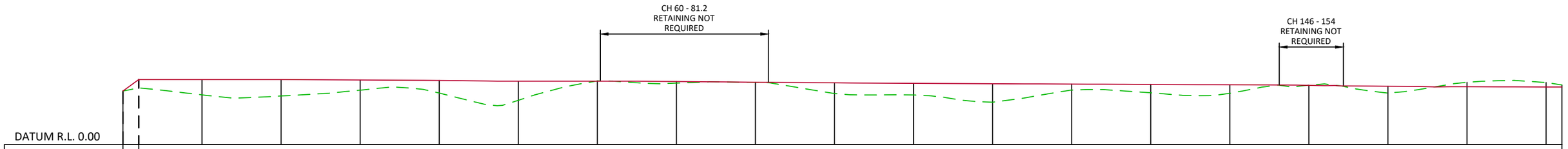
NOTES:

1. REFER DWG 2500 FOR RETAINING WALL LOCATIONS.

LEGEND:

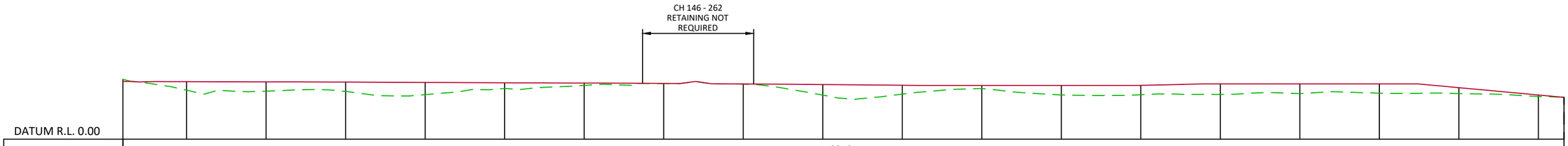
TOP OF WALL

BOTTOM OF WALL



DATUM R.L. 0.00																							
HORIZ GEOMETRY		2.00 233°16'41"										361.21 143°16'24"											
WALL HEIGHT		1.07	1.94	2.07	1.29	1.59	2.43	-0.02	0.20	0.01	1.35	1.47	2.33	0.76	1.06	1.08	-0.02	0.86	-0.55	-0.56	-0.26		
TOP WALL	6.75	8.20	8.20	8.19	8.14	8.08	8.00	8.00	7.95	7.86	7.78	7.72	7.67	7.63	7.58	7.54	7.47	7.36	7.29	7.26	7.25		
BOTTOM WALL		7.14	6.26	6.12	6.85	6.49	5.57	8.02	7.75	7.85	6.43	6.25	5.34	6.87	6.53	6.45	7.49	6.49	7.84	7.82	7.51		
CHAINAGE	0.00	2.00	10.00	20.00	30.00	40.00	50.00	60.00	70.00	80.00	90.00	100.00	110.00	120.00	130.00	140.00	150.00	160.00	170.00	180.00	182.00		

LONGITUDINAL SECTION FOR RW 4



DATUM R.L. 0.00																							
HORIZ GEOMETRY		361.21 143°16'24"																					
WALL HEIGHT	-0.26	1.06	1.17	1.16	1.53	0.71	0.29	0.01	0.01	1.32	1.11	0.39	1.19	1.18	1.33	1.22	1.17	0.75	0.18				
TOP WALL	7.25	7.23	7.20	7.17	7.13	7.08	7.05	7.00	6.94	6.86	6.78	6.75	6.75	6.76	6.95	6.95	6.95	6.47	5.55	5.25			
BOTTOM WALL	7.51	6.17	6.03	6.01	5.60	6.37	6.76	6.99	6.92	5.54	5.66	6.36	5.56	5.58	5.62	5.73	5.78	5.73	5.37				
CHAINAGE	182.00	190.00	200.00	210.00	220.00	230.00	240.00	250.00	260.00	270.00	280.00	290.00	300.00	310.00	320.00	330.00	340.00	350.00	360.00	363.21			

LONGITUDINAL SECTION FOR RW 4

FOR RESOURCE CONSENT

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EARTHWORKS
RETAINING WALL
LONGSECTIONS SHEET 3

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: **1:500** (A3 Original)

Job No: **A25556** Dwg No: **2512** Rev: **1**

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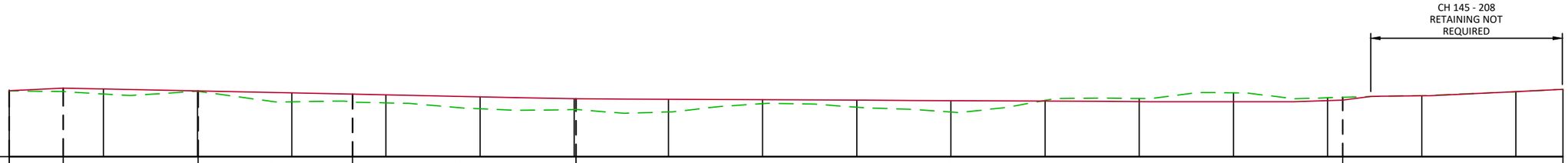
NOTES:

1. REFER DWG 2500 FOR RETAINING WALL LOCATIONS.

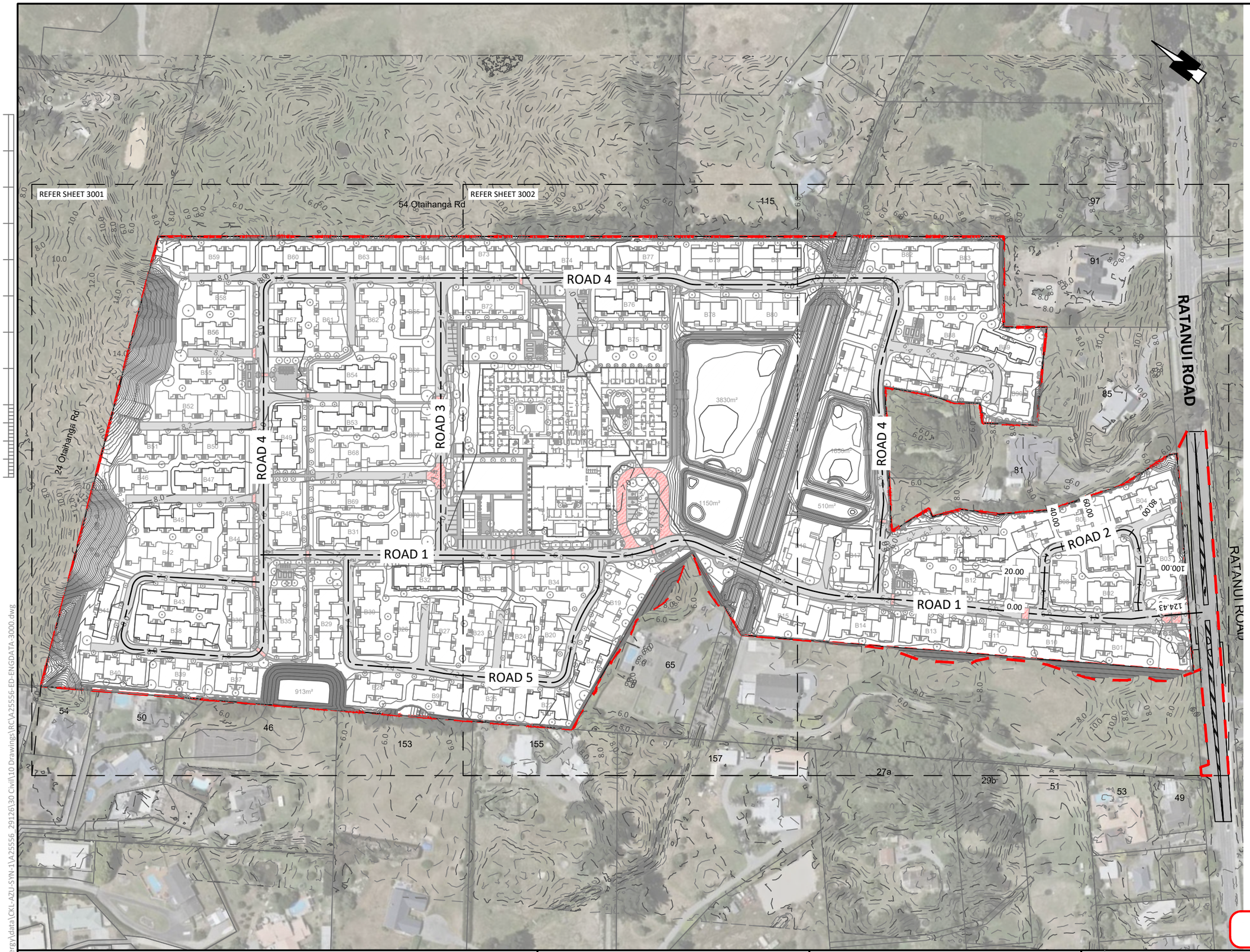
LEGEND:

TOP OF WALL

BOTTOM OF WALL



| | | |



ROADING/ACCESSWAY NOTES:

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH KCDC ENGINEERING STANDARDS AND THE NZ BUILDING CODE.
2. ALL EXTRUDED/INSITU CONCRETE TO BE MIN. 25 MPa STRENGTH AT 28 DAYS.
3. ALL REINFORCING SHALL BE PLACED ON APPROVED CHAIRS AND IS TO BE PLACED CENTRALLY OR AS PER DESIGN PLANS.
4. ALL FOOTPATH/ACCESSWAY SAWCUTS ARE TO COINCIDE WITH KERB SAWCUTS AT 3m CRS TYP. UNLESS NOTED OTHERWISE.
5. PAVEMENT DESIGN IS PROVISIONAL ONLY AND INSITU SUBGRADE STRENGTH SHALL BE CONFIRMED VIA SCALA PENETROMETER TESTING FOLLOWING GULLETTING OF THE CARRIAGEWAYS TO CONFIRM FINAL PAVEMENT THICKNESS AND ANY SUBGRADE IMPROVEMENT WORKS i.e. UNDERCUTTING OR STABILISATION. THE ENGINEER IS TO INSPECT, TEST AND APPROVE ALL SUBGRADES PRIOR TO AGGREGATE PLACEMENT.
6. ALL SUBGRADES SHALL BE TRIMMED WITHIN +/- 10mm TOLERANCE TO DESIGN LEVELS AND SHALL BE STRUNG AND APPROVED PRIOR TO METAL COURSE PLACEMENT.

LEGEND:

- 49.5 EXISTING CONTOURS - MAJOR (2.0m)
- 49.9 EXISTING CONTOURS - MINOR (0.5m)
- 49.5 FINISHED CONTOURS - MAJOR (1.0m)
- 49.9 FINISHED CONTOURS - MINOR (0.2m)
- PROPOSED EXTENT OF WORKS
- ASPHALT
- FOOTPATH CONCRETE
- PERMEABLE PAVERS

FOR RESOURCE CONSENT

CKL
Planning | Surveying | Engineering | Environmental

OFFICE
Auckland
A: 139 Carlton Gore Road, Auckland
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OTAIHANGA RETIREMENT VILLAGE
SUMMERSET VILLAGES (PARAPARAUMU) LTD
73 RATANUI ROAD, PARAPARAUMU

ROADING
OVERVIEW PLAN

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:2000 (A3 Original)

Job No: A25556 | Dwg No: 3000 | Rev: 1

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ROADING/ACCESSWAY NOTES:

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH KCDC ENGINEERING STANDARDS AND THE NZ BUILDING CODE.
2. ALL EXTRUDED/INSITU CONCRETE TO BE MIN. 25 MPa STRENGTH AT 28 DAYS.
3. ALL REINFORCING SHALL BE PLACED ON APPROVED CHAIRS AND IS TO BE PLACED CENTRALLY OR AS PER DESIGN PLANS.
4. ALL FOOTPATH/ACCESSWAY SAWCUTS ARE TO COINCIDE WITH KERB SAWCUTS AT 3m CRS TYP. UNLESS NOTED OTHERWISE.
5. PAVEMENT DESIGN IS PROVISIONAL ONLY AND INSITU SUBGRADE STRENGTH SHALL BE CONFIRMED VIA SCALA PENETROMETER TESTING FOLLOWING GULLETTING OF THE CARRIAGEWAYS TO CONFIRM FINAL PAVEMENT THICKNESS AND ANY SUBGRADE IMPROVEMENT WORKS i.e. UNDERCUTTING OR STABILISATION. THE ENGINEER IS TO INSPECT, TEST AND APPROVE ALL SUBGRADES PRIOR TO AGGREGATE PLACEMENT.
6. ALL SUBGRADES SHALL BE TRIMMED WITHIN +/- 10mm TOLERANCE TO DESIGN LEVELS AND SHALL BE STRUNG AND APPROVED PRIOR TO METAL COURSE PLACEMENT.

LEGEND:

- 49.5 EXISTING CONTOURS - MAJOR (2.0m)
- 49.9 EXISTING CONTOURS - MINOR (0.5m)
- 49.5 FINISHED CONTOURS - MAJOR (1.0m)
- 49.9 FINISHED CONTOURS - MINOR (0.2m)
- PROPOSED EXTENT OF WORKS
- ASPHALT
- FOOTPATH CONCRETE
- PERMEABLE PAVERS

FOR RESOURCE CONSENT

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ROADING LAYOUT PLAN SHEET 1

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: **1:1250** (A3 Original)

Job No: **A25556** Dwg No: **3001** Rev: **1**

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ROADING/ACCESSWAY NOTES:

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LEGEND:

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- 49.9 EXISTING CONTOURS - MINOR (0.5m)
- 49.5 FINISHED CONTOURS - MAJOR (1.0m)
- 49.9 FINISHED CONTOURS - MINOR (0.2m)
- PROPOSED EXTENT OF WORKS
- ASPHALT
- FOOTPATH CONCRETE
- PERMEABLE PAVERS

PROPOSED LOCATION OF TEMPORARY CONSTRUCTION ACCESS

PROPOSED TRAFFIC ISLAND

PROPOSED ROAD WIDENING EXTENT AND PROPOSED FOOTPATH TIE IN TO EXISTING TO BE FINALISED DURING DETAILED DESIGN. REFER TO STANTEC INTEGRATED TRANSPORT ASSESSMENT FOR FURTHER DETAILS

FOR RESOURCE CONSENT

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ROADING LAYOUT PLAN SHEET 2

Issue	Description	Checked	Date
1	FOR RESOURCE CONSENT	NP	19.10.26

		Date
Designed:	AV	22.07.26
Drawn:	LL	22.07.26
Checked:	NP	19.10.26

Scale: 1:1250 (A3 Original)

Job No: A25556 | Dwg No: 3002 | Rev: 1

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