



APPENDIX H

Preliminary Earthworks

Drawing No.: 23301-3A3B-PRE000 to PRE020 (Rev A);
23301-3A3B-PRE040 to PRE046 (Rev C); and
23301-3A3B-PRE070 to PRE231 (Rev A)

Prepared by Mortons – Urban Solutions
dated 13 November 2019

MORTONS
urban**solutions**
Civil Engineering
Project Coordination
Development Costing
ABN: 39 116 375 065 Tel: (07) 54997000

ABN: 39 116 375 065 Tel: (07) 54997000

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DATA TRANSMITTAL



PROJECT NAME: FLINDERS 3A/3B PRELIMINARY ENGINEERING
JOB NO: 23301-3A3B

PLEASE CHECK THAT YOU HAVE RECEIVED ALL DOCUMENTS AS LISTED ABOVE.

I hereby acknowledge receipt of the documents as detailed above.

Signed: _____

Date: / /

Company: _____

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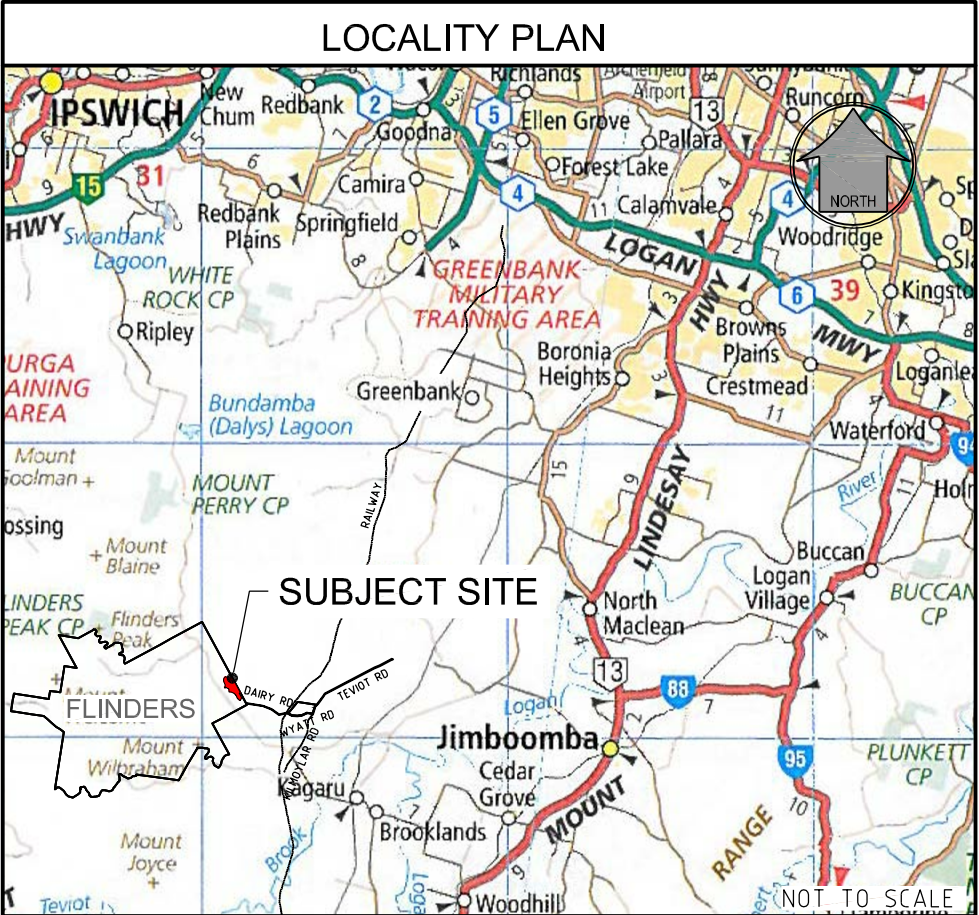
PRELIMINARY ENGINEERING
NEIGHBOURHOOD 3A & 3B
No.23301-3A3B-PRE

SCHEDULE OF DRAWINGS					
NUMBER	REV	TITLE	NUMBER	REV	TITLE
GENERAL					
23301-3A3B-PRE000	A	COVER SHEET	23301-3A3B-PRE202	A	3A ROAD 02
23301-3A3B-PRE005	A	ROAD HIERARCHY & STAGING PLAN	23301-3A3B-PRE203	A	3A ROAD 03 SHEET 01
EARTHWORKS: EXISTING FEATURES & DEMOLITION			23301-3A3B-PRE204	A	3A ROAD 03 SHEET 02
23301-3A3B-PRE020	A	PLAN	23301-3A3B-PRE205	A	3A ROAD 03 SHEET 03
EARTHWORKS: BULK EARTHWORKS CUT FILL			23301-3A3B-PRE206	A	3A ROAD 03 SHEET 04
23301-3A3B-PRE040	C	PLAN SHEET 01	23301-3A3B-PRE207	A	3A ROAD 03 SHEET 05
23301-3A3B-PRE041	C	PLAN SHEET 02	23301-3A3B-PRE208	A	3A ROAD 03 SHEET 06
23301-3A3B-PRE042	C	PLAN SHEET 03	23301-3A3B-PRE209	A	3A ROAD 04
23301-3A3B-PRE043	C	PLAN SHEET 04	23301-3A3B-PRE210	A	3A ROAD 05
23301-3A3B-PRE044	C	PLAN SHEET 05	23301-3A3B-PRE211	A	3A ROAD 06
23301-3A3B-PRE045	C	PLAN SHEET 06	23301-3A3B-PRE212	A	3A ROAD 07
23301-3A3B-PRE046	C	PLAN SHEET 07	23301-3A3B-PRE213	A	3A ROAD 08 SHEET 01
EARTHWORKS: RETAINING WALL & DETAIL GRADING			23301-3A3B-PRE214	A	3A ROAD 08 SHEET 02
23301-3A3B-PRE070	A	DETAILS	23301-3A3B-PRE215	A	3A ROAD 09
EARTHWORKS: FINAL SURFACE & SEDIMENT AND EROSION CONTROL			23301-3A3B-PRE216	A	3A ROAD 10
23301-3A3B-PRE080	A	NOTES AND LEGEND	23301-3A3B-PRE217	A	3A ROAD 11
23301-3A3B-PRE081	A	PLAN SHEET 01	23301-3A3B-PRE218	A	3A ROAD 12
23301-3A3B-PRE082	A	PLAN SHEET 02	23301-3A3B-PRE219	A	3A ROAD 13
EARTHWORKS: COMBINED SERVICES			23301-3A3B-PRE220	A	3A ROAD 14
23301-3A3B-PRE090	A	PLAN SHEET 01	23301-3A3B-PRE221	A	3B ROAD 01
23301-3A3B-PRE091	A	PLAN SHEET 02	23301-3A3B-PRE222	A	3B ROAD 02 SHEET 01
ROADS: ROADWORKS			23301-3A3B-PRE223	A	3B ROAD 02 SHEET 02
23301-3A3B-PRE100	A	PLAN SHEET 01	23301-3A3B-PRE224	A	3B ROAD 02 SHEET 03
23301-3A3B-PRE101	A	PLAN SHEET 02	23301-3A3B-PRE225	A	3B ROAD 03 SHEET 01
23301-3A3B-PRE120	A	DETAILS SHEET 01	23301-3A3B-PRE226	A	3B ROAD 03 SHEET 02
23301-3A3B-PRE121	A	DETAILS SHEET 02	23301-3A3B-PRE227	A	3B ROAD 04
ROADS: LONGITUDINAL SECTIONS			23301-3A3B-PRE228	A	3B ROAD 05
23301-3A3B-PRE200	A	3A ROAD 01 SHEET 01	23301-3A3B-PRE229	A	3B ROAD 06 SHEET 01
23301-3A3B-PRE201	A	3A ROAD 01 SHEET 02	23301-3A3B-PRE230	A	3B ROAD 06 SHEET 02
			23301-3A3B-PRE231	A	3B ROAD 07



PACIFIQ

SUB-CONSULTANTS



R. P. DESCRIPTION
LOT 3 ON S311896
LOCALITY OF FLINDERS LAKES
LOCAL AUTHORITY - LOGAN CITY COUNCIL

GENERAL

1. CONTRACT SPECIFICATIONS
- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATION.
2. SETOUT
- SURVEY SETOUT INFORMATION HAS BEEN ESTABLISHED ON SITE BY THE PRINCIPAL'S SURVEYOR TO ENABLE THE CONTRACTOR TO ACCURATELY SETOUT THE WORKS TO THE CO-ORDINATES SHOWN. SETOUT INFORMATION SHALL NOT BE OBTAINED BY SCALING FROM THESE DRAWINGS.
3. DATUM
- LEVELS SHOWN ARE TO A.H.D.
4. TRENCH SPOIL
- ALL MATERIALS ARISING FROM ROADS & SERVICES ARE TO BE COMPACTED TO FUTURE STAGES, TO LEVEL 1 IF NO SPOIL AREA IS AVAILABLE THESE MATERIALS SHALL BE TRUCKED TO A LICENSED TIP. THESE WORKS FORM PART OF THE CONTRACTED WORKS.
5. CHECK ELECTRONIC SETOUT
- CONTRACTOR IS RESPONSIBLE TO ENSURE ANY ELECTRONIC DATA FILES MATCH THE DRAWINGS.
6. PRE START
- a. ERECT SITE SIGNAGE. CONSTRUCT ENTRY & EXIT POINT AS INDICATED.

b. CONSTRUCT VEHICLE WASHDOWN AREA & ASSOCIATED SILT MANAGEMENT DEVICES.

c. CONSTRUCT SITE OFFICE & STORAGE COMPOUND AREA.

d. INSTALL EROSION & SEDIMENT CONTROL DEVICES AS PER THE CONTRACTOR'S EROSION & SEDIMENT CONTROL PLAN.

e. ERECT TEMPORARY TREE PROTECTION FENCING IN ACCORDANCE WITH THE APPROVED VEGETATION MANAGEMENT PLAN & AUTHORITIES APPROVAL CONDITIONS (IF REQUIRED).
7. HEALTH & SAFETY
- ALL WORKS UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE WORKPLACE HEALTH & SAFETY LEGISLATION.
8. STOCKPILING
- STOCKPILING OF ANY SURPLUS MATERIAL IS NOT PERMITTED

PROJECT SPECIFIC REPORTS

- THE CONTRACTOR MUST FOLLOW THE RECOMMENDATIONS & PROCEDURES OUTLINED IN THE FOLLOWING REPORTS AT ALL TIMES.
- a) GEOTECHNICAL INVESTIGATION REPORTS (INCLUDING ANY ACID SULPHATE OR DISPERSIVE SOIL REPORTING)

b) VEGETATION & FAUNA MANAGEMENT PLANS

c) OTHER MANAGEMENT PLANS NOMINATED IN THE CONTRACT, AUTHORITIES APPROVAL CONDITIONS OR BY THE SUPERINTENDENT.

LEGEND

- CONCRETE LANE
(5.5m CARRIAGEWAY)

CONCRETE LANE, INCREASED VERGE
(5.5m CARRIAGEWAY)

LOCAL ACCESS STREET, ADJACENT TO PARK
(5.5m CARRIAGEWAY)

LOCAL ACCESS STREET
(7.5m CARRIAGEWAY)

LOCAL ACCESS STREET, REDUCED VERGE
(7.5m CARRIAGEWAY)

LOCAL ACCESS STREET, SPECIAL
(7.5m CARRIAGEWAY)

NEIGHBOURHOOD CONNECTOR
(11.2m CARRIAGEWAY)
- REFER 120 DRAWINGS
SERIES FOR TYPICAL
SECTIONS
- EXISTING PROPERTY LINE

EXISTING KERB (INVERT)

FUTURE PROPERTY LINE

FUTURE KERB (INVERT)

PROPOSED PROPERTY LINE

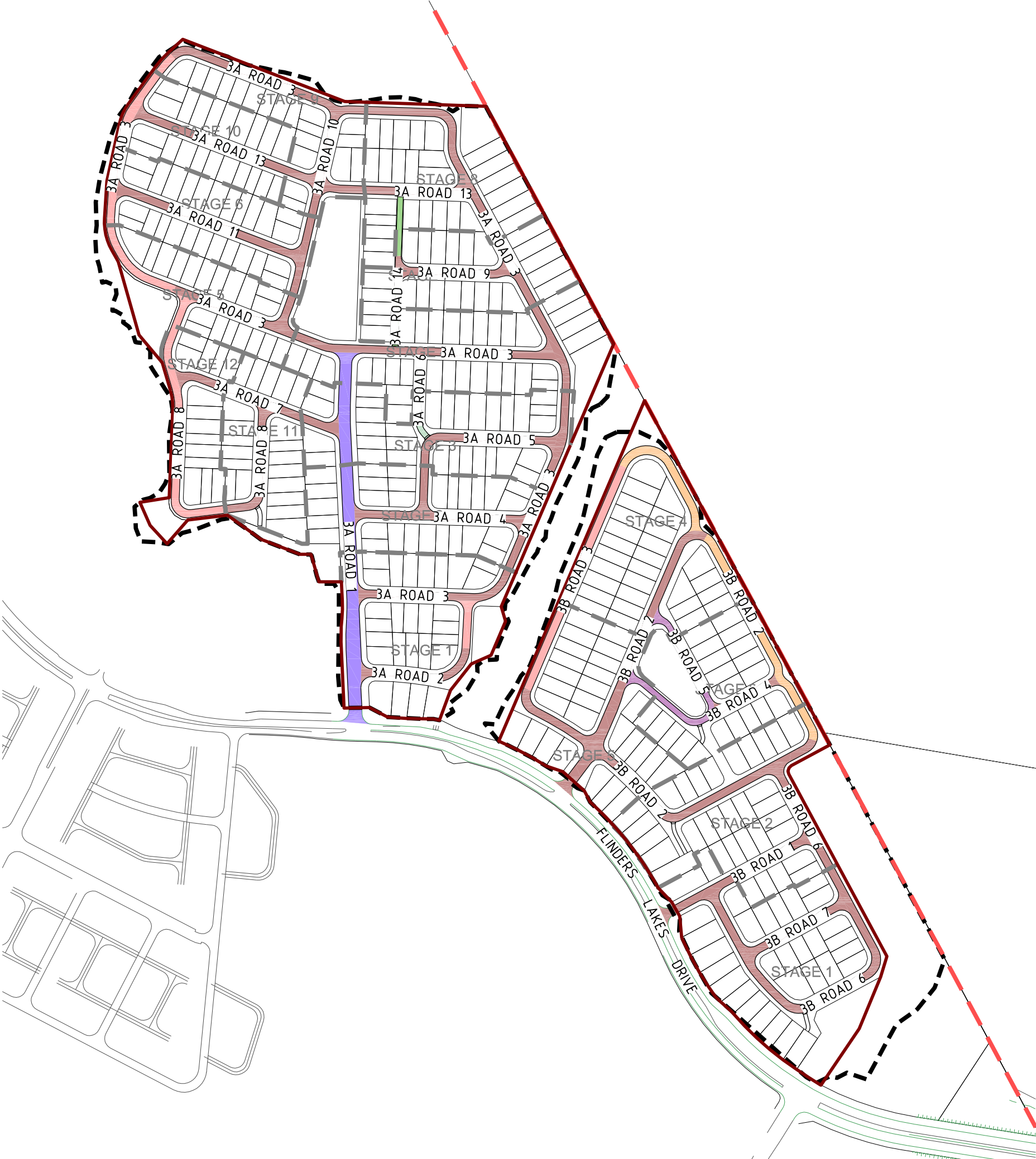
PROPOSED KERB (INVERT)

SITE BOUNDARY

PRECINCT BOUNDARY

STAGE BOUNDARY

LIMIT OF WORKS BOUNDARY



PROJECT NAME



NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT





0 20 40 60 80 100m
Scale 1:2000 - A1 (1:4000 - A3)

ISSUES	DATE
TENDER	
COUNCIL	
CONSTRUCTION	

PRE	DATE	AMENDMENT
A	13-11-19	EDD ISSUE

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ASSOCIATED CONSULTANTS



robertsday



"Where will our knowledge take you?"



saunders havill group



Steven Hosking Surveys Pty Ltd

DRAWING TITLE

ROAD HIERARCHY,
STAGING PLAN
&
GENERAL NOTES



Urban & Regional Planning
Civil Engineering
Project Coordination

MUS Pty Ltd T/As:
Mortons-Urban Solutions
ABN: 39 116 375 065
mortons@urbansolutions.net.au
www.urbansolutions.net.au
Tel: 07 5571 1099
Fax: 07 5571 1088

Postal Address
PO Box 2484
Southport QLD 4215

Gold Coast Office
Suite 9, 19 Short St
Southport QLD 4215

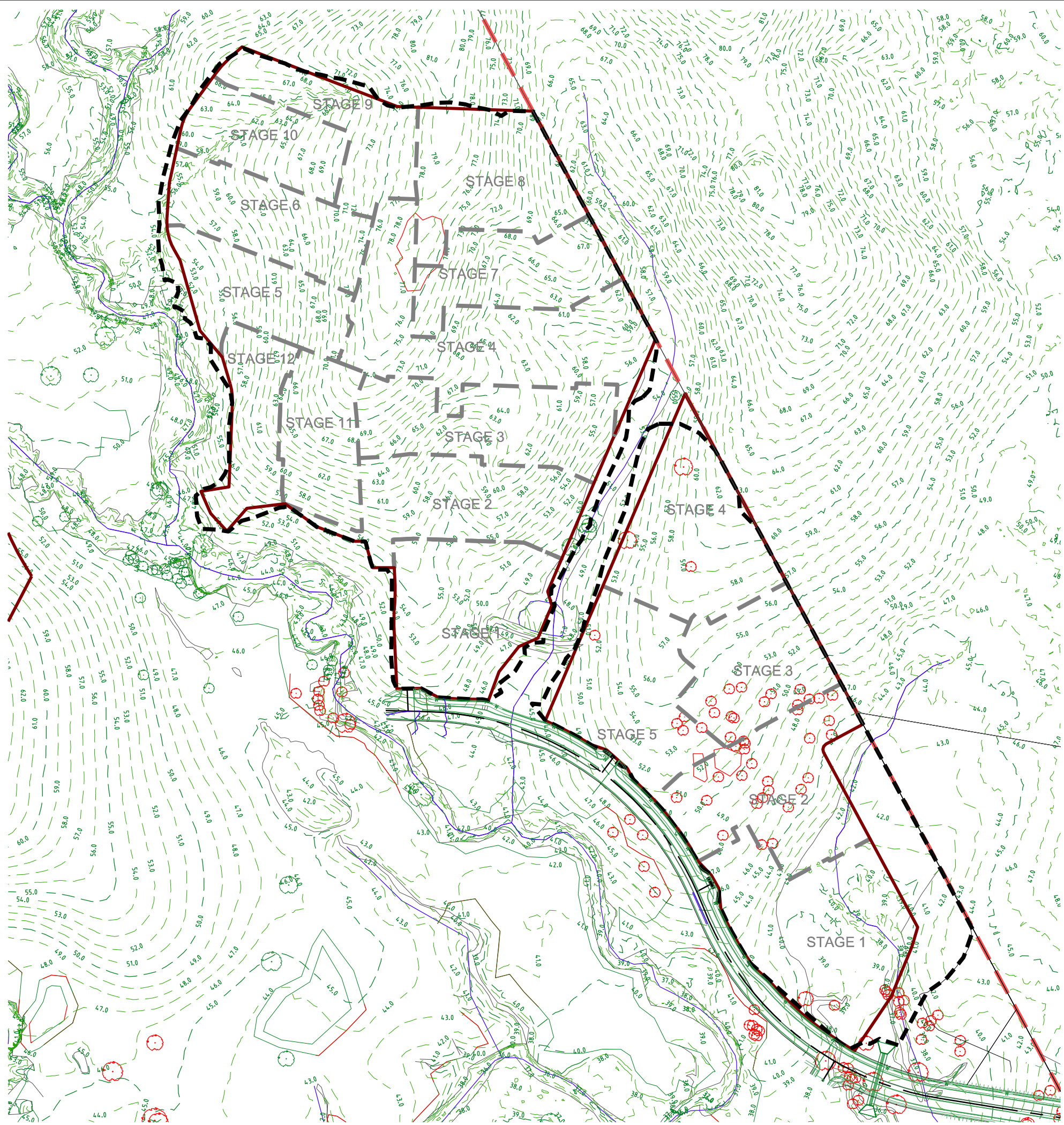
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APPROVED		RPE	DATE 13-11-19

DRAWING NUMBER	AMEND.
23301-3A3B-PRE005	A

- GENERAL**
1. EXISTING SERVICES - EXTERNAL WORKS
THE LOCATIONS OF ALL EXISTING SERVICES WITHIN THE WORK AREA SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION COMMENCING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE RELEVANT AUTHORITIES & TO ENSURE THAT THE EXISTING SERVICES ARE NOT DAMAGED OR DISTURBED IN ANY WAY BY THE CONTRACT WORKS.
2. EXISTING STRUCTURES
ALL EXISTING STRUCTURES & ASSOCIATED INFRASTRUCTURE TO BE REMOVED & DISPOSED OF OFF SITE.
3. EXISTING DAMS
EXISTING DAMS TO BE DEWATERED. ALL SILT & DEBRIS ARE TO BE REMOVED & LAWFULLY DISPOSED OF TO A TIP OFF SITE, OR INCORPORATED INTO THE SITE EARTHWORKS AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER. REPLACEMENT FILL IS TO BE LOCATED & COMPACTED IN ACCORDANCE WITH LOCAL COUNCIL'S SPECIFICATIONS.

NOTE:
CONTRACTOR TO MAKE ALL NECESSARY ALLOWANCES FOR LOCATION AND PROTECTION OF EXISTING SERVICES DURING WORKS.

- LEGEND**
- EXISTING PROPERTY LINE
 - EXISTING FENCE
 - EXISTING KERB
 - EXISTING EDGE OF BITUMEN
 - CONTROL LINE / CENTER OF ROAD
 - EXISTING FOOTPATH
 - EXISTING EDGE OF VEGETATION
 - EXISTING STORMWATER
 - EXISTING RISING MAIN
 - EXISTING SEWER
 - EXISTING WATER
 - EXISTING CONTOURS MAJOR
 - EXISTING CONTOURS MINOR
 - EXISTING CHANNEL
 - SITE BOUNDARY
 - PRECINCT BOUNDARY
 - STAGE BOUNDARY
 - LIMIT OF WORKS BOUNDARY
 - TREES TO BE RETAINED
 - TREES TO BE REMOVED



PROJECT NAME

FLINDERS LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT

PACIFIQ

Scale 1:2000 - A1 (1:4000 - A3)

ISSUES

ISSUES	DATE
TENDER	
COUNCIL	
CONSTRUCTION	

PRE DATE

AMENDMENT

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ASSOCIATED CONSULTANTS

HDR robertsday
BMT WBM
Cardno
saunders havill group
CRGACOUSTICS

DRAWING TITLE

EXISTING FEATURES AND DEMOLITION PLAN

MORTONS urbansolutions
Urban & Regional Planning
Civil Engineering
Project Coordination

MUS Pty Ltd T/As:
Mortons-Urban Solutions
ABN 39 116 375 065
mortons@urbansolutions.net.au
www.urbansolutions.net.au
Tel 07 5571 1099
Fax 07 5571 1088

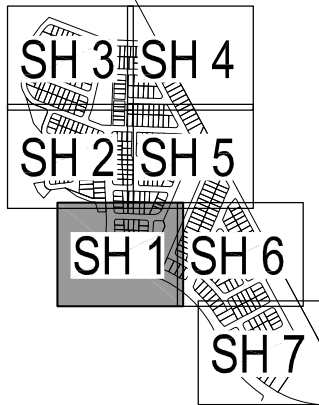
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Southport QLD 4215

Gold Coast Office
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Southport QLD 4215

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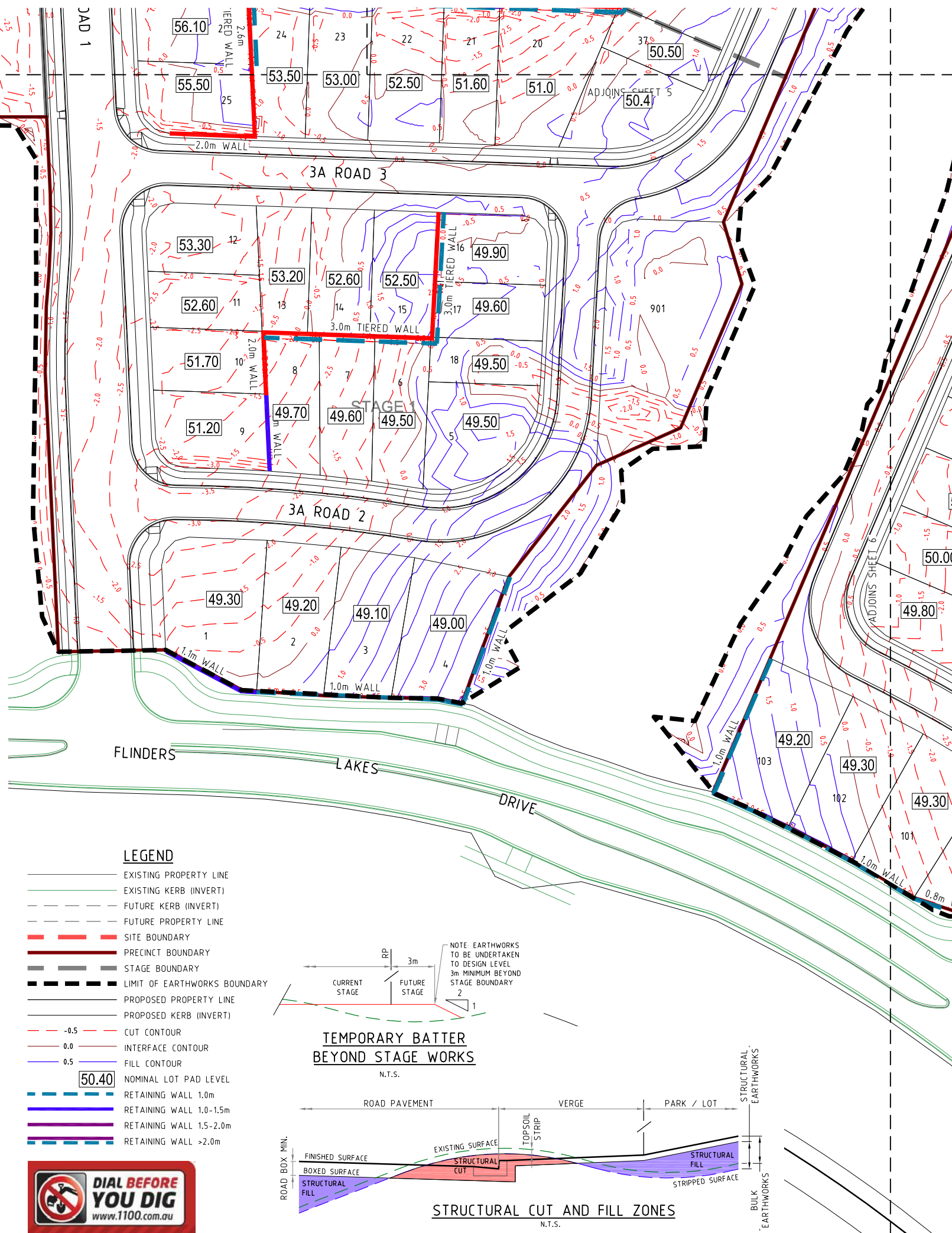
SHEET LAYOUT

EARTHWORKS

- TOPSOIL STRIPPING**
TOPSOIL SHALL BE STRIPPED ACROSS THE ENTIRE LIMIT OF THE EARTHWORKS CUT & FILL AREAS & SHALL BE STOCKPILED IN A LOCATION APPROVED BY THE SUPERINTENDENT. THE EXISTING STRATA IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION PRIOR TO PLACING ANY FILL.
- EARTHWORKS LEVELS**
EARTHWORKS LEVELS SHOWN ON DRAWINGS ARE TO FINISHED SURFACE LEVELS & INCLUDE 100mm OF TOPSOIL.
- COMPACTION STANDARD**
SITE FILLING & TRENCH BACKFILL SHALL BE COMPACTED TO THE STANDARDS OUTLINED IN THE LOCAL AUTHORITY'S SPECIFICATIONS. FILL BATTER FACES ARE TO BE OVERFILLED, COMPACTED & CUT BACK TO DESIGN LEVELS. ALL CUT BATTERS ARE TO BE CUT BACK & TRIMMED TO DESIGN LEVELS.
- PAVEMENT DEPTHS**
THE DESIGN PAVEMENT DEPTHS ALLOWED IN EARTHWORKS CALCULATIONS ARE BASED ON THE DEPTHS SHOWN IN THE SCHEDULE OF PAVEMENT DEPTHS. THE PAVEMENT DEPTHS GIVEN ARE DESIGN DEPTHS ONLY & MAY BE VARIED AFTER SUB GRADE TESTS ARE TAKEN & AUTHORITY APPROVAL.
- TESTING & CERTIFICATION**
ALL COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A. TESTING AUTHORITY. ALL SITE FILLING SHALL BE TESTED AT LEVEL 1 REQUIREMENTS. THE CONTRACTOR IS TO PROVIDE ALL REQUIRED EARTHWORKS CERTIFICATIONS IN ACCORDANCE WITH THE APPROVAL CONDITIONS. THE CONTRACTOR IS TO PROVIDE A CONSTRUCTED EARTHWORKS SLOPE STABILITY CERTIFICATION CONFIRMING REQUIRED F.O.S. CERTIFIED BY A RPEQ.
- TOPSOIL REPLACEMENT**
ALL FOOTPATHS, BATTERS & ALLOTMENT CUT & FILL AREAS SHALL BE TOPSOILED WITH TOPSOIL FROM ONSITE STOCKPILES, & AMELIORATE SOIL AS NECESSARY TO ENSURE GRASS STRIKE.
- GRASSING**
ALL CUT/FILL AREAS, DISTURBED AREAS & TRENCHED AREAS SHALL BE GRASSED TO THE SATISFACTION OF THE SUPERINTENDENT & LOCAL AUTHORITY.
- ROCK**
THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR EARTHWORKS RATE.
- EARTHWORKS ZONE**
THE FOLLOWING ACTIVITIES ARE PROHIBITED OUTSIDE THE EARTHWORKS ZONE - STORAGE & MIXING OF MATERIALS, VEHICLE PARKING, LIQUID DISPOSAL, MACHINERY REPAIRS/REFUELING, PLACEMENT OF SITE OFFICES OR SHEDS, COMBUSTION OF ANY MATERIAL, STOCKPILING OF SOIL, RUBBLE OR DEBRIS, ANY FILLING OR EXCAVATION INCLUDING TRENCHES, TOPSOIL, SKIMMING AND/OR SURFACE EXCAVATION UNLESS OTHERWISE APPROVED BY THE RELEVANT AUTHORITY.
- CONSTRUCTION - STOCKPILING**
TEMPORARY SILT FENCE TO BE ERRECTED 5m FROM TOE OF BATTER ON LOW SIDE OF STOCKPILING. STOCKPILE SITE TO BE CLEAR OF ADJACENT PROPERTY BOUNDARIES SO AS NOT TO CAUSE A NUISANCE TO ADJOINING PROPERTIES. NO STOCKPILES ARE TO BE LOCATED WITHIN THE TREE PROTECTION ZONE. REFER VEGETATION MANAGEMENT PLAN FOR MORE DETAILS. THE CONTRACTOR SHALL NOT CREATE STOCKPILES OF SURPLUS MATERIALS UNLESS DIRECTED BY THE SUPERINTENDENT. ALL MATERIALS ARISING FROM THE WORKS SHALL BE COMPACTED TO FUTURE FILL AREAS AS NOMINATED OR REMOVED FROM THE SITE.
- TOPSOIL SCREENING**
TOPSOIL SHALL BE SCREENED BY THE CONTRACTOR WHEN DIRECTED BY THE SUPERINTENDENT. ALL UNSUITABLE MATERIAL SCREENED FROM THE TOPSOIL WILL BE TAKEN TO AN OFFSITE TIP BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.
- EARTHWORKS MATERIAL SIZE**
ALL EARTHWORKS MATERIAL IS TO BE BROKEN DOWN TO AN ACCEPTABLE SIZE TO BE COMPACTED UNDER LEVEL 1 FILL. WHERE THE RELEVANT GUIDELINES DON'T SPECIFY AN ACCEPTABLE SIZE, EARTHWORKS MATERIAL IS TO BE BROKEN DOWN TO A SIZE NO LARGER THAN 75mm.
- MOISTURE CONTENT**
EARTHWORKS MOISTURE VARIATION TO NOT EXCEED $\pm 2\%$ OF THE OPTIMUM MOISTURE CONTENT.
- SURFACE FINISH**
THE FINISHED SURFACE LEVEL IS TO BE CAPPED WITH FINER MATERIAL & SMOOTH DRUM ROLLED & GRADED TO PROMOTE SURFACE WATER RUNOFF IN A CONTROLLED MANNER.
- EARTHWORKS LIMITS**
THE CONTRACTOR IS TO TIE IN TO THE NATURAL SURFACE AT THE LIMIT OF THE EARTHWORKS. THE TIE IN IS TO BE COMPLETED IN A MANNER TO ENSURE THERE IS NO PONDING OF SURFACE WATER.
- IMPORTED MATERIAL**
LOTS - ALL IMPORTED MATERIAL FOR PLACEMENT ON LOTS TO BE A MINIMUM CBR 10 MATERIAL & HAVE A SWELL % < 1.5 .
ROADS - ALL IMPORTED MATERIAL FOR PLACEMENT ON ROADS TO BE A MINIMUM CBR10 MATERIAL WITH A SWELL % < 1.5 , LIQUID LIMIT < 70 & PLASTICITY INDEX < 45 .
SOIL PARAMETERS TO BE REVIEWED BY THE SITE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT ON SITE.
- REACTIVE SOILS**
 - ALL REACTIVE TOPSOIL TO BE IDENTIFIED BY THE GEOTECHNICAL ENGINEER & BE SEPARATED FROM THE NON REACTIVE TOPSOIL.
 - ALL REACTIVE TOPSOIL TO BE RESPREAD IN THE OPEN SPACE AREA. WHERE REACTIVE TOPSOIL IS REQUIRED TO BE RESPREAD ON DEVELOPABLE AREAS THE CONTRACTOR SHALL LIME TREAT THE TOPSOIL TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
 - WHEN UNDERTAKING THE EARTHWORKS CUT ALL MATERIALS SHOULD BE SELECTIVELY SORTED SO THAT THE REACTIVE SOILS ARE SEPARATED FROM THE LOW REACTIVE RESIDUAL SOILS & XW BEDROCK
 - ALL REACTIVE SOILS ARE TO BE PLACED IN THE LOWER SECTIONS OF FILL WITH THE LESS REACTIVE RESIDUAL SOILS & XW BEDROCK TO BE PLACED IN THE UPPER FILLS. ALTERNATIVELY, THE REACTIVE SOILS CAN BE BLENDED WITH THE LESS REACTIVE SOILS & XW ROCK TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
 - NO REACTIVE CLAY SOILS SHOULD BE PLACED WITHIN THE UPPER 0.75M APPROX. FILL PROFILE WHERE POSSIBLE.
 - WHEN PLACING FILL OVER HIGHLY REACTIVE SOILS, TREATMENT MAY BE REQUIRED IF THE FILLS ARE ONLY MINOR, 0.3m APPROX. & THE REACTIVE SOIL PROFILE IS GREATER THAN 0.7m APPROX. IN THESE AREAS SUBGRADE REPLACEMENT OF AT LEAST 0.75m OF NON REACTIVE / LOW REACTIVE MATERIAL OVERLYING THE REACTIVE SOILS SHALL BE UNDERTAKEN.
 - ALL WORKS ASSOCIATED WITH THE IDENTIFICATION, PLACEMENT & TREATMENT OF REACTIVE SOILS SHALL BE UNDERTAKEN TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.

NOTE:

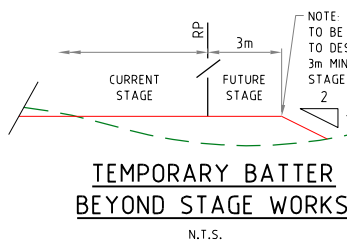
CONTRACTOR TO MAKE ALL NECESSARY ALLOWANCES FOR EXISTING SERVICES DURING ALL WORKS.



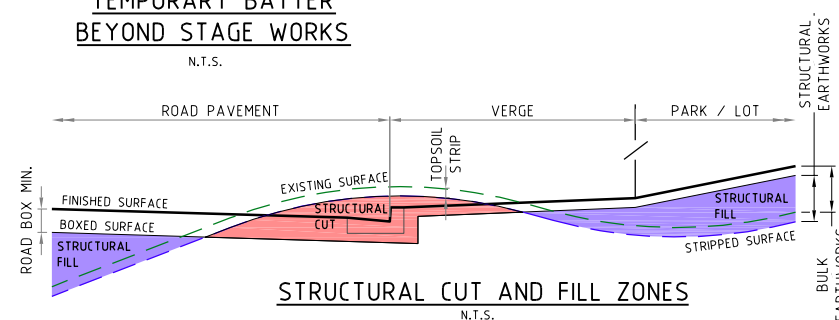
LEGEND

- EXISTING PROPERTY LINE
- EXISTING KERB (INVERT)
- FUTURE KERB (INVERT)
- FUTURE PROPERTY LINE
- SITE BOUNDARY
- PRECINCT BOUNDARY
- STAGE BOUNDARY
- LIMIT OF EARTHWORKS BOUNDARY
- PROPOSED PROPERTY LINE
- PROPOSED KERB (INVERT)
- 0.5 CUT CONTOUR
- 0.0 INTERFACE CONTOUR
- 0.5 FILL CONTOUR
- NOMINAL LOT PAD LEVEL
- RETAINING WALL 1.0m
- RETAINING WALL 1.0-1.5m
- RETAINING WALL 1.5-2.0m
- RETAINING WALL > 2.0 m

TEMPORARY BATTER BEYOND STAGE WORKS



STRUCTURAL CUT AND FILL ZONES



PROJECT NAME



NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT

PACIFIQ



0 5 10 15 20 25m
Scale 1500 - A1 (1:1000 - A3)

ISSUES		DATE
TENDER		
COUNCIL		
CONSTRUCTION		
C	13-11-19	EDQ ISSUE
B	05-08-19	DRAFT FOR TEAM REVIEW
A	DRAFT	FOR TEAM INFO
PRE	DATE	AMENDMENT

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DRAWING TITLE

EARTHWORKS
CUT TO FILL
PLAN
SHEET 01

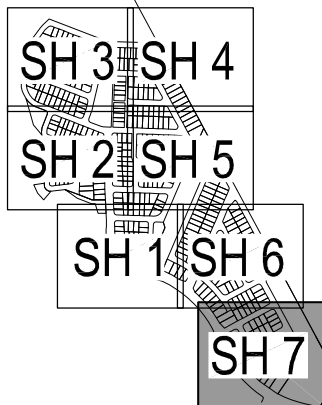


MUS Pty Ltd T/As:
Mortons-Urban Solutions
ABN 39 116 375 065
mortons@urbansolutions.net.au
www.urbansolutions.net.au
Tel 07 5571 1099
Fax 07 5571 1088

Postal Address
PO Box 2484
Southport QLD 4215

Gold Coast Office
Suite 9, 19 Short St
Southport QLD 4215

DESIGNED PP	DRAWN CB
APPROVED	DATE 13-11-19
DRAWING NUMBER	AMEND.
23301-3A3B-PRE040	C



APPROVED	REVISION	DATE 15-11-11
DRAWING NUMBER		AMENDMENT
23301-3A3B-PRE046		C

- RETAINING WALL DETAILS ARE INDICATIVE ONLY.
- CONTRACTOR TO ARRANGE FOR DESIGN & CONSTRUCTION OF WALLS BY RPEQ STRUCTURAL ENGINEER. CONTRACTOR TO PROVIDE STRUCTURAL CERTIFICATION OF DESIGN & FINAL CONSTRUCTION.
- ALLOW FOR 5kPa LOADING TO WALLS EXCEPT ADJACENT TO ROADS WHICH REQUIRE A 10kPa LOADING.
- CONTRACTOR TO CONFIRM LOCATION OF LOT BOUNDARY PRIOR TO COMMENCING WALL CONSTRUCTION.
- THE BUILDING ON THE HIGHER SIDE OF THE RETAINING WALL MUST MAINTAIN AN OFFSET OR APPROPRIATE FOUNDATION STRUCTURES (EG; PIERS) IN ORDER TO ENSURE THE ENTIRE DEPTH OF THE RETAINING WALL IS FREE FROM THE ZONE OF INFLUENCE OF THE BUILDING/OVERBURDEN LOAD UNLESS OTHERWISE SPECIFIED BY STRUCTURAL ENGINEER.
- STRUCTURAL ENGINEER TO DESIGN SLAB & PIER.
- AGRICULTURAL DRAIN TO DISCHARGE TO 300x300mm STORMWATER PIT. HOUSE BUILDER TO CONNECT 300x300mm STORMWATER PIT TO ROOFWATER SYSTEM.
- RETAINING WALL DESIGN TO ALLOW FOR ALL SERVICES (ADJACENT OR BELOW) & HAVE NO IMPACT.
- SANDSTONE & PROPRIETARY RETAINING WALLS TO BE DESIGNED & CONSTRUCTED TO HAVE VERTICAL FACE UNLESS OTHERWISE AGREED BY THE SUPERINTENDENT.
- ANY WALL GREATER THAN 0.9M HIGH TO INSTALL A FALL BARRIER AT THE TOP OF WALL. THE FALL BARRIER IS TO BE MAINTAINED UNTIL THE END OF THE MAINTENANCE PERIOD OR THE ASSOCIATED LOT IS SOLD BY THE DEVELOPER.
- REFER TO LANDSCAPE ARCHITECT FOR RETAINING WALL COLOUR & FINISH.
- * SETBACK FROM BOUNDARY TO BE:
 - 200mm SIDE BOUNDARY
 - 400mm REAR BOUNDARY
 - 600mm ROAD RESERVE
- WHERE RETAINING WALLS ARE LOCATED WITHIN 2m OF A PMT SITE THE RETAINING WALL IS TO BE DESIGNED & CONSTRUCTED TO ALLOW EXCAVATION OF THE FULL PMT SITE TO A DEPTH OF 1.3m.



DRAWING NUMBER	AMEND.
23301-3A3B-PRE070	A

	EXISTING PROPERTY LINE
	EXISTING KERB (INVERT)
	EXISTING STORMWATER
	EXISTING CONTOURS
	FUTURE PROPERTY LINE
	FUTURE KERB (INVERT)
	FUTURE STORMWATER
	FUTURE CONTOURS
	SITE BOUNDARY
	PRECINCT BOUNDARY
	STAGE BOUNDARY
	PROPOSED PROPERTY LINE
	PROPOSED KERB (INVERT)
	PROPOSED STORMWATER
	DESIGN CONTOURS
	MANHOLE
	KERB INLET (ON GRADE) PIT
	KERB INLET (SAG) PIT
	HEADWALL
	SEDIMENT FENCE
	SCOUR PROTECTION
	TEMPORARY SEDIMENT BASIN
	STORMWATER INLET FILTER
	ROCK CHECK DAM
	VEHICLE SHAKEDOWN (AT ALL SITE ENTRANCES MIN.)
	TREES

PROVIDE SEDIMENT AND
EROSION CONTROL
MEASURES IN
ACCORDANCE WITH THE
INTERNATIONAL EROSION
CONTROL ASSOCIATION
BPESC DOCUMENT.

SEDIMENT AND EROSION CONTROL MEASURES SHOWN RELATE TO THE FINISHED SURFACE ONLY AND ARE CONCEPTUAL ONLY. THE CONTRACTOR IS TO PREPARE A SITE SPECIFIC CONSTRUCTION AND MAINTENANCE PHASE SEDIMENT AND EROSION CONTROL PLAN.



THE EROSION & SEDIMENT CONTROL DEVICES SHOWN ON THESE DRAWINGS ARE INDICATIVE & PROVIDED FOR SUBMISSION TO LOCAL AUTHORITY ONLY. NOTWITHSTANDING THE EROSION & SEDIMENT DEVICES SHOWN ON THESE DRAWINGS, THE CONTRACTOR MUST PREPARE & FOLLOW A SITE SPECIFIC EROSION & SEDIMENT CONTROL PLAN TO MEET ALL LOCAL & STATE GOVERNMENT LEGISLATION INCLUDING BUT NOT LIMITED TO

- a. ENVIRONMENTAL PROTECTION ACT WITH SPECIFIC REFERENCE TO PARTS S440G & S319
- b. STATE PLANNING POLICY

PRESCRIBED WATER CONTAMINANTS (AS DEFINED IN THE ENVIRONMENTAL PROTECTION ACT 1994) MUST NOT BE RELEASED FROM THE SITE OR TO WATERS WITHIN THE SITE, OR BE LIKELY TO BE RELEASED SHOULD RAINFALL OCCUR, UNLESS ALL REASONABLE & PRACTICABLE MEASURES ARE TAKEN TO PREVENT OR MINIMISE THE RELEASE & CONCENTRATION OF CONTAMINATION. THE ESC PLAN MUST BE DESIGNED, IMPLEMENTED & MAINTAINED IN ACCORDANCE WITH "BEST PRACTICE EROSION & SEDIMENT CONTROL" PUBLISHED BY THE INTERNATIONAL EROSION CONTROL ASSOCIATION (AUSTRALASIAN CHAPTER) (IECA, 2008).

2. TO COMPLY WITH THE REQUIREMENTS OF THE EP ACT & BEST PRACTICE DESIGN, THE SEDIMENT BASINS ON THE SITE MUST BE DESIGNED & IMPLEMENTED TO ACHIEVE THE FOLLOWING:

SEDIMENT BASINS ARE TO BE DESIGNED, IMPLEMENTED & MAINTAINED TO A STANDARD WHICH WOULD ACHIEVE AT LEAST 80% OF THE AVERAGE ANNUAL RUNOFF VOLUME OF THE CONTRIBUTING CATCHMENT TREATED (I.E. 80% HYDROLOGIC EFFECTIVENESS) TO 50MG/L TSS OR LESS & PH IN THE RANGE 6.5-8.5

THIS WILL REQUIRE THE INSTALLATION & OPERATION OF A HIGH-EFFICIENCY SEDIMENT BASIN(S) DESIGNED IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN THE "BEST PRACTICE EROSION & SEDIMENT CONTROL - APPENDIX B SEDIMENT BASIN DESIGN & OPERATION" PUBLISHED BY THE INTERNATIONAL EROSION CONTROL ASSOCIATION (AUSTRALASIAN CHAPTER) (IECA, 2016, DRAFT)

3. THE EROSION & SEDIMENT CONTROL PLAN MUST BE PREPARED & CERTIFIED BY A CERTIFIED PROFESSIONAL IN EROSION & SEDIMENT CONTROL & FOLLOW THE REQUIREMENTS OUTLINED IN IECA'S BEST PRACTICE EROSION & SEDIMENT CONTROL DOCUMENT & THE QUEENSLAND URBAN DRAINAGE MANUAL.

4. PRIOR TO THE COMMENCEMENT OF WORKS ONSITE THE CONTRACTOR MUST MAKE THEMSELVES AWARE OF ALL PREVIOUS GEOTECHNICAL REPORTS & DETERMINE THE DISPERSIVE CHARACTERISTICS OF THE SOIL (INCLUDING PERFORMING ANY SOIL TESTS IF REQUIRED). THE RESULTS OF THIS REVIEW & ANY TESTS MUST BE INCLUDED IN THE CONTRACTOR'S EROSION & SEDIMENT CONTROL PLAN. A COPY OF ALL TEST RESULTS MUST BE PROVIDED TO THE SUPERINTENDENT.

5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION & DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTION (INCLUDING THE MAINTENANCE PERIOD). NOTWITHSTANDING THE CONTROL MEASURES OR FINISHED EARTHWORKS DESIGN SHOWN ON THESE DRAWINGS, THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING ADDITIONAL OR ALTERNATIVE EROSION & SEDIMENT CONTROL MEASURES TO MINIMISE SEDIMENT ACROSS OR LEAVING THE SITE.

6. AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS (INCLUDING WEEKENDS & PUBLIC HOLIDAYS) & AT ALL TIMES REMAINS RESPONSIBLE TO

- a) CLEAN & REPAIR CONTROL DEVICES WHENEVER THE ACCUMULATED SEDIMENT REDUCES THEIR CAPACITY BY 50%.
- b) MAINTAIN POSITIVE GRADES OF ALL PERIMETER BANKS & SWALES TO AN OUTLET.
- c) PROTECT ANY DOWNSTREAM CONSTRUCTION.
- d) CONTROLLING DUST.
- e) MEASURES HAVE BEEN INSTALLED IN ACCORDANCE WITH DETAILS OUTLINED IN THEIR EROSION & SEDIMENT CONTROL PLAN & AS DIRECTED BY THE SUPERINTENDENT.

7. THE CONTRACTOR'S PLAN SHALL ALLOW FOR SUITABLE ACCESS TO ALLOW MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES. NO ADDITIONAL VEGETATION CLEARING IS PERMITTED FOR GAINING ACCESS UNLESS APPROVED BY THE SUPERINTENDENT.

8. THE CONTRACTOR MAY REQUEST APPROVAL FROM THE SUPERINTENDENT TO REUSE THE STOCKPILED MULCH FOR STABILISING BATTERS ONLY IN LOCATIONS WHERE THE APPROVED LANDSCAPE OPW DESIGN REQUIRES MULCH ULTIMATELY.

9. CONSTRUCTION STOCKPIILING

- a) TOPSOIL SHALL BE STRIPPED & STOCKPILED IN LOCATIONS NOMINATED ON THE CONSTRUCTION DRAWINGS OR IN LOCATIONS AGREED WITH THE SUPERINTENDENT.
- b) ADDITIONAL VEGETATION CLEARING IS NOT PERMITTED TO FACILITATE THE STOCKPIILING OF MATERIALS UNLESS SHOWN ON THE APPROVED VEGETATION MANAGEMENT PLAN.
- c) ANY STOCKPILE SITE MUST BE CLEAR OF ADJACENT PROPERTY BOUNDARIES SO AS NOT TO CAUSE A NUISANCE TO ADJOINING PROPERTIES.
- d) NO STOCKPILES ARE TO BE LOCATED WITHIN THE TREE PROTECTION ZONE OF VEGETATION.
- e) A TEMPORARY SILT FENCE IS TO BE ERECTED APPROXIMATELY 5m FROM TOE OF BATTER ON LOW SIDE OF STOCKPIILING.

10. NOTWITHSTANDING THE DETAILS SHOWN IN THE CONTRACTOR'S EROSION & SEDIMENT CONTROL PLAN, DURING CONSTRUCTION THE CONTRACTOR MUST

- a) SIZE ALL TEMPORARY SEDIMENT BASINS APPROPRIATELY TO TREAT THE UPSTREAM CATCHMENT. NOTE THAT THE PERMANENT BIO BASINS SHOWN ON THESE DRAWINGS ARE SIZED FOR THE ULTIMATE CATCHMENT NOT FOR THE CONSTRUCTION PHASE.
- b) PLACE A ROCK BUND AROUND ALL HEADWALLS DURING CONSTRUCTION.
- c) PROVIDE KERB INLET PROTECTION TO ALL GULLIES.
- d) PLACE A MINIMUM 1.0m wide TURF STRIP BEHIND ALL KERBS & IN A HERRINGBONE LAYOUT WITHIN THE ROAD VERGE.
- d) MAINTENANCE (INCLUDING FLOCCULATION IF REQUIRED & PUMP OUT) OF ALL CONSTRUCTION SEDIMENT BASINS (WHETHER EXISTING OR NEW).
- e) CLEAN OUT ALL GROSS POLLUTANT TRAPS, SEDIMENT FOREBAYS & ALL OTHER PERMANENT SEDIMENT CONTROL DEVICES AT BOTH ON & OFF MAINTENANCE.

11. CONTRACTOR TO CONFIRM THE EXTENTS OF REQUIRED GRASSING TREATMENTS WITH THE SUPERINTENDENT AT LEAST 7 DAYS PRIOR TO FINAL TRIMMING.

12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT GRASSING STRIKE RATES ARE ACHIEVED AT THE ON & OFF MAINTENANCE INSPECTIONS IN ACCORDANCE WITH COUNCIL REQUIREMENTS. THIS INCLUDES THE SUPPLY & INSTALLATION OF ANY REQUIRED CHEMICAL/FERTILISER AMELIORATION TO ACHIEVE THE SPECIFIED GRASS STRIKE RATES.

13. GEOFABRIC LINING OF CHANNELS & CHECK DAMS MAY BE REQUIRED SUBJECT TO THE SITE CONDITIONS.

14. BATTERS WITHIN PUBLIC OPEN SPACE TO BE VEGETATED IN ACCORDANCE WITH APPROVED OPEN SPACE MANAGEMENT PLAN & LANDSCAPING OPW. CONTRACT DOCUMENTATION WILL SPECIFY WHETHER THIS IS THE CIVIL CONTRACTOR OR THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO SUPPLY & INSTALL. THE CIVIL CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUITABLE ACCESS FOR THE LANDSCAPE CONTRACTOR TO PERFORM THEIR WORKS.

15. MAINTENANCE PERIOD (PRE TO POST CONSTRUCTION)

- a) ALL PROTECTION MEASURES ARE TO BE INSPECTED & MAINTAINED REGULARLY
- b) REPAIRS ARE TO BE EFFECTED IMMEDIATELY.
- c) SILT AFTER RAIN IS TO BE CLEANED FROM STREETS & ALLOTMENTS IMMEDIATELY & CORRECTIVE ACTION TAKEN TO AVOID A RE-OCCURRENCE.
- d) AT OFF-MAINTENANCE & ONLY WHEN DIRECTED BY COUNCIL, REMOVE & DISPOSE OFFSITE ALL TEMPORARY EROSION & SEDIMENT CONTROL DEVICES.



CLIENT

PACIFIQ

ISSUES	DATE	
TENDER		
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CONSTRUCTION	..	

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CRG ACOUSTICS

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FINAL SURFACE AND SEDIMENT AND EROSION NOTES AND LEGEND

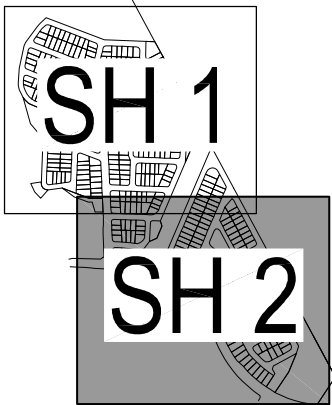


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 ABN 39 116 375 065 Southport QLD 4215
 mortons@urbansolutions.net.au
 www.urbansolutions.net.au
 Gold Coast Office
 Suite 9, 19 Short St
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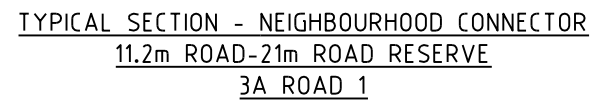
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SHEET LAYOUT

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TYPICAL SECTION - LOCAL ACCESS STREET
(ADJACENT TO PARK)
5.5m ROAD-12m ROAD RESERVE
3B ROAD 5

TYPICAL SECTION - LOCAL ACCESS STREET
7.5m ROAD-15.5m ROAD RESERVE
 3A ROAD 2, 3, 4, 5, 7, 8, 9, 10, 11, 12 & 13
 3B ROAD 1, 2, 3, 4, 6 & 7

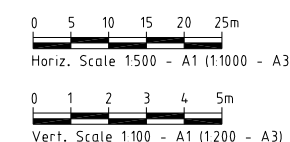
TYPICAL SECTION - LOCAL ACCESS STREET
(REDUCED VERGE)
7.5m ROAD-13.5m ROAD RESERVE
3A ROAD 2, 3 & 8
3B ROAD 3

TYPICAL SECTION - LOCAL ACCESS STREET
(SPECIAL)
7.5m ROAD-13.5m ROAD RESERVE
3B ROAD 3 & 2

TYPICAL SECTION - CONCRETE LANE
5.5m ROAD-6.5m ROAD RESERVE
3A ROAD 14

TYPICAL SECTION - CONCRETE LANE
(INCREASED VERGE)
5.5m ROAD-12.5m ROAD RESERVE
3A ROAD 6

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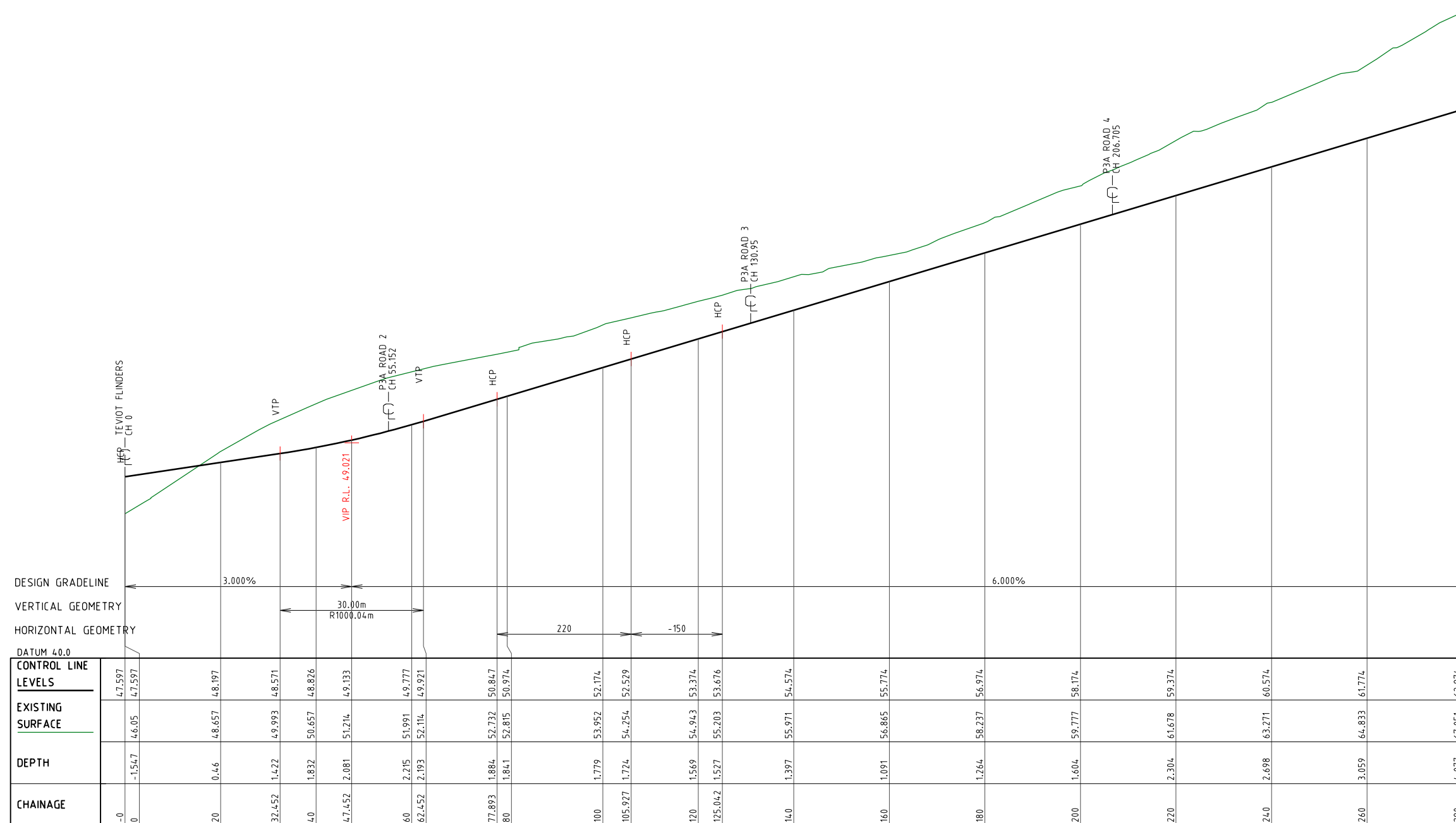
LONGITUDINAL SECTIONS
3A ROAD 01
SHEET 01



Project Coordination

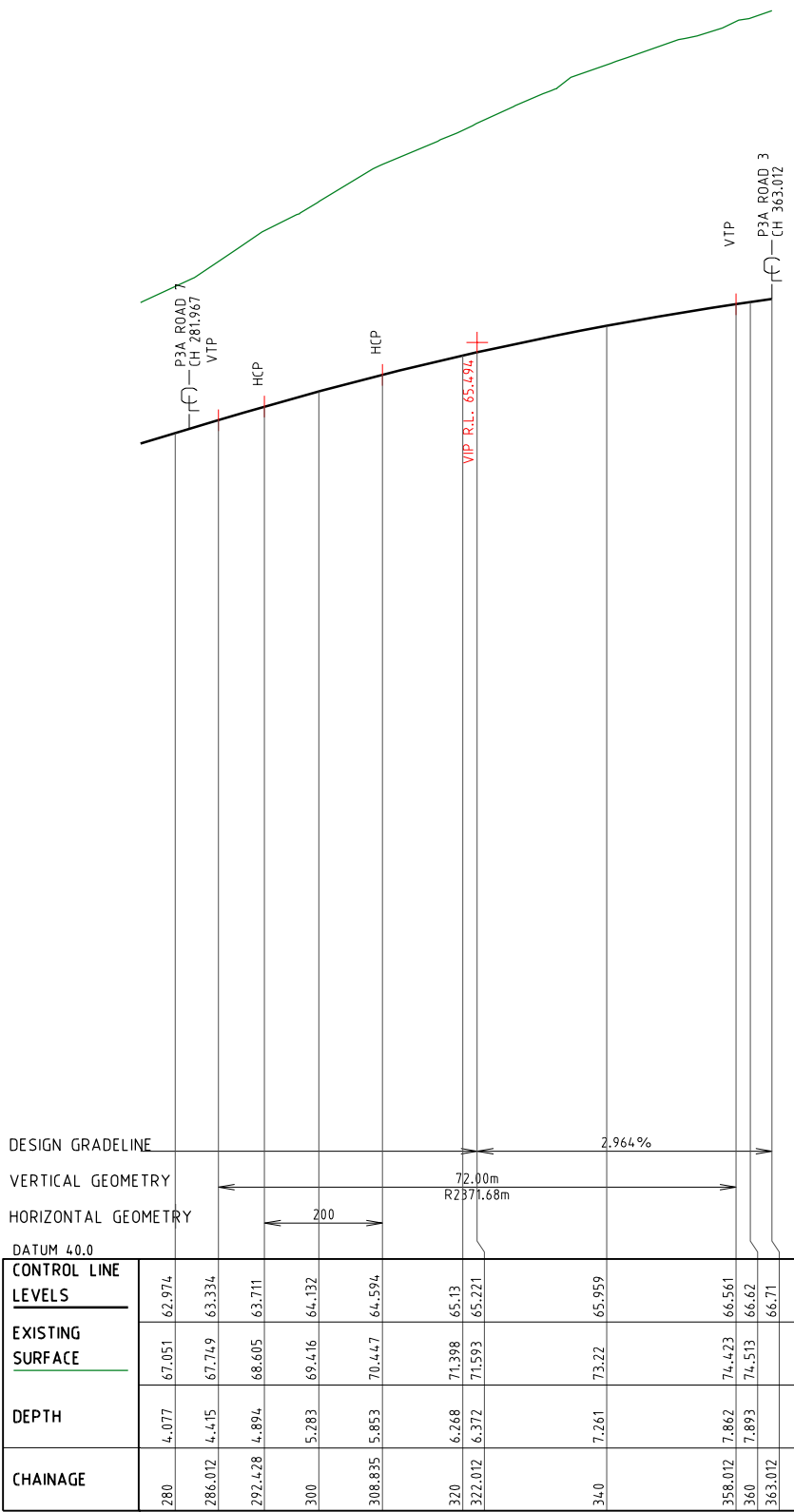
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LONGITUDINAL SECTION 3A ROAD 1

Vertical scale 1:100
Horizontal scale 1:500



PROJECT NAME

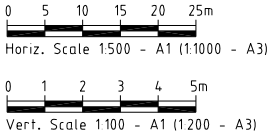


FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT





0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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LONGITUDINAL SECTIONS
3A ROAD 01
SHEET 02



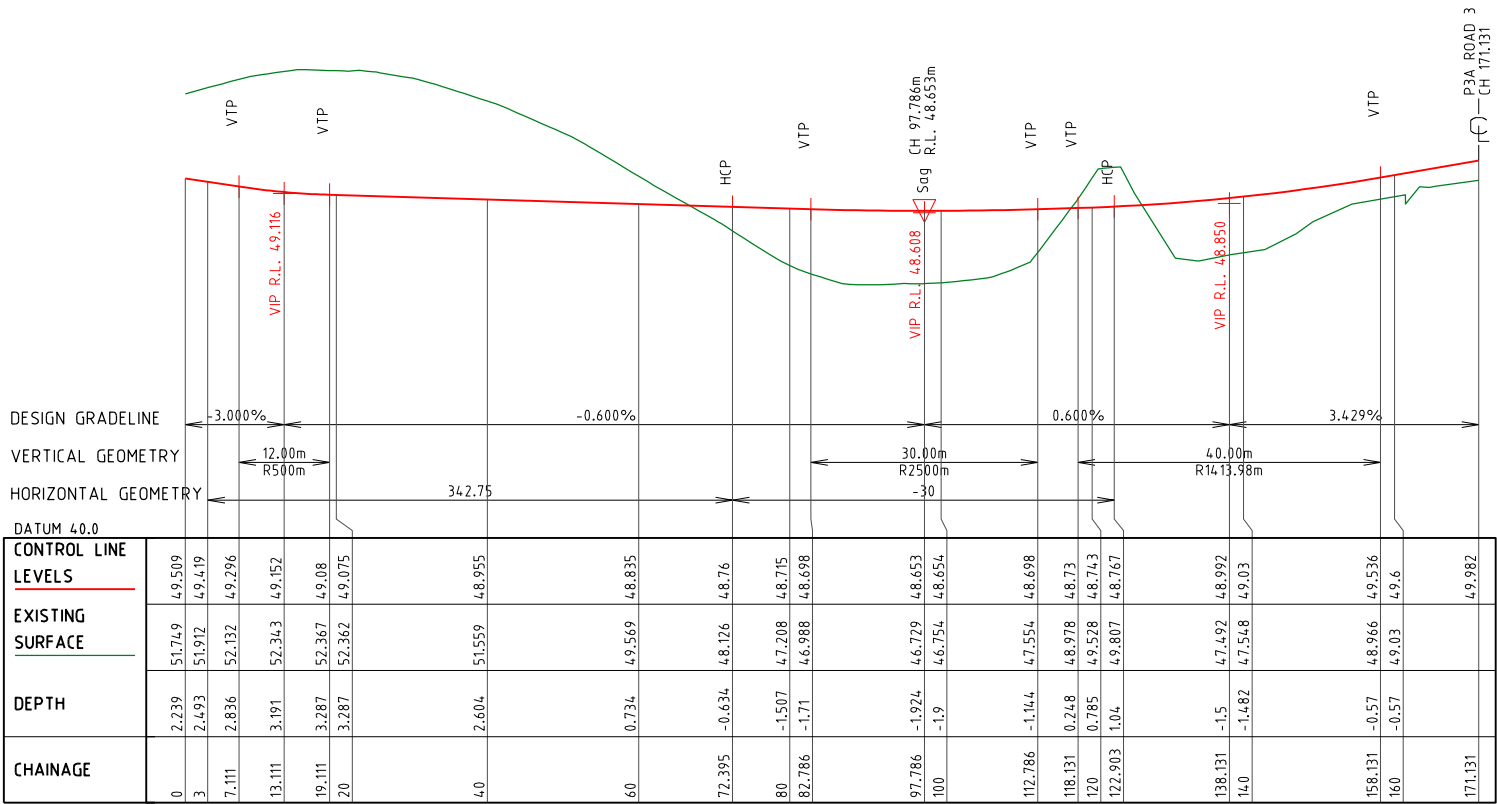
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mortons@urbansolutions.net.au
www.urbansolutions.net.au
Tel 07 5571 1099
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LONGITUDINAL SECTION 3A ROAD 2

Vertical scale 1100
Horizontal scale 1500

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



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0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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3A ROAD 02



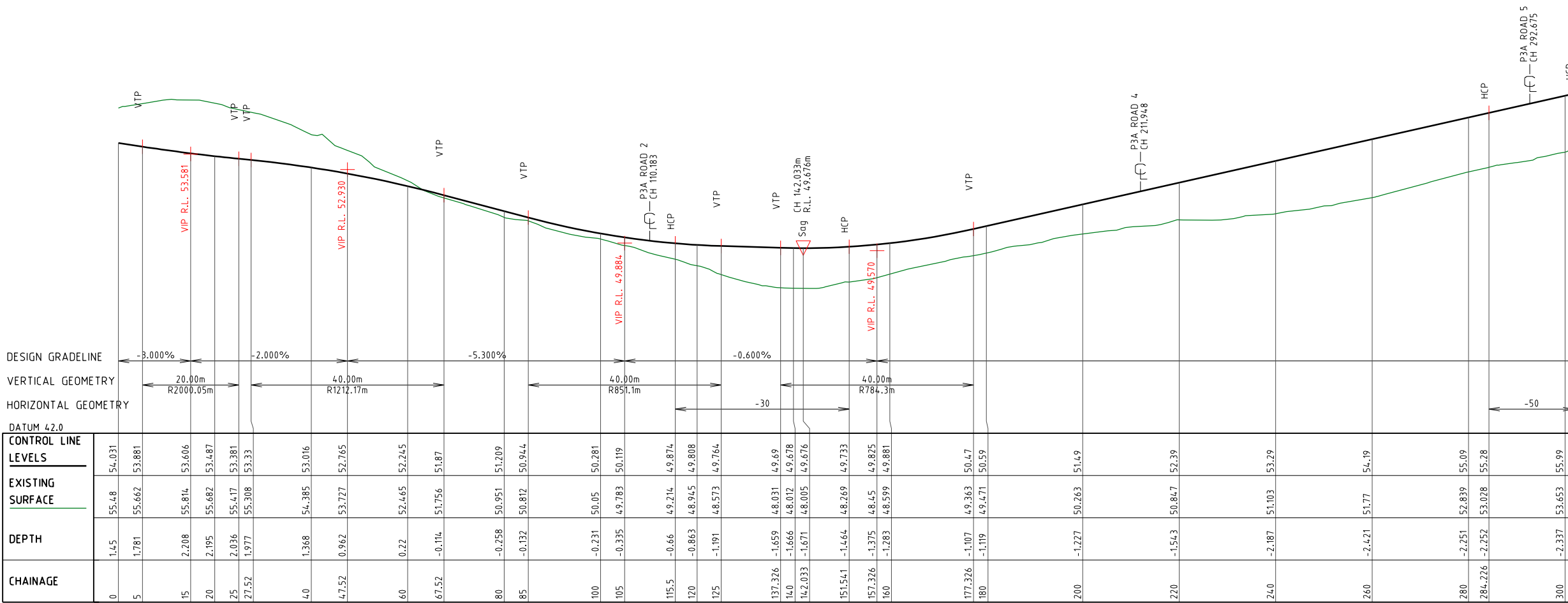
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LONGITUDINAL SECTION 3A ROAD 3

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
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LONGITUDINAL SECTIONS
3A ROAD 03
SHEET 01



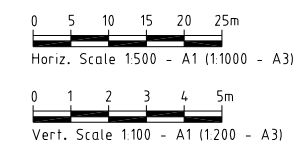
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LONGITUDINAL SECTIONS
3A ROAD 03
SHEET 02



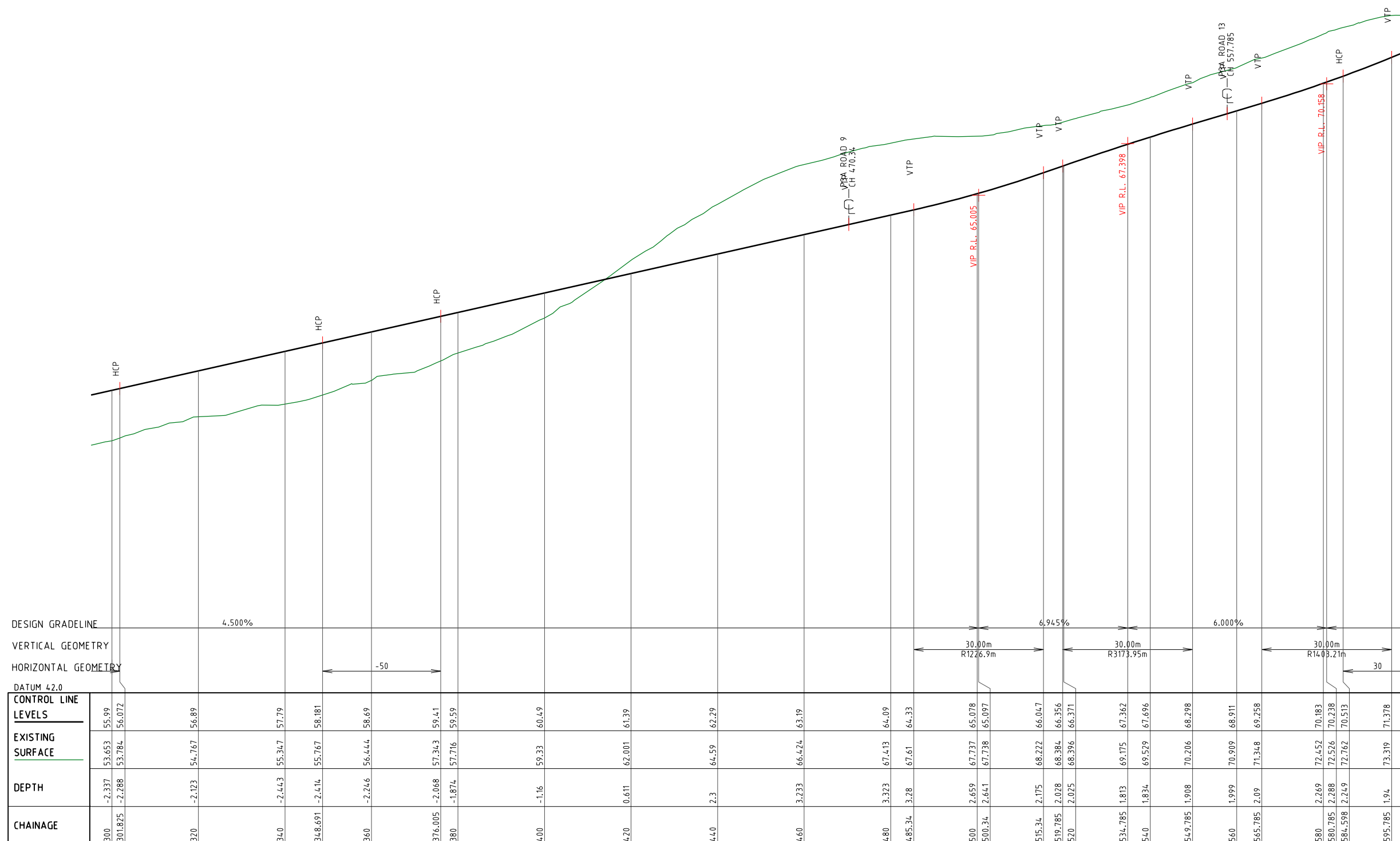
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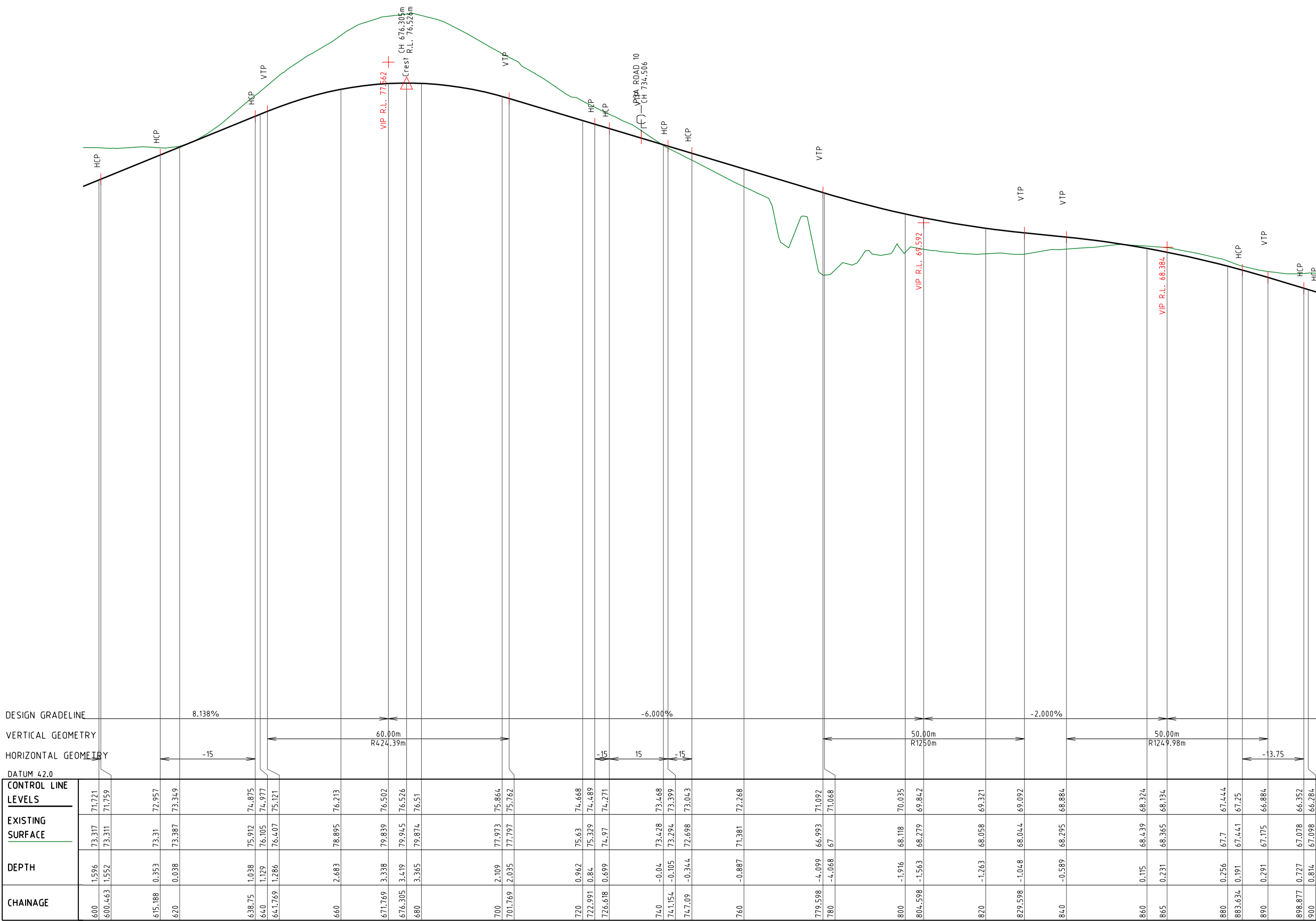
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LONGITUDINAL SECTION 3A ROAD 3

Vertical scale 1:100
Horizontal scale 1:500



LONGITUDINAL SECTION 3A ROAD 3

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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SHEET 03



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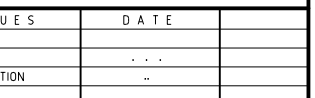
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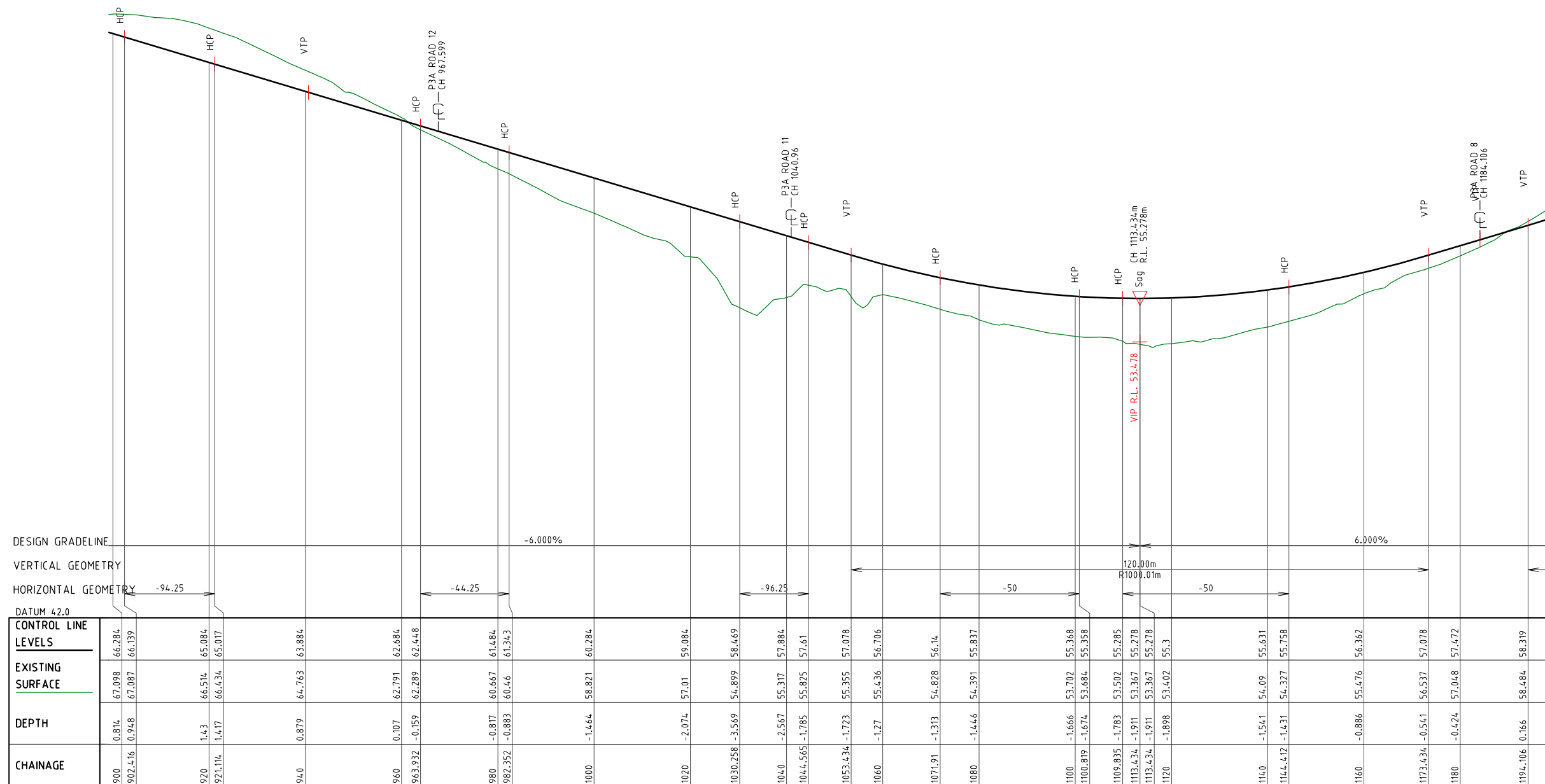



LONGITUDINAL SECTIONS
3A ROAD 03
SHEET 04



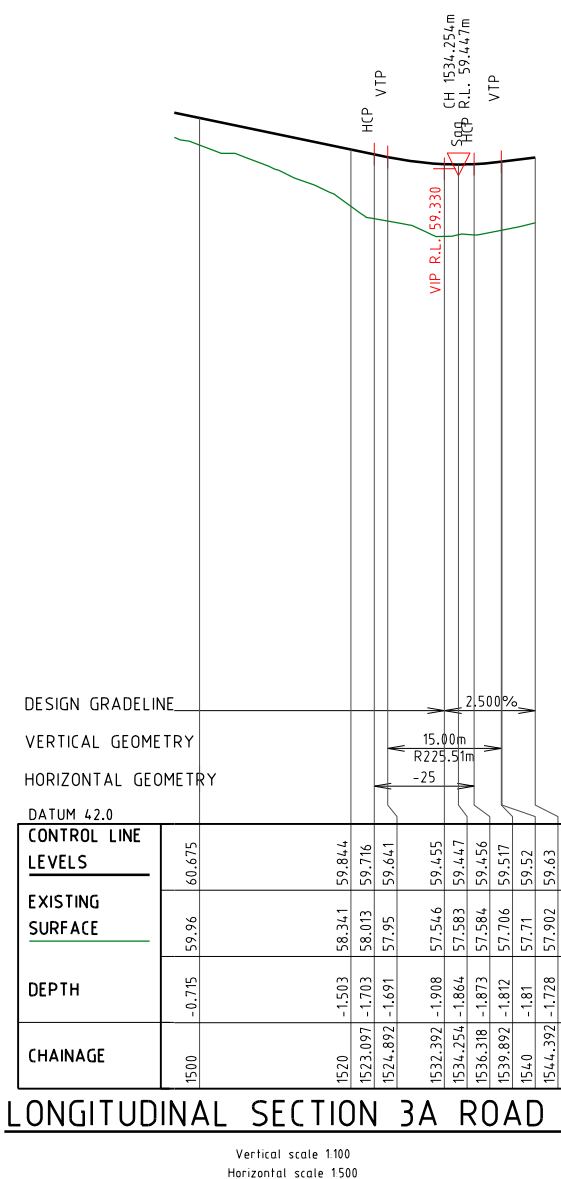
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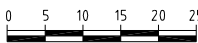
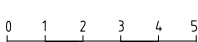
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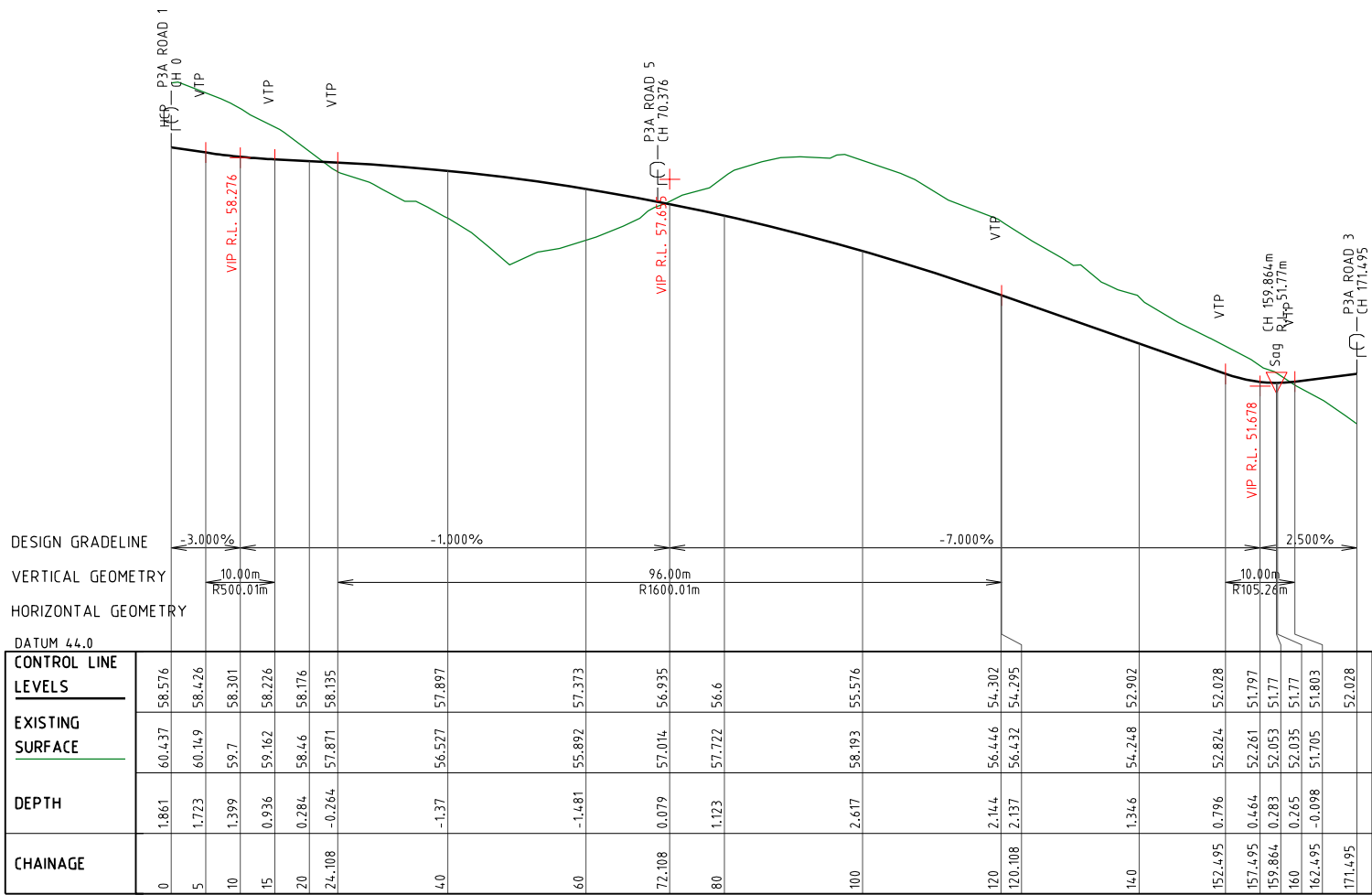


LONGITUDINAL SECTION 3A ROAD 3

Vertical scale 1:100
Horizontal scale 1:500



PROJECT NAME			
 FLINDERS LAKES NEIGHBOURHOOD 3A & 3B PRELIM ENGINEERING			
CLIENT			
PACIFIQ			
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LONGITUDINAL SECTION 3A ROAD 4

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



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0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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LONGITUDINAL SECTIONS
3A ROAD 04

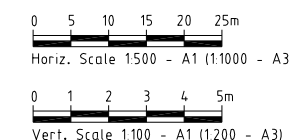


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LONGITUDINAL SECTIONS
3A ROAD 05



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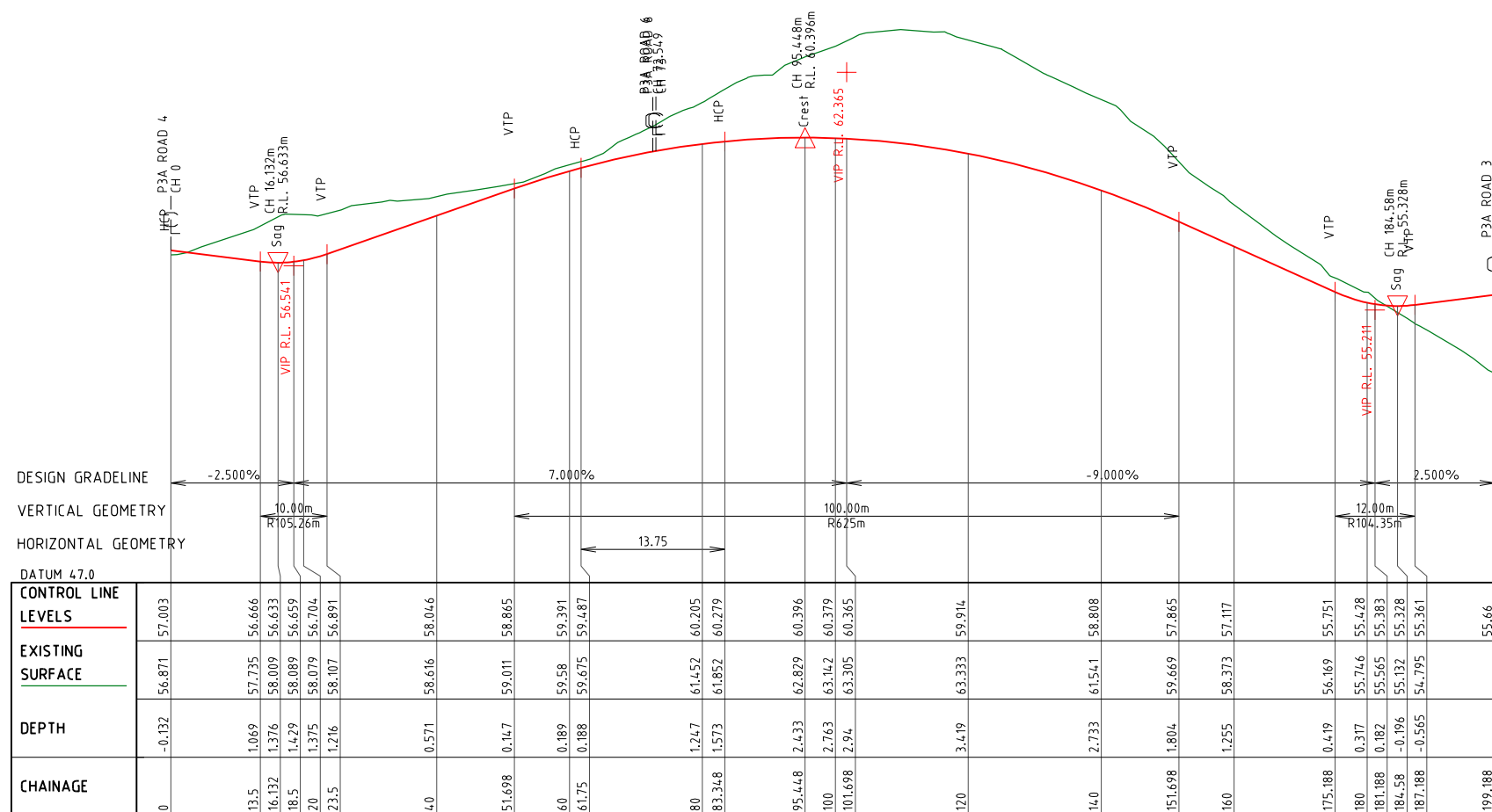
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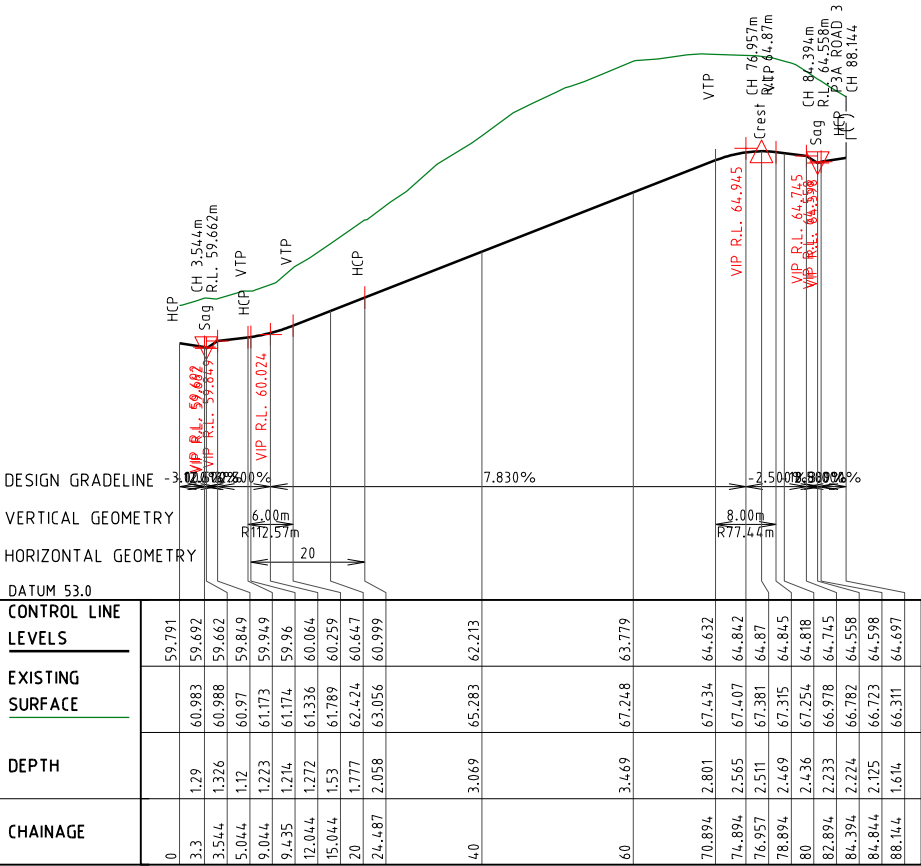
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LONGITUDINAL SECTION 3A ROAD 5

Vertical scale 1:100
Horizontal scale 1:500



LONGITUDINAL SECTION 3A ROAD 6

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME

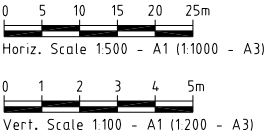


FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT





0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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3A ROAD 06

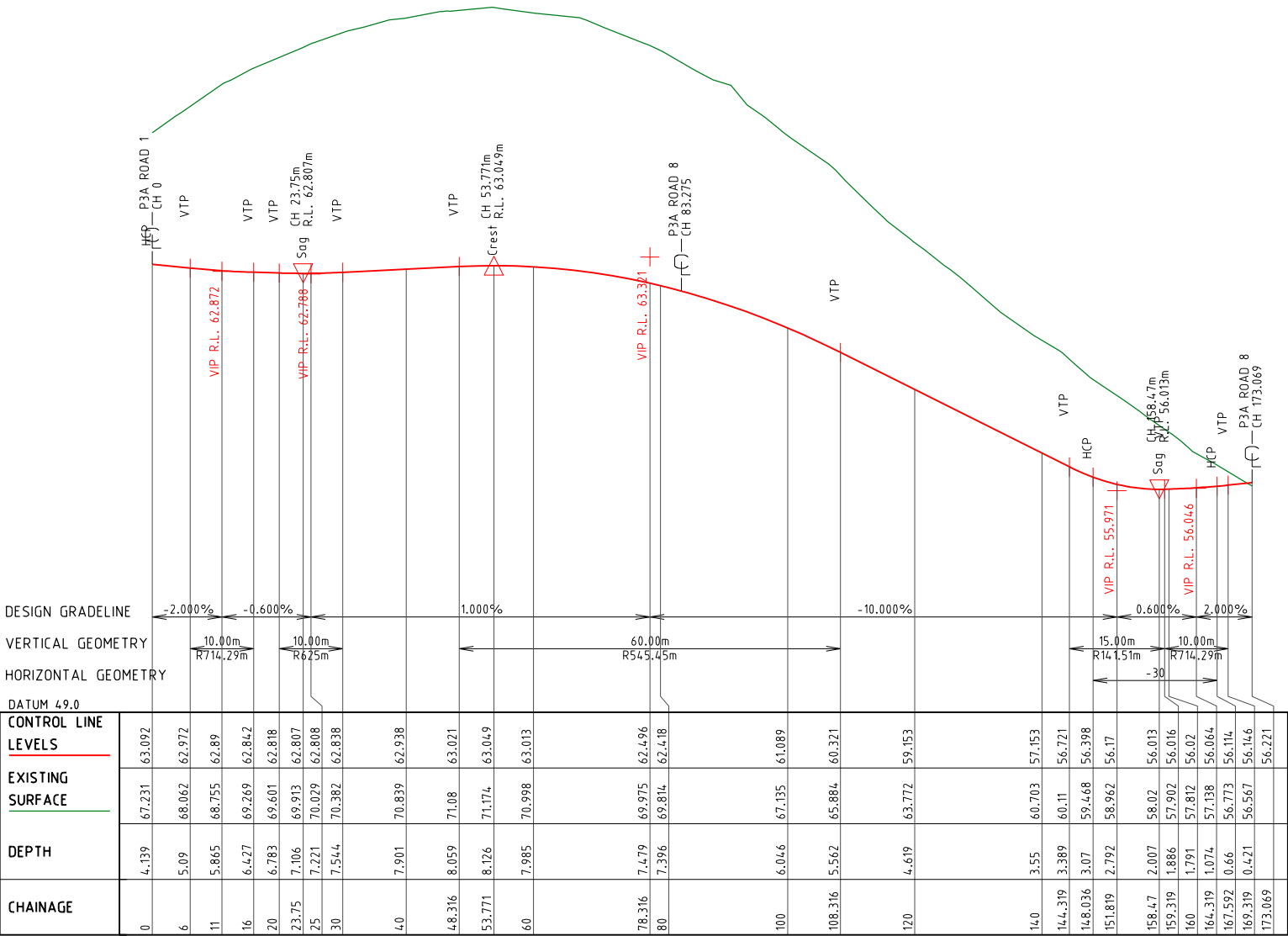


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LONGITUDINAL SECTION 3A ROAD 7

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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3A ROAD 07

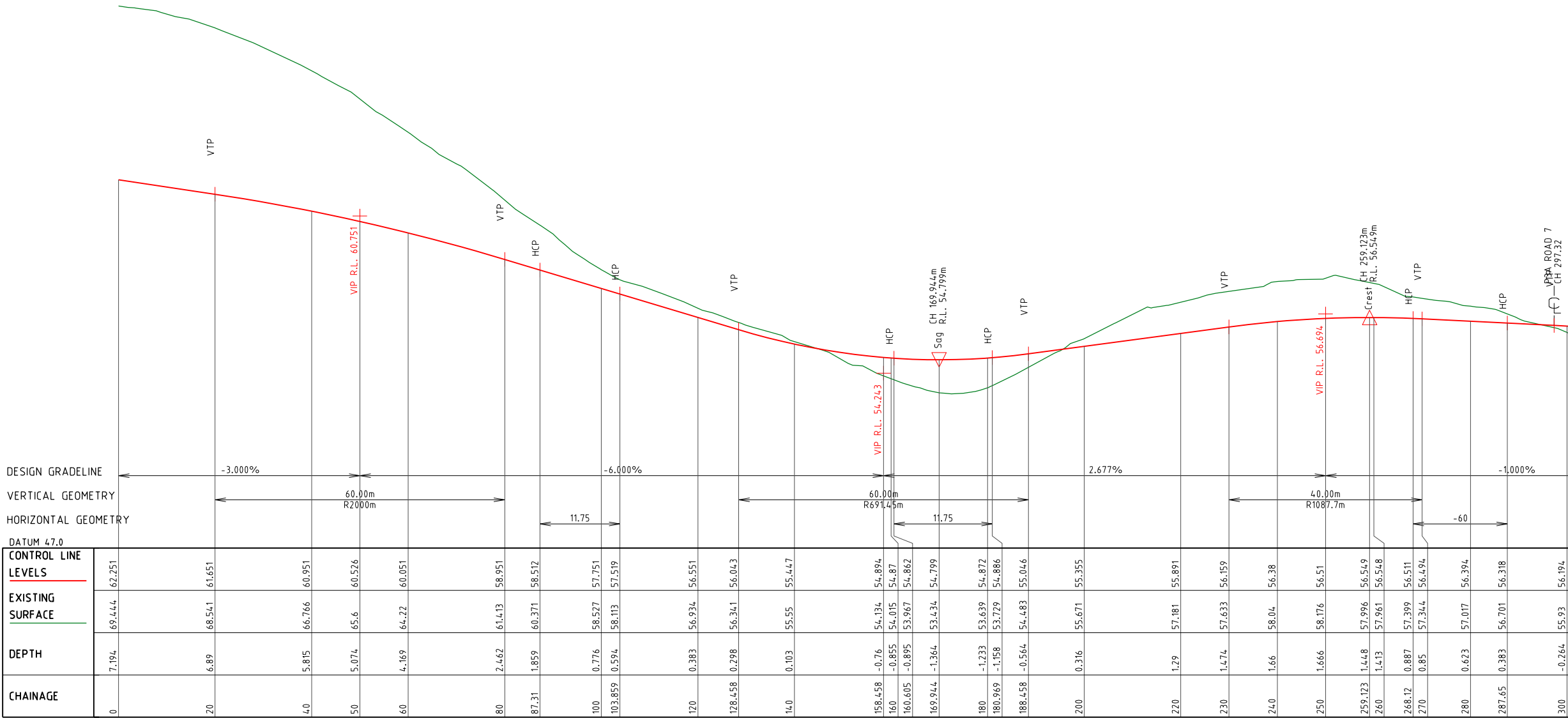


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LONGITUDINAL SECTION 3A ROAD 8

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



0 5 10 15 20 25m

Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m

Vert. Scale 1:100 - A1 (1:200 - A3)

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LONGITUDINAL SECTIONS
3A ROAD 08
SHEET 01



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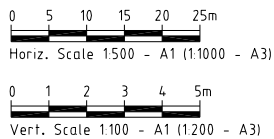
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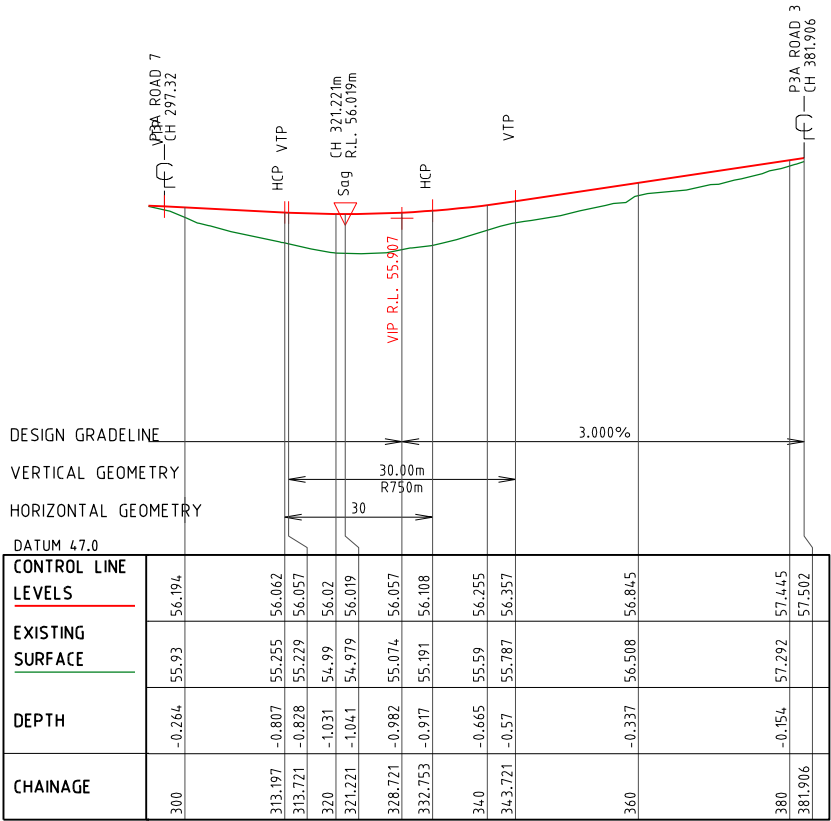
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3A ROAD 08
SHEET 02



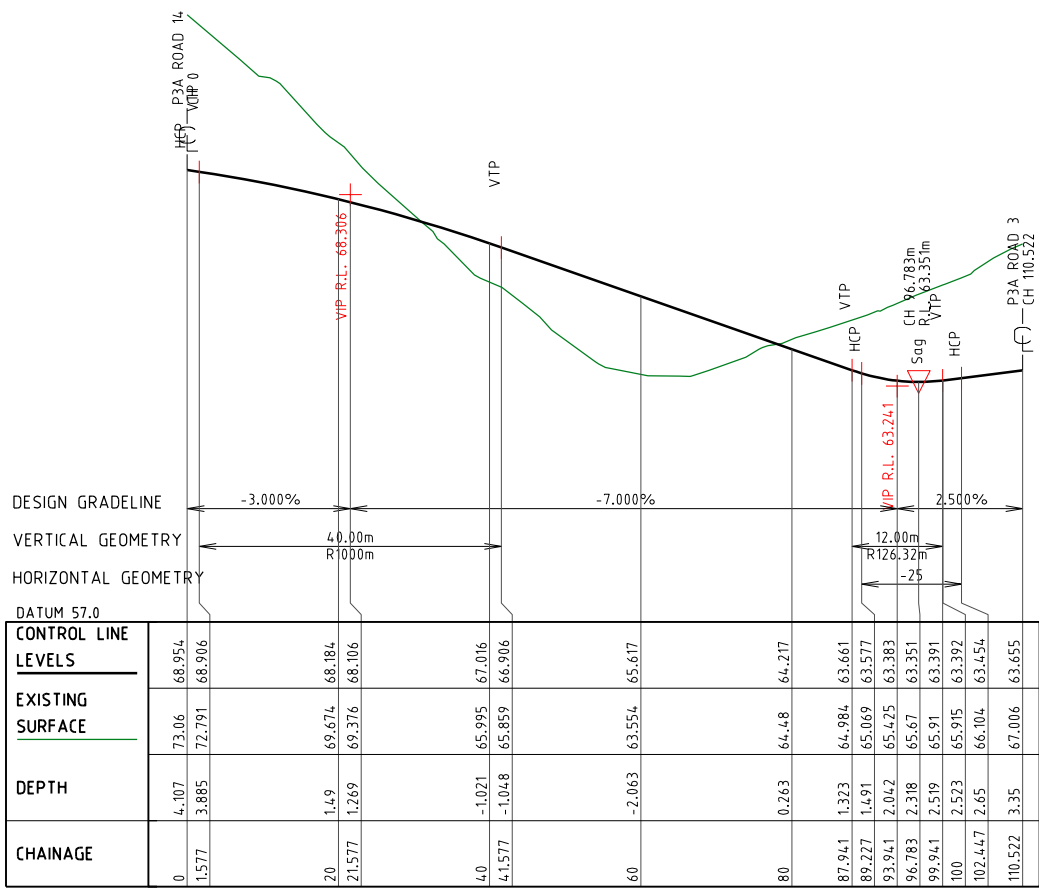
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LONGITUDINAL SECTION 3A ROAD 8

Vertical scale 1:100
Horizontal scale 1:500



LONGITUDINAL SECTION 3A ROAD 9

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

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0525m

0510152025m

Horiz. Scale 1:500 - A1 (1:1000 - A3)

05m

012345m

Vert. Scale 1:100 - A1 (1:200 - A3)

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3A ROAD 09



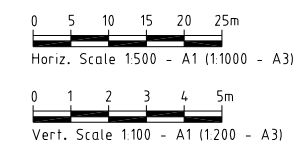
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LONGITUDINAL SECTIONS
3A ROAD 10



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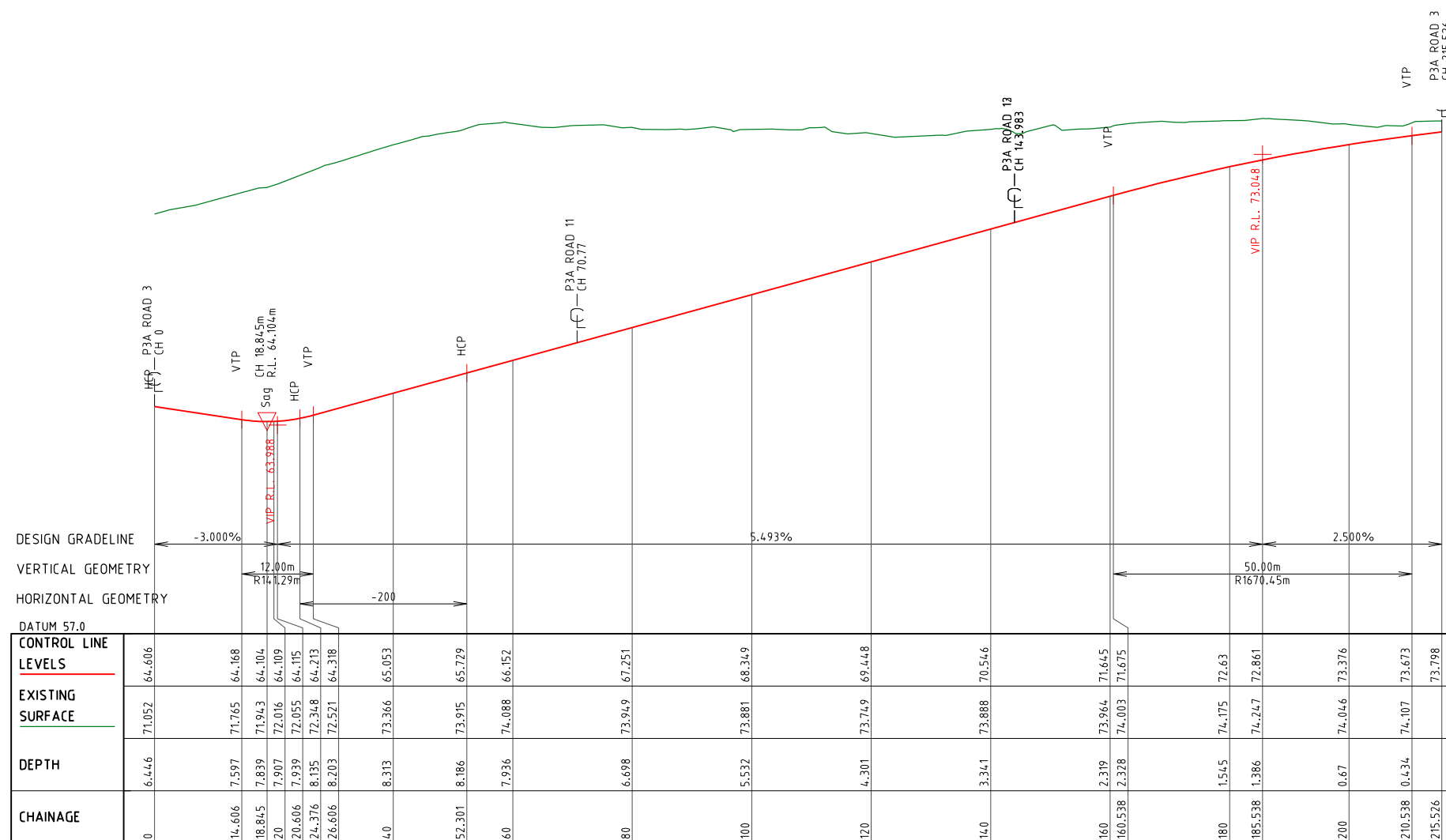
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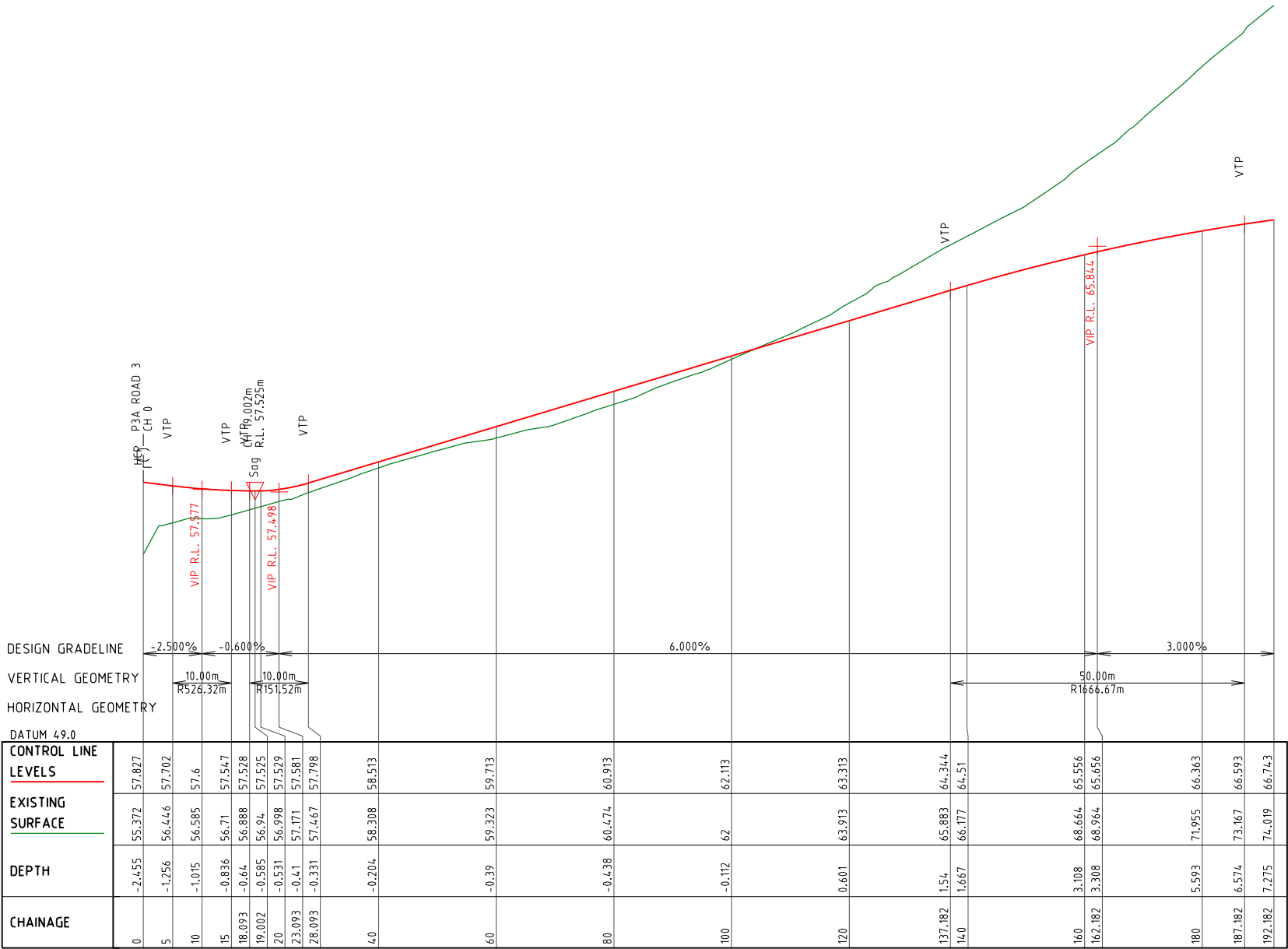
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LONGITUDINAL SECTION 3A ROAD 10

Vertical scale 1:100
Horizontal scale 1:500



LONGITUDINAL SECTION 3A ROAD 11

PROJECT NAME

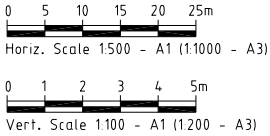


FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT





0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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LONGITUDINAL SECTIONS
3A ROAD 11



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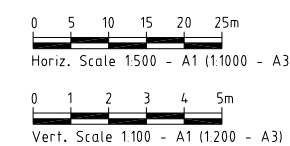
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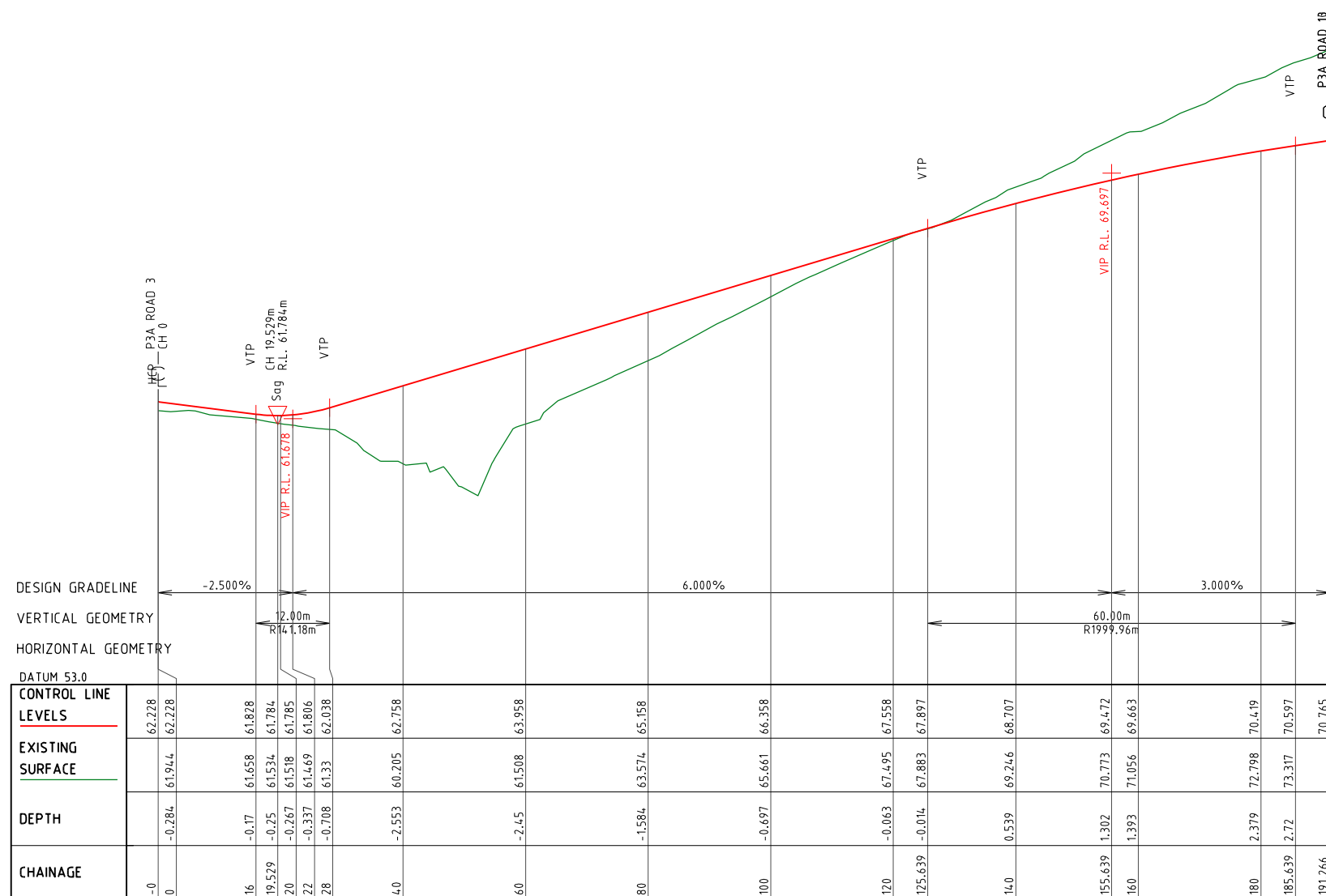
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3A ROAD 12



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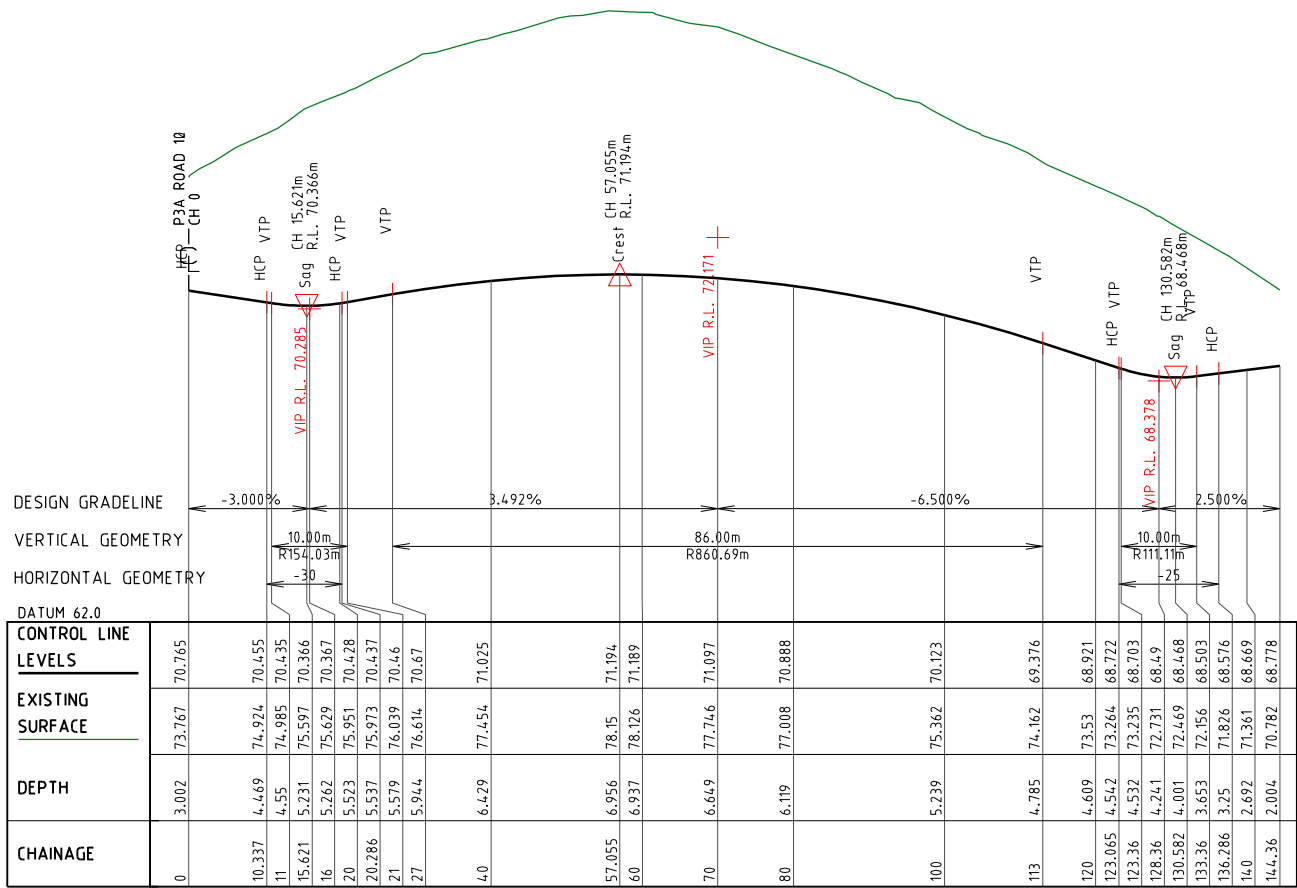
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LONGITUDINAL SECTION 3A ROAD 12

Vertical scale 1:100
Horizontal scale 1:500



LONGITUDINAL SECTION 3A ROAD 13

Vertical scale 1100
Horizontal scale 1500

PROJECT NAME



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LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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3A ROAD 13

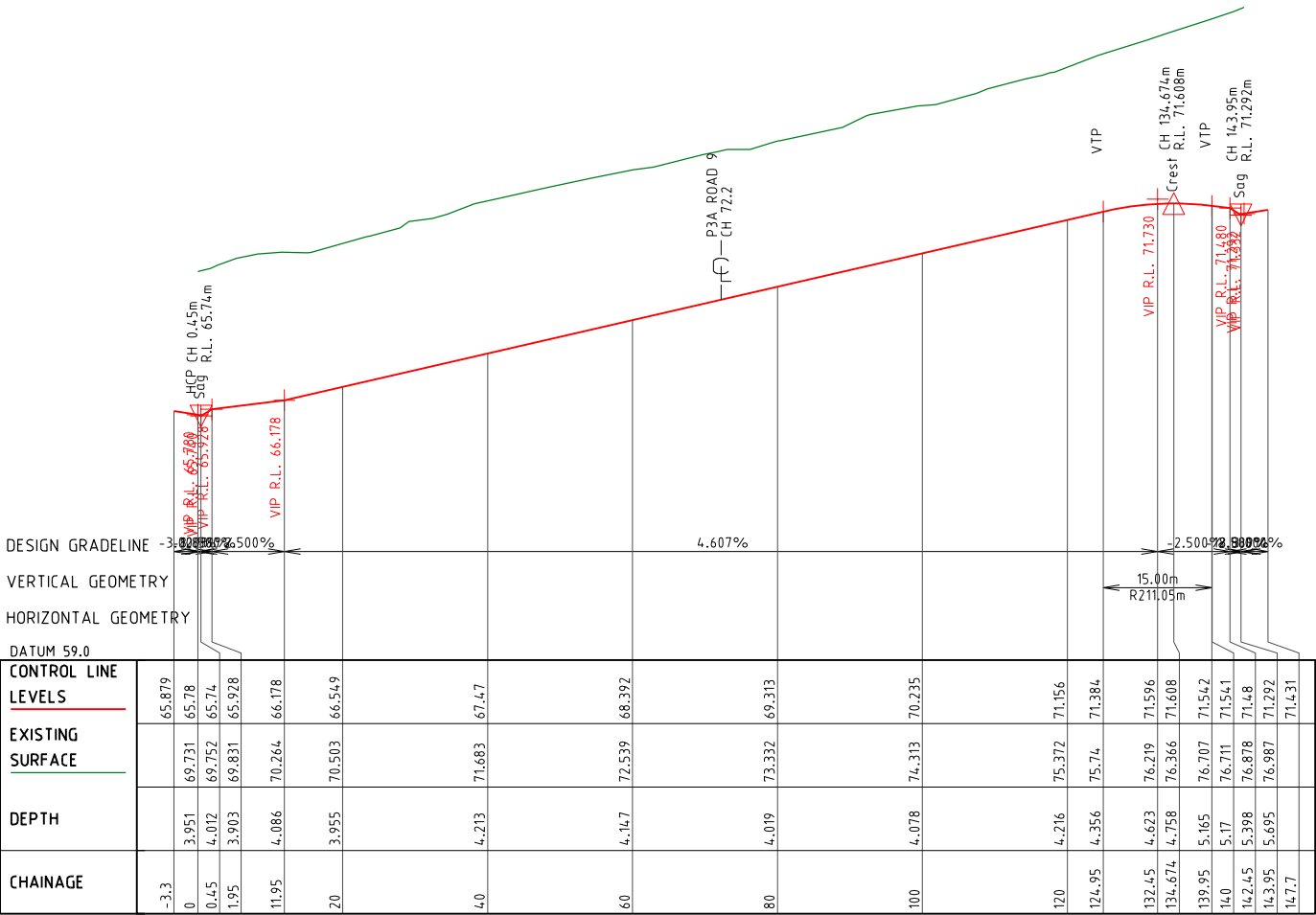


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LONGITUDINAL SECTION 3A ROAD 14

Vertical scale 1100
Horizontal scale 1500

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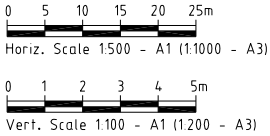


FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT





0 5 10 15 20 25m
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0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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3A ROAD 14



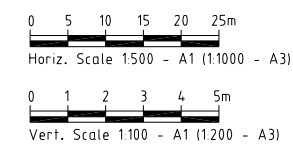
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LONGITUDINAL SECTIONS
3B ROAD 01



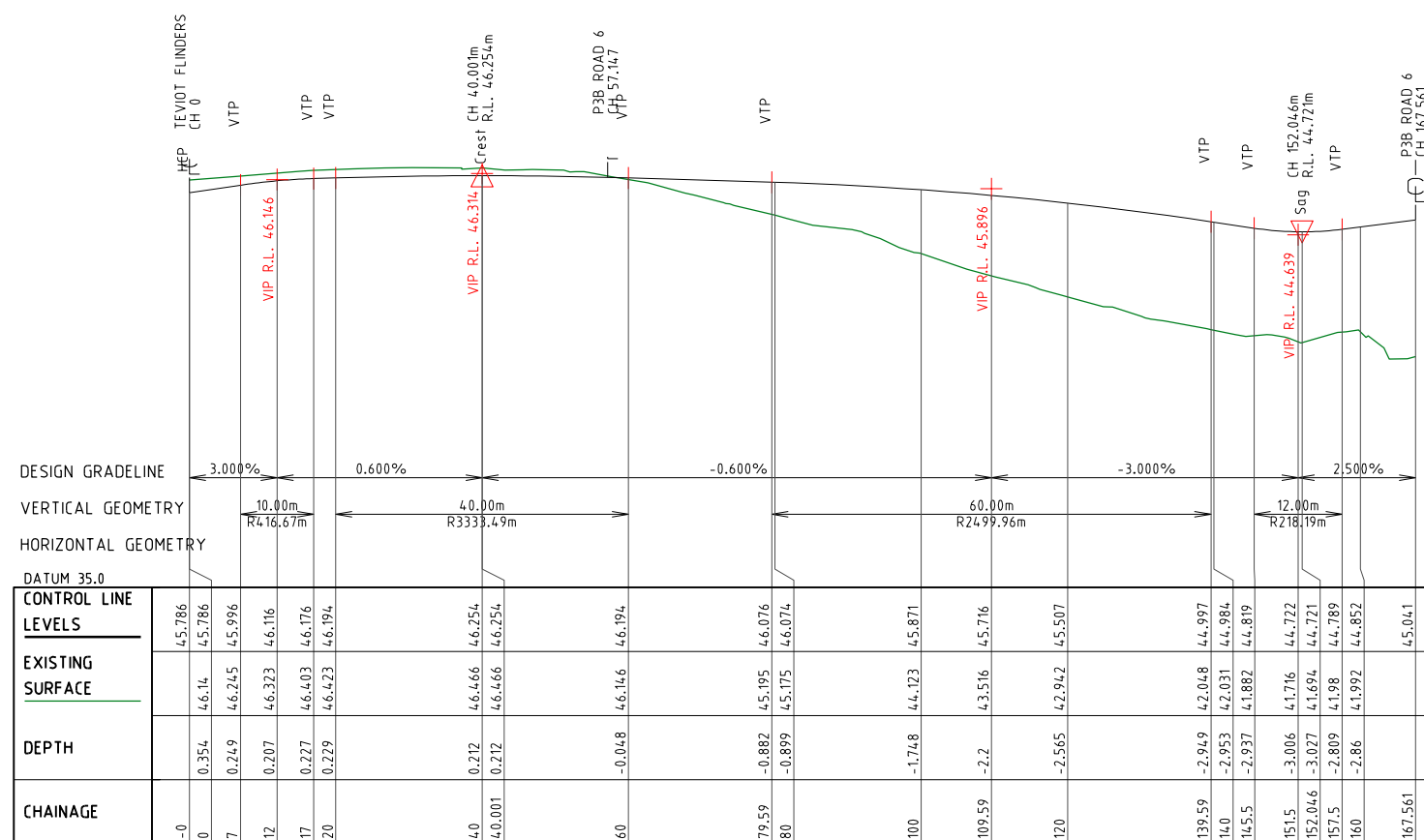
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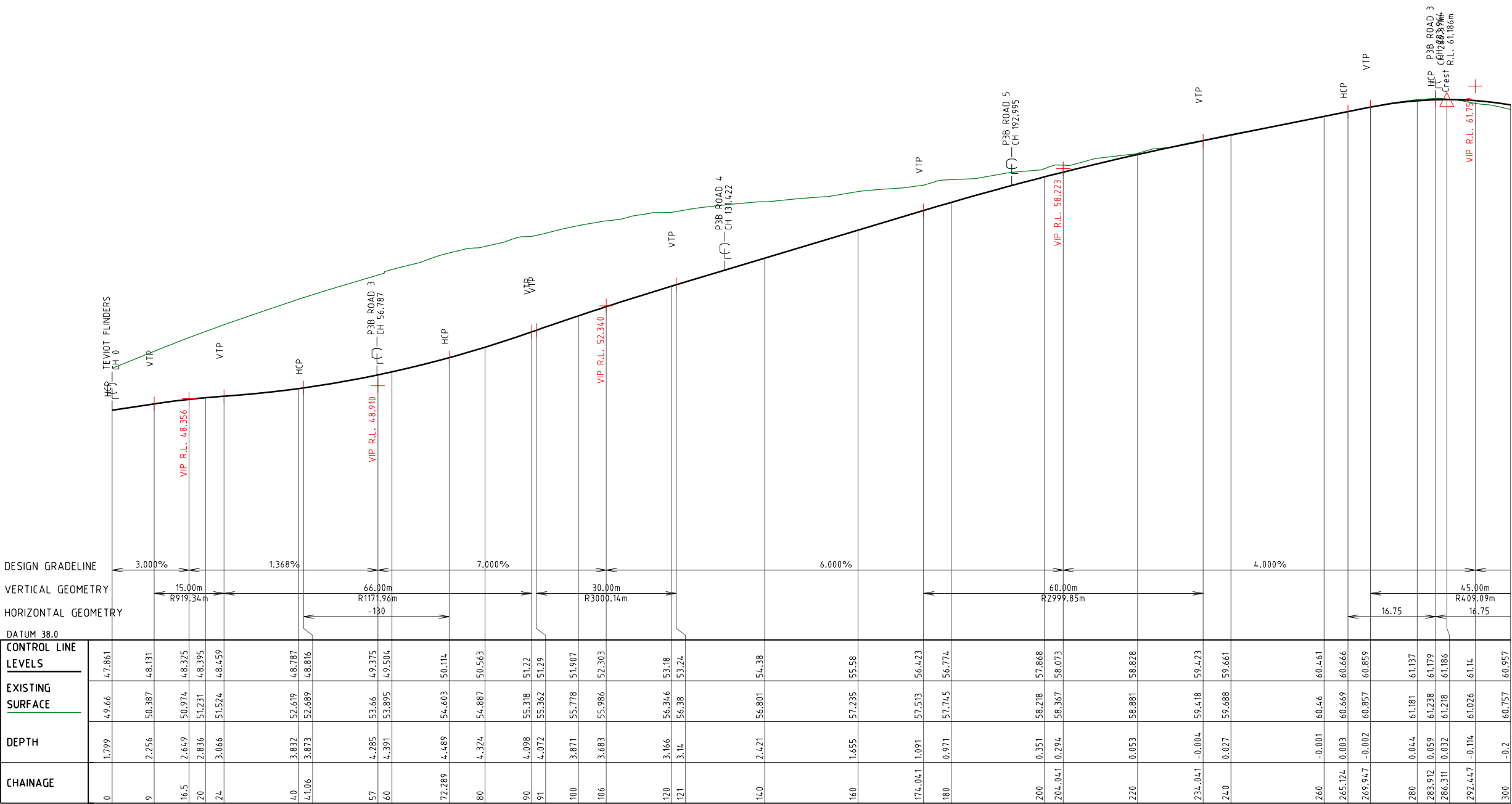
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LONGITUDINAL SECTION 3B ROAD 1

Vertical scale 1:100
Horizontal scale 1:500



LONGITUDINAL SECTION 3B ROAD 2

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



PACIFIQ

0 5 10 15 20 25m

Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m

Vert. Scale 1:100 - A1 (1:200 - A3)

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3B ROAD 02
SHEET 01



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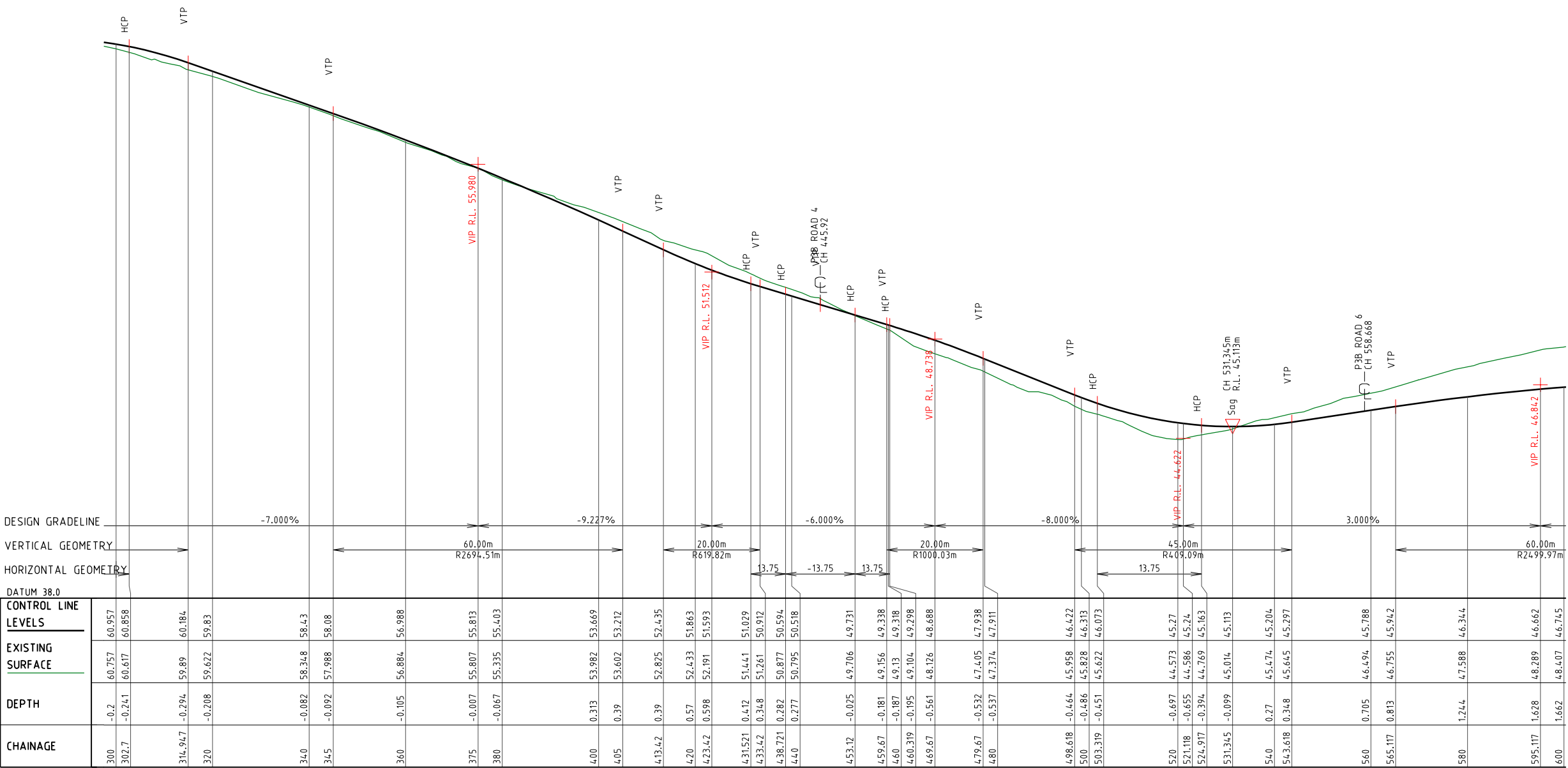
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LONGITUDINAL SECTION 3B ROAD 2

Vertical scale 1:100
Horizontal scale 1:500

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LAKES

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0 5 10 15 20 25m
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0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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3B ROAD 02
SHEET 02



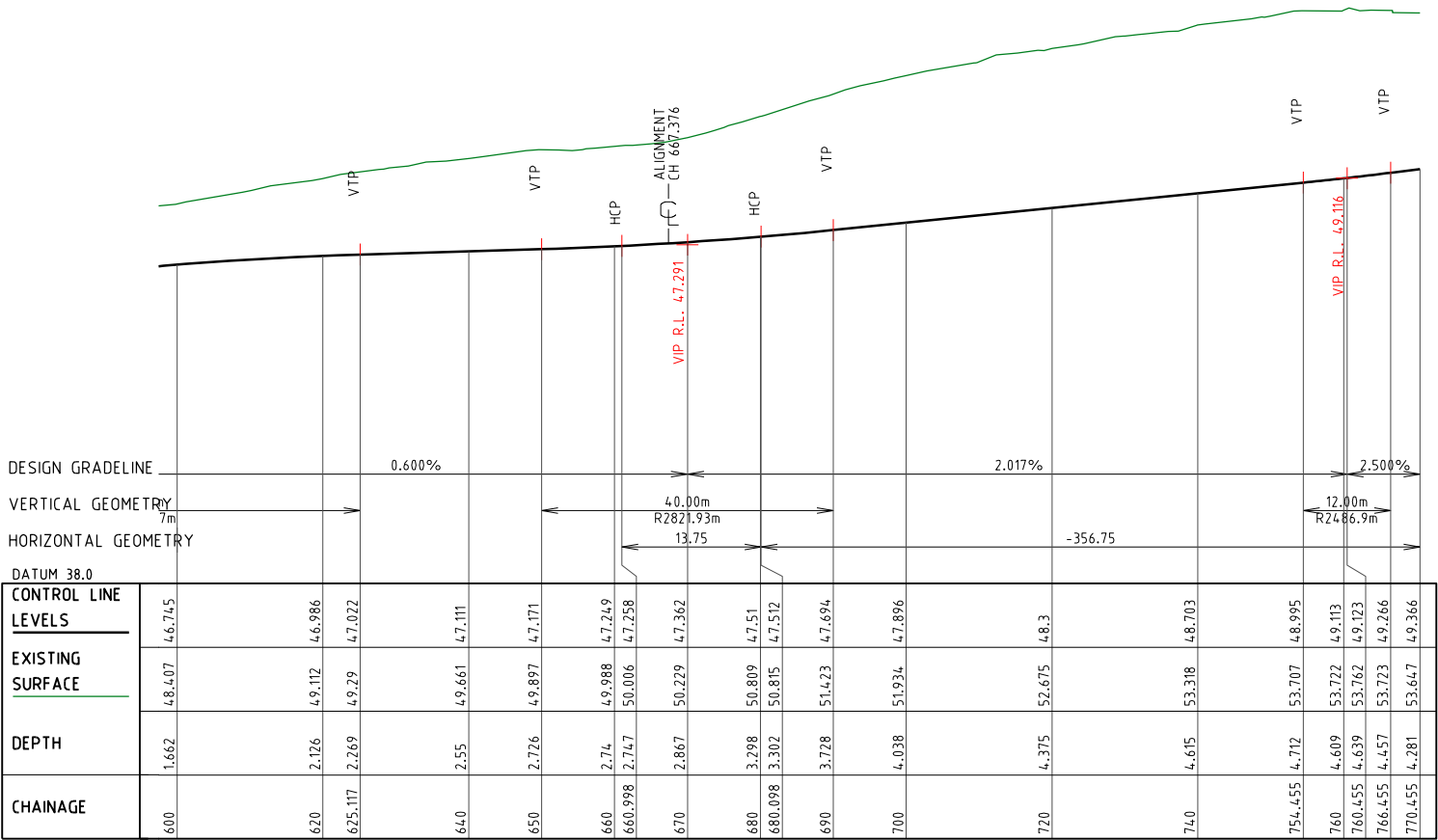
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LONGITUDINAL SECTION 3B ROAD 2

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME

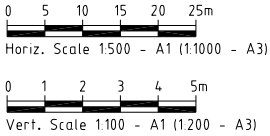


FLINDERS
LAKES

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PRELIM ENGINEERING

CLIENT





0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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LONGITUDINAL SECTIONS
3B ROAD 02
SHEET 03



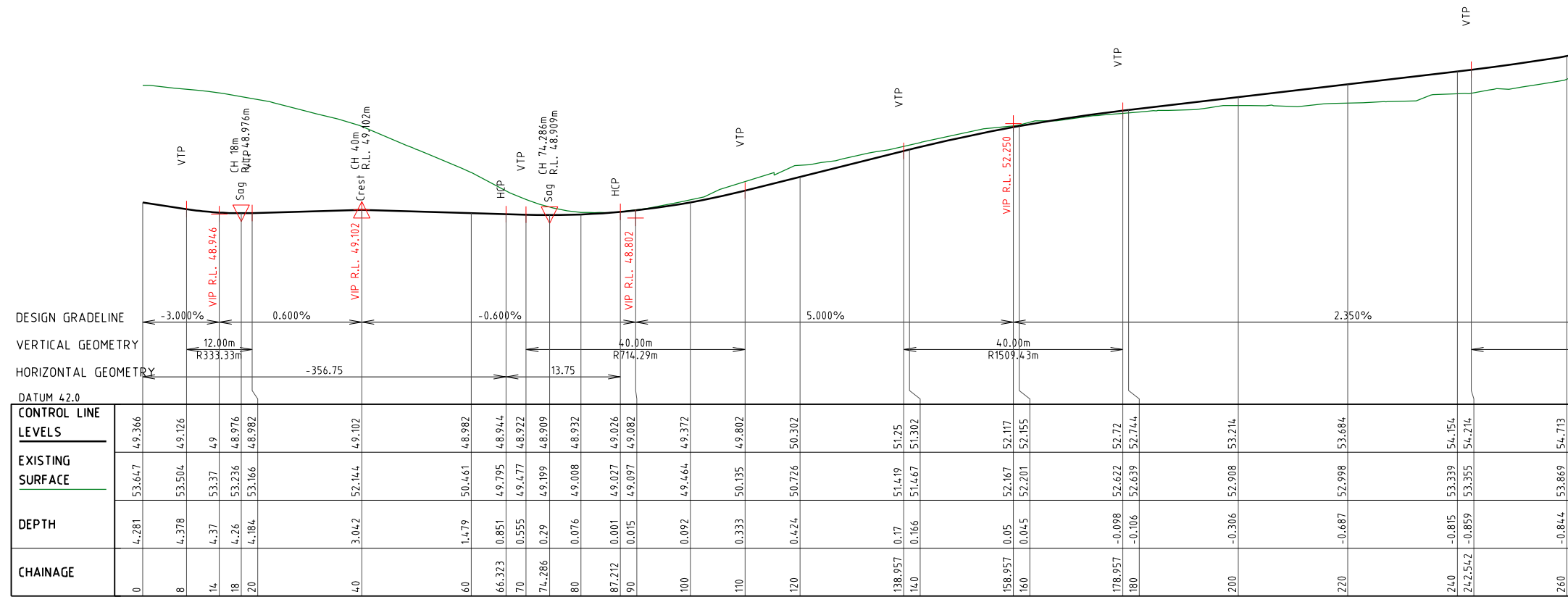
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www.urbansolutions.net.au
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LONGITUDINAL SECTION 3B ROAD 3

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME

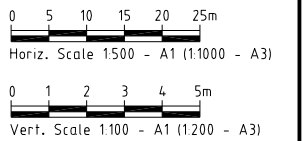


FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

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LONGITUDINAL SECTIONS
3B ROAD 03
SHEET 01

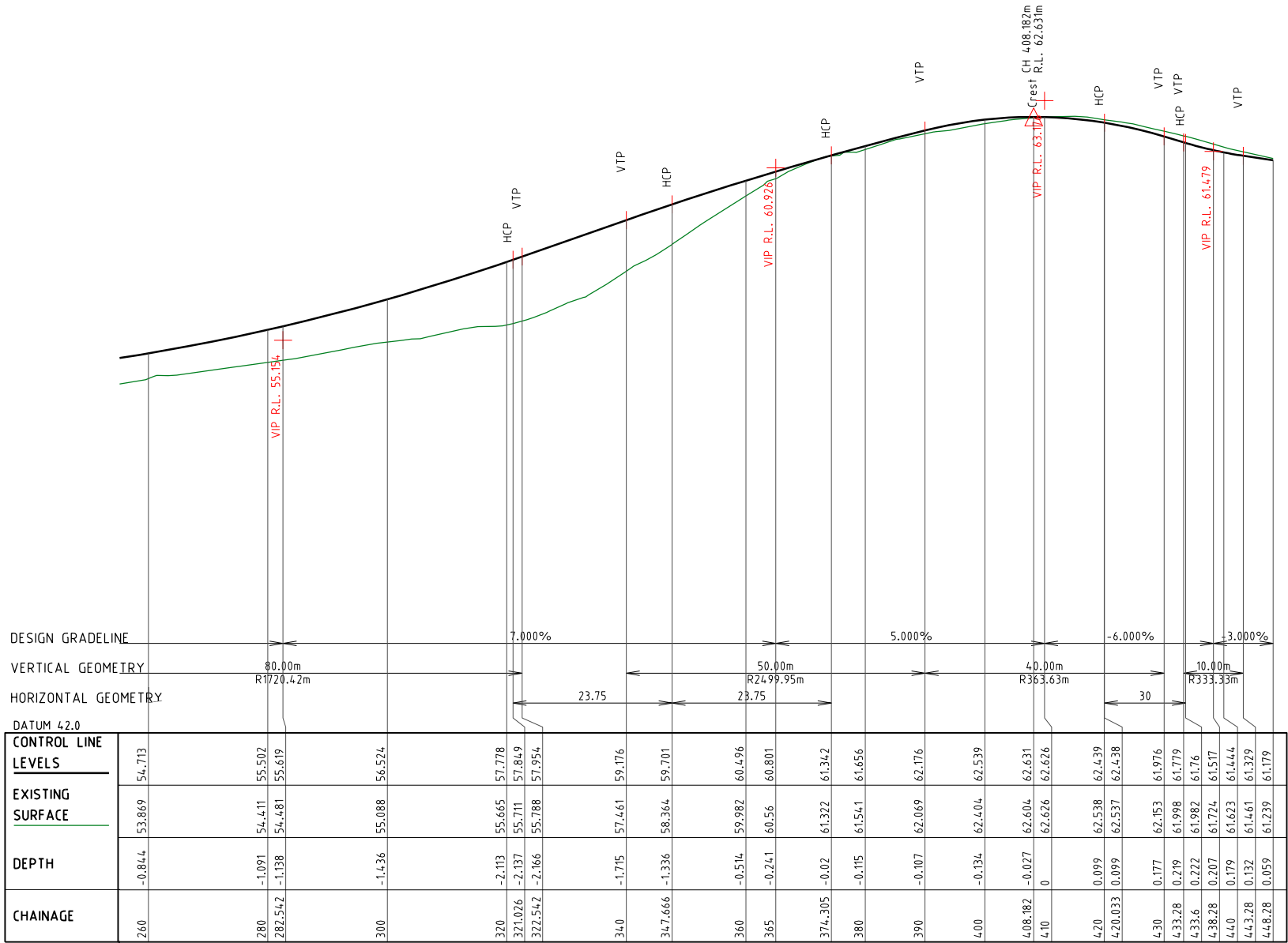
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LONGITUDINAL SECTION 3B ROAD 3

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME

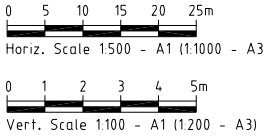


FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT





0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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3B ROAD 03
SHEET 02



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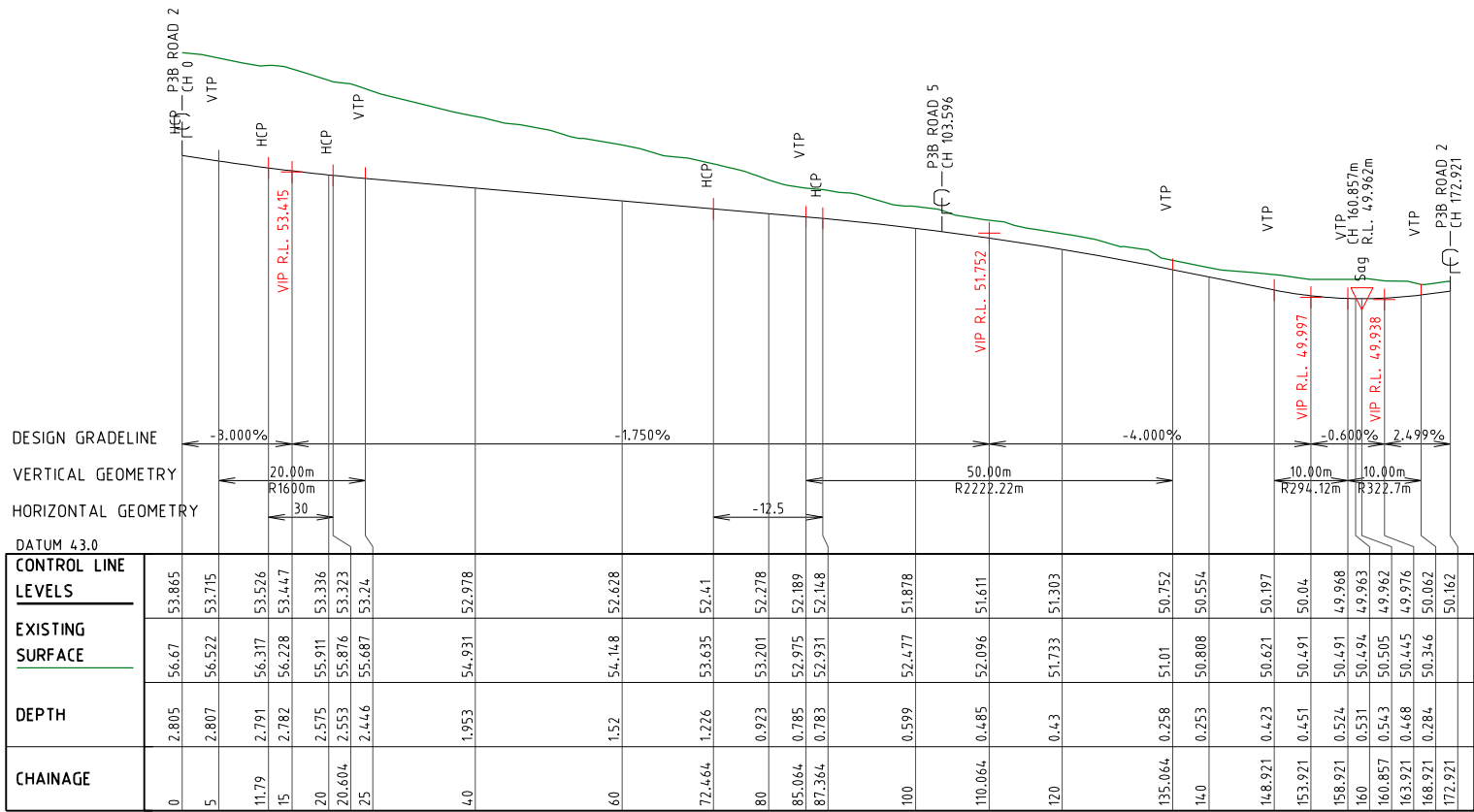
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LONGITUDINAL SECTION 3B ROAD 4

Vertical scale 1100
Horizontal scale 1500

PROJECT NAME

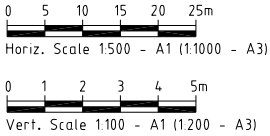


FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT





0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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3B ROAD 04



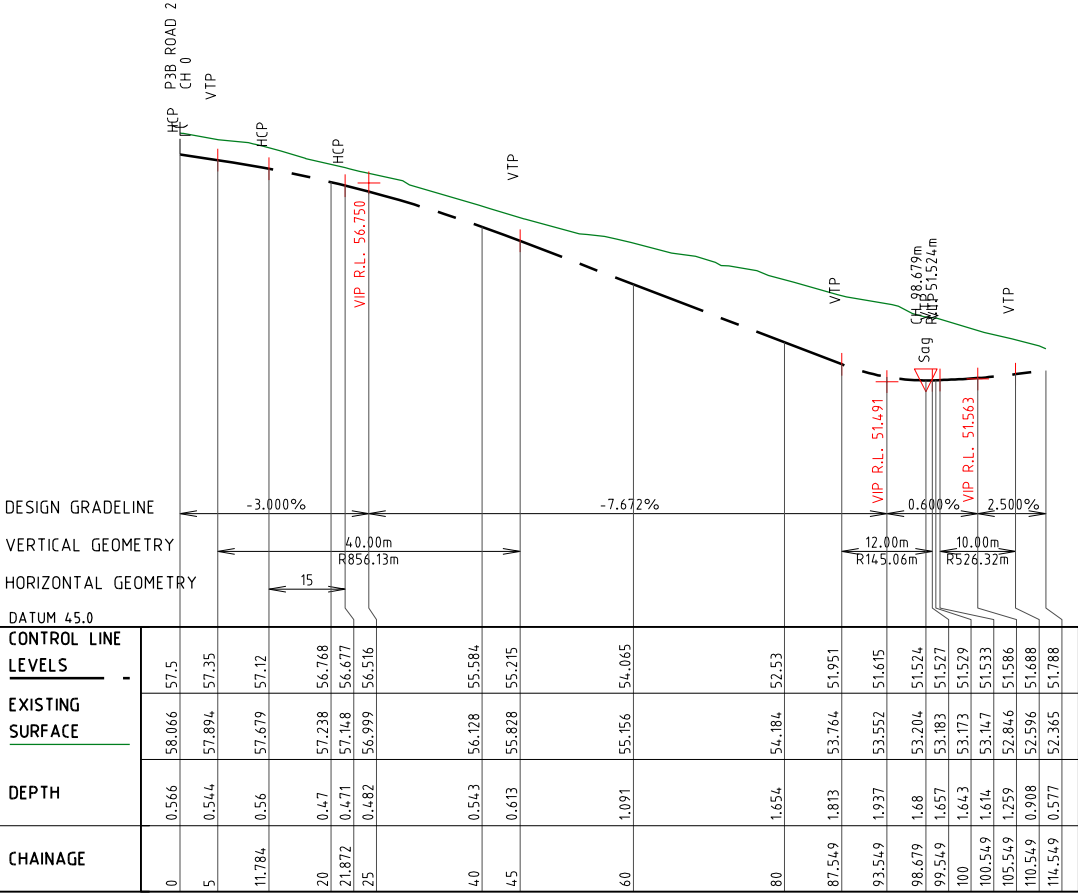
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LONGITUDINAL SECTION 3B ROAD 5

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME

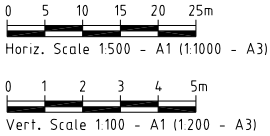


FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT





0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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LONGITUDINAL SECTIONS
3B ROAD 05



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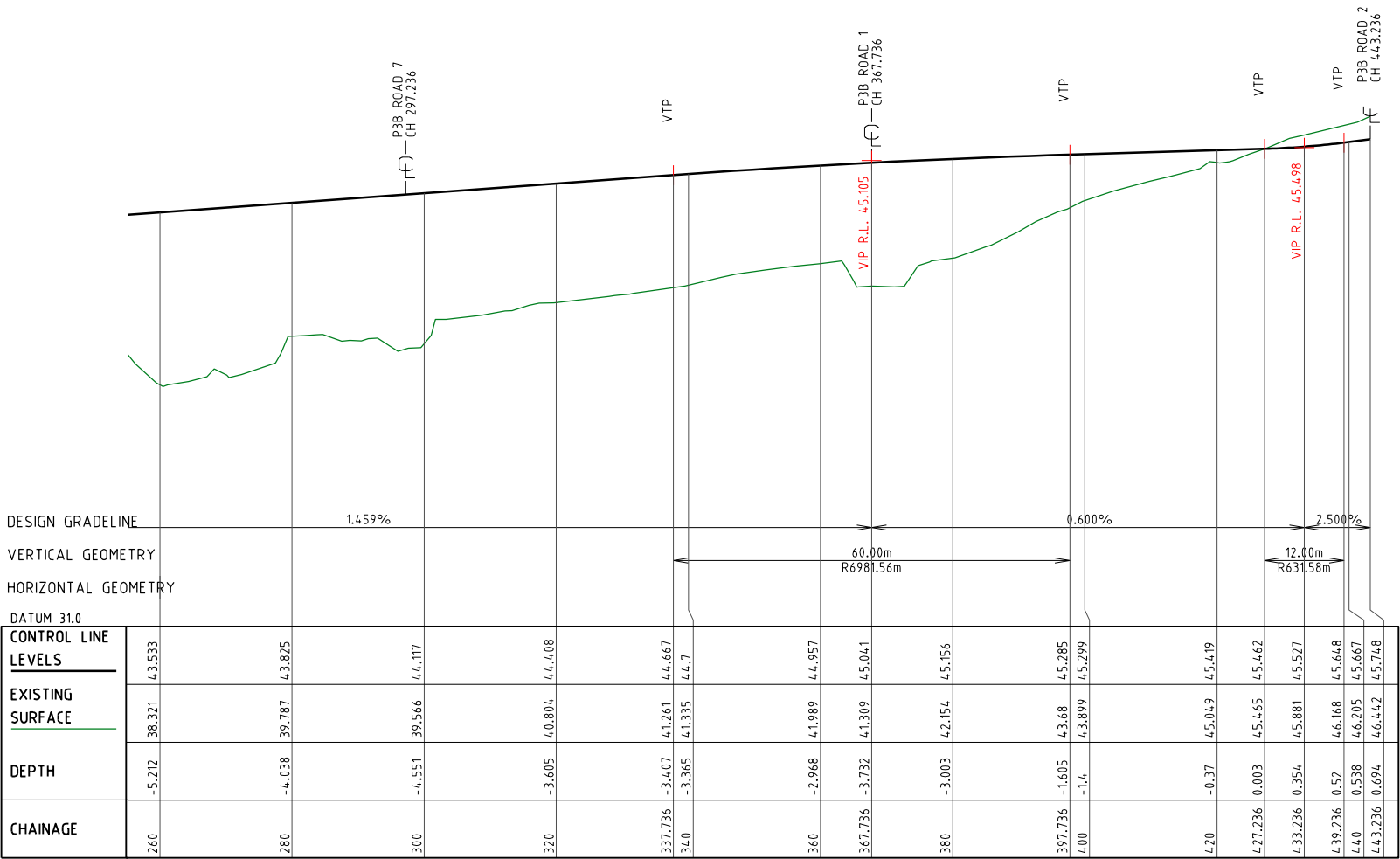
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LONGITUDINAL SECTION 3B ROAD 6

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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LONGITUDINAL SECTIONS
3B ROAD 06
SHEET 02



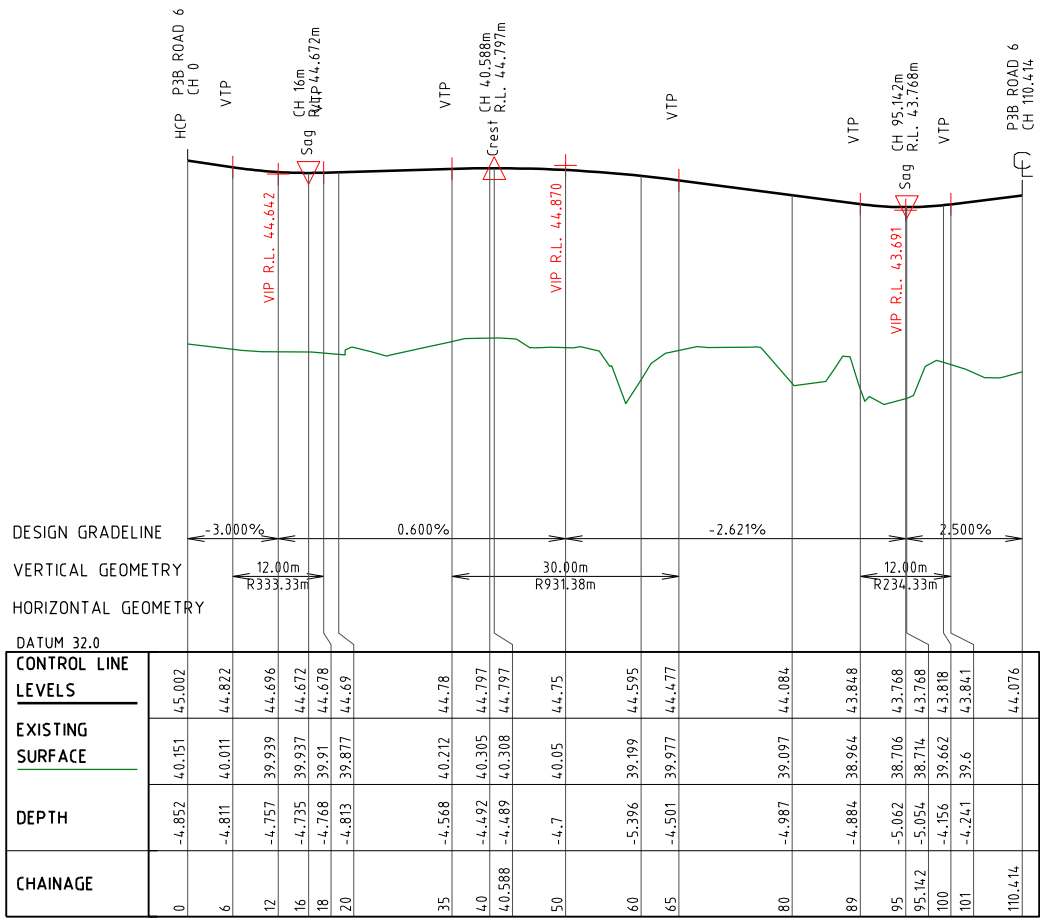
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LONGITUDINAL SECTION 3B ROAD 7

Vertical scale 1:100
Horizontal scale 1:500

PROJECT NAME



FLINDERS
LAKES

NEIGHBOURHOOD 3A & 3B
PRELIM ENGINEERING

CLIENT



0 5 10 15 20 25m
Horiz. Scale 1:500 - A1 (1:1000 - A3)

0 1 2 3 4 5m
Vert. Scale 1:100 - A1 (1:200 - A3)

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LONGITUDINAL SECTIONS
3B ROAD 07



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