

ORIGINAL SIZE A1

200 mm  
150  
100  
90  
80  
70  
60  
50  
40  
30  
20  
10  
0



**NZ TRANSPORT AGENCY**  
WAKA KOTAHI

# STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25

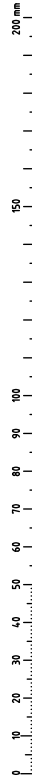
## CONTRACT No. 464PN

## SCHEME ASSESSMENT

NOT FOR CONSTRUCTION

		SURVEYED						STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25	Status Stamp	
		DESIGNED		Barbara Browne 09/13					SCHEME ASSESSMENT	
		DRAWN		Joseph Mitchell 09/13					Date Stamp	
		CAD REVIEW							18.10.13	
		DESIGN CHECK							Scales	
		DESIGN REVIEW				NTS				
		APPROVED		<b>NOT APPROVED</b>		Drawing No.		80500902-01-0604-C 001		
		PROF REGISTRATION:				Rev.		A		
A SCHEME ASSESSMENT		JWM	MO	PP	18.10.13					
REV REVISIONS		DRN	CHK	APP	DATE					

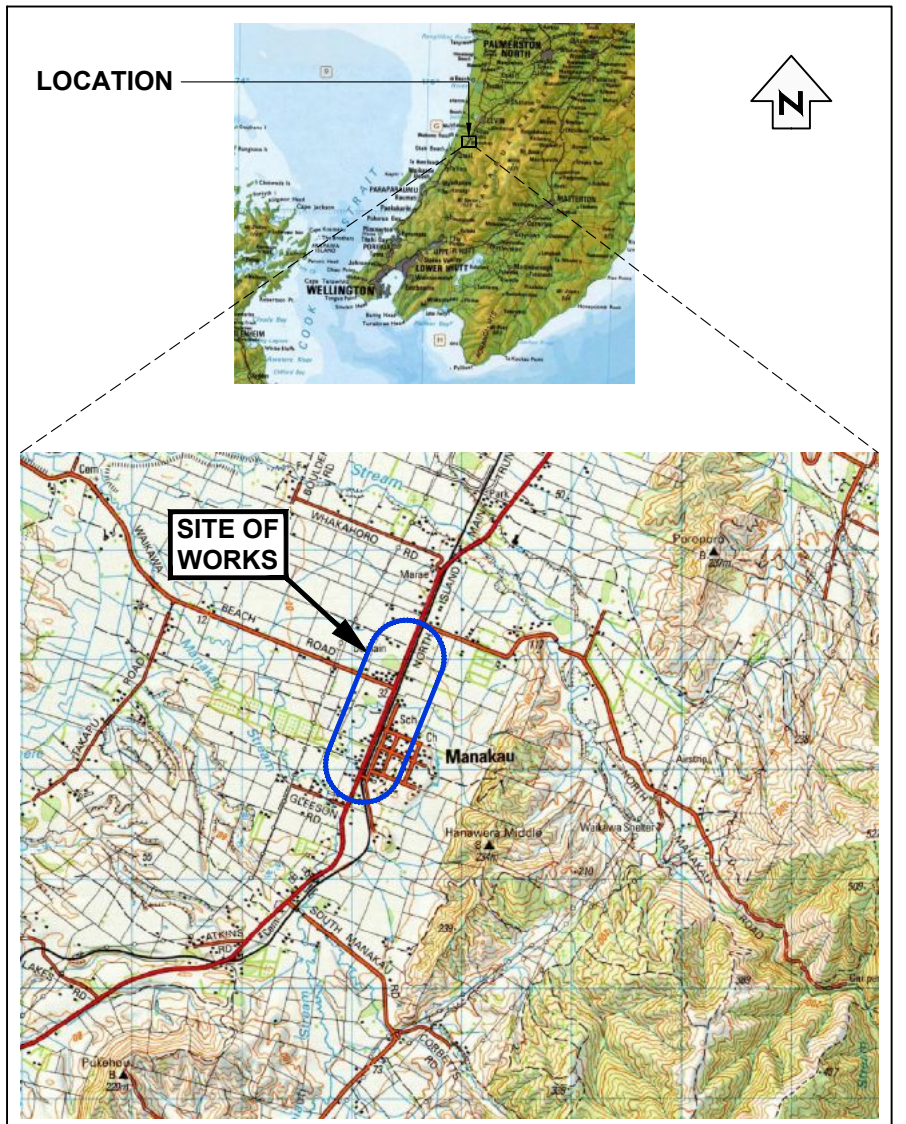
DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

**DRAWING INDEX**

DWG No.	DRAWING TITLE
80500902-01-0604-C001	COVER SHEET
80500902-01-0604-C002	LOCALITY PLAN AND DRAWING INDEX
80500902-01-0604-C003	GENERAL NOTES AND LEGEND
80500902-01-0604-C101	TYPICAL CROSS SECTION
80500902-01-0604-C102	MANAKAU THRESHOLD DETAILS - PLAN AND SECTION
80500902-01-0604-C151	EXISTING SURVEY, AERIAL, SERVICES AND FEATURES - SHEET 1 OF 3
80500902-01-0604-C152	EXISTING SURVEY, AERIAL, SERVICES AND FEATURES - SHEET 2 OF 3
80500902-01-0604-C153	EXISTING SURVEY, AERIAL, SERVICES AND FEATURES - SHEET 3 OF 3
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80500902-01-0604-C201	PLAN AND LONG SECTION - SHEET 1 OF 7
80500902-01-0604-C202	PLAN AND LONG SECTION - SHEET 2 OF 7
80500902-01-0604-C203	PLAN AND LONG SECTION - SHEET 3 OF 7
80500902-01-0604-C204	PLAN AND LONG SECTION - SHEET 4 OF 7
80500902-01-0604-C205	PLAN AND LONG SECTION - SHEET 5 OF 7
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80500902-01-0604-C207	PLAN AND LONG SECTION - SHEET 7 OF 7
80500902-01-0604-C301	CROSS SECTIONS - SHEET 1 OF 10
80500902-01-0604-C302	CROSS SECTIONS - SHEET 2 OF 10
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80500902-01-0604-C304	CROSS SECTIONS - SHEET 4 OF 10
80500902-01-0604-C305	CROSS SECTIONS - SHEET 5 OF 10
80500902-01-0604-C306	CROSS SECTIONS - SHEET 6 OF 10
80500902-01-0604-C307	CROSS SECTIONS - SHEET 7 OF 10
80500902-01-0604-C308	CROSS SECTIONS - SHEET 8 OF 10
80500902-01-0604-C309	CROSS SECTIONS - SHEET 9 OF 10
80500902-01-0604-C310	CROSS SECTIONS - SHEET 10 OF 10



SET No: <b>01</b>	CONTRACT No: <b>464PN</b>
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QUALITY ASSURANCE STATEMENT	
OFFICE:  MWH New Zealand Limited HAZELDEAN BUSINESS PARK 6 HAZELDEAN ROAD ADDINGTON P O Box 13-249 CHRISTCHURCH 8024 NEW ZEALAND PHONE : 64-3-366 7449 FAX : 64-3-366 7780	PROJECT MANAGER: J. ENGLAND
	DESIGNED BY: B. BROWNE
	DRAWINGS CHECKED BY: M. OPPENHUIS
	REVIEWED BY: P. PEET
	APPROVED BY: P. PEET

**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	JWM	MO	PP	18.10.13
REV	REVISIONS	DRN	CHK	APP	DATE
A	SCHEME ASSESSMENT				

SURVEYED	-	-
DESIGNED	Barbara Browne	09/13
DRAWN	Joseph Mitchell	09/13
CAD REVIEW		
DESIGN CHECK		
DESIGN REVIEW		
APPROVED	<b>NOT APPROVED</b>	
PROF REGISTRATION:		

Client:




STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25
LOCATION PLAN AND DRAWING INDEX

Status Stamp	<b>SCHEME ASSESSMENT</b>
Date Stamp	18.10.13
Scales	NTS
Drawing No.	80500902-01-0604-C002
Rev.	A

ORIGINAL SIZE A1

200 mm

150

100

90

80

70

60

50

40

30

20

10

0

**GENERAL NOTES**

- ALL NOTES SHALL BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATIONS, DESIGN DRAWINGS AND OTHER RELEVANT STANDARDS, MANUALS AND SPECIFICATIONS.
- ALL DIMENSIONS ARE IN METRES UNLESS SHOWN OTHERWISE.
- DO NOT SCALE FROM DRAWINGS.
- THE ENGINEERING DESIGN IS BASED PARTLY ON A DIGITAL TERRAIN MODEL (DTM) COMPUTER GENERATED FROM THE SITE SURVEY. SOME GEOMETRY FROM THE SURVEY HAS BEEN INTERPOLATED AND MAY VARY FROM THE ACTUAL SITE CONDITIONS.
- CADASTRAL BOUNDARIES ARE INDICATIVE ONLY. BOUNDARIES TO BE VERIFIED BY SURVEY ON SITE.
- ALL DESIGN ASPECTS INCLUDING PAVEMENT MARKINGS AND SIGNAGE, RRPMS AND EDGE MARKER POSTS ARE TO MEET THE REQUIREMENTS OF THE CLIENT STANDARDS.
- ALL COORDINATES ARE IN TERMS OF \_\_\_\_\_.
- ALL LEVELS ARE TO \_\_\_\_\_ DATUM.
- PIPES, CABLES AND OTHER UTILITIES, FOUNDATIONS, LEVELS, REFERENCE MARKS AND OTHER OBSTRUCTIONS INDICATED ON THIS DRAWING ARE BASED ONLY ON READILY AVAILABLE RECORD PLANS AND OTHER INFORMATION. THIS INFORMATION MAY NOT BE COMPLETE, ACCURATE NOR UP TO DATE PRIOR TO CARRYING OUT ANY EXCAVATION OR OTHER PHYSICAL WORK. CONTRACTORS SHALL OBTAIN THE LATEST INFORMATION FROM UTILITY PROVIDERS AND CARRY OUT DETAILED EXPLORATORY WORK, TRACING, LOCATING, PROTECTION, ISOLATION AND ALTERATIONS AS ARE REQUIRED UNDER THE CONTRACT.
- ENGINEER TO ASSESS ALL CARRIAGEWAY REINSTATEMENT WORK TO CONFIRM SUITABILITY OF EXISTING MATERIAL PRIOR TO ANY REINSTATEMENT WORK. THE CONTRACTOR SHALL ALLOW IN THEIR RATES FOR THE APPROPRIATE TESTING TO CONFORM TO THE SPECIFICATIONS.
- ALL JOINTS BETWEEN THE CONTRACT WORK AND EXISTING MUST BE SAWCUT NEATLY. SAWCUTTING SHALL GENERALLY BE SQUARE AND/OR PARALLEL TO THE KERB ALIGNMENT AND/OR CARRIAGEWAY. DRY CUTTING IS NOT PERMITTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF ALL ACTIVITIES REQUIRED TO ENSURE THAT ADEQUATE PUBLIC AND PRIVATE ACCESS IS NOT PREVENTED BY THE WORKS.
- BEFORE COMMENCING ANY WORK THE CONTRACTOR SHALL MAKE APPLICATION FOR A ROAD OPENING NOTICE. THIS SHALL INCLUDE A TRAFFIC MANAGEMENT PLAN. NO WORK SHALL COMMENCE WITHIN THE ROAD RESERVE UNTIL THE APPLICATION HAS BEEN APPROVED BY THE ROAD CONTROLLING AUTHORITY.
- NO EXCAVATION OF MATERIAL IS TO BE UNDERTAKEN UNTIL THE CONTRACTOR HAS TAKEN NECESSARY STEPS TO ENSURE THAT ANY WORKS DO NOT COMPROMISE THE STRUCTURAL STABILITY OF EXISTING RETAINING WALLS OR GROUND SLOPES.
- WHERE APPLICABLE EXISTING CONCRETE FOOTPATHS SHALL BE RECONSTRUCTED OVER SUCH LENGTH AS IS NECESSARY TO PROVIDE SAFE TRANSITION BETWEEN DESIGN AND EXISTING LEVELS.
- REINSTATE THE AFFECTED WORK AREA TO PRIOR CONDITION INCLUDING FENCES, GATES DRIVEWAYS ETC. WITH EXISTING OR MATCHING MATERIALS AS APPROVED BY ENGINEER.
- PROPERTY BOUNDARY LOCATIONS HAVE BEEN ATTAINED FROM \_\_\_\_\_ AND ARE SUBJECT TO FINAL SURVEY.

**ROADMARKING NOTES**

- THE CONTRACTOR SHALL ENSURE THAT ALL REINSTATED ROAD MARKINGS ARE TO BE EXTENDED AS REQUIRED BEYOND THE LIMITS SHOWN IN THE DRAWINGS TO ACHIEVE CONTINUITY MATCHING INTO THE EXISTING MARKINGS.
- ALL REDUNDANT MARKINGS SHALL BE PERMANENTLY REMOVED. BLACKING OUT OF MARKINGS WITH PAINT IS NOT PERMITTED.

**SERVICES NOTES**

- UNDERGROUND SERVICE LOCATIONS HAVE BEEN DERIVED FROM SURVEY, DBYB AND GIS INFORMATION. ALTHOUGH EVERY EFFORT HAS BEEN MADE, NO RESPONSIBILITY IS TAKEN FOR ITS ACCURACY.
- THE SERVICE INFORMATION PROVIDED IS NOT INTENDED TO PROVIDE A COMPLETE OR ACCURATE LOCATION OF EXISTING SERVICES.
- IT IS THE CONTRACTORS RESPONSIBILITY TO INVESTIGATE AND CONFIRM ALL EXISTING SERVICES AND FEATURE LOCATIONS ONSITE PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL MAKE ENQUIRIES OF THE SERVICE AUTHORITIES AS TO THE LOCATION, DEPTH AND EXTENT OF SERVICES PRIOR TO COMMENCEMENT OF WORK ON THE SITE.
- THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING SERVICES DURING THE EXECUTION OF WORKS UNDER CONTRACT. NO WORK SHALL BE CARRIED OUT WITHIN 3.0M OF ANY EXISTING SERVICE, WITHOUT PRIOR RECORDED CONSULTATION WITH THE RELEVANT AUTHORITY.
- ALL PIPEWORK TO BE ABANDONED SHALL BE SEALED WITH 17.5MPA CONCRETE PLUG TO THE SATISFACTION OF THE ENGINEER.

**SITE CLEARING:**

- THE CONTRACTOR SHALL LIAISE WITH THE ENGINEER ON SITE FOR ALL TREE REMOVAL, PLANTING AND PRUNING WORKS.
- TREES NOT DIRECTLY AFFECTED BY WORKS ARE TO BE RETAINED. TREE REMOVALS WITHIN 2.0m FROM TOP OF CUT AND BOTTOM OF FILL BATTERS SHALL NOT PROCEED WITHOUT APPROVAL FROM SITE ENGINEER.

**LEGEND - DESIGN FEATURES:**

- NEW PROPERTY BOUNDARY
- CONTROL LINE
- NEW KERB
- NEW KERB AND CHANNEL
- NEW EDGE OF PAVEMENT
- NEW TOP OF BANK
- NEW SWALE DRAIN
- NEW U/G DRAINAGE LINE
- NEW U/G COMMS LINE
- NEW U/G WATER MAIN
- NEW U/G SEWERAGE MAIN
- NEW O/H OVERHEAD ELEC.
- NEW OPTIC FIBRE.
- NEW CULVERT
- NEW FENCE
- NEW GABION BASKET / RETAINING WALL
- NEW OPEN DRAINAGE CHANNEL
- FINISHED SURFACE CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED SURFACE CONTOUR (MINOR) 0.1m INTERVALS
- NEW GATE
- NEW ROAD SIGN
- NEW POWER POLE LOCATION
- NEW STREET LIGHT
- NEW STREET LIGHT (OUTREACH)
- NEW DRAINAGE PIT
- NEW STORMWATER SUMP
- NEW MANHOLE
- CATCHMENT BOUNDARY
- NEW RETAINING WALL
- NEW SAFETY BARRIER (GUARDRAIL)
- NEW SAFETY BARRIER (WIRE ROPE)
- SETOUT POINT
- INTERSECTION POINT

**LEGEND - NEW ROAD MARKINGS**

- NEW CENTRE LINE / LANE LINE
- NEW BARRIER LINE (LEFT)
- NEW BARRIER LINE (RIGHT)
- DOUBLE BARRIER LINE
- EDGE LINE
- EDGE LINE (WITH AUDIBLE TACTILE MARKERS)
- CONTINUITY LINE
- NO STOPPING LINE

**LEGEND - EXISTING SURVEY FEATURES:**

- EXISTING PROPERTY BOUNDARY
- EXISTING KERB
- EXISTING KERB AND CHANNEL
- EXISTING EDGE OF PAVEMENT
- EXISTING TOP OF BANK
- EXISTING SWALE DRAIN
- EXISTING U/G DRAINAGE LINE
- EXISTING U/G COMMS LINE
- EXISTING U/G WATER MAIN
- EXISTING U/G SEWERAGE MAIN
- EXISTING U/G ELEC.
- EXISTING O/H POWER
- EXISTING OPTIC FIBRE.
- EXISTING CULVERT
- EXISTING FENCE
- EXISTING GABION BASKET / RETAINING WALL
- EXISTING SURFACE CONTOUR (MAJOR) 0.5m INTERVALS
- EXISTING SURFACE CONTOUR (MINOR) 0.1m INTERVALS
- EXISTING GATE
- EXISTING ROAD SIGN
- EXISTING POWER POLE
- EXISTING STREET LIGHT
- EXISTING STREET LIGHT (OUTREACH)
- EXISTING DRAINAGE PIT
- EXISTING STORMWATER SUMP
- EXISTING MANHOLE
- BENCHMARK (SURVEY STATION)
- BOREHOLE
- EXISTING HYDRANT
- EXISTING ACCESS CHAMBER
- EXISTING WATER METER
- EXISTING ROAD SIGN (TO BE REMOVED)
- EXISTING KERB (TO BE REMOVED).
- EXISTING FENCE (TO BE REMOVED).
- EXISTING TREE
- EXISTING TREE (TO BE REMOVED)

**LEGEND - EXISTING ROAD MARKINGS**

- EXISTING CENTRE LINE / LANE LINE
- EXISTING EDGE LINE
- EXISTING CONTINUITY LINE
- EXISTING NO STOPPING LINE



**NOT FOR CONSTRUCTION**

REV	SCHEME ASSESSMENT	JWM	MO	PP	18.10.13
	REVISIONS	DRN	CHK	APP	DATE

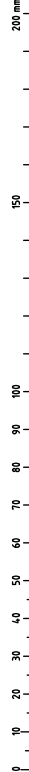
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DESIGNED	Barbara Browne	09/13
DRAWN	Joseph Mitchell	09/13
CAD REVIEW		
DESIGN CHECK		
DESIGN REVIEW		
APPROVED	<b>NOT APPROVED</b>	
PROF REGISTRATION:		



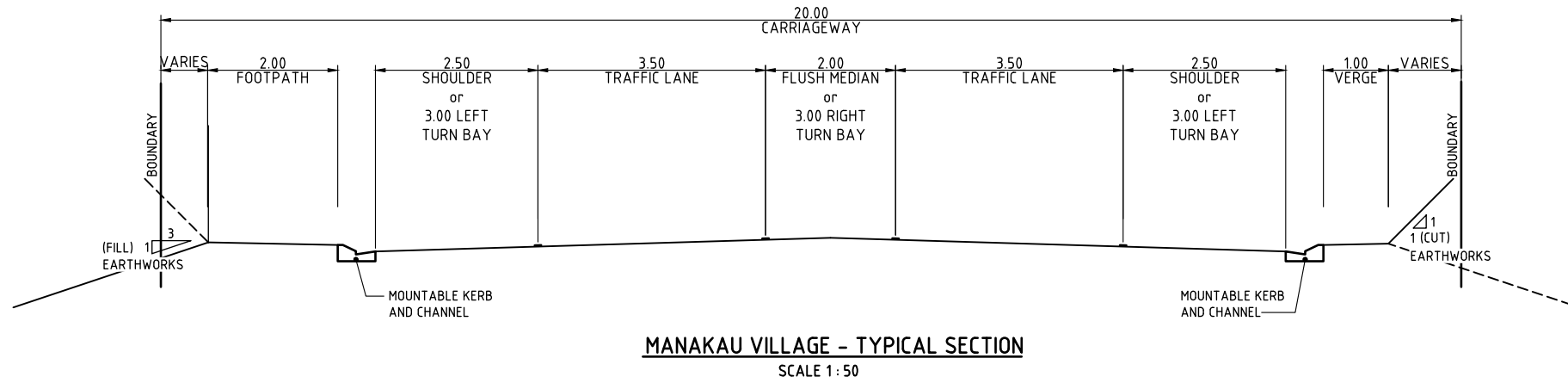
Client: STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
 MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25  
**GENERAL NOTES AND LEGEND**

Status Stamp	<b>SCHEME ASSESSMENT</b>	
Date Stamp	18.10.13	
Scales	NTS	
Drawing No.	80500902-01-0604-C003	Rev. A

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



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REV	SCHEME ASSESSMENT	JWM	MO	PP	18.10.13
	REVISIONS	DRN	CHK	APP	DATE

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STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25

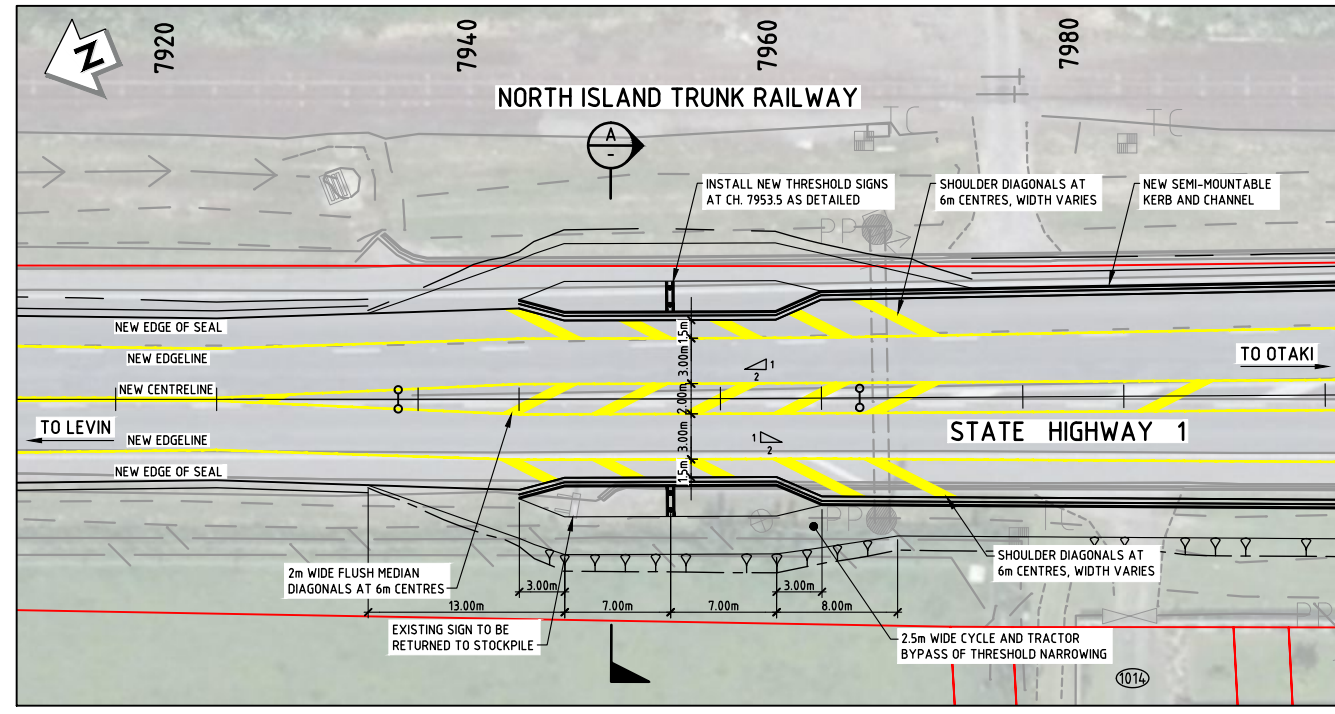
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Date Stamp	18.10.13
Scales	1:50
Drawing No.	80500902-01-0604-C 101
Rev.	A

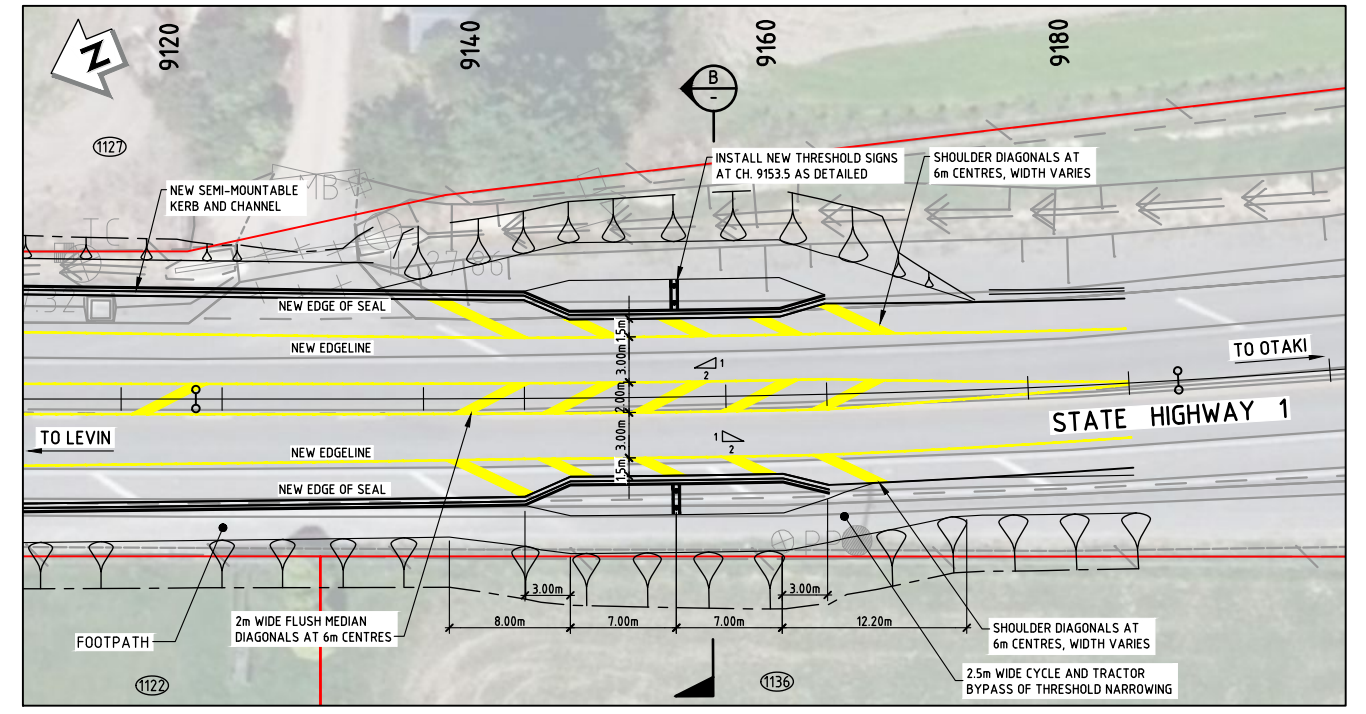


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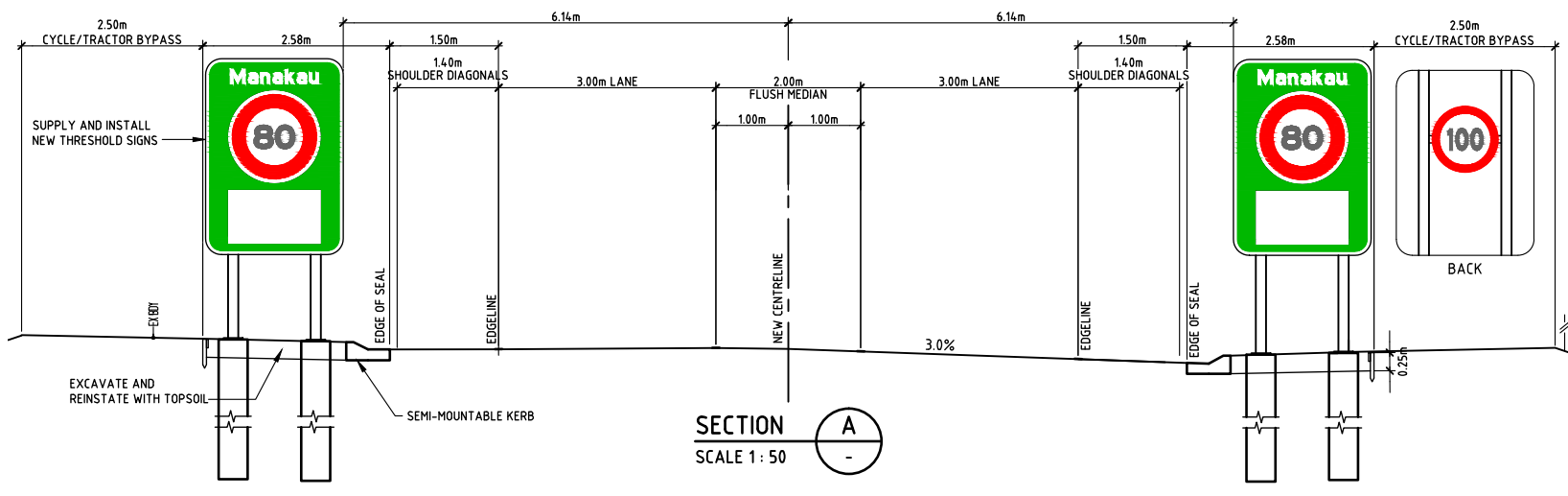
ORIGINAL SIZE A1



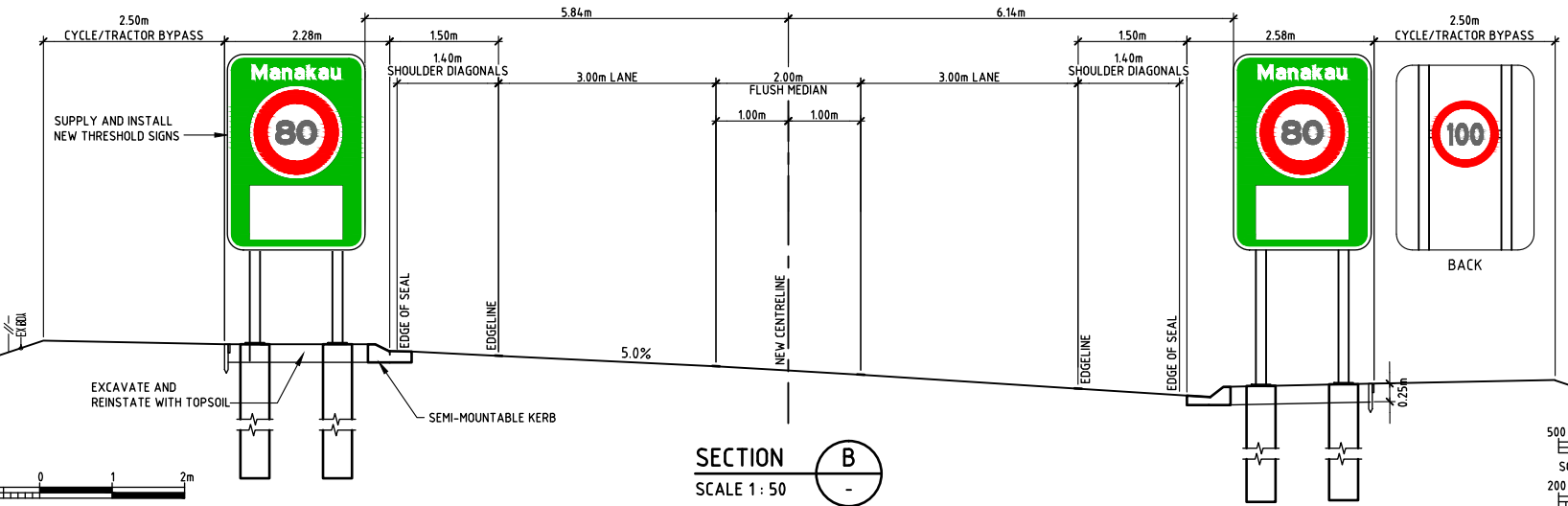
**NEW THRESHOLD PLAN - CH. 7920-7980**  
SCALE 1:250



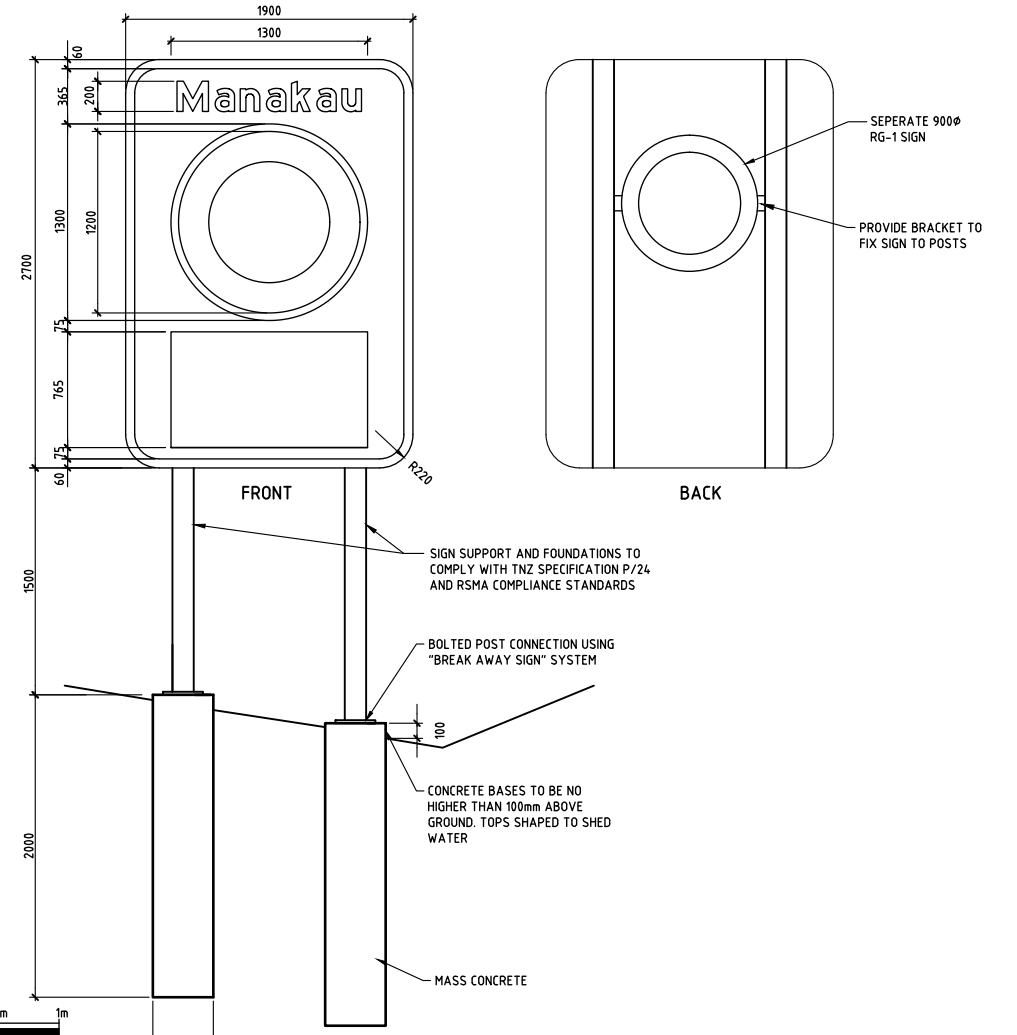
**NEW THRESHOLD PLAN - CH. 9120-9180**  
SCALE 1:250



**SECTION A**  
SCALE 1:50



**SECTION B**  
SCALE 1:50



**THRESHOLD SIGN DETAILS**  
SCALE 1:25

REV	DESCRIPTION	JWM	MO	PP	18.10.13
DRN	CHK	APP	DATE		
A	SCHEME ASSESSMENT				
	REVISIONS				

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CAD REVIEW		
DESIGN CHECK		
APPROVED	<b>NOT APPROVED</b>	
PROF REGISTRATION:		

Client:

**STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN**  
**MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25**

**MANAKAU THRESHOLD DETAILS**  
**PLAN AND SECTION**

Status Stamp	<b>SCHEME ASSESSMENT</b>
Date Stamp	18.10.13
Scales	AS SHOWN
Drawing No.	80500902-01-0604-C102
Rev.	A



DO NOT SCALE - IF IN DOUBT, ASK

200 mm

150

100

90

80

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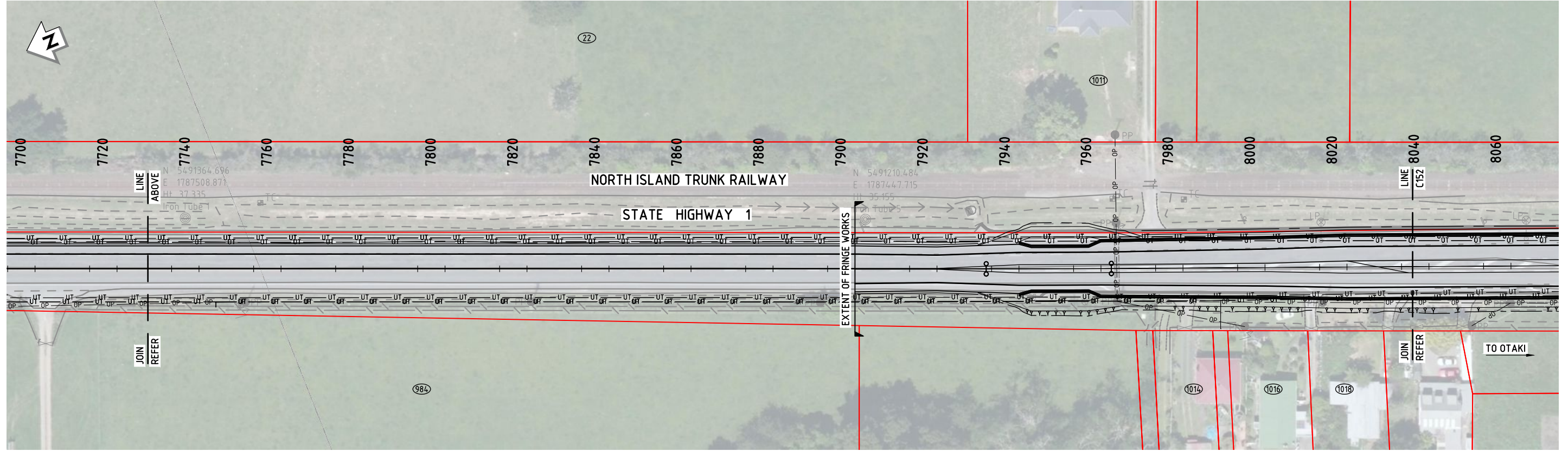
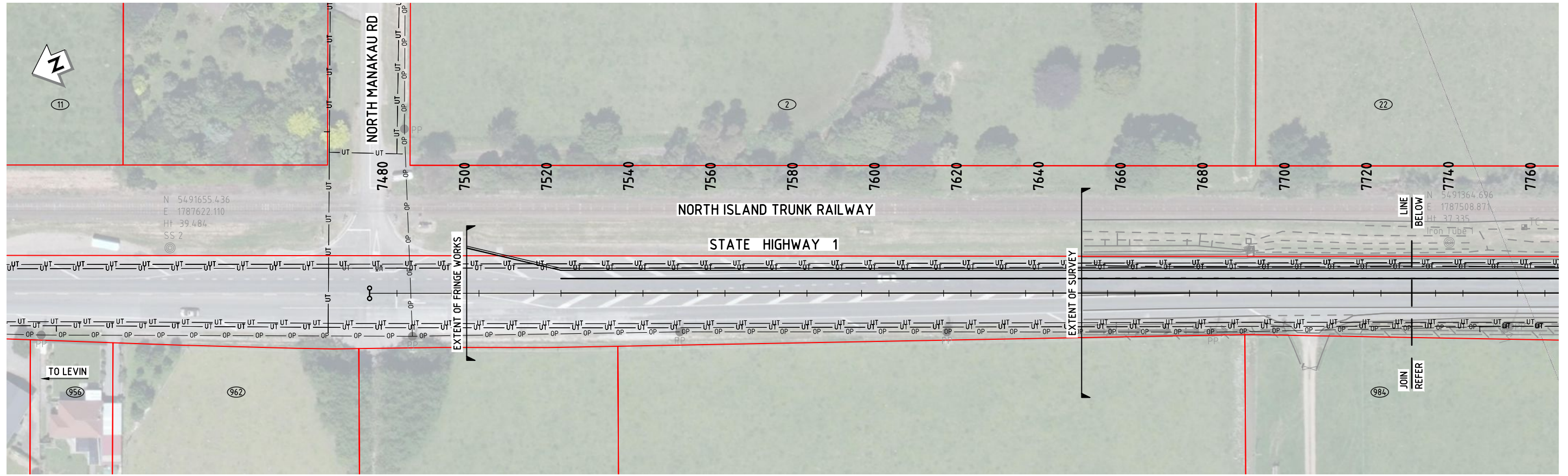
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ORIGINAL SIZE A1



**NOTES:**  
 1. REFER TO DRAWING 80500902-02-0604-C003 FOR GENERAL NOTES AND LEGEND.

**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	JWM	MO	PP	DATE
DRN	CHK	APP			
A	SCHEME ASSESSMENT				18.10.13
	REVISIONS				

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Client:  
 STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
 MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25  
 EXISTING SURVEY, AERIAL, SERVICES AND FEATURES  
 SHEET 1 OF 3

Status Stamp	<b>SCHEME ASSESSMENT</b>
Date Stamp	18.10.13
Scales	1 : 500
Drawing No.	80500902-01-0604-C151
Rev.	A



DO NOT SCALE - IF IN DOUBT, ASK

200 mm

150

100

90

80

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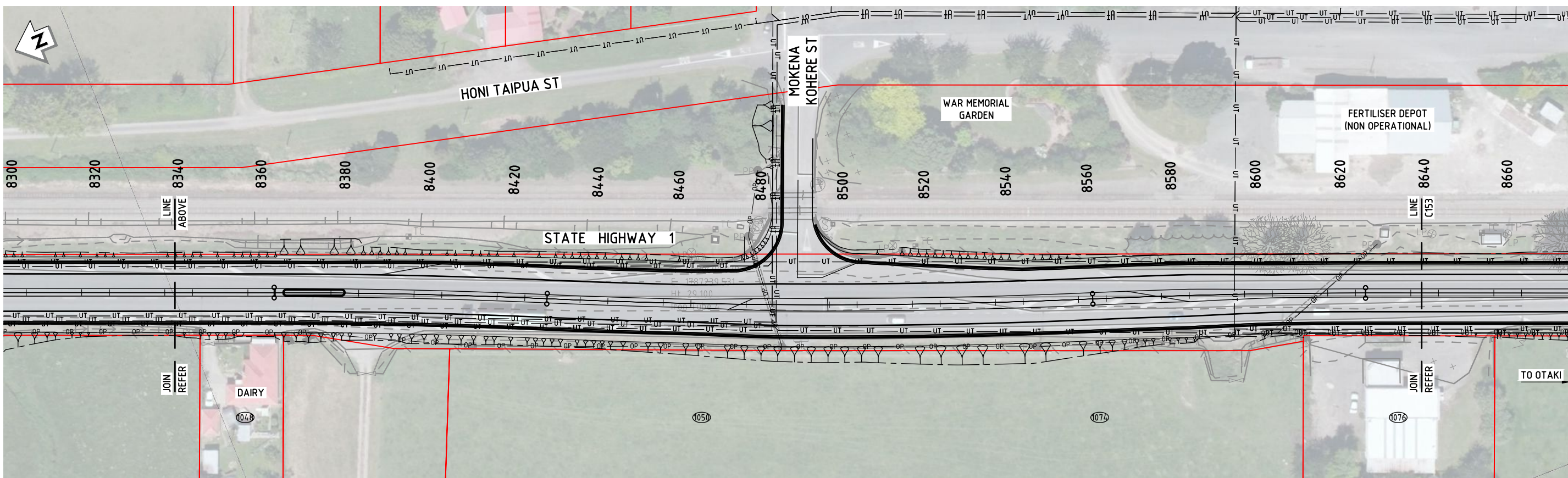
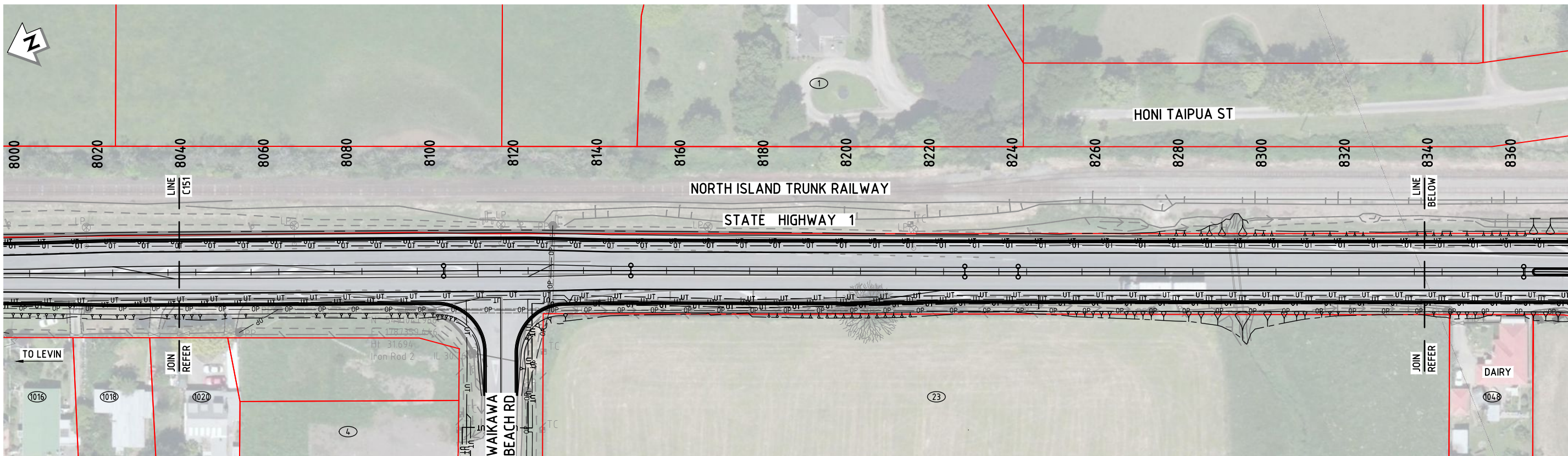
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ORIGINAL SIZE

A1



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 STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
 MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25  
 EXISTING SURVEY, AERIAL, SERVICES AND FEATURES  
 SHEET 2 OF 3

Status Stamp	<b>SCHEME ASSESSMENT</b>
Date Stamp	18.10.13
Scales	1: 500
Drawing No.	80500902-01-0604-C152
Rev	A



DO NOT SCALE - IF IN DOUBT, ASK

200 mm

150

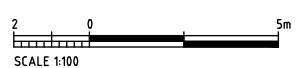
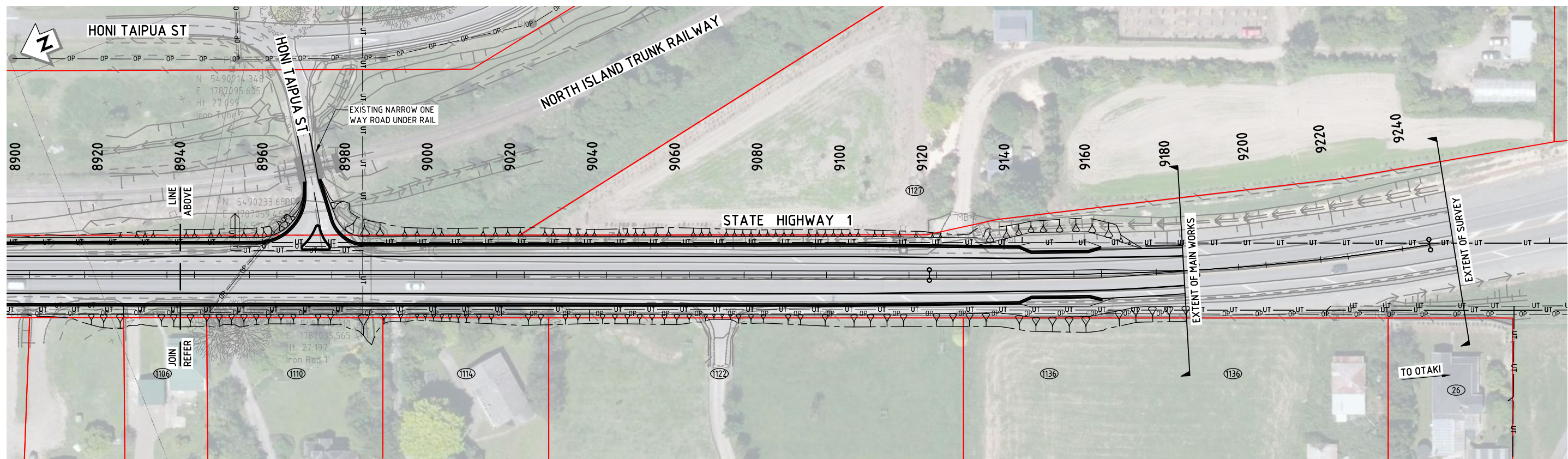
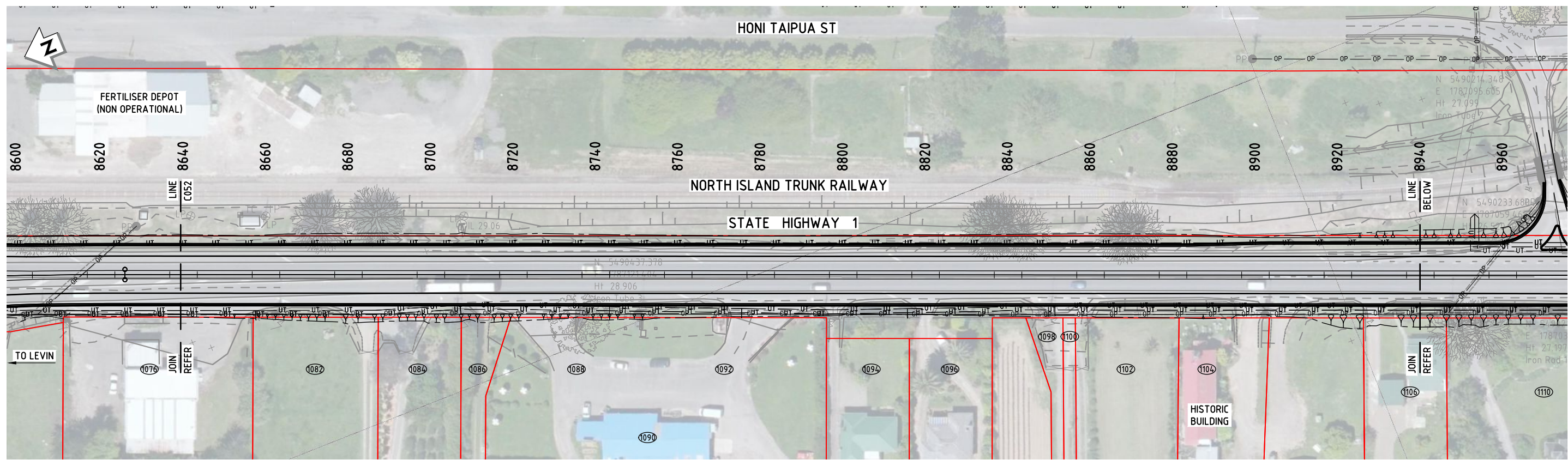
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ORIGINAL SIZE

A1



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A	SCHEME ASSESSMENT				18.10.13
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Client:  
 STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
 MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25  
 EXISTING SURVEY, AERIAL, SERVICES AND FEATURES  
 SHEET 3 OF 3

Status Stamp	<b>SCHEME ASSESSMENT</b>
Date Stamp	18.10.13
Scales	1: 500
Drawing No.	80500902-01-0604-C153
Rev	A



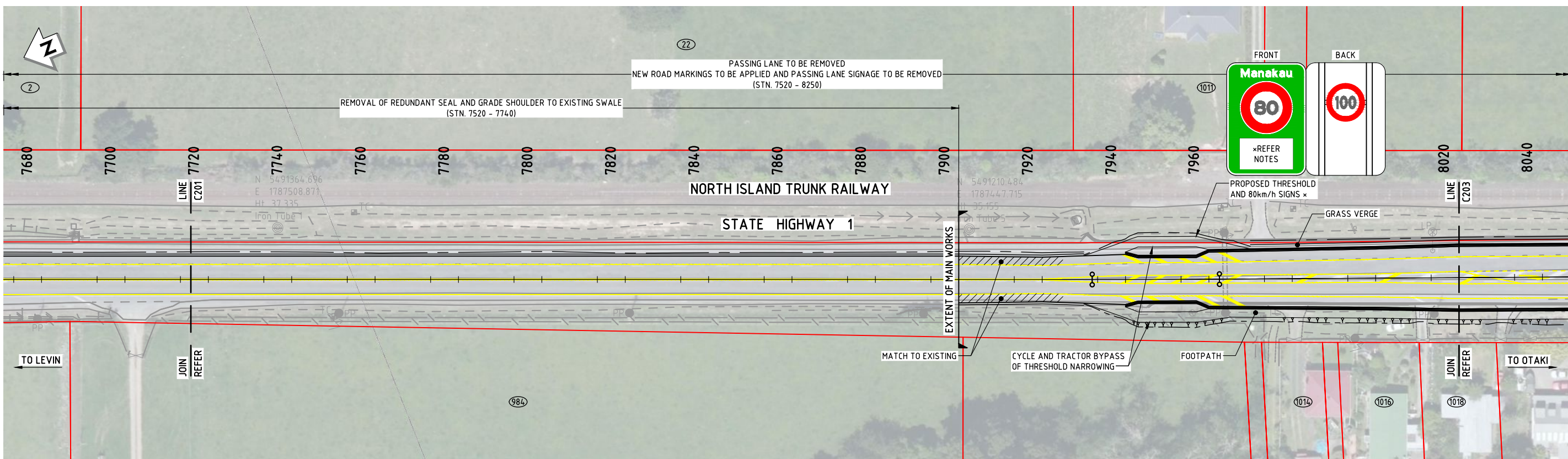






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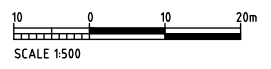
ORIGINAL SIZE A1



PLAN  
SCALE 1:500

× PROPOSED THRESHOLD TREATMENT SIGN DESIGN CAN POTENTIALLY BE DEVELOPED IN CONJUNCTION WITH THE MANAKAU COMMUNITY.

	7740.0	7760.0	7780.0	7800.0	7820.0	7840.0	7860.0	7880.0	7900.0	7920.0	7940.0	7960.0	7980.0	8000.0	8020.0		
DATUM R.L.=31.0																	
-CUT/+FILL DEPTH	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000		
EXISTING LEVEL	37.509	37.332	37.141	36.965	36.782	36.566	36.316	36.041	35.766	35.453	35.116	34.791	34.423	34.034	33.638		
DESIGN LEVEL	37.509	37.332	37.141	36.965	36.782	36.566	36.316	36.041	35.766	35.453	35.116	34.791	34.423	34.034	33.638		
STATION (MCOZ)	7740.0	7760.0	7780.0	7800.0	7820.0	7840.0	7860.0	7880.0	7900.0	7920.0	7940.0	7960.0	7980.0	8000.0	8020.0		
VERTICAL GEOMETRY																	
HORIZONTAL GEOMETRY	D=458.682											D=137.138					
SUPERELEVATION LEFT												R=-5000.000 L=30.523					
SUPERELEVATION RIGHT												-0.245	-0.165	-0.132	-0.274	-0.689	-1.292



LONG SECTION  
SCALES - H 1: 500  
V 1: 100

NOT FOR CONSTRUCTION

REV	DESCRIPTION	JWM	MO	PP	18.10.13
DRN	CHK	APP	DATE		
A	SCHEME ASSESSMENT				
	REVISIONS				

SURVEYED	-	-
DESIGNED	Barbara Browne	09/13
DRAWN	Joseph Mitchell	09/13
CAD REVIEW		
DESIGN CHECK		
DESIGN REVIEW		
APPROVED	<b>NOT APPROVED</b>	
PROF REGISTRATION:		

Client:

STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25

PLAN AND LONG SECTION  
SHEET 2 OF 7

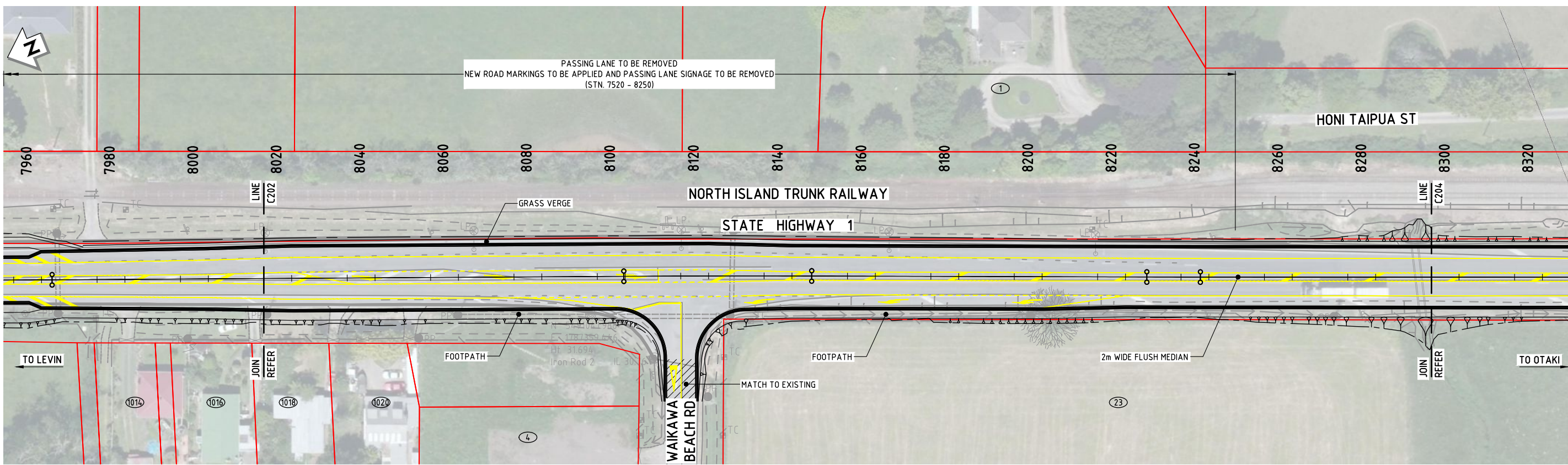
Status Stamp	SCHEME ASSESSMENT
Date Stamp	18.10.13
Scales	AS SHOWN
Drawing No.	80500902-01-0604-C202
Rev.	A



DO NOT SCALE - IF IN DOUBT, ASK

200 mm  
150  
100  
90  
80  
70  
60  
50  
40  
30  
20  
10  
0

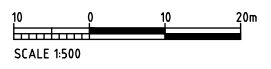
ORIGINAL SIZE A1



PLAN  
SCALE 1:500

DATUM R.L. = 27.0												
-CUT/+FILL DEPTH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EXISTING LEVEL	33.638	33.252	32.871	32.468	32.122	31.806	31.601	31.387	31.095	30.703	30.323	29.961
DESIGN LEVEL	33.638	33.252	32.871	32.468	32.122	31.806	31.601	31.387	31.095	30.703	30.323	29.961
STATION (MC02)	8020.0	8040.0	8060.0	8080.0	8100.0	8120.0	8140.0	8160.0	8180.0	8200.0	8220.0	8240.0
VERTICAL GEOMETRY												
HORIZONTAL GEOMETRY	D=137.138					R=5000.000 L=45.064			D=80.388			R
SUPERELEVATION LEFT	-4.138	-4.239	-3.509	-3.805	-3.608	-1.616	-2.305	-2.470	-2.303	-2.193	-2.970	-3.301
SUPERELEVATION RIGHT	-1.292	-1.139	-1.797	-2.129	-2.049	-1.918	-2.605	-2.481	-1.760	-1.741	-2.701	-1.372

LONG SECTION  
SCALES - H 1: 500  
V 1: 100



NOT FOR CONSTRUCTION

REV	A	SCHEME ASSESSMENT	JWM	MO	PP	18.10.13
		REVISIONS	DRN	CHK	APP	DATE

SURVEYED	-	-
DESIGNED	Barbara Browne	09/13
DRAWN	Joseph Mitchell	09/13
CAD REVIEW		
DESIGN CHECK		
DESIGN REVIEW		
APPROVED	<b>NOT APPROVED</b>	
PROF REGISTRATION:		



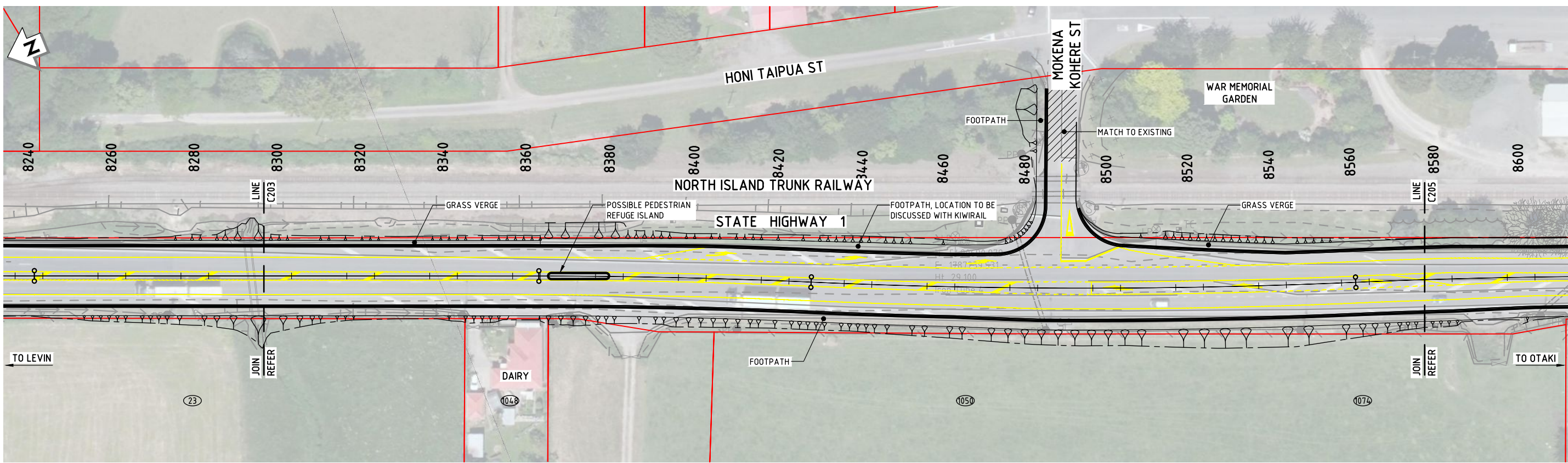
STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25  
PLAN AND LONG SECTION  
SHEET 3 OF 7

Status Stamp	SCHEME ASSESSMENT
Date Stamp	18.10.13
Scales	AS SHOWN
Drawing No.	80500902-01-0604-C203
Rev.	A



DO NOT SCALE - IF IN DOUBT, ASK

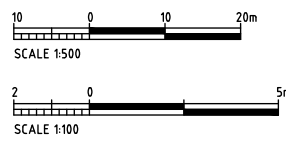
ORIGINAL SIZE A1



**PLAN**  
SCALE 1:500

DATUM R.L.=26.0	
-CUT/+FILL DEPTH	0.000
EXISTING LEVEL	29.158
DESIGN LEVEL	29.158
STATION (MCOZ)	8300.0
VERTICAL GEOMETRY	
HORIZONTAL GEOMETRY	D=121.696
SUPERELEVATION LEFT	-3.372
SUPERELEVATION RIGHT	-3.057

**LONG SECTION**  
SCALES - H 1: 500  
V 1: 100



**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	JWM	MO	PP	18.10.13
DRN	CHK	APP	DATE		
A	SCHEME ASSESSMENT				

SURVEYED	-	-
DESIGNED	Barbara Browne	09/13
DRAWN	Joseph Mitchell	09/13
CAD REVIEW		
DESIGN CHECK		
DESIGN REVIEW		
APPROVED	<b>NOT APPROVED</b>	
PROF REGISTRATION:		

Client:

STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25

**PLAN AND LONG SECTION**  
**SHEET 4 OF 7**

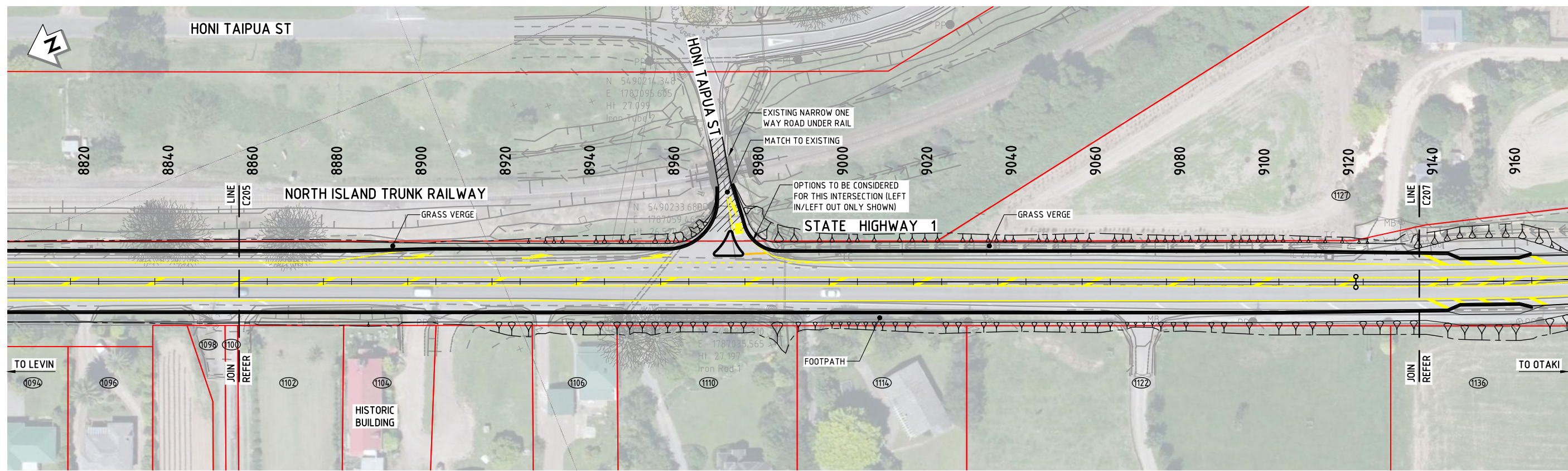
Status Stamp	<b>SCHEME ASSESSMENT</b>
Date Stamp	18.10.13
Scales	AS SHOWN
Drawing No.	80500902-01-0604-C204
Rev.	A





DO NOT SCALE - IF IN DOUBT, ASK

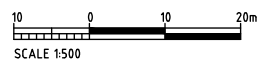
ORIGINAL SIZE A1



PLAN  
SCALE 1:500

	8860.0	8880.0	8900.0	8920.0	8940.0	8960.0	8980.0	9000.0	9020.0	9040.0	9060.0	9080.0	9100.0	9120.0	9140.0
DATUM R.L.=25.0															
-CUT/+FILL DEPTH	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
EXISTING LEVEL	28.629	28.439	28.244	28.048	27.842	27.710	27.491	27.610	27.688	27.832	28.008	28.184	28.397	28.604	28.861
DESIGN LEVEL	28.629	28.439	28.244	28.048	27.842	27.710	27.491	27.610	27.688	27.832	28.008	28.184	28.397	28.604	28.861
STATION (MC02)	8860.0	8880.0	8900.0	8920.0	8940.0	8960.0	8980.0	9000.0	9020.0	9040.0	9060.0	9080.0	9100.0	9120.0	9140.0
VERTICAL GEOMETRY															
HORIZONTAL GEOMETRY															
SUPERELEVATION LEFT	-2.871	-3.001	-2.498	-2.698	-3.550	-3.944	-1.363	-4.574	-3.444	-2.969	-2.238	-0.784	-1.259	-2.678	-3.649
SUPERELEVATION RIGHT	-2.918	-2.865	-2.704	-2.770	-2.677	-4.030	-0.508	-4.790	-3.360	-3.472	-2.408	-2.706	-4.204	-4.999	-5.438

LONG SECTION  
SCALES - H 1: 500  
V 1: 100



NOT FOR CONSTRUCTION

REV	SCHEME ASSESSMENT	JWM	MO	PP	18.10.13
REV	REVISIONS	DRN	CHK	APP	DATE

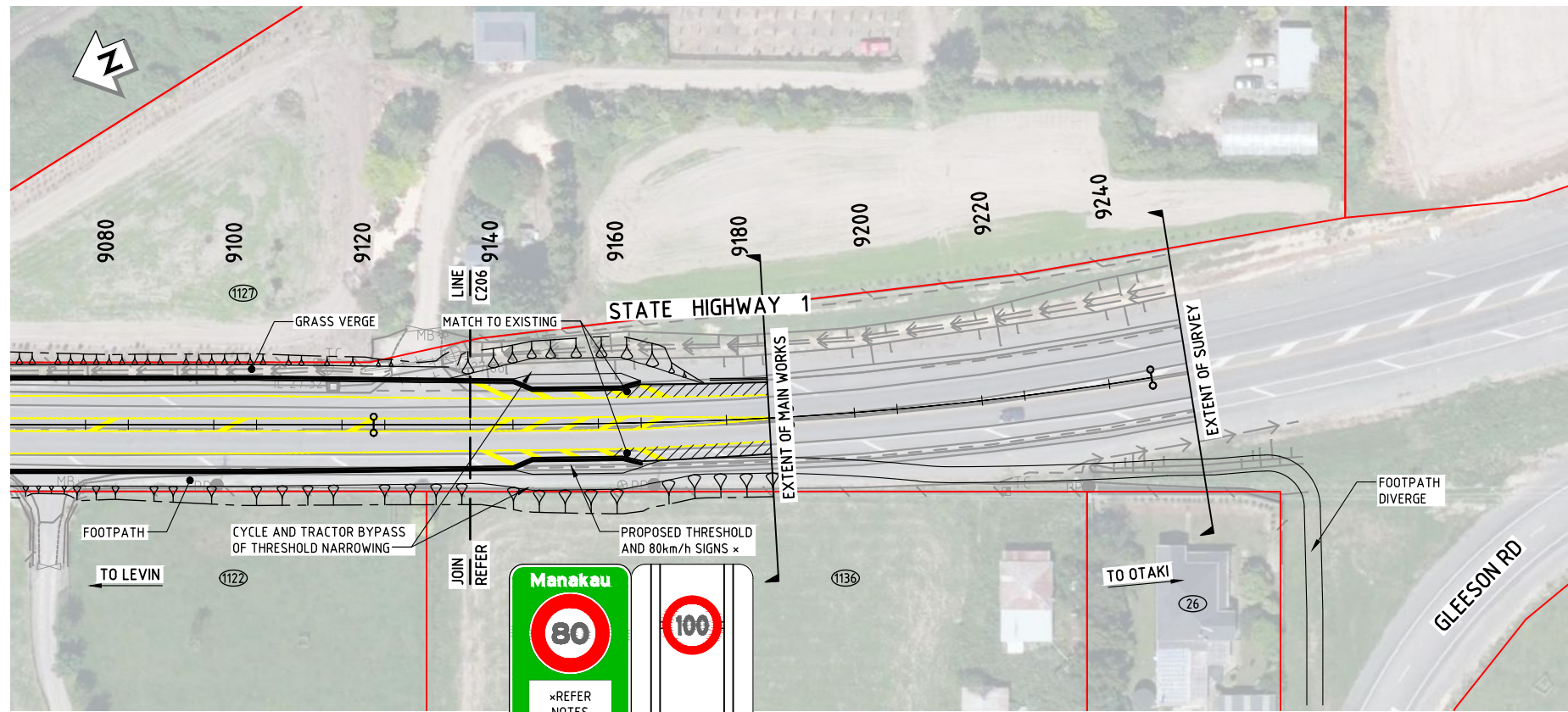
SURVEYED	-	-
DESIGNED	Barbara Browne	09/13
DRAWN	Joseph Mitchell	09/13
CAD REVIEW		
DESIGN CHECK		
DESIGN REVIEW		
APPROVED	<b>NOT APPROVED</b>	
PROF REGISTRATION:		



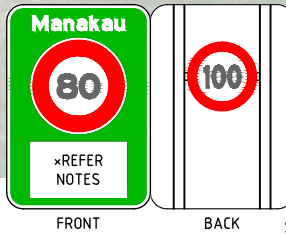
STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25

PLAN AND LONG SECTION  
SHEET 6 OF 7

Status Stamp	<b>SCHEME ASSESSMENT</b>
Date Stamp	18.10.13
Scales	AS SHOWN
Drawing No.	80500902-01-0604-C206
Rev.	A



\* PROPOSED THRESHOLD TREATMENT SIGN DESIGN CAN POTENTIALLY BE DEVELOPED IN CONJUNCTION WITH THE MANAKAU COMMUNITY.



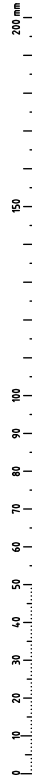
PLAN SCALE 1:500

DATUM R.L.=26.0

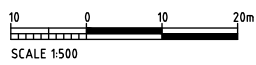
-CUT/+FILL DEPTH	0.000	0.000	0.000	0.000	0.000
EXISTING LEVEL	28.861	29.135	29.334	29.530	29.733
DESIGN LEVEL	28.861	29.135	29.334	29.530	29.733
STATION (MCOZ)	9140.0	9160.0	9180.0	9200.0	9220.0
VERTICAL GEOMETRY					
HORIZONTAL GEOMETRY	CL=65.000			R=-560.000 L=56.736	
SUPERELEVATION LEFT	3.649	5.016	6.534		
SUPERELEVATION RIGHT	-5.438	-6.308	-6.915		

LONG SECTION  
 SCALES - H 1: 500  
 V 1: 100

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



NOT FOR CONSTRUCTION

REV	A	SCHEME ASSESSMENT	JWM	MO	PP	18.10.13
		REVISIONS	DRN	CHK	APP	DATE

SURVEYED	-	-
DESIGNED	Barbara Browne	09/13
DRAWN	Joseph Mitchell	09/13
CAD REVIEW		
DESIGN CHECK		
DESIGN REVIEW		
APPROVED	<b>NOT APPROVED</b>	
PROF REGISTRATION:		

Client:

STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
 MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25

PLAN AND LONG SECTION  
 SHEET 7 OF 7

Status Stamp	SCHEME ASSESSMENT
Date Stamp	18.10.13
Scales	AS SHOWN
Drawing No.	80500902-01-0604-C207
Rev.	A

















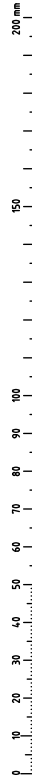




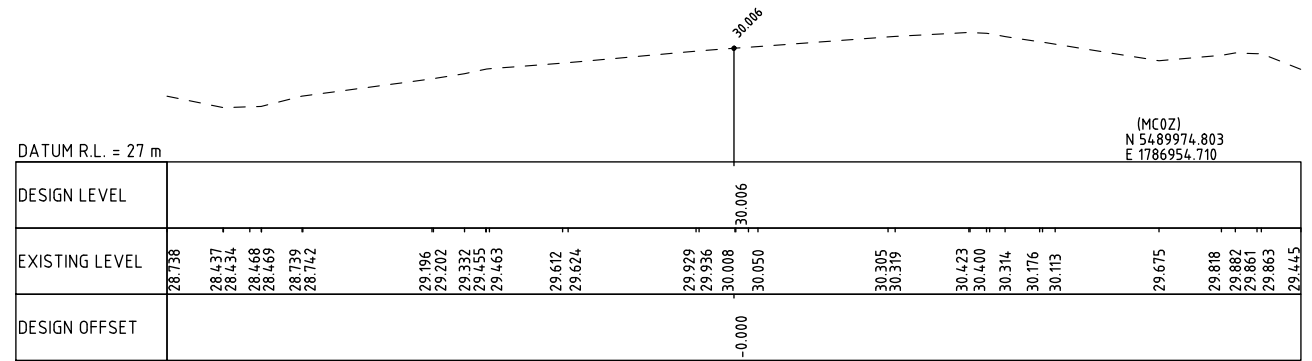




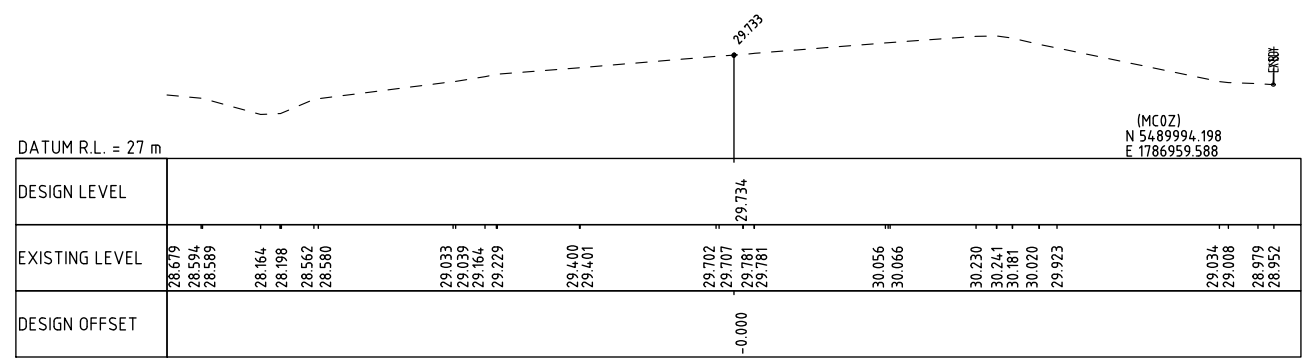
DO NOT SCALE - IF IN DOUBT, ASK



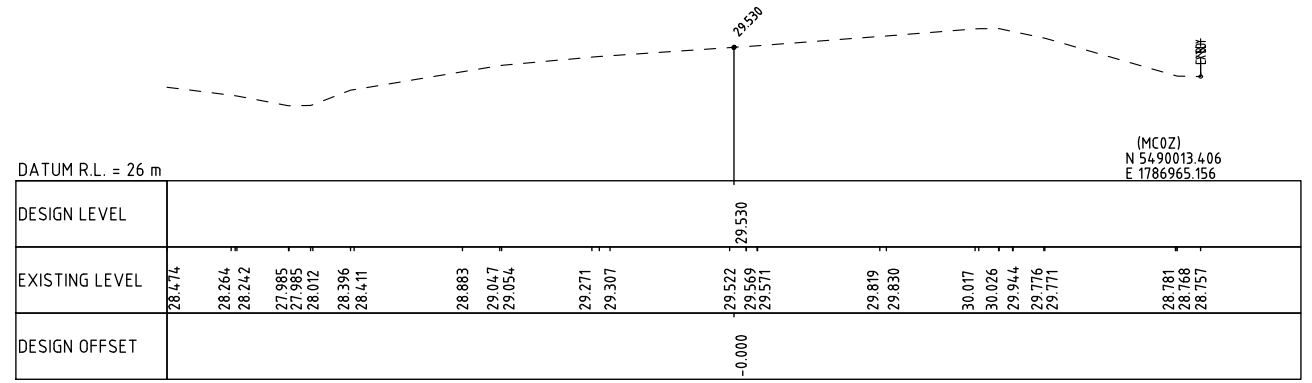
ORIGINAL SIZE A1



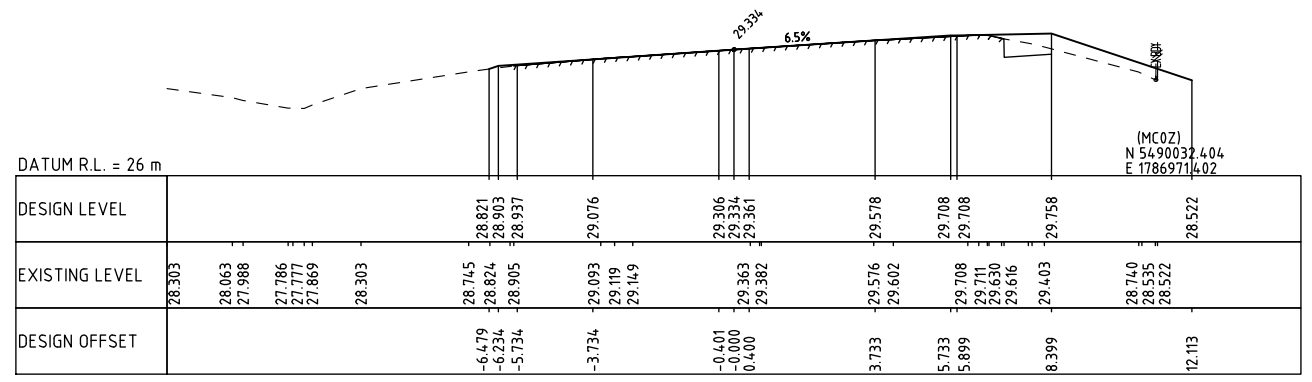
STATION 9240



STATION 9220



STATION 9200



STATION 9180

NOT FOR CONSTRUCTION

REV	A	SCHEME ASSESSMENT	JWM	MO	PP	18.10.13
		REVISIONS	DRN	CHK	APP	DATE

SURVEYED	-	-
DESIGNED	Barbara Browne	09/13
DRAWN	Joseph Mitchell	09/13
CAD REVIEW		
DESIGN CHECK		
DESIGN REVIEW	<b>NOT APPROVED</b>	
APPROVED		
PROF REGISTRATION:		

Client:

STATE HIGHWAY 1 - OTAKI TO NORTH OF LEVIN  
 MANAKAU VILLAGE SAR - RP 985/7.48 - RP 985/9.25

**CROSS SECTIONS**  
**SHEET 10 OF 10**

Status Stamp	<b>SCHEME ASSESSMENT</b>
Date Stamp	18.10.13
Scales	1 : 100
Drawing No.	80500902-01-0604-C 310
Rev.	A