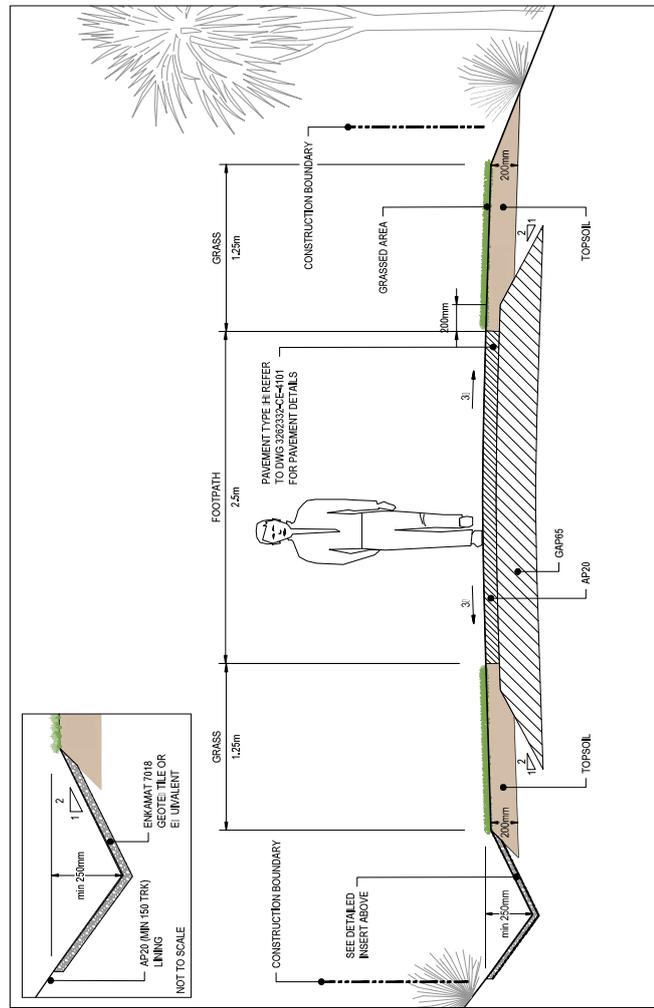
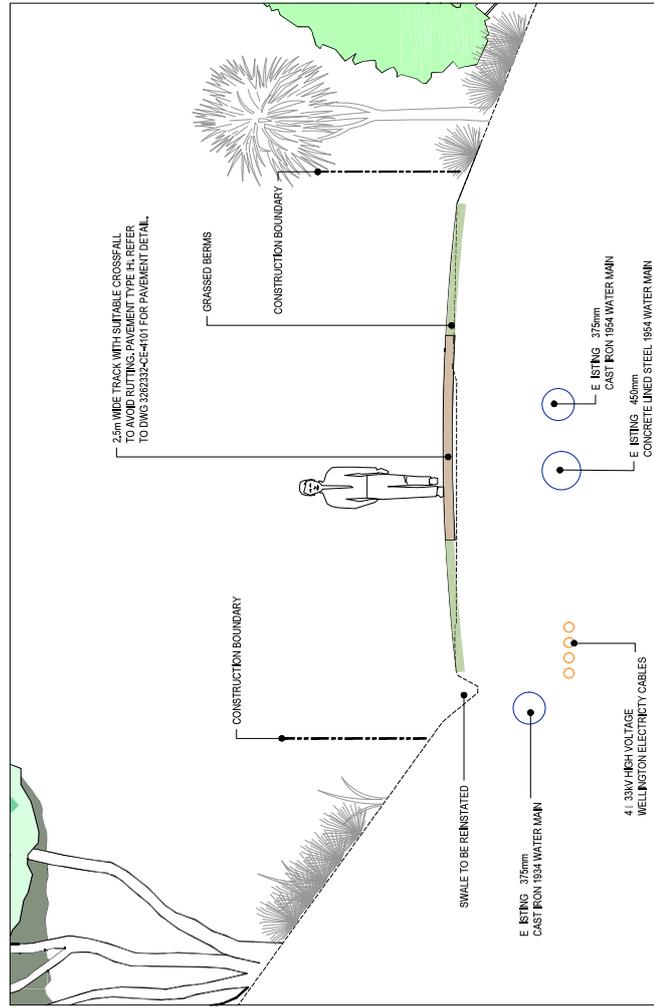


FIELD LINK ACCESS TRACK PLAN
SCALE 1:2001 A1



5 TYPICAL CROSS SECTION - LOWER LINK TRACK - FINAL TREATMENT DETAILED SECTION
1:201 A1



4 TYPICAL CROSS SECTION - LOWER LINK TRACK - FINAL TREATMENT GENERAL SECTION
NOT TO SCALE

LEGEND:

- 33kV ELECTRICITY CABLES
- WATER PIPE
- STORMWATER PIPE
- PAVEMENT TYPE H
- GRASSED AREA

NOTES:

1. GENERAL

1.1 ALL SERVICES TO BE LOCATED, MARKED OUT PRIOR TO CONSTRUCTION BEGINNING.

1.2 ALL TOPSOIL TO BE STRIPPED, DISPOSED OF PRIOR TO CONSTRUCTION BEGINNING.

HAZARD WARNING
BURIED 33kV ELECTRICITY CABLES CROSS TRACK ALIGNMENT. CONTRACTOR TO ACCURATELY LOCATE PRIOR TO BEGINNING WORKS.

FOR TENDER
NOT FOR CONSTRUCTION

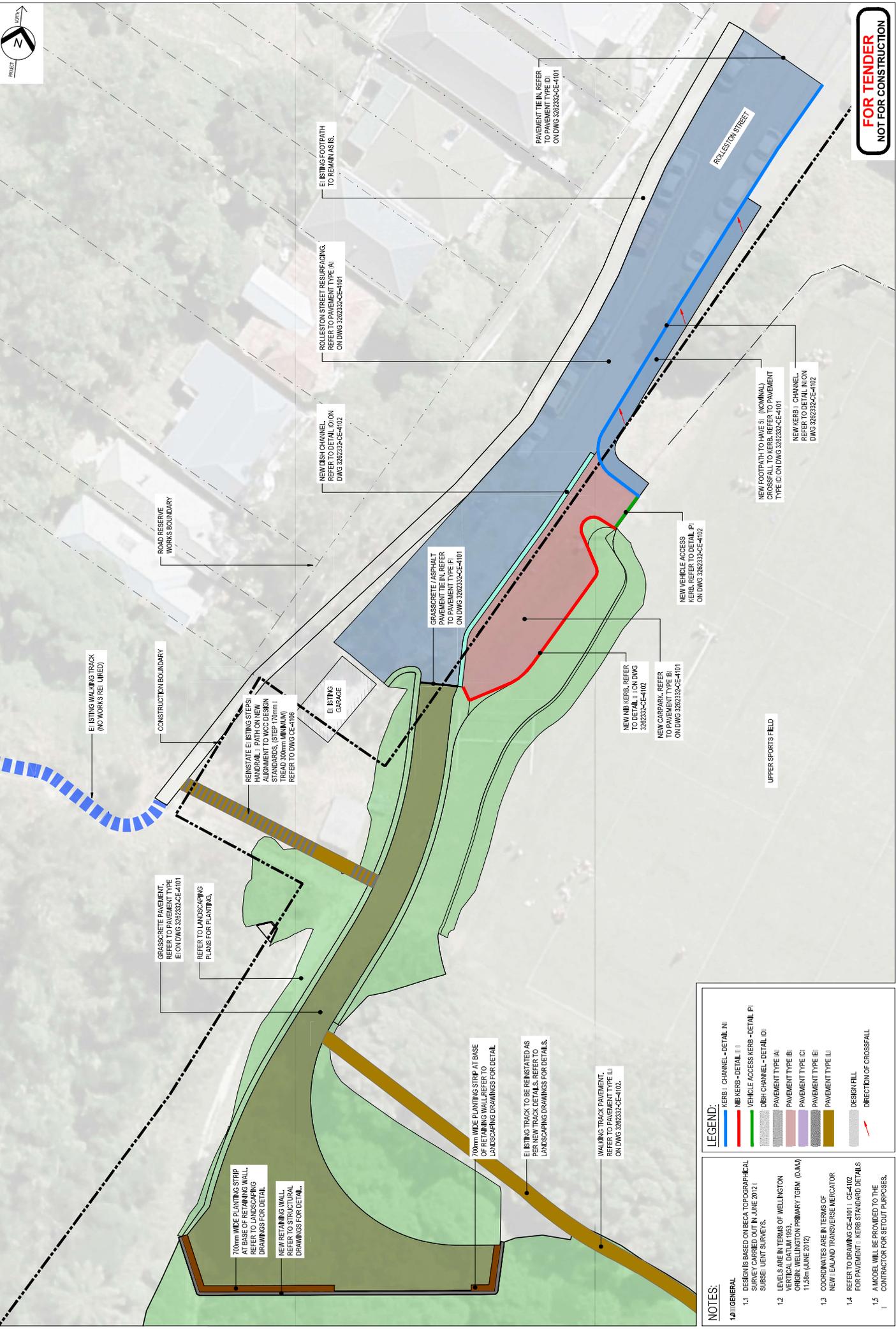
Project	OMARORO RESERVOIR
Client	Wellington Water
Discipline	CIVIL
Drawn By	3262332-CE-1603
Checked By	0
Scale	0

FIELD LINK ACCESS TRACK
FINAL WORKS
SHEET 1 OF 2

Discipline	Design	Checked	Approved
Electrical	R. HANCOCK	Z. SULLIVAN	Z. SULLIVAN
Civil	M. KALEAN	Z. SULLIVAN	Z. SULLIVAN
Water	M. KALEAN	Z. SULLIVAN	Z. SULLIVAN
Drainage	Z. SULLIVAN	Z. SULLIVAN	Z. SULLIVAN
Structural	Z. SULLIVAN	Z. SULLIVAN	Z. SULLIVAN
Other	Z. SULLIVAN	Z. SULLIVAN	Z. SULLIVAN

Drawn By: [Name] Date: [Date]
Checked By: [Name] Date: [Date]
Approved By: [Name] Date: [Date]

Project: OMARORO RESERVOIR
Client: Wellington Water
Discipline: CIVIL
Drawn By: 3262332-CE-1603
Checked By: 0
Scale: 0



**FOR TENDER
NOT FOR CONSTRUCTION**

Project No.	3262332-CE-4001
Discipline	CIVIL
Revision	0

ACCESS ROAD @ ROLLESTON ST
PAVEMENT PLAN

OMARORO RESERVOIR



Design	Check	Drawn	Checked	Approved
Author	Reviewer	Designer	Checker	Approver
15/05/19	15/05/19	15/05/19	15/05/19	15/05/19

Scale	1:500
Drawn	15/05/19
Checked	15/05/19
Approved	15/05/19

Issue No.	0
Issue Date	15/05/19
By	CE
Appr	CE
Date	15/05/19

LEGEND:

Blue line	KERB - CHANNEL - DETAIL IN
Red line	NEW KERB - DETAIL BI
Green line	VEHICLE ACCESS KERB - DETAIL PI
Blue hatched	DISH CHANNEL - DETAIL CI
Light blue	PAVEMENT TYPE AI
Light green	PAVEMENT TYPE BI
Light purple	PAVEMENT TYPE CI
Light yellow	PAVEMENT TYPE EI
Light orange	PAVEMENT TYPE LI
Grey	DESIGN FILL
Red arrow	DIRECTION OF CROSSFALL

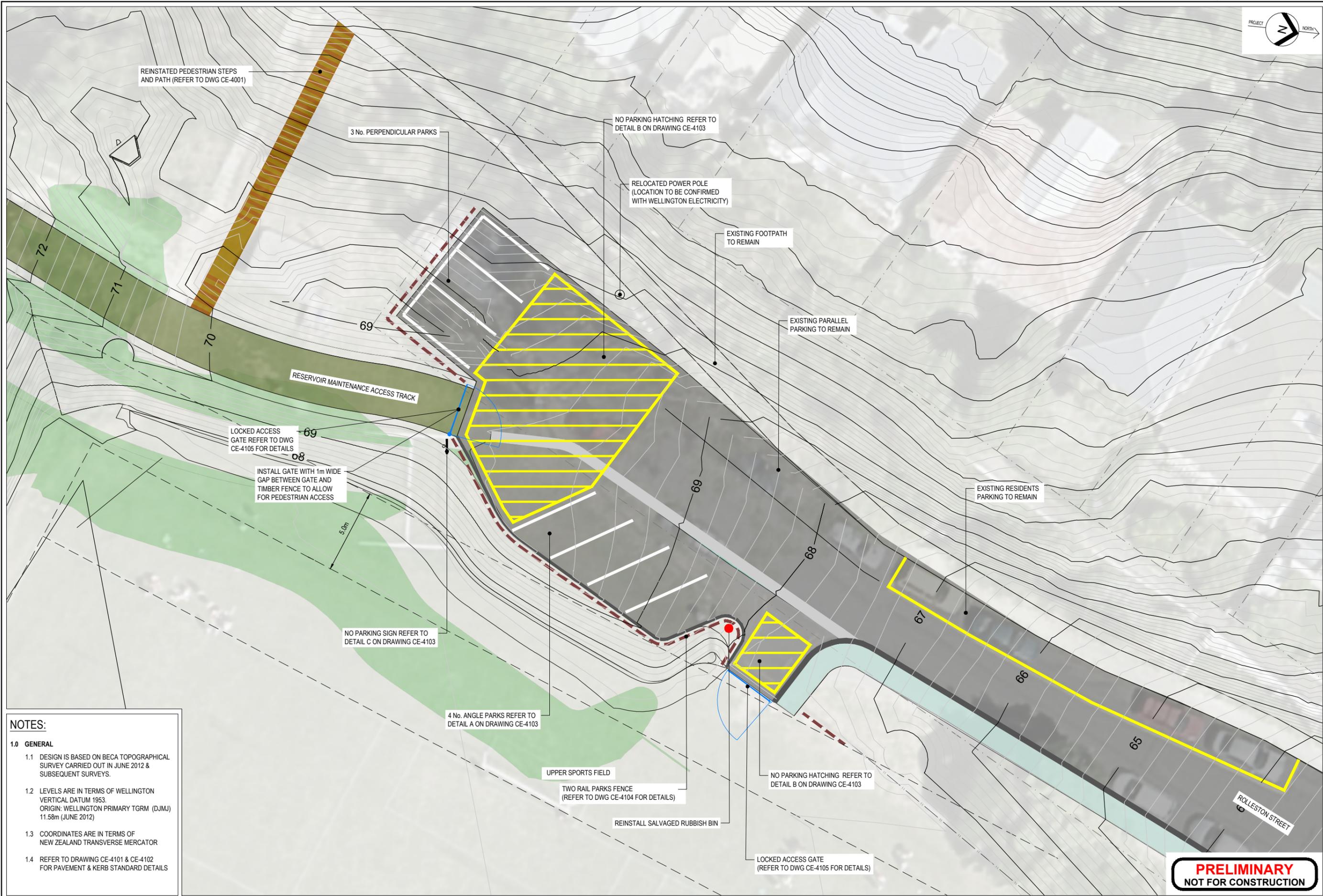
- NOTES:**
- DESIGNS BASED ON BECA TOPOGRAPHICAL SURVEY DATUM 1955, 17 JUNE 2017.
 - LEVELS ARE IN TERMS OF WELLINGTON VERTICAL DATUM 1955, 17 JUNE 2017.
 - COORDINATES ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR.
 - REFER TO DRAWING CE-4101.TI, CE-4102 FOR PAVEMENT KERB STANDARD DETAILS.
 - ALL MODEL WILL BE PROVIDED TO THE CONTRACTOR FOR SETOUT PURPOSES.



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Document No. P:\26\3262332\CAD\3262332-CK-4100.DWG



NOTES:

1.0 GENERAL

1.1 DESIGN IS BASED ON BECA TOPOGRAPHICAL SURVEY CARRIED OUT IN JUNE 2012 & SUBSEQUENT SURVEYS.

1.2 LEVELS ARE IN TERMS OF WELLINGTON VERTICAL DATUM 1953. ORIGIN: WELLINGTON PRIMARY TGRM (DJMJ) 11.58m (JUNE 2012)

1.3 COORDINATES ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR

1.4 REFER TO DRAWING CE-4101 & CE-4102 FOR PAVEMENT & KERB STANDARD DETAILS

PRELIMINARY
NOT FOR CONSTRUCTION

No.	Revision	By	Chk	Appd	Date
A	ISSUE FOR REVIEW	WM			09.12.19



Original Scale (A1)	Design	WM	09.12.19	Approved For Construction*
1:100	Drawn	WM	09.12.19	Date
Reduced Scale (A3)	Verifier			
1:200	Dwg Check			
	* Refer to Revision 1 for Original Signature			



Client: **OMARORO RESERVOIR**

Project: **ROLLESTON ST AREA SIGNAGE AND MARKING PLAN**

Discipline	CIVIL
Drawing No.	3262332-CK-4100
Rev.	A

GENERAL NOTES:

1.0 GENERAL

- 1.1 FOR PAVEMENT WIDENING CONSIDERATION NEEDS TO BE GIVEN TO THE FOLLOWING TO LESSEN THE LIKELIHOOD OF PREMATURE DISTRESS ALONG THE LONGITUDINAL JOINT AND IN ADJOINING PAVEMENT AREAS
- 1.2 IF APPROPRIATE AND WHERE POSSIBLE WIDENING SHOULD HAVE SIMILAR PAVEMENT STIFFNESS TO THE EXISTING PAVEMENT AS THIS WILL REDUCE THE LIKELIHOOD OF A CRACK DEVELOPING ALONG THE LONGITUDINAL JOINT.
- 1.3 WHERE APPROPRIATE AND WHERE POSSIBLE THE PERMEABILITY AND LAYER THICKNESS OF THE WIDENING AND EXISTING PAVEMENT SHOULD BE SIMILAR TO ASSIST THE DRAINAGE OF MOISTURE TO THE OUTER EDGE. IT IS ALSO DESIRABLE FOR THE SUBGRADE LEVEL OF THE WIDENING TO BE AT OR BELOW THE SUBGRADE LEVEL OF THE EXISTING PAVEMENT.

- 1.4 AS A CRACK MAY DEVELOP ALONG THE LONGITUDINAL JOINT CONSIDERATION NEEDS TO BE GIVEN TO WIDENING AND EXISTING PAVEMENTS WITH LOW SUBGRADE STIFFNESS. THIS INCLUDES THE PERMEABILITY AND LAYER THICKNESS OF THE WIDENING AND EXISTING PAVEMENT. DIFFERENCES IN PERMEABILITY AND LAYER THICKNESS OF THE WIDENING AND EXISTING PAVEMENT AS IT DRAINS TOWARDS THE OUTER EDGE ON THE LOW SIDE OF THE PAVEMENT. SUBSURFACE DRAINS IN TRAFFICKED PAVEMENT AREAS MAY BE LIKE A NOT-THICK CONCRETE BACKFILL TO REDUCE THE LIKELIHOOD OF FURTHER COMPACTION AND THEREFORE PAVEMENT DEFORMATION UNDER TRAFFIC.

- 1.5 THE STRUCTURAL COMPETENCY OF THE PAVEMENT AT LONGITUDINAL JOINTS IS GENERALLY NOT AS SOUND AS OTHER THINGS MAY BE DUE TO REDUCED COMPACTION LACK OF MOISTURE CURING AND THE LIKELIHOOD OF CRACKING AND DEFORMATION NEAR THE JOINT. WHERE APPROPRIATE AND PRACTICAL LONGITUDINAL JOINTS MAY BE OFFSET FROM ONE LAYER TO THE NEXT BY NOT LESS THAN 150 MM.

- 1.6 IT IS PREFERABLE TO LOCATE LONGITUDINAL JOINTS AWAY FROM THE WHEEL PATHS. CONSIDERATION SHOULD BE GIVEN TO LOCATING LONGITUDINAL JOINTS WITHIN 300 MM OF THE PLANNED POSITION OF TRAFFIC LANE LINES OR WITHIN 300 MM OF THE CENTRE OF A TRAFFIC LANE.

- 1.7 A GEOTE, TILE OR SAMMAY BE USEFUL IN DELAYING THE ONSET OF LONGITUDINAL CRACKING ALONG THE JOINT.

- 1.8 IF IT IS PROPOSED TO MILL THE ASPHALT THEN THE CHARACTERISTIC DEFLECTIONS AND CHARACTERISTIC CURVATURES BASED ON MEASUREMENTS TAKEN AT THE SURFACE OF THE EXISTING PAVEMENT NEED TO BE INCREASED TO ALLOW FOR THICKNESS OF ASPHALT REMOVED IN THE MILLING PROCESS. FOR MILLING DEPTHS UP TO 50 MM IT MAY BE ASSUMED DEFLECTIONS AND CURVATURES INCREASE BY ABOUT 15% AND 25% RESPECTIVELY FOR EACH 25 MM OF ASPHALT REMOVED. IF THE MILLING DEPTH EXCEEDS 50 MM IT IS RECOMMENDED THAT EITHER:

- 1.9 THE DEFLECTIONS BE MEASURED AFTER MILLING AND THESE DEFLECTIONS BE USED TO DESIGN THE OVERLAY REQUIREMENTS

- 1.10 GENERAL MECHANISTIC PROCEDURES FOR OVERLAY DESIGN ARE USED AS DESCRIBED IN SECTION 6.3 OF GUIDE TO PAVEMENT TECHNOLOGY PART 5 PAVEMENT EVALUATION AND TREATMENT DESIGN.

- 1.11 FOR INTERFACE BETWEEN NEW AND EXISTING PAVEMENTS EACH LAYER TO BE BENCHED 150mm INTO EXISTING MATERIAL.

- 1.12 WATERPROOF MEMBRANE TO BE INTACT AND UNIFORM. IF MILLING INTO UNBOUND MATERIAL GRADE 35 TWO COAT CHIPSEAL LAYER REQUIRED PRIOR TO FINAL SEAL LAYER.

- 1.13 WHERE PAVEMENT SURFACE BEING SCARIFIED REMOVE EXISTING SURFACE TO BASE COURSE LEVEL AND TIE IN PROPOSED EDGE OF SEAL TO NEW METAL SURFACE.

- 1.14 FOOTPATH BASECOURSE TO HAVE CLEGG CIV. 25.

- 1.15 AC JOINTS TO BE BANDAAGED.

- 1.16 NEW SEAL (AC) OVERLAY TO FINISH FLUSH WITH THE EXISTING TOP OF CHANNEL.

- 1.17 REFER TO STORMWATER 300 GRASSCRETE CAST IN SITU PAVING SYSTEM DESIGN AND SPECIFICATION GUIDE FOR MORE DETAIL ON GRASSCRETE PAVEMENT DETAIL. ALSO REFER TO STORMWATER 300 GRASSCRETE CAST IN SITU PAVING SYSTEM DESIGN AND SPECIFICATION GUIDE CHAPTER 2 PART 1 TABLE FOR MORE DETAILS ON GRASSCRETE SYSTEM SURFACING.

FOR TENDER
NOT FOR CONSTRUCTION

Drawn By	CIVIL
Drawn No.	3262332-CE-4101
Rev.	0

PAVEMENT DETAILS
SHEET 1 OF 2

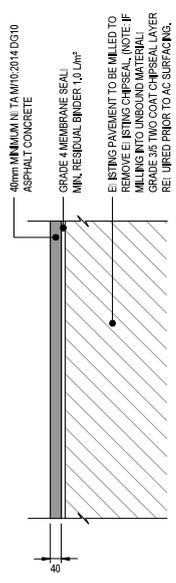
OMARORO RESERVOIR



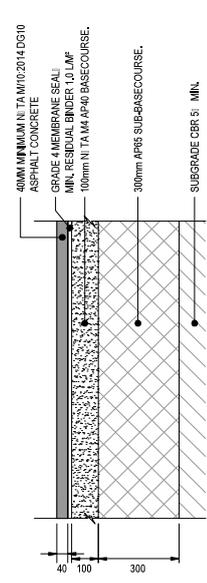
Design	Checked	Reviewed	Approved For Construction
DATE	DATE	DATE	DATE
DESIGNER	CHECKER	REVIEWER	APPROVER
DATE	DATE	DATE	DATE



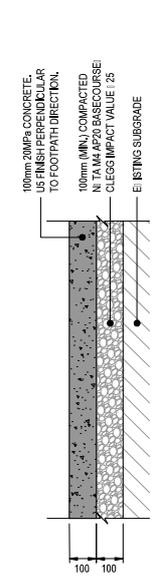
Project	OMARORO RESERVOIR
Client	Wellington Water
Drawn By	RM
Checked By	MM
Reviewed By	DC
Approved By	AP
Date	DATE



A PAVEMENT TYPE A - ROLLESTON STREET MILL INLAY (ASPHALT)
SCALE 1:10 (A1)

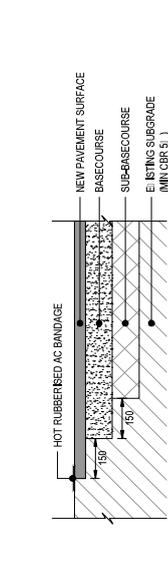


B PAVEMENT TYPE B - ROLLESTON STREET CARPARK
SCALE 1:10 (A1)

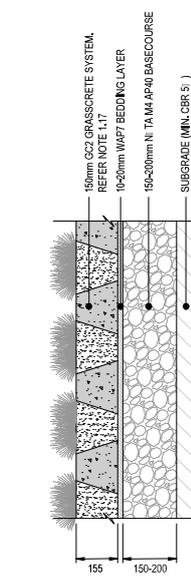


IF SCOPE OF WORK ONLY IMPACTS SURFACING LAYER NEW BASECOURSE CAN BE OMITTED IF EXISTING BASECOURSE LAYER HAS CIV. 25.

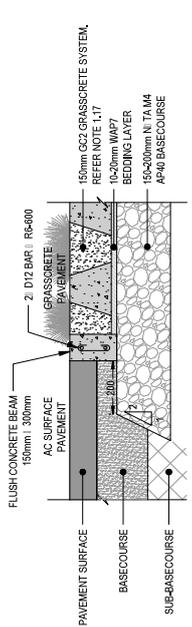
C PAVEMENT TYPE C - CONCRETE FOOTPATH
SCALE 1:10 (A1)



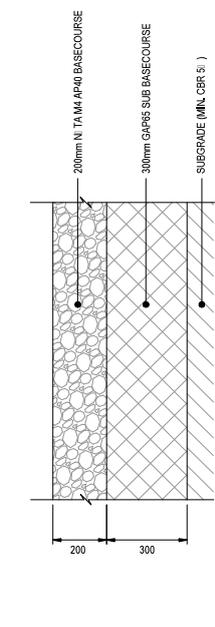
D PAVEMENT TYPE D - BENCHING JOINT DETAILS
SCALE 1:10 (A1)



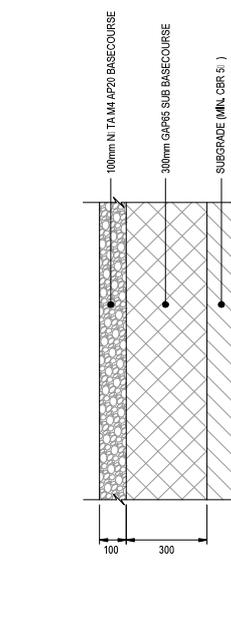
E PAVEMENT TYPE E - ACCESS ROAD GRASSCRETE
SCALE 1:10 (A1)



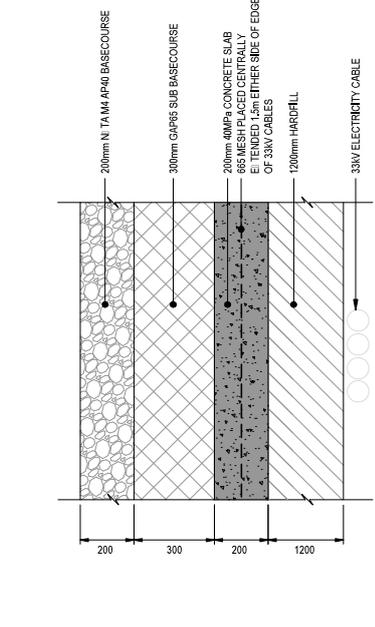
F PAVEMENT TYPE F - AC - GRASSCRETE TIE IN DETAIL
SCALE 1:10 (A1)



G PAVEMENT TYPE G - ACCESS LINK TRACK - TEMPORARY
SCALE 1:10 (A1)



H PAVEMENT TYPE H - ACCESS LINK TRACK - FINAL
SCALE 1:10 (A1)



I PAVEMENT TYPE I - ACCESS LINK TRACK (TEMPORARY) - WITH 33KV ELECTRICITY CABLE
SCALE 1:10 (A1)

GENERAL NOTES:

1.0001 A EMBEN

1.1 FOR PAVEMENT WIDENING CONSIDERATION NEEDS TO BE GIVEN TO THE FOLLOWING TO LESSEN THE LIKELIHOOD OF PREMATURE DISTRESS ALONG THE LONGITUDINAL JOINT AND IN ADJOINING PAVEMENT AREAS.

1.2 IF APPROPRIATE AND WHERE POSSIBLE WIDENING SHOULD HAVE SIMILAR PAVEMENT STIFFNESS TO THE EXISTING PAVEMENT AS THIS WILL REDUCE THE LIKELIHOOD OF A CRACK DEVELOPING ALONG THE LONGITUDINAL JOINT.

1.3 IF APPROPRIATE AND WHERE POSSIBLE THE PERMEABILITY AND LAYER THICKNESS OF THE WIDENING AND EXISTING PAVEMENT SHOULD BE SIMILAR TO ASSIST THE DRAINAGE OF THE PAVEMENT TO BEAT OR BELOW THE SUBGRADE LEVEL OF THE EXISTING PAVEMENT.

1.4 AS A CRACK MAY DEVELOP ALONG THE LONGITUDINAL JOINT CONSIDERATION NEEDS TO BE GIVEN TO HOW MECHANICAL LONGITUDINAL PAVEMENT JOINTS CAN BE USED TO DRAIN ANY MOISTURE ENTERING THE PAVEMENT. SUCH DRAINAGE MAY ALSO BE REQUIRED WHERE THE PERMEABILITY AND LAYER THICKNESS OF THE WIDENING AND EXISTING PAVEMENT DIFFER AS SUCH DIFFERENCES MAY LEAD TO MOISTURE ACCUMULATING AT THE INTERFACE AS IT DRAINS TOWARDS THE OUTER EDGE ON THE LOW SIDE OF THE PAVEMENT. SUBSURFACE DRAINING IN TRAFFICED PAVEMENT AREAS MAY REQUIRE A FINES CONCRETE DRAINAGE COURSE TO BE USED TO OBTAIN FURTHER COMPACTION AND THEREFORE PAVEMENT DEFORMATION UNDER TRAFFIC.

1.5 THE STRUCTURAL COMPETENCY OF THE PAVEMENT AT LONGITUDINAL JOINTS IS GENERALLY LOWER THAN THAT OF THE PAVEMENT BETWEEN JOINTS. THIS IS DUE TO THE AGGREGATE INTERLOCK OR MATERIAL SEGREGATION AND MAY LEAD TO CRACKING AND DEFORMATION NEAR THE JOINT, WHERE APPROPRIATE AND PRACTICAL LONGITUDINAL JOINTS MAY BE OFFSET FROM ONE LAYER TO THE NEXT BY NOT LESS THAN 150 MM.

1.6 IT IS PREFERABLE TO LOCATE LONGITUDINAL JOINTS AWAY FROM THE WHEEL PATHS. CONSIDERATION SHOULD BE GIVEN TO LOCATING LONGITUDINAL JOINTS WITHIN 300 MM OF THE PLANNED POSITION OF TRAFFIC LANE LINES OR WITHIN 300 MM OF THE CENTRE OF A TRAFFIC LANE.

1.7 A GEOTE TILE OR SAMI MAY BE USEFUL IN DELAYING THE ONSET OF LONGITUDINAL CRACKING ALONG THE JOINT.

1.8 IF IT IS PROPOSED TO MILL THE ASPHALT THEN THE CHARACTERISTIC DEFLECTIONS AND CHARACTERISTIC CURVATURES BASED ON MEASUREMENTS TAKEN AT THE SURFACE OF THE EXISTING PAVEMENT NEED TO BE INCREASED TO ALLOW FOR THICKNESS OF ASPHALT REMOVED IN THE MILLING PROCESS. FOR MILLING DEPTHS UP TO 50 MM IT MAY BE ASSUMED DEFLECTIONS AND CURVATURES INCREASE BY ABOUT 15% AND 25% RESPECTIVELY FOR MILLING DEPTHS GREATER THAN 50 MM. IF THE MILLING DEPTH EXCEEDS 50 MM IT IS RECOMMENDED THAT EITHER:

1.9 THE DEFLECTIONS BE MEASURED AFTER MILLING AND THESE DEFLECTIONS BE USED TO DESIGN THE OVERLAY REQUIREMENTS

1.10 GENERAL MECHANISTIC PROCEDURES FOR OVERLAY DESIGN ARE USED AS DESCRIBED IN SECTION 4.3.3.3 OF THE GUIDE TO PAVEMENT TECHNOLOGY PART 3: PAVEMENT EVALUATION AND TREATMENT DESIGN.

1.11 FOR INTERFACE BETWEEN NEW AND EXISTING PAVEMENTS EACH LAYER TO BE BENCHED 150mm INTO EXISTING MATERIAL.

1.12 WATERPROOF MEMBRANE TO BE INTACT AND UNIFORM IF MILLING INTO UNBOUND MATERIAL GRADE AS TWO COAT CHIP SEAL LAYER REQUIRED PRIOR TO FINAL SEAL LAYER.

1.13 WHERE PAVEMENT SURFACE IS BEING SCARIFIED REMOVE EXISTING SURFACE TO BASE COURSE LEVEL AND TIE IN PROPOSED EDGE OF SEAL TO NEW METAL SURFACE.

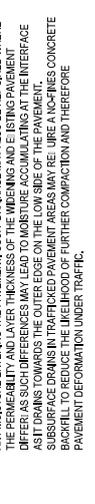
1.14 FOOTPATH BASE COURSE TO HAVE CLEGG CIV 25.

1.15 AC JOINTS TO BE BANDAIDED.

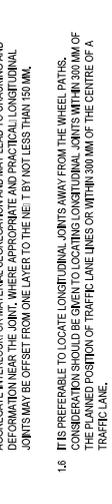
1.16 NEW SEAL (AC) OVERLAY TO FINISH FLUSH WITH THE EXISTING TOP OF CHANNEL.

1.17 REFER TO STORMWATER 360 GRASSCOTE CAST IN SITU PAVING SYSTEM DESIGN AND SPECIFICATION GUIDE CHAPTER 2 PART 6 TABLE FOR MORE DETAILS ON GRASSCOTE SYSTEM SURFACING.

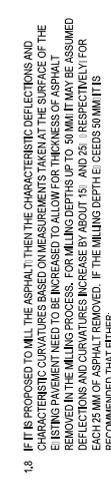
PAVEMENT TYPE L - WALKING TRACK DETAIL



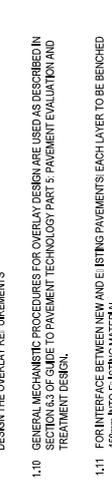
PAVEMENT TYPE M - CRANE TURNING AREA



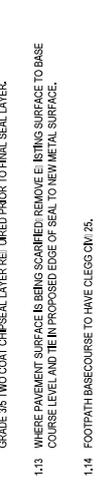
STANDARD KERB AND CHANNEL



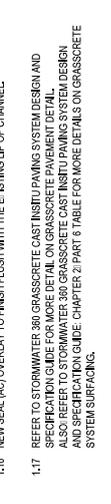
STANDARD CARRIAGEWAY DISHED CHANNEL



VEHICLE ACCESS KERB



TYPICAL MONOSLOPE CUT / FILL FORMATION



EDGEBOARD FORMATION



FOR TENDER NOT FOR CONSTRUCTION

Project: OMARORO RESERVOIR

Client: Wellington Water

Drawn: RAJALEAN ZAVALLIS

Checked: B. STEVEN ZAVALLIS

Design Date: 15/06/19

Issue Date: 15/06/19

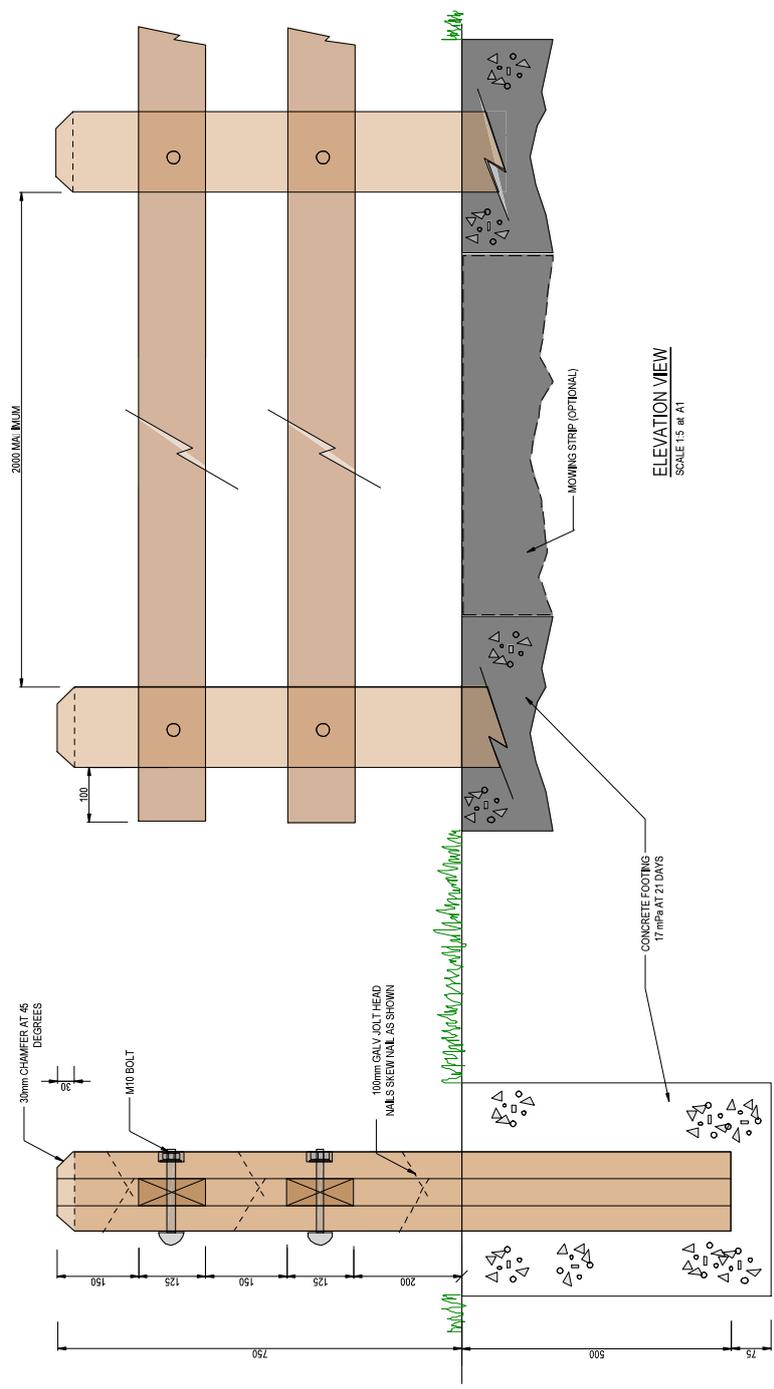
Scale: 1:10 (A1)

Drawn	Checked	Approved
RAJALEAN ZAVALLIS	B. STEVEN ZAVALLIS	
Design Date	Issue Date	Scale
15/06/19	15/06/19	1:10 (A1)

Project	OMARORO RESERVOIR
Client	Wellington Water
Drawn	RAJALEAN ZAVALLIS
Checked	B. STEVEN ZAVALLIS
Design Date	15/06/19
Issue Date	15/06/19
Scale	1:10 (A1)

NOTES:

- 1.0 GENERAL
- 1.1 150 x 50 H4 ROUGH SAWN PINE TO CREATE POSTS.
 - 1.2 125 x 50 H4 ROUGH SAWN PINE FOR RAILS.
 - 1.3 M10 GALV ROUND HEAD BOLTS TO HOLD RAILS; COUNTER SINK NUT AND WASHER END.
 - 1.4 MOWING STRIP MAY BE REQUIRED IN GRASSED AREAS.
 - 1.5 CONTRACTOR TO VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.



SECTION VIEW
SCALE: 1:5 at A1

ELEVATION VIEW
SCALE: 1:5 at A1

DRAWING SOURCED FROM WCC

FOR TENDER
NOT FOR CONSTRUCTION

Disc No.	CIVIL
Drawn No.	3262332-CE-4104
Rev.	0

TWO RAIL PARKS FENCE
STANDARD DETAIL

OMARORO RESERVOIR

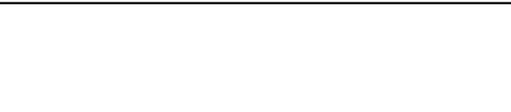
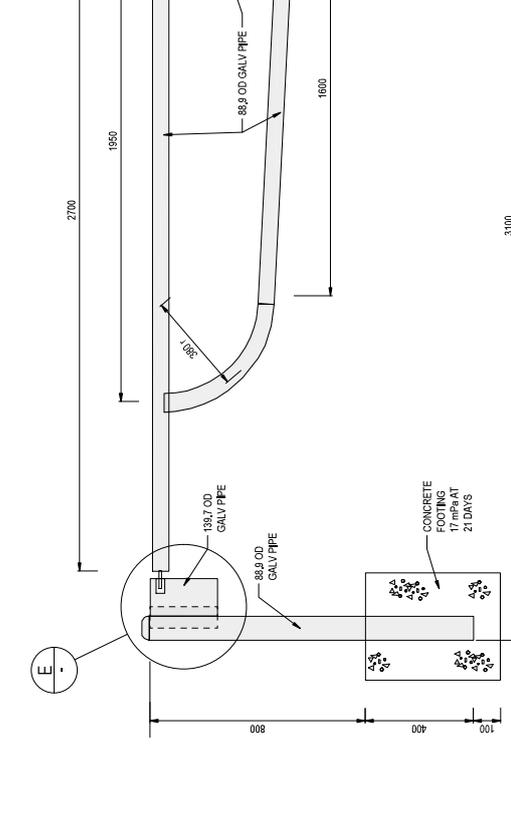
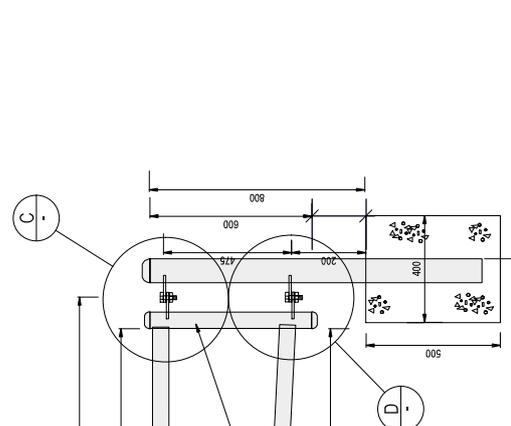
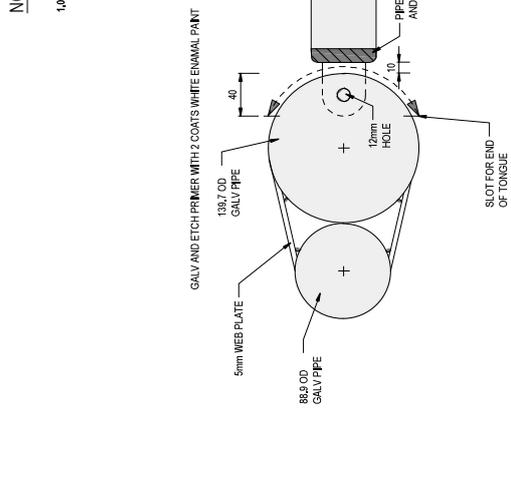


Drawn	Checked	Approved For Construction
Design	Checked	Approved
Drawn	Checked	Approved
Revised	Checked	Approved
Revised	Checked	Approved



No.	Revision	By	Check	Date
0	ISSUE FOR TENDER	RM	MM	DD

NOTES:
 1.0 GENERAL
 1.1 CONTRACTOR TO VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION



A STANDARD VEHICLE GATE ELEVATION VIEW
 SCALE 1:10 (A1)

B STANDARD VEHICLE GATE PADLOCK ENCLOSURE PLAN VIEW
 SCALE 1:2.5 (A1)

C STANDARD VEHICLE GATE TOP SWIVEL HINGE
 SCALE 1:2.5 (A1)

D STANDARD VEHICLE GATE BOTTOM SWIVEL HINGE
 SCALE 1:2.5 (A1)

FOR TENDER
NOT FOR CONSTRUCTION

STANDARD VEHICLE GATE PADLOCK ENCLOSURE ELEVATION VIEW
 SCALE 1:2.5 (A1)

STANDARD VEHICLE GATE TOP SWIVEL HINGE
 SCALE 1:2.5 (A1)

STANDARD VEHICLE GATE BOTTOM SWIVEL HINGE
 SCALE 1:2.5 (A1)

DRAWING SOURCED FROM WCC

Project	OMARORO RESERVOIR
Client	Wellington Water
Design	RAJAPATIRAJA
Drawn	RAJAPATIRAJA
Checked	MUMUKSHU
Approved	RAJAPATIRAJA
Date	15/05/19
Scale	1:2.5 (A1)
Sheet	0

Beca

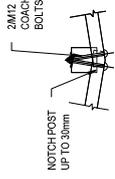
WELLINGTON WATER

FOR TENDER
NOT FOR CONSTRUCTION

CIVIL
 3262332-CE-4105

NOTES

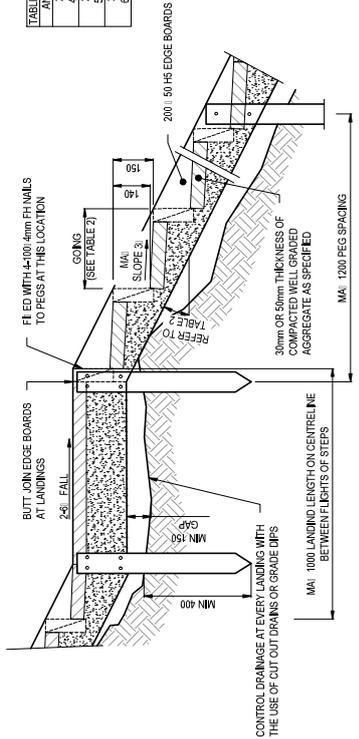
- 1.1 DETAILS SOURCED FROM WCC
- 1.2 PROVIDE A LANDING EVERY MA: 12 STEPS.
- 1.3 LANDING SHALL CONSIST OF AT LEAST 900mm LEVEL STEP.
- 1.4 ALL TIMBER TO BE HS TREATED.
- 1.5 STEPS SHALL HAVE UNIFORM LENGTH AND RISER HEIGHT WITHIN EACH FLIGHT BETWEEN LANDINGS.



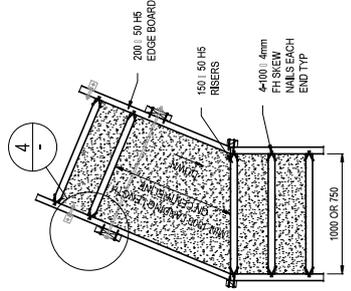
SPLICE DETAIL AT DIRECTION CHANGE



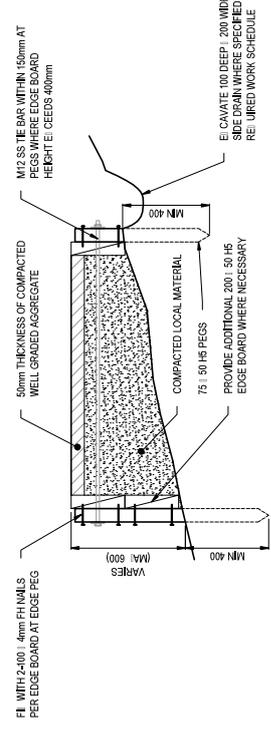
TABLE 2- STEP GEOMETRY	
ANGLE	GOING
22	375
27	300
50	50
31	60



1. TYPICAL BOILED STEP ELEVATION
SCALE 1:10 (A1)

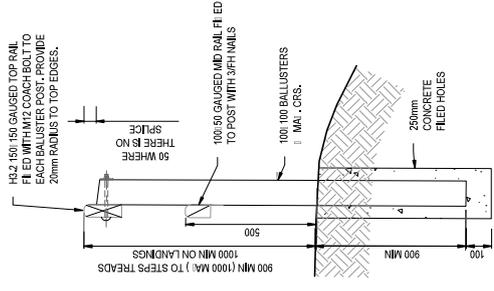


3. PART PLAN ON BOILED STEPS
SCALE 1:10 (A1)

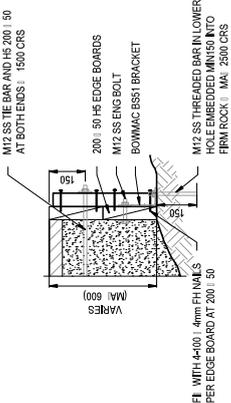


2. TYPICAL SECTION ON BOILED STEPS
SCALE 1:10 (A1)

SPLICE DETAIL AT GRADE CHANGE (ANGLE TO SUIT)



7. HANDRAIL DETAILS
SCALE 1:10 (A1)



4. ROCK FILLING DETAIL
SCALE 1:10 (A1)

FOR TENDER
NOT FOR CONSTRUCTION

	Wellington Water		Beca		
Client	Project	Drawn	Checked	Reviewed	Approved For Construction
OMARORO RESERVOIR	STANDARD BO: TIMBER STEPS	W.MARCOCK	M.MARCOCK	S.DOVON	S.DOVON
Project No. 3262332-CE-4106	Disc No. CIVIL	Drawn Date 15/05/19	Checked Date 15/05/19	Reviewed Date 15/05/19	Approved Date 15/05/19
Drawn By	Checked By	Reviewed By	Approved By	Date	
RM	MM	DC	AS		
By	Chk	Appr	Date		
No.	Revision				