



SHEET INDEX

Dwg 100	Overall Site Plan 1:250
Dwg 200	Earthworks Plan 1:250
Dwg 203	Retaining Wall Elevations
Dwg 210	Silt fence detail
Dwg 211	Stabilised entrance detail
Dwg 300	Accessway Longsections
Dwg 301	Section X-X
Dwg 310	Standard details
Dwg 400	Stormwater Site Plan 1:250
Dwg 410	Stormwater Longsections
Dwg 500	Wastewater Site Plan 1:250
Dwg 510	Wastewater Longsection
Dwg 511	Standard Details SW22,WW54

NOTE

ALL PROPOSED PUBLIC DRAINAGE REQUIRES ENGINEERING APPROVAL.

ALL PRIVATE DRAINAGE, DETENTION TANKS & RETAINING WALLS REQUIRE BUILDING CONSENT.

PRE-POUR & POST-POUR INSPECTIONS OF ACCESSWAY REQUIRED BY DESIGN ENGINEER

PROPOSED VEHICLE CROSSING REQUIRES VEHICLE CROSSING APPROVAL.

WATERCARE WORKS-OVER APPROVAL REQUIRED FOR WORKS WITHIN 2m OF WATERCARE ASSETS



BUN60373701

Approved Resource Consent Plan

12/01/2022

NOTES

ALL WORK TO BE CARRIED OUT TO AUCKLAND COUNCIL & WATERCARE SERVICES ENGINEERING STANDARDS & STAMPED APPROVED PLANS.

CONTRACTOR TO LOCATE ALL SERVICES PRIOR TO COMMENCEMENT OF WORK.

NO DEVIATION FROM THESE ENGINEERING PLANS WITHOUT PRIOR WRITTEN APPROVAL FROM THE DESIGN ENGINEER.

STORMWATER, WASTEWATER AND WATERMAIN CONNECTIONS SHALL BE INSTALLED BY AN AUCKLAND COUNCIL & WATERCARE SERVICES APPROVED LICENSED CONTRACTOR AT THE APPLICANTS EXPENSE.

CONTRACTOR TO CONFIRM ALL DIMENSIONS ON SITE.

BOTH CONTRACTORS AND CONSULTANTS ARE TO TAKE ALL NECESSARY CARE AND PRECAUTION AT THE CONSTRUCTION SITE TO AVOID ACCIDENT AND INJURY FROM FALLING INTO EXCAVATIONS, CRUSHING BY SUBSIDING EXCAVATIONS AND THE MOVEMENT OF PLANT AND MATERIALS ON THE SITE.

THE CONTRACTOR SHALL PROVIDE SAFETY SHIELD OR EQUIVALENT SAFETY MEASURES FOR WORKS AREA DEEPER THAN OR EQUAL TO 1.5m TO COMPLY WITH WORKSAFE NEW ZEALAND.

CONTOURS AND MEASUREMENTS HAVE BEEN PROVIDED FOR ENGINEERING PURPOSES ONLY AND SHOULD NOT BE USED FOR TOWN PLANNING PURPOSES.

PILOT ALL SERVICES AND EXISTING DRAINAGE LINES PRIOR TO INSTALLATION OF NEW DRAINAGE LINES.

ANY DRAINAGE LINES ENCOUNTERED ON SITE DURING CONSTRUCTION NOT SHOWN ON THE ENGINEERING PLANS MUST BE REFERRED TO THE DESIGN ENGINEER.

LEVELS IN TERMS OF LANDS & SURVEY DATUM 1946.

ALL PUBLIC WASTEWATER MANHOLES TO BE 1050Ø RC WITH 600Ø HINGED LID AND SAFETY GRILLE UNLESS SHOWN OTHERWISE.

ALL PUBLIC STORMWATER MANHOLES TO BE 1050Ø RC WITH 600Ø HINGED LID UNLESS SHOWN OTHERWISE.

ALL PRECAST CONCRETE WASTEWATER MANHOLES TO BE THICKWALLED (WITH A 25mm SACRIFICIAL LAYER) OR HAVE APPROVED PE/PVC LINING AS PER WATERCARE MATERIAL SUPPLY STANDARD 14.8.4(H).

ALL SW & WW CONNECTIONS TO BE 100Ø uPVC SN16 UNLESS SHOWN OTHERWISE.

ALL 100Ø WW LOT CONNECTIONS TO BE FACTORY WYE JUNCTIONS (SN16 RATING).

ALL 100Ø WW LOT CONNECTIONS TO BE INSTALLED AT MIN. 30° INCOMING ANGLE FROM HORIZONTAL (MAX. 60°) PER WW15. INSTALL PLAIN BEND AT END OF WYE JUNCTION IF NECESSARY.

KINGUSSIE PLACE

SITE PLAN
1:250

Design	PS
Survey	SURVPLANZ
Drawn	LFP
Checked	PS
Date	22/02/2021
Scale	A3 1:250 (13 SHEETS)
CAD Filename	
© Copyright 2001	Airey Consultants Ltd

FINAL

Job Title.
**PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK**

RESOURCE CONSENT



Drawing Title.
SITE PLAN

File No.
200636/1

Rev.
2

Dwg. No.
100

No.	Revision Details	Date	No.	Revision Details	Date
2	RETAINING WALLS REVISED	14/12/2021			
1	PROPOSED BUILDINGS REVISED TO 13 LOTS	6/08/2021			



BUN60373701

Approved Resource Consent Plan

12/01/2022

EARTHWORKS AREA: 1350m²

EARTHWORKS VOLUMES:

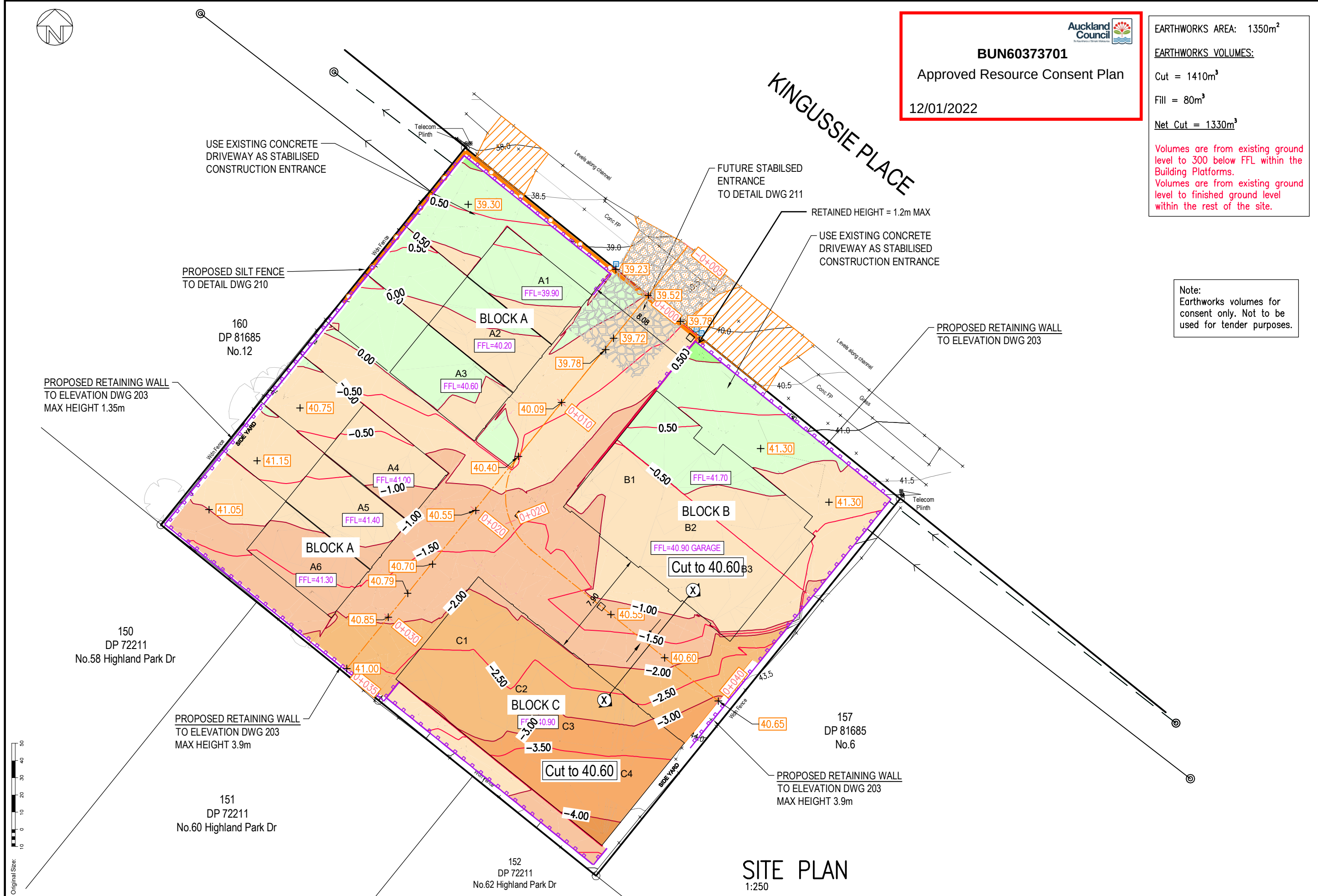
Cut = 1410m³

Fill = 80m³

Net Cut = 1330m³

Volumes are from existing ground level to 300 below FFL within the Building Platforms.
Volumes are from existing ground level to finished ground level within the rest of the site.

Note:
Earthworks volumes for consent only. Not to be used for tender purposes.



Design PS
Survey SURVPLANZ
Drawn LFP
Checked PS
Date 22/02/2021
Scale A3 1:250
CAD Filename
© Copyright 2001 Airey Consultants Ltd

Job Title
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

AIREY
CONSULTANTS LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takapuna, Botany, Queenstown

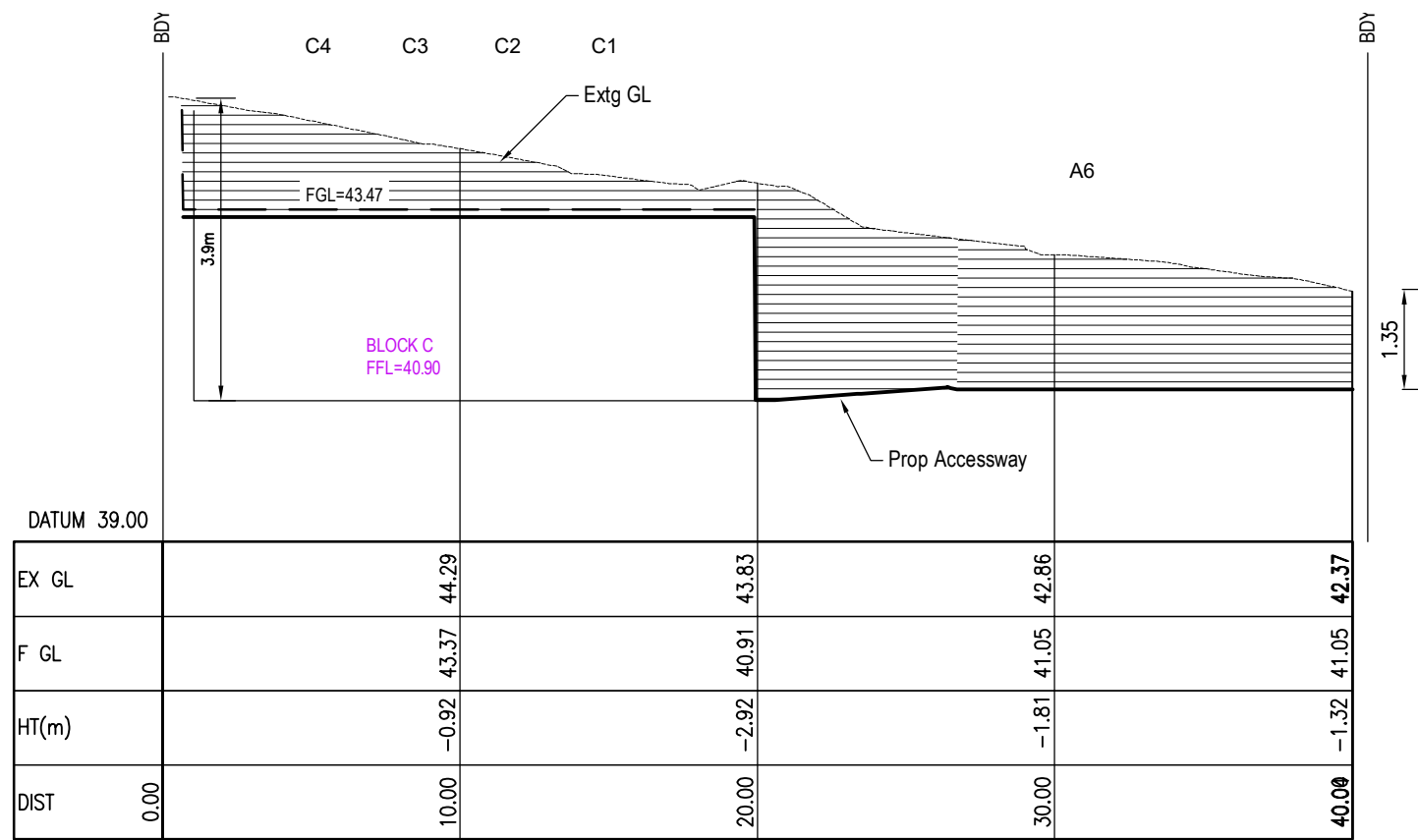
Drawing Title
SITE PLAN - EARTHWORKS
File No.
200636/1
Rev.
2
Dwg. No.
200

No.	Revision Details	Date	No.	Revision Details	Date
2	RETAINING WALLS & EW VOLUMES REVISED	14/12/2021			
1	PROPOSED BUILDINGS REVISED TO 13 LOTS	6/08/2021			

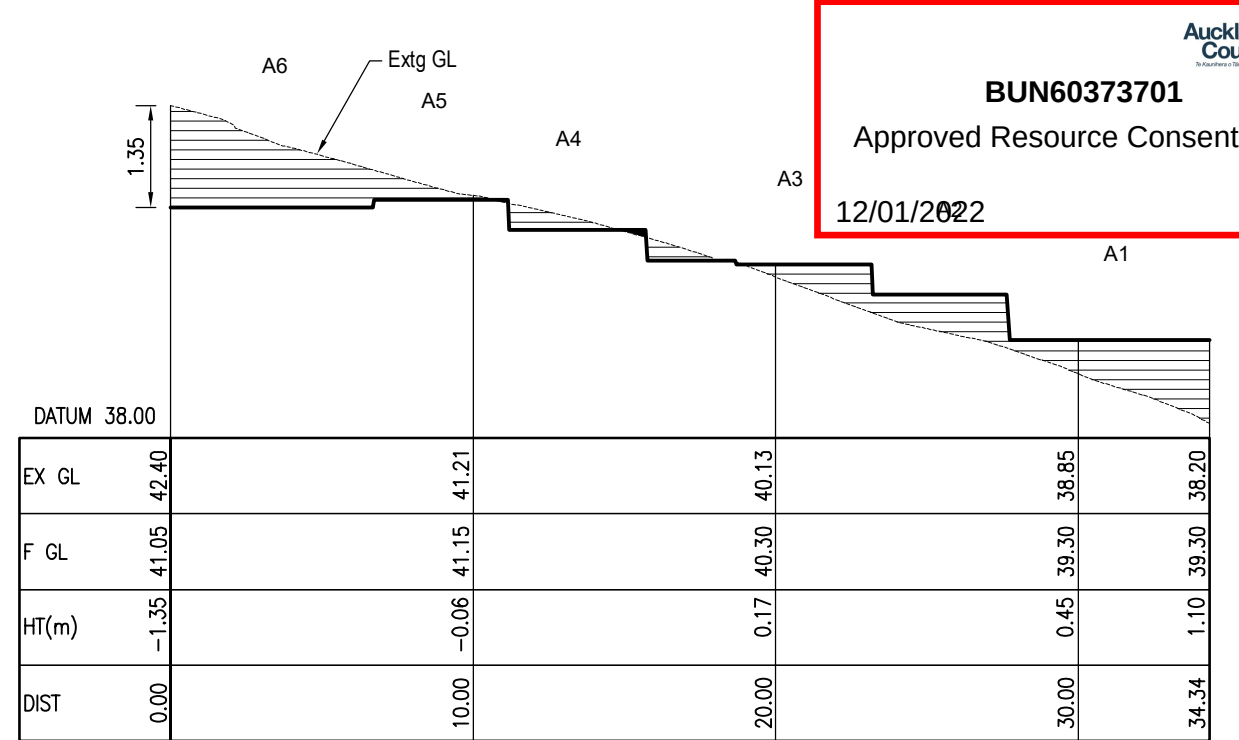
FINAL

RESOURCE CONSENT

J:\200636\200636 LINK2_8-10 KINGUSSIE PLACE WORKING DRAWINGS\8-10 KINGUSSIE PLACE 200636-1.dwg, 14/12/2021 2:53:51 PM, PDF-XChange for Acrobat Pro

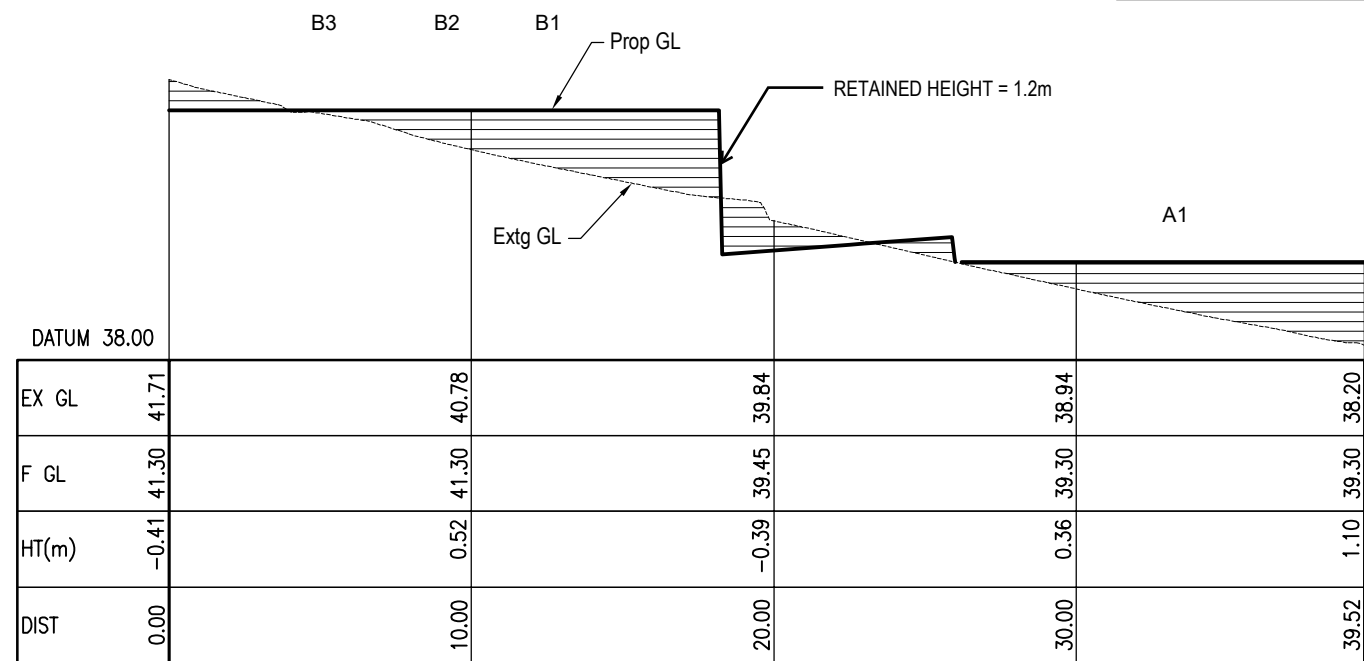


SOUTH BDY RETAINING WALL ELEVATION
VERT 1:100
HORIZ 1:250
(VIEWED FROM INSIDE No. 8-10 KINGUSSIE PL)

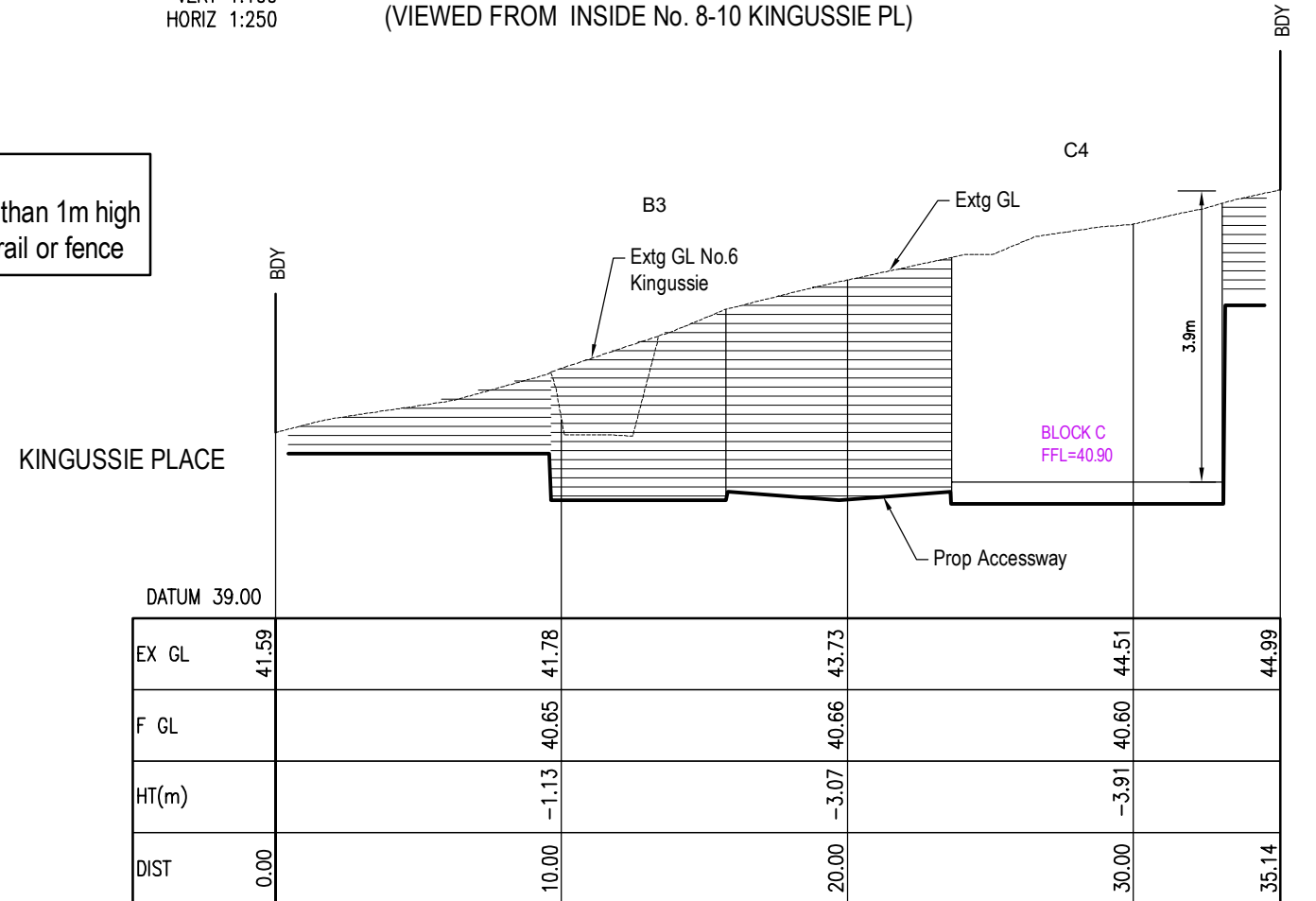


WEST BDY RETAINING WALL ELEVATION
VERT 1:100
HORIZ 1:250
(VIEWED FROM INSIDE No. 8-10 KINGUSSIE PL)

Note:
Retaining walls greater than 1m high
to have approved handrail or fence



NORTH BDY RETAINING WALL ELEVATION
VERT 1:100
HORIZ 1:250
(VIEWED FROM THE ROAD RESERVE)



EAST BDY RETAINING WALL ELEVATION
VERT 1:100
HORIZ 1:250
(VIEWED FROM INSIDE No. 8-10 KINGUSSIE PL)

Design PS
Survey SURVPLANZ
Drawn LFP
Checked PS
Date 22/02/2021
Scale A3 AS SHOWN
CAD Filename
© Copyright 2001 Airey Consultants Ltd

FINAL

Job Title:
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

AIREY
CONSULTANTS LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takapuna, Botany, Queenstown

Drawing Title:
RETAINING WALL ELEVATIONS
File No.
200636/1
Rev.
2
Dwg. No.
203

RESOURCE CONSENT

J:\200603\200636 LINK2_8-10 Kingussie\CAD\WORKING DRAWINGS\8-10 KINGUSSIE PL 200636-1.dwg, 14/12/2021 2:23:37 PM, PDF-XChange for Acrobat Pro

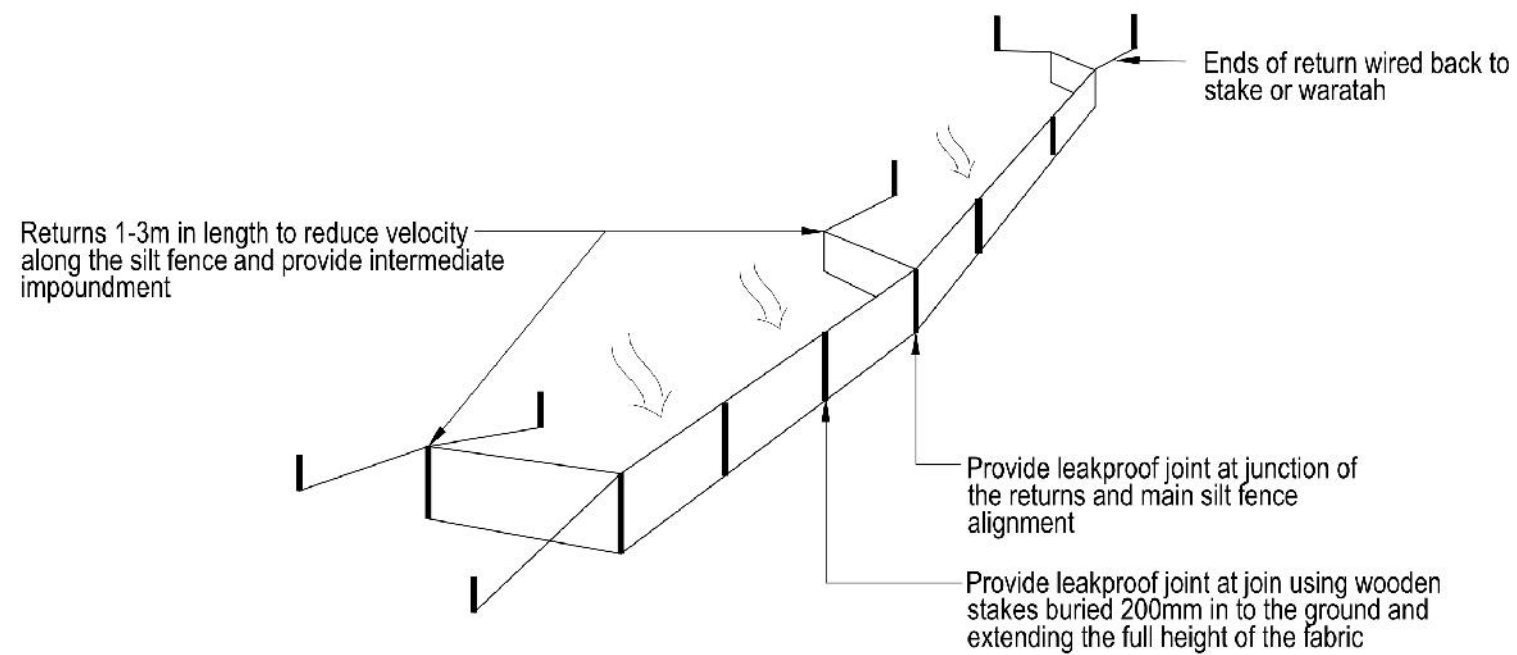
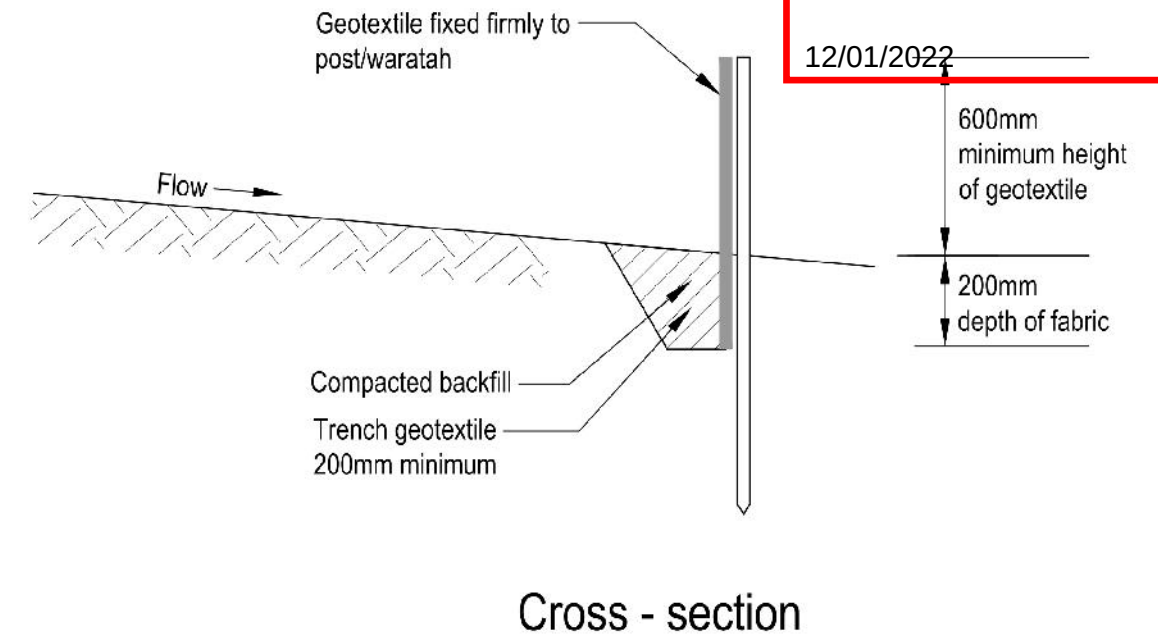
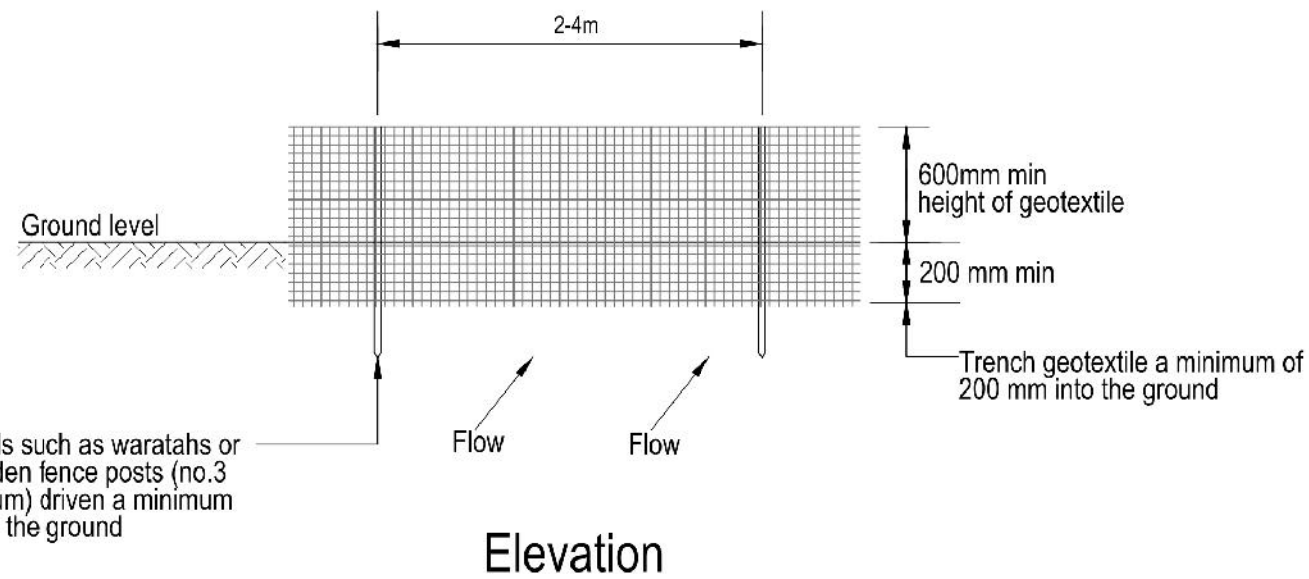


Figure 82: Schematic of a silt fence

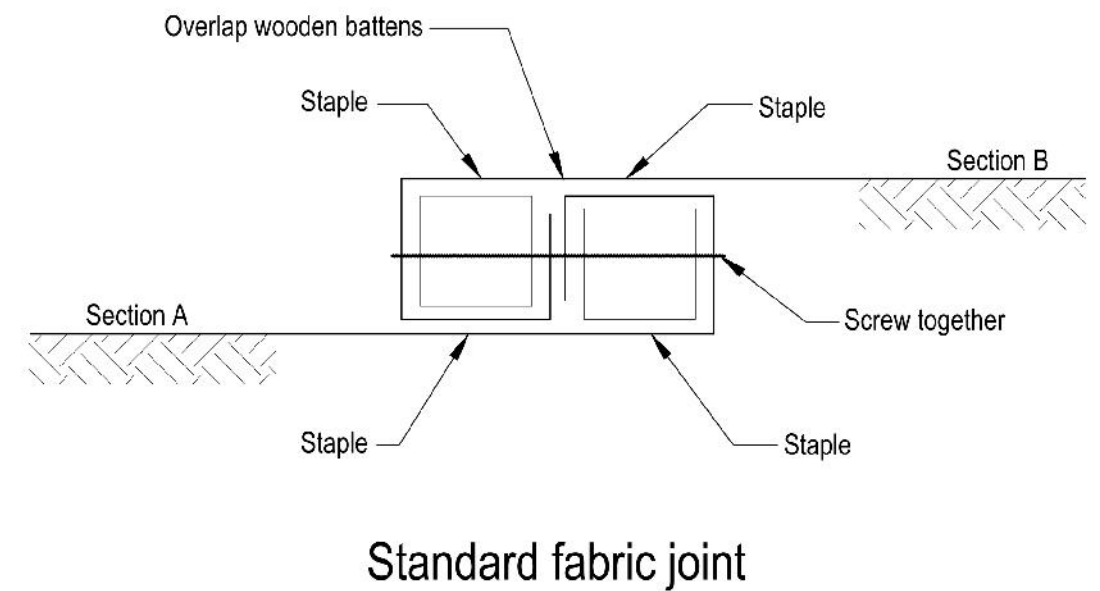


Figure 83: Silt fence cross-section

Design PS
Survey SURVPLANZ
Drawn LFP
Checked PS
Date 22/02/2021
Scale A3 NTS
CAD Filename
© Copyright 2001 Airey Consultants Ltd

FINAL

Job Title
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

RESOURCE CONSENT

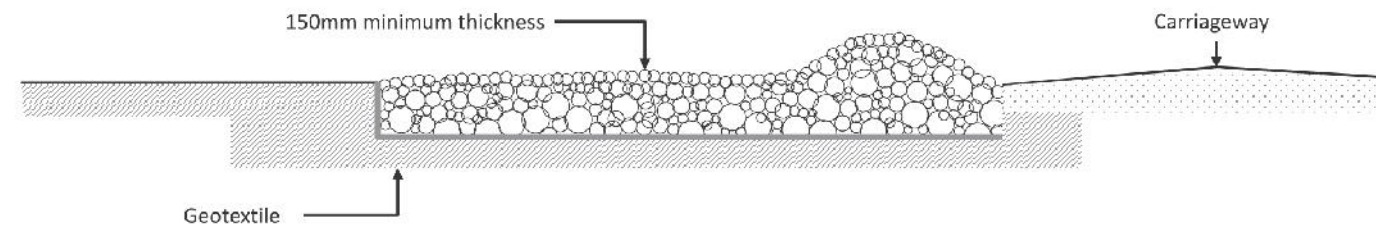
AIREY
CONSULTANTS LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takapuna, Botany, Queenstown

Drawing Title
STANDARD DETAILS

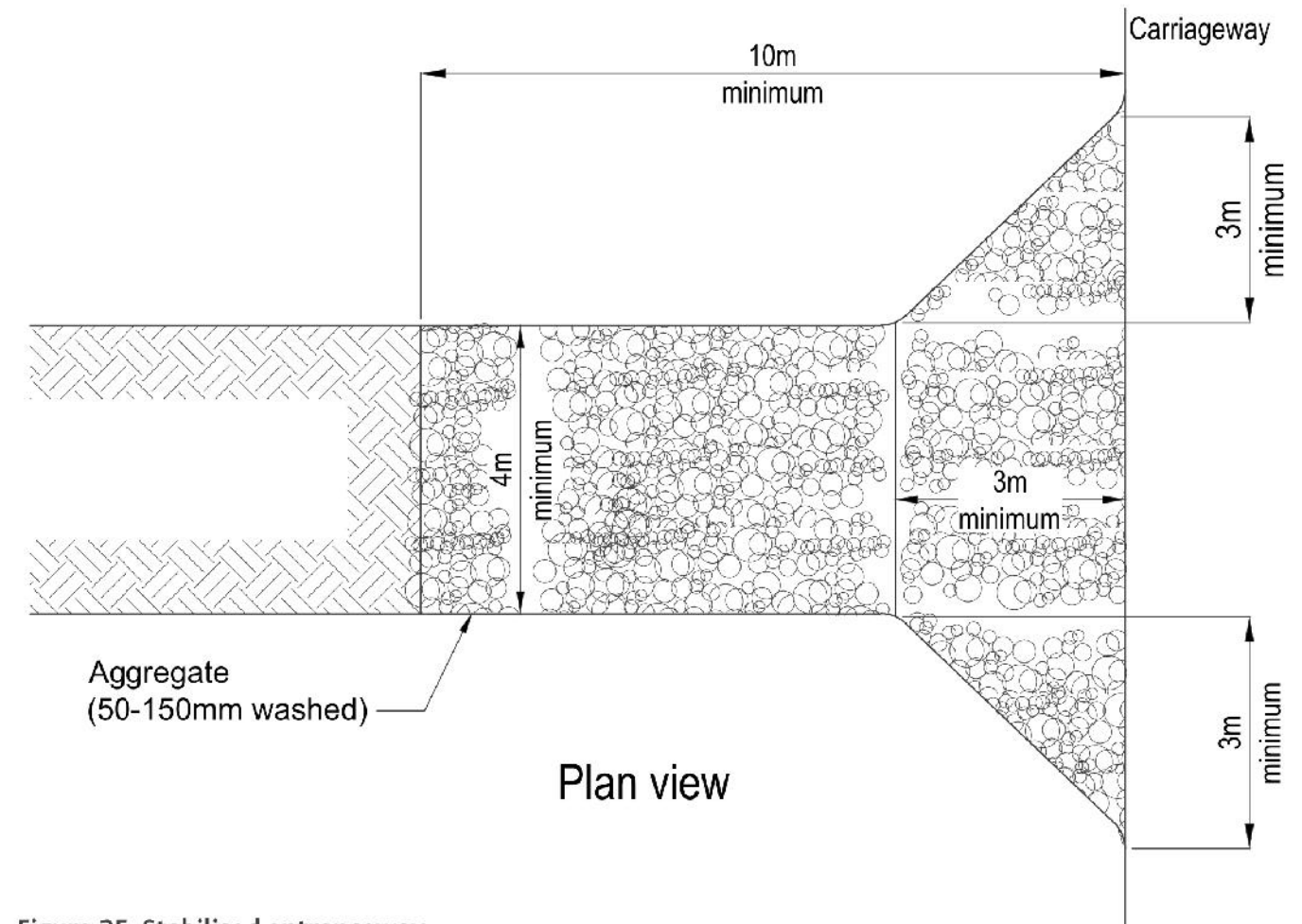
File No.
200636/1

Rev.
-
Dwg. No.
210

No.	Revision Details	Date	No.	Revision Details	Date



Side elevation



Plan view

Figure 35: Stabilised entranceway

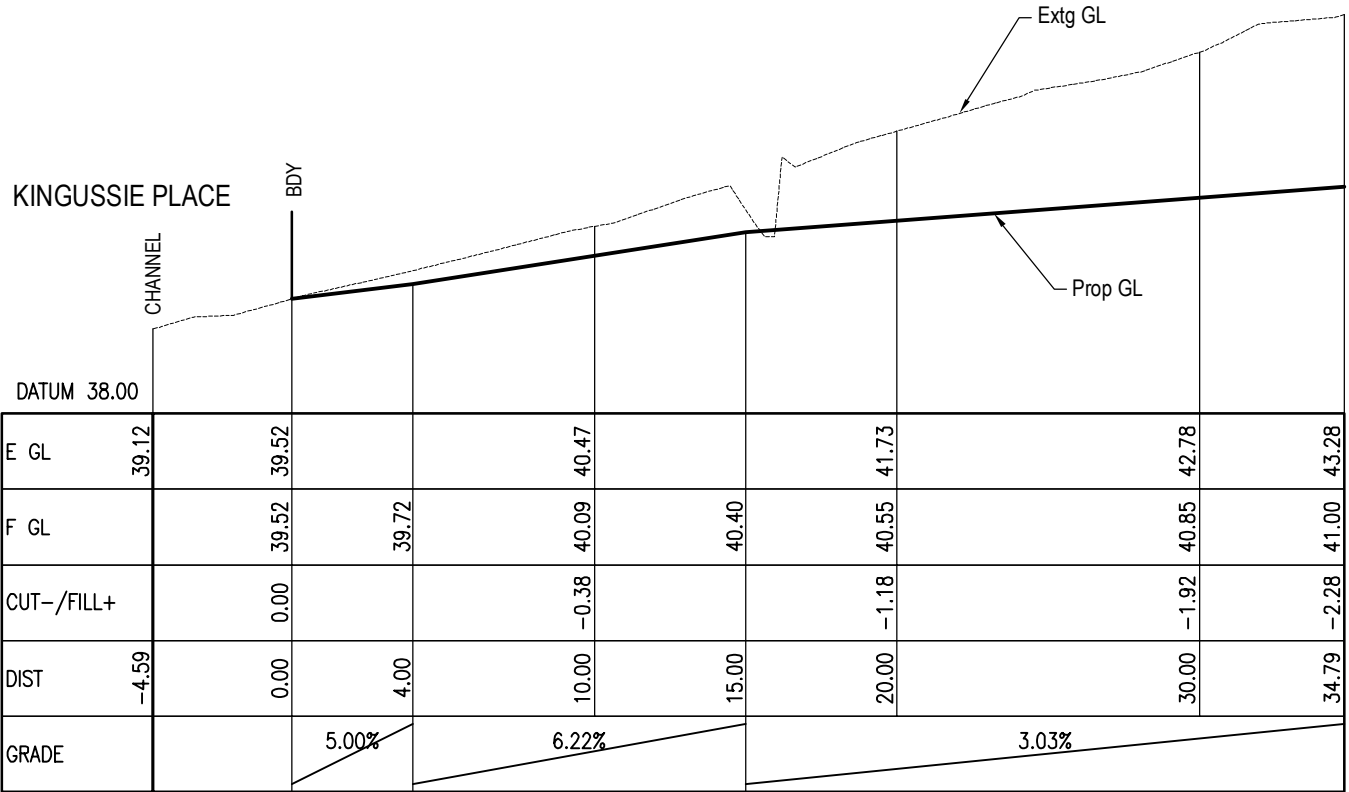
Original Size: 10 20 30 40 50

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

FINAL

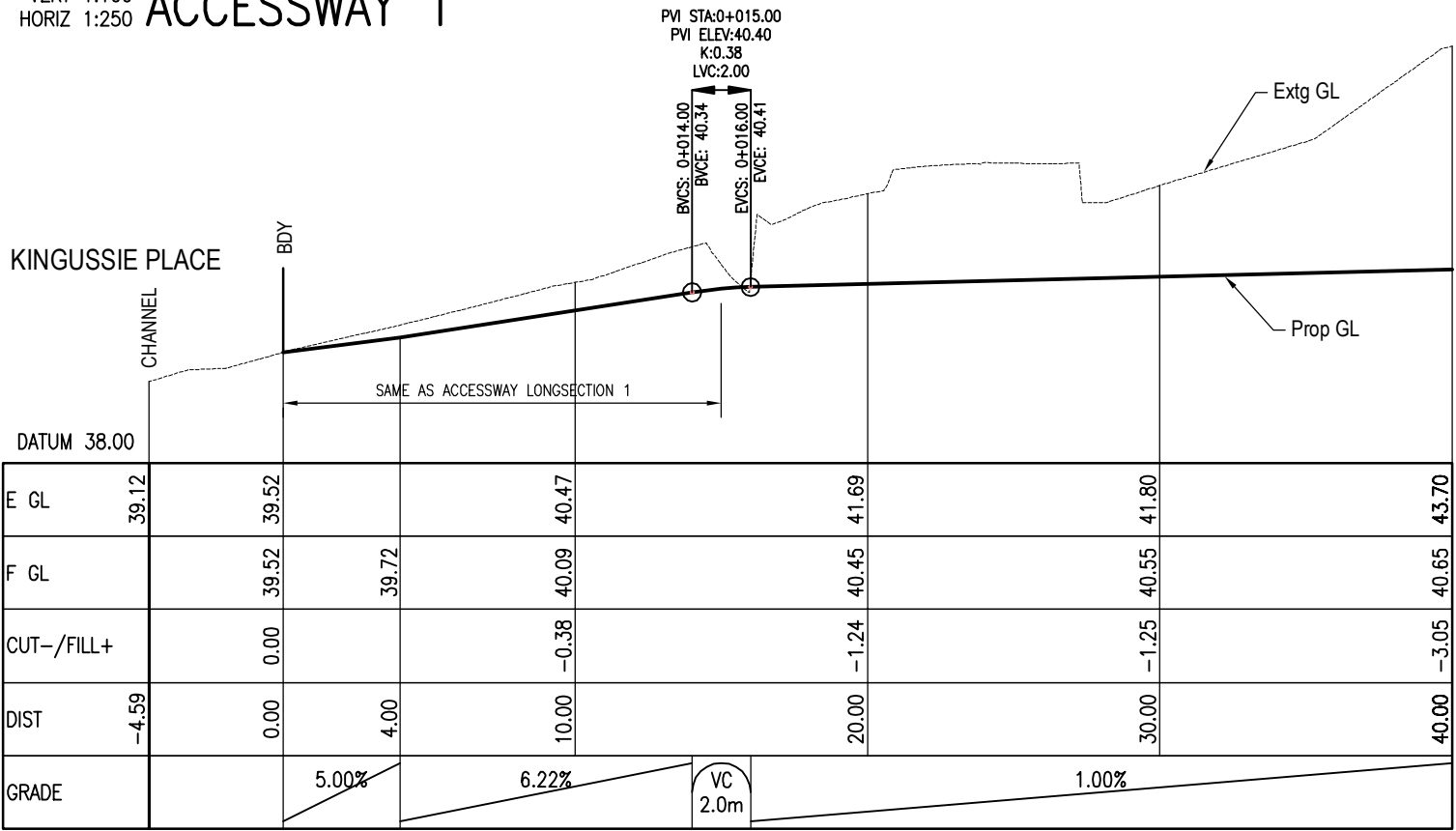


CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takapuna, Botany, Queenstown



VERT 1:100
HORIZ 1:250

ACCESSWAY 1



VERT 1:100
HORIZ 1:250

ACCESSWAY 2

Design PS
Survey SURVPLANZ
Drawn LFP
Checked PS
Date 22/02/2021
Scale A3 AS SHOWN
CAD Filename
© Copyright 2001 Airey Consultants Ltd

Job Title:
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

AIREY
CONSULTANTS LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takapuna, Botany, Queenstown

Drawing Title:
ACCESSWAY LONGSECTIONS

File No.
200636/1

Rev.
1

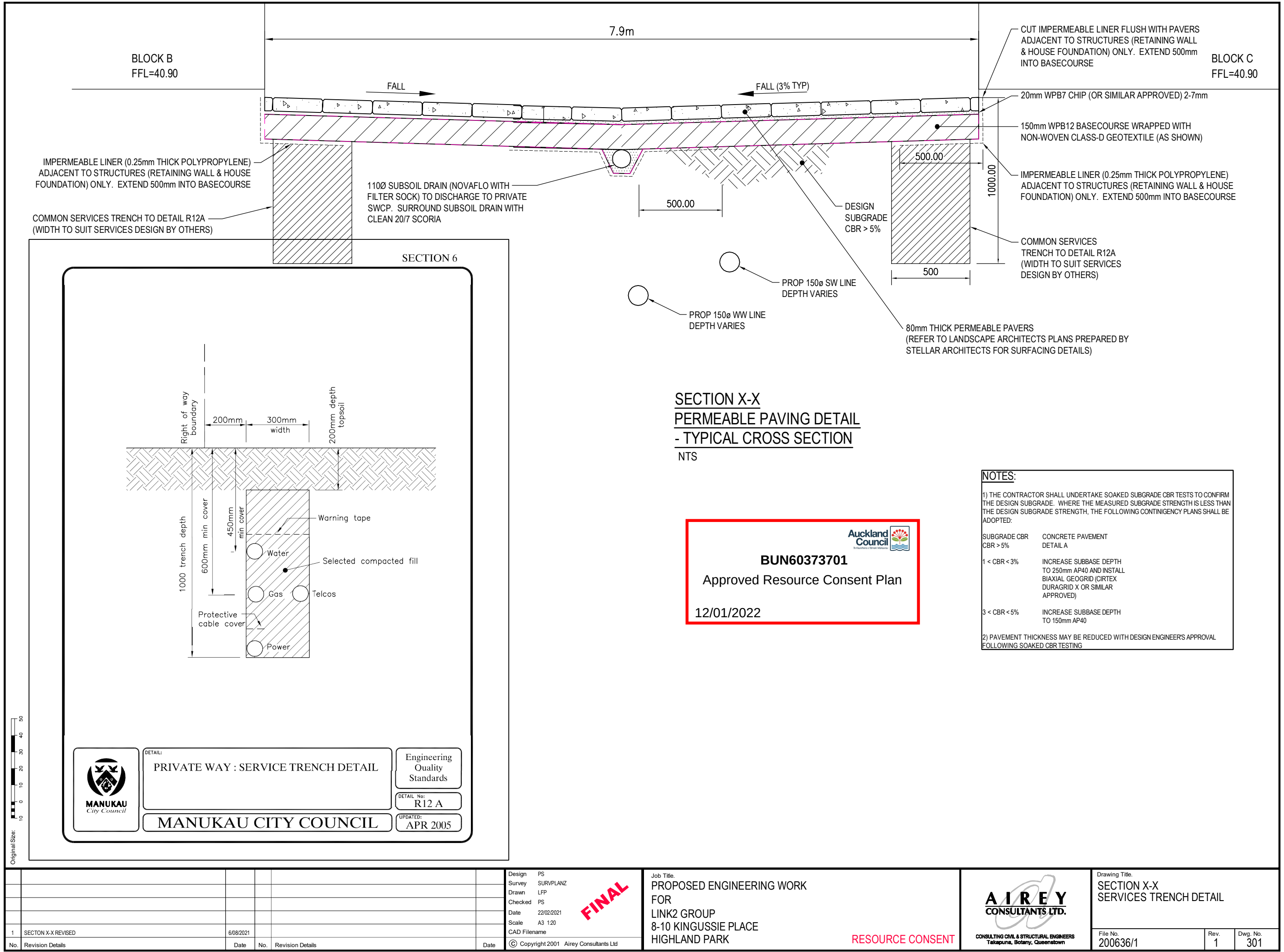
Dwg. No.
300

1 ACCESSWAY LONGSECTIONS REVISED 6/08/2021

No. Revision Details Date No. Revision Details Date

RESOURCE CONSENT

J:\20000\200636 LINK2_B - 10 Kingussie\CAD\WORKING DRAWINGS\8-10 KINGUSSIE PL 200636-1.dwg, 7/09/2021 1:45:15 PM, PDF-XChange for AcrobatPro



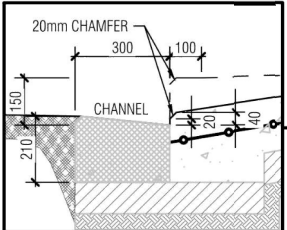
12/01/2022

ORIGINAL SIZE A4 DO NOT SCALE

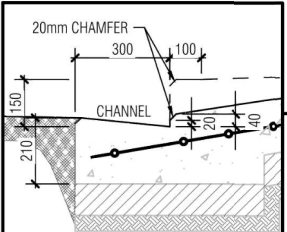


3D VIEW
N.T.S

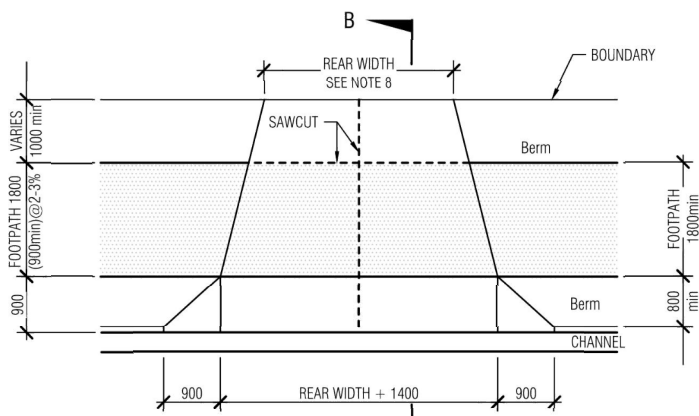
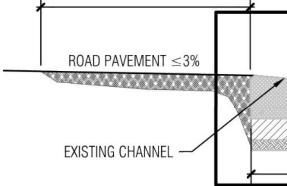
KEEP EXISTING CHANNEL



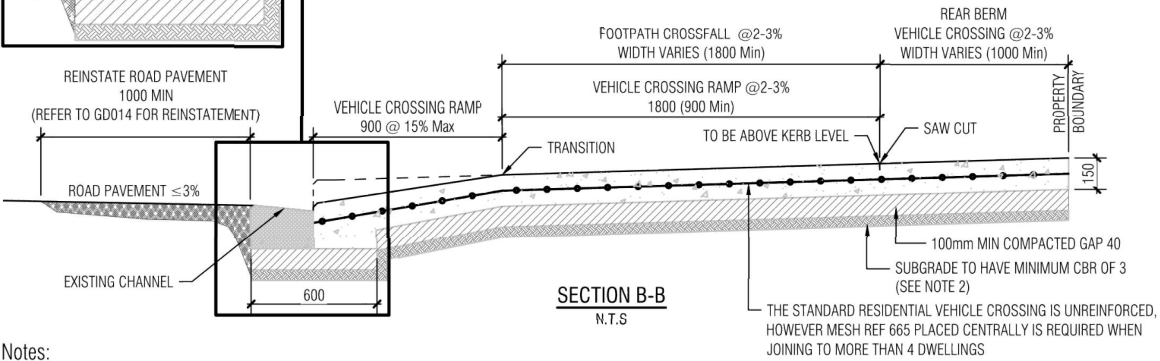
REBUILD NEW CHANNEL



REINSTATE ROAD PAVEMENT
1000 MIN
(REFER TO GD014 FOR REINSTATEMENT)



VEHICLE CROSSING
FOOTPATH SEPARATED FROM KERB
N.T.S



Notes:

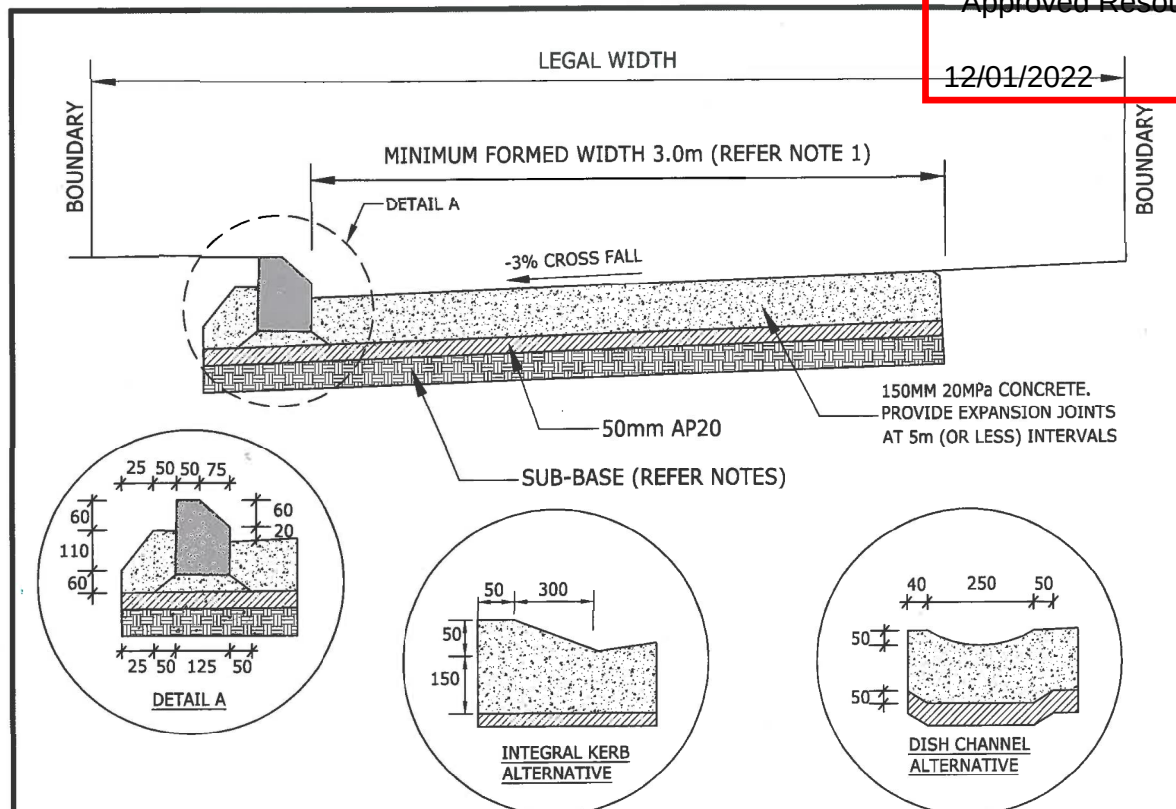
- All dimensions are in millimetres unless noted otherwise.
- If CBR of existing Subgrade is <3, Pavement Design should be provided and approved by Auckland Transport.
- All concrete to be 20 Mpa and constructed in accordance with NZS 3109 with a broom finish and may contain upto 4% oxide
- Saw cut expansion joints at 4m centres maximum each way in addition to saw cuts shown on dwg.
- All work must comply with the NZTA's 'CoPTM' (code of practice for temporary traffic management).
- Construct in same material and finish as surrounding footpath.
- Existing channel may be retained if;
 - kerb can be removed without disturbing channel
 - road crossfall does not exceed 3%
- Rear Width to be as permitted under Auckland unitary Plan;
 - 2750-3000 - Single vehicle crossing
 - 5500-6000 - Two-Way Shared Access
 - 3000-3500 - One-Way Shared Access

Drawn	Ulysses Gabriel
Checked	Richard Batty
Approved	Chris Beasley
Authorised	Chief Engineer

Project: TDM TECHNICAL STANDARDS
Road layout and geometric design
Residential Vehicle Crossing (Sheet 3 of 4)

Date:	-
Scales	N.T.S.
Drawing No.	GD017A-1B

- ASSUMED CBR <7 USE 100mm MIN AP40.
- MINIMUM REINFORCING 665HRC MESH OR EQUIVALENT.



NOTES:

- LEGAL AND FORMED WIDTHS SHALL BE IN ACCORDANCE WITH THE UNITARY PLAN OR APPROVED CONSENT. (REFER TABLES E27.6.4.3.2 AND E38.8.1.2.1)
- CONCRETE CONSTRUCTION IS TO BE IN ACCORDANCE WITH NZS 3109 AND NZS 3114. (NZS 3109 - Concrete construction) (NZS 3114 - Specification for concrete surface finishes)
- ALL DIMENSIONS ARE IN MILLIMETRES (UNLESS OTHERWISE SPECIFIED)
- BELOW THE 50mm AP20
AP 40 OR GAP 65 SUB-BASE MAY BE REQUIRED
MINIMUM 150MM THICK IF SUBGRADE CBR < 3
MINIMUM 100MM THICK IF SUBGRADE CBR > 3 TO < 7
NOT REQUIRED IF SUBGRADE CBR ≥ 7
- MAXIMUM GRADE 1 in 5. WHERE THE UNITARY PLAN MAY ALLOW A STEEPER GRADE SPECIFIC DESIGN IS REQUIRED.
- AN APPROPRIATE SIZED CESSPIT OR OTHER COLLECTION DEVICE IS REQUIRED FOR SURFACE WATER RUNOFF. THE SIZE AND DESIGN IS TO BE BASED ON THE CATCHMENT AREA AND SLOPE.
- THE USE OF REINFORCING OR OTHER DESIGN ALTERNATIVES WILL BE CONSIDERED.
- THE USE OF REINFORCING FIBRE OR MESH IN THE UPPER LAYER (FIXED WITH 30MM COVER) IS RECOMMENDED TO REDUCE SHRINKAGE CRACKING.
- THIS DETAIL IS ACCEPTABLE SOLUTION ONLY. AT TIMES SPECIFIC DESIGN MAY BE REQUIRED.

REGULATORY ENGINEERING



DWG : RE 01
ISSUED : MARCH 2019

DRIVEWAYS

FOR RESIDENTIAL DEVELOPMENTS SERVICING
NINE OR LESS PARKING SPACES
OR FIVE AND LESS REAR SITES

Original Size: 10 20 30 40 50

No.	Revision Details	Date	No.	Revision Details	Date

Design PS
Survey SURVPLANZ
Drawn LFP
Checked PS
Date 22/02/2021
Scale A3 NTS
CAD Filename
© Copyright 2001 Airey Consultants Ltd

Job Title:
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

RESOURCE CONSENT



Drawing Title: STANDARD DETAILS	File No. 200636/1	Rev. -	Dwg. No. 310
------------------------------------	----------------------	-----------	-----------------



NOTES

CONTRACTOR TO LOCATE ALL SERVICES PRIOR TO COMMENCEMENT OF WORK.

NO DEVIATION FROM THESE ENGINEERING PLANS WITHOUT PRIOR WRITTEN APPROVAL FROM THE DESIGN ENGINEER.

STORMWATER, WASTEWATER AND WATERMAIN CONNECTIONS SHALL BE INSTALLED BY AN AUCKLAND COUNCIL & WATERCARE SERVICES APPROVED LICENSED CONTRACTOR AT THE APPLICANTS EXPENSE.

CONTRACTOR TO CONFIRM ALL DIMENSIONS ON SITE.

BOTH CONTRACTORS AND CONSULTANTS ARE TO TAKE ALL NECESSARY CARE AND PRECAUTION AT THE CONSTRUCTION SITE TO AVOID ACCIDENT AND INJURY FROM FALLING INTO EXCAVATIONS, CRUSHING BY SUBSIDING EXCAVATIONS AND THE MOVEMENT OF PLANT AND MATERIALS ON THE SITE.

THE CONTRACTOR SHALL PROVIDE SAFETY SHIELD OR EQUIVALENT SAFETY MEASURES FOR WORKS AREA DEEPER THAN OR EQUAL TO 1.5m TO COMPLY WITH WORKSAFE NEW ZEALAND.

CONTOURS AND MEASUREMENTS HAVE BEEN PROVIDED FOR
ENGINEERING PURPOSES ONLY AND SHOULD NOT BE USED FOR
TOWN PLANNING PURPOSES

PILOT ALL SERVICES AND EXISTING DRAINAGE LINES PRIOR TO
INSTALLATION OF NEW DRAINAGE LINES.

ANY DRAINAGE LINES ENCOUNTERED ON SITE DURING
CONSTRUCTION NOT SHOWN ON THE ENGINEERING PLANS MUST BE
REFERRED TO THE DESIGN ENGINEER.

LEVELS IN TERMS OF LANDS & SURVEY DATUM 1946.

ALL PUBLIC WASTEWATER MANHOLES TO BE 1050Ø RC WITH 600Ø
HINGED LID AND SAFETY GRILLE UNLESS SHOWN OTHERWISE.

ALL PUBLIC STORMWATER MANHOLES TO BE 1050Ø RC WITH 600Ø
HINGED LID UNLESS SHOWN OTHERWISE.

ALL PRECAST CONCRETE WASTEWATER MANHOLES TO BE THICKWALLED (WITH A 25mm SACRIFICIAL LAYER) OR HAVE APPROVED PE/PVC LINING AS PER WATERCARE MATERIAL SUPPLY STANDARD 14.8.4(H).

ALL SW & WW CONNECTIONS TO BE 100Ø uPVC SN16 UNLESS SHOWN OTHERWISE.

ALL 100Ø WW LOT CONNECTIONS TO BE FACTORY WYE JUNCTIONS (SN16 RATING).

ALL 100Ø WW LOT CONNECTIONS TO BE INSTALLED AT MIN. 30° INCOMING ANGLE FROM HORIZONTAL (MAX. 60°) PER WW15. INSTALL PLAIN BEND AT END OF WYE JUNCTION IF NECESSARY.

EXTG SWMH
LL 44.05
IL 42.60
1.45m DEEP

12/01/2022

SITE PLAN

FINAL

Job Title:
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

RESOURCE CONSENT

A I R E Y
CONSULTANTS LTD.

CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takanunga, Rotorua, Queenstown

Drawing Title.
SITE PLAN - STORMWATER

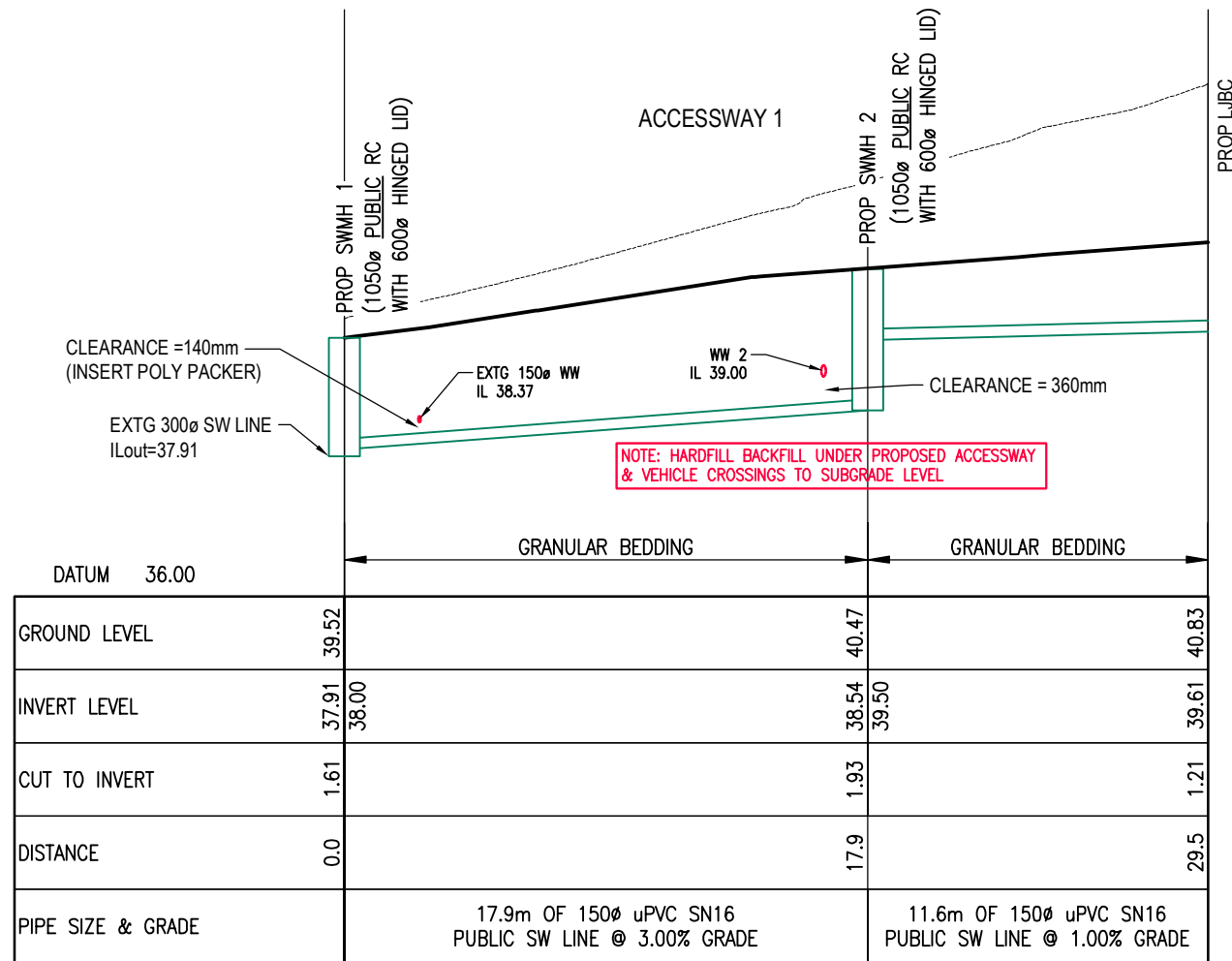
File No.
200636/1

Rev.	2
------	---

Dwg. No.	400
----------	-----

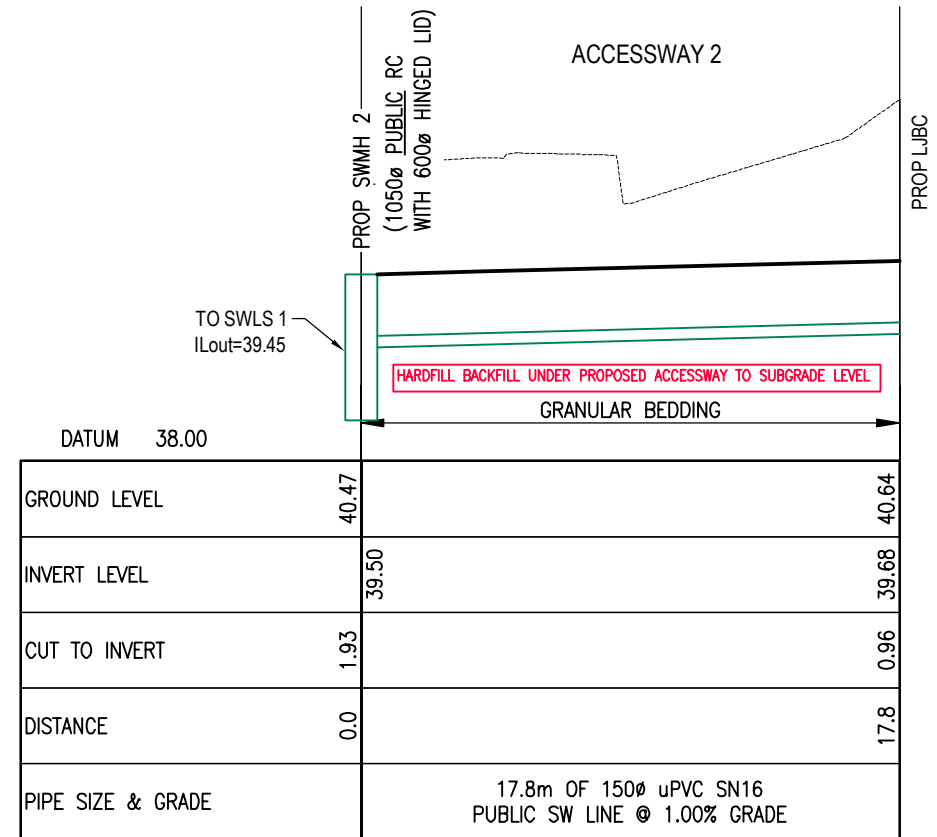
2	RETAINING WALLS REVISED	14/12/2021		
1	PROPOSED BUILDINGS REVISED TO 13 LOTS	6/08/2021		
No	Revision Details	Date	No	Revision Details

	Design	PS
	Survey	SURVPLANZ
	Drawn	LFP
	Checked	PS
	Date	22/02/2021
	Scale	A3 1:250
	CAD Filename	
Date	© Copyright 2001	Airey Consultants Ltd



SW 1 LONGSECTION

VERT 1:100
HORIZ 1:250



SW 2 LONGSECTION

VERT 1:100
HORIZ 1:250

NOTE: EACH LINE CONNECTING TO A MANHOLE SHALL HAVE AN APPROVED FLEXIBLE JOINT WITHIN 600mm OF THE MANHOLE WALL

Original Size: 10 20 30 40 50

Design PS
Survey SURVPLANZ
Drawn LFP
Checked PS
Date 22/02/2021
Scale A3 AS SHOWN
CAD Filename
© Copyright 2001 Airey Consultants Ltd

FINAL

Job Title:
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

RESOURCE CONSENT

AIREY
CONSULTANTS LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takapuna, Botany, Queenstown

Drawing Title:
STORMWATER LONGSECTIONS

File No.
200636/1

Rev.
1

Dwg. No.
410

No. Revision Details

Date No. Revision Details

Date

© Copyright 2001 Airey Consultants Ltd



EXTG WMMH
LL 37.43
IL 33.63 (GIS)
3.8m DEEP (GIS)

EXTG 150 ϕ
PUBLIC WW LINE
@ 9.92% GRADE

EXTG 100 ϕ PUBLIC WW
CONN TO BE ABANDONED

WW 1
13.8m of 150mm ϕ uPVC SN16
PUBLIC WW LINE @ 4.36% GRADE

PROP PUBLIC WWMH 2
(1050 ϕ RC WITH 600 ϕ HINGED
LID & SAFETY GRILLE)
LL 40.47
ILin 39.00 (uPVC 150 ϕ WW 1)
ILin 38.98 (uPVC 150 ϕ WW 2)
ILout 38.90 (uPVC 150 ϕ)

WW 1
12.6m of 150mm ϕ uPVC SN16
PUBLIC WW LINE @ 3.98% GRADE

EXTG 150 ϕ
PUBLIC WW LINE

150
DP 72211
No.58 Highland Park Dr

151
DP 72211
No.60 Highland Park Dr

PROP PUBLIC WJBC 1
LL 40.86
ILout 39.50 (uPVC 150 ϕ)

EXTG WATER METER
TO BE RELOCATED TO
METER BANK

PROP WATER METER BANK
(WITH 6 METERS)

PROP PUBLIC WWMH 1
(1050 ϕ RC WITH 600 ϕ HINGED
LID & SAFETY GRILLE)
LL 39.70
ILin 38.30 (uPVC 150 ϕ) WW1

12/01/2022
Approved Resource Consent Plan

PROP WATER METER BANK (WITH 6 METERS)
EXTG WATER METER RELOCATED

EXTG WATER METER
TO BE RELOCATED

EXTG 40 ϕ WATERMAIN TO BE
UPGRADED TO 50 ϕ RIDER MAIN

EXTG FH OPPOSITE
OUTSIDE No.9
KINGUSSIE

EXTG 150 ϕ
PUBLIC WW LINE
@ 9.92% GRADE

EXTG WMMH
LL 44.60
IL 42.80 (GIS)
1.8m DEEP (GIS)



BUN60373701

Approved Resource Consent Plan

NOTES

ALL WORK TO BE CARRIED OUT TO AUCKLAND COUNCIL & WATERCARE SERVICES ENGINEERING STANDARDS & STAMPED APPROVED PLANS.

CONTRACTOR TO LOCATE ALL SERVICES PRIOR TO COMMENCEMENT OF WORK.

NO DEVIATION FROM THESE ENGINEERING PLANS WITHOUT PRIOR WRITTEN APPROVAL FROM THE DESIGN ENGINEER.

STORMWATER, WASTEWATER AND WATERMAIN CONNECTIONS SHALL BE INSTALLED BY AN AUCKLAND COUNCIL & WATERCARE SERVICES APPROVED LICENSED CONTRACTOR AT THE APPLICANTS EXPENSE.

CONTRACTOR TO CONFIRM ALL DIMENSIONS ON SITE.

BOTH CONTRACTORS AND CONSULTANTS ARE TO TAKE ALL NECESSARY CARE AND PRECAUTION AT THE CONSTRUCTION SITE TO AVOID ACCIDENT AND INJURY FROM FALLING INTO EXCAVATIONS, CRUSHING BY SUBSIDING EXCAVATIONS AND THE MOVEMENT OF PLANT AND MATERIALS ON THE SITE.

THE CONTRACTOR SHALL PROVIDE SAFETY SHIELD OR EQUIVALENT SAFETY MEASURES FOR WORKS AREA DEEPER THAN OR EQUAL TO 1.5m TO COMPLY WITH WORKSAFE NEW ZEALAND.

CONTOURS AND MEASUREMENTS HAVE BEEN PROVIDED FOR ENGINEERING PURPOSES ONLY AND SHOULD NOT BE USED FOR TOWN PLANNING PURPOSES.

PILOT ALL SERVICES AND EXISTING DRAINAGE LINES PRIOR TO INSTALLATION OF NEW DRAINAGE LINES.

ANY DRAINAGE LINES ENCOUNTERED ON SITE DURING CONSTRUCTION NOT SHOWN ON THE ENGINEERING PLANS MUST BE REFERRED TO THE DESIGN ENGINEER.

LEVELS IN TERMS OF LANDS & SURVEY DATUM 1946.

ALL PUBLIC WASTEWATER MANHOLES TO BE 1050 ϕ RC WITH 600 ϕ HINGED LID AND SAFETY GRILLE UNLESS SHOWN OTHERWISE.

ALL PUBLIC STORMWATER MANHOLES TO BE 1050 ϕ RC WITH 600 ϕ HINGED LID UNLESS SHOWN OTHERWISE.

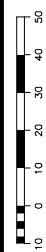
ALL PRECAST CONCRETE WASTEWATER MANHOLES TO BE THICKWALLED (WITH A 25mm SACRIFICIAL LAYER) OR HAVE APPROVED PE/PVC LINING AS PER WATERCARE MATERIAL SUPPLY STANDARD 14.8.4(H).

ALL SW & WW CONNECTIONS TO BE 100 ϕ uPVC SN16 UNLESS SHOWN OTHERWISE.

ALL 100 ϕ WW LOT CONNECTIONS TO BE FACTORY WYE JUNCTIONS (SN16 RATING).

ALL 100 ϕ WW LOT CONNECTIONS TO BE INSTALLED AT MIN. 30° INCOMING ANGLE FROM HORIZONTAL (MAX. 60°) PER WW15. INSTALL PLAIN BEND AT END OF WYE JUNCTION IF NECESSARY.

Original Size:



SITE PLAN
1:250

Design PS
Survey SURVPLANZ
Drawn LFP
Checked PS
Date 22/02/2021
Scale A3 1:250
CAD Filename
© Copyright 2001 Airey Consultants Ltd

FINAL

Job Title:
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

RESOURCE CONSENT

AIREY
CONSULTANTS LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takapuna, Botany, Queenstown

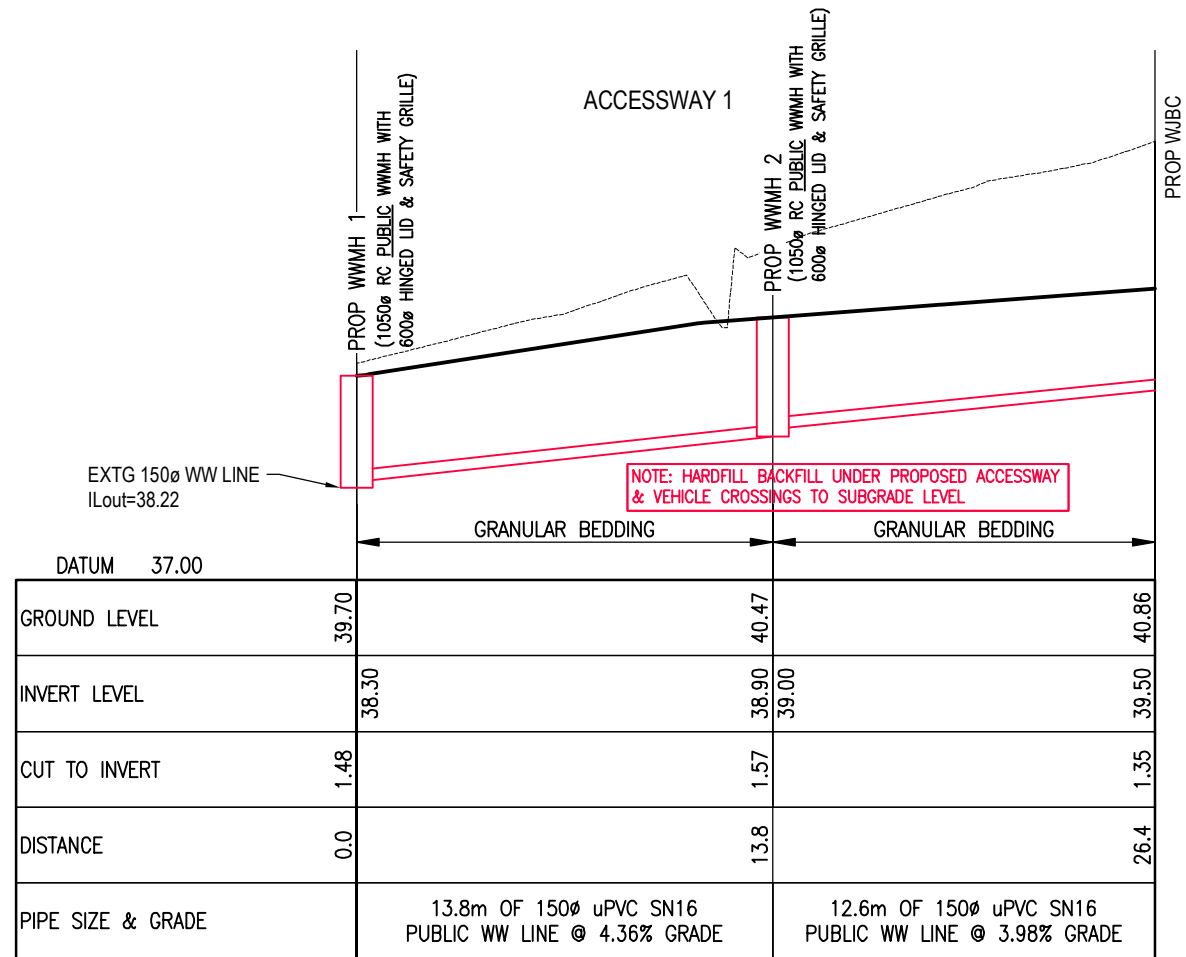
Drawing Title:
SITE PLAN - WASTEWATER

File No.
200636/1

Rev.
2

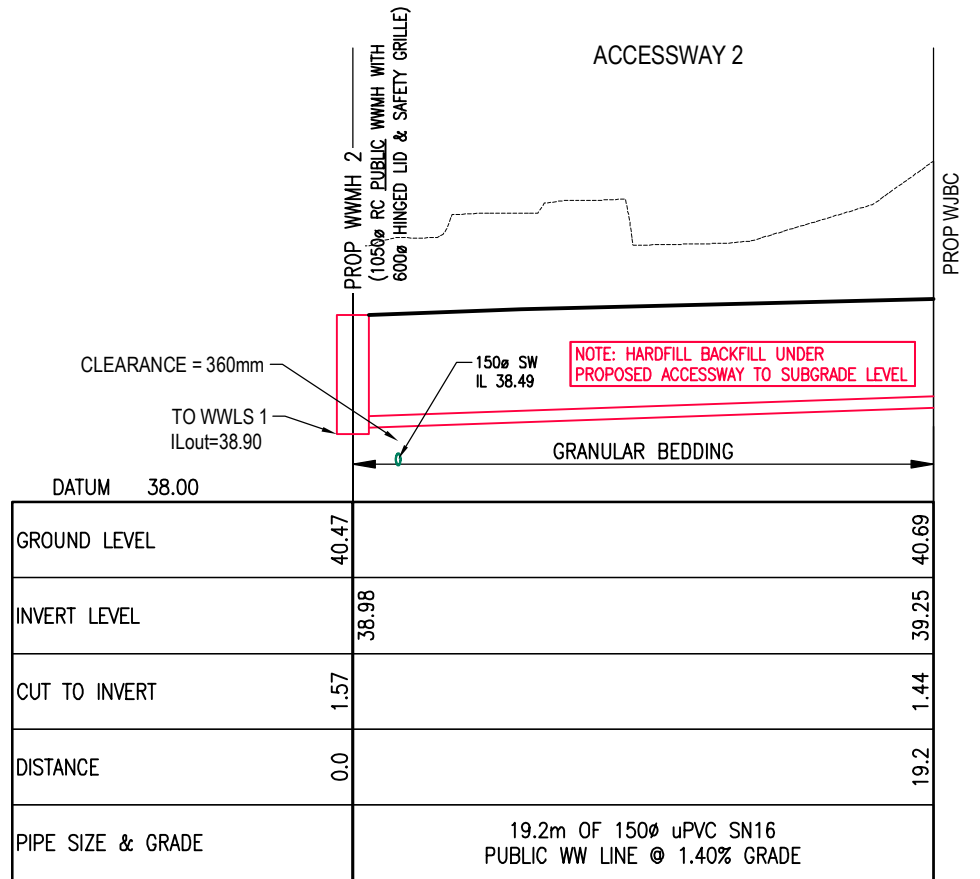
Dwg. No.
500

No.	Revision Details	Date	No.	Revision Details	Date
2	RETAINING WALLS REVISED	14/12/2021			
1	PROPOSED BUILDINGS REVISED TO 13 LOTS	6/08/2021			



WW 1 LONGSECTION

VERT 1:100
HORIZ 1:250



WW 2 LONGSECTION

VERT 1:100
HORIZ 1:250

Design PS
Survey SURVPLANZ
Drawn LFP
Checked PS
Date 22/02/2021
Scale A3 AS SHOWN
CAD Filename
© Copyright 2001 Airey Consultants Ltd

Job Title:
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

AIREY
CONSULTANTS LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takapuna, Botany, Queenstown

Drawing Title:
WASTEWATER LONGSECTIONS

File No.
200636/1
Rev.
1
Dwg. No.
510

FINAL

RESOURCE CONSENT

J:\2000020036 LIN2_8 - 10 Kingussie\CAD\WORKING DRAWINGS\8-10 KINGUSSIE PL 200636-1.dwg, 22/02/2021 1:01:46 PM, PDF-XChange for Acrobat Pro

Original Size: 10 0 10 20 30 40 50

No.	Revision Details	Date	No.	Revision Details	Date

Design PS
Survey SURVPLANZ
Drawn LFP
Checked PS
Date 22/02/2021
Scale A3 NTS
CAD Filename
© Copyright 2001 Airey Consultants Ltd

FINAL

Job Title.
PROPOSED ENGINEERING WORK
FOR
LINK2 GROUP
8-10 KINGUSSIE PLACE
HIGHLAND PARK

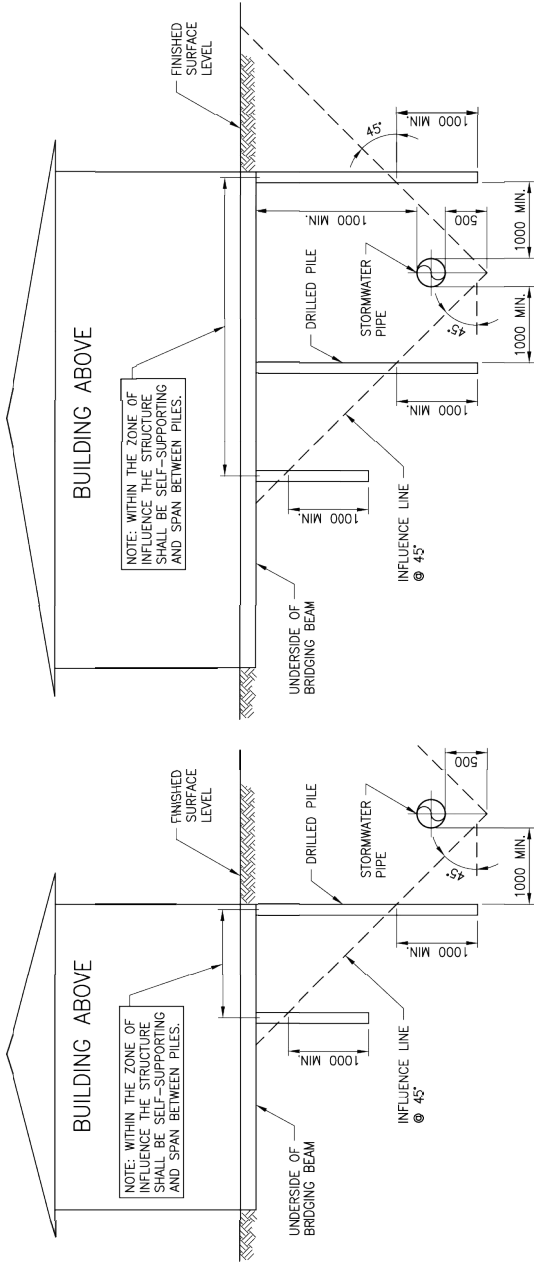
RESOURCE CONSENT

AIREY
CONSULTANTS LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Takapuna, Botany, Queenstown

Drawing Title.
STANDARD DETAILS

File No. 200636/1	Rev. -	Dwg. No. 511
----------------------	-----------	-----------------

- GENERAL NOTES:**
1. THE INFORMATION ON THIS PAGE IS INTENDED TO SHOW EXAMPLES OF TYPICAL SCENARIOS AND SHALL BE USED FOR GENERAL GUIDANCE PURPOSES ONLY. SIGNIFICANT VARIATIONS ON A SITE-BY-SITE BASIS ARE TO BE EXPECTED AND IT IS IN NO WAY IMPLIED THAT MEETING ANY OF THESE REQUIREMENTS WILL GUARANTEE APPROVAL.
 2. REQUIREMENTS FOR FOUNDATION DESIGN, ETC. APPLY TO BOTH SIDES OF THE PIPE.
 3. NO DRIVEN PILES ARE PERMITTED WITHIN 10m OF BRICK STORMWATER STRUCTURES, OR WITHIN 5m OF ALL OTHER STORMWATER STRUCTURES.
 4. SPECIFIC APPROVAL IS REQUIRED FROM AUCKLAND COUNCIL FOR DRIVEN PILES IN PARTIALLY DRILLED HOLES, WITHIN THE 5m-10m ZONE.
 5. PILES THAT MAY BE REQUIRED TO RESIST HORIZONTAL FORCES WILL REQUIRE SPECIFIC DESIGN.
 6. PILE/FOOTING LOCATION POINT MUST BE BELOW 45° "ZONE OF INFLUENCE".
 7. ALL MANHOLES SHALL HAVE 24 HOURS UNOBSTRUCTED ACCESS.
 8. MANHOLES IN BASEMENTS, OR IN LOCATIONS WHERE SUFFICIENT CLEARANCE IS UNAVAILABLE, ARE NOT PERMITTED.
 9. ALL PIPE BUILDOVERS WILL REQUIRE APPROVAL BY AUCKLAND COUNCIL.
 10. REFER TO SECTION 4.3.23 OF THE SWCoP FOR PIPE BUILDOVER REQUIREMENTS.
 11. FOR MANHOLES GREATER THAN 4m DEEP OR LARGER THAN 1200mm DIA. SPECIFIC DESIGN (INCLUDING CLEARANCE REQUIREMENTS) IS REQUIRED.

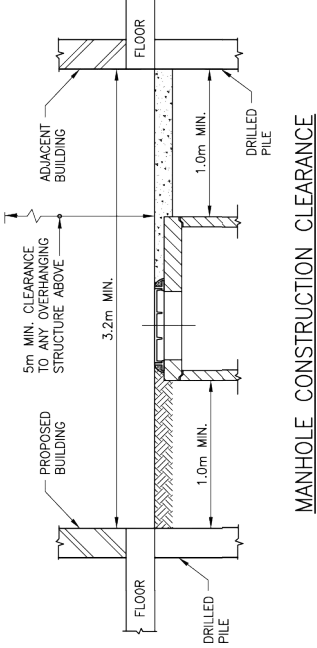


BUILD OVER

BUILD CLOSE

- "BUILD OVER" NOTES:**
1. OUTSIDE ZONE OF INFLUENCE, NORMAL FOUNDATION REQUIREMENTS APPLY.
 2. THE DETAIL APPLIES TO STORMWATER PIPES 375mm NOMINAL DIAMETER OR LESS.
 3. BRIDGING OVER PIPES LARGER THAN 375mm NOMINAL DIAMETER IS GENERALLY NOT ALLOWED.
 4. PILES SHALL BE CONSTRUCTED TO A DEPTH OF 1.0m BELOW INFLUENCE LINE.
 5. BRIDGING IS GENERALLY NOT ALLOWED OVER PIPES WHERE CLEAR VERTICAL SEPARATION DISTANCE FROM TOP OF PIPE TO UNDERSIDE OF BRIDGING BEAM IS LESS THAN 1.0m.

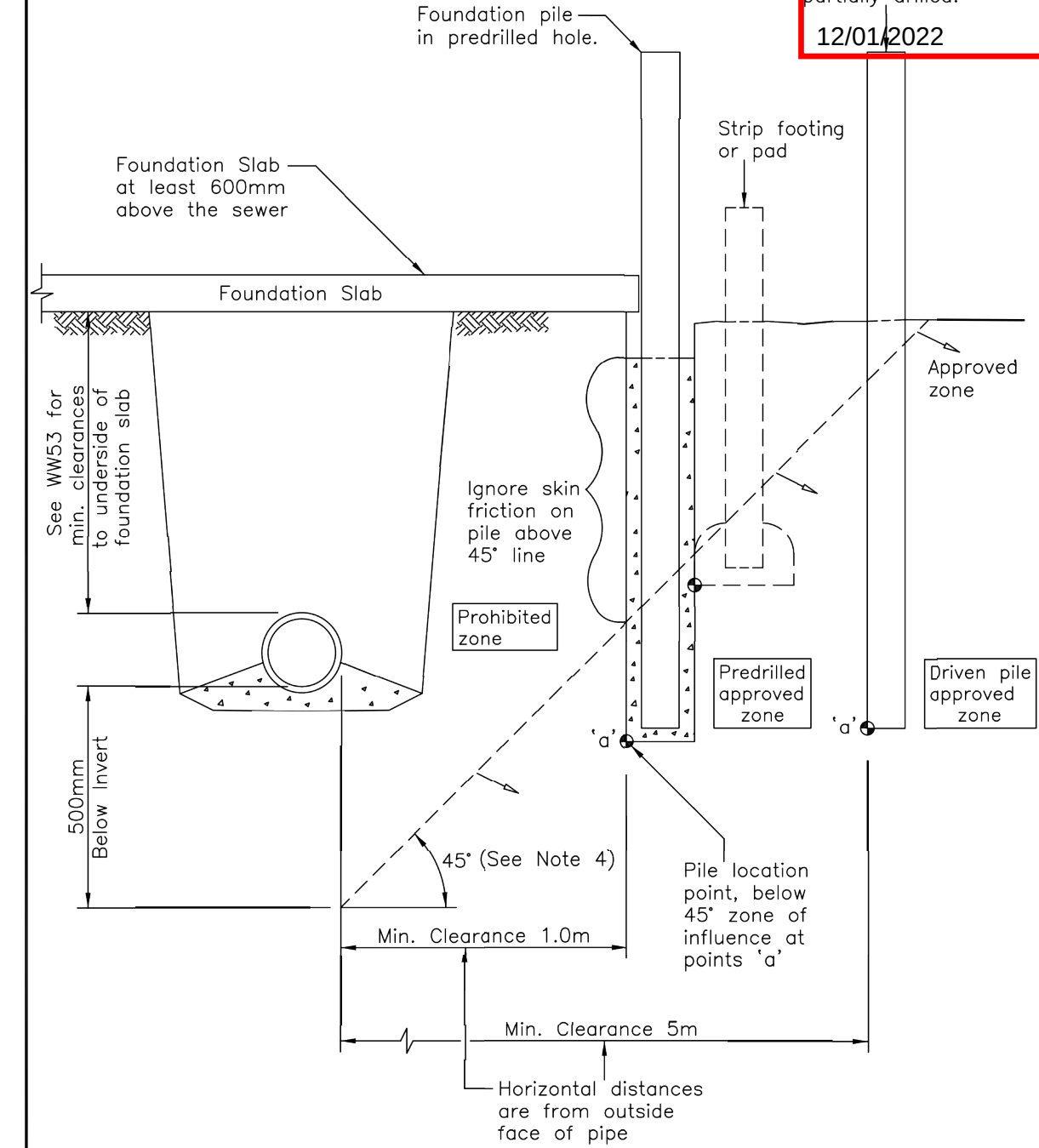
- "BUILD CLOSE" NOTES:**
1. OUTSIDE ZONE OF INFLUENCE, NORMAL FOUNDATION REQUIREMENTS APPLY.
 2. SPECIFIC APPROVAL IS REQUIRED FROM AUCKLAND COUNCIL IF BUILDING IS ADJACENT TO PIPES LARGER THAN 375mm INTERNAL DIAMETER, OR GREATER THAN 2.0m DEEP.
 3. BUILDING SHALL GENERALLY BE OUTSIDE ALL OVERLAND FLOW PATHS AND FLOODPLAINS. SEE SECTION 4.3.5.6 AND 4.3.5.7 OF THE SWCoP FOR FURTHER DETAILS.
 4. PILES SHALL BE CONSTRUCTED TO A DEPTH OF 1.0m BELOW INFLUENCE LINE.



MANHOLE CONSTRUCTION CLEARANCE

STORMWATER CODE OF PRACTICE STANDARD DETAILS	AUCKLAND COUNCIL	ENVIRONMENTAL-SW	ORIGINAL SCALE SCALE: N.T.S.	SWCoP	DRAWING SET 1 OF 1	REV 1
REVISION: 2 REV DATE: 1 NOVEMBER 2015 CAD FILENAME: AC-STD-SW22.DWG	STORMWATER PIPE AND MANHOLE CONSTRUCTION CLEARANCE REQUIREMENTS MANHOLES NEAR BUILDINGS AND BUILDING CLOSE OVER PIPES					2

Drawing Index



NOTES:

1. No driven piles are permitted within 10m of brick Sewers, or within 5m of all other sewers.
2. Piles that are required to resist horizontal forces will require specific design.
3. Pile/Footing location point must be below 45° zone of influence.
4. Zone of influence typically 45° or angle determined by a structural engineer.

Watercare
COPYRIGHT - This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.

BUILDING CLOSE TO OR OVER
LOCAL NETWORK SEWER

SCALE:	N.T.S.
ISSUE DATE:	20-9-2013
DWG No.	2010070.045
REFERENCE No.	WW 54

Foundation pile driven into ground.
Hole partially drilled.
BUN60373701
Approved Resource Consent Plan
12/01/2022

