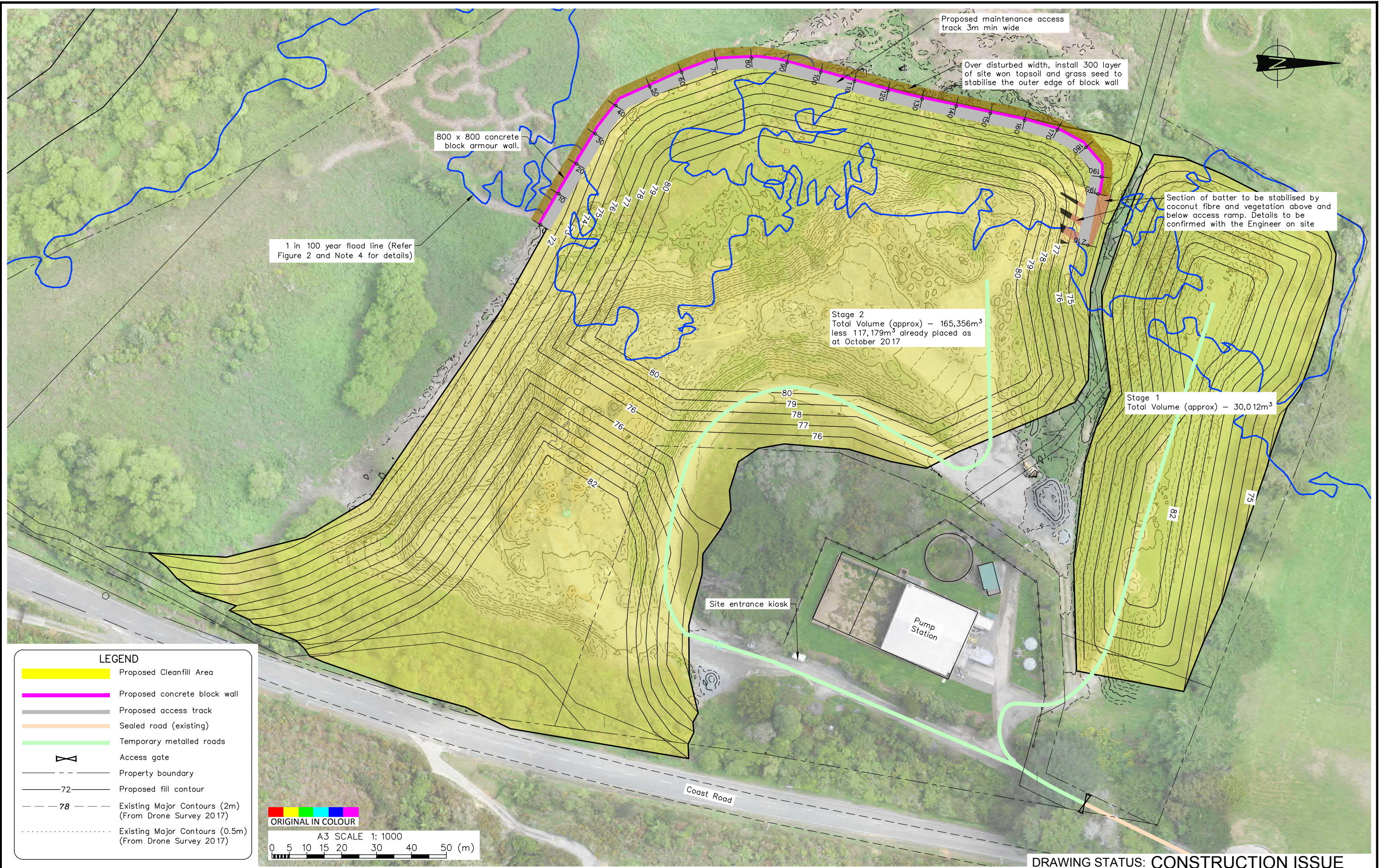


## Appendix C: Drawings

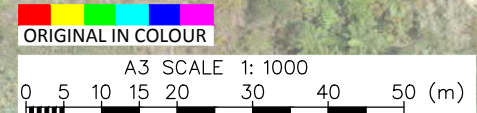
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DRAFT



**LEGEND**

	Proposed Cleanfill Area
	Proposed concrete block wall
	Proposed access track
	Sealed road (existing)
	Temporary metalled roads
	Access gate
	Property boundary
	Proposed fill contour
	Existing Major Contours (2m) (From Drone Survey 2017)
	Existing Major Contours (0.5m) (From Drone Survey 2017)



**DRAWING STATUS: CONSTRUCTION ISSUE**

DESIGNED :	BLR	May.18
DRAWN :	BLR	May.18
DESIGN CHECKED :	SJG	May.18
DRAFTING CHECKED :	RBS	May.18
CADFILE :	\\84466.002-01,03.dwg	
APPROVED :	Simon Grundy 02/05/18	
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
A Construction Issue	BLR	May.18

**NOTES :**

- Aerial photo supplied by Cuttriss Consultants (Date of Photography :Oct 2017)
- Topographic survey supplied by Cuttriss Consultants, dated October 2017. Reference data: "29513 Wainui Cleanfill Contours.dwg".
- Coordinate Datum: NZGD2000, Wellington Circuit Coordinates. Origin: 41 18 04S 174 46 35E 800,000mN 400,000mE Level Datum: LINZ (MSL) Wellington Vertical Datum 1953
- Flood modelling provided by GWRC December 2017
- Refer to DWG 84466.002-02 for details of flood modelling, DWGs 84466.002-03 to 07 for details of proposed flood inundation armour wall and DWG 84466.002-08 for culvert details

REFERENCE :






**Tonkin+Taylor**

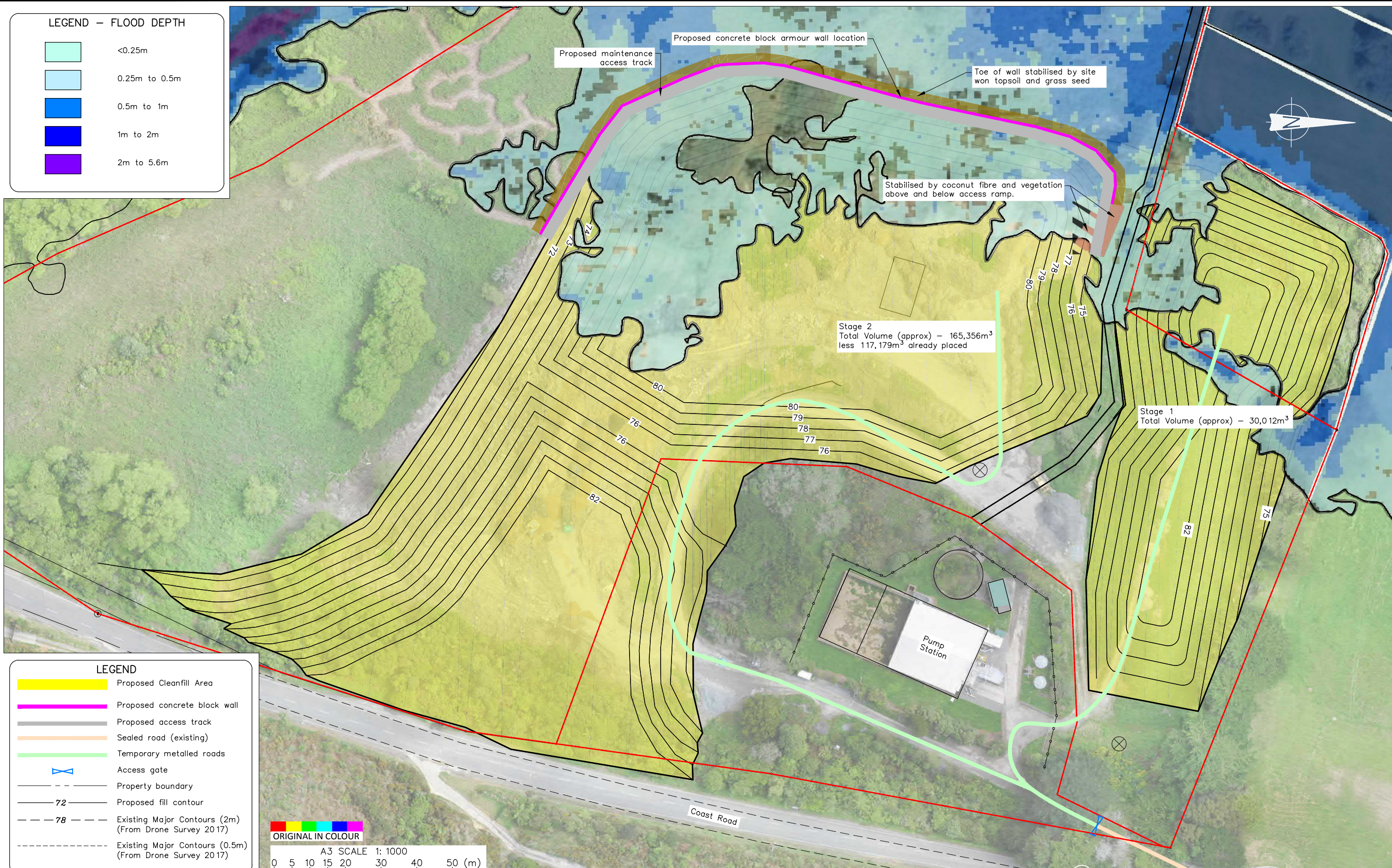
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CLIENT, PROJECT	HUTT CITY COUNCIL WAINUIOMATA CLEAN FILL SITE	
TITLE	SITE PLAN	
SCALES (AT A3 SIZE)	DWG. No.	REV.
1: 1000	84466.002-01	A

\\weldc.l.tgroup.local\data\rep\live\l\projects\84466\84466.002-01,03.dwg, 01, 2/05/2018 11:34:39 a.m., blr

**LEGEND - FLOOD DEPTH**

	<0.25m
	0.25m to 0.5m
	0.5m to 1m
	1m to 2m
	2m to 5.6m



Proposed maintenance access track

Proposed concrete block armour wall location




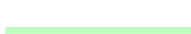


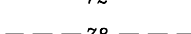



Toe of wall stabilised by site won topsoil and grass seed

Stabilised by coconut fibre and vegetation above and below access ramp.

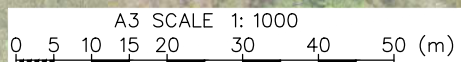
Stage 2  
Total Volume (approx) - 165,356m<sup>3</sup>  
less 117,179m<sup>3</sup> already placed

Stage 1  
Total Volume (approx) - 30,012m<sup>3</sup>

**LEGEND**

	Proposed Cleanfill Area
	Proposed concrete block wall
	Proposed access track
	Sealed road (existing)
	Temporary metalled roads
	Access gate
	Property boundary
	Proposed fill contour
	Existing Major Contours (2m) (From Drone Survey 2017)
	Existing Major Contours (0.5m) (From Drone Survey 2017)

ORIGINAL IN COLOUR



**DRAWING STATUS: CONSTRUCTION ISSUE**

DESIGNED :	BLR	May.18
DRAWN :	BLR	May.18
DESIGN CHECKED :	SJG	May.18
DRAFTING CHECKED :	RBS	May.18
CADFILE :	\\84466.0020-02.dwg	
APPROVED :	Simon Grundy 02/05/18	
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
A Construction Issue	BLR	May.18

**NOTES :**

1. Aerial photo supplied by Cuttriss Consultants (Date of Photography :Oct 2017)
2. Topographic survey supplied by Cuttriss Consultants, dated October 2017. Reference data: "29513 Wainui Cleanfill Contours.dwg".
3. Coordinate Datum: NZGD2000, Wellington Circuit Coordinates. Origin: 41 18 04S 174 46 35E 800,000mN 400,000mE Level Datum: LINZ (MSL) Wellington Vertical Datum 1953
4. Flood modelling provided by GWRC December 2017
5. Refer to DWG 84466.002-02 for details of flood modelling, DWGs 84466.002-03 to 07 for details of proposed flood inundation armour wall and DWG 84466.002-8 for culvert details

REFERENCE :

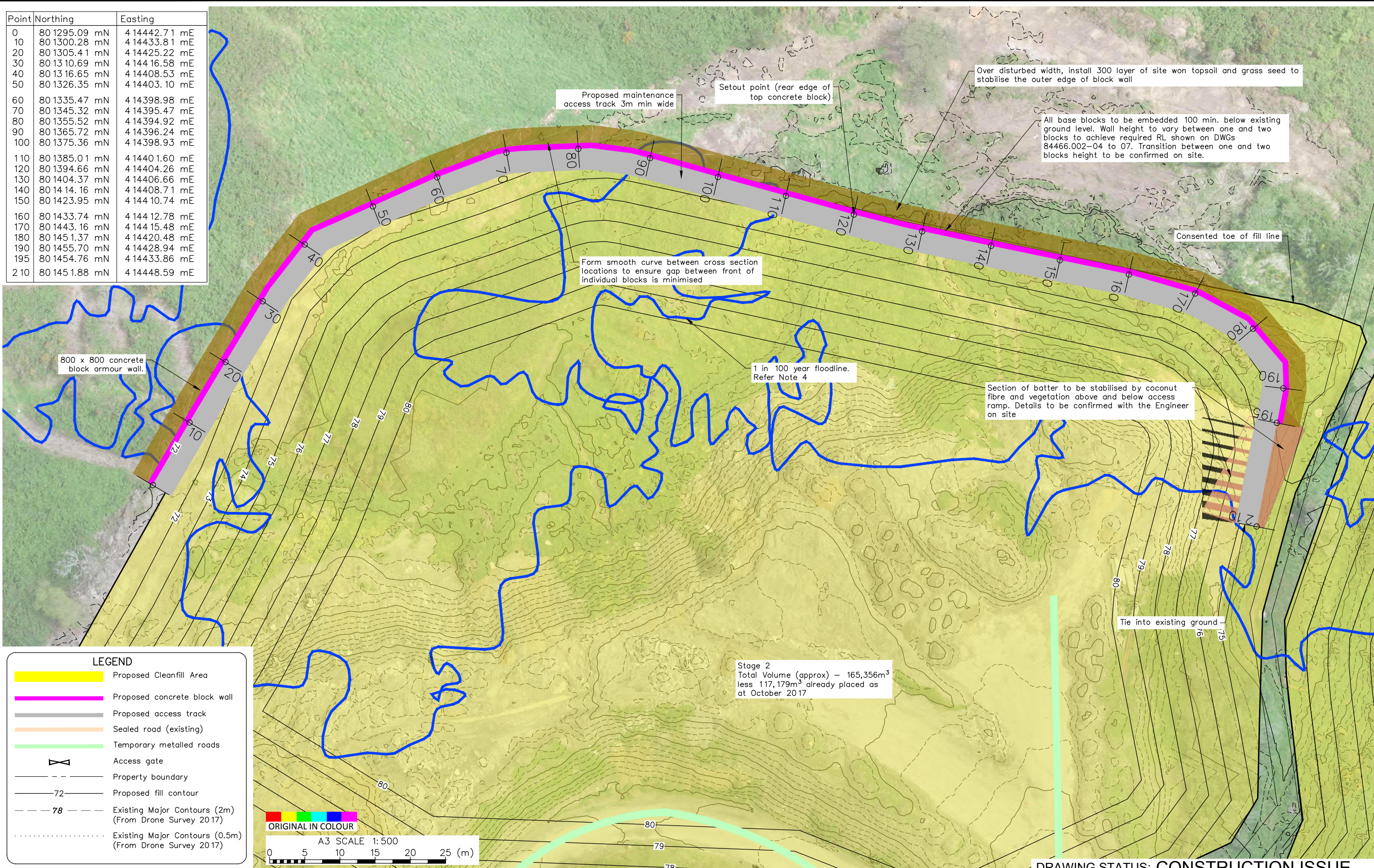


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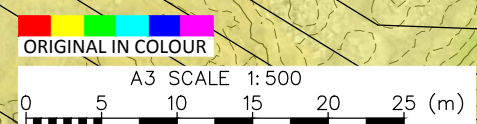
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TITLE	100 YEAR FLOOD PLAN	
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Point	Northing	Easting
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10	801300.28 mN	414433.81 mE
20	801305.41 mN	414425.22 mE
30	801310.69 mN	414416.58 mE
40	801316.65 mN	414408.53 mE
50	801326.35 mN	414403.10 mE
60	801335.47 mN	414398.98 mE
70	801345.32 mN	414395.47 mE
80	801355.52 mN	414394.92 mE
90	801365.72 mN	414396.24 mE
100	801375.36 mN	414398.93 mE
110	801385.01 mN	414401.60 mE
120	801394.66 mN	414404.26 mE
130	801404.37 mN	414406.66 mE
140	801414.16 mN	414408.71 mE
150	801423.95 mN	414410.74 mE
160	801433.74 mN	414412.78 mE
170	801443.16 mN	414415.48 mE
180	801451.37 mN	414420.48 mE
190	801455.70 mN	414428.94 mE
195	801454.76 mN	414433.86 mE
210	801451.88 mN	414448.59 mE



LEGEND	
	Proposed Cleanfill Area
	Proposed concrete block wall
	Proposed access track
	Sealed road (existing)
	Temporary metalled roads
	Access gate
	Property boundary
	Proposed fill contour
	Existing Major Contours (2m) (From Drone Survey 2017)
	Existing Major Contours (0.5m) (From Drone Survey 2017)



Stage 2  
Total Volume (approx) – 165,356m<sup>3</sup>  
less 117,179m<sup>3</sup> already placed as  
at October 2017

DRAWING STATUS: CONSTRUCTION ISSUE

DESIGNED :	BLR	May.18
DRAWN :	BLR	May.18
DESIGN CHECKED :	SJG	May.18
DRAFTING CHECKED :	RBS	May.18
CADFILE :	\\84466.002-01,03.dwg	
APPROVED :	Simon Grundy 02/05/18	
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
A Construction Issue	BLR	May.18

NOTES :

1. Aerial photo supplied by Cuttriss Consultants (Date of Photography :Oct 2017)
2. Topographic survey supplied by Cuttriss Consultants, dated October 2017. Reference data: "29513 Wainui Cleanfill Contours.dwg".
3. Coordinate Datum: NZGD2000, Wellington Circuit Coordinates. Origin: 41 18 04S 174 46 35E 800,000mN 400,000mE Level Datum: LINZ (MSL) Wellington Vertical Datum 1953
4. Flood modelling provided by GWRC December 2017
5. Refer to DWG 84466.002-02 for details of flood modelling, DWGs 84466.002-03 to 07 for details of proposed flood inundation armour wall and DWG 84466.002-8 for culvert details

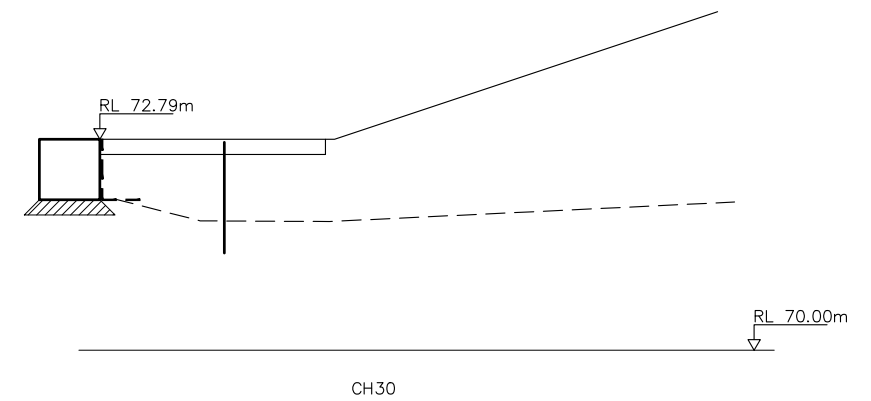
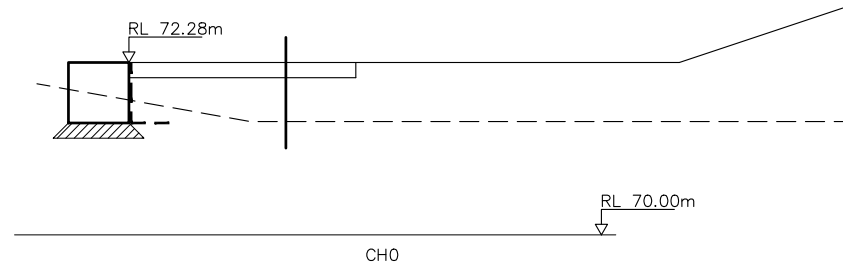
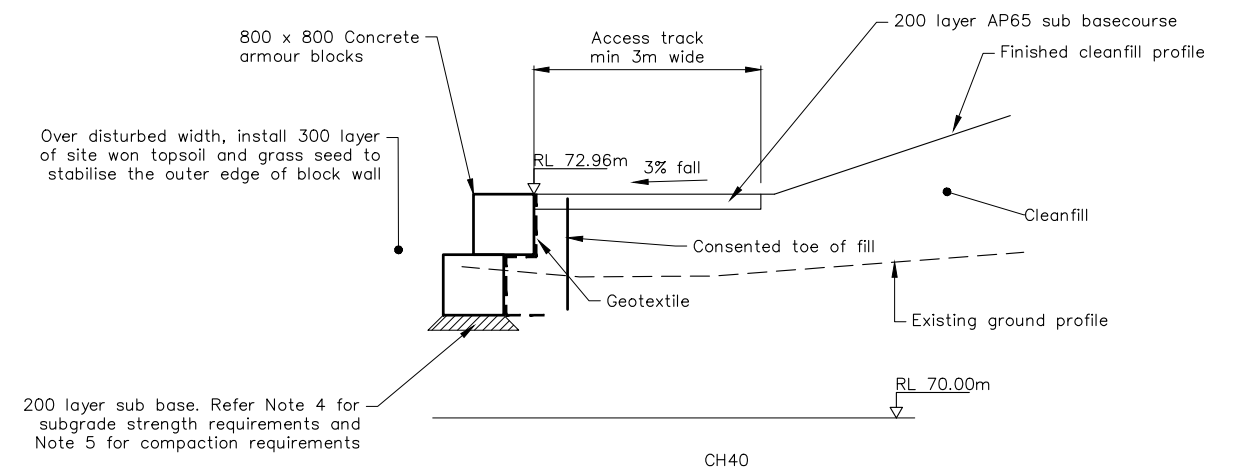
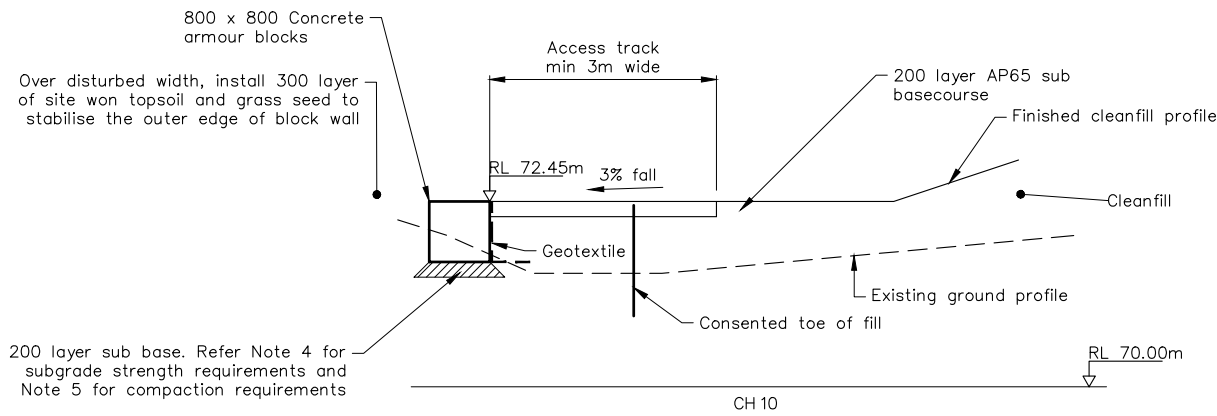
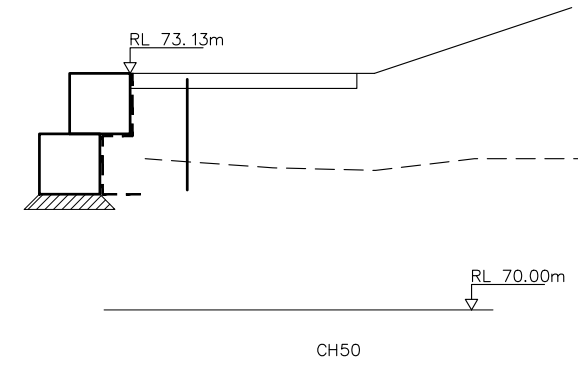
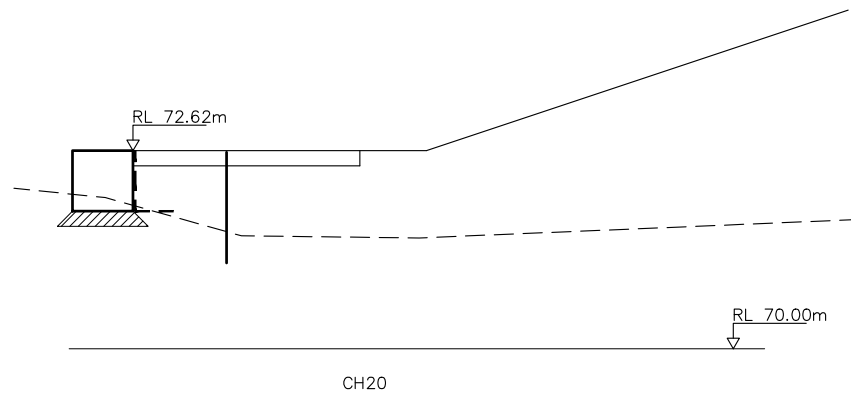
REFERENCE :

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CLIENT, PROJECT	HUTT CITY COUNCIL WAINUIOMATA CLEAN FILL SITE	
TITLE	BLOCK ARMOUR SET OUT DETAILS	
SCALES (AT A3 SIZE)	DWG. No.	REV.
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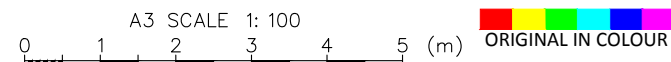
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- NOTES:
1. All dimensions are in millimetres unless noted otherwise
  2. Refer to DWGs 84466.002-01 to 03 for cross section locations
  3. Level Datum: LINZ (MSL) Wellington Vertical Datum 1953
  4. Wall subgrade to achieve a minimum of 4 scala penetrometer blows per 100mm to 1.0m depth (or refusal). Scala penetrometer testing to be undertaken by Geotechnics and reviewed by Engineer prior to wall construction
  5. Subbase for block bedding and maintenance track to be compacted to 95% MDD. Source and NDM testing to be undertaken by Geotechnics and verified by the Engineer
  6. Geotextile cloth to be Bidim A29 or approved equivalent. Geotextile to be lapped 300mm min. where laps are required

DESIGNED :	BLR	May.18
DRAWN :	BLR	May.18
DESIGN CHECKED :	SJG	May.18
DRAFTING CHECKED :	RBS	May.18
CADFILE :	\\84466.002-04-08.dwg	
APPROVED :	Simon Grundy 02/05/18	
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
A Construction Issue	BLR	May.18

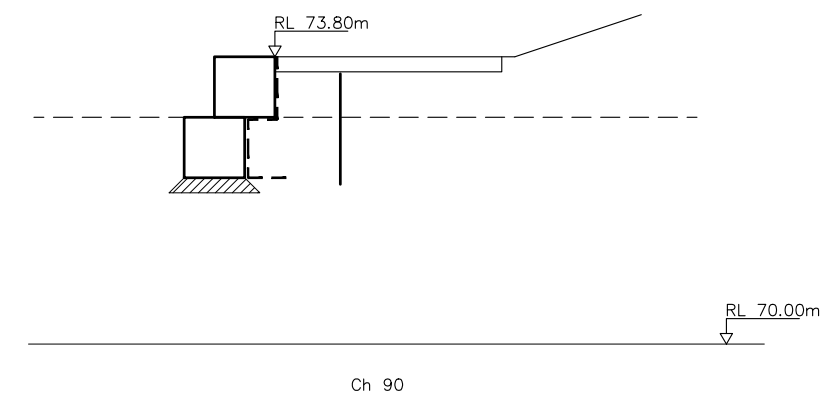
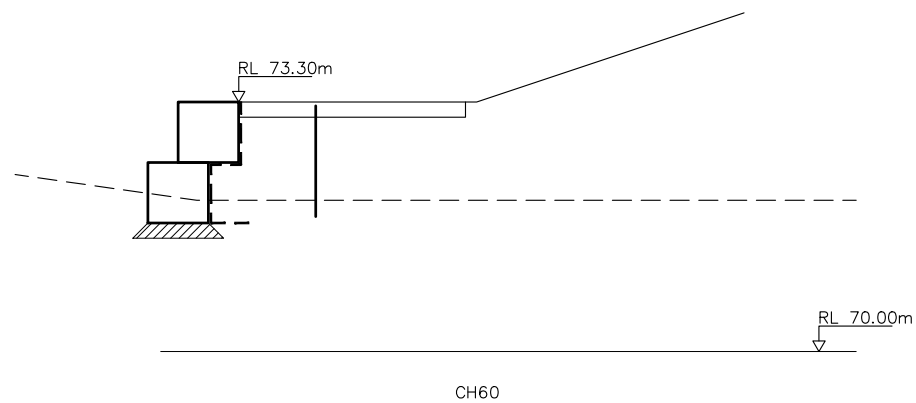
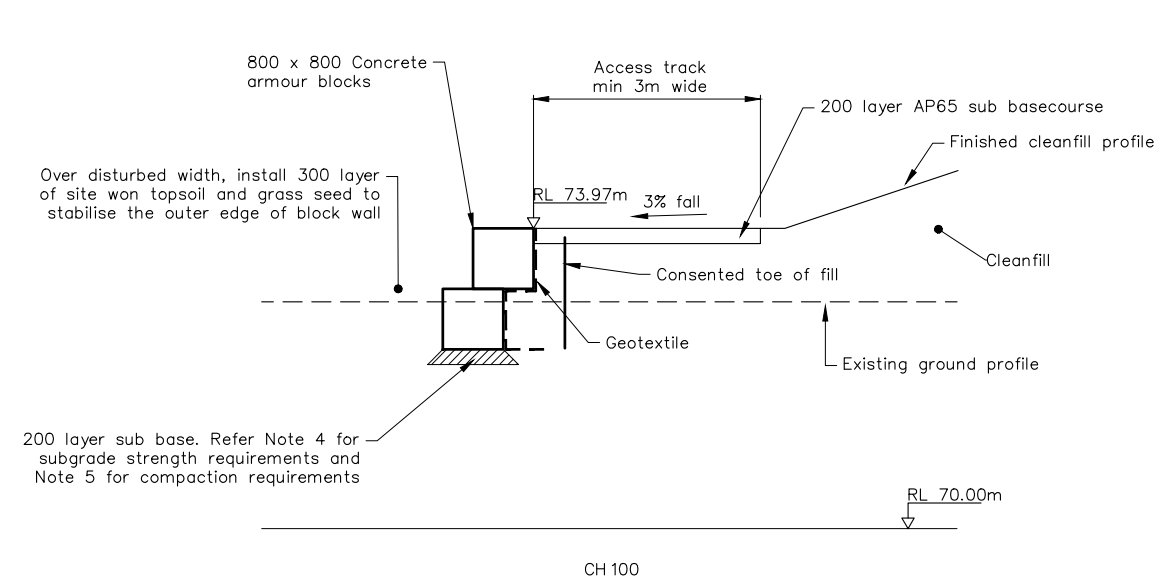
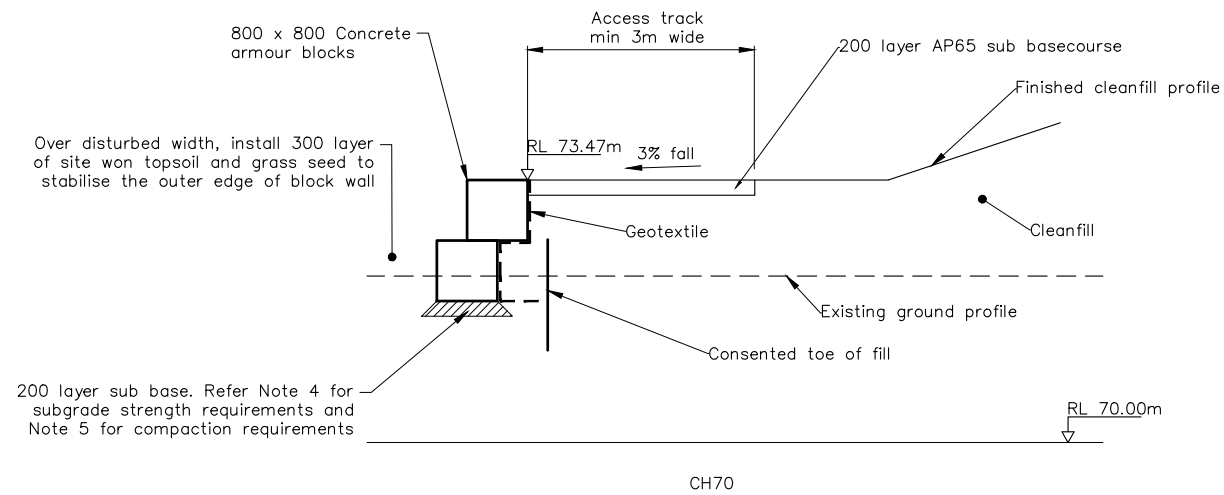
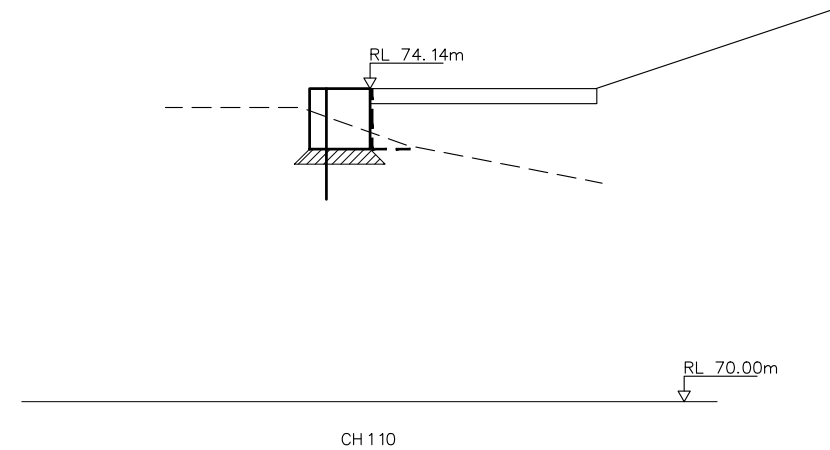
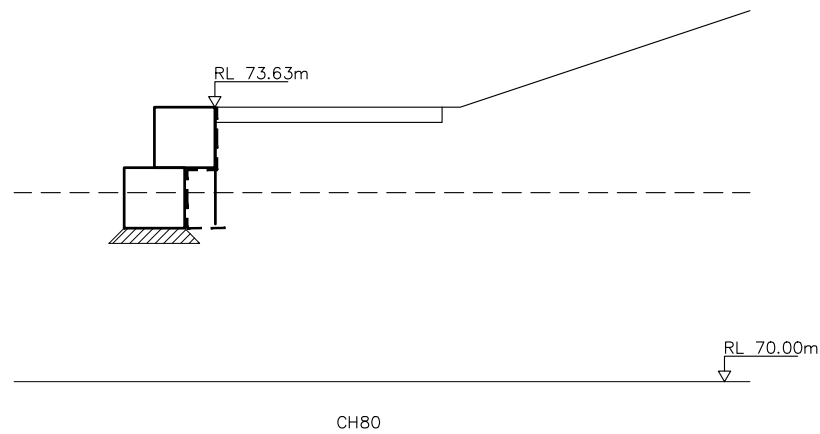


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DRAWING STATUS: CONSTRUCTION ISSUE

CLIENT, PROJECT  
**HUTT CITY COUNCIL**  
 WAINUIOMATA CLEAN FILL SITE  
 TITLE  
**BLOCK ARMOUR SECTIONS (SHEET 1 OF 4)**

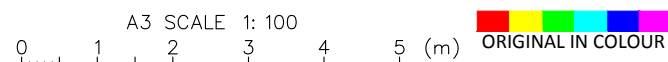
SCALES (AT A3 SIZE) 1:100	DWG. No. 84466.002-04	REV. A
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NOTES:

- All dimensions are in millimetres unless noted otherwise
- Refer to DWGs 84466.002-01 to 03 for cross section locations
- Level Datum: LINZ (MSL) Wellington Vertical Datum 1953
- Wall subgrade to achieve a minimum of 4 scala penetrometer blows per 100mm to 1.0m depth (or refusal). Scala penetrometer testing to be undertaken by Geotechnics and reviewed by Engineer prior to wall construction
- Subbase for block bedding and maintenance track to be compacted to 95% MDD. Source and NDM testing to be undertaken by Geotechnics and verified by the Engineer
- Geotextile cloth to be Bidim A29 or approved equivalent. Geotextile to be lapped 300mm min. where laps are required

DESIGNED :	BLR	May.18
DRAWN :	BLR	May.18
DESIGN CHECKED :	SJG	May.18
DRAFTING CHECKED :	RBS	May.18
CADFILE :	\\84466.002-04-08.dwg	
APPROVED :	Simon Grundy 02/05/18	
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
A Construction Issue	BLR	May.18



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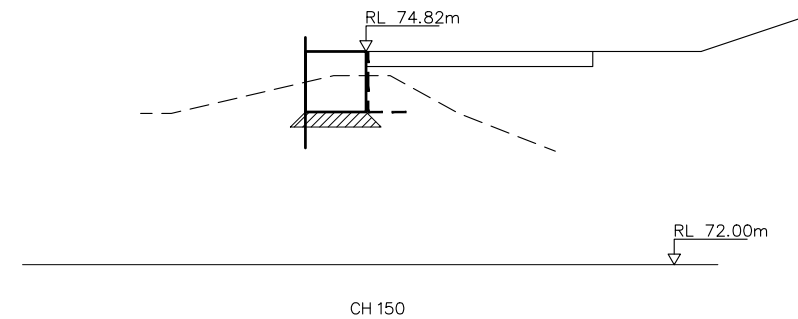
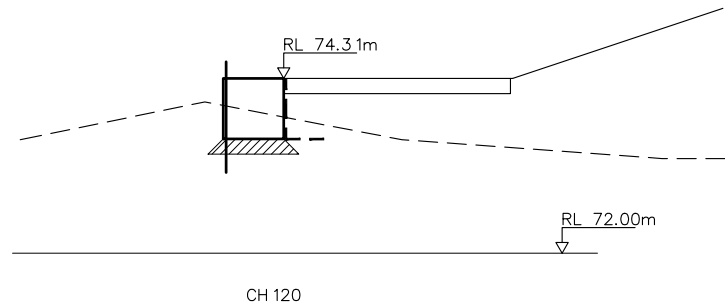
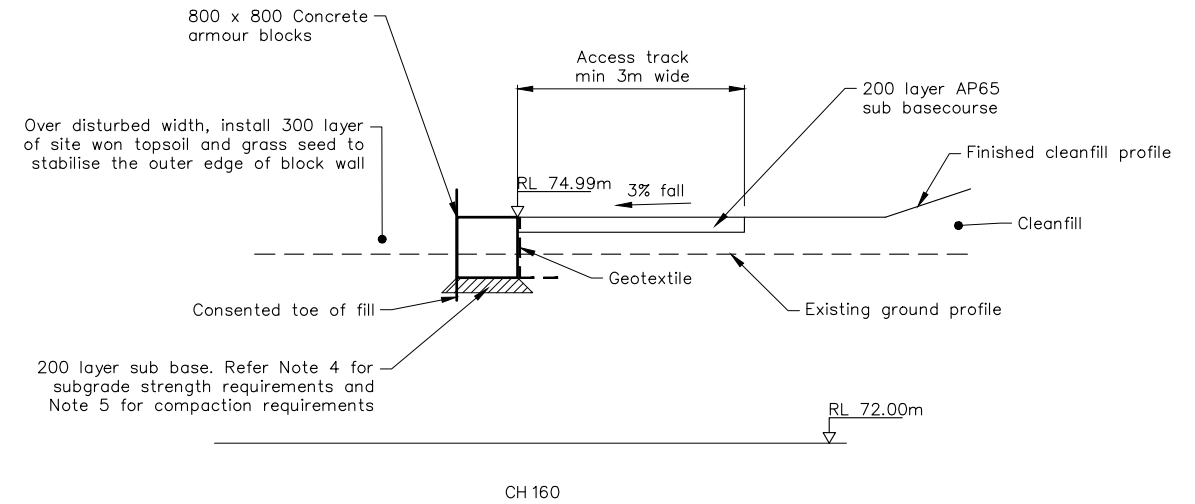
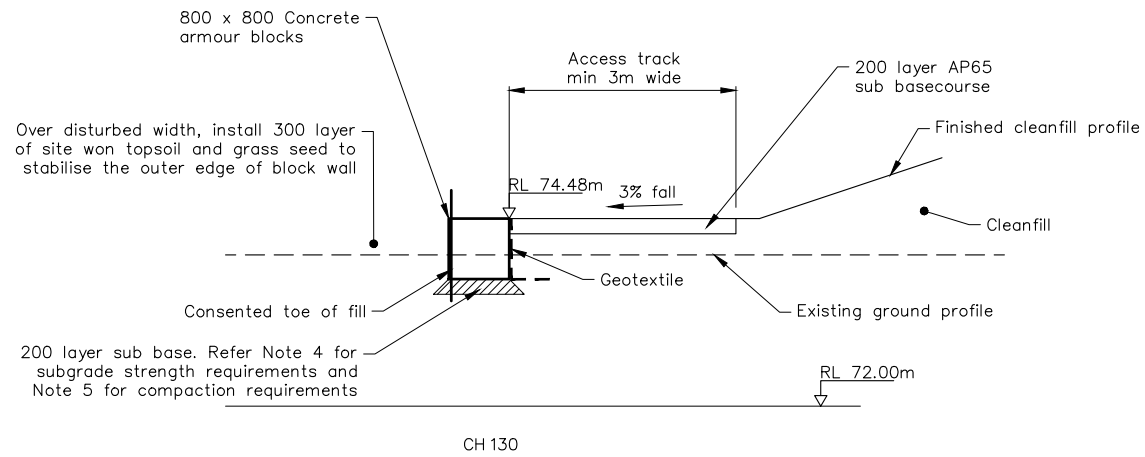
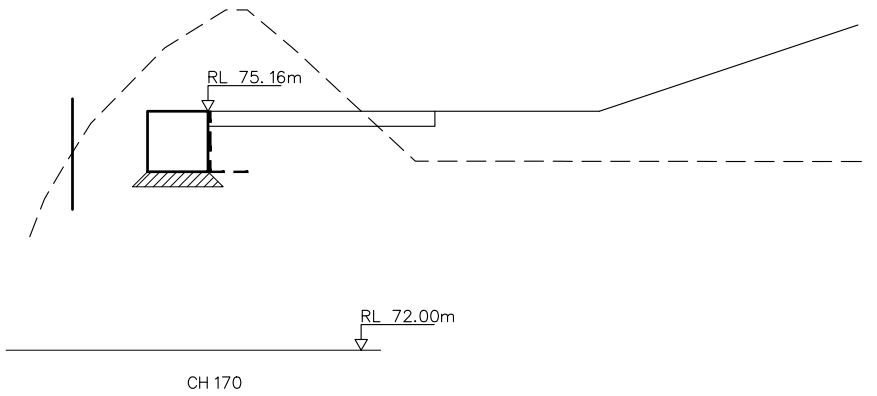
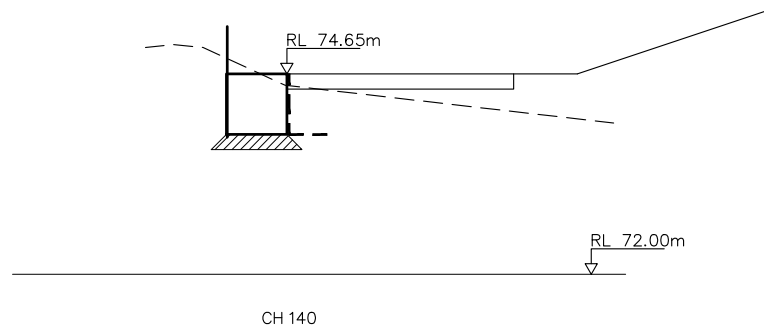
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 Tel. (04) 381 8560 Fax. (09) 307 0265  
 www.tonkintaylor.co.nz

DRAWING STATUS: CONSTRUCTION ISSUE

CLIENT, PROJECT	HUTT CITY COUNCIL WAINUIOMATA CLEAN FILL SITE	
TITLE	BLOCK ARMOUR SECTIONS (SHEET 2 OF 4)	
SCALES (AT A3 SIZE)	DWG. No.	REV.
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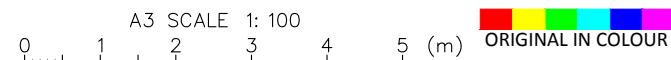
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- NOTES:
- All dimensions are in millimetres unless noted otherwise
  - Refer to DWGs 84466.002-01 to 03 for cross section locations
  - Level Datum: LINZ (MSL) Wellington Vertical Datum 1953
  - Wall subgrade to achieve a minimum of 4 scala penetrometer blows per 100mm to 1.0m depth (or refusal). Scala penetrometer testing to be undertaken by Geotechnics and reviewed by Engineer prior to wall construction
  - Subbase for block bedding and maintenance track to be compacted to 95% MDD. Source and NDM testing to be undertaken by Geotechnics and verified by the Engineer
  - Geotextile cloth to be Bidim A29 or approved equivalent. Geotextile to be lapped 300mm min. where laps are required

DESIGNED :	BLR	May.18
DRAWN :	BLR	May.18
DESIGN CHECKED :	SJG	May.18
DRAFTING CHECKED :	RBS	May.18
CADFILE :	\\84466.002-04-08.dwg	
APPROVED :	Simon Grundy 02/05/18	
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
A Construction Issue	BLR	May.18

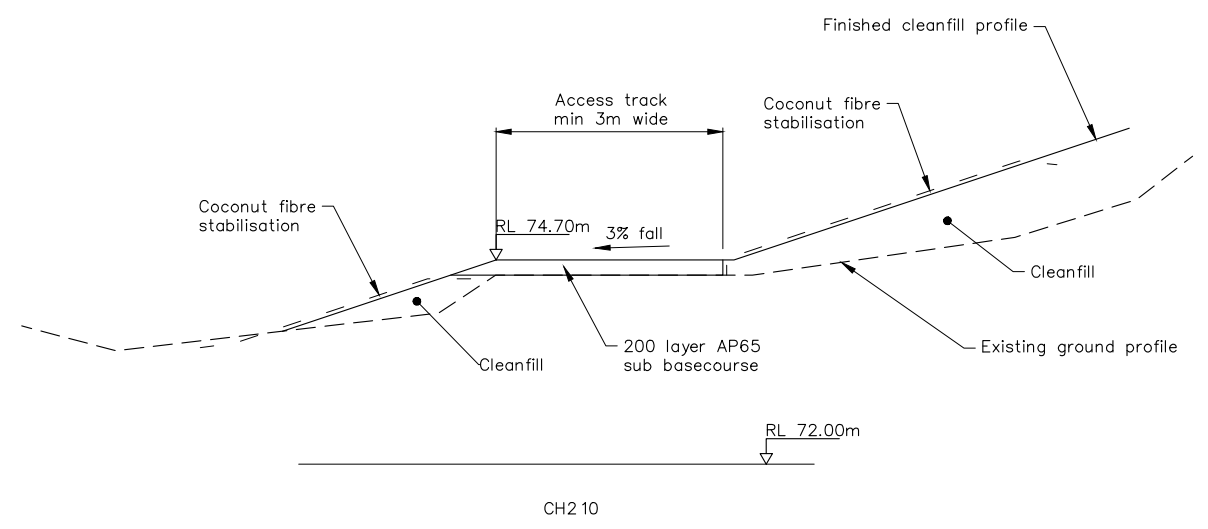
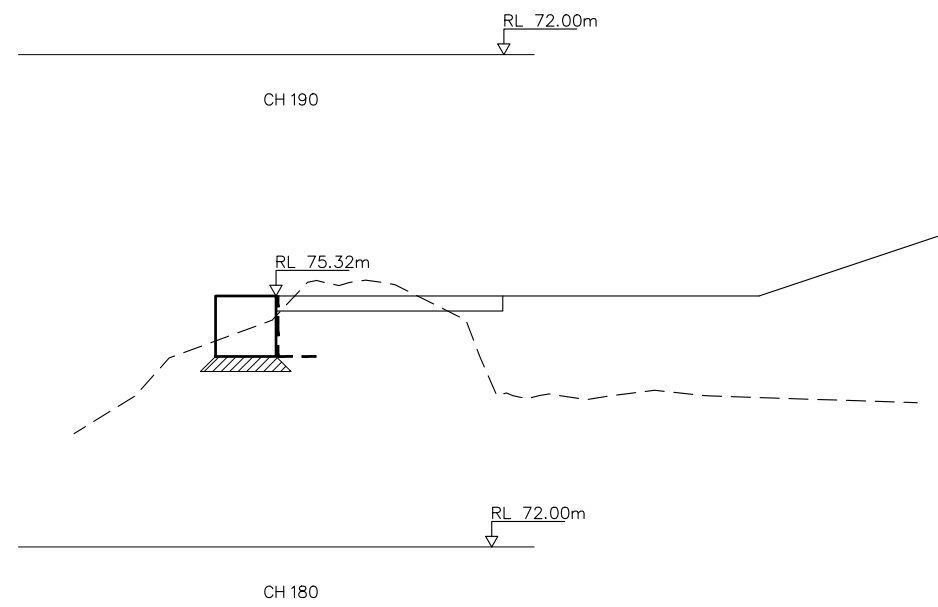
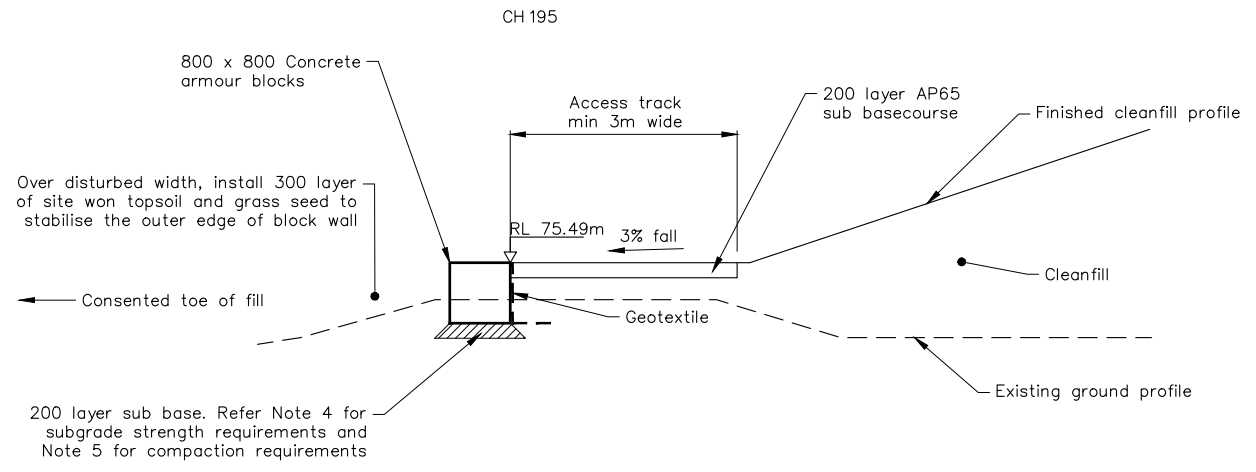
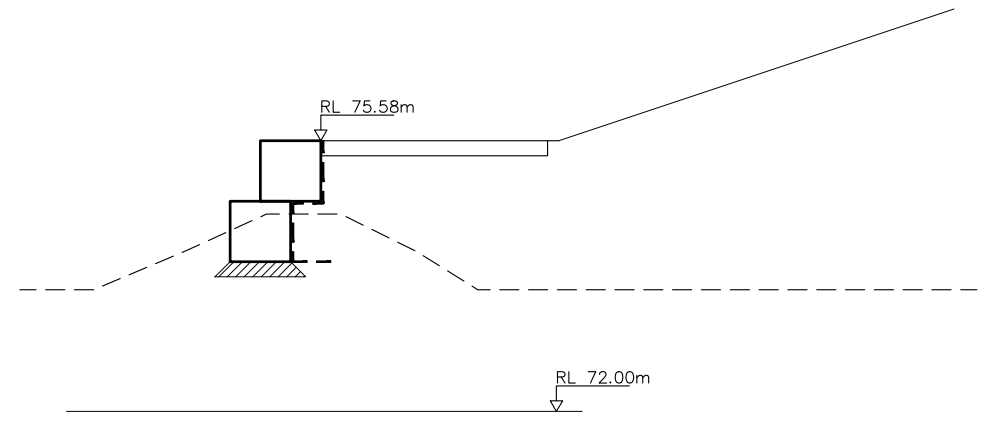


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DRAWING STATUS: CONSTRUCTION ISSUE

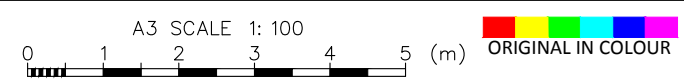
CLIENT, PROJECT  
**HUTT CITY COUNCIL**  
 WAINUIOMATA CLEAN FILL SITE  
 TITLE  
**BLOCK ARMOUR SECTIONS (SHEET 3 OF 4)**

SCALES (AT A3 SIZE)	DWG. No.	REV.
1: 100	84466.002-06	A



- NOTES:
1. All dimensions are in millimetres unless noted otherwise
  2. Refer to DWGs 84466.002-01 to 03 for cross section locations
  3. Level Datum: LINZ (MSL) Wellington Vertical Datum 1953
  4. Wall subgrade to achieve a minimum of 4 scala penetrometer blows per 100mm to 1.0m depth (or refusal). Scala penetrometer testing to be undertaken by Geotechnics and reviewed by Engineer prior to wall construction
  5. Subbase for block bedding and maintenance track to be compacted to 95% MDD. Source and NDM testing to be undertaken by Geotechnics and verified by the Engineer
  6. Geotextile cloth to be Bidim A29 or approved equivalent. Geotextile to be lapped 300mm min. where laps are required

DESIGNED :	BLR	May. 18
DRAWN :	BLR	May. 18
DESIGN CHECKED :	SJG	May. 18
DRAFTING CHECKED :	RBS	May. 18
CADFILE :	\\84466.002-04-08.dwg	
APPROVED :	Simon Grundy 02/05/18	
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
A Construction Issue	BLR	May. 18



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DRAWING STATUS: CONSTRUCTION ISSUE

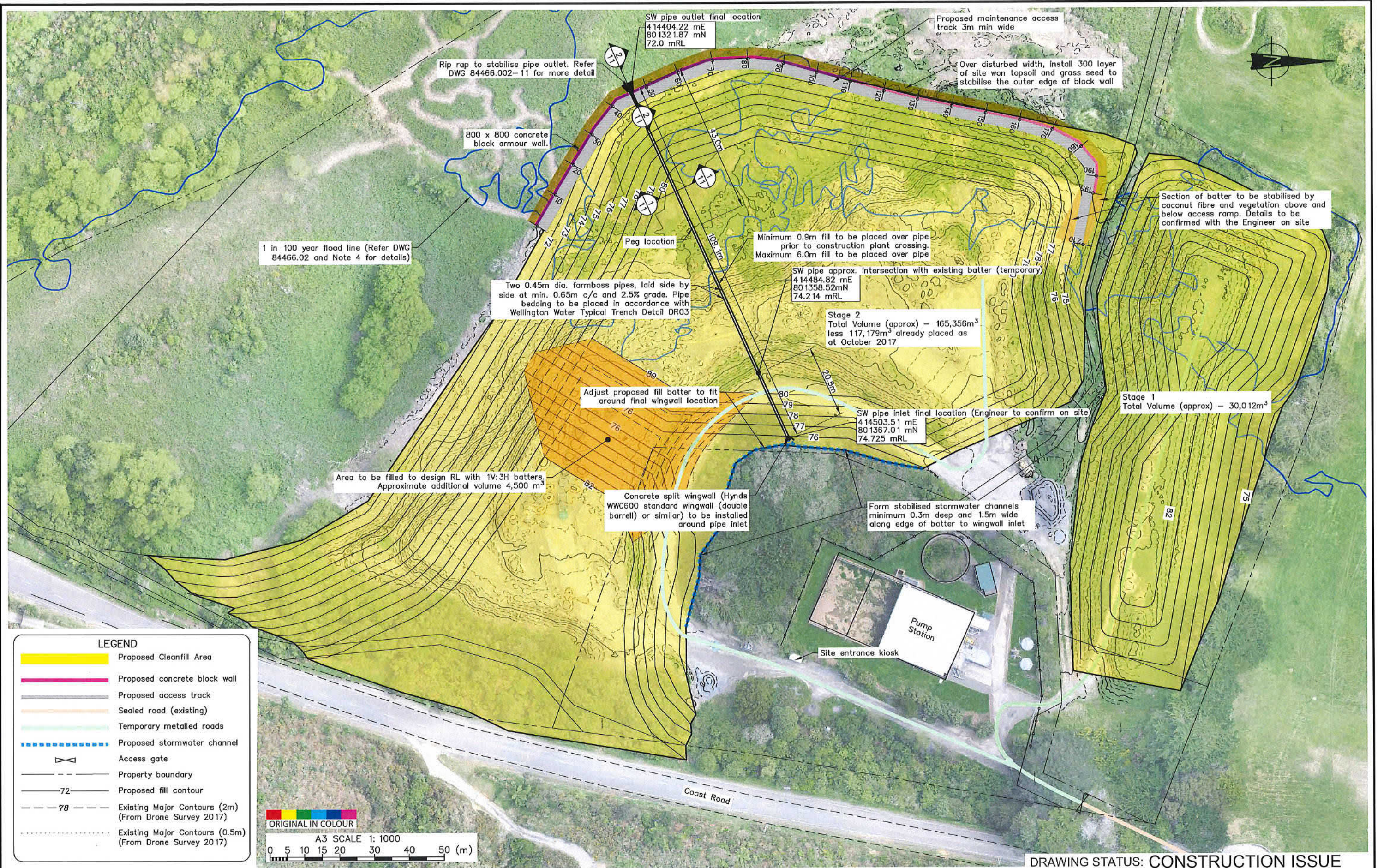
CLIENT, PROJECT  
**HUTT CITY COUNCIL**  
 WAINUIOMATA CLEAN FILL SITE

TITLE  
**BLOCK ARMOUR SECTIONS (SHEET 4 OF 4)**

SCALES (AT A3 SIZE) 1: 100	DWG. No. 84466.002-07	REV. A
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**LEGEND**

- Proposed Cleanfill Area
- Proposed concrete block wall
- Proposed access track
- Sealed road (existing)
- Temporary metalled roads
- Proposed stormwater channel
- Access gate
- Property boundary
- Proposed fill contour
- Existing Major Contours (2m) (From Drone Survey 2017)
- Existing Major Contours (0.5m) (From Drone Survey 2017)

ORIGINAL IN COLOUR

A3 SCALE 1: 1000

0 5 10 15 20 30 40 50 (m)

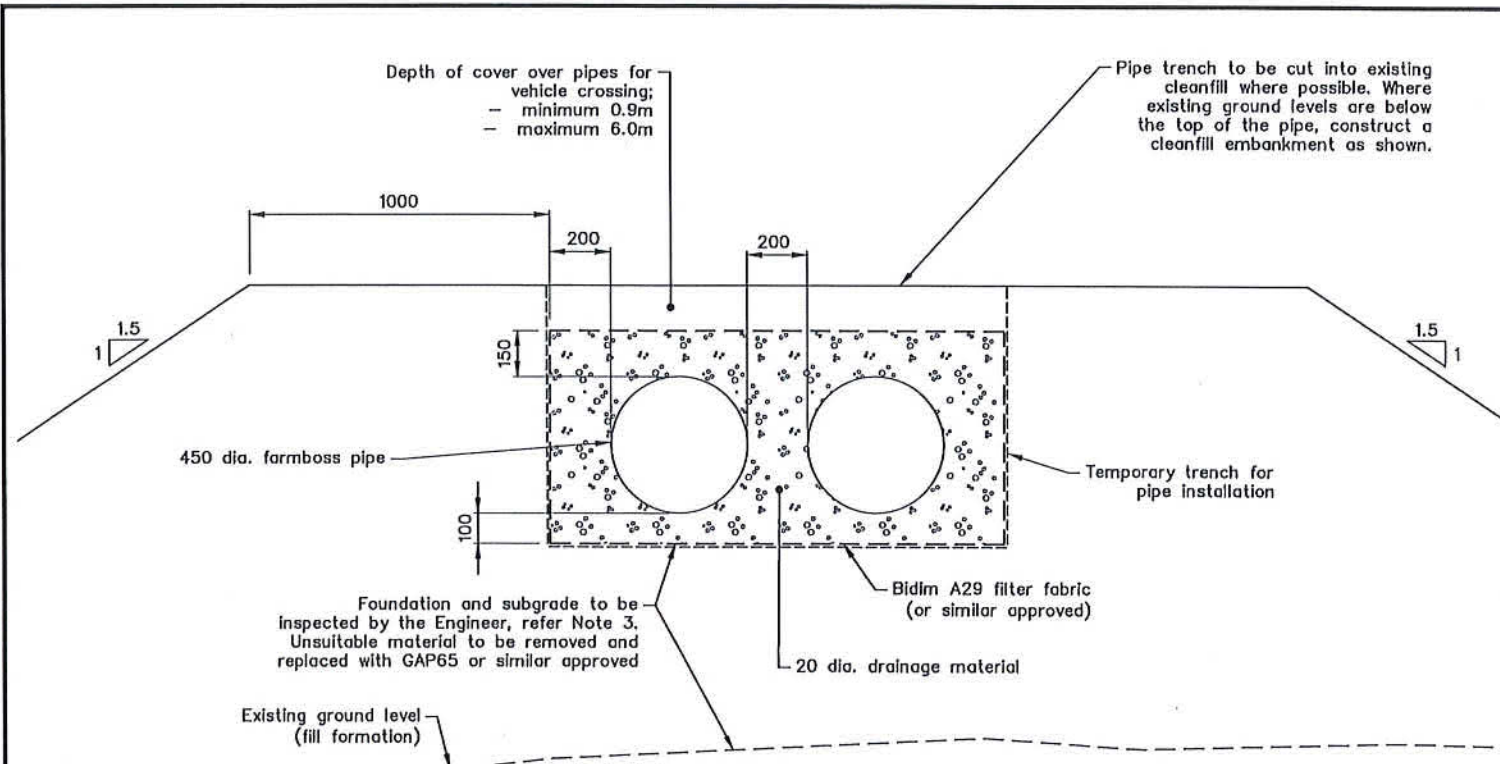
**DRAWING STATUS: CONSTRUCTION ISSUE**

	DESIGNED :	BLR	Jul. 18	<p><b>NOTES :</b></p> <ol style="list-style-type: none"> <li>Aerial photo supplied by Cuttriss Consultants (Date of Photography : Oct 2017)</li> <li>Topographic survey supplied by Cuttriss Consultants, dated October 2017. Reference data: "29513 Wainui Cleanfill Contours.dwg".</li> <li>Coordinate Datum: NZGD2000, Wellington Circuit Coordinates. Origin: 41 18 04S 174 46 35E 800,000mN 400,000mE Level Datum: LINZ (MSL) Wellington Vertical Datum 1953</li> <li>Flood modelling provided by GWRC December 2017</li> <li>Refer to DWG 84466.002-02 for details of flood modelling, DWGs 84466.002-03 to 07 for details of proposed flood inundation armour wall and DWG 84466.002-11 for culvert details</li> </ol> <p>REFERENCE :</p>
	DRAWN :	BLR	Jul. 18	
	DESIGN CHECKED :	<i>[Signature]</i>		
	DRAFTING CHECKED :	<i>[Signature]</i>		
	CADFILE :	\\84466.0020-10.dwg		
	APPROVED :	<i>[Signature]</i>		
A Construction Issue	BY	DATE	3/7/18	<p>This drawing is not to be used for construction purposes unless signed or approved</p> <p>COPYRIGHT ON THIS DRAWING IS RESERVED</p>

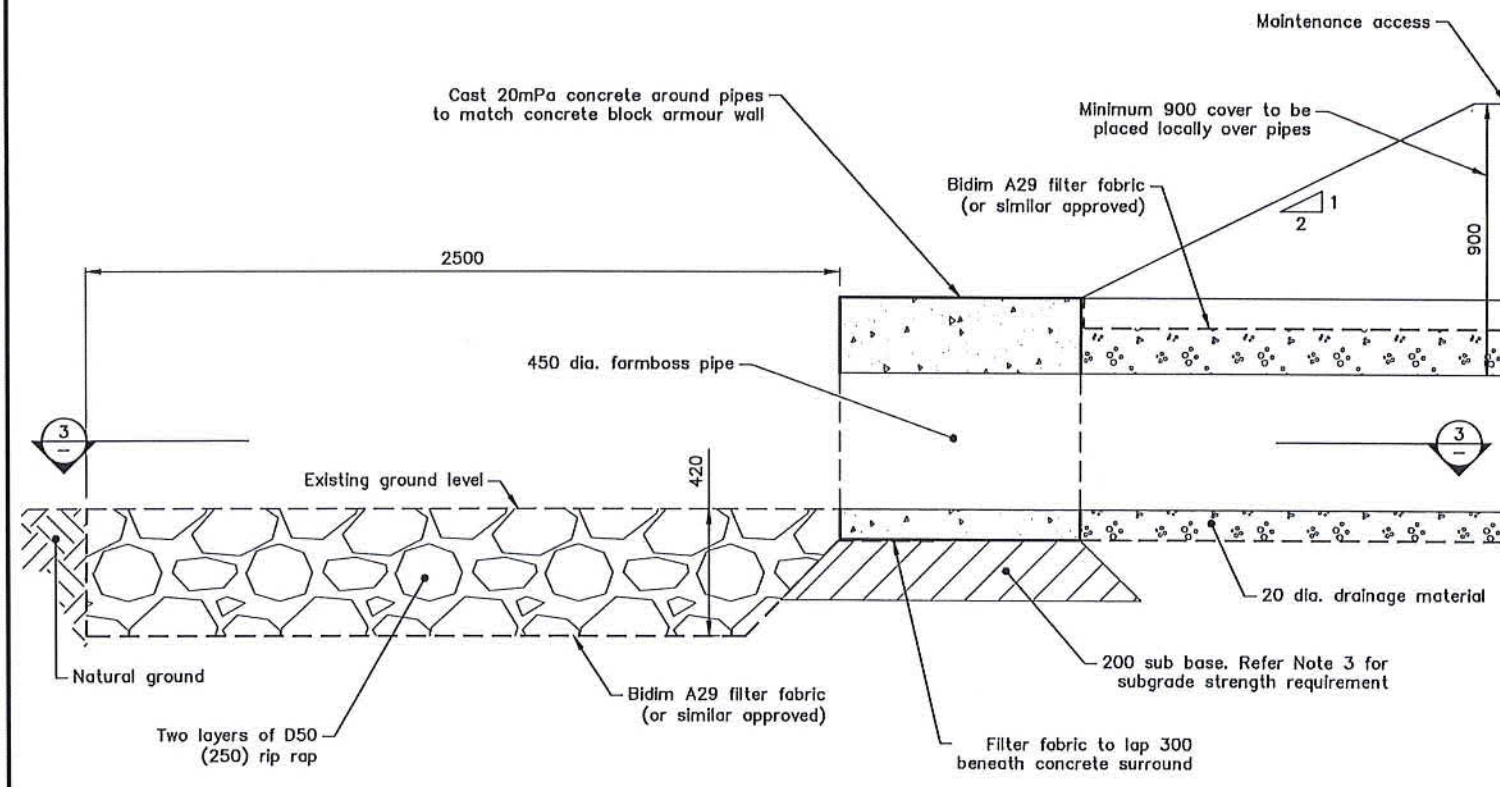
**Tonkin+Taylor**

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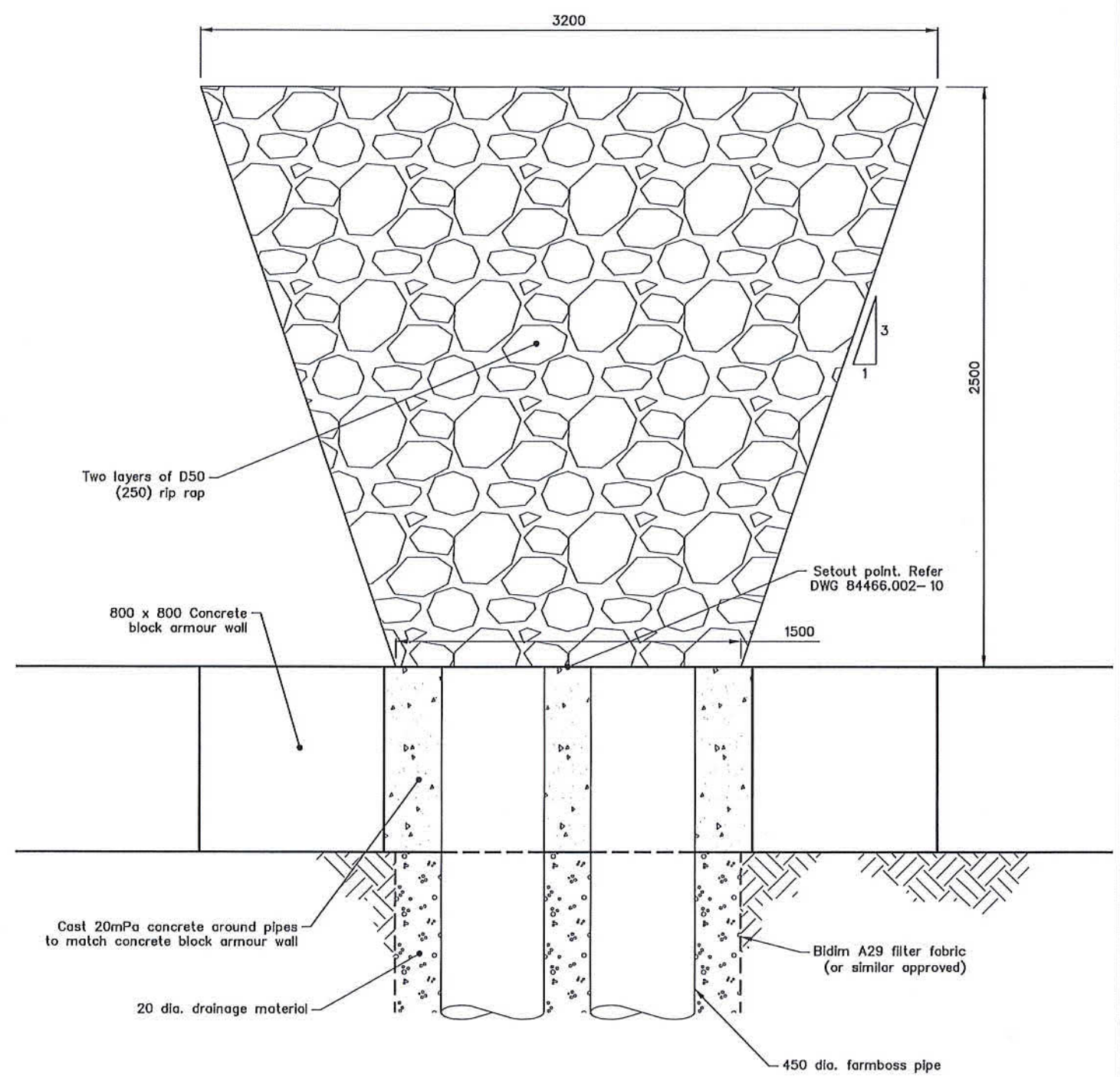
CLIENT, PROJECT	HUTT CITY COUNCIL WAINUIOMATA CLEAN FILL SITE		
TITLE	SITE PLAN - NEW STORMWATER CULVERTS		
SCALES (AT A3 SIZE)	1: 1000	DWG. No.	84466.002- 10
REV.	A		



SECTION 1 TRENCH  
SCALE 1:25



SECTION 2 CULVERT OUTLET  
SCALE 1:25



SECTION 3 CULVERT OUTLET PLAN  
SCALE 1:25



DESIGNED :	BLR	Jun. 18
DRAWN :	BLR	Jun. 18
DESIGN CHECKED :		
DRAFTING CHECKED :		
CADFILE :	\\84466.0020-11.dwg	
APPROVED :	3.7.18	
REVISION DESCRIPTION	BY	DATE
A Construction Issue	BLR	7/18

NOTES :

- All dimensions are in millimetres unless noted otherwise
- Refer to DWG 84466.002-10 for cross section locations
- Pipe formation and subgrade to achieve a minimum of 4 scale penetrometer blows per 100mm to 1.0m depth (or refusal). Scala penetrometer testing to be undertaken by Geotechnics and reviewed by Engineer prior to wall and culvert construction

REFERENCE :

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DRAWING STATUS: CONSTRUCTION ISSUE

CLIENT, PROJECT  
**HUTT CITY COUNCIL**  
WAINUIOMATA CLEAN FILL SITE

TITLE  
**PIPED STORMWATER SYSTEM DETAILS**

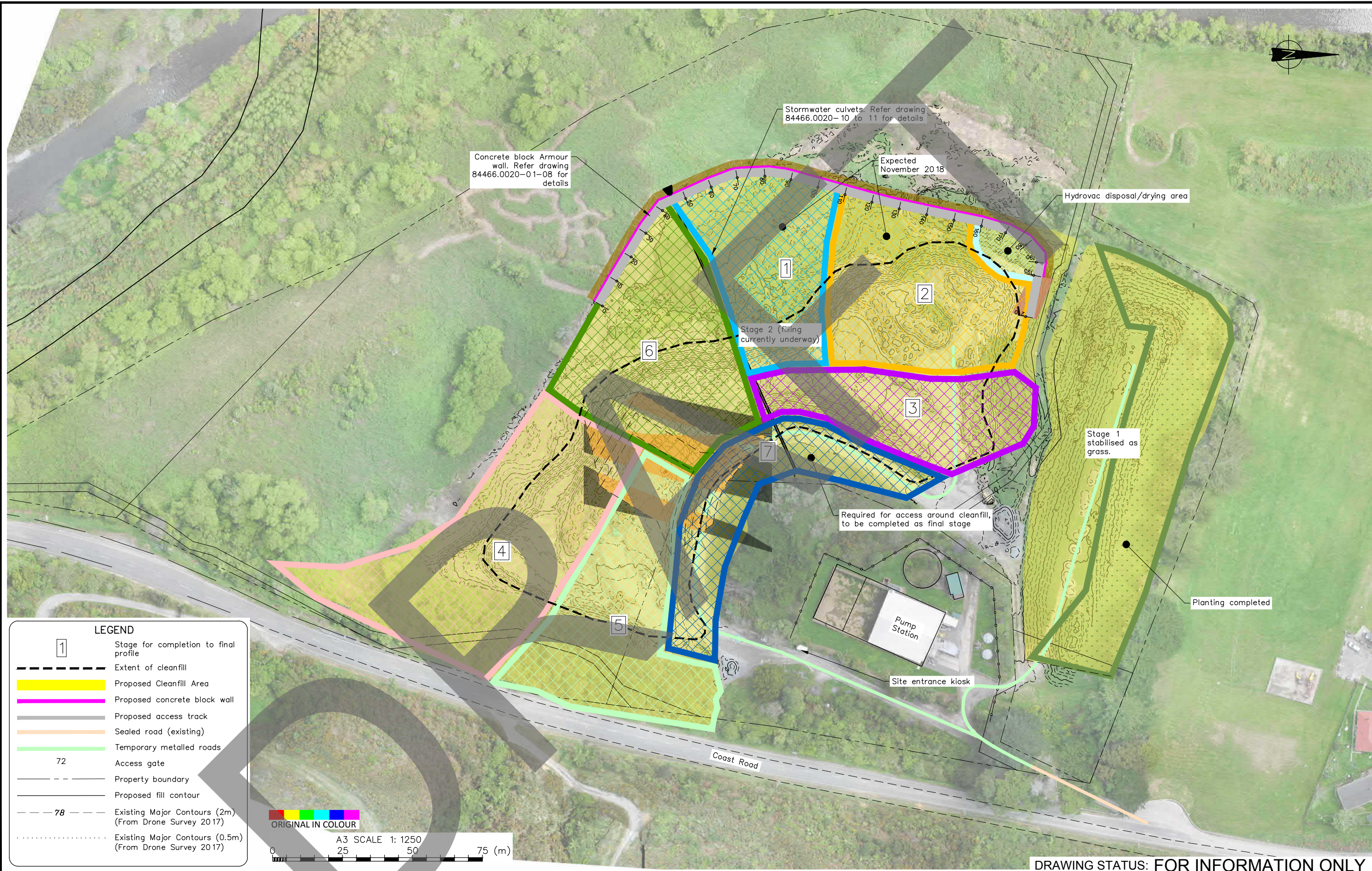
SCALES (AT A3 SIZE)  
1:25

DWG. No.  
84466.002-11

REV.  
A

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**LEGEND**

- 1 Stage for completion to final profile
- Extent of cleanfill
- Proposed Cleanfill Area
- Proposed concrete block wall
- Proposed access track
- Sealed road (existing)
- Temporary metalled roads
- 72 Access gate
- Property boundary
- Proposed fill contour
- 78 Existing Major Contours (2m) (From Drone Survey 2017)
- Existing Major Contours (0.5m) (From Drone Survey 2017)

ORIGINAL IN COLOUR

A3 SCALE 1: 1250  
0 25 50 75 (m)

**DRAWING STATUS: FOR INFORMATION ONLY**

DESIGNED :	BLR	Sep. 18
DRAWN :	BLR	Sep. 18
DESIGN CHECKED :		
DRAFTING CHECKED :		
CADFILE :	\\84466.0020-20.dwg	
APPROVED :		
This drawing is not to be used for construction purposes unless signed as approved		
REVISION	DESCRIPTION	BY DATE
0	Information Only	

**NOTES :**

- Aerial photo supplied by Cuttriss Consultants (Date of Photography :Oct 2017)
- Topographic survey supplied by Cuttriss Consultants, dated October 2017. Reference data: "29513 Wainui Cleanfill Contours.dwg"
- Coordinate Datum: NZGD2000, Wellington Circuit Coordinates. Origin: 41 18 04S 174 46 35E 800,000mN 400,000mE Level Datum: LINZ (MSL) Wellington Vertical Datum 1953
- Extent of cleanfill from Drone Survey October 2017

REFERENCE :

**Tonkin+Taylor**

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Tel. (04) 381 8560 Fax. (09) 307 0265  
www.tonkintaylor.co.nz

CLIENT, PROJECT	
HUTT CITY COUNCIL WAINUIOMATA CLEAN FILL SITE	
TITLE	
SITE PLAN Operational Filling Plan (Stage 2)	
SCALES (AT A3 SIZE)	DWG. No.
1: 1250	84466.0020-20
REV.	0