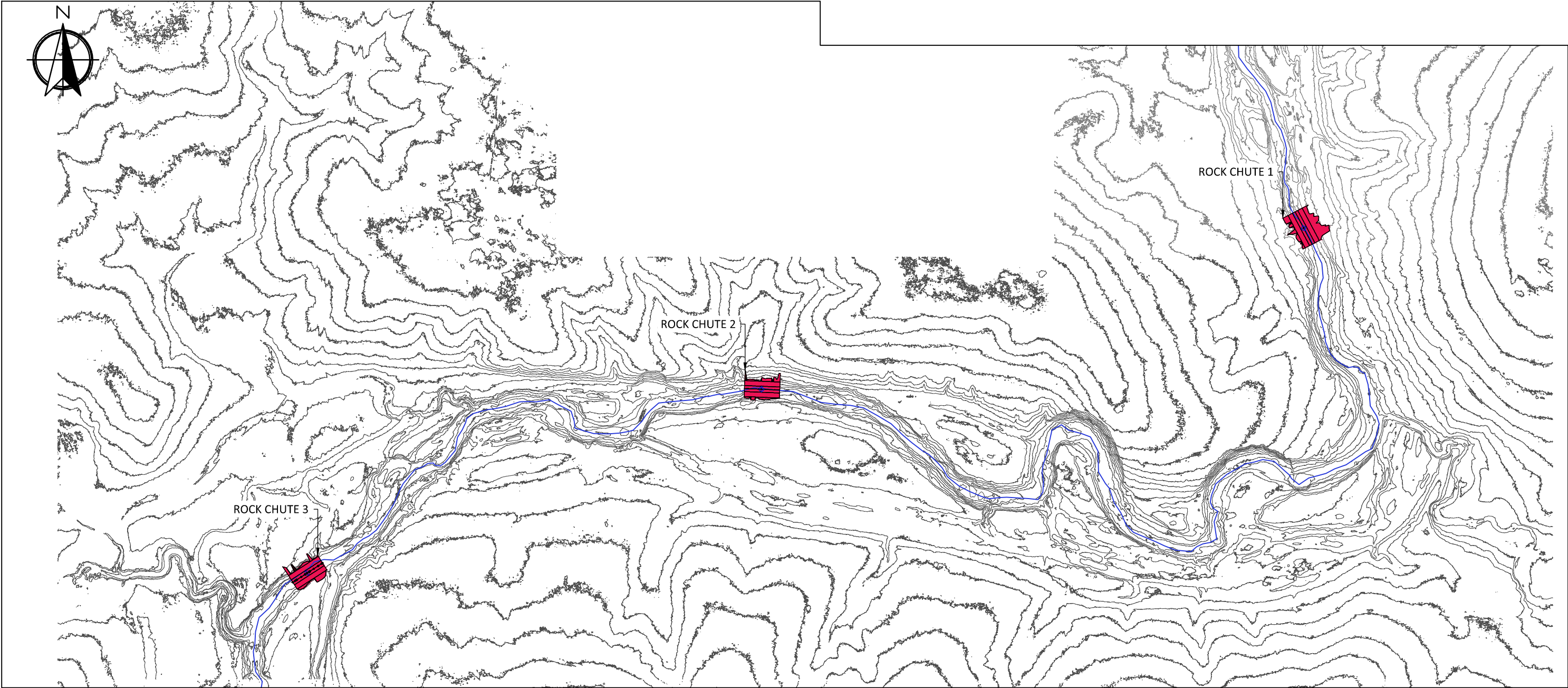


DRAWING SCHEDULE		
DRAWING NUMBER	REV	DRAWING TITLE
001	A	OVERALL PLAN VIEW, SHEET LAYOUT & NOTES
002	A	ROCK CHUTE 1 - SETOUT
003	A	ROCK CHUTE 1 - LONGITUDINAL SECTION
004	A	ROCK CHUTE 2 - SETOUT
005	A	ROCK CHUTE 2 - LONGITUDINAL SECTION
006	A	ROCK CHUTE 3 - SETOUT
007	A	ROCK CHUTE 3 - LONGITUDINAL SECTION
008	A	TYPICAL SECTIONS
009	A	TYPICAL SECTIONS

GENERAL NOTES

1. REFER TO TECHNICAL SPECIFICATION: TEN MILE CREEK EROSION REMEDIATION DETAIL DESIGN
2. COORDINATES ARE GDA94 ZONE 56.
3. CONTOURS ARE AT 1m INTERVALS.
4. SURVEY DATA CAPTURED IN 2018 WAS USED TO CREATE THE DTM UPON WHICH THE DESIGN IS BASED AND THIS DTM MAY NOT REPRESENT THE GROUND CONDITIONS AT THE TIME OF COMMENCEMENT OF WORKS.
5. DURING BOTH SETOUT AND CONSTRUCTION, IF PART OF THE DESIGN DOES NOT TIE INTO THE ON GROUND CONDITIONS, NEILLY GROUP ENGINEERING, THROUGH THE SITE SUPERVISOR, SHOULD BE CONSULTED TO DETERMINE HOW TO PROCEED WITHOUT COMPROMISING THE DESIGN INTENT.
6. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATION AND DEPTH OF ALL UNDERGROUND SERVICES PRIOR TO THE COMMENCEMENT OF WORKS.
7. DISTURBANCE TO VEGETATION SHALL BE MINIMISED AND SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION.



SITE: TEN MILE CREEK					
TITLE: REEF TRUST IV STREAM BANK EROSION REMEDIATION OVERALL PLAN VIEW, SHEET LAYOUT & NOTES					
SCALE @ A3 1:4000	DRAWN DATE 12/07/19	DRAWN TB	DESIGNED JA	APPRVD AN	APPRVD DATE 12/07/19
PROJECT NO. 18060	DRAWING NO. 001	REVISION A	SHEET NO. 1	FILE NAME 18060.dwg	

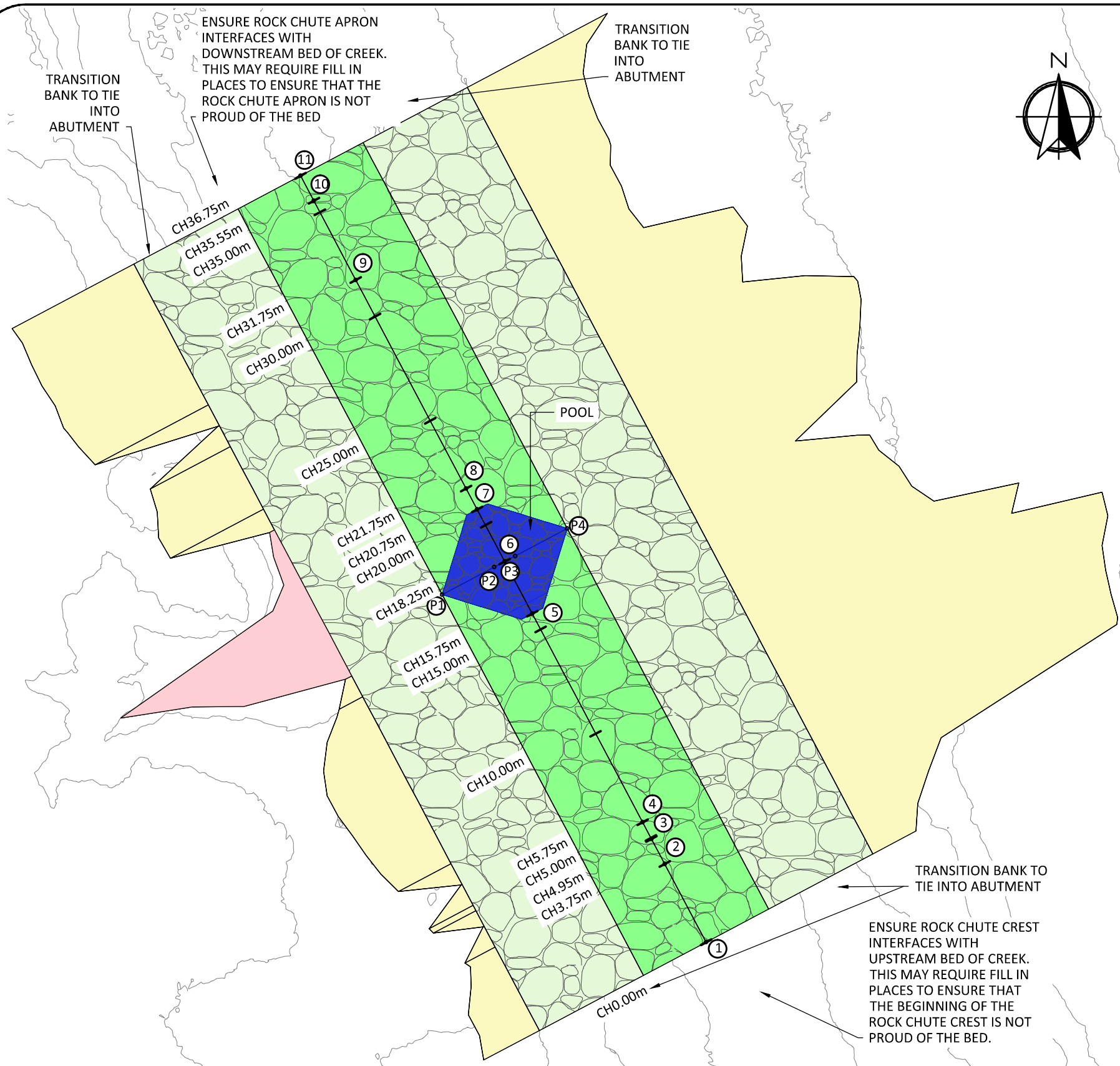


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A	DRAFT ISSUE	12/07/19	AN
REV	DESCRIPTION	DATE	APPRVD
STATUS: DRAFT			



ROCK CHUTE 1 SETOUT POINTS							
SETOUT NO.	TYPE	STATION	EASTING	NORTHING	BEARING		
					DEG	MIN	SEC
1	START CHUTE UPSTREAM FACE	0	191758.66	7442012.74	332	6	20.7
2	START CREST/START OF CREST CUT OFF WALL	3.75	191756.90	7442016.06	332	6	20.7
3	END CREST CUT OFF WALL	4.95	191756.34	7442017.12	332	6	20.7
4	END CREST	5.75	191755.97	7442017.83	332	6	20.7
5	START POOL	15.75	191751.29	7442026.66	332	6	20.7
6	BASE POOL	18.25	191750.12	7442028.87	332	6	20.7
7	END POOL/START POOL APRON	20.75	191748.95	7442031.08	332	6	20.7
8	END POOL APRON	21.75	191748.48	7442031.97	332	6	20.7
9	START APRON	31.75	191743.81	7442040.81	332	6	20.7
10	START APRON CUT OFF WALL	35.55	191742.03	7442044.16	332	6	20.7
11	END APRON/END OF APRON CUT OFF WALL	36.75	191741.47	7442045.22	332	6	20.7

ROCK CHUTE 1 POOL SETOUT POINTS							
SETOUT NO.	TYPE	STATION	EASTING	NORTHING	BEARING		
					DEG	MIN	SEC
P1	POOL START	0	191747.47	7442027.47	62	6	20.7
P2	POOL BASE START	2.5	191749.68	7442028.64	62	6	20.7
P3	POOL BASE END	3.5	191750.56	7442029.11	62	6	20.7
P4	POOL END	6	191752.77	7442030.28	62	6	20.7

SITE: TEN MILE CREEK					
TITLE: REEF TRUST IV STREAM BANK EROSION REMEDIATION ROCK CHUTE 1 - SETOUT					
SCALE @ A3 1:200	DRAWN DATE 12/07/19	DRAWN TB	DESIGNED JA	APPRVD AN	APPRVD DATE 12/07/19
PROJECT NO. 18060	DRAWING NO. 002	REVISION A	SHEET NO. 2	FILE NAME 18060.dwg	



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STATUS: DRAFT			

LEGEND

 ROCK CHUTE SPILLWAY

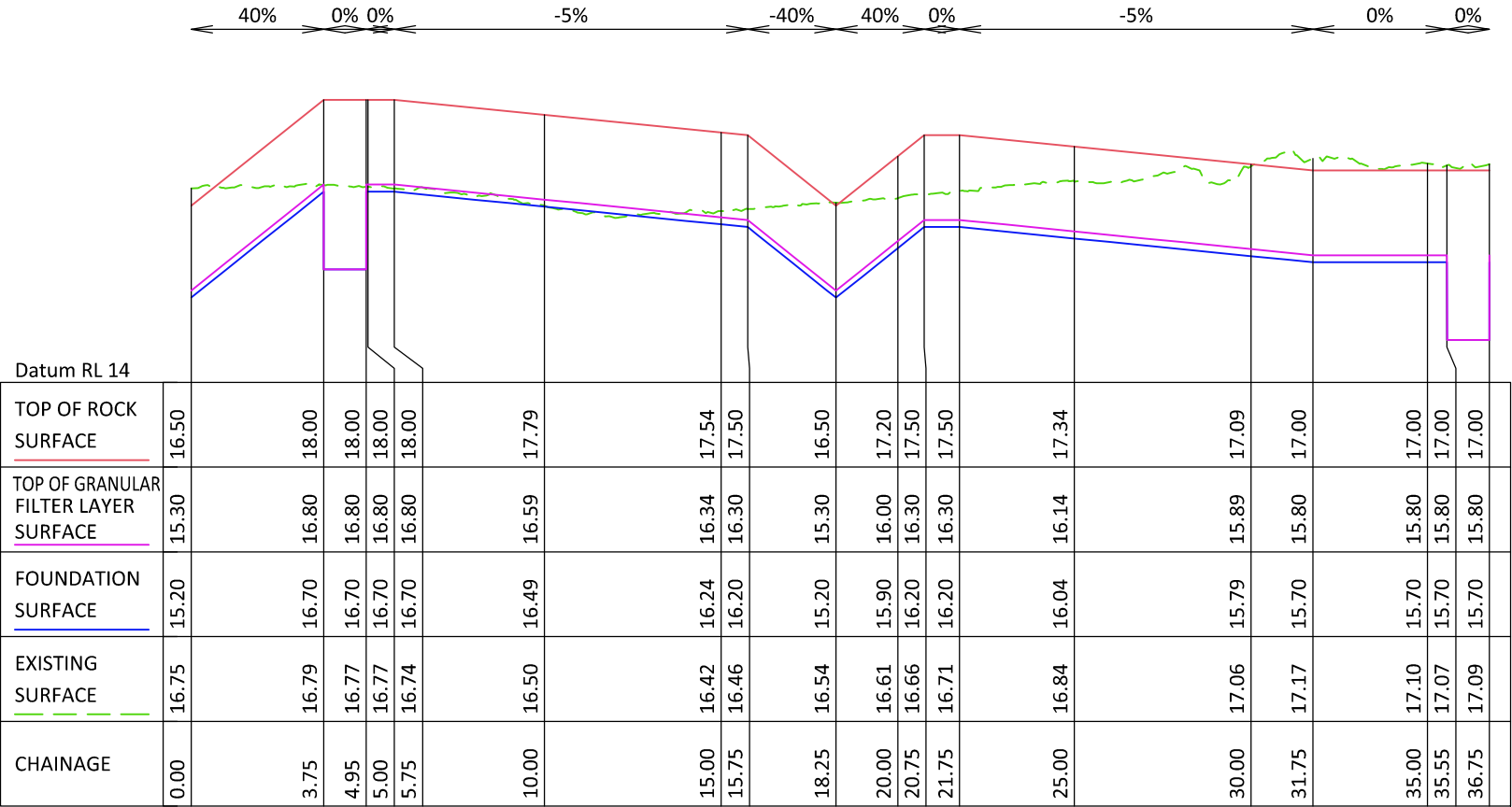
 1V:2.5H ABUTMENT

 POOL

 1V:2.5H UPPER BATTER CUT

 1V:20H UPPER BATTER FILL

SCALES
 Horizontal Scale 1:200
 Vertical Scale 1:100



SITE:
 TEN MILE CREEK
 TITLE:
 REEF TRUST IV STREAM BANK EROSION REMEDIATION
 ROCK CHUTE 1 - LONGITUDINAL SECTION

SCALE @ A3 -	DRAWN DATE 12/07/19	DRAWN TB	DESIGNED JA	APPRVD AN	APPRVD DATE 12/07/19
PROJECT NO. 18060	DRAWING NO. 003	REVISION A	SHEET NO. 3	FILE NAME 18060.dwg	

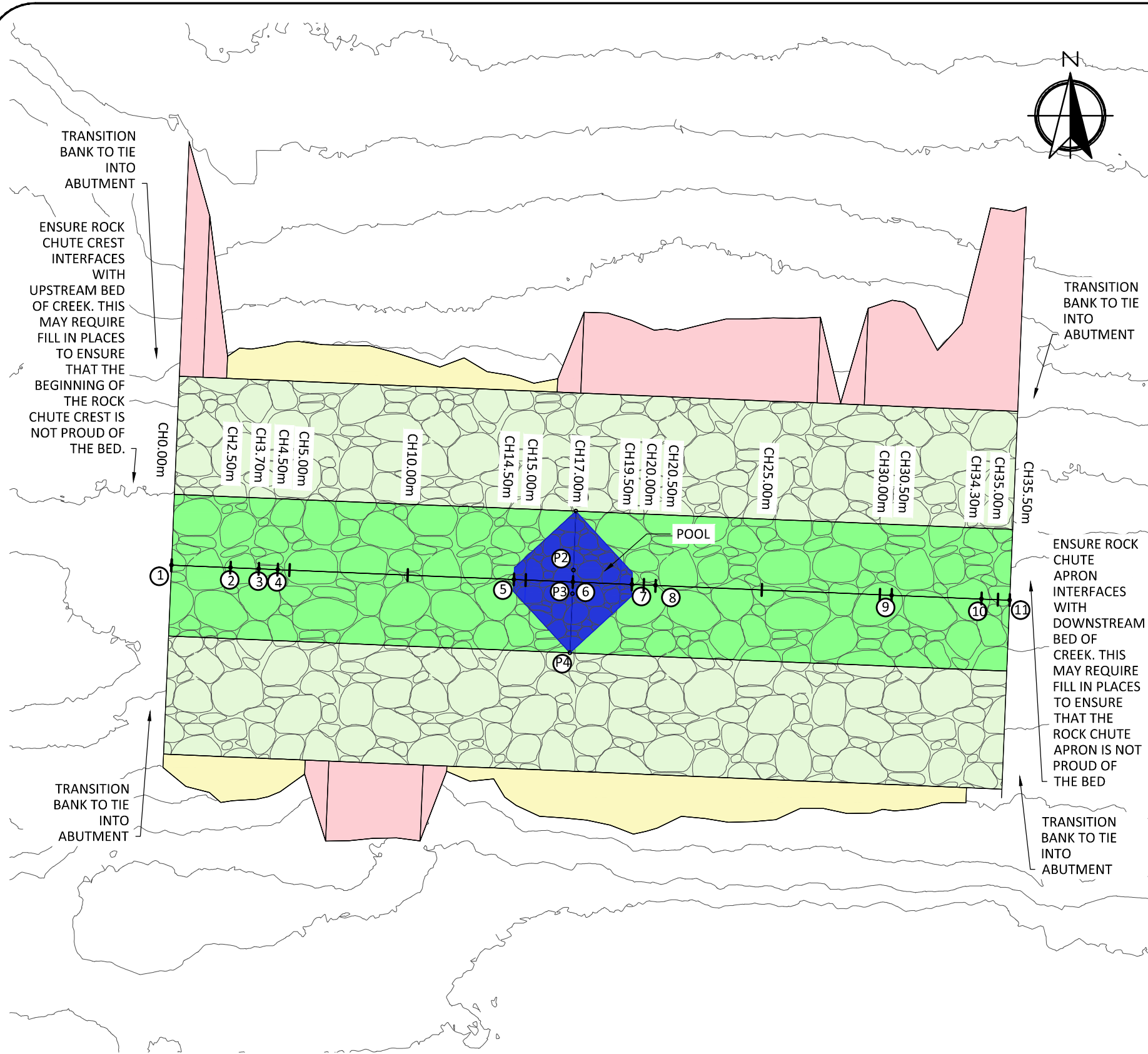
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REV	DESCRIPTION	DATE	APPRVD

STATUS:

DRAFT



ROCK CHUTE 2 SETOUT POINTS							
SETOUT NO.	TYPE	STATION	EASTING	NORTHING	BEARING		
					DEG	MIN	SEC
1	START CHUTE UPSTREAM FACE	0	191188.99	7441868.08	92	23	35.4
2	START CREST/START OF CREST CUT OFF WALL	2.5	191191.48	7441867.97	92	23	35.4
3	END CREST CUT OFF WALL	3.7	191192.68	7441867.92	92	23	35.4
4	END CREST	4.5	191193.48	7441867.89	92	23	35.4
5	START POOL	14.5	191203.47	7441867.47	92	23	35.4
6	BASE POOL	17	191205.97	7441867.37	92	23	35.4
7	END POOL/START POOL APRON	19.5	191208.47	7441867.26	92	23	35.4
8	END POOL APRON	20.5	191209.47	7441867.22	92	23	35.4
9	START APRON	30.5	191219.46	7441866.80	92	23	35.4
10	START APRON CUT OFF WALL	34.3	191223.26	7441866.64	92	23	35.4
11	END APRON/END OF APRON CUT OFF WALL	35.5	191224.46	7441866.59	92	23	35.4

ROCK CHUTE 2 POOL SETOUT POINTS							
SETOUT NO.	TYPE	STATION	EASTING	NORTHING	BEARING		
					DEG	MIN	SEC
P1	POOL START	0	191206.10	7441870.36	182	23	35.4
P2	POOL BASE START	2.5	191205.99	7441867.87	182	23	35.4
P3	POOL BASE END	3.5	191205.95	7441866.87	182	23	35.4
P4	POOL END	6	191205.85	7441864.37	182	23	35.4

SITE: TEN MILE CREEK					
TITLE: REEF TRUST IV STREAM BANK EROSION REMEDIATION ROCK CHUTE 2 - SETOUT					
SCALE @ A3 1:200	DRAWN DATE 12/07/19	DRAWN TB	DESIGNED JA	APPRVD AN	APPRVD DATE 12/07/19
PROJECT NO. 18060	DRAWING NO. 004	REVISION A	SHEET NO. 4	FILE NAME 18060.dwg	



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REV	DESCRIPTION	DATE	APPRVD
STATUS: DRAFT			

LEGEND

 ROCK CHUTE SPILLWAY

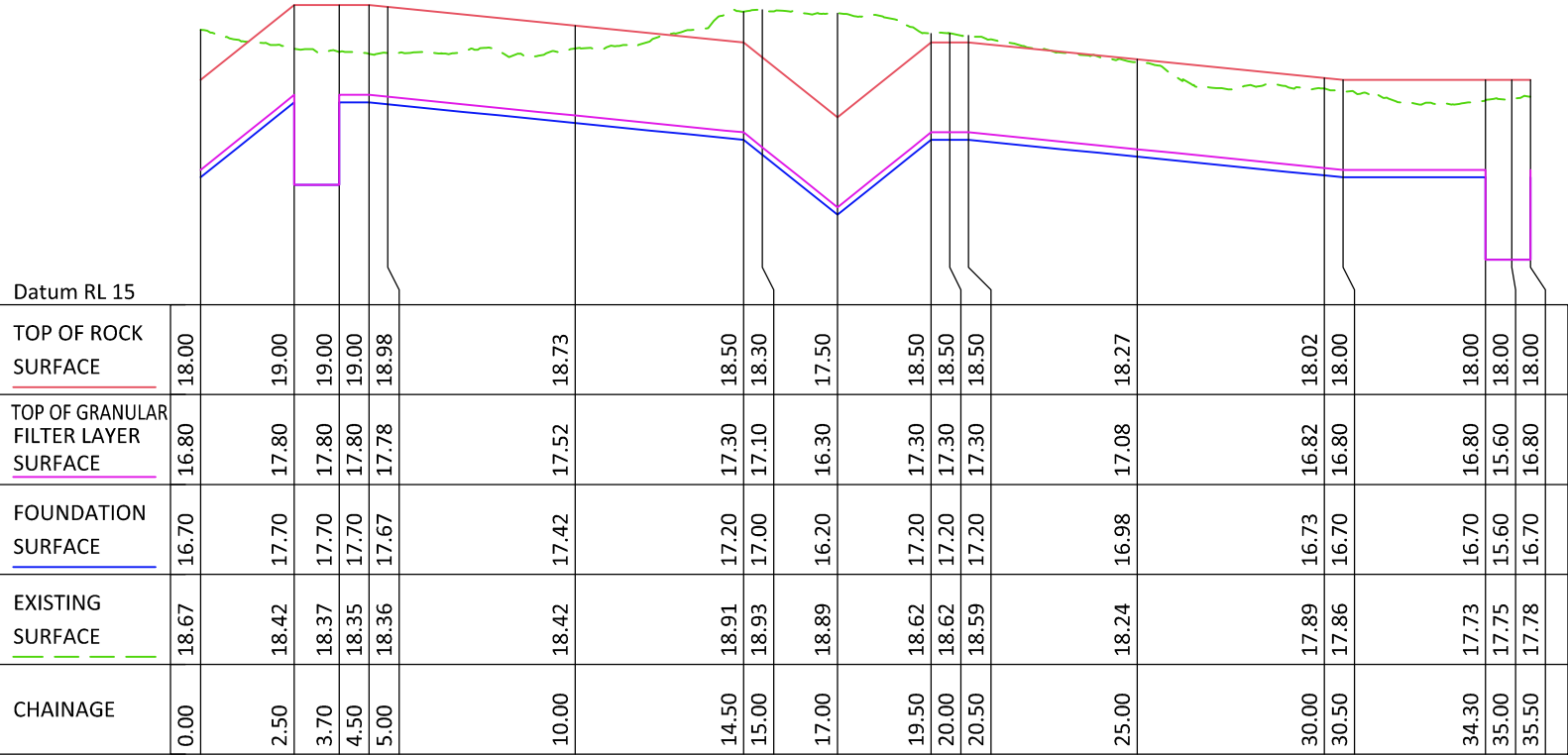
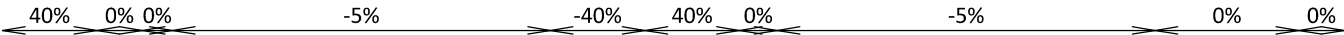
 1V:2.5H ABUTMENT

 POOL

 1V:2.5H UPPER BATTER CUT

 1V:20H UPPER BATTER FILL

SCALES
 Horizontal Scale 1:200
 Vertical Scale 1:100



SITE: TEN MILE CREEK TITLE: REEF TRUST IV STREAM BANK EROSION REMEDIATION ROCK CHUTE 2 - LONGITUDINAL SECTION					
SCALE @ A3	DRAWN DATE	DRAWN	DESIGNED	APPRVD	APPRVD DATE
-	12/07/19	TB	JA	AN	12/07/19
PROJECT NO.	DRAWING NO.	REVISION	SHEET NO.	FILE NAME	
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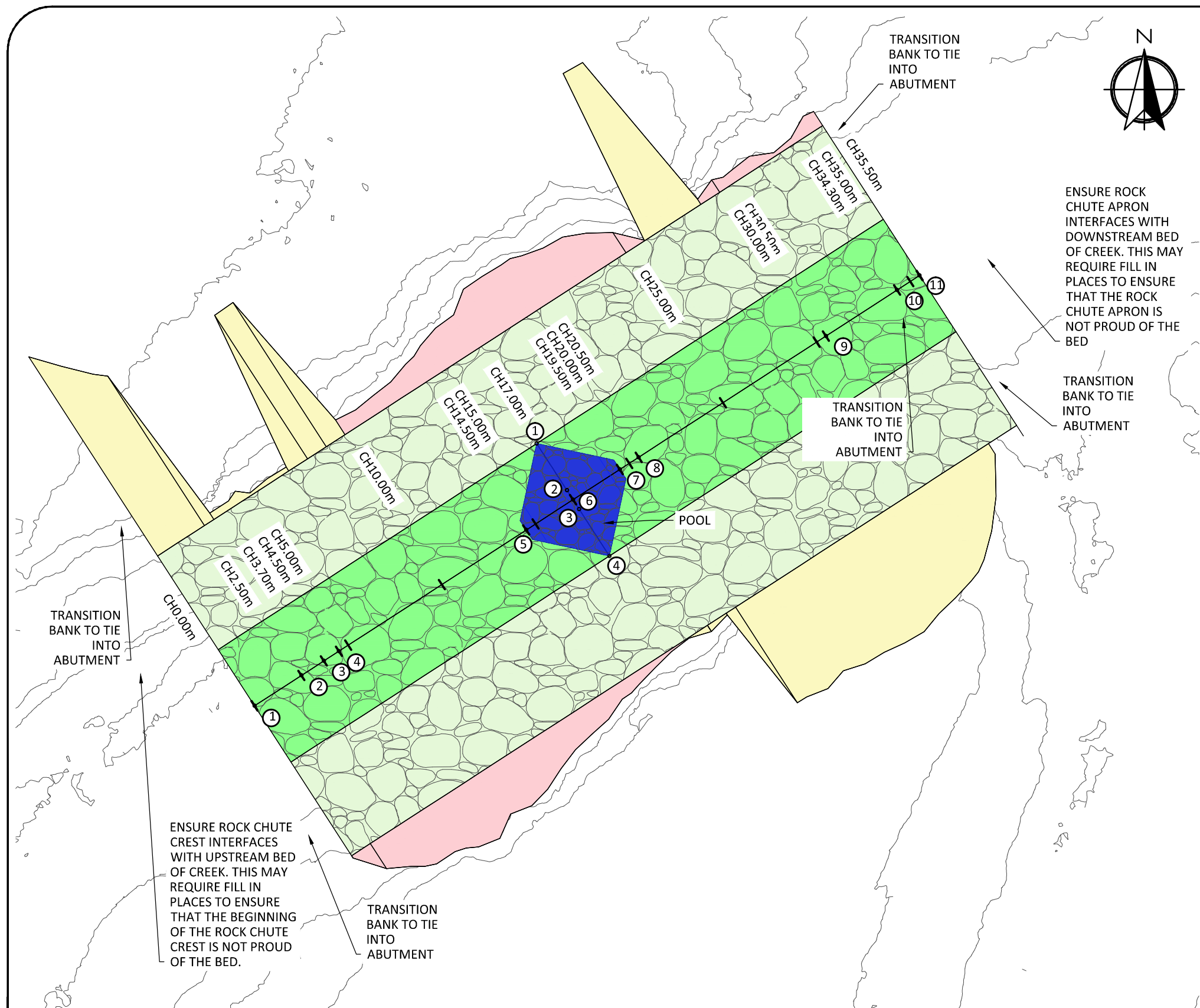


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A	DRAFT ISSUE	12/07/19	AN
REV	DESCRIPTION	DATE	APPRVD
STATUS:		DRAFT	



ROCK CHUTE 3 SETOUT POINTS							
SETOUT NO.	TYPE	STATION	EASTING	NORTHING	BEARING		
					DEG	MIN	SEC
1	START CHUTE UPSTREAM FACE	0.00	190735.97	7441673.76	57	6	4.4
2	START CREST/START OF CREST CUT OFF WALL	2.50	190738.07	7441675.12	57	6	4.4
3	END CREST CUT OFF WALL	3.70	190739.07	7441675.77	57	6	4.4
4	END CREST	4.50	190739.75	7441676.21	57	6	4.4
5	START POOL	14.50	190748.14	7441681.64	57	6	4.4
6	BASE POOL	17.00	190750.24	7441683.00	57	6	4.4
7	END POOL/START POOL APRON	19.50	190752.34	7441684.35	57	6	4.4
8	END POOL APRON	20.50	190753.18	7441684.90	57	6	4.4
9	START APRON	30.50	190761.58	7441690.33	57	6	4.4
10	START APRON CUT OFF WALL	34.30	190764.77	7441692.39	57	6	4.4
11	END APRON/END OF APRON CUT OFF WALL	35.50	190765.77	7441693.04	57	6	4.4

ROCK CHUTE 3 POOL SETOUT POINTS							
SETOUT NO.	TYPE	STATION	EASTING	NORTHING	BEARING		
					DEG	MIN	SEC
P1	POOL START	0	190748.61	7441685.52	147	6	4.4
P2	POOL BASE START	2.5	190749.97	7441683.42	147	6	4.4
P3	POOL BASE END	3.5	190750.51	7441682.58	147	6	4.4
P4	POOL END	6	190751.87	7441680.48	147	6	4.4

SITE:
TEN MILE CREEK

TITLE:
REEF TRUST IV STREAM BANK EROSION REMEDIATION
ROCK CHUTE 3 - SETOUT

SCALE @ A3 1:200	DRAWN DATE 12/07/19	DRAWN TB	DESIGNED JA	APPRVD AN	APPRVD DATE 12/07/19
PROJECT NO. 18060	DRAWING NO. 006	REVISION A	SHEET NO. 6	FILE NAME 18060.dwg	

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STATUS:

DRAFT

LEGEND

 ROCK CHUTE SPILLWAY

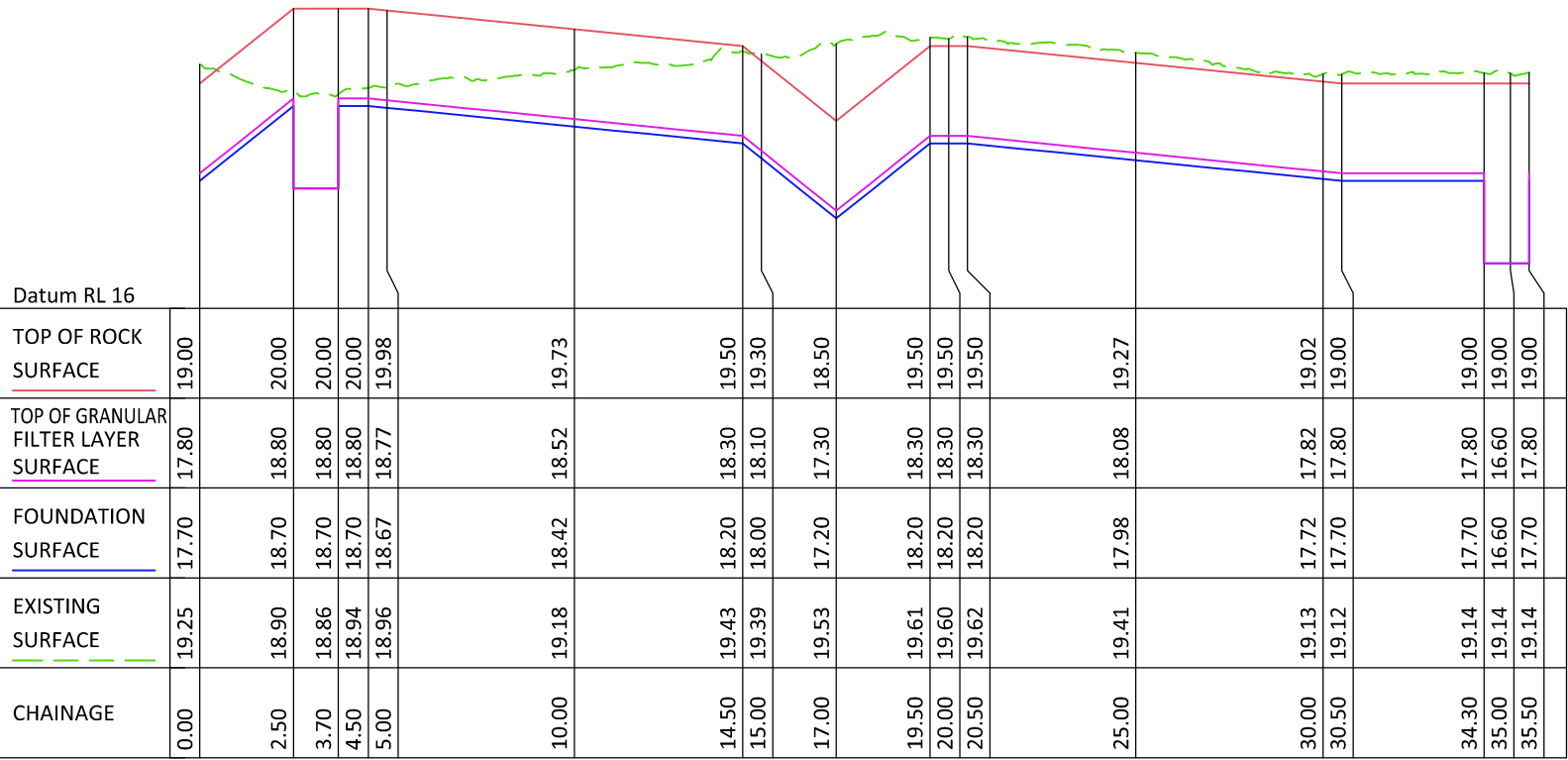
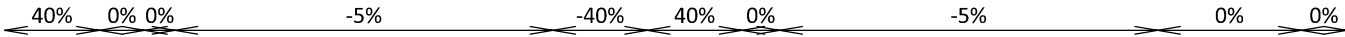
 1V:2.5H ABUTMENT

 POOL

 1V:2.5H UPPER BATTER CUT

 1V:20H UPPER BATTER FILL

SCALES
 Horizontal Scale 1:200
 Vertical Scale 1:100



SITE:
 TEN MILE CREEK
 TITLE:
 REEF TRUST IV STREAM BANK EROSION REMEDIATION
 ROCK CHUTE 3 - LONGITUDINAL SECTION

SCALE @ A3 -	DRAWN DATE 12/07/19	DRAWN TB	DESIGNED JA	APPRVD AN	APPRVD DATE 12/07/19
PROJECT NO. 18060	DRAWING NO. 007	REVISION A	SHEET NO. 7	FILE NAME 18060.dwg	

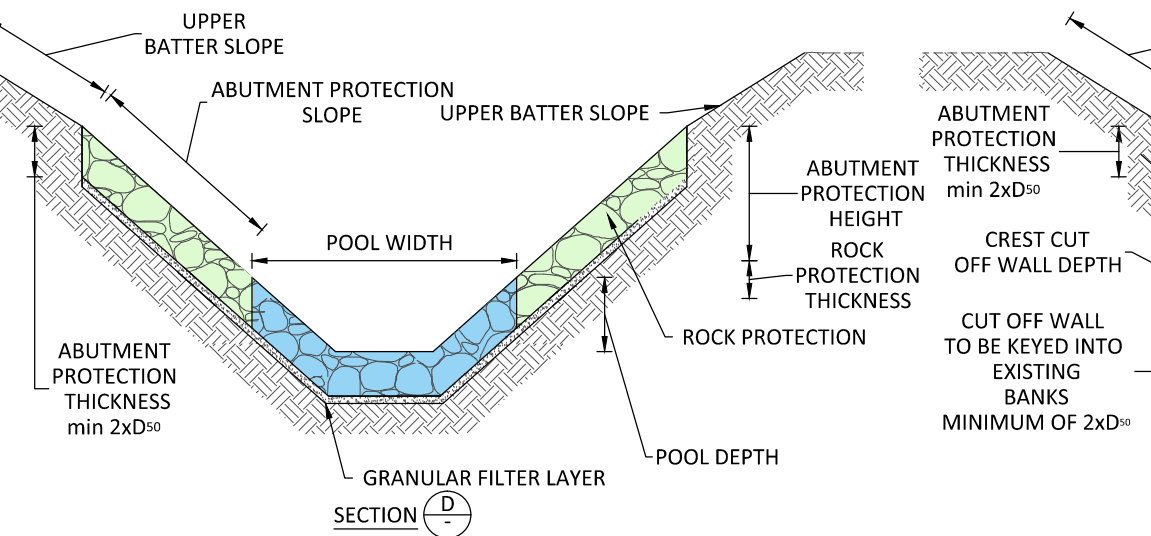
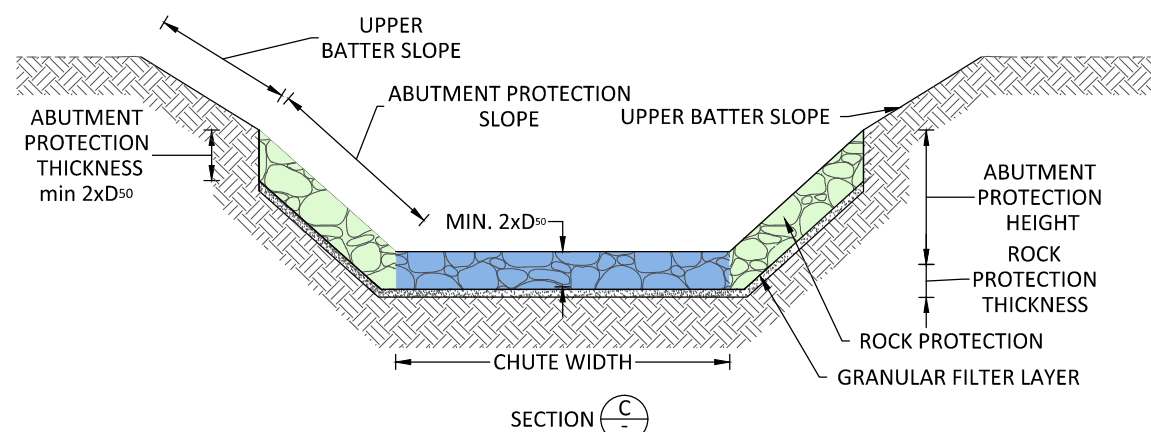
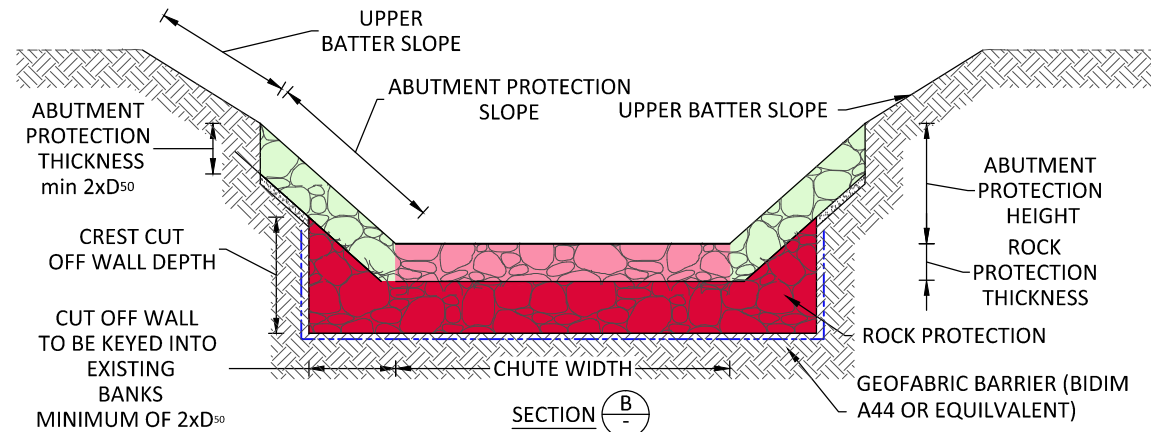
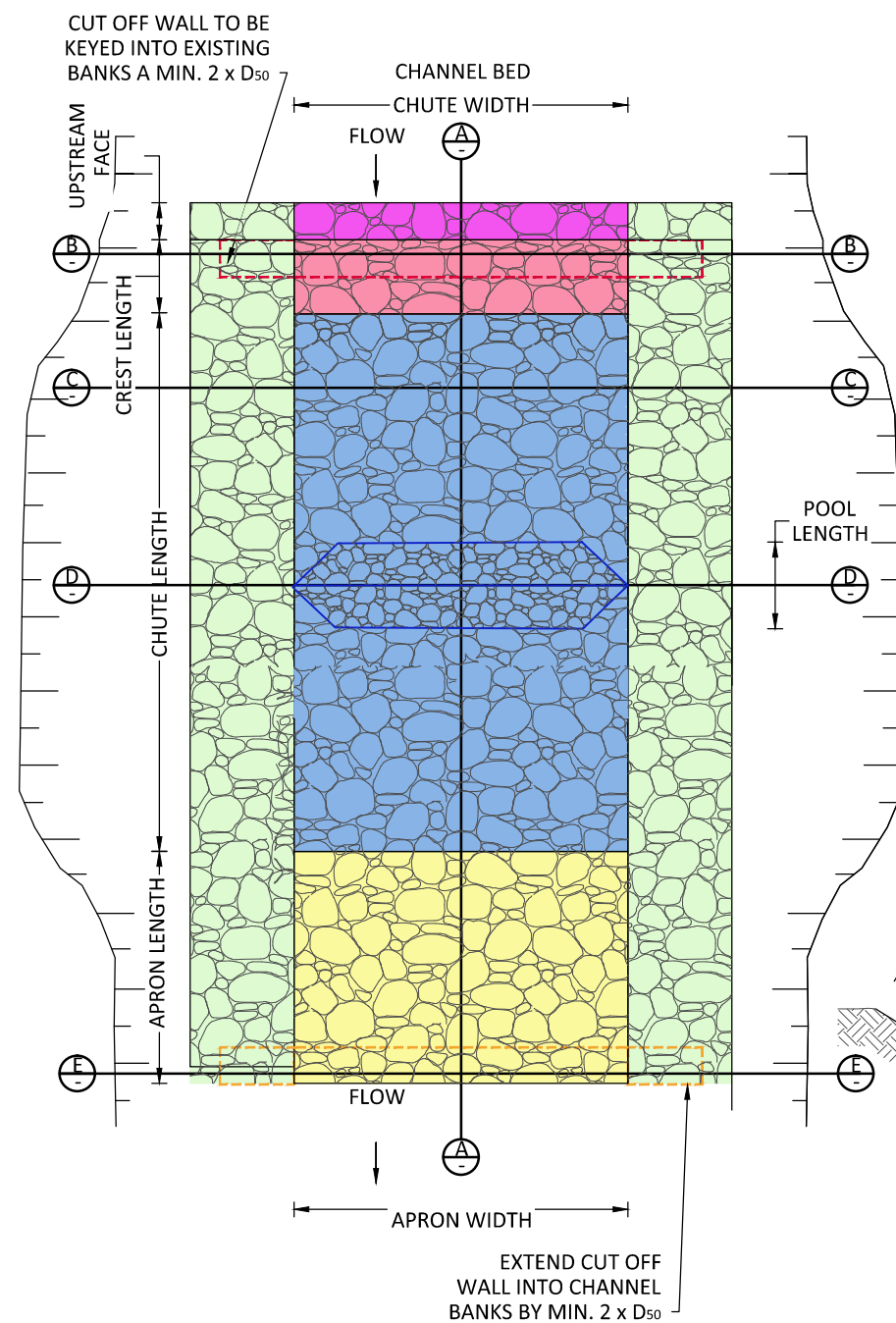
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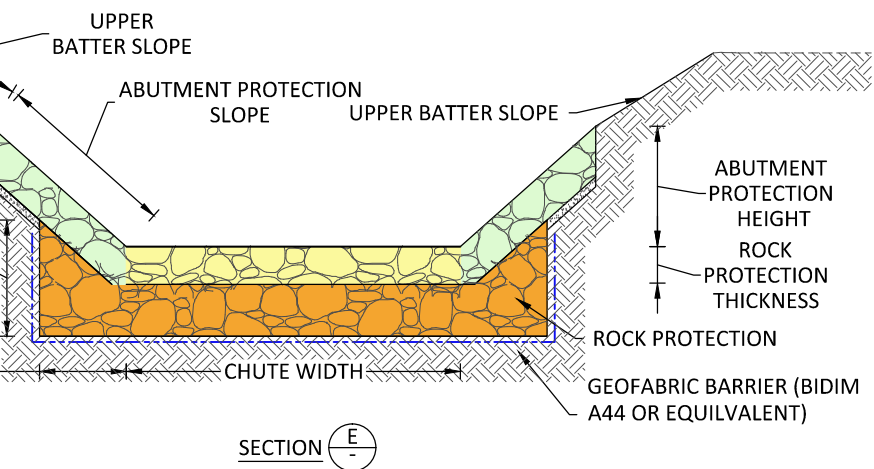
A	DRAFT ISSUE	12/07/19	AN
REV	DESCRIPTION	DATE	APPRVD

STATUS:

DRAFT



ROCK CHUTE SPECIFICATION TABLE				
CHUTE ELEMENT	UNITS	ROCK CHUTE 1	ROCK CHUTE 2	ROCK CHUTE 3
CHUTE LENGTH	m	26	26	26
CHUTE DROP	m	1	1	1
CHUTE WIDTH	m	6	6	6
UPSTREAM FACE LENGTH	m	3.75	2.5	2.5
UPSTREAM FACE SLOPE	m/m	1V:2.5H	1V:2.5H	1V:2.5H
CREST LENGTH	m	2	2	2
CREST CUT OFF WALL DEPTH	m	2.4	2.4	2.4
CREST CUT OFF WALL LENGTH	m	1.2	1.2	1.2
APRON LENGTH	m	5	5	5
APRON CUT OFF WALL DEPTH	m	2.4	2.4	2.4
APRON CUT OFF WALL LENGTH	m	1.2	1.2	1.2
ABUTMENT PROTECTION HEIGHT	m	2	2	2
ABUTMENT PROTECTION SLOPE	m/m	1V:2.5H	1V:2.5H	1V:2.5H
ABUTMENT PROTECTION THICKNESS	m	1.2	1.2	1.2
UPPER BATTER SLOPE WHERE CUT	m/m	1V:2.5H	1V:2.5H	1V:2.5H
UPPER BATTER SLOPE WHERE FILL	m/m	1V:20H	1V:20H	1V:20H
POOL TOP WIDTH	m	6	6	6
POOL TOP LENGTH	m	5	5	5
POOL SIDE SLOPES	m/m	1V:2.5H	1V:2.5H	1V:2.5H
POOL APRON LENGTH	m	1	1	1
SIZE OF ROCK PROTECTION, D50	mm	600	600	600
ROCK PROTECTION THICKNESS	m	1.2	1.2	1.2
	m ³	814	789	789
	tonnes	1,954	1,894	1,894
	mm	25	25	25
GRANULAR FILTER LAYER THICKNESS	m	0.1	0.1	0.1
QUANTITY OF GRANULAR FILTER MATERIAL	m ³	55	53	53
	tonnes	88	85	85
LENGTH OF GEOTEXTILE (4.0 m wide roll)	m	37	37	37
EXCAVATION (CUT)	m ³	958	995	1,039
SELECT FILL FOR FOUNDATION AND UPPER BATTERS (FILL)	m ³	195	131	11
TOPSOIL FOR UPPER BATTERS	m ³	64	25	64



SITE: TEN MILE CREEK					
TITLE: REEF TRUST IV STREAM BANK EROSION REMEDIATION					
TYPICAL SECTIONS					
SCALE @ A3	DRAWN DATE	DRAWN	DESIGNED	APPRVD	APPRVD DATE
-	12/07/19	TB	JA	AN	12/07/19
PROJECT NO.	DRAWING NO.	REVISION	SHEET NO.	FILE NAME	
18060	008	A	8	18060.dwg	

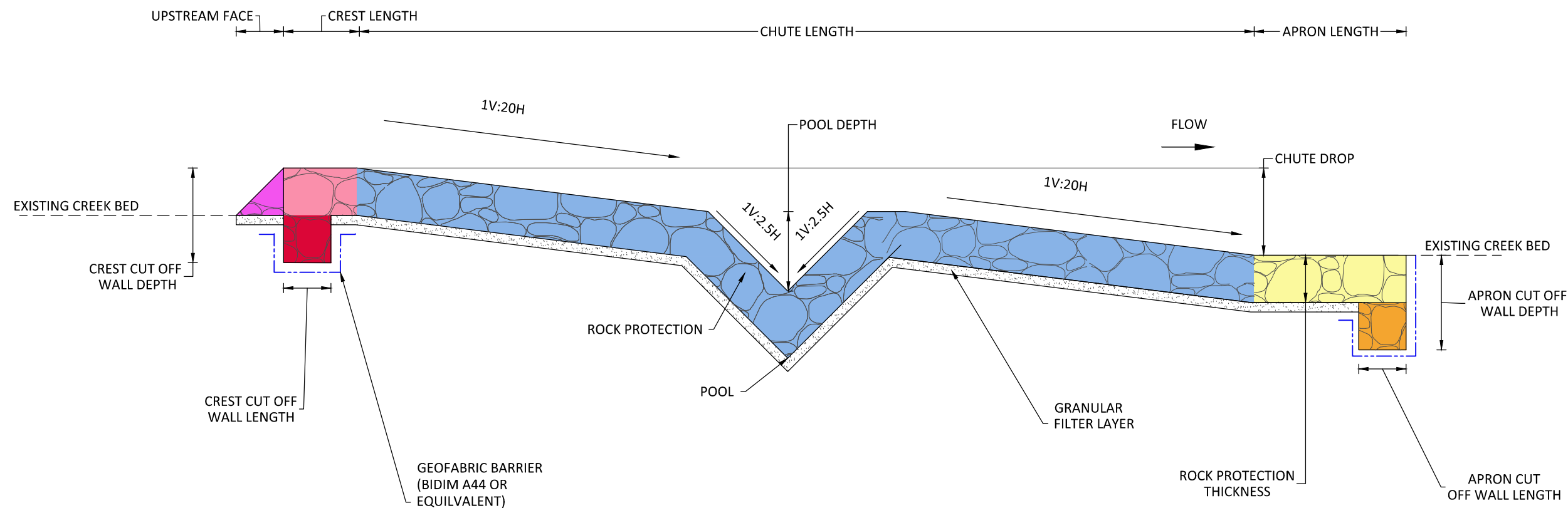
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A	DRAFT ISSUE	12/07/19	AN
REV	DESCRIPTION	DATE	APPRVD
STATUS: DRAFT			

LEGEND	
	CREST
	CREST CUT OFF WALL
	CHUTE FACE
	APRON
	APRON CUT OFF WALL
	ABUTMENTS
	UPSTREAM FACE



ROCK CHUTE SECTION A

SITE: TEN MILE CREEK TITLE: REEF TRUST IV STREAM BANK EROSION REMEDIATION TYPICAL SECTIONS					
SCALE @ A3	DRAWN DATE	DRAWN	DESIGNED	APPRVD	APPRVD DATE
-	12/07/19	TB	JA	AN	12/07/19
PROJECT NO.	DRAWING NO.	REVISION	SHEET NO.	FILE NAME	
18060	009	A	9	18060.dwg	



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A		DRAFT ISSUE	12/07/19	AN
REV		DESCRIPTION	DATE	APPRVD
STATUS:		DRAFT		

LEGEND	
 CREST	 APRON
 CREST CUT OFF WALL	 APRON CUT OFF WALL
 CHUTE FACE	
 UPSTREAM FACE	