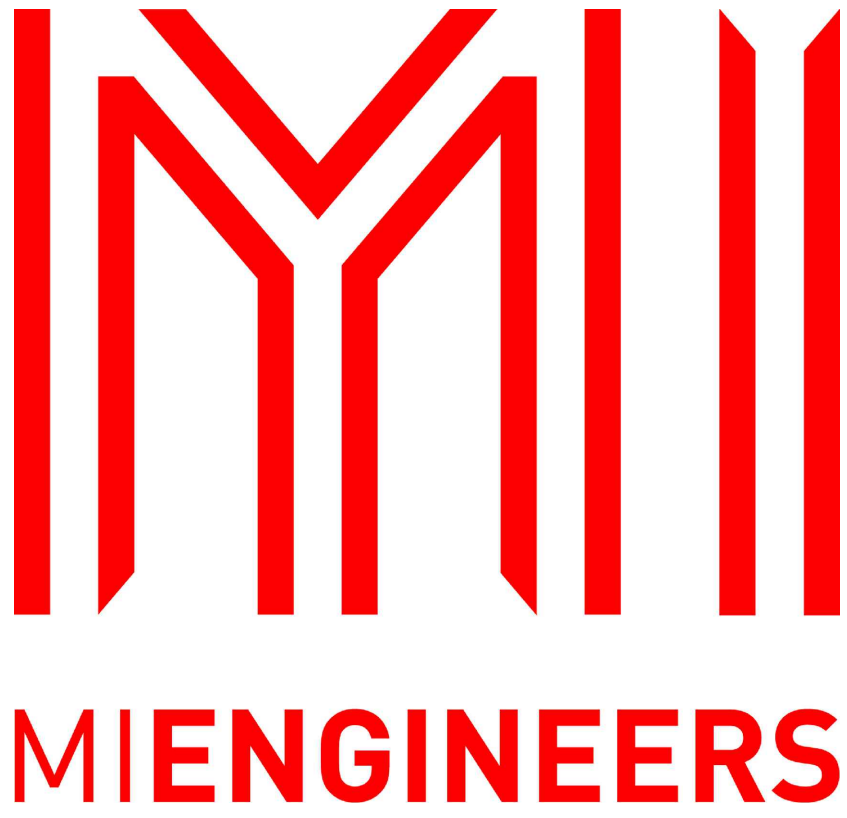




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Suite 206/68 York Street, Sydney NSW 2000
Tel (02) 8396 6565

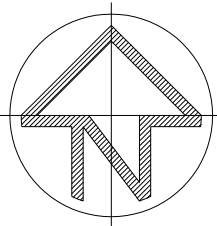
SOUTH COAST OFFICE
49 Berry Street, Nowra NSW 2541
Tel (02) 4423 0566

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Suite 3, 128/134 Crown Street, Wollongong NSW 2500
Tel (02) 4423 0566

www.miengineers.com

BENDALONG BOAT HARBOUR STORMWATER UPGRADE

MANTA RAY ROAD, BENDALONG NSW 2539

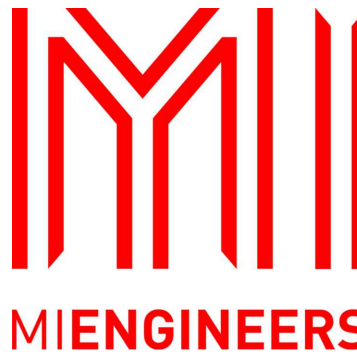


APPROXIMATE AREA OF WORKS

DRAWING INDEX

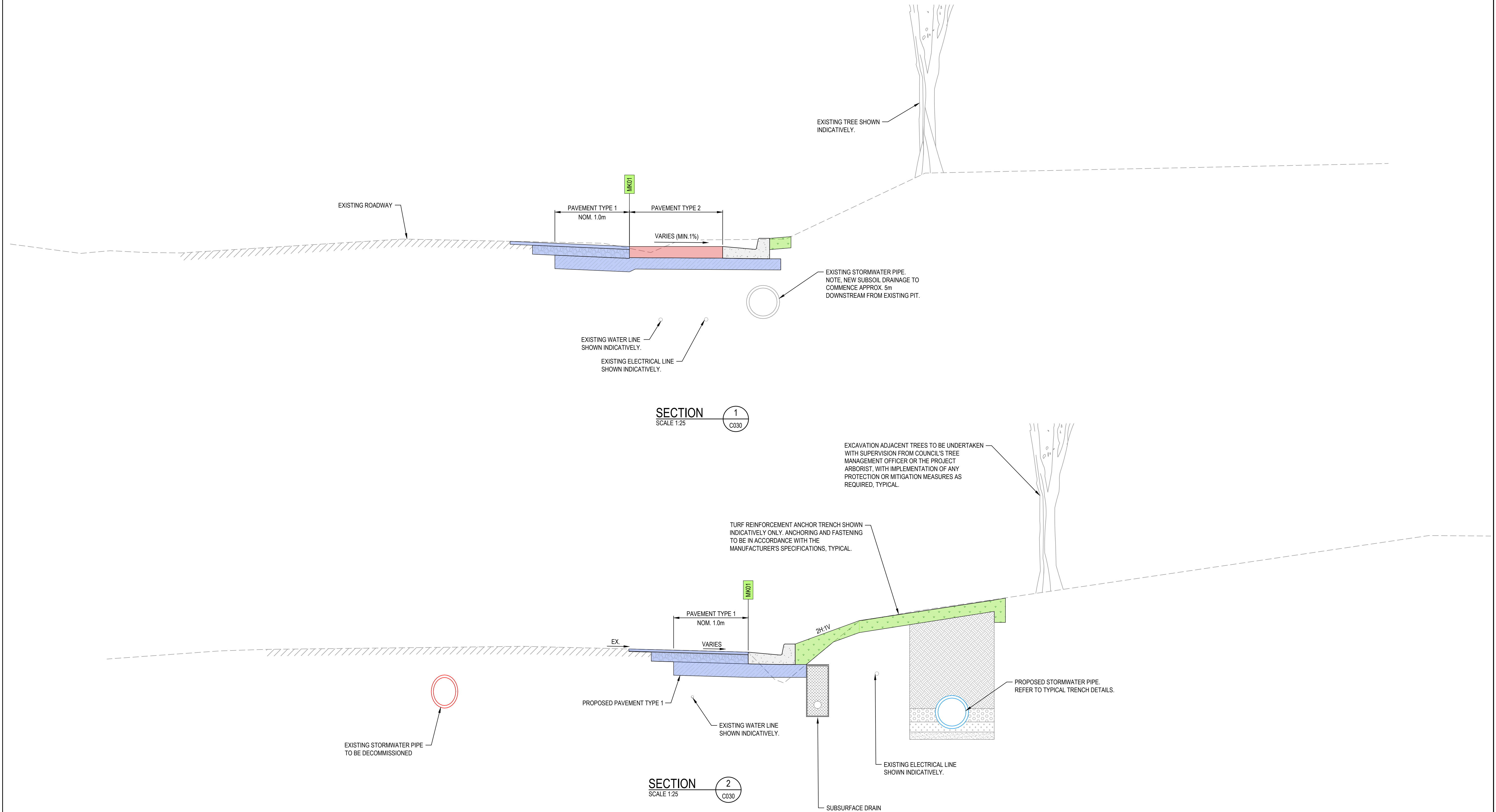
- DN220019 C001 COVER SHEET
- DN220019 C002 NOTES SHEET
- DN220019 C010 TYPICAL CROSS SECTIONS SHEET 1
- DN220019 C011 TYPICAL CROSS SECTIONS SHEET 2
- DN220019 C020 TYPICAL DETAILS
- DN220019 C022 PIT BD2 DETAIL
- DN220019 C030 GENERAL ARRANGEMENT PLAN
- DN220019 C035 STORMWATER LONGITUDINAL SECTION
- DN220019 C040 OUTLET DETAIL PLAN
- DN220019 C041 OUTLET DETAILS SHEET
- DN220019 C045 LONGITUDINAL SECTIONS
- DN220019 C050 CROSS SECTIONS SHEET
- DN220019 CE01 EROSION & SEDIMENT CONTROL PLAN
- DN220019 CE02 EROSION & SEDIMENT DETAILS

LOCALITY PLAN
N.T.S.

REVISION	AMENDMENTS	DATE	CKD	APP	SURVEYOR: AXIOM SPATIAL SURVEYORS	CLIENT:	SYDNEY OFFICE Suite 206/68 York Street, Sydney NSW 2000 Tel (02) 8396 6565	THIS DRAWING AND THE CONCEPTS CONTAINED THEREIN ARE THE PROPERTY OF MI ENGINEERS. NO UNAUTHORISED COPYING IS PERMITTED. NOTHING IS TO BE CONSTRUCTED BASED ON THIS DRAWING, OR PART OF THIS DRAWING, WITHOUT THE WRITTEN PERMISSION OF MI ENGINEERS. DRAWINGS TO BE READ IN CONJUNCTION WITH OTHER RELATED DESIGN DOCUMENTATION. FURTHERMORE, WHERE MIENGINEERS RELIES ON THE INFORMATION SUPPLIED BY OTHERS TO PRODUCE THE DESIGNS, WE ACCEPT NO LIABILITY FOR ERRORS, TO THE EXTENT THAT THE DESIGN HAS MADE RELIANCE ON THIS INFORMATION. MUST BE READ IN COLOUR	PROJECT :	DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
3	ISSUED FOR CONSTRUCTION - DESIGN OF OUTLET OMITTED, MINOR AMENDMENTS AS CLOUDED	18.03.25	RM	AS	DATE OF SURVEY: -	 	SOUTH COAST OFFICE 49 Berry Street, Nowra NSW 2541 Tel (02) 4423 0566	MIENGINEERS.COM	BENDALONG BOAT HARBOUR STORMWATER UPGRADE MANTA RAY ROAD, BENDALONG NSW 2539 - COVER SHEET	RM	JH	-	A1
2	ISSUED FOR REVIEW - DESIGN OF OUTLET OMITTED, MINOR AMENDMENTS AS CLOUDED	24.02.25	RM	AS	DRAWING STATUS					DRAWING No.			
1	ISSUED FOR CONSTRUCTION	08.12.23	RM	AS	CONSTRUCTION					C001			
C	ISSUED FOR REVIEW - KERB AND GUTTER ADDED	16.05.23	RM	AS	PROJECT No.					REVISION:			
B	ISSUED FOR REVIEW - SERVICE LOCATING ADDED	21.10.22	RM	AS	DN220019					3			
A	ISSUED FOR REVIEW	26.05.22	RM	AS	HORIZONTAL DATUM: -								



PROJECT :		DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
BENDALONG BOAT HARBOUR STORMWATER UPGRADE MANTA RAY ROAD, BENDALONG NSW 2539 -		RM	JH	-	A1
		DRAWING STATUS		DRAWING No.	
		CONSTRUCTION		C002	
DRAWING NAME:		PROJECT No.		REVISION:	
NOTES SHEET		DN220019		3	



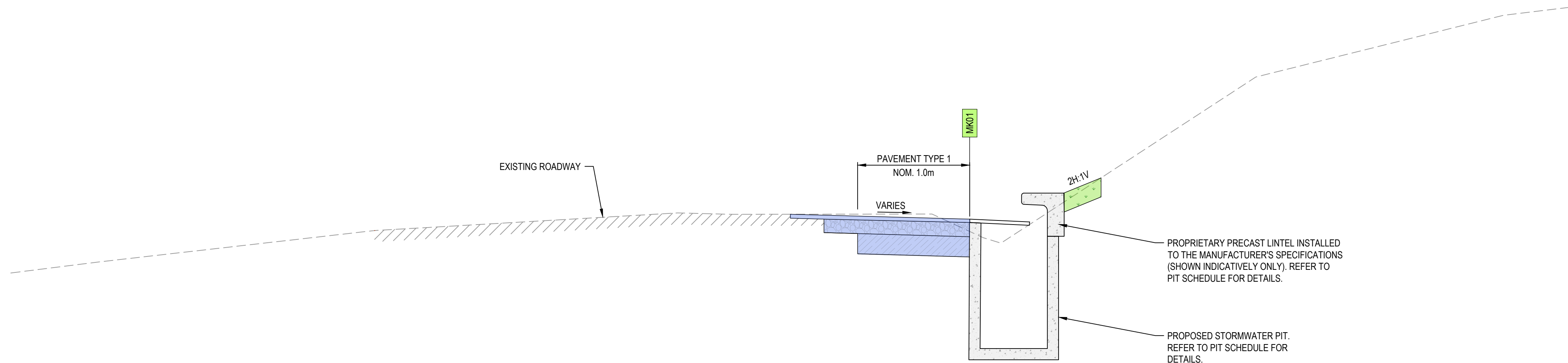
REVISION	AMENDMENTS	DATE	CKD	APP	SURVEYOR: AXIOM SPATIAL SURVEYORS
3	ISSUED FOR CONSTRUCTION - DESIGN OF OUTLET OMITTED, MINOR AMENDMENTS AS CLOUDED	18.03.25	RM	AS	DATE OF SURVEY: -
2	ISSUED FOR REVIEW - DESIGN OF OUTLET OMITTED, MINOR AMENDMENTS AS CLOUDED	24.02.25	RM	AS	ORIGIN: -
1	ISSUED FOR CONSTRUCTION	08.12.23	RM	AS	HEIGHT OF DATUM: -
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B	ISSUED FOR REVIEW - SERVICE LOCATING ADDED	21.10.22	RM	AS	
A	ISSUED FOR REVIEW	26.05.22	RM	AS	



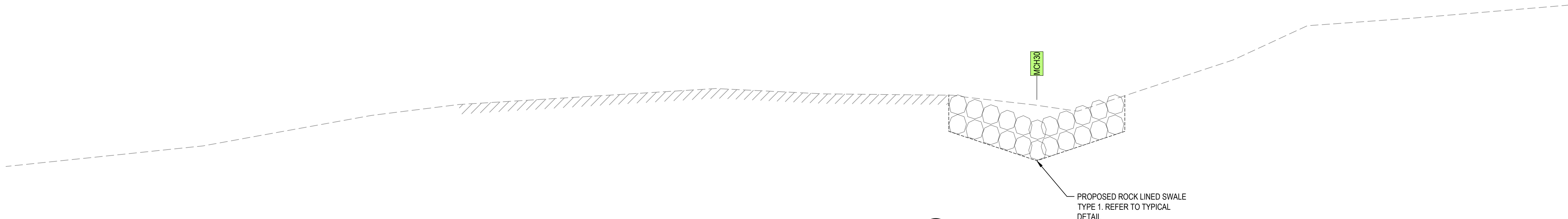
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PROJECT :	BENDALONG BOAT HARBOUR STORMWATER UPGRADE MANTA RAY ROAD, BENDALONG NSW 2539
DRAWING NAME:	TYPICAL CROSS SECTIONS SHEET 1

DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
RM	JH	-	A1
DRAWING STATUS	DRAWING No.	REVISION:	
CONSTRUCTION	C010		
PROJECT No.	DN220019		
			3



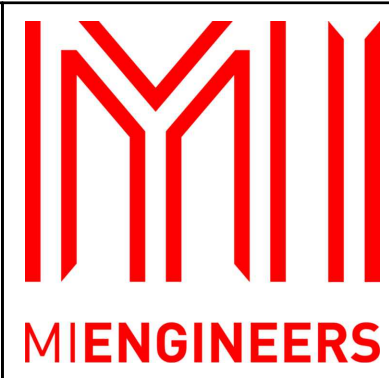
SECTION 3
SCALE 1:25



SECTION 4
SCALE 1:25

REVISION	AMENDMENTS	DATE	CKD	APP	SURVEYOR: AXIOM SPATIAL SURVEYORS
3	ISSUED FOR CONSTRUCTION - DESIGN OF OUTLET OMITTED, MINOR AMENDMENTS AS CLOUDED	18.03.25	RM	AS	DATE OF SURVEY: -
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PROJECT :

BENDALONG BOAT HARBOUR STORMWATER UPGRADE

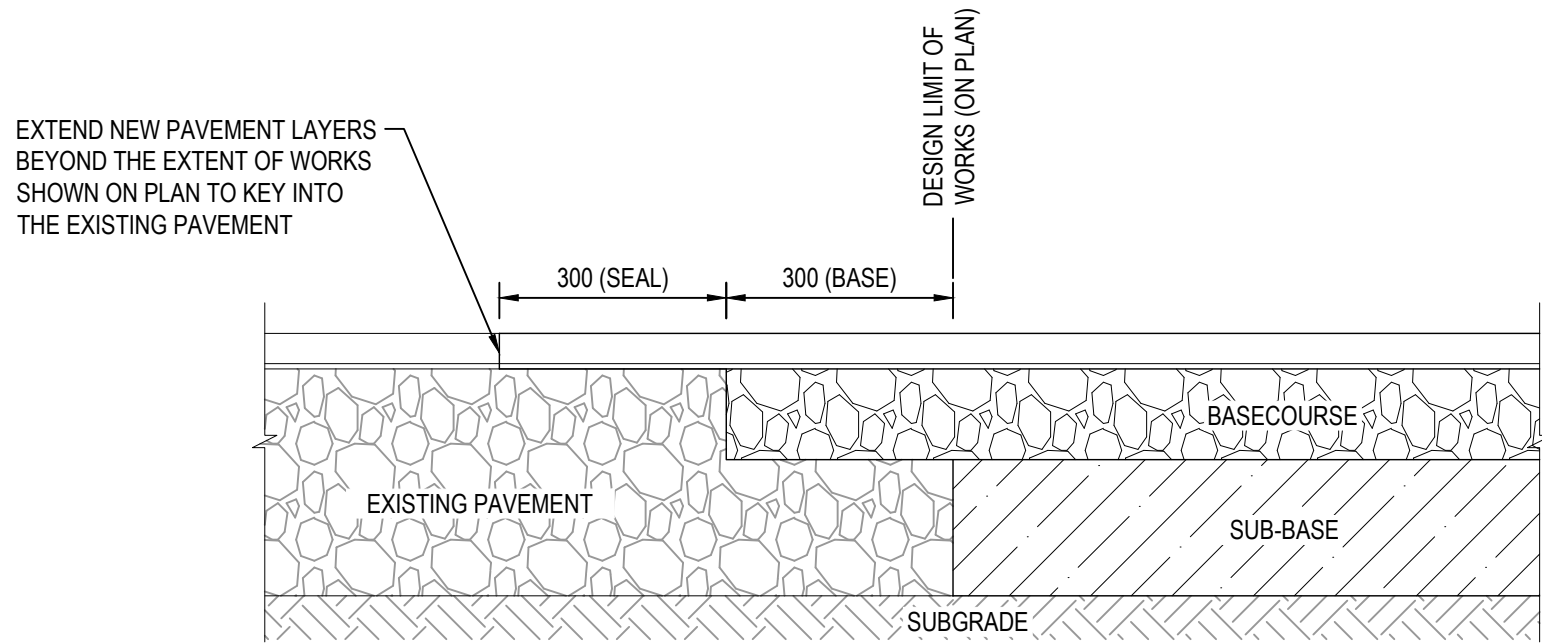
MANTA RAY ROAD, BENDALONG NSW 2539

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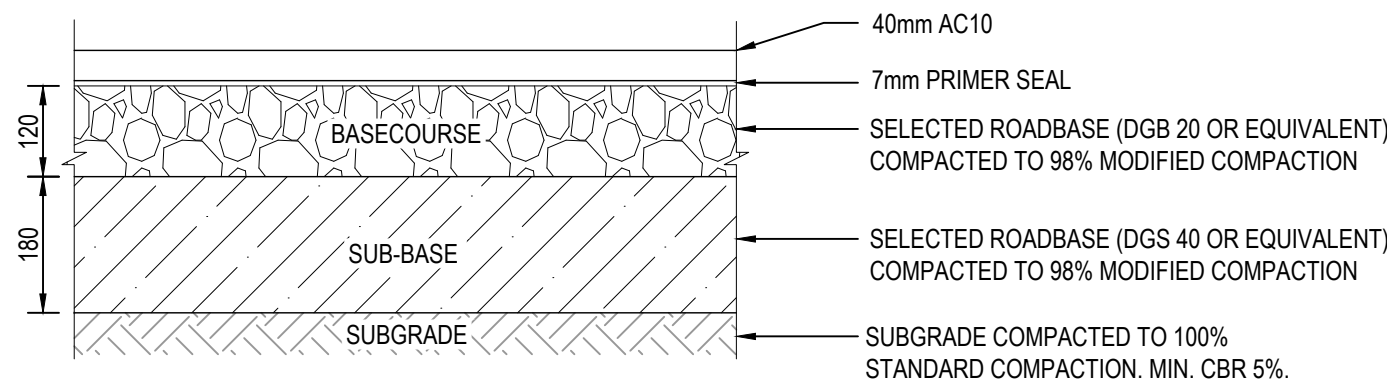
DRAWING NAME:

TYPICAL CROSS SECTIONS SHEET 2

DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
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DRAWING STATUS		DRAWING No.	
CONSTRUCTION		C011	
PROJECT No.		REVISION:	
DN220019		3	

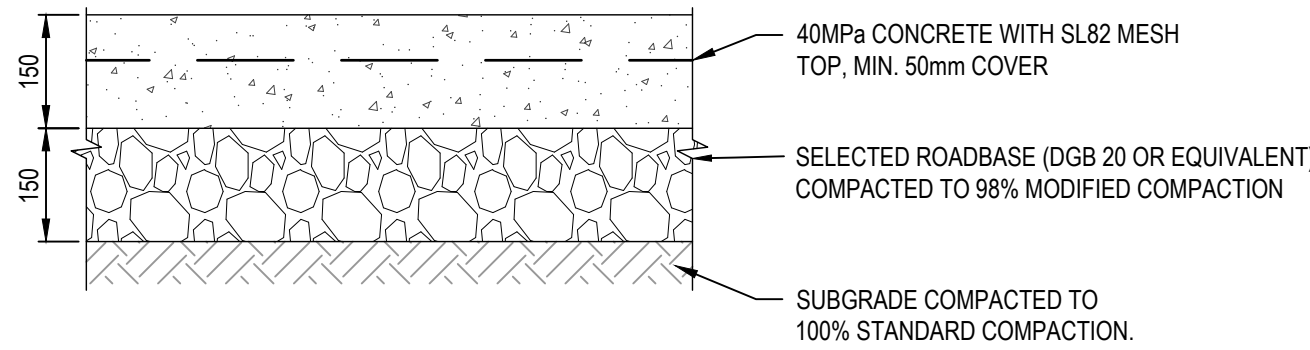


TYPICAL PAVEMENT INTERFACE
SCALE 1:10

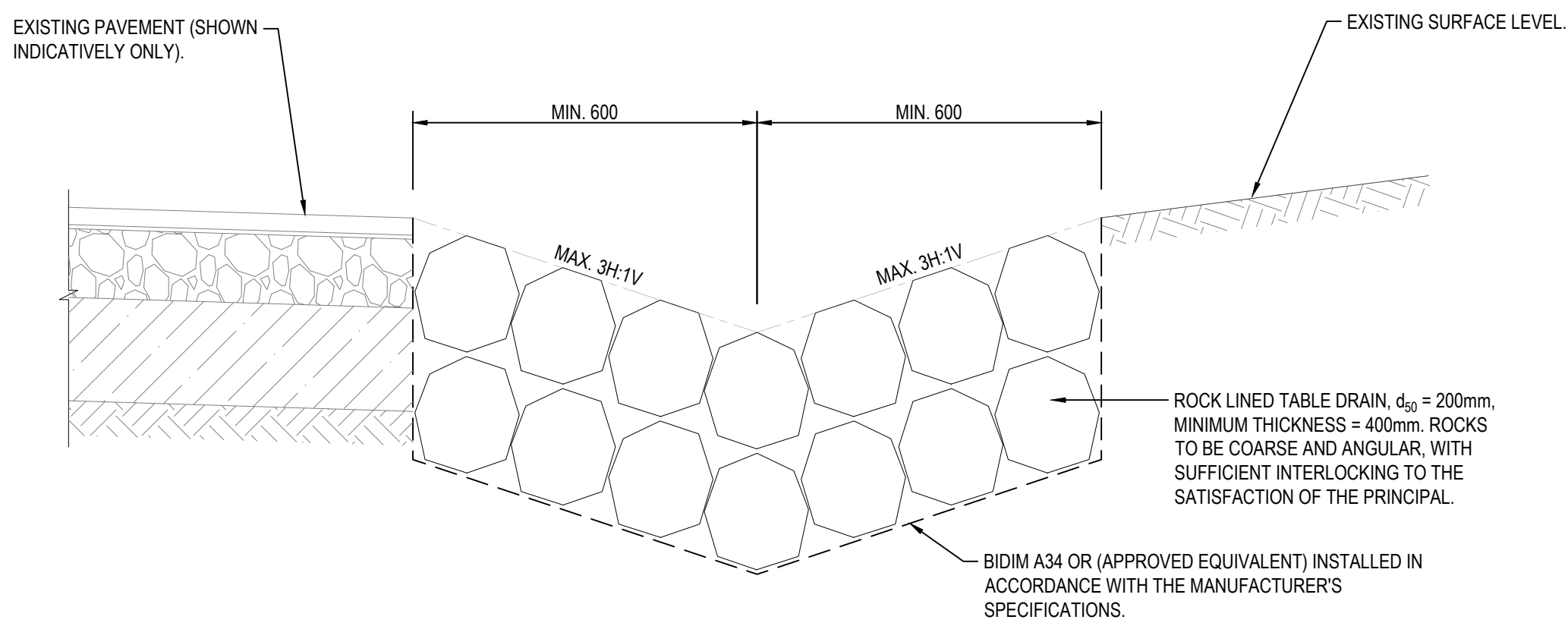


TYPICAL SEALED PAVEMENT (TYPE 1) DETAIL
SCALE 1:10

SUBGRADE CBR AND PAVEMENT DESIGN TO BE CONFIRMED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

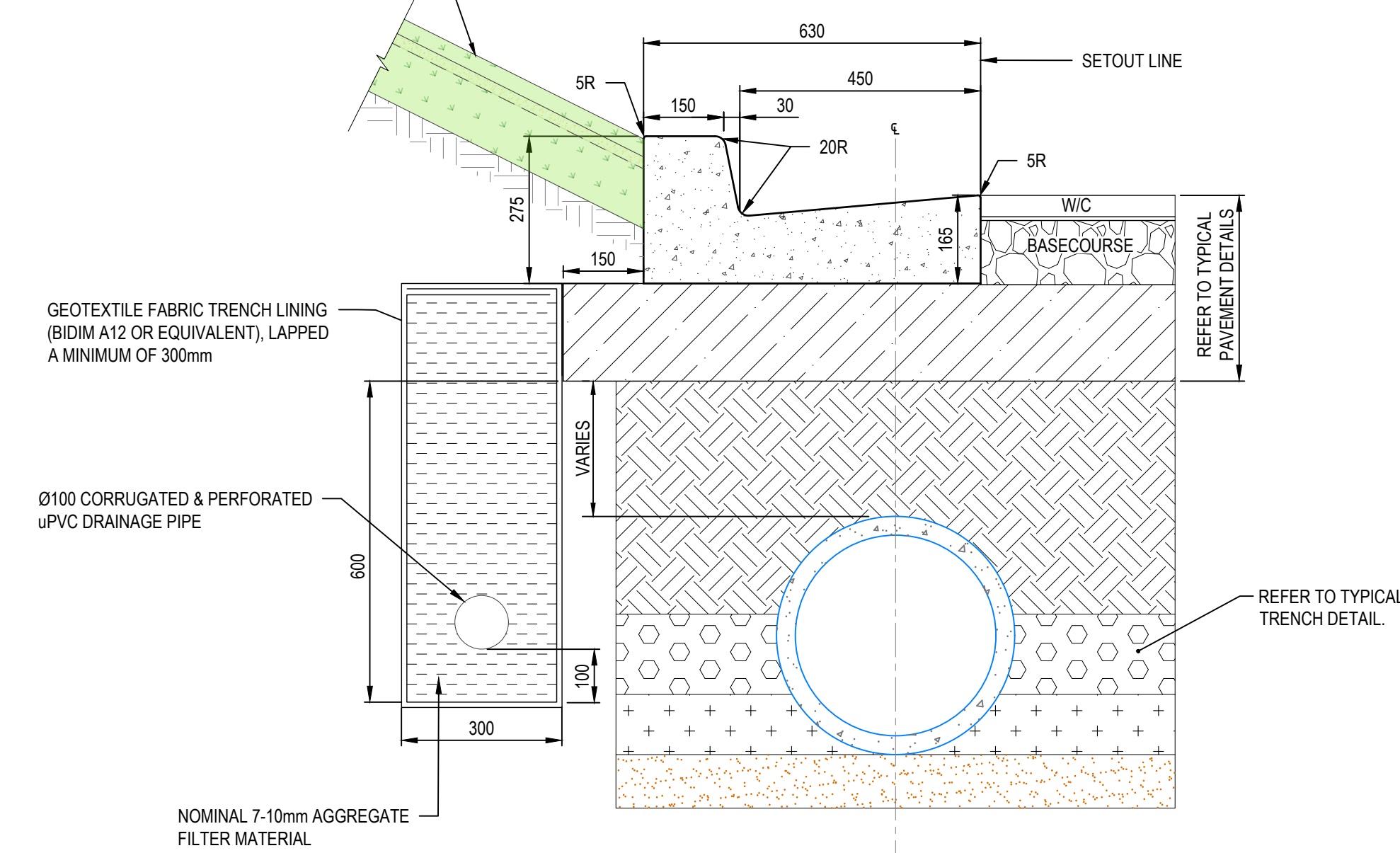


CONCRETE PAVEMENT (TYPE 2) DETAIL
SCALE 1:10

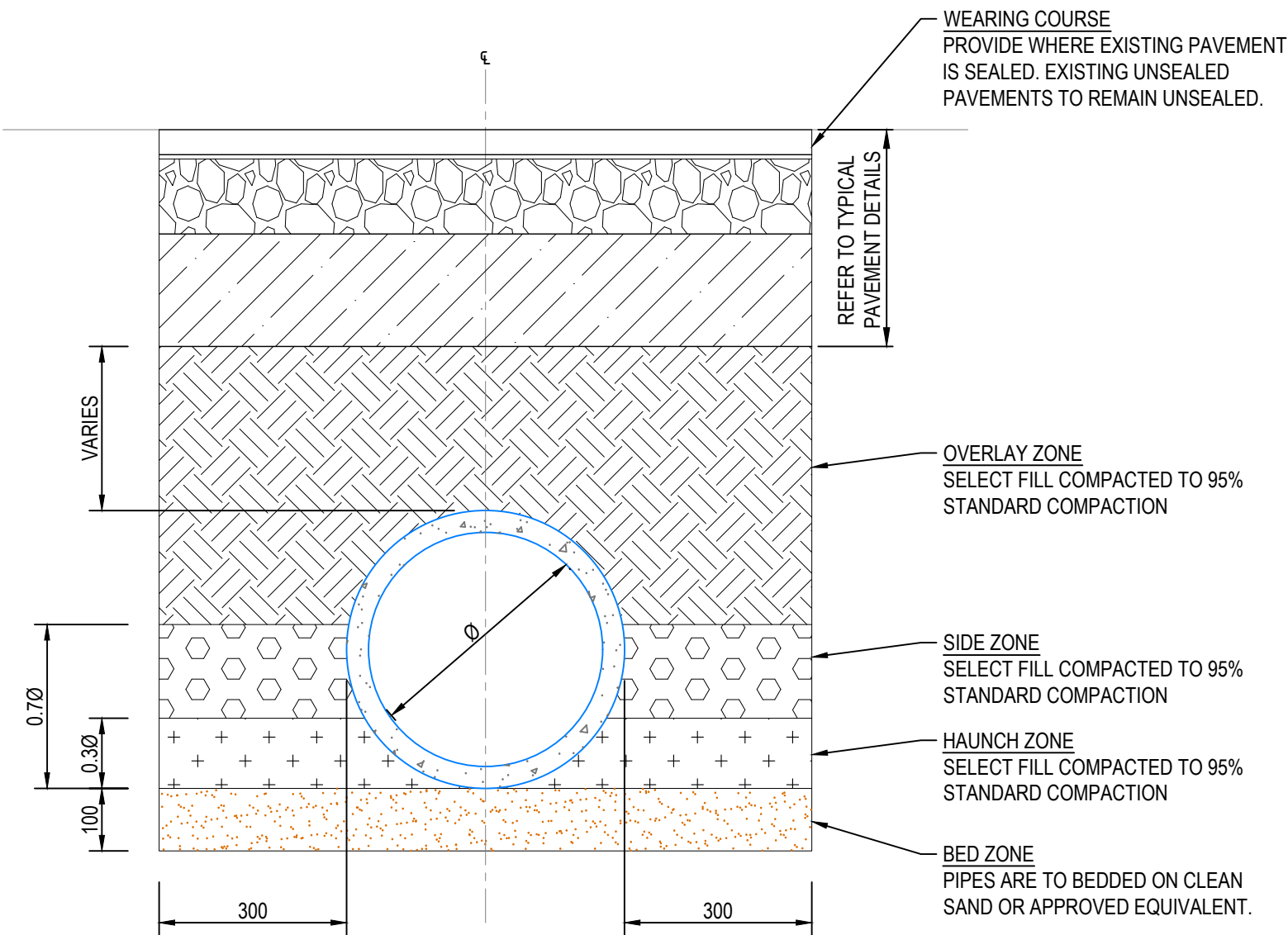


TYPICAL ROCK LINED TABLE DRAIN DETAIL - TYPE 1
SCALE 1:10

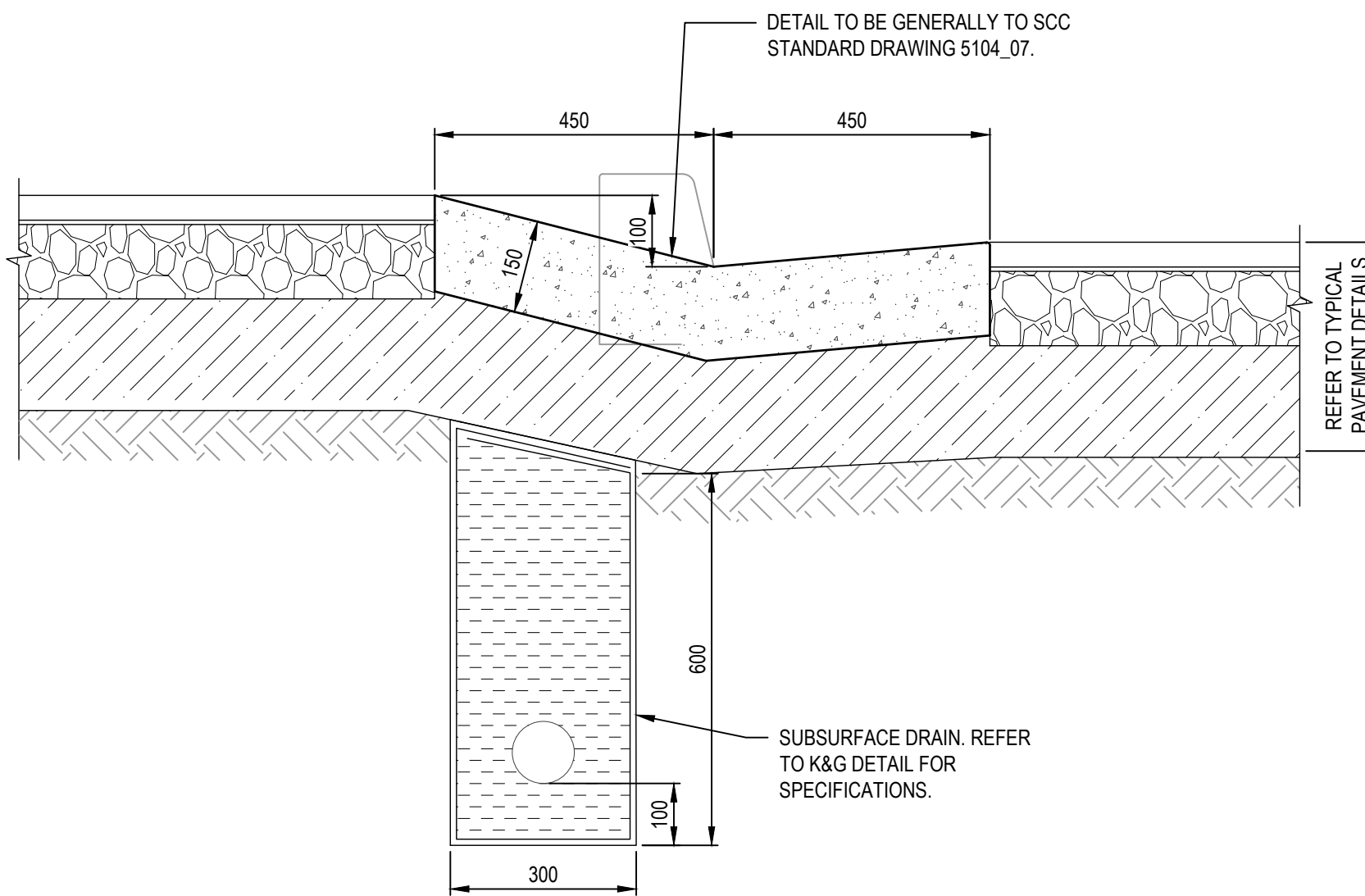
ENKAMAT BATTER STABILISATION IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. INDICATIVE ARRANGEMENT SHOWN FOR INFORMATION ONLY (SOIL FILLING METHOD).



TYPICAL KERB AND GUTTER (K&G) WITH
STORMWATER DRAINAGE PIPE DETAIL
SCALE 1:10



TYPICAL STORMWATER PIPE TRENCH DETAIL
TRAFFICABLE
SCALE 1:10



TYPICAL LAYBACK DETAIL
(VEHICULAR CROSSING)
SCALE 1:10

REVISION	AMENDMENTS	DATE	CKD	APP	SURVEYOR: AXIOM SPATIAL SURVEYORS
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A	ISSUED FOR REVIEW	26.05.22	RM	AS	

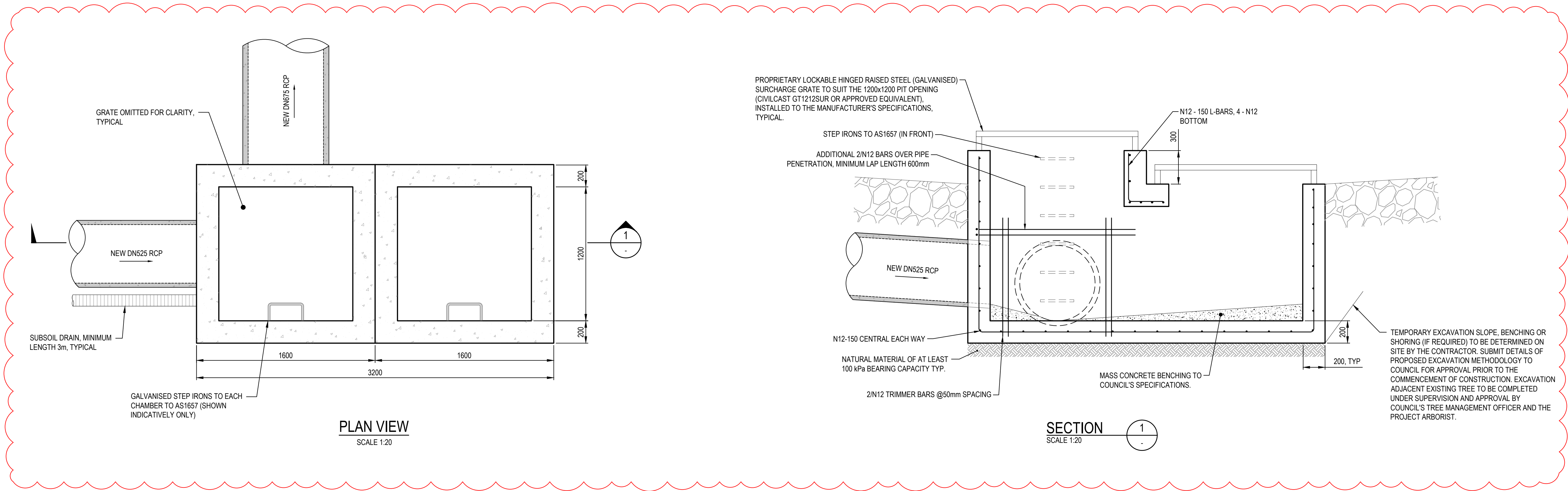


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PROJECT :	BENDALONG BOAT HARBOUR STORMWATER UPGRADE MANTA RAY ROAD, BENDALONG NSW 2539
DRAWING NAME:	TYPICAL DETAILS



DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
RM	JH	-	A1
DRAWING STATUS	DRAWING No.		
CONSTRUCTION	C020		
PROJECT No.	REVISION:		
DN220019	3		



REVISION	AMENDMENTS	DATE	CKD	APP	SURVEYOR: AXIOM SPATIAL SURVEYORS
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A	ISSUED FOR REVIEW	26.05.22	RM	AS	

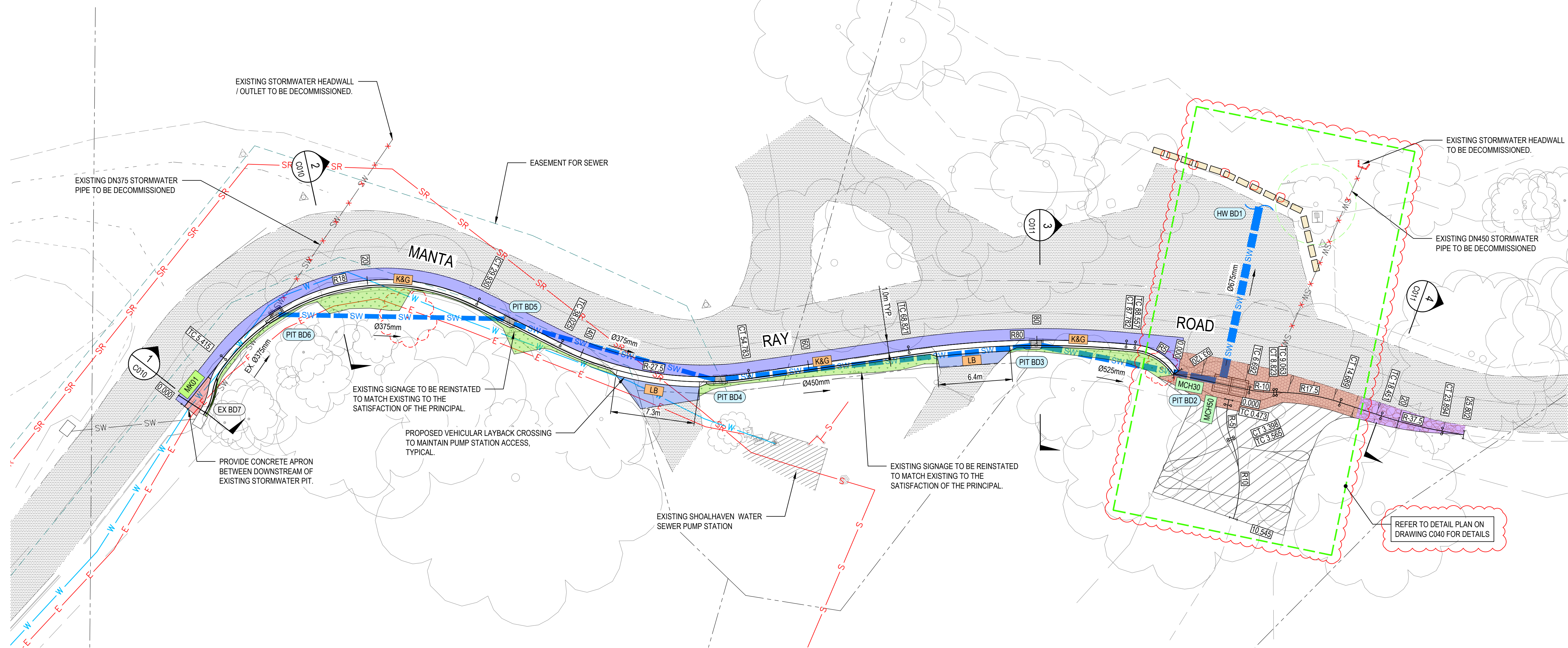
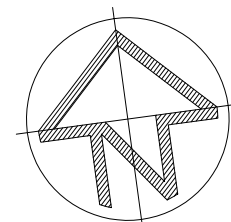


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DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
AJ	JH	1:20	A1
DRAWING STATUS			DRAWING No.
CONSTRUCTION			C022
PROJECT No.			REVISION:
DN220019			3



DO NOT SCALE



GENERAL ARRANGEMENT PLAN

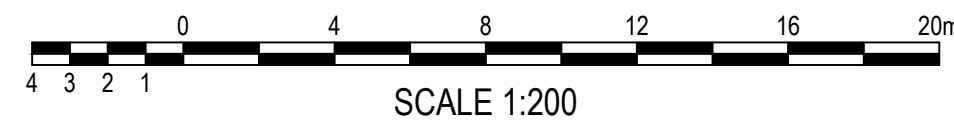
SCALE 1:200

GENERAL LEGEND

MC01	CONTROL LINE
SW	PROPOSED STORMWATER LINE
PIT A1	PROPOSED STORMWATER PIT
EX PIT	EXISTING STORMWATER PIT
K&G	PROPOSED KERB AND GUTTER
LB	PROPOSED LAYBACK
	PROPOSED ROCK LINED SWALE - TYPE 1
	PROPOSED ROCK LINED SWALE - TYPE 2
	PROPOSED EMBANKMENT STABILISATION
	PAVEMENT TYPE 1 - BITUMEN
	PAVEMENT TYPE 2 - CONCRETE
SR	EXISTING SEWER RISING MAIN (SHOWN INDICATIVELY)
S	EXISTING SEWER MAIN (SHOWN INDICATIVELY)
W	EXISTING WATER MAIN (SHOWN INDICATIVELY)
E	EXISTING UNDERGROUND ELECTRICAL LINE (SHOWN INDICATIVELY)
X SW-X	EXISTING STORMWATER PIPE TO BE DECOMMISSIONED
	EXISTING TREE TO REMAIN
	TREE PROTECTION ZONE (TPZ) OF EXISTING TREE (AS SUPPLIED BY COUNCIL). NOTE, ONLY ONE TPZ PROVIDED AND REQUESTED FOR INCLUSION
	EXISTING TREE TO BE REMOVED
	PROPOSED SANDSTONE LOGS

PIT SCHEDULE

LABEL	PIT TYPE	COMMENTS
HW BD1	BEACH OUTLET STRUCTURE	DESIGN & DOCUMENTATION BY OTHERS
BD2	2x1200x1200 CAST IN SITU PIT	REFER TO SHEET C022 FOR DETAILS
BD3	600x900 PRECAST CONCRETE PIT WITH 3.0m PRECAST LINTEL	
BD4	600x900 PRECAST CONCRETE PIT WITH 2.4m PRECAST LINTEL	
BD5	600x900 PRECAST CONCRETE PIT WITH 1.8m PRECAST LINTEL	
BD6	600x900 PRECAST CONCRETE PIT WITH 1.8m PRECAST LINTEL	INSTALL NEW PIT OVER EXISTING DN375 PIPE. CONFIRM INVERT LEVEL ON SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
EX BD7	EXISTING INLET PIT TO BE RETAINED	

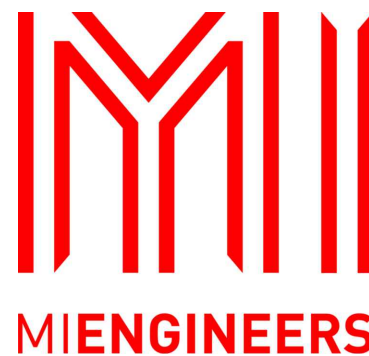


SCALE 1:200

REVISION	AMENDMENTS	DATE	CKD	APP	SURVEYOR: AXIOM SPATIAL SURVEYORS
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A	ISSUED FOR REVIEW	26.05.22	RM	AS	-
					HORIZONTAL DATUM:
					-

CLIENT:

Shoalhaven
City Council



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Suite 206/68 York Street,
Sydney NSW 2000
Tel (02) 8396 6565

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PROJECT :

BENDALONG BOAT HARBOUR STORMWATER UPGRADE
MANTA RAY ROAD, BENDALONG NSW 2539

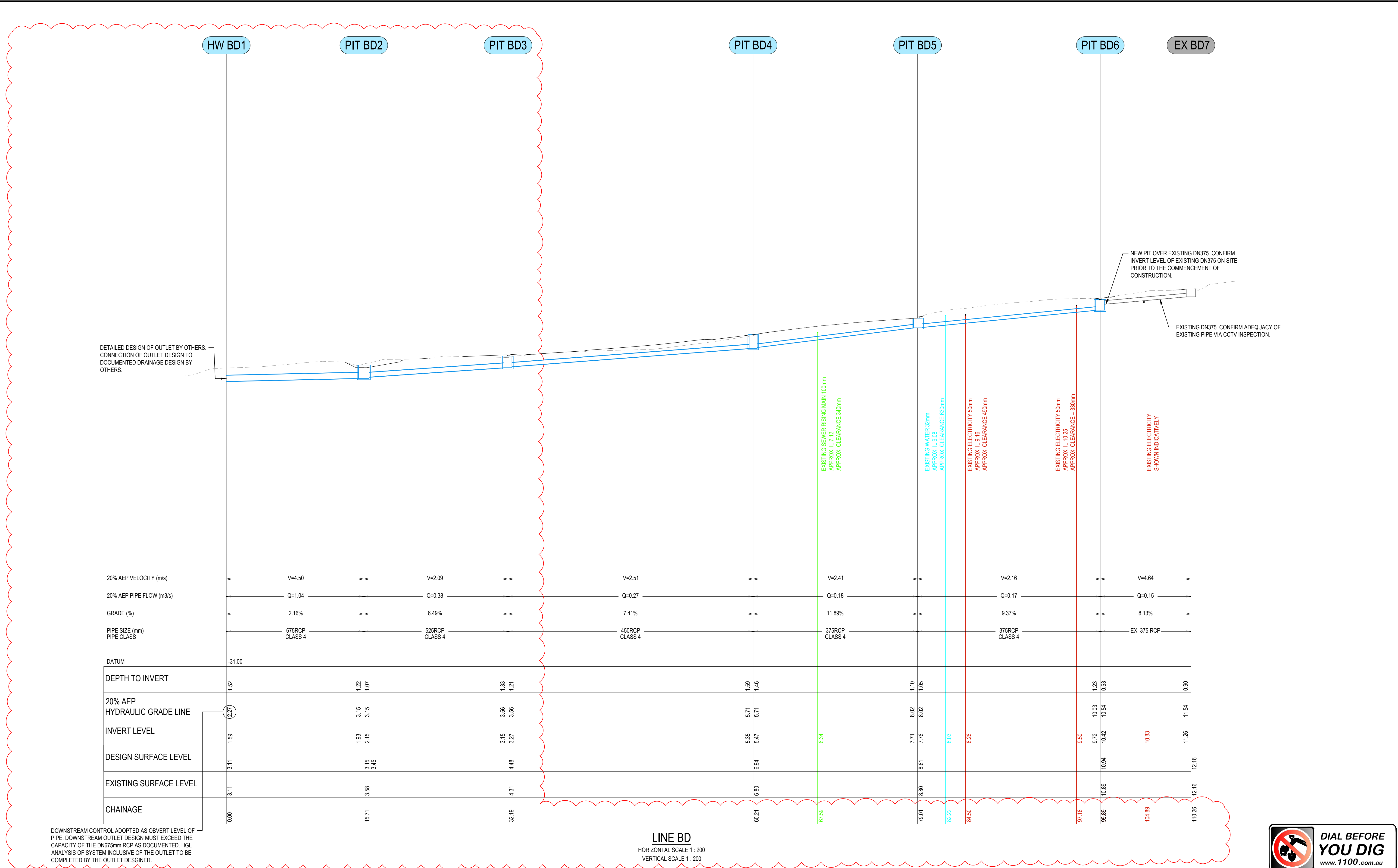
DRAWING NAME:

GENERAL ARRANGEMENT PLAN



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DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
RM	JH	NOTED	A1
DRAWING STATUS		DRAWING No.	
CONSTRUCTION		C030	
PROJECT No.		REVISION:	
DN220019		3	



DOWNSIDE CONTROL ADOPTED AS OBVERT LEVEL OF PIPE. DOWNSIDE OUTLET DESIGN MUST EXCEED THE CAPACITY OF THE DN675mm RCP AS DOCUMENTED. HGL ANALYSIS OF SYSTEM INCLUSIVE OF THE OUTLET TO BE COMPLETED BY THE OUTLET DESIGNER.

LINE BD
HORIZONTAL SCALE 1 : 200
VERTICAL SCALE 1 : 200



REVISION	AMENDMENTS	DATE	CKD	APP	SURVEYOR: AXIOM SPATIAL SURVEYORS
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A	ISSUED FOR REVIEW	26.05.22	RM	AS	-
					HORIZONTAL DATUM:
					-



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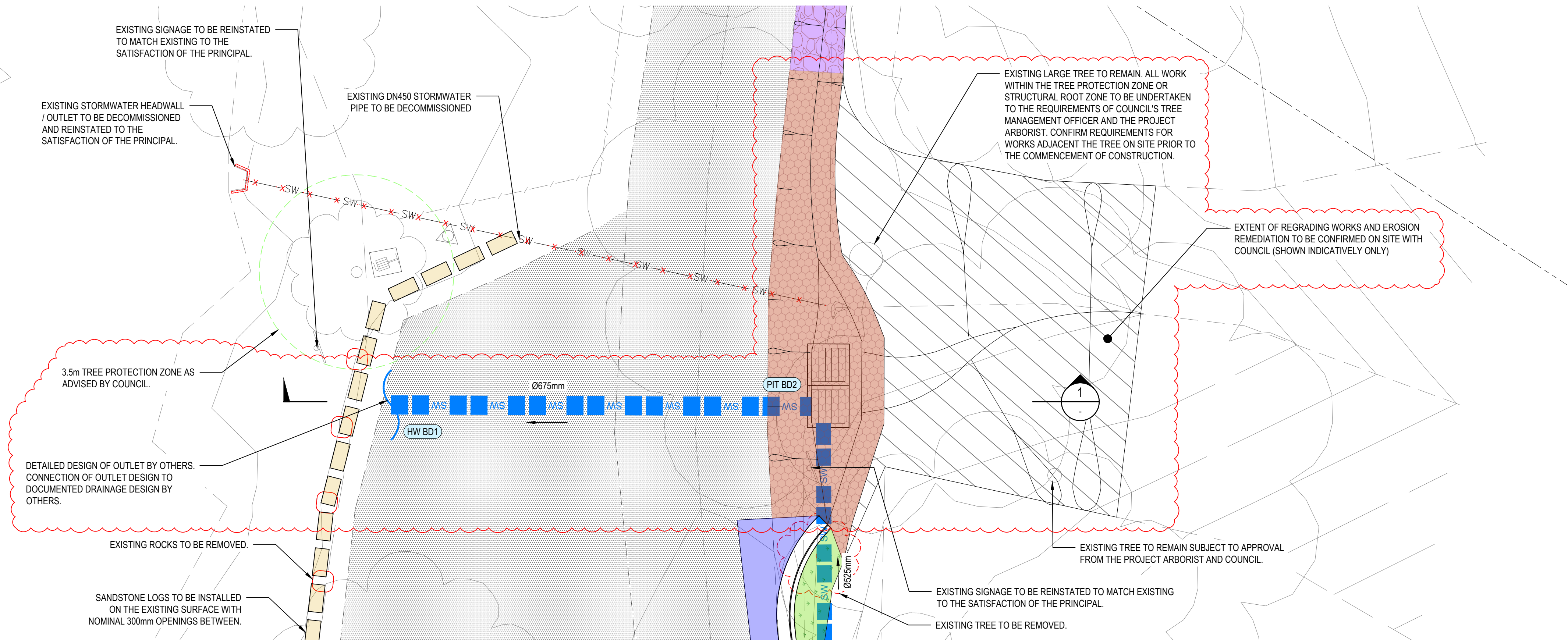
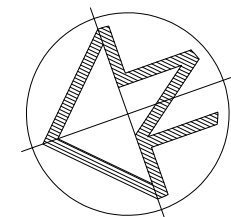
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PROJECT :	BENDALONG BOAT HARBOUR STORMWATER UPGRADE MANTA RAY ROAD, BENDALONG NSW 2539
DRAWING NAME:	STORMWATER LONGITUDINAL SECTION

DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
RM	JH	1:100	A1
DRAWING STATUS	DRAWING No.		
CONSTRUCTION	C035		
PROJECT No.	REVISION:		
DN220019	3		

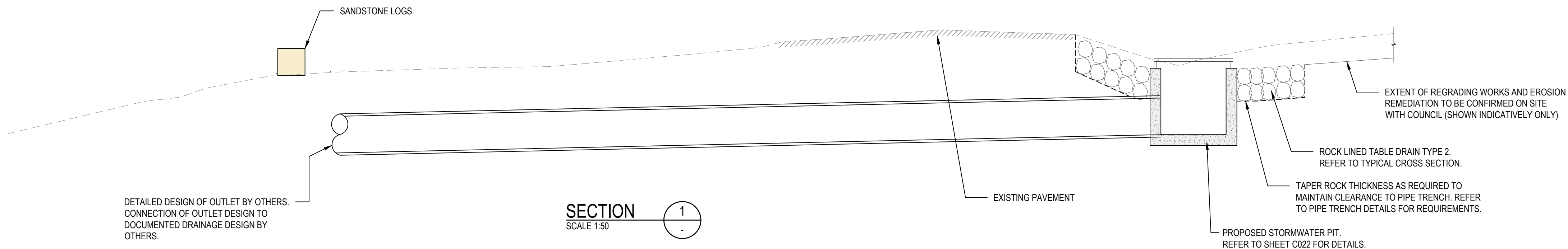
DO NOT SCALE



OUTLET DETAIL PLAN

SCALE 1:100

GENERAL LEGEND	
MC01	CONTROL LINE
SW	PROPOSED STORMWATER LINE
PIT A1	PROPOSED STORMWATER PIT
EX PIT	EXISTING STORMWATER PIT
K&G	PROPOSED KERB AND GUTTER
LB	PROPOSED LAYBACK
PROPOSED ROCK LINED SWALE - TYPE 1	
PROPOSED ROCK LINED SWALE - TYPE 2	
PROPOSED EMBANKMENT STABILISATION	
PAVEMENT TYPE 1 - BITUMEN	
PAVEMENT TYPE 2 - CONCRETE	
SR	EXISTING SEWER RISING MAIN (SHOWN INDICATIVELY)
S	EXISTING SEWER MAIN (SHOWN INDICATIVELY)
W	EXISTING WATER MAIN (SHOWN INDICATIVELY)
E	EXISTING UNDERGROUND ELECTRICAL LINE (SHOWN INDICATIVELY)
x SW - x	EXISTING STORMWATER PIPE TO BE DECOMMISSIONED
EXISTING TREE TO REMAIN	
TREE PROTECTION ZONE (TPZ) OF EXISTING TREE (AS SUPPLIED BY COUNCIL). NOTE, ONLY ONE TPZ PROVIDED AND REQUESTED FOR INCLUSION	
EXISTING TREE TO BE REMOVED	
PROPOSED SANDSTONE LOGS	



SECTION 1

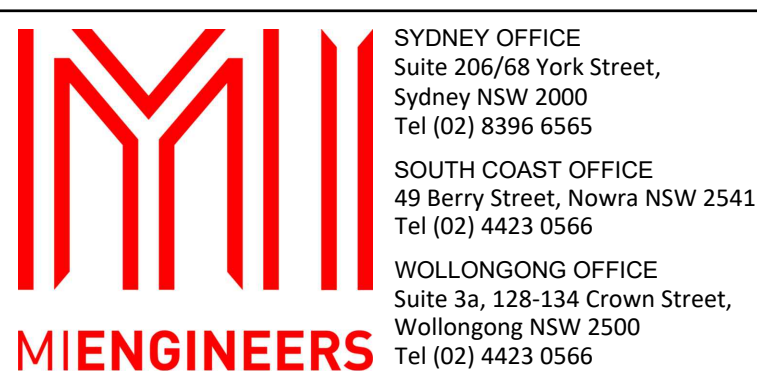
SCALE 1:50

OUTLET DESIGN REMOVED FROM SCOPE



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REVISION	AMENDMENTS	DATE	CKD	APP	SURVEYOR: AXIOM SPATIAL SURVEYORS
3	ISSUED FOR CONSTRUCTION - DESIGN OF OUTLET OMITTED, MINOR AMENDMENTS AS CLOUDED	18.03.25	RM	AS	DATE OF SURVEY: -
2	ISSUED FOR REVIEW - DESIGN OF OUTLET OMITTED, MINOR AMENDMENTS AS CLOUDED	24.02.25	RM	AS	ORIGIN: -
1	ISSUED FOR CONSTRUCTION	08.12.23	RM	AS	HEIGHT OF DATUM: -
E	ISSUED FOR REVIEW - OUTLET AMENDED	27.07.23	RM	AS	HORIZONTAL DATUM: -
D	ISSUED FOR REVIEW - OUTLET AMENDED	23.06.23	RM	AS	
C	ISSUED FOR REVIEW - KERB AND GUTTER ADDED	16.05.23	RM	AS	
B	ISSUED FOR REVIEW - SERVICE LOCATING ADDED	21.10.22	RM	AS	



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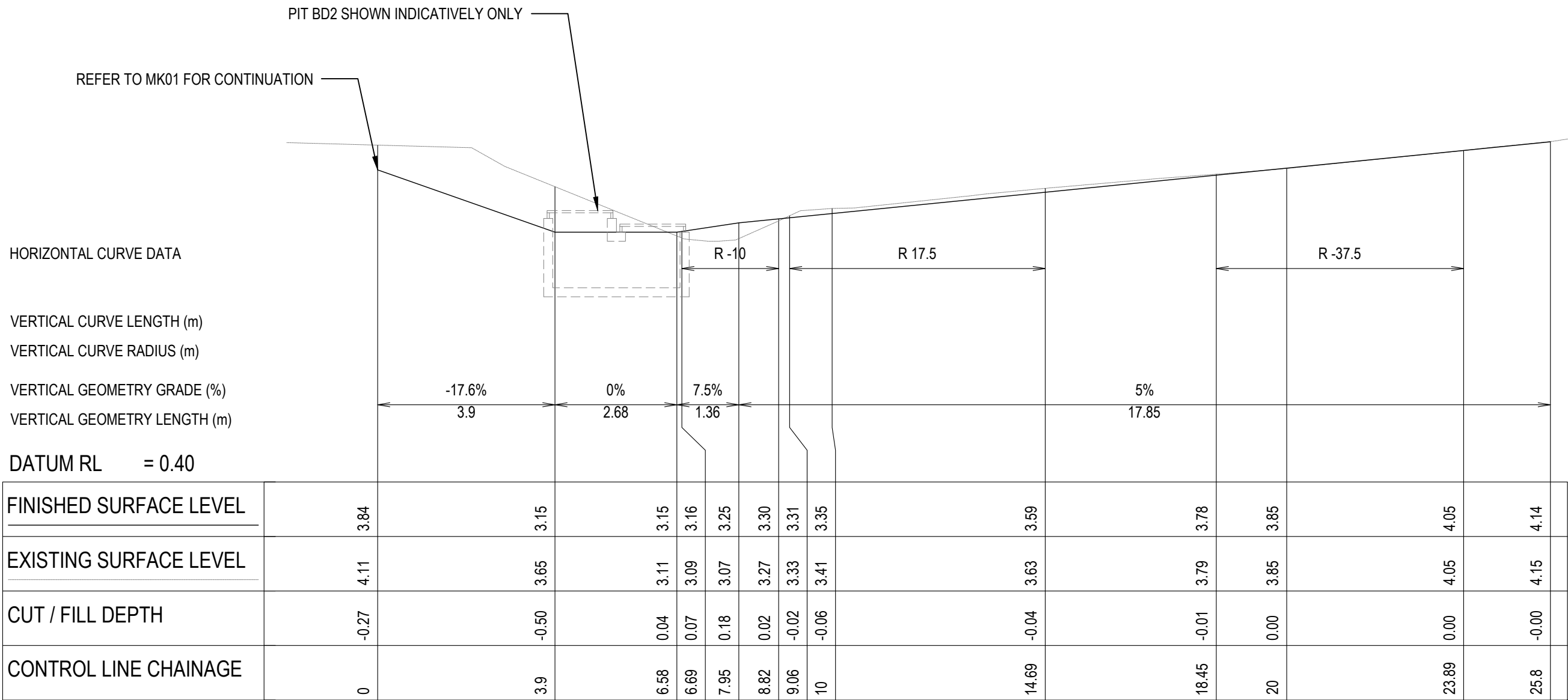
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AJ/RM	JH	NOTED	A1
DRAWING STATUS		DRAWING No.	
CONSTRUCTION		C040	
PROJECT No.		REVISION:	
DN220019		3	

PROJECT :
BENDALONG BOAT HARBOUR STORMWATER UPGRADE
MANTA RAY ROAD, BENDALONG NSW 2539
DRAWING NAME:
OUTLET DETAIL PLAN

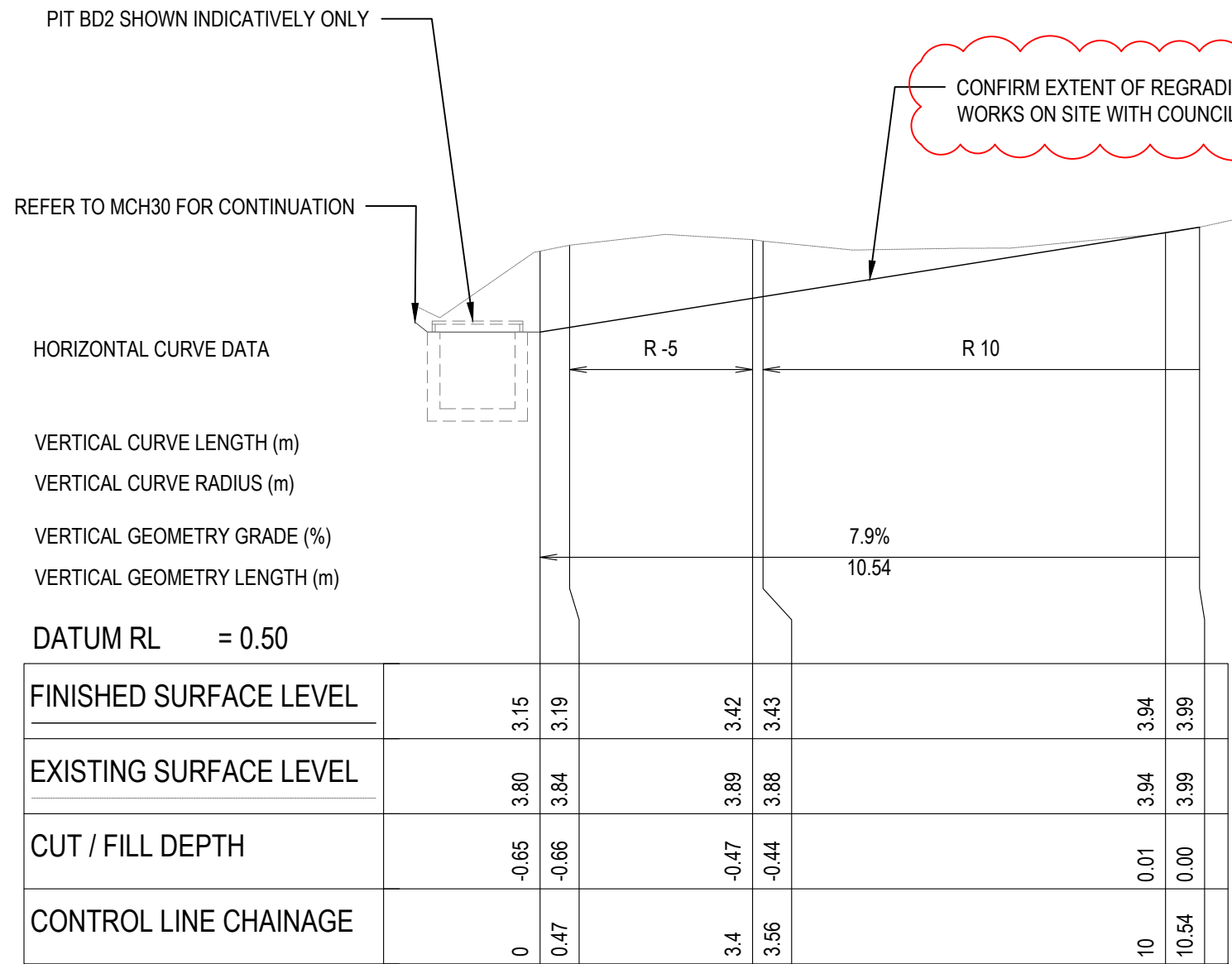


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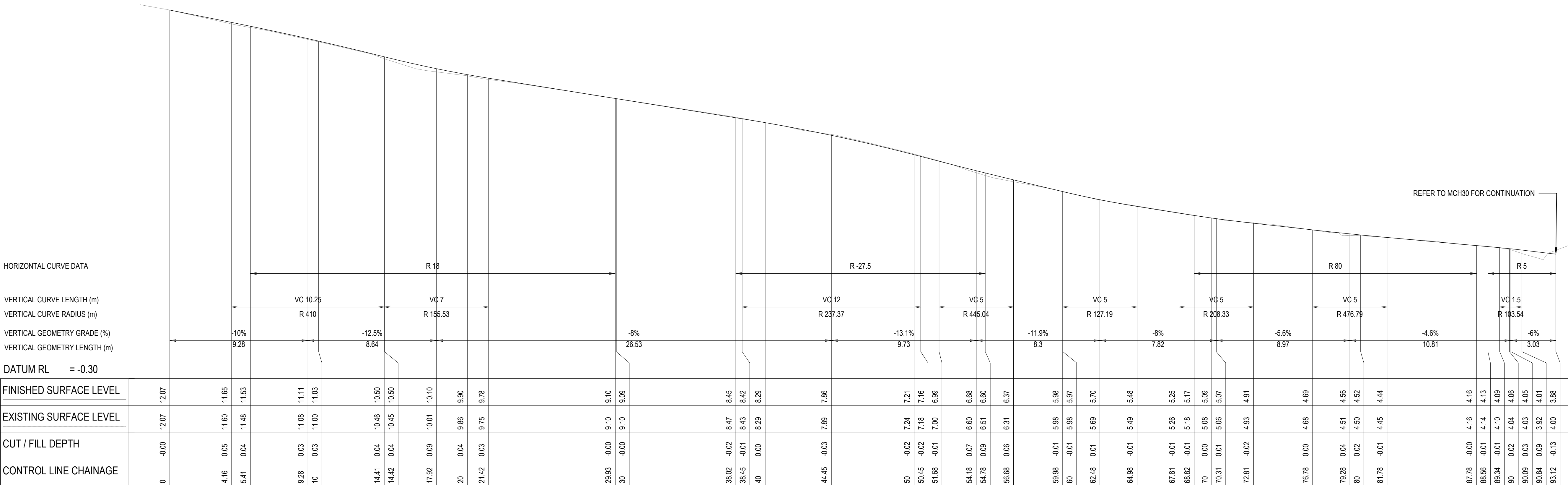
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LONGITUDINAL SECTION MCH 30

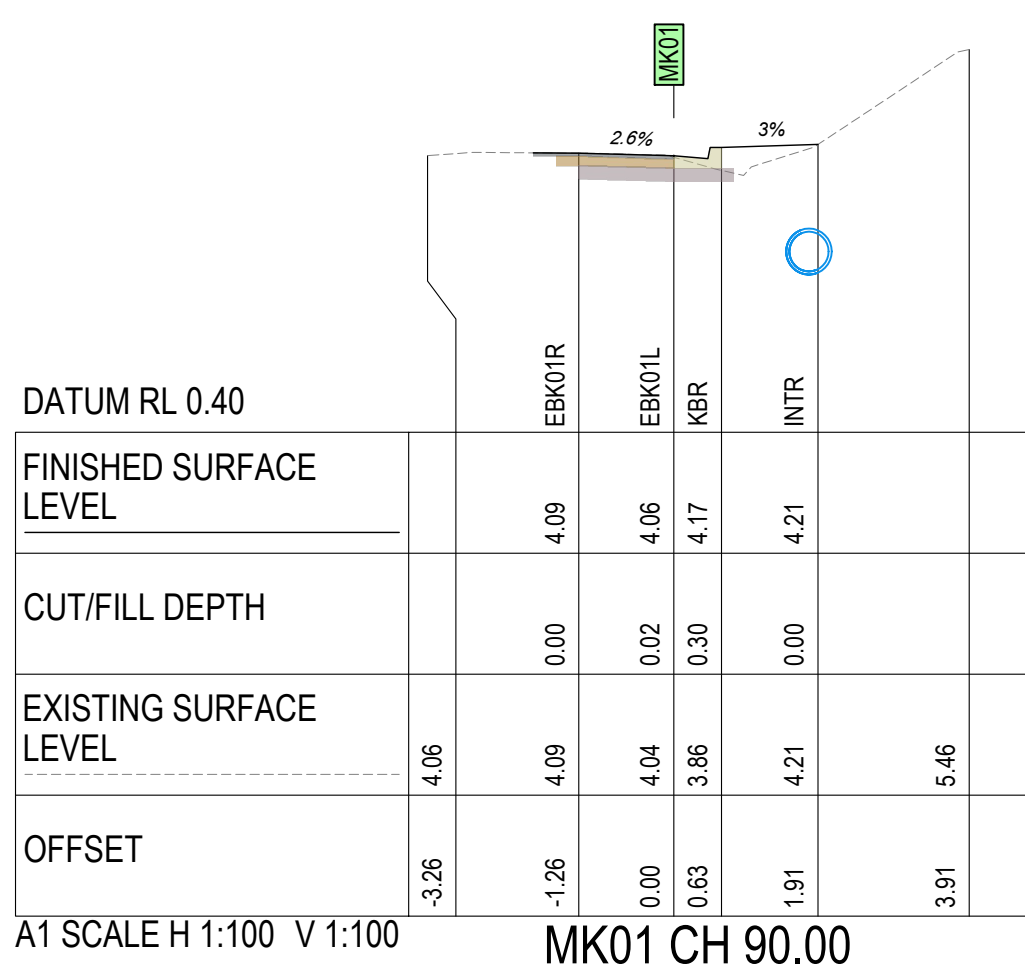
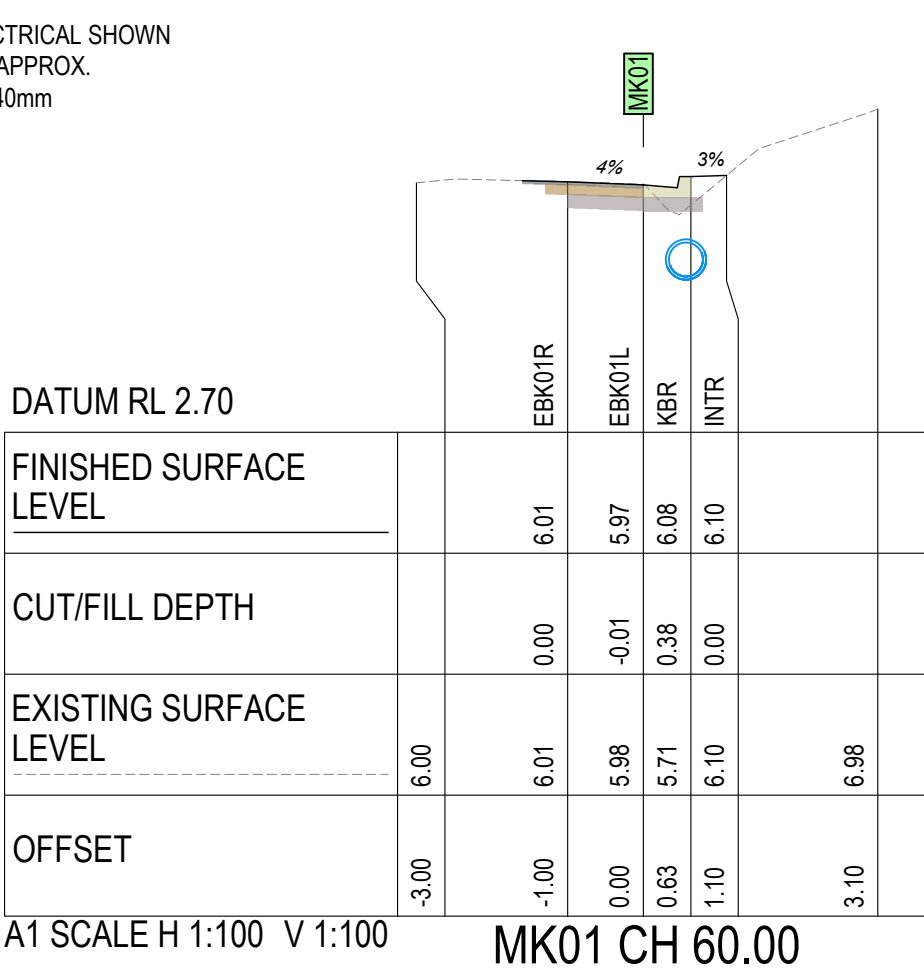
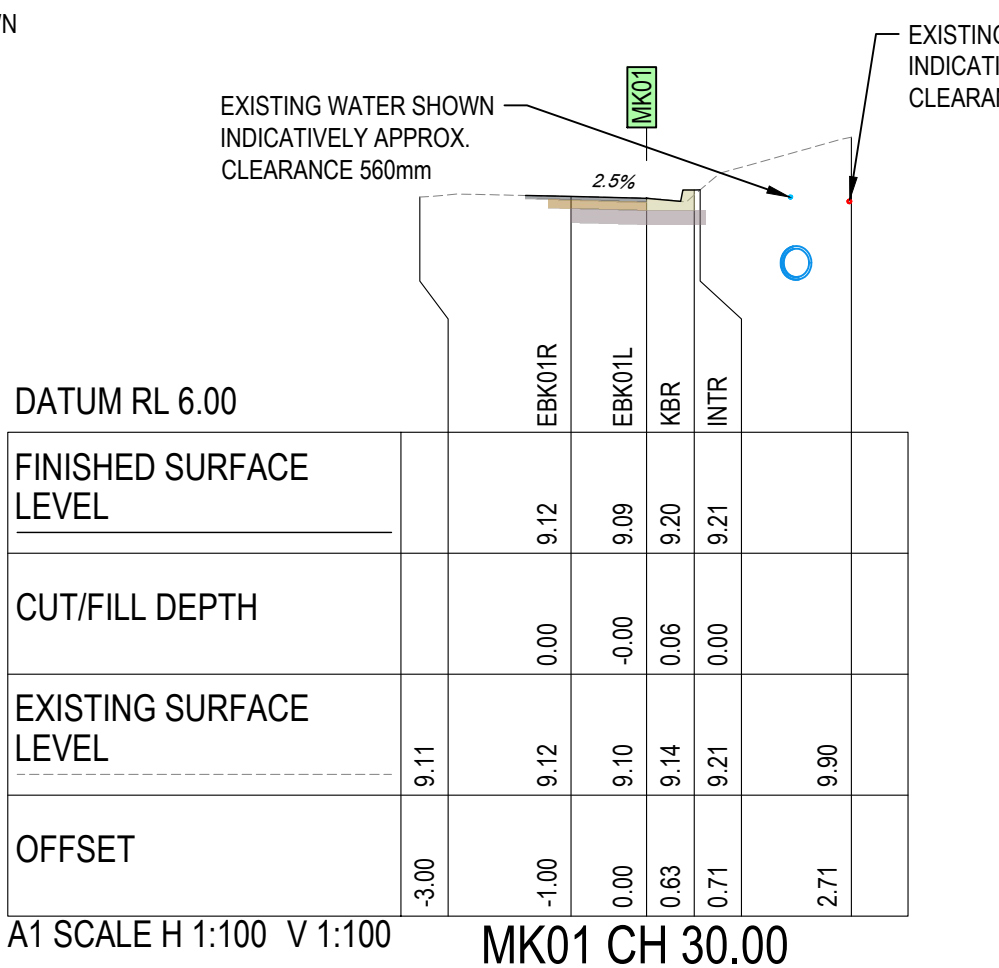
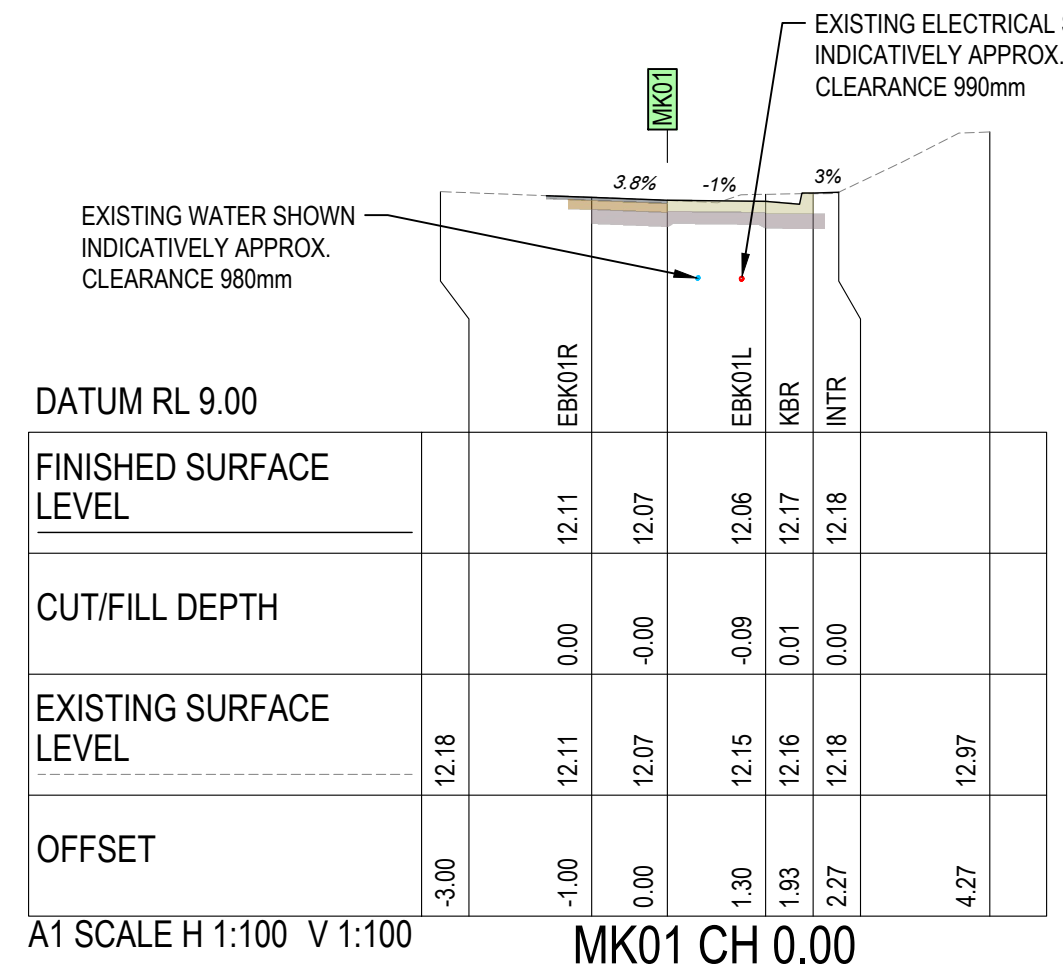
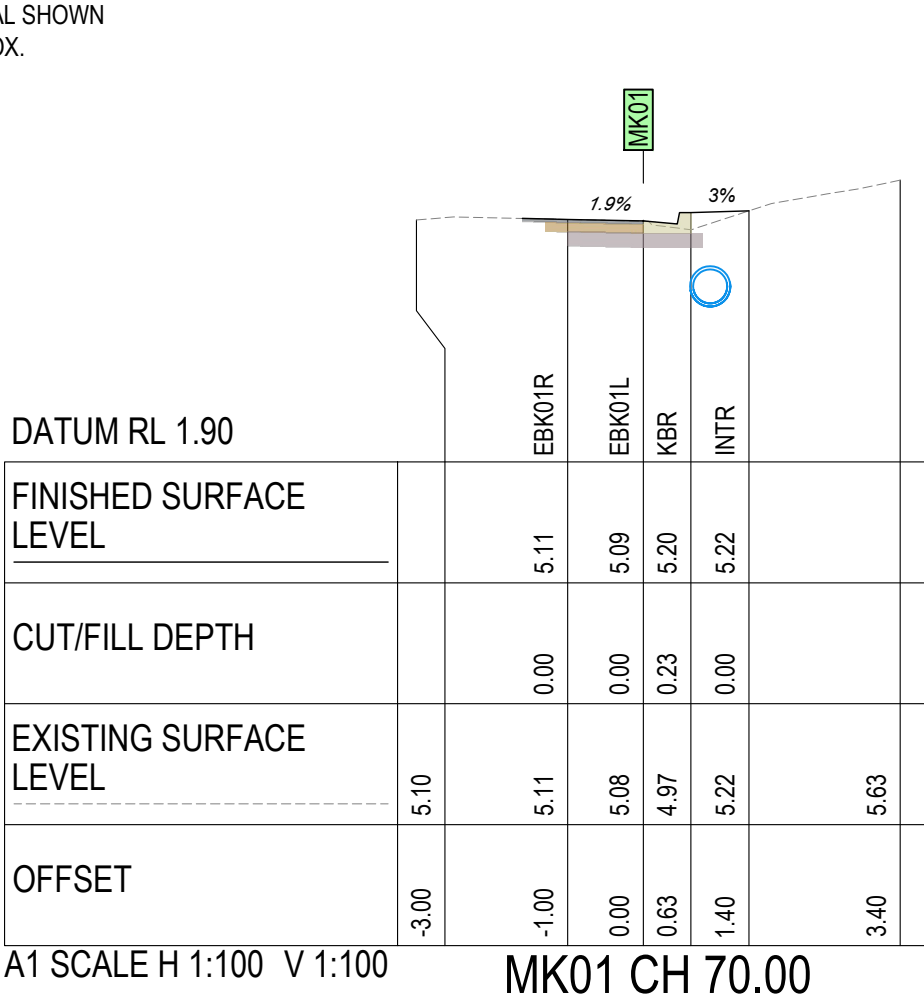
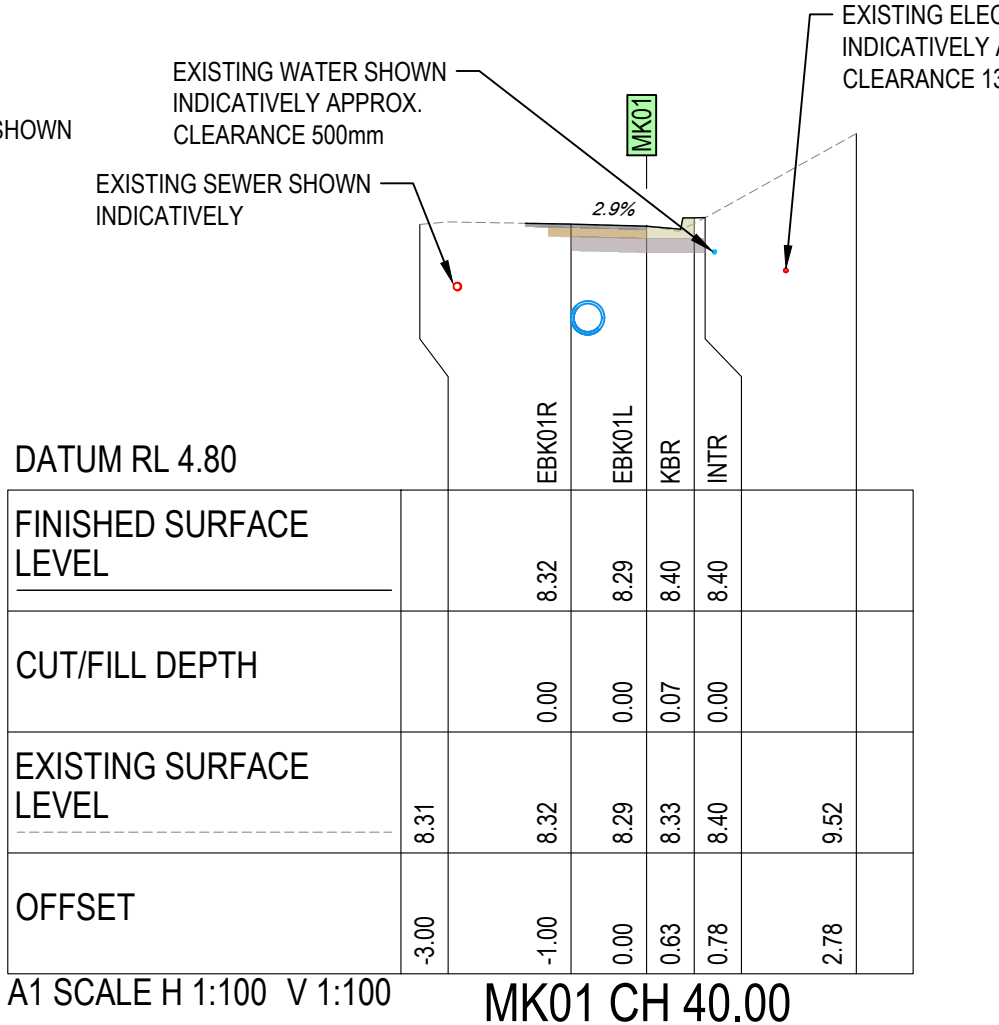
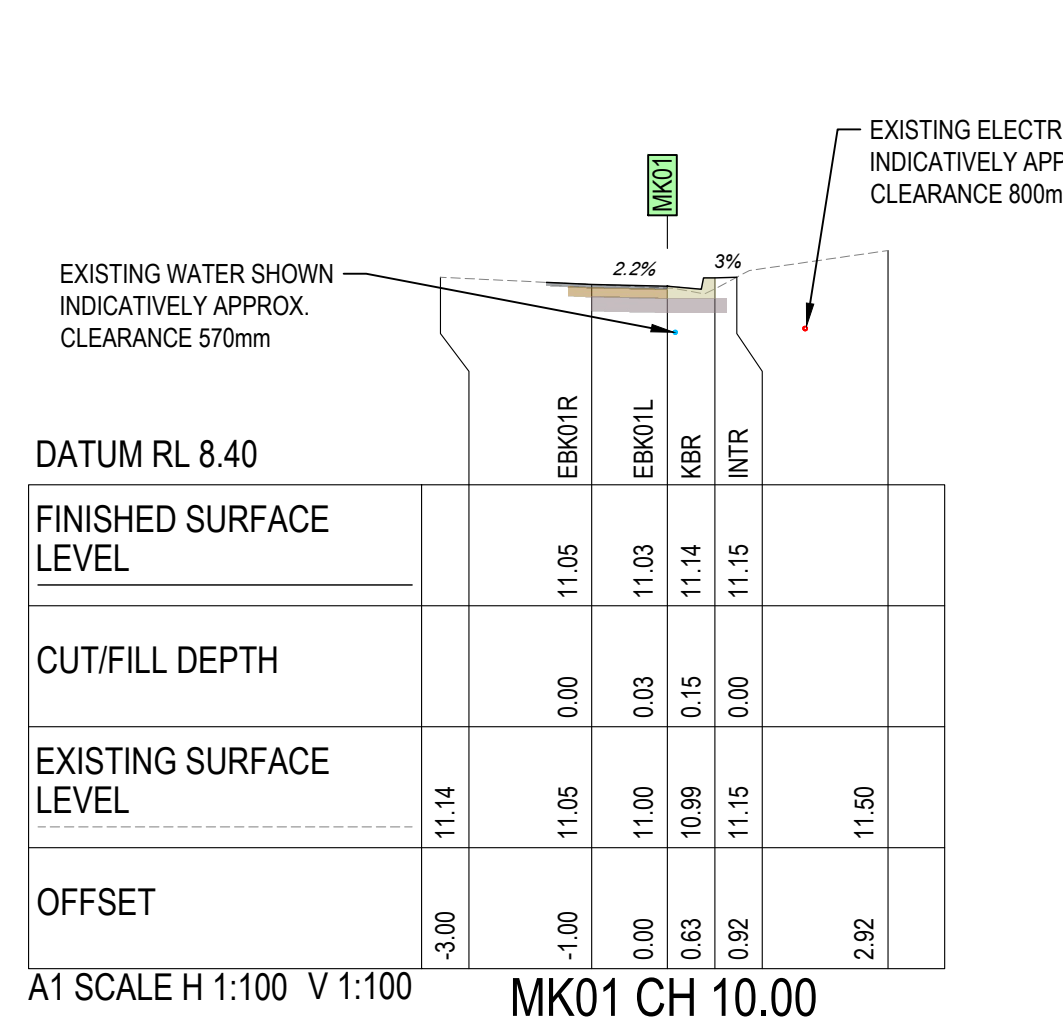
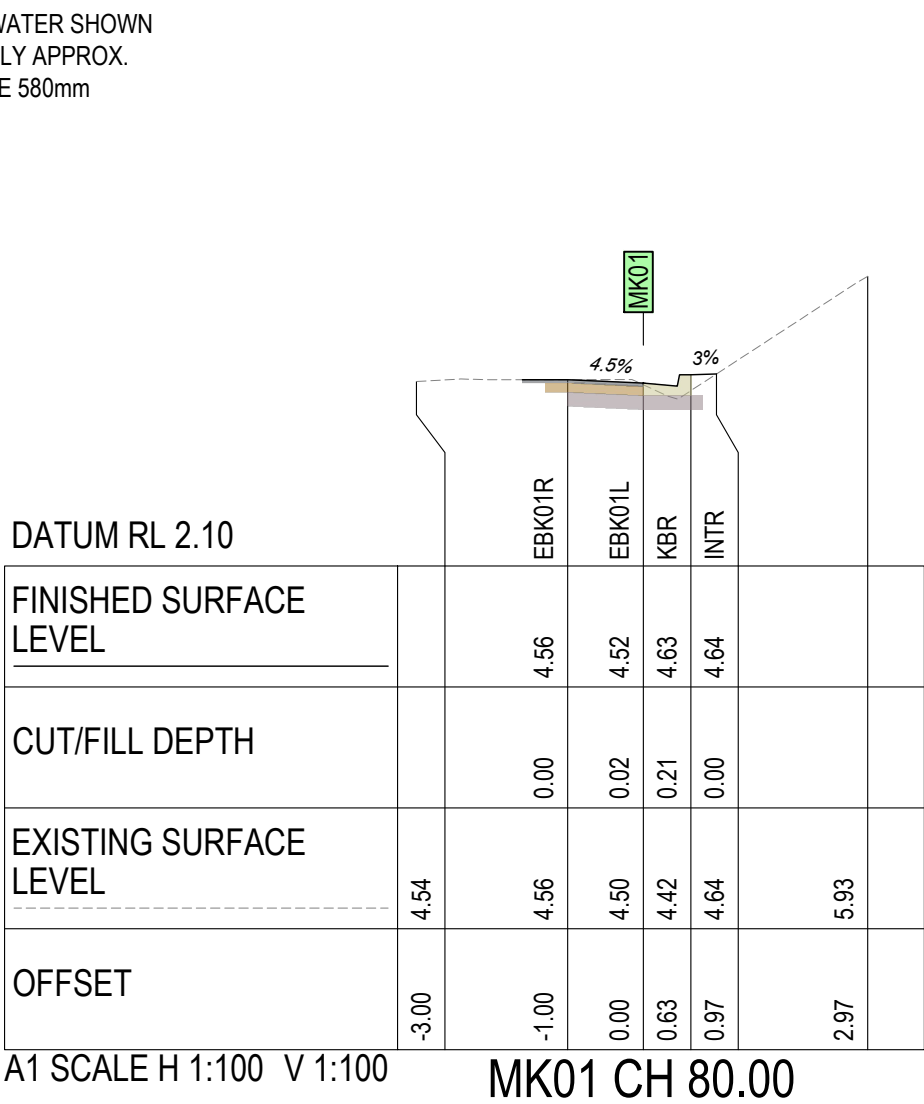
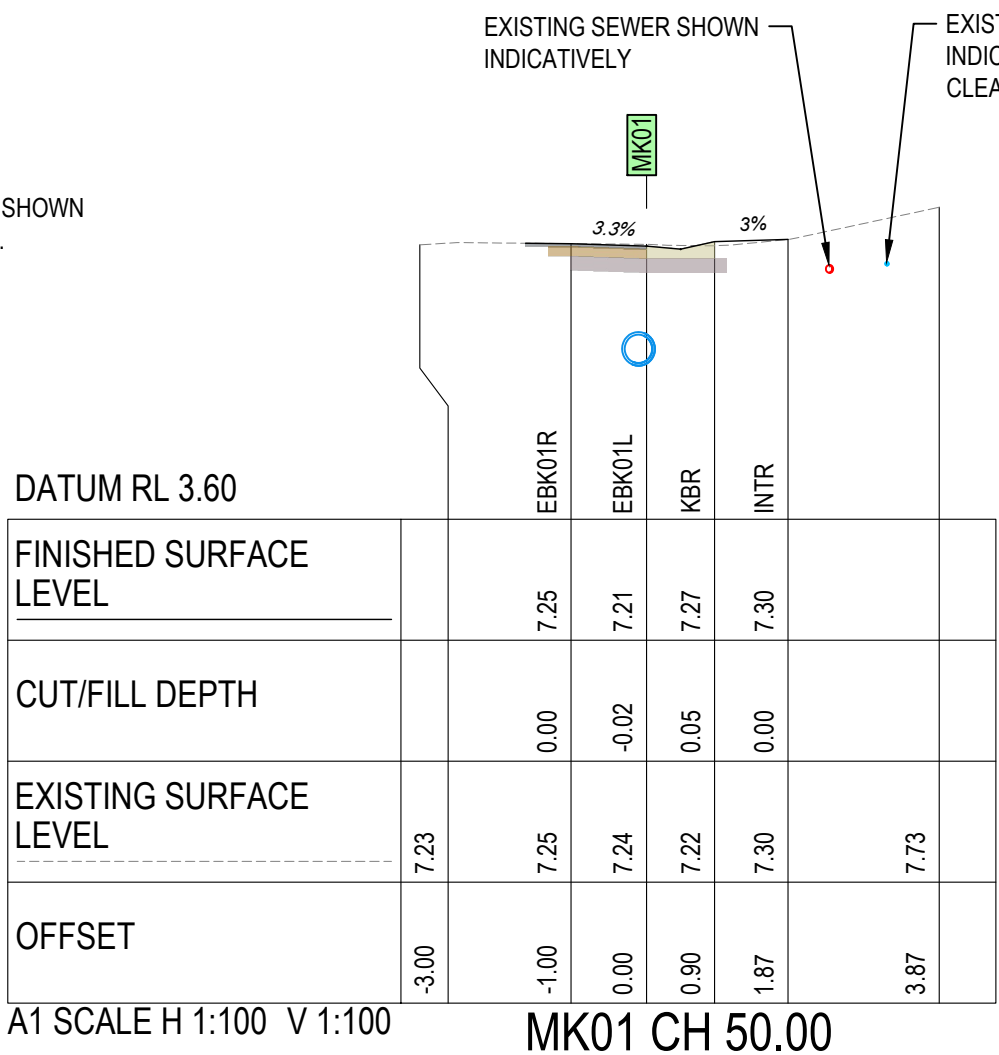
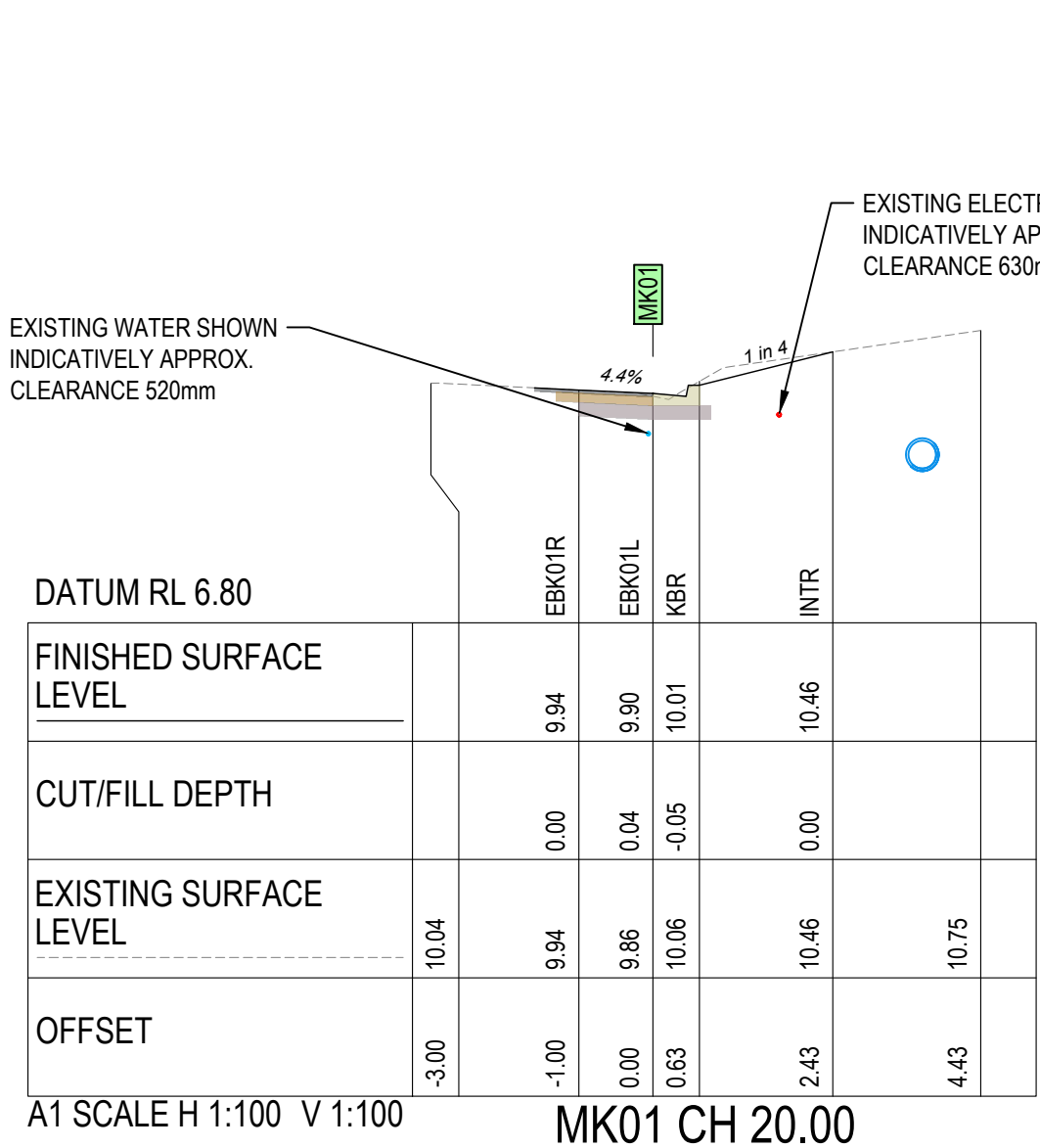


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LONGITUDINAL SECTION MCH 50



A1 SCALE: H 1:150,V 1:75
LONGITUDINAL SECTION MK01

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REVISION	AMENDMENTS	DATE	CKD	APP
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A	ISSUED FOR REVIEW	26.05.22	RM	AS

SURVEYOR: AXIOM SPATIAL SURVEYORS
DATE OF SURVEY: -
ORIGIN: -
HEIGHT OF DATUM: -
HORIZONTAL DATUM: -



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PROJECT :

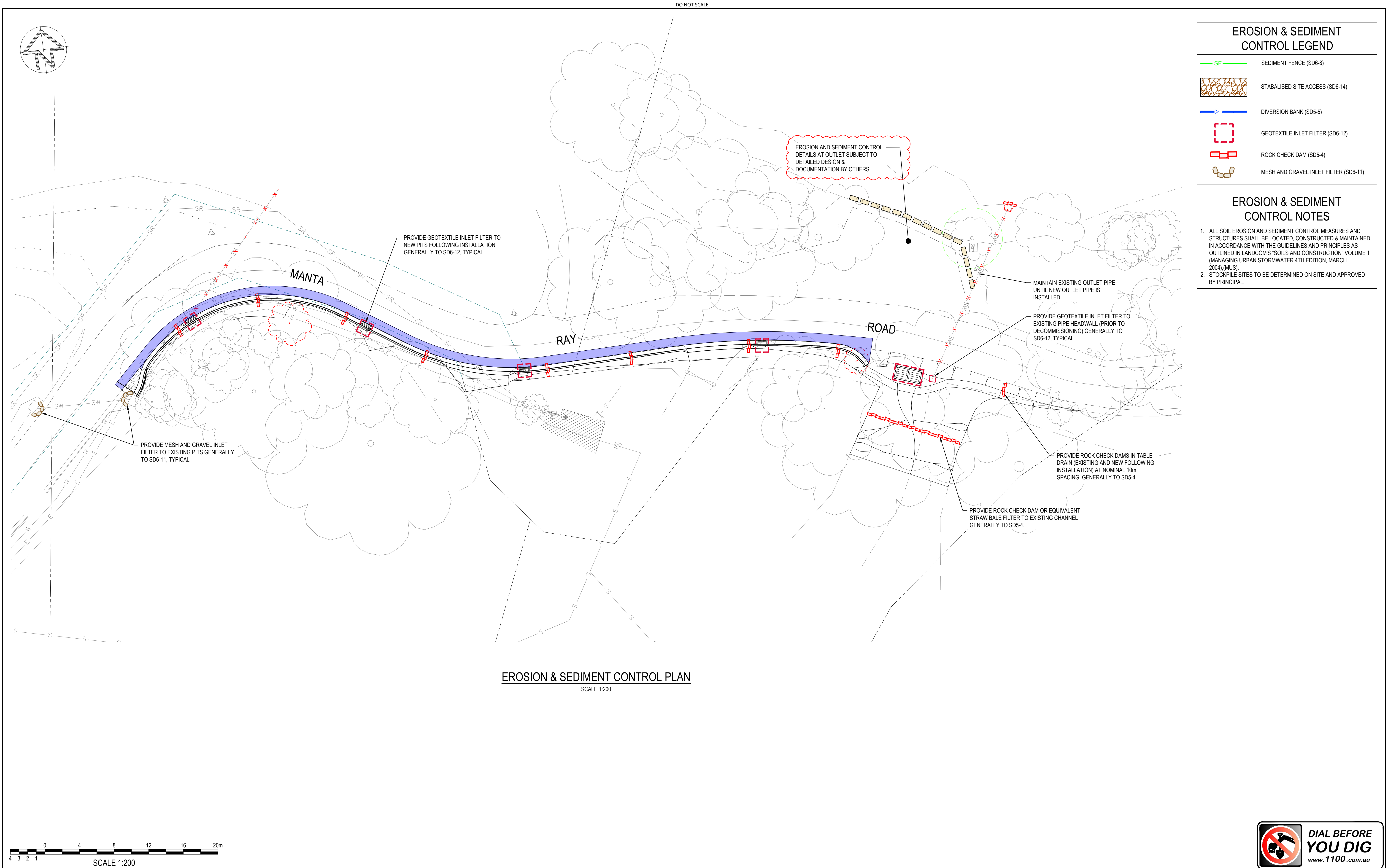
BENDALONG BOAT HARBOUR STORMWATER UPGRADE

MANTA RAY ROAD, BENDALONG NSW 2539

DRAWING NAME:
CROSS SECTIONS SHEET

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DESIGNED: RM	DRAWN: JH	SCALE: 1:200	SHEET SIZE: A1
DRAWING STATUS CONSTRUCTION		DRAWING No. C050	
PROJECT No. DN220019		REVISION: 3	



REVISION	AMENDMENTS	DATE	CKD	APP	SURVEYOR: AXIOM SPATIAL SURVEYORS
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CLIENT:

Shoalhaven
City Council

MIENGINEERS

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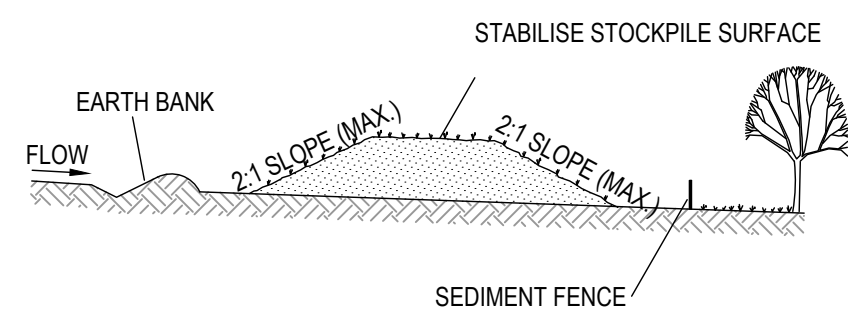
PROJECT :

BENDALONG BOAT HARBOUR STORMWATER UPGRADE
MANTA RAY ROAD, BENDALONG NSW 2539

DRAWING NAME:
EROSION & SEDIMENT CONTROL PLAN

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DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
RM	JH	-	A1
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CONSTRUCTION		CE01	
PROJECT No.		REVISION:	
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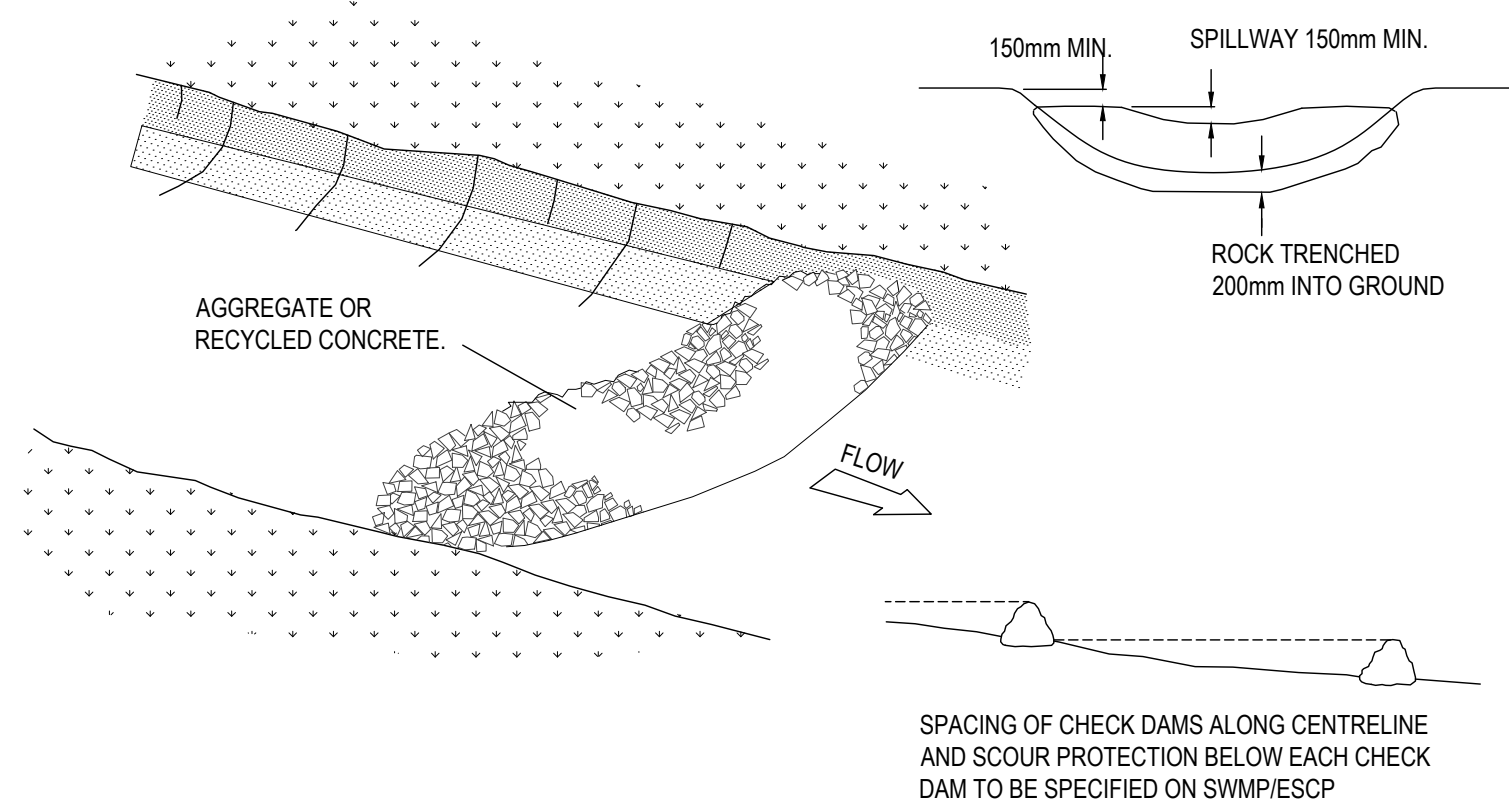


CONSTRUCTION NOTES

1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2 METRES DOWNSLOPE.

STOCKPILES

SD 4-1

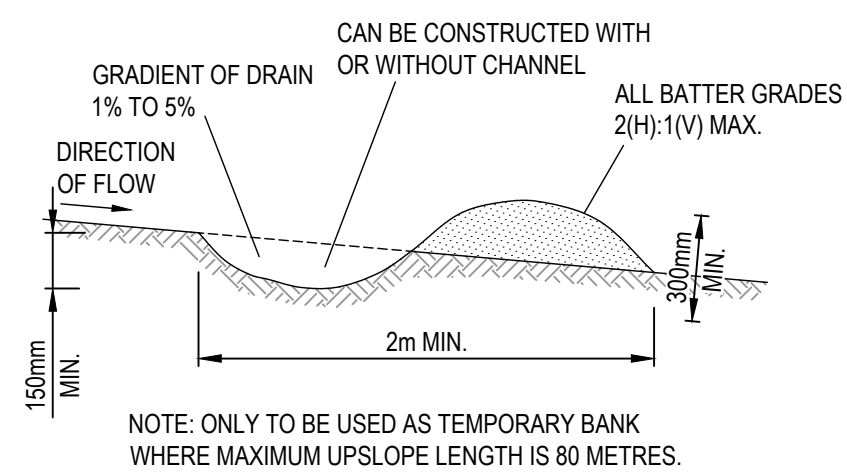


CONSTRUCTION NOTES

1. CHECK DAMS CAN BE BUILT WITH VARIOUS MATERIALS, INCLUDING ROCKS, LOGS, SANDBAGS AND STRAW BALES. THE MAINTENANCE PROGRAM SHOULD ENSURE THEIR INTEGRITY IS RETAINED, ESPECIALLY WHERE CONSTRUCTED WITH STRAW BALES. IN THE CASE OF BALES, THIS MIGHT REQUIRE THEIR REPLACEMENT EACH TWO TO FOUR MONTHS.
2. TRENCH THE CHECK DAM 200mm INTO THE GROUND ACROSS ITS WHOLE WIDTH. WHERE ROCK IS USED, FILL THE TRENCHES TO AT LEAST 100 MM ABOVE THE GROUND SURFACE TO REDUCE THE RISK OF UNDERCUTTING.
3. NORMALLY, THEIR MAXIMUM HEIGHT SHOULD NOT EXCEED 600 MM ABOVE THE GULLY FLOOR. THE CENTRE SHOULD ACT AS A SPILLWAY, BEING AT LEAST 150mm LOWER THAN THE OUTER EDGES.
4. SPACE THE DAMS SO THE TOE OF THE UPSTREAM DAM IS LEVEL WITH THE SPILLWAY OF THE NEXT DOWNSTREAM DAM.

ROCK CHECK DAM

SD 5-4

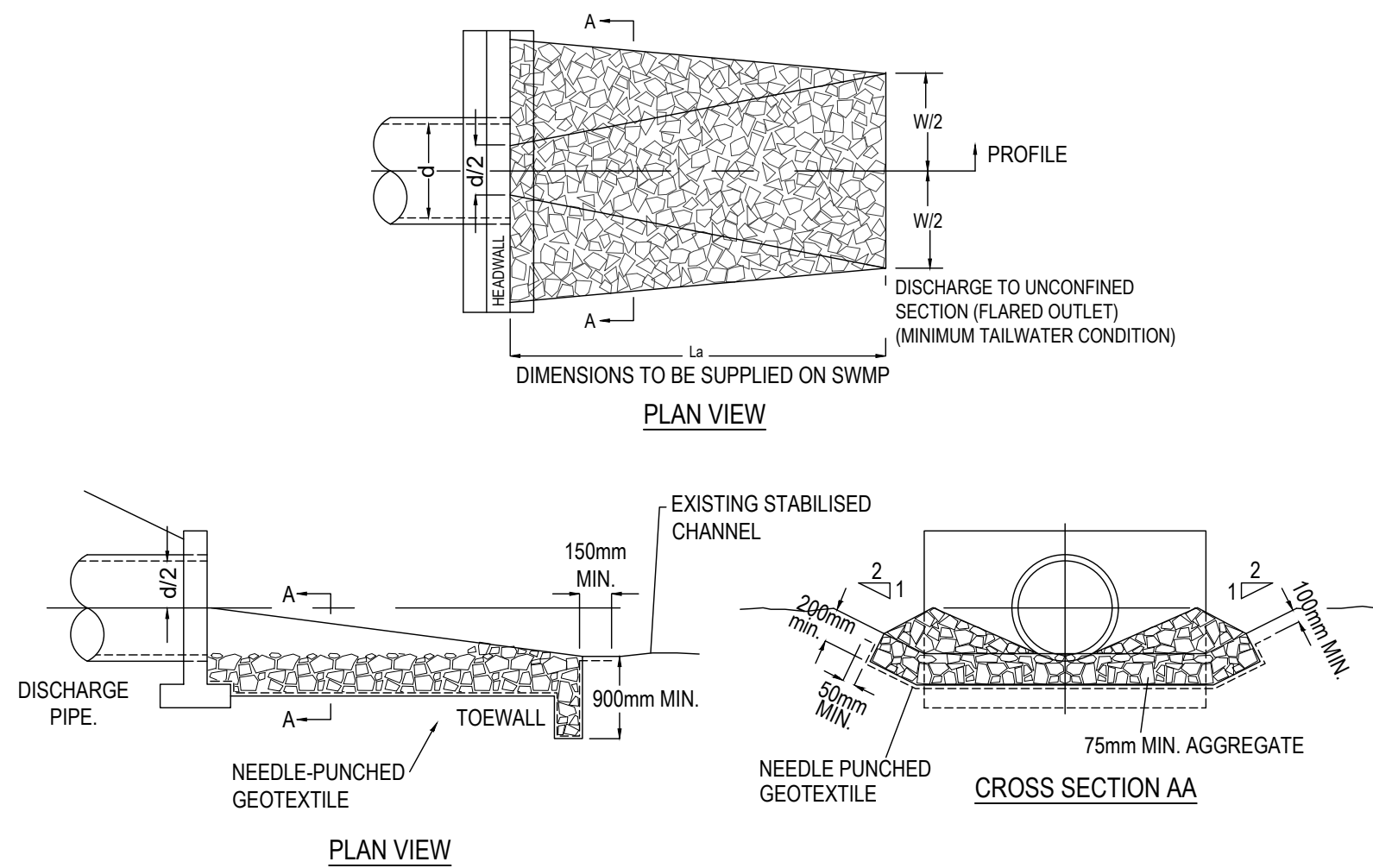


CONSTRUCTION NOTES

1. BUILD WITH GRADIENTS BETWEEN 1 PERCENT AND 5 PERCENT.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
5. ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
6. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

EARTH BANK (LOW FLOW)

SD 5-5

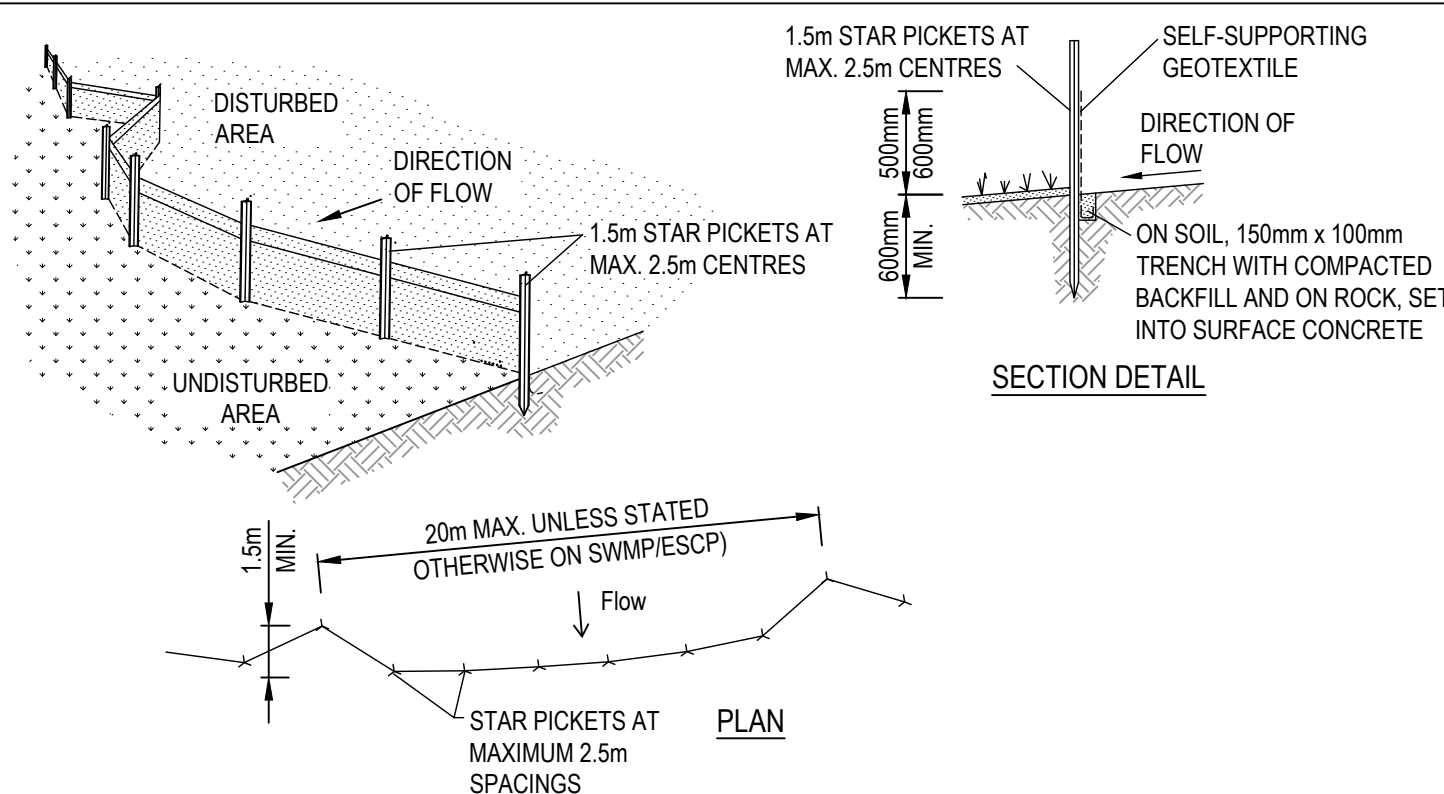


CONSTRUCTION NOTES

1. COMPACT THE SUBGRADE FILL TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL.
2. PREPARE A SMOOTH, EVEN FOUNDATION FOR THE STRUCTURE THAT WILL ENSURE THAT THE NEEDLE-PUNCHED GEOTEXTILE DOES NOT SUSTAIN SERIOUS DAMAGE WHEN COVERED WITH ROCK.
3. SHOULD ANY MINOR DAMAGE TO THE GEOTEXTILE OCCUR, REPAIR IT BEFORE SPREADING ANY AGGREGATE. FOR REPAIRS, PATCH ONE PIECE OF FABRIC OVER THE DAMAGE, MAKING SURE THAT ALL JOINTS AND PATCHES OVERLAP MORE THAN 300mm.
4. LAY ROCK FOLLOWING THE DRAWING, ACCORDING TO TABLE 5.2 OF LANDCOM (2004) AND WITH A MINIMUM DIAMETER OF 75mm.
5. ENSURE THAT ANY CONCRETE OR RIPRAP USED FOR THE ENERGY DISSIPATER OR THE OUTLET PROTECTION CONFORMS TO THE GRADING LIMITS SPECIFIED ON THE SWMP.

ENERGY DISSIPATER

SD 5-8

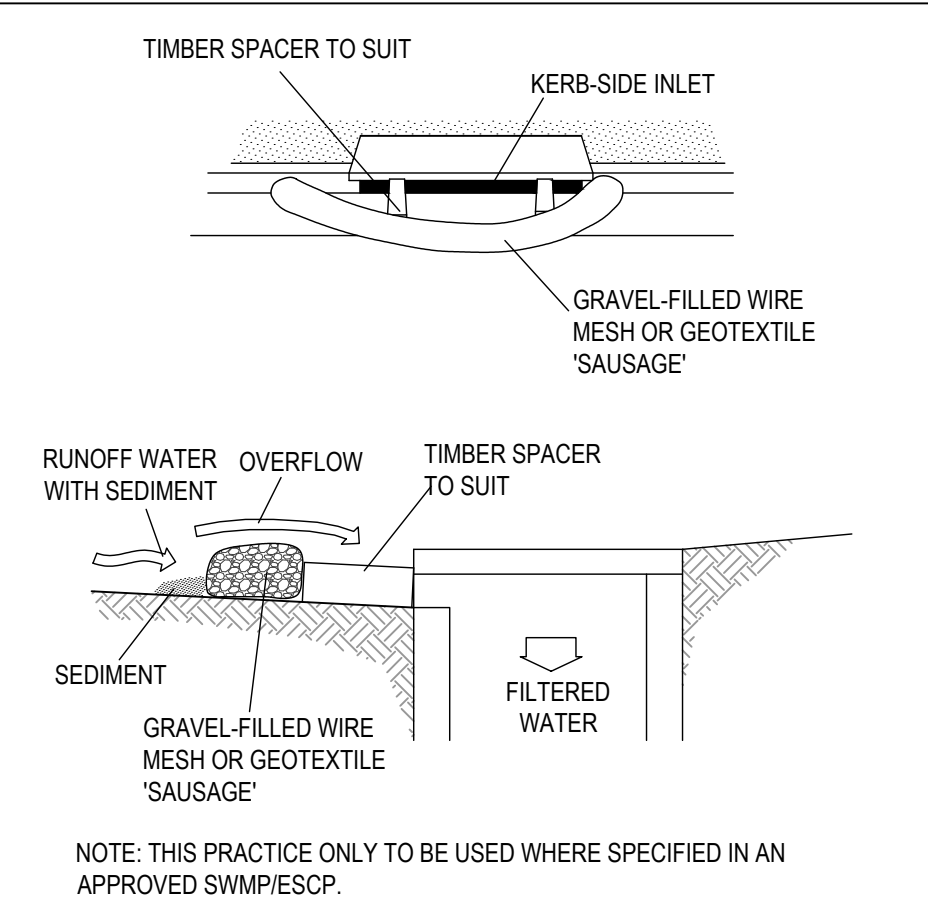


CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150-MM DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150-MM OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

SEDIMENT FENCE

SD 6-8

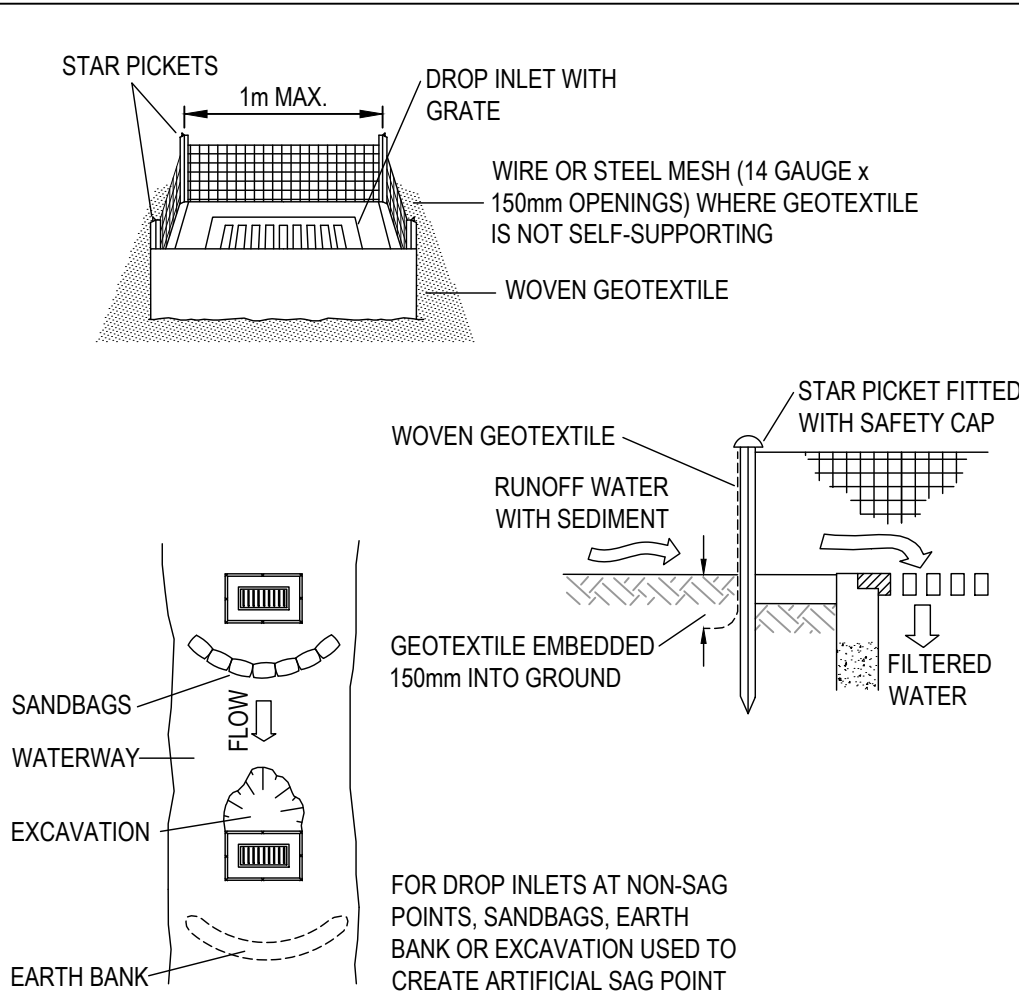


CONSTRUCTION NOTES

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 5mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

MESH AND GRAVEL INLET FILTER

SD 6-11

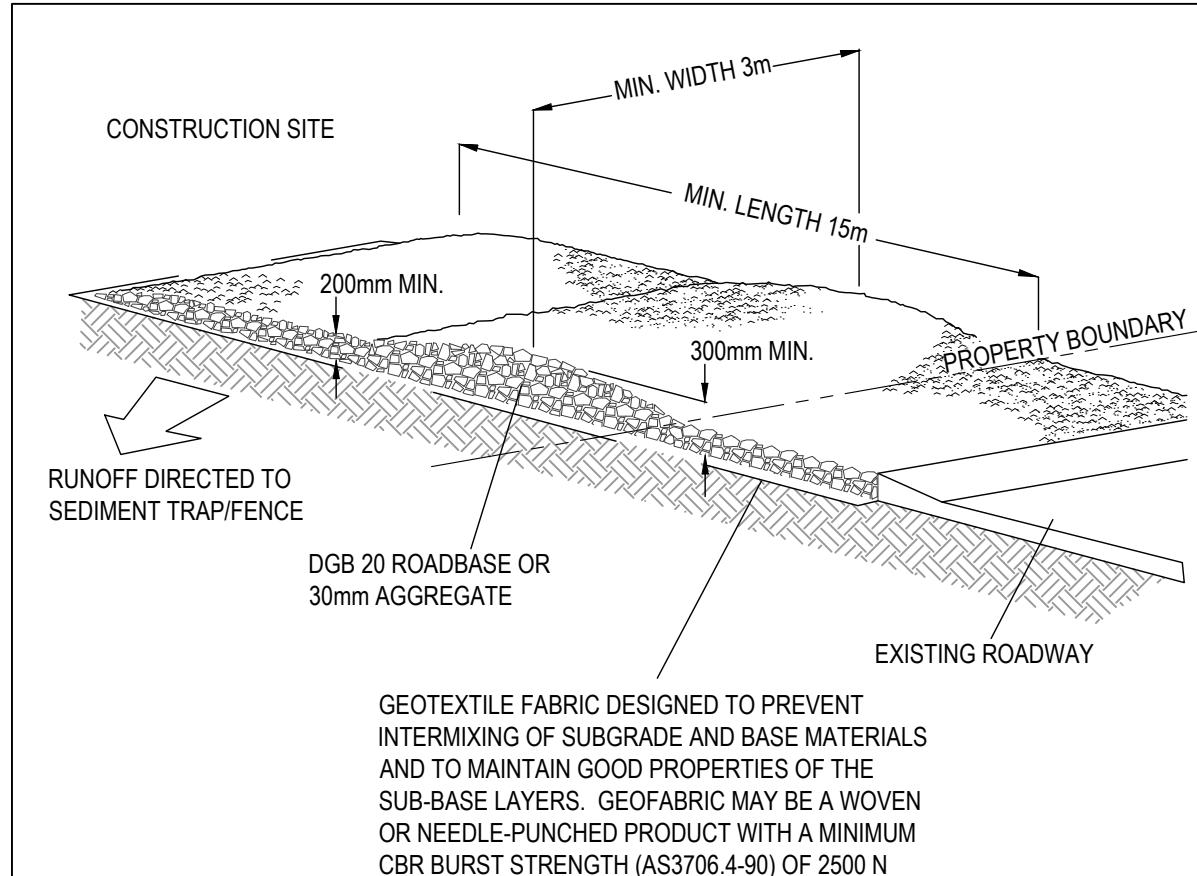


CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

GEOTEXTILE INLET FILTER

SD 6-12



CONSTRUCTION NOTES

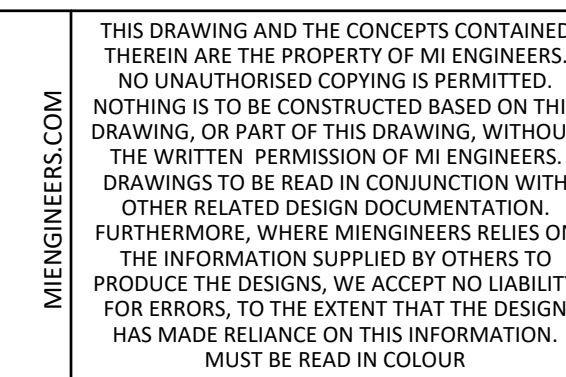
1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE

STABILISED SITE ACCESS

SD 6-14



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A	ISSUED FOR REVIEW	26.05.22	RM	AS	HORIZONTAL DATUM:
					-



PROJECT :	BENDALONG BOAT HARBOUR STORMWATER UPGRADE MANTA RAY ROAD, BENDALONG NSW 2539
DRAWING NAME:	EROSION & SEDIMENT DETAILS

DESIGNED:	DRAWN:	SCALE:	SHEET SIZE:
RM	JH	-	A1
DRAWING STATUS	DRAWING No.		
CONSTRUCTION	CE02		
PROJECT No.	REVISION:		
DN220019	3		