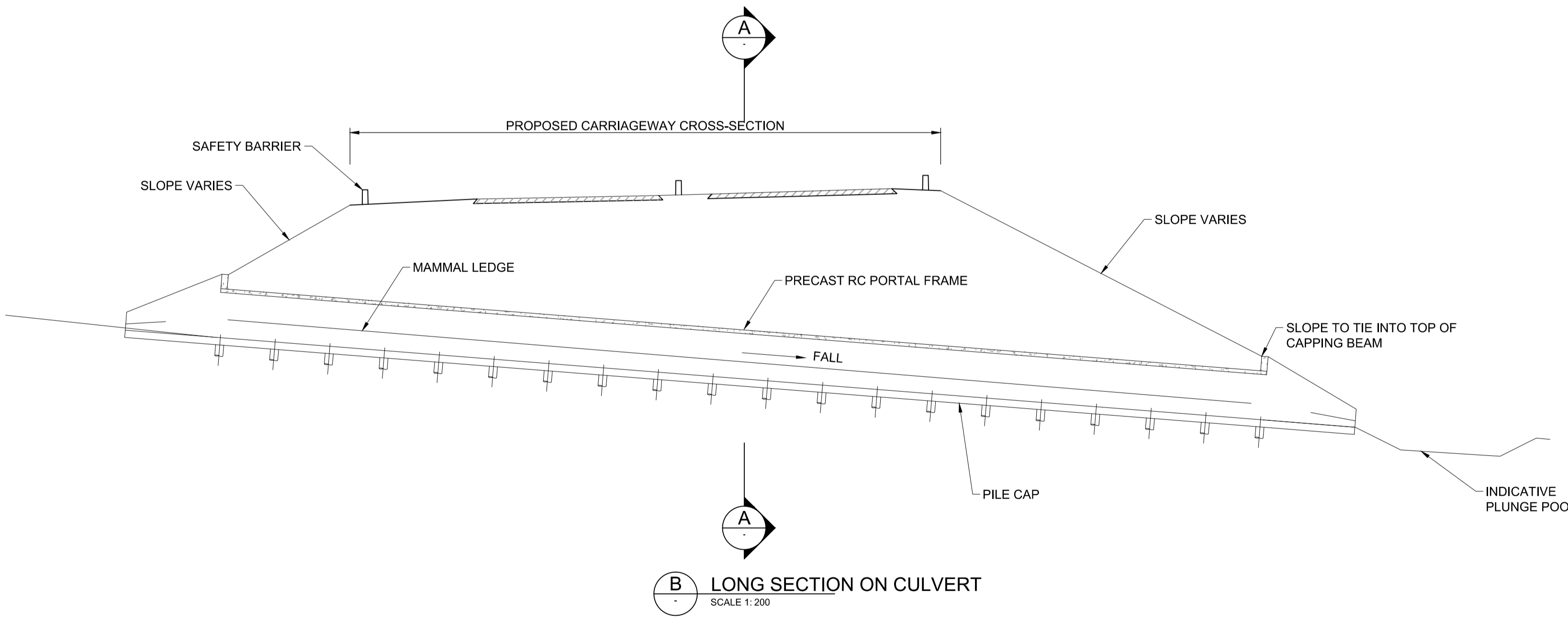
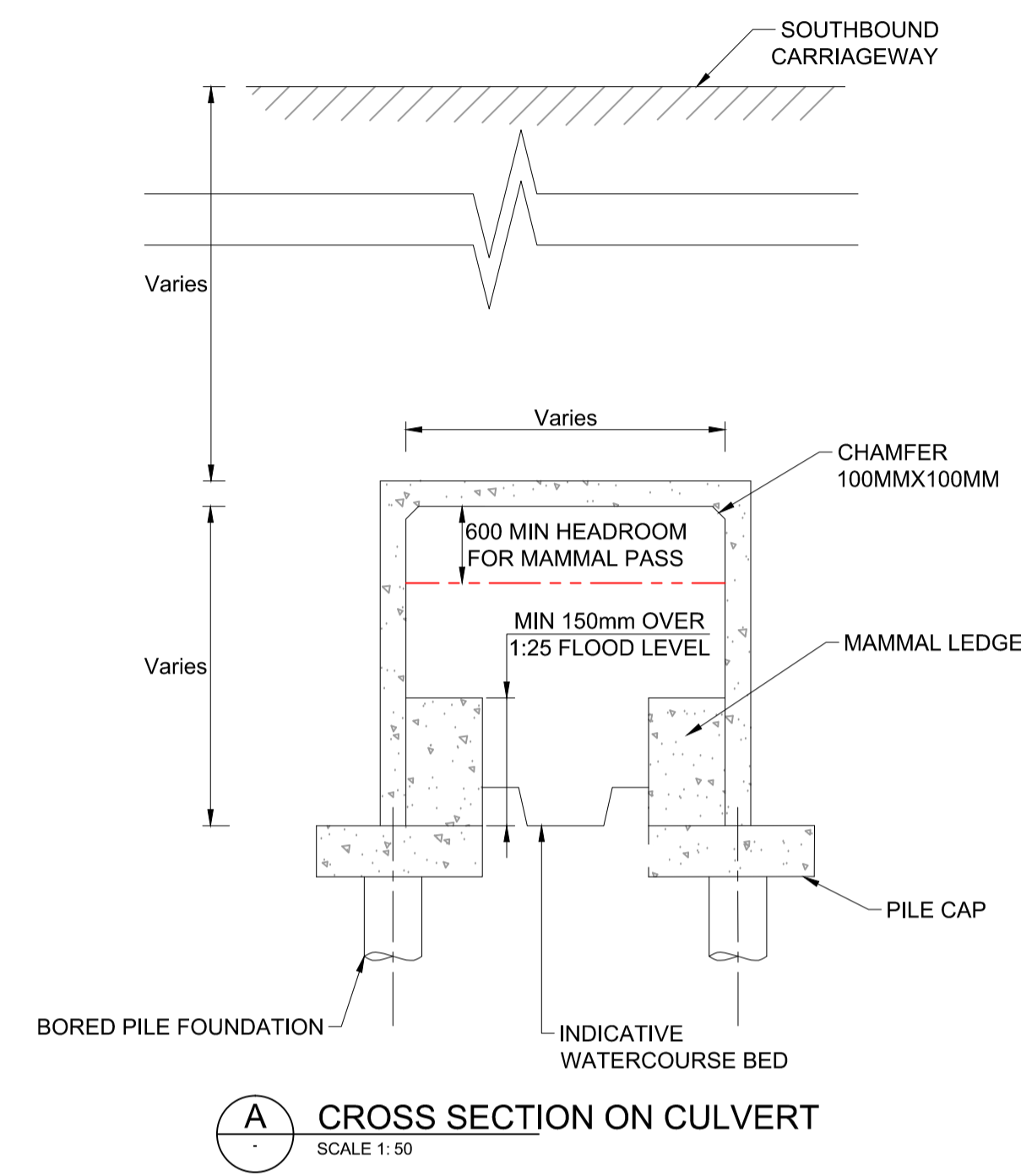
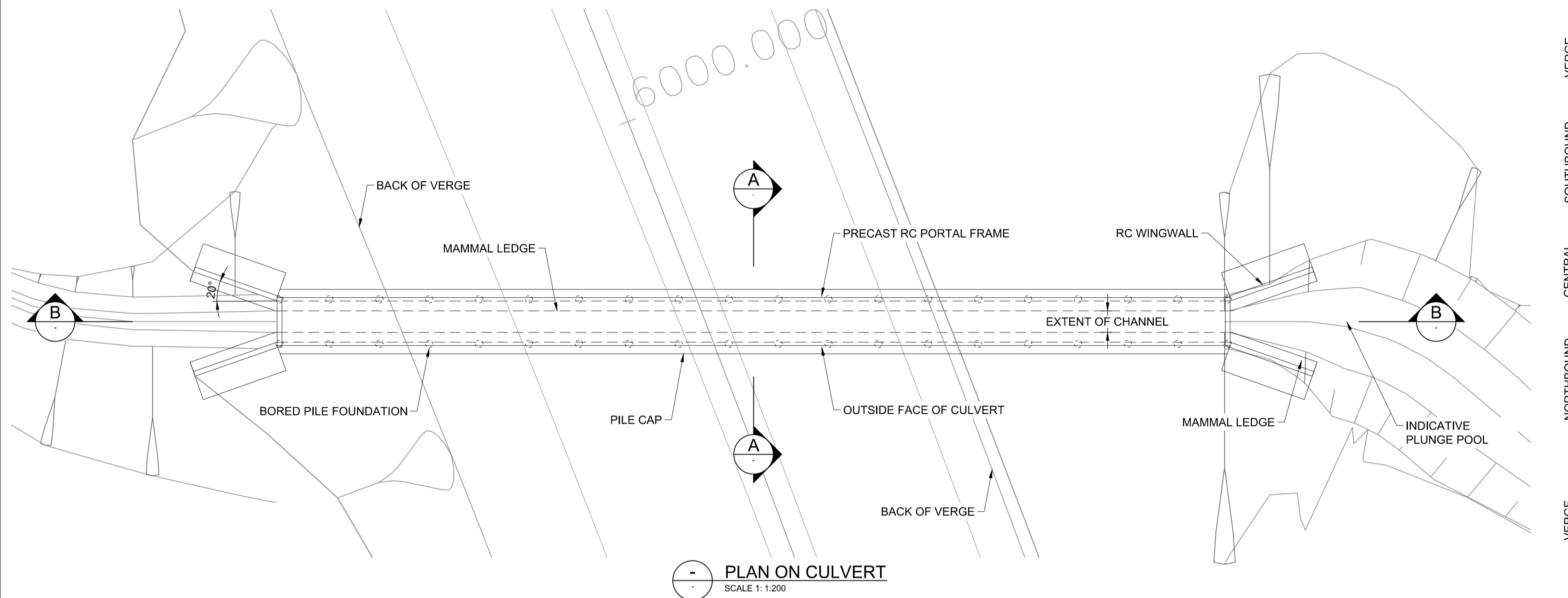


100
Millimetres
10
0
DO NOT SCALE



- NOTES:
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ENVIRONMENTAL STATEMENT.
 2. THE DRAWING IS A STAGE 3 GENERAL ARRANGEMENT DRAWING AND MAY BE SUBJECT TO CHANGE.
 3. THE DRAWING SHOWS AN EXAMPLE OF A PORTAL FRAME STRUCTURE WHICH MAINTAINS A NATURAL WATERBED. OTHER CULVERTS MIGHT BE CONSTRUCTED AS BOX CULVERTS WITH NATURAL BED MATERIAL INFILL.

P01	RC	GA	RB	30/03/18
FIRST ISSUE				
Rev	Drawn / Des	Checked	Approved	Date
Description				
Drawing Status				Suitability
FINAL				B

Client

TRANSPORT SCOTLAND
 CÒMHDAIL ALBA


A9 DUALLING
 PERTH TO INVERNESS
 Tomatin to Moy

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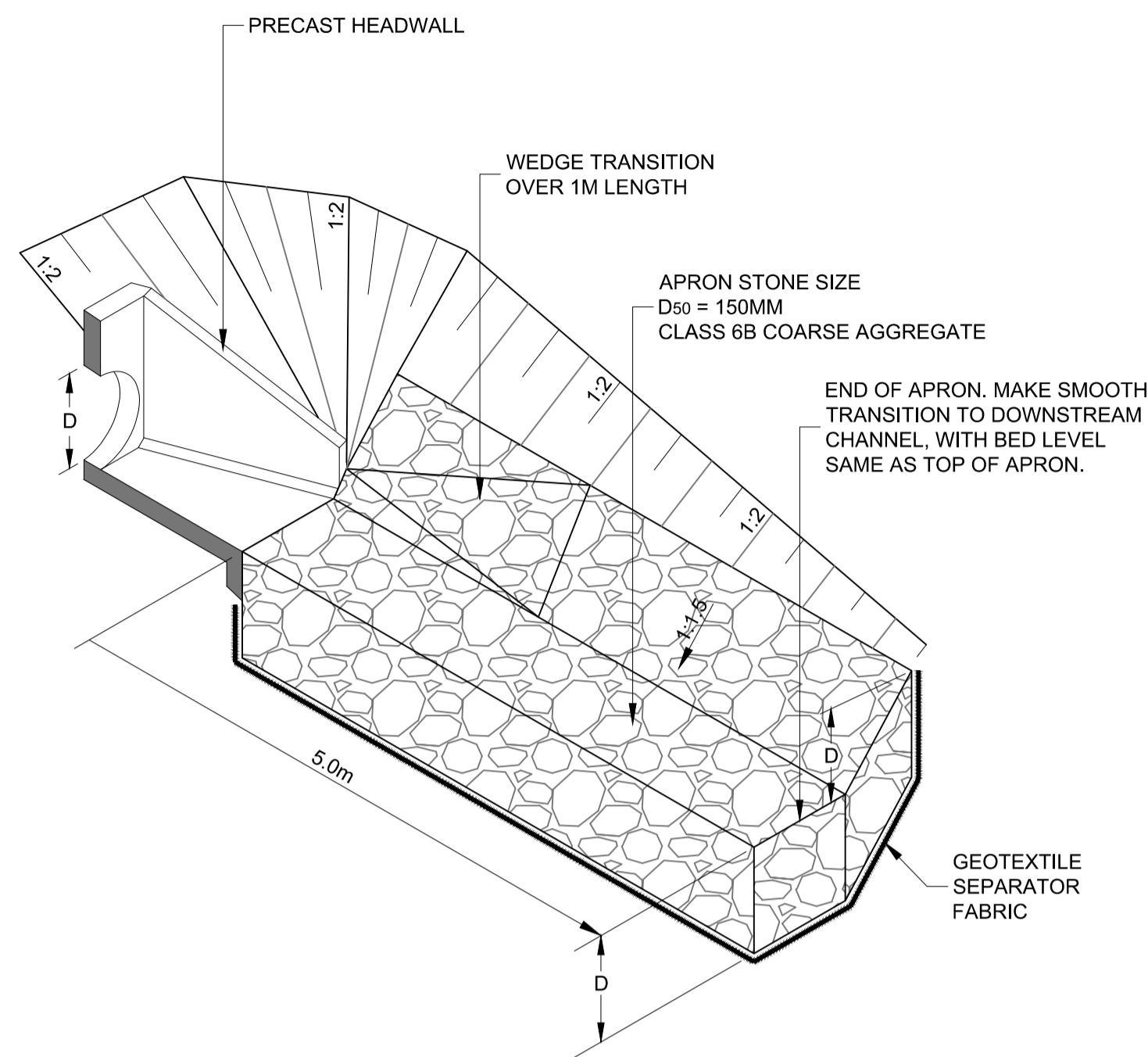
Drawing Title
FIGURE 5.15A
TYPICAL CULVERT DETAIL

Scale	Designed / Drawn	Checked	Approved	Authorised
AS SHOWN	RC	GA	RB	SB
Original Size	Date	Date	Date	Date
A1	30/03/18	30/03/18	30/03/18	30/03/18
Drawing Number	Project	Originator	Volume	Revision
	A9P12 - AMJ - HGN -			P01
	A_MLCO6_CV - DR - ST - 0001			
Location	Type	Role	Number	

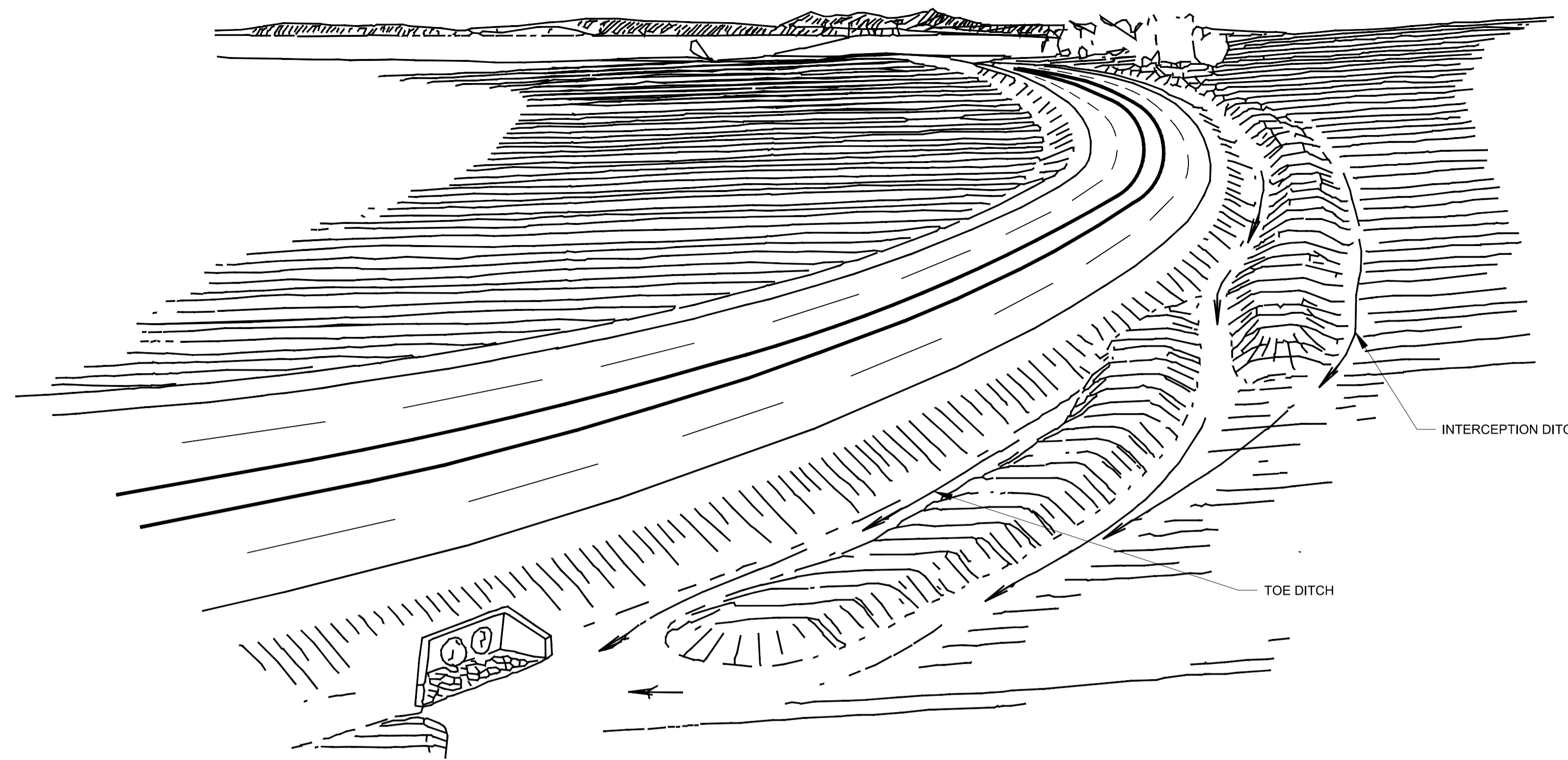
Plotfile: Mar 30, 2018 - 4:03pm by: UKMW/001

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100
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DO NOT SCALE



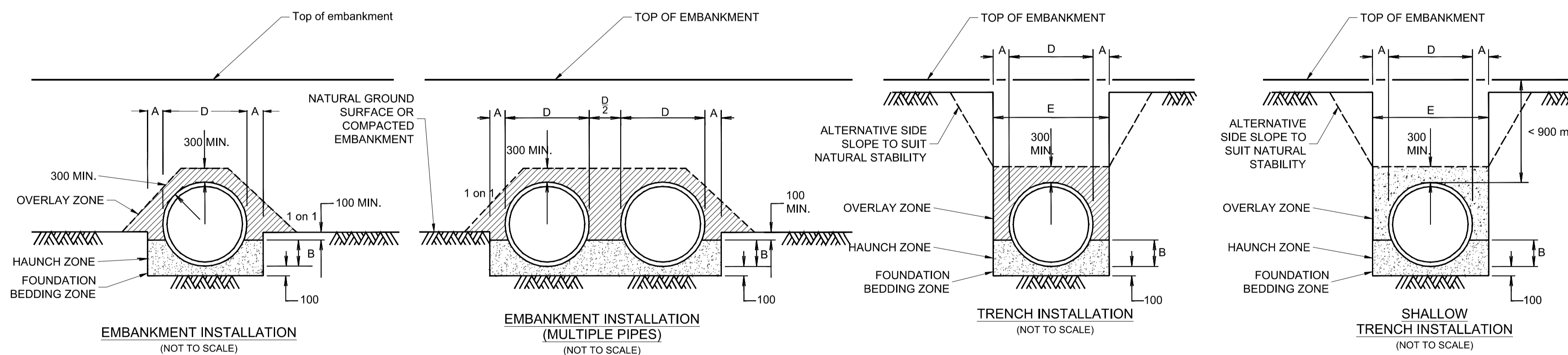
PIPE CULVERT OUTLET
TYPICAL SCOUR PROTECTION ARRANGEMENT
(NOT TO SCALE)



SIMPLE PERSPECTIVE
PIPE CULVERT IN EMBANKMENT
(NOT TO SCALE)

NOTES

1. DESIGN SUBJECT TO CHANGE.
2. ALL WORKS TO BE IN ACCORDANCE WITH THE SPECIFICATIONS OF HIGHWAYS WORKS (SHW).
3. "D" DENOTES EXTERNAL DIAMETER OF CULVERT.



TYPICAL TRENCH & BEDDING DETAILS

NOMINAL INTERNAL DIAMETER, ID(mm)	MINIMUM WIDTH, A (mm)	HAUNCH DEPTH, B (mm)	MAXIMUM ALLOWABLE WIDTH, E(m) TRENCH INSTALLATION
300	300	110	1.1
375	300	135	1.2
450	300	160	1.3
525	300	180	1.5
600	300	205	1.6
750	450	255	1.8
900	450	310	1.9

KEY

- CONCRETE TO S.H.W. CLAUSE 503.3(III)
- CLASS 8 MATERIAL TO S.H.W. CLAUSE 503.3(IV)

P01	RC	GA	RB	30/03/18
FIRST ISSUE				
Rev	Drawn / Des	Checked	Approved	Date
Description				Suitability
FINAL				B



Drawing Title				
FIGURE 5.15B TYPICAL PIPE CULVERT				
Scale	Designed / Drawn	Checked	Approved	Authorised
AS SHOWN	RC	GA	RB	SB
Original Size	Date	Date	Date	Date
A1	30/03/18	30/03/18	30/03/18	30/03/18
Drawing Number	Project	Originator	Volume	Revision
	A9P12 - AMJ - HGN -			
	X_ZZZZ_ZZ - DR - DE - 0517			
Location	Type	Role	Number	
				P01

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