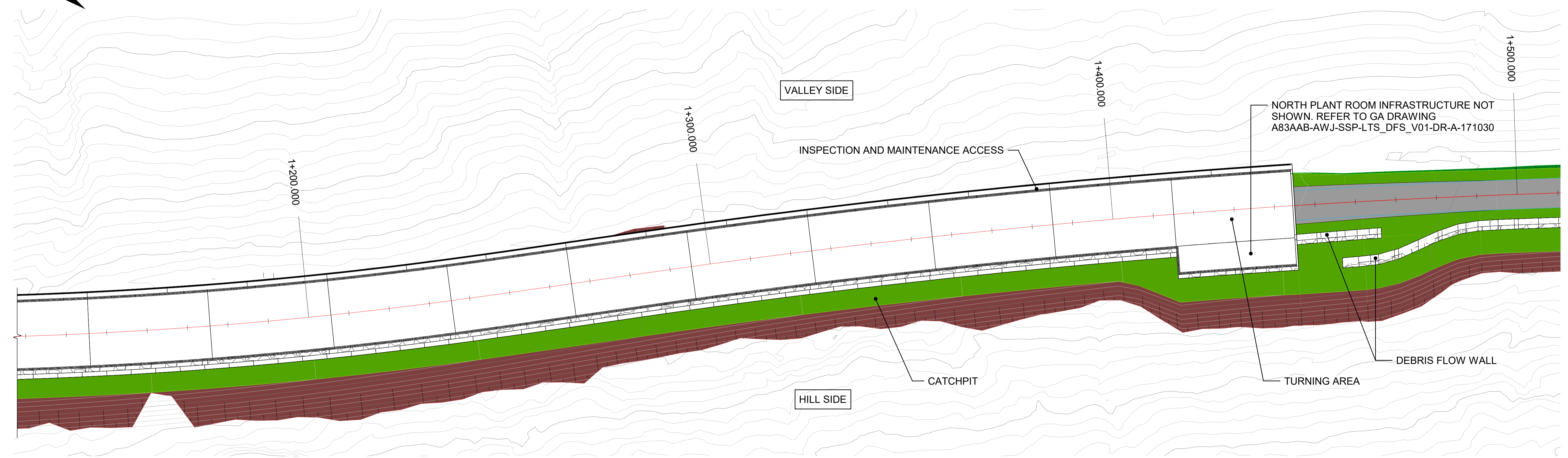
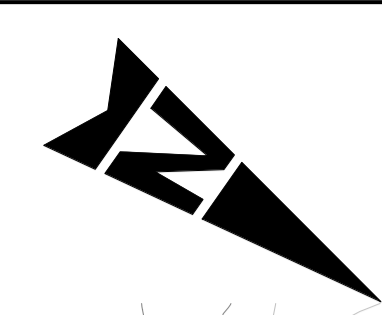
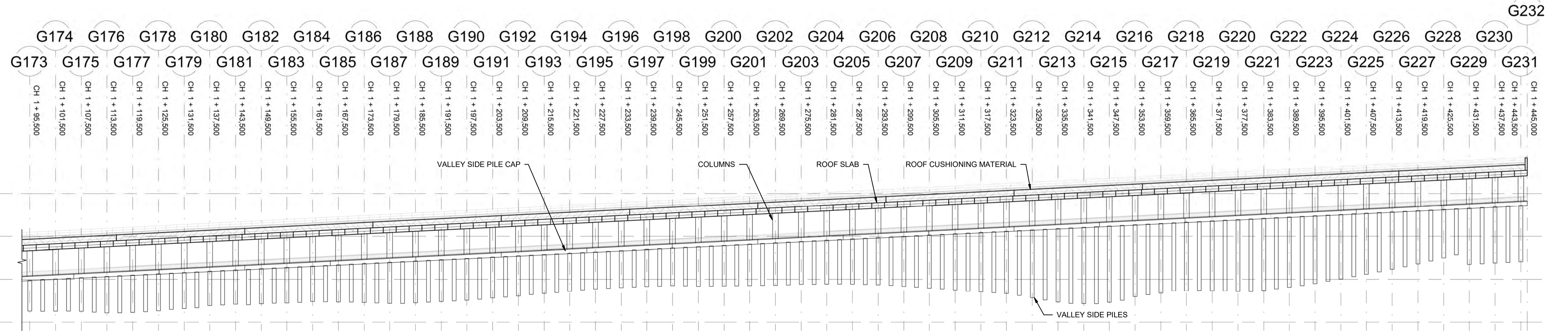


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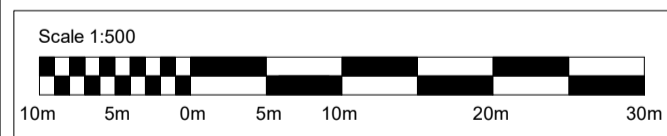
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PLAN LAYOUT
SCALE 1 : 500



SECTION ON CONTROL LINE LOOKING TO VALLEY SIDE
SCALE 1 : 500



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NOTES:
 1. PILE LENGTH, DIAMETER AND SPACING ARE INDICATIVE UNTIL GI IS AVAILABLE.
 2. A83 CULVERTS EXCLUDED FOR CLARITY.
 3. THE VERTICAL COLUMNS ARE SHOWN INDICATIVELY AT THIS STAGE.
 4. PLEASE REFER TO THE GEOTECHNICAL SECTION OF THE STAGE 3 REPORT FOR INFORMATION RELATED TO THE CATCH PIT AND DEBRIS FLOW AND ROCKFALL PROTECTION MEASURES.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION						
Description:						
Description:						
Description:						
Construction						
Description:						
Description:						
Maintenance / Cleaning						
Description:						
Description:						
Use						
Description:						
Description:						
Decommissioning / Demolition						
Description:						
FOR STAGE 3 REPORT						
A3	C01	JH	DG	CG	CM	06/12/2024
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Status: **A3** Drawing Suitability: **AUTHORISED & ACCEPTED - STAGE 3**

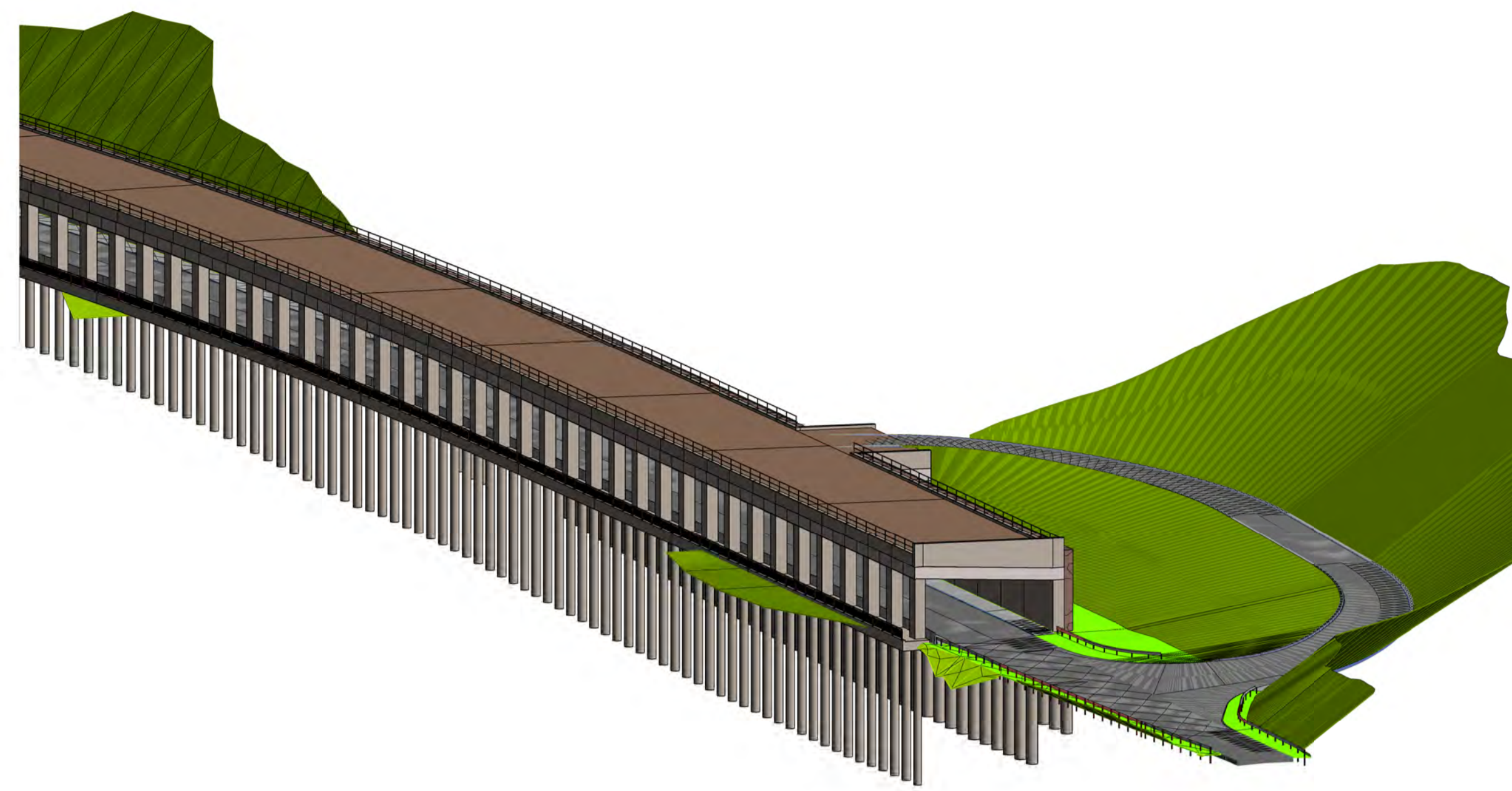
AtkinsRéalis **wsp**

Client: **TRANSPORT SCOTLAND**
CÒMHDHAIL ALBA

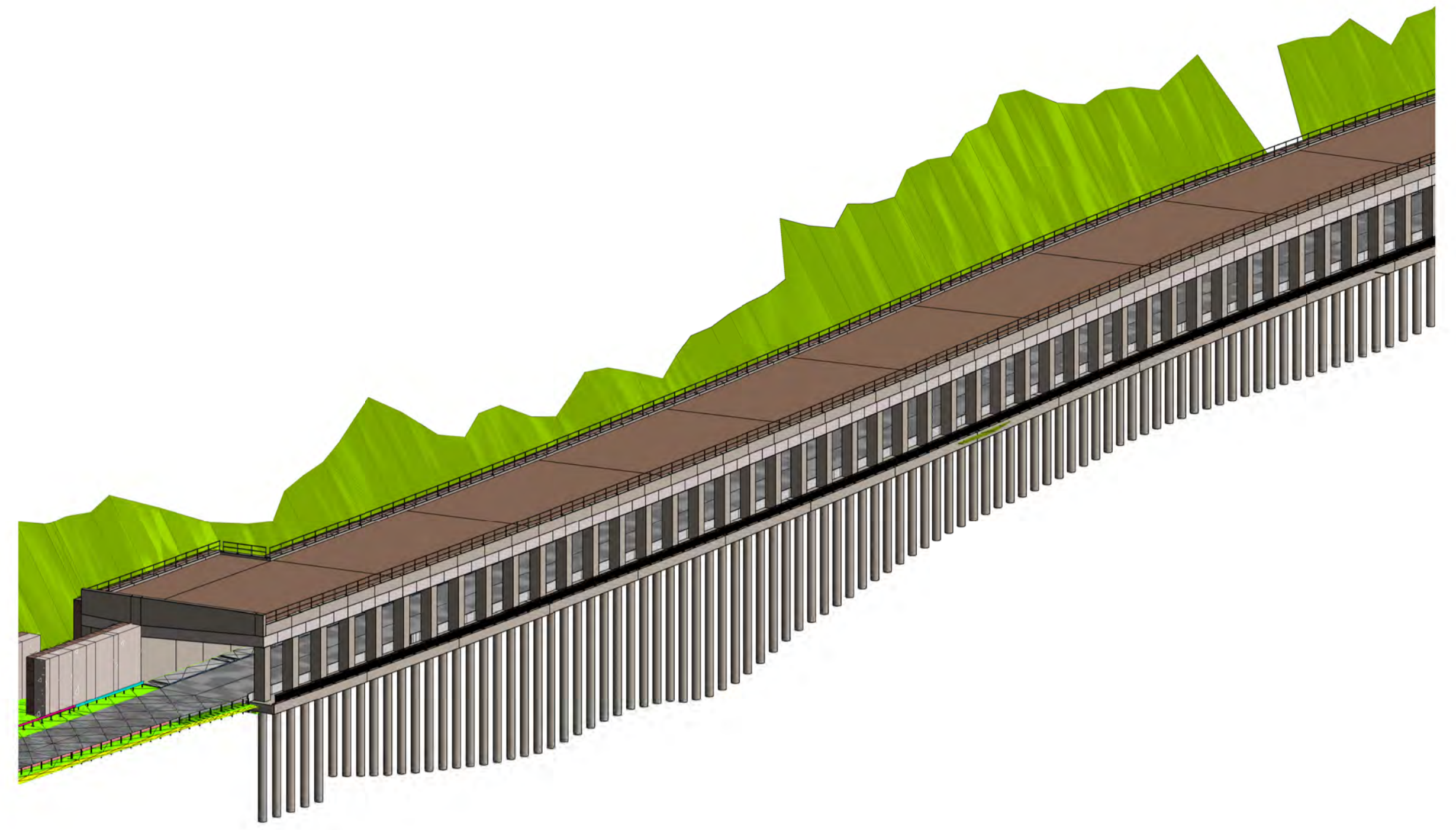
Project Stage / Design Fix: DMRB Stage 3	Status: Preliminary
Project Title: A83 Rest and Be Thankful	
Drawing Title: DEBRIS FLOW SHELTER GENERAL ARRANGEMENT PLAN AND ELEVATION SHEET 4	
Drawing Number:	Originator: A83AAB - AWJ - SSP - LTS_DFS_V01 - DR - CB - 001005
Project: A83AAB - AWJ - SSP - LTS_DFS_V01 - DR - CB - 001005	Volume: -
Location:	Type: 1 Role: 1 Number: 1
Original Size: A1	Scale: As Shown Project Ref. No: 5204594 Sheet: 1 of 1 Rev: C01

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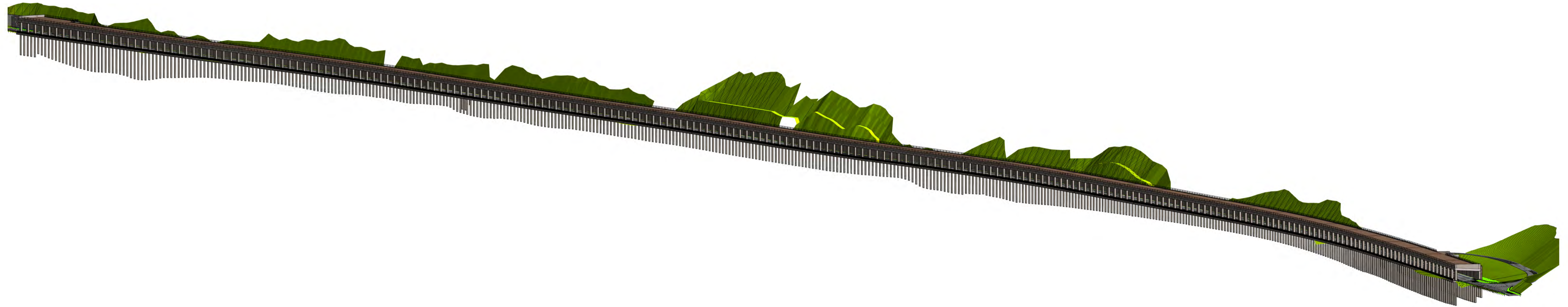
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3D VIEW OF SOUTH ENTRANCE OF THE DEBRIS FLOW SHELTER
SCALE



3D VIEW OF NORTH ENTRANCE OF THE DEBRIS FLOW SHELTER
SCALE



OVERALL 3D VIEW
SCALE

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NOTES:

1. PILE LENGTH, DIAMETER AND SPACING ARE INDICATIVE UNTIL GI IS AVAILABLE.
2. A83 CULVERTS EXCLUDED FOR CLARITY.
3. THE VERTICAL COLUMNS ARE SHOWN INDICATIVELY AT THIS STAGE.
4. PLEASE REFER TO THE GEOTECHNICAL SECTION OF THE STAGE 3 REPORT FOR INFORMATION RELATED TO THE CATCH PIT AND DEBRIS FLOW AND ROCKFALL PROTECTION MEASURES.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction

Maintenance / Cleaning

Use

Decommissioning / Demolition

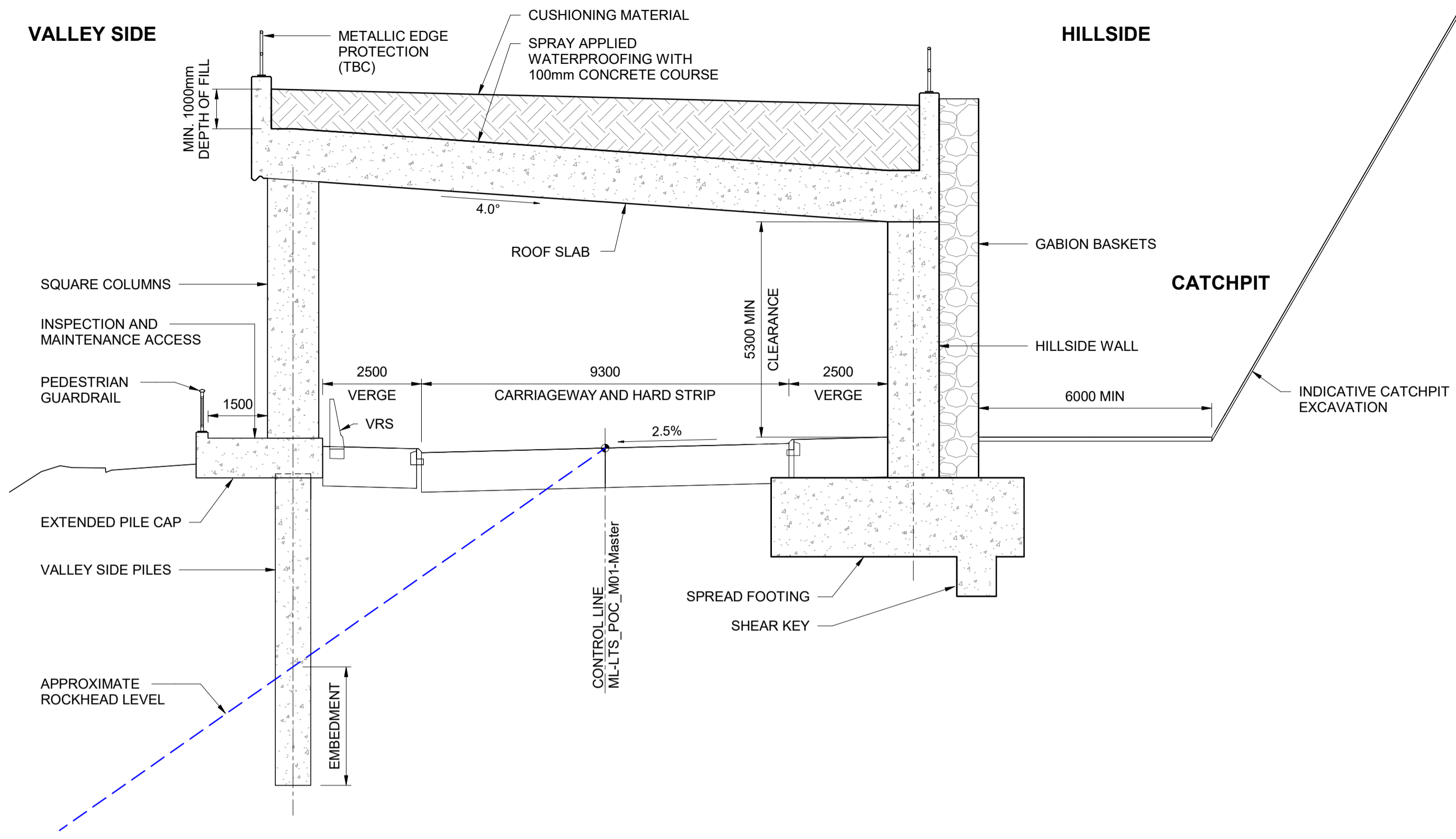
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Description: FOR STAGE 3 REPORT							
A3	C01	JH	DG	CG	CM	06/12/2024	
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	

Status	A3	Drawing Suitability	AUTHORISED & ACCEPTED - STAGE 3
Client			

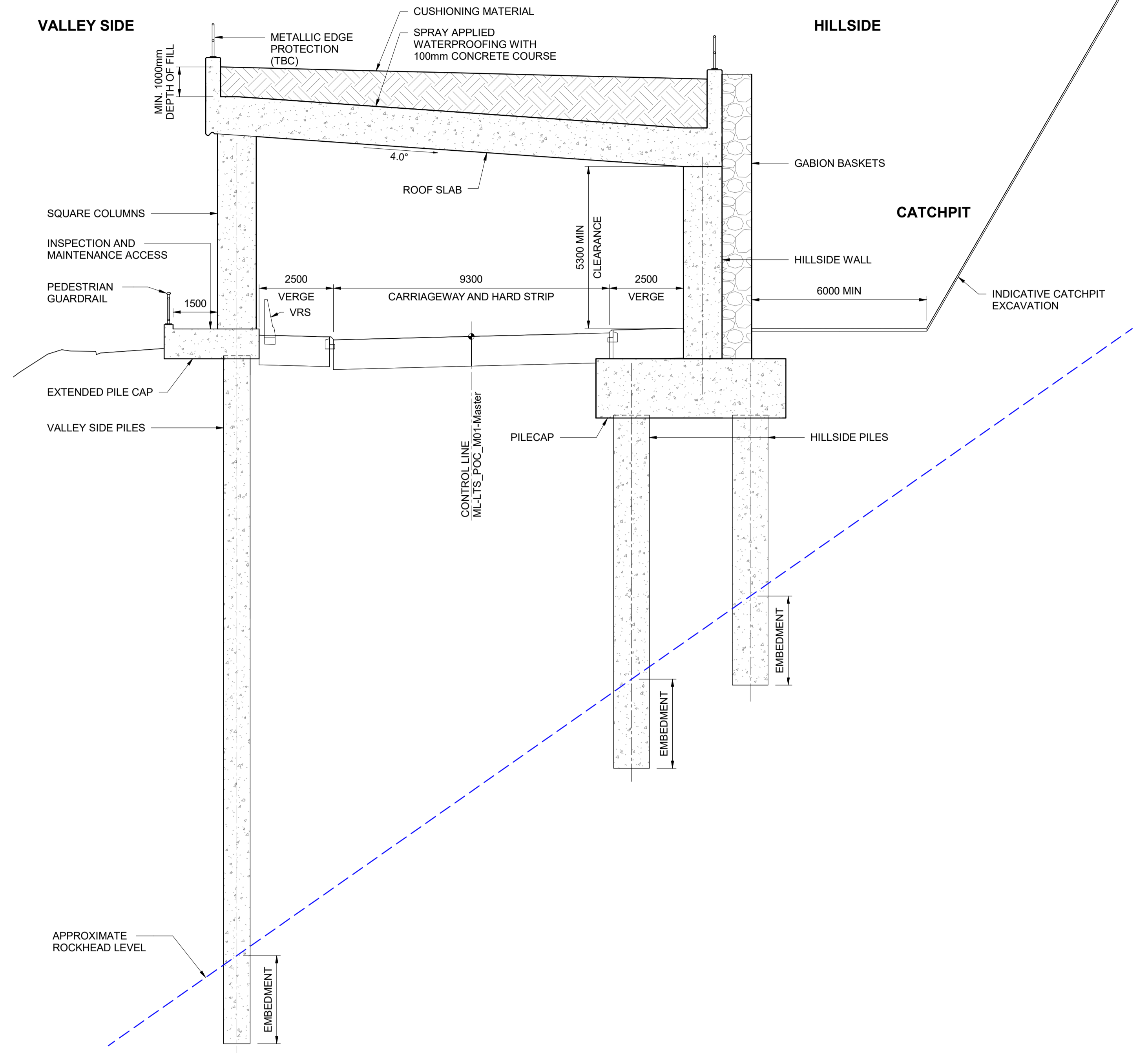
Project Stage / Design Fix	DMRB Stage 3	State	Preliminary
Project Title	A83 Rest and Be Thankful		
Drawing Title	DEBRIS FLOW SHELTER GENERAL ARRANGEMENT 3D VIEWS		
Drawing Number	A83AAB - AWJ - SSP - LTS_DFS_V01 - DR - CB - 001008		
Original Size	A1	Scale	As Shown
Project Ref. No.	5204594	Sheet	1 of 1
Rev.	C01		

DO NOT SCALE

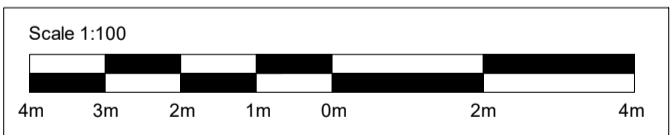
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Millimetres



ROCK HEAD = 3m OR LESS FROM FINISHED GROUND AT HILLSIDE
OPTION 1 : TYPICAL SPREAD FOOTING
 SCALE 1 : 100
 5.3m INTERNAL HEADROOM, 4.0 DEGREE SLOPE



ROCK HEAD = 3m+ FROM FINISHED GROUND AT HILLSIDE
OPTION 2 : TYPICAL TWIN PILE
 SCALE 1 : 100
 5.3m INTERNAL HEADROOM, 4.0 DEGREE SLOPE



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NOTES:

1. PILE LENGTH, DIAMETER AND SPACING ARE INDICATIVE UNTIL GI IS AVAILABLE.
2. A83 CULVERTS EXCLUDED FOR CLARITY.
3. THE VERTICAL COLUMNS ARE SHOWN INDICATIVELY AT THIS STAGE.
4. PLEASE REFER TO THE GEOTECHNICAL SECTION OF THE STAGE 3 REPORT FOR INFORMATION RELATED TO THE CATCH PIT AND DEBRIS FLOW AND ROCKFALL PROTECTION MEASURES.
5. SPREAD FOOTING GEOMETRY MAY BE OPTIMISED THROUGH PROVISION OF LATERAL AND VERTICAL RESTRAINT SUCH AS SHEAR KEY, GROUND ANCHORS OR ROCK DOWELS.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION						
Description:						
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).						
Construction						
Description:						
Maintenance / Cleaning						
Description:						
Use						
Description:						
Decommissioning / Demolition						
Description: FOR STAGE 3 REPORT						
A3	C01	JH	DG	CG	CM	06/12/2024
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Status: **A3** Drawing Suitability: **AUTHORISED & ACCEPTED - STAGE 3**

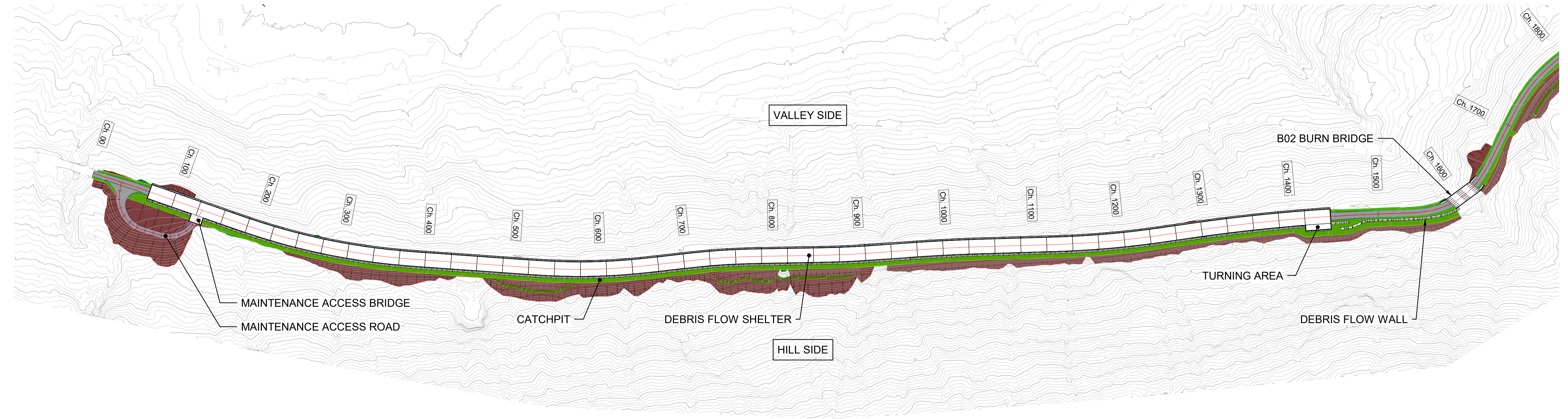
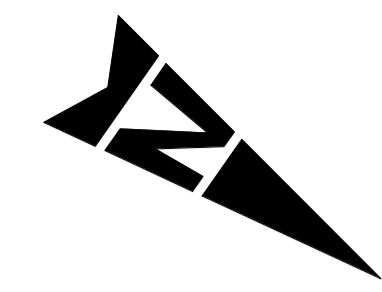
AtkinsRéalis *wsp*

Client: **TRANSPORT SCOTLAND**
CÒMHDHAIL ALBA

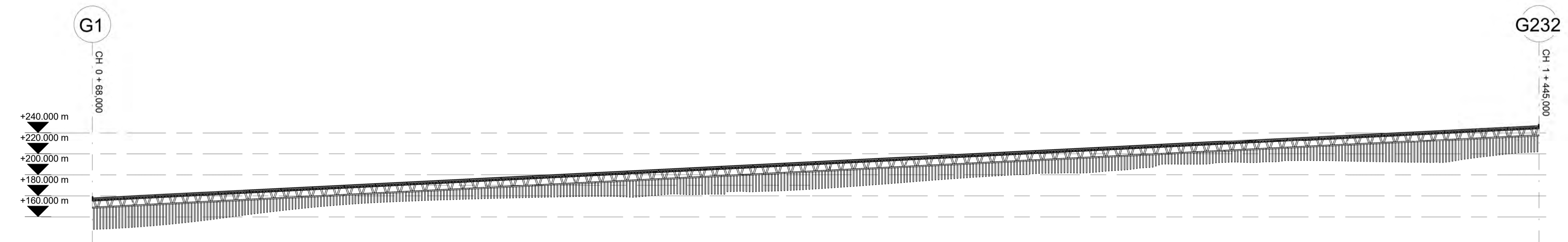
Project Stage / Design Fix	DMRB Stage 3	State	Preliminary
Project Title	A83 Rest and Be Thankful		
Drawing Title	DEBRIS FLOW SHELTER GENERAL ARRANGEMENT TYPICAL SECTIONS SHEET 1		
Drawing Number	Project: A83AAB - AWJ - SSP - LTS_DFS_V01 - DR - CB - 001011		
Original Size: A1	Scale: As Shown	Project Ref. No: 5204594	Sheet: 1 of 1 Rev: C01

DO NOT SCALE

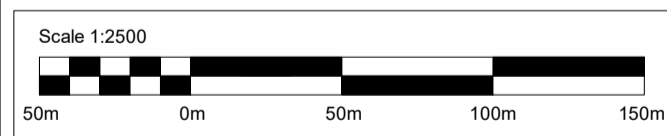
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Millimetres



GENERAL ARRANGEMENT
SCALE 1 : 2500



ELEVATION ON CONTROL LINE LOOKING TO VALLEY SIDE
SCALE 1 : 2500



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NOTES:
 1. PILE LENGTH, DIAMETER AND SPACING ARE INDICATIVE UNTIL G1 IS AVAILABLE.
 2. A83 CULVERTS EXCLUDED FOR CLARITY.
 3. THE INCLINED V SHAPED COLUMNS ARE SHOWN INDICATIVELY AT THIS STAGE, ALTERNATIVELY VERTICAL COLUMNS ARE ALSO VIABLE.
 4. PLEASE REFER TO THE GEOTECHNICAL SECTION OF THE STAGE 3 REPORT FOR INFORMATION RELATED TO THE CATCH PIT AND DEBRIS FLOW AND ROCKFALL PROTECTION MEASURES.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION						
Description:						
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).						
Construction						
Description:						
Maintenance / Cleaning						
Description:						
Use						
Description:						
Decommissioning / Demolition						
Description: FOR STAGE 3 REPORT						
A3	C01	JH	DG	CG	CM	06/12/2024
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Status: **A3** Drawing Suitability: **AUTHORISED & ACCEPTED - STAGE 3**

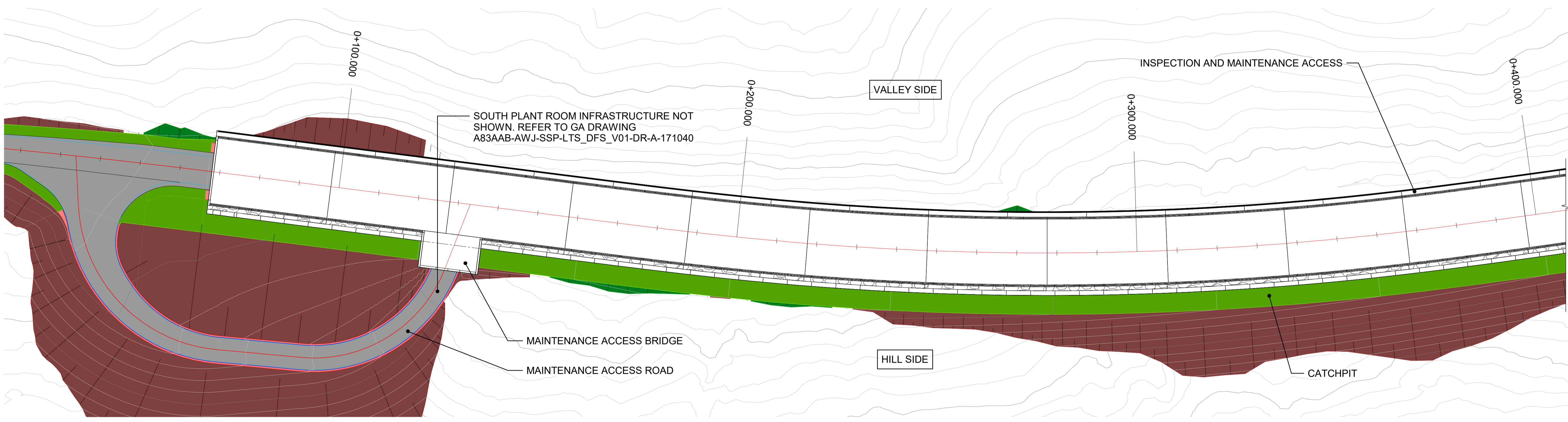
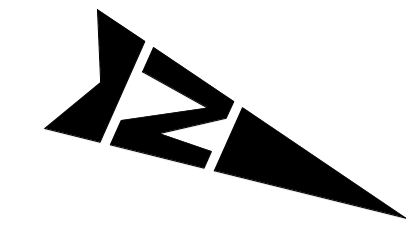
AtkinsRéalis **wsp**

Client: **TRANSPORT SCOTLAND**
CÒMHDHAIL ALBA

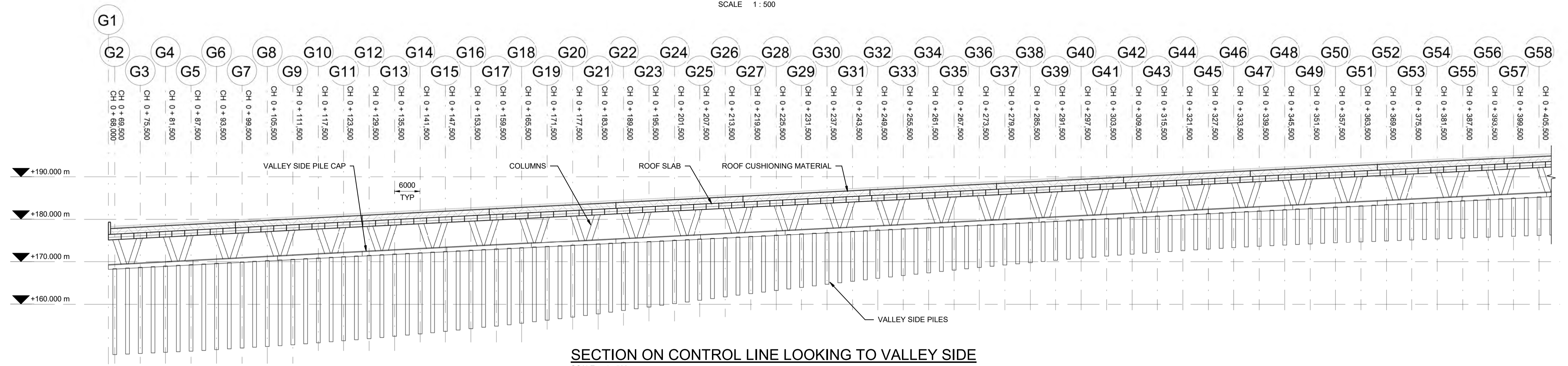
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Project Title	A83 Rest and Be Thankful		
Drawing Title	DEBRIS FLOW SHELTER GENERAL ARRANGEMENT OVERALL LAYOUT		
Drawing Number	Project: A83AAB - AWJ - SSP - LTS_DFS_V03 - DR - CB - 001001		
Original Size: A1	Scale: As Shown	Project Ref. No: 6204594	Sheet: 1 of 1 Rev: C01

DO NOT SCALE

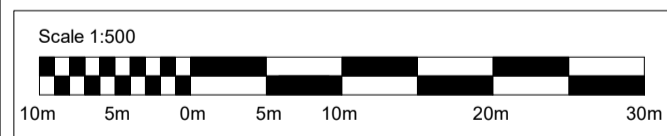
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Millimetres



PLAN LAYOUT
SCALE 1 : 500



SECTION ON CONTROL LINE LOOKING TO VALLEY SIDE
SCALE 1 : 500



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- NOTES:**
1. PILE LENGTH, DIAMETER AND SPACING ARE INDICATIVE UNTIL G1 IS AVAILABLE.
 2. A83 CULVERTS EXCLUDED FOR CLARITY.
 3. THE INCLINED V SHAPED COLUMNS ARE SHOWN INDICATIVELY AT THIS STAGE, ALTERNATIVELY VERTICAL COLUMNS ARE ALSO VIABLE.
 4. PLEASE REFER TO THE GEOTECHNICAL SECTION OF THE STAGE 3 REPORT FOR INFORMATION RELATED TO THE CATCH PIT AND DEBRIS FLOW AND ROCKFALL PROTECTION MEASURES.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	Description:					
Maintenance / Cleaning	Description:					
Use	Description:					
Decommissioning / Demolition	Description:					

FOR STAGE 3 REPORT						
A3	C01	JH	DG	CG	CM	06/12/2024
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

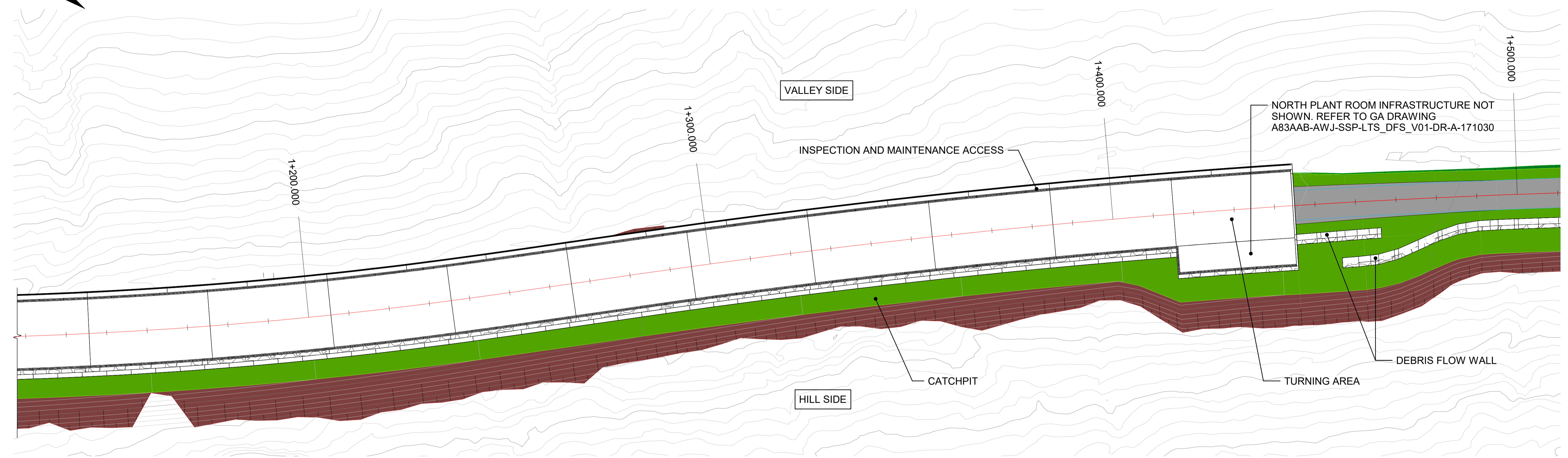
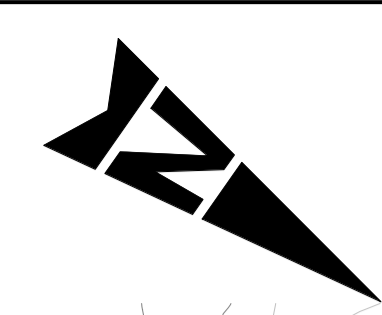
Status	A3
Drawing Suitability	AUTHORISED & ACCEPTED - STAGE 3



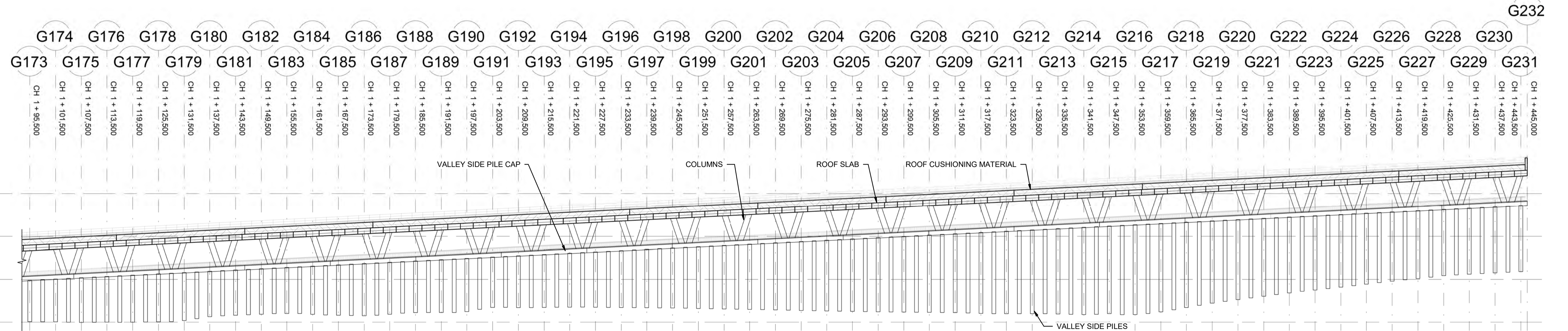
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Project Title	A83 Rest and Be Thankful		
Drawing Title	DEBRIS FLOW SHELTER GENERAL ARRANGEMENT PLAN AND ELEVATION SHEET 1		
Drawing Number	A83AAB - AWJ - SSP - LTS_DFS_V03 - DR - CB - 001002		
Location	Scale: As Shown	Project Ref. No. 5204594	Sheet: 1 of 1 Rev: C01

DO NOT SCALE

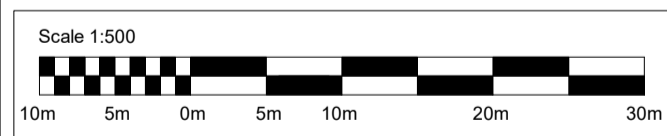
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Millimetres



PLAN LAYOUT
SCALE 1 : 500



SECTION ON CONTROL LINE LOOKING TO VALLEY SIDE
SCALE 1 : 500



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- NOTES:**
- PILE LENGTH, DIAMETER AND SPACING ARE INDICATIVE UNTIL GI IS AVAILABLE.
 - A83 CULVERTS EXCLUDED FOR CLARITY.
 - THE INCLINED V SHAPED COLUMNS ARE SHOWN INDICATIVELY AT THIS STAGE, ALTERNATIVELY VERTICAL COLUMNS ARE ALSO VIABLE.
 - PLEASE REFER TO THE GEOTECHNICAL SECTION OF THE STAGE 3 REPORT FOR INFORMATION RELATED TO THE CATCH PIT AND DEBRIS FLOW AND ROCKFALL PROTECTION MEASURES.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

Description:	
Description:	
Description:	
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

FOR STAGE 3 REPORT					
A3	C01	JH	DG	CG	CM
Status	Revision	Drawn	Checked	Reviewed	Authorised
					06/12/2024
					Issue Date

Status: A3 Drawing Suitability: AUTHORISED & ACCEPTED - STAGE 3



Project Stage / Design Fix: DMRB Stage 3 State: Preliminary

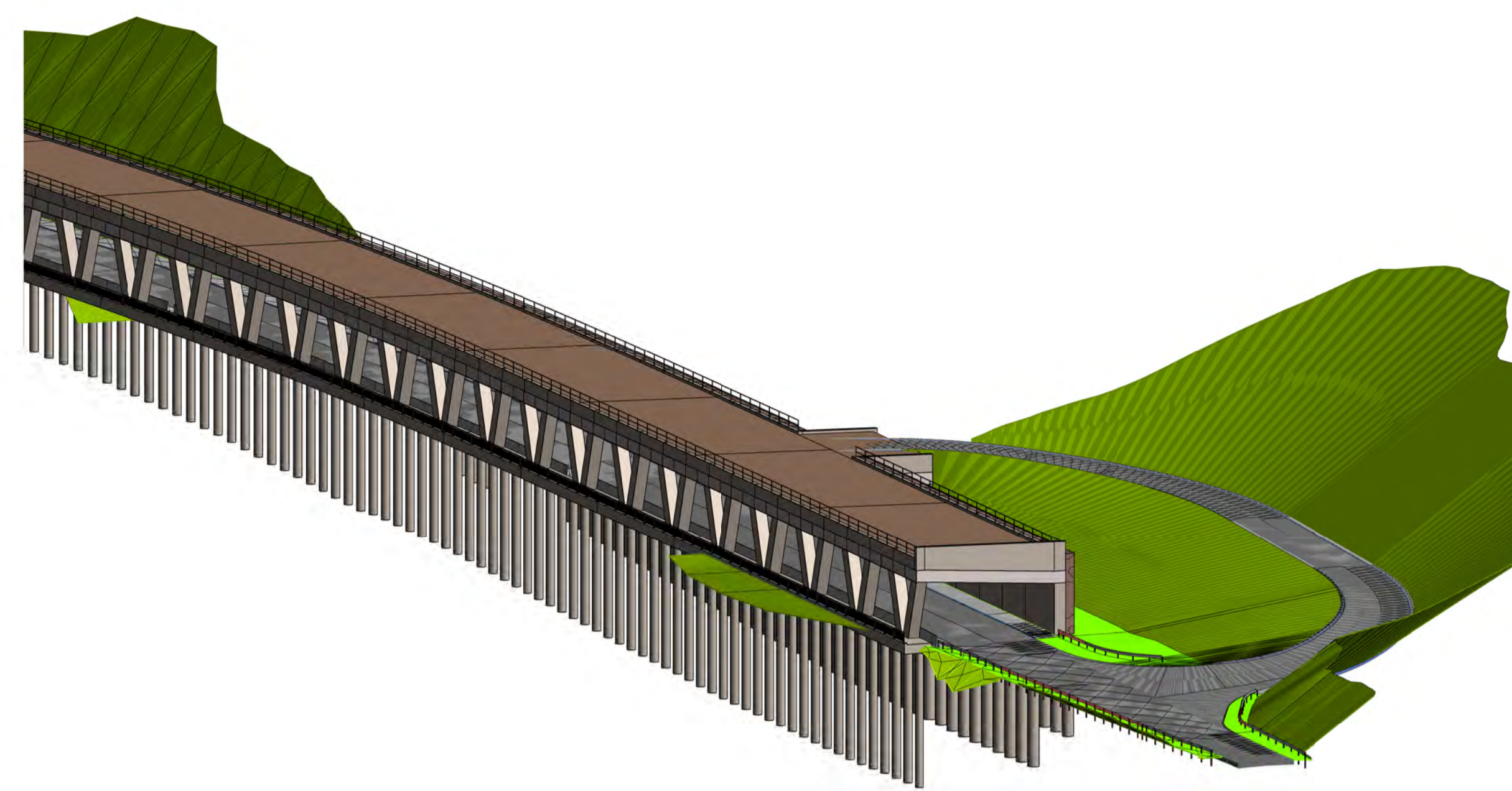
Project Title: A83 Rest and Be Thankful

Drawing Title: DEBRIS FLOW SHELTER GENERAL ARRANGEMENT PLAN AND ELEVATION SHEET 4

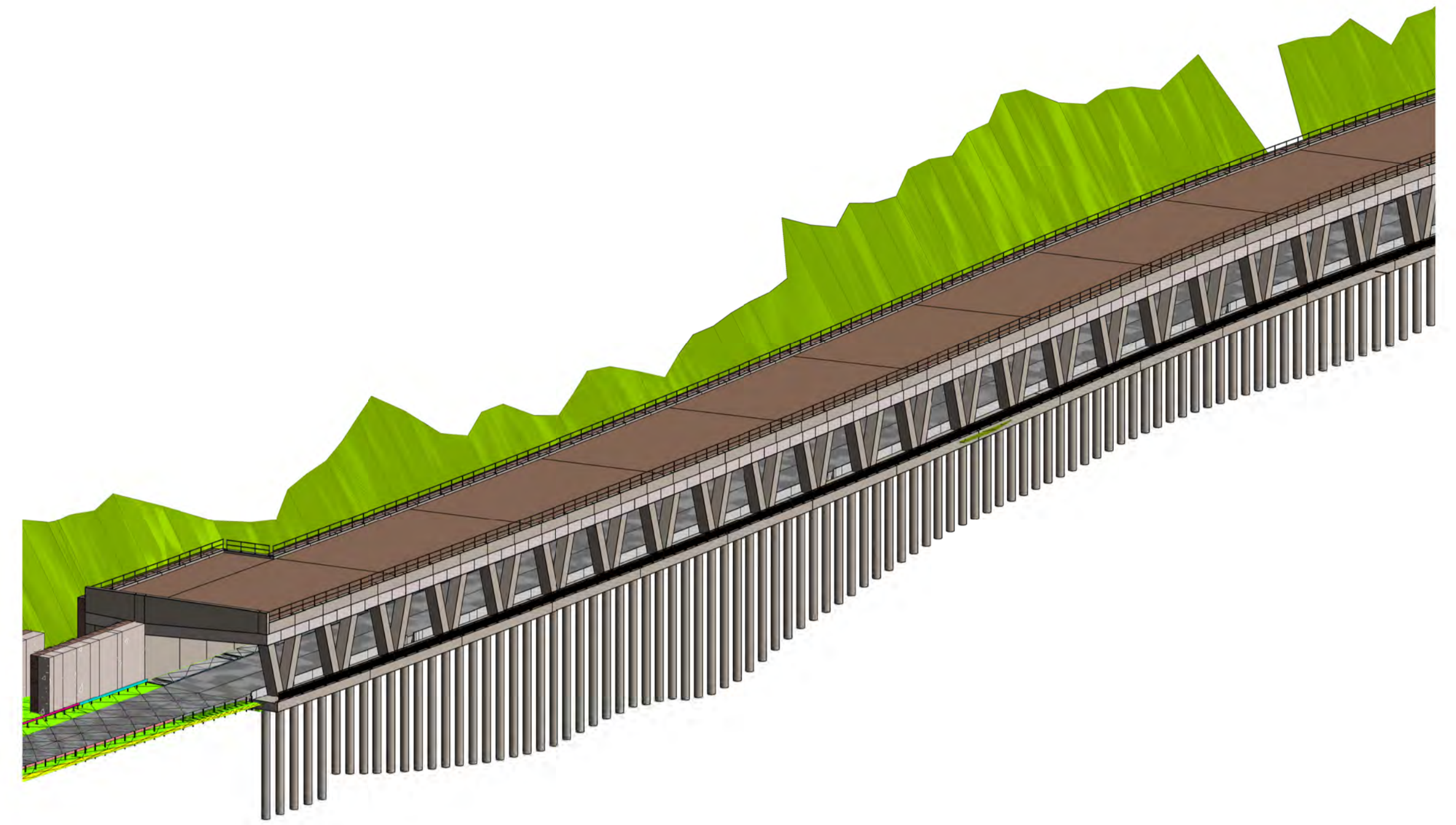
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 Originator: Volume: Type: Role: Number: Rev: C01

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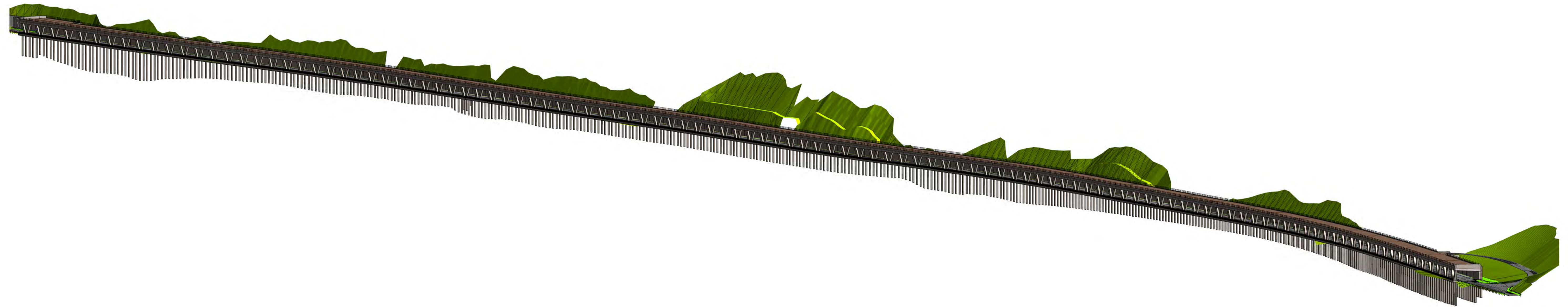
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3D VIEW OF SOUTH ENTRANCE OF THE DEBRIS FLOW SHELTER
SCALE



3D VIEW OF NORTH ENTRANCE OF THE DEBRIS FLOW SHELTER
SCALE



OVERALL 3D VIEW
SCALE

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NOTES:

1. PILE LENGTH, DIAMETER AND SPACING ARE INDICATIVE UNTIL GI IS AVAILABLE.
2. A83 CULVERTS EXCLUDED FOR CLARITY.
3. THE INCLINED V SHAPED COLUMNS ARE SHOWN INDICATIVELY AT THIS STAGE, ALTERNATIVELY VERTICAL COLUMNS ARE ALSO VIABLE.
4. PLEASE REFER TO THE GEOTECHNICAL SECTION OF THE STAGE 3 REPORT FOR INFORMATION RELATED TO THE CATCH PIT AND DEBRIS FLOW AND ROCKFALL PROTECTION MEASURES.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	Description:					
Maintenance / Cleaning	Description:					
Use	Description:					
Decommissioning / Demolition	Description:					

Description: FOR STAGE 3 REPORT						
A3	C01	JH	DG	CG	CM	06/12/2024
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Status: **A3** Drawing Suitability: **AUTHORISED & ACCEPTED - STAGE 3**

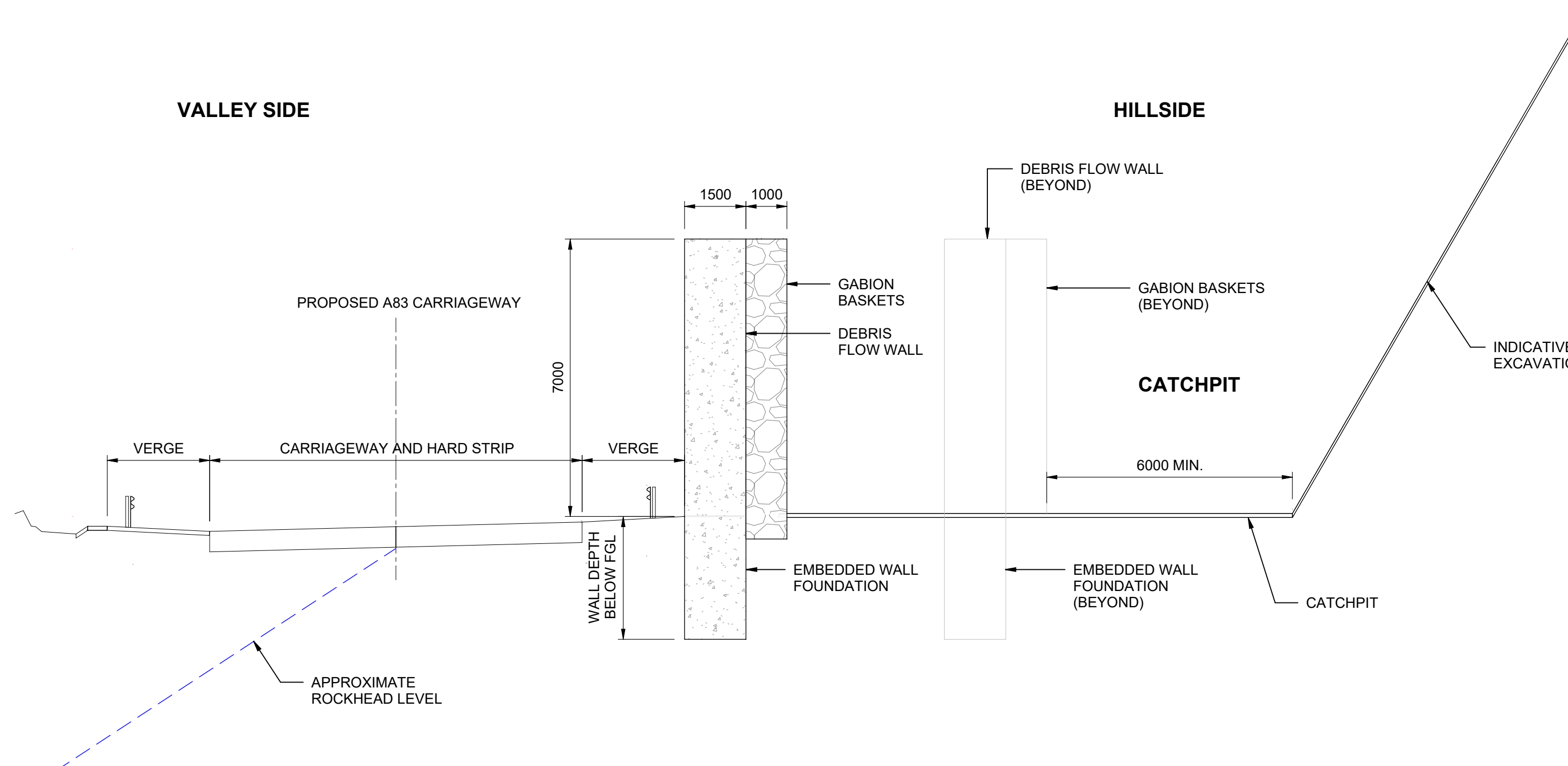
AtkinsRéalis **wsp**

Client: **TRANSPORT SCOTLAND**
CÒMHDHAIL ALBA

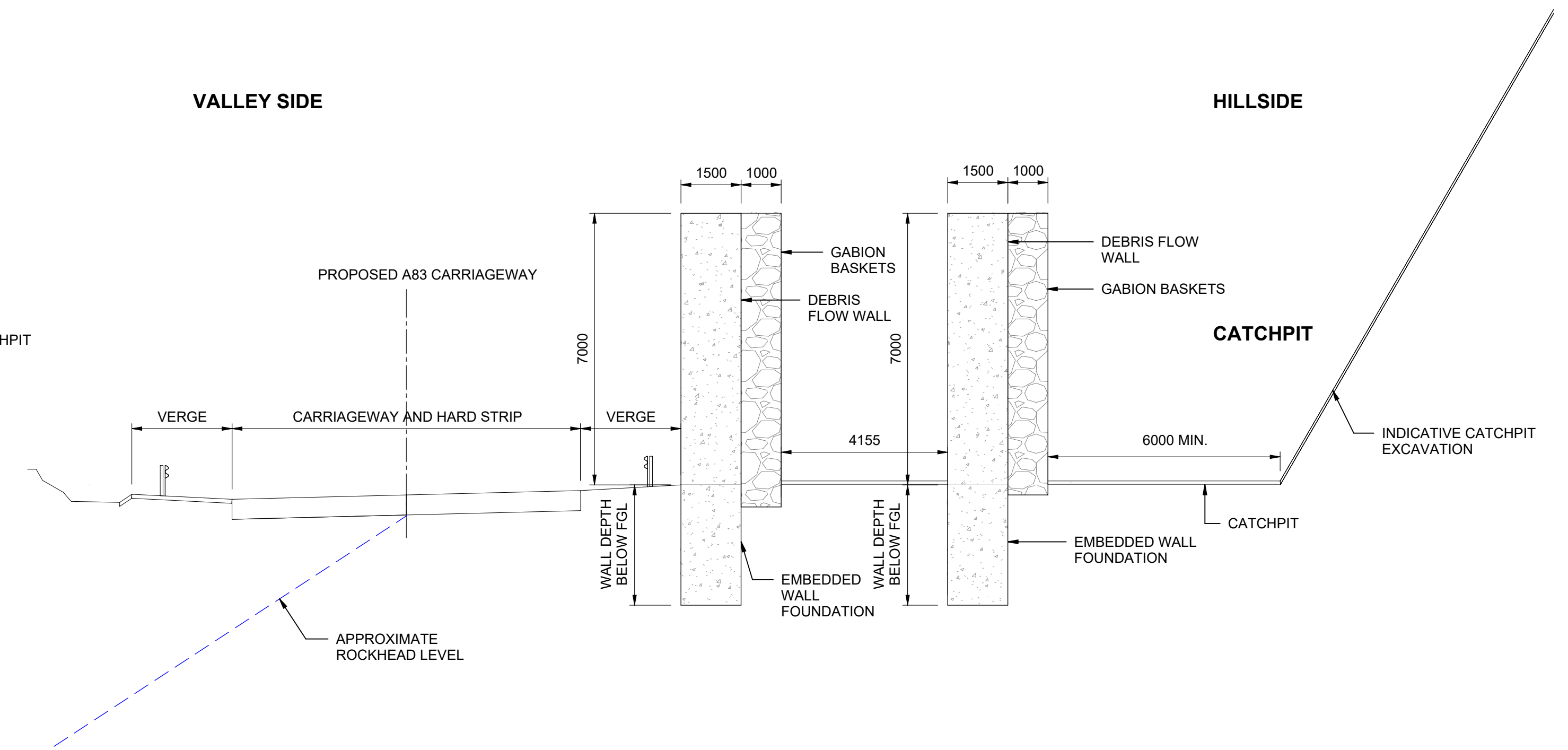
Project Stage / Design Fix	DMRB Stage 3	State	Preliminary
Project Title	A83 Rest and Be Thankful		
Drawing Title	DEBRIS FLOW SHELTER GENERAL ARRANGEMENT 3D VIEWS		
Drawing Number	Project: A83AAB - AWJ - SSP - LTS_DFS_V03 - DR - CB - 001008		
Original Size	A1	Scale: As Shown	Project Ref. No. 5204594 Sheet: 1 of 1 Rev: C01

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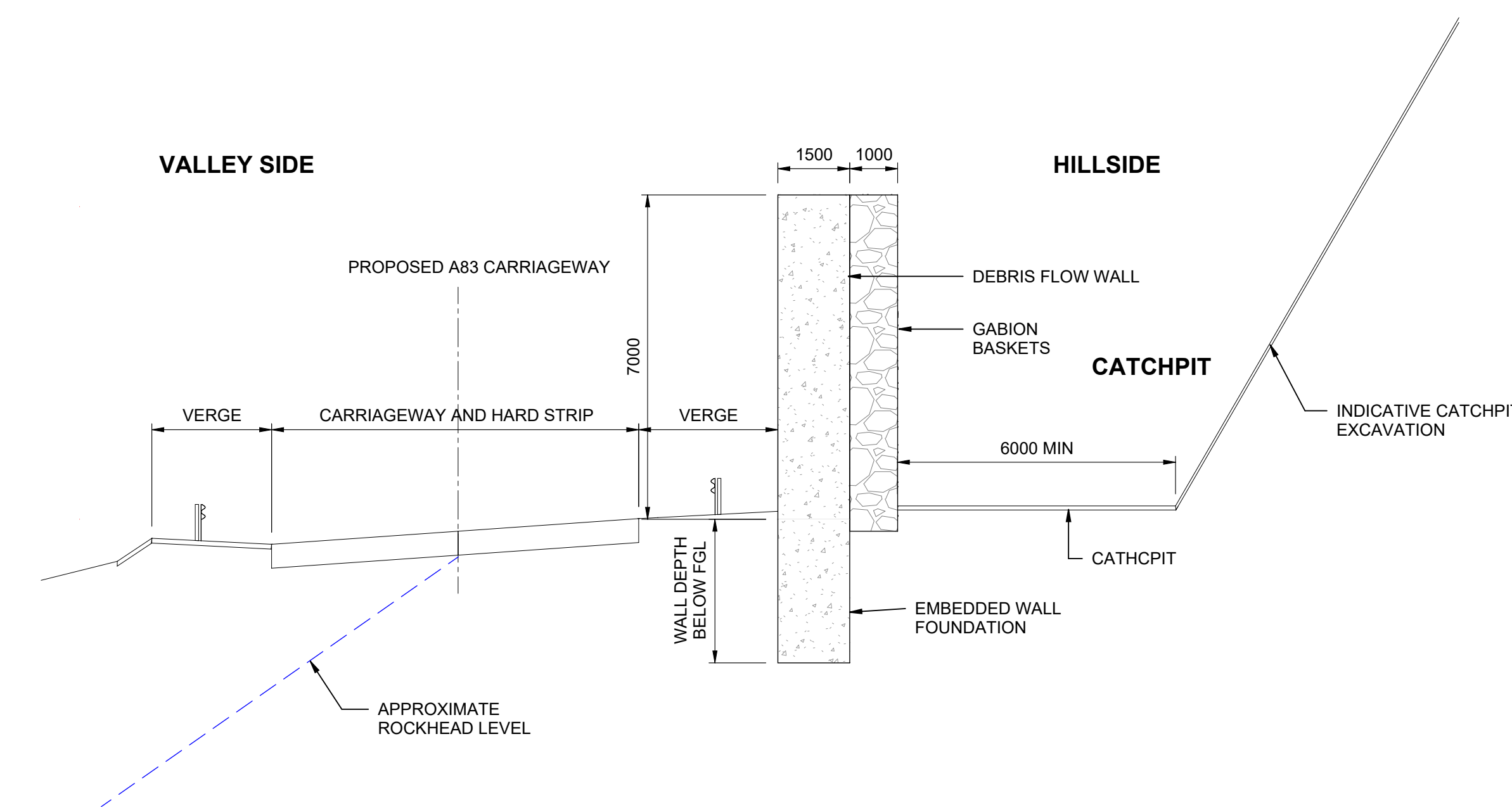
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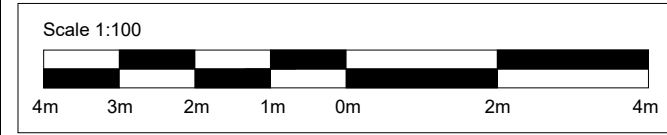
A SECTION AT CH 1+450
000001 SCALE 1 : 100



B SECTION AT CH 1+460
000001 SCALE 1 : 100



C SECTION AT CH 1+560
000001 SCALE 1 : 100



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NOTES :
1. WALL DEPTH BELOW FINISHED GROUND LEVEL (FGL) TO BE CONFIRMED WHEN GI IS AVAILABLE.
2. DEPTH BELOW FGL DEPENDS ON THE DEPTH TO ROCKHEAD AND EMBEDMENT DEPTH INTO THE ROCKHEAD.
3. THE PREFERRED FORM OF THE FOUNDATION TO BE CONFIRMED FOLLOWING GI.
4. PLEASE REFER TO THE GEOTECHNICAL SECTION OF THE STAGE 3 REPORT FOR INFORMATION RELATED TO THE CATCH PIT AND DEBRIS FLOW AND ROCKFALL PROTECTION MEASURES.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION						
Description:						
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).						
Construction						
Maintenance / Cleaning						
Use						
Decommissioning / Demolition						
Description: FOR STAGE 3 REPORT						
A3	C01	JH	DG	CG	CM	06/12/2024
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Status: **A3** Drawing Suitability: **AUTHORISED & ACCEPTED - STAGE 3**

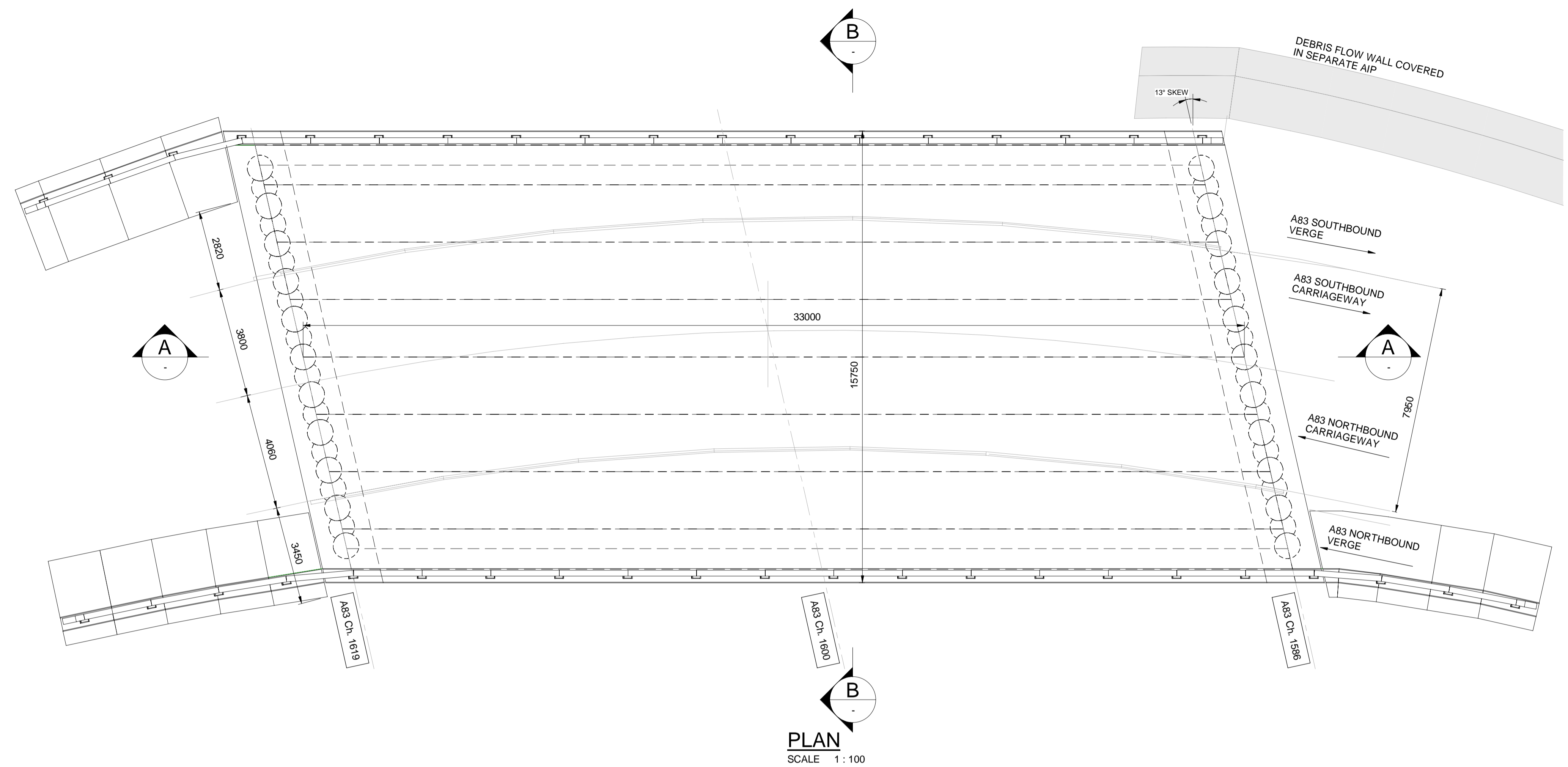
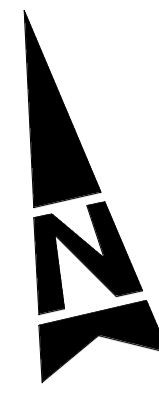
AtkinsRéalis **wsp**

Client: **TRANSPORT SCOTLAND**
CÒMHDHAIL ALBA

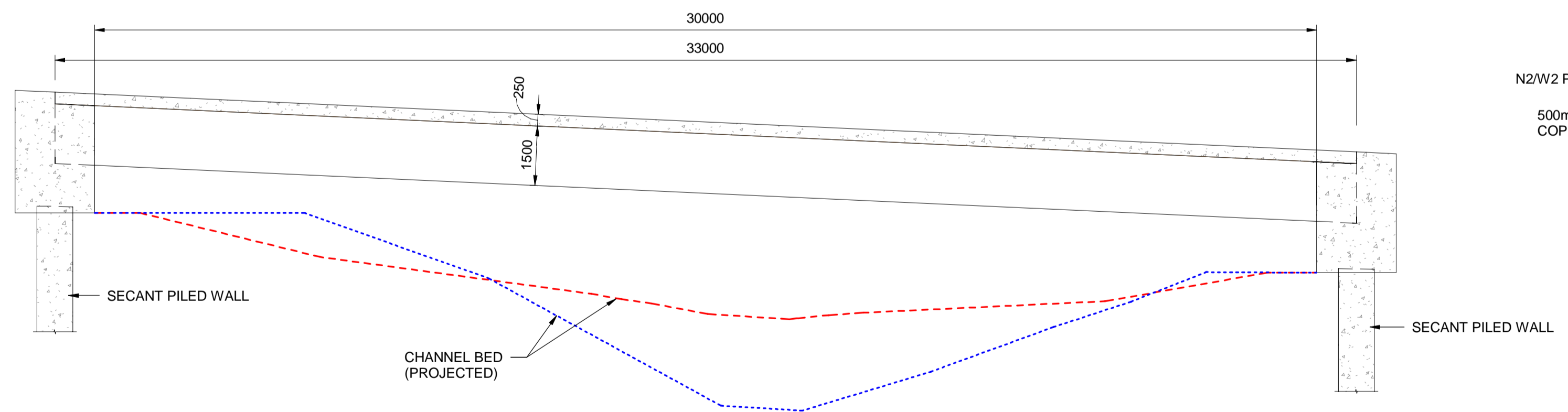
Project Stage / Design Fix	DMRB Stage 3	State	Preliminary
Project Title	A83 Rest and Be Thankful		
Drawing Title	DEBRIS FLOW WALL CROSS SECTIONS		
Drawing Number	A83AAB - AWJ - SSP - LTS_DFW_V01 - DR - CB - 001002		
Original Size	A1	Scale	As Shown
Project Ref. No.	54204594	Sheet	1 of 1
Rev.	C01	Number	

DO NOT SCALE

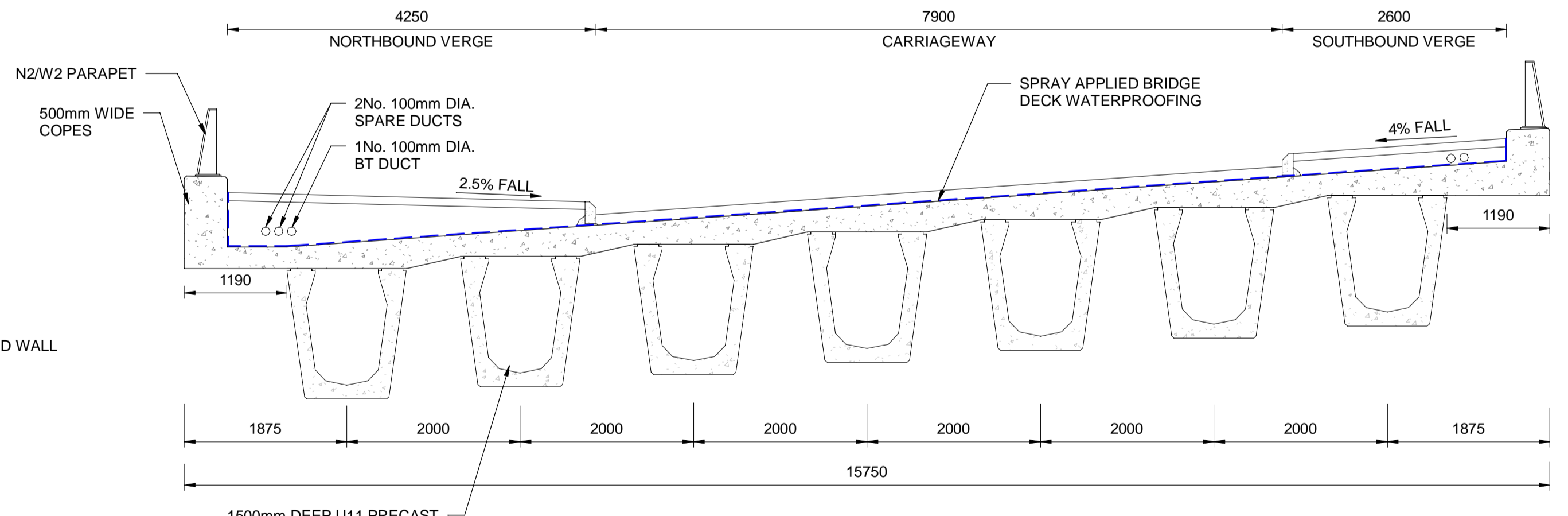
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PLAN
SCALE 1 : 100

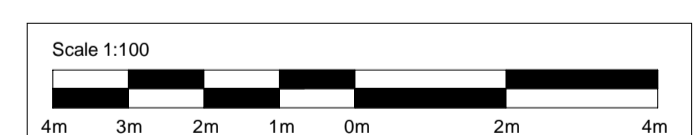
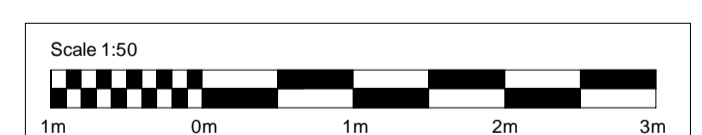
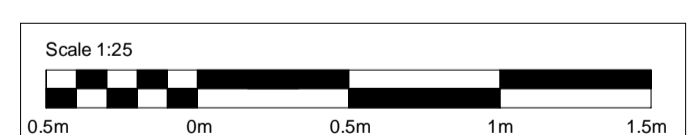


SECTION A-A
SCALE 1 : 100



SECTION B-B
SCALE 1 : 50

--- PROPOSED INDICATIVE CHANNEL PROFILE UPSTREAM (INDICATIVE)
 - - - PROPOSED INDICATIVE CHANNEL PROFILE DOWNSTREAM (INDICATIVE)



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NOTES

- LTS GROUND INVESTIGATION TO INFORM DEPTH TO ROCKHEAD AT ABUTMENT LOCATIONS AND PROPOSED EXCAVATION LEVELS.
- MINIMUM CLEARANCE BETWEEN BRIDGE SOFFIT AND CHANNEL BED TO BE MINIMUM 3m ON UPSTREAM SIDE OF THE BRIDGE.
- THE GRADIENT OF THE EXCAVATED CHANNEL TO CONSIDER PASSAGE OF DEBRIS FLOWS BELOW THE STRUCTURE.
- LENGTH OF WING WALLS SHOWN INDICATIVELY. DETAILS TO BE CONFIRMED AT NEXT STAGE OF DESIGN.
- CARRIAGEWAY VRS EXCLUDED. DETAILS TBC.
- NUMBER OF SPARE DUCTS IN VERGES TO BE CONFIRMED.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	Maintenance / Cleaning	Use	Decommissioning / Demolition
Description:	Description:	Description:	Description:

FOR STAGE 3 REPORT						
A3	C01	SOA	DG	CG	RHG	06/12/2024
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Status: **A3** Drawing Suitability: **AUTHORISED & ACCEPTED - STAGE 3**

AtkinsRéalis **wsp**

Client: **TRANSPORT SCOTLAND**
CÒMHDHAIL ALBA

Project Stage / Design Fix	DMRB Stage 3	State	Preliminary
Project Title	A83 Rest and Be Thankful		
Drawing Title	B02 BURN BRIDGE GENERAL ARRANGEMENT		
Drawing Number		Originator	Volume
Project	A83AAB	- AWJ	- SBR
Location	LTS_B02_M01 - DR - CB - 100001		
Original Size	A1	Scale: As Shown	Project Ref. No.: 5204594
Sheet	1 of 1	Number	Rev: C01