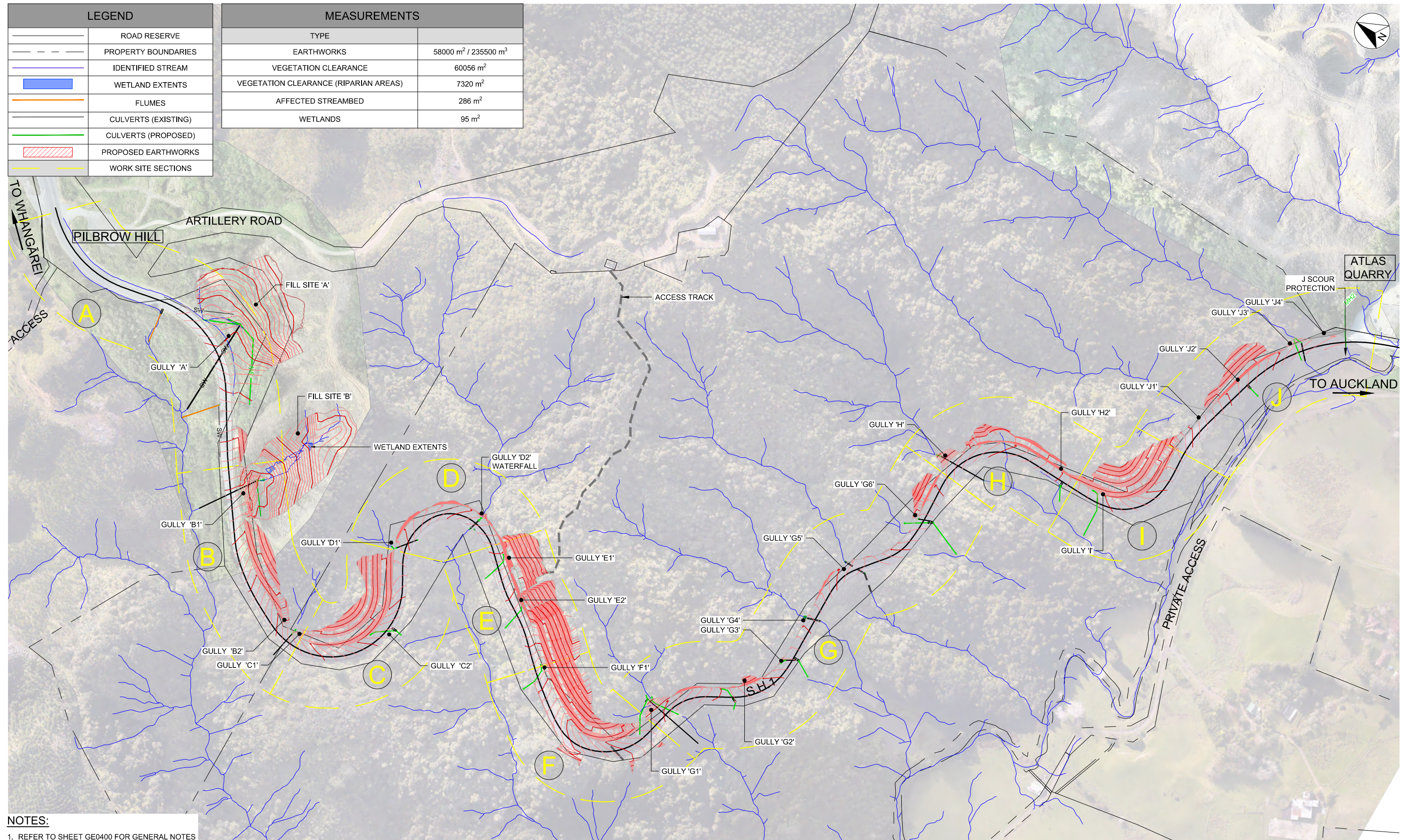


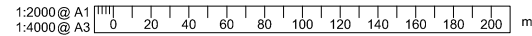
APPENDIX B General Arrangements Drawings

LEGEND	
	ROAD RESERVE
	PROPERTY BOUNDARIES
	IDENTIFIED STREAM
	WETLAND EXTENTS
	FLUMES
	CULVERTS (EXISTING)
	CULVERTS (PROPOSED)
	PROPOSED EARTHWORKS
	WORK SITE SECTIONS

MEASUREMENTS	
TYPE	
EARTHWORKS	58000 m ² / 235500 m ³
VEGETATION CLEARANCE	60056 m ²
VEGETATION CLEARANCE (RIPARIAN AREAS)	7320 m ²
AFFECTED STREAMBED	286 m ²
WETLANDS	95 m ²



NOTES:
1. REFER TO SHEET GE0400 FOR GENERAL NOTES



WORK IN PROGRESS
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A	FOR REGIONAL CONSENT	-	-



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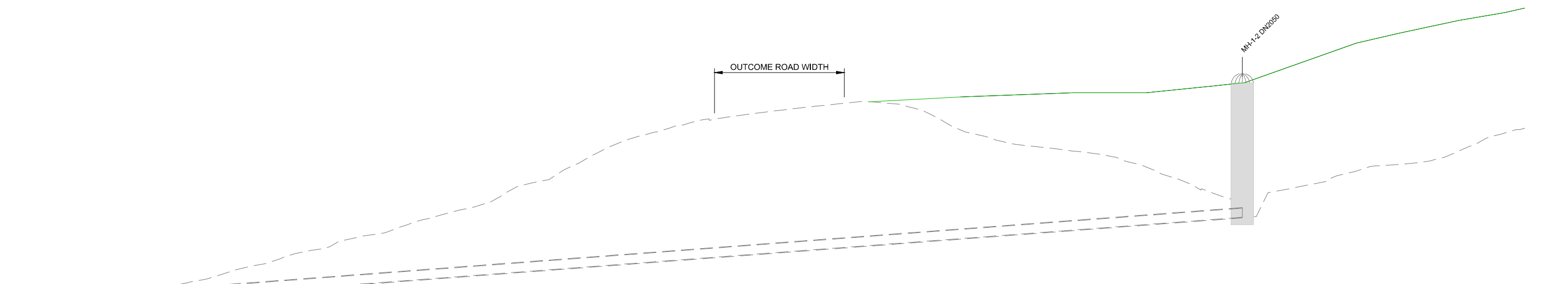
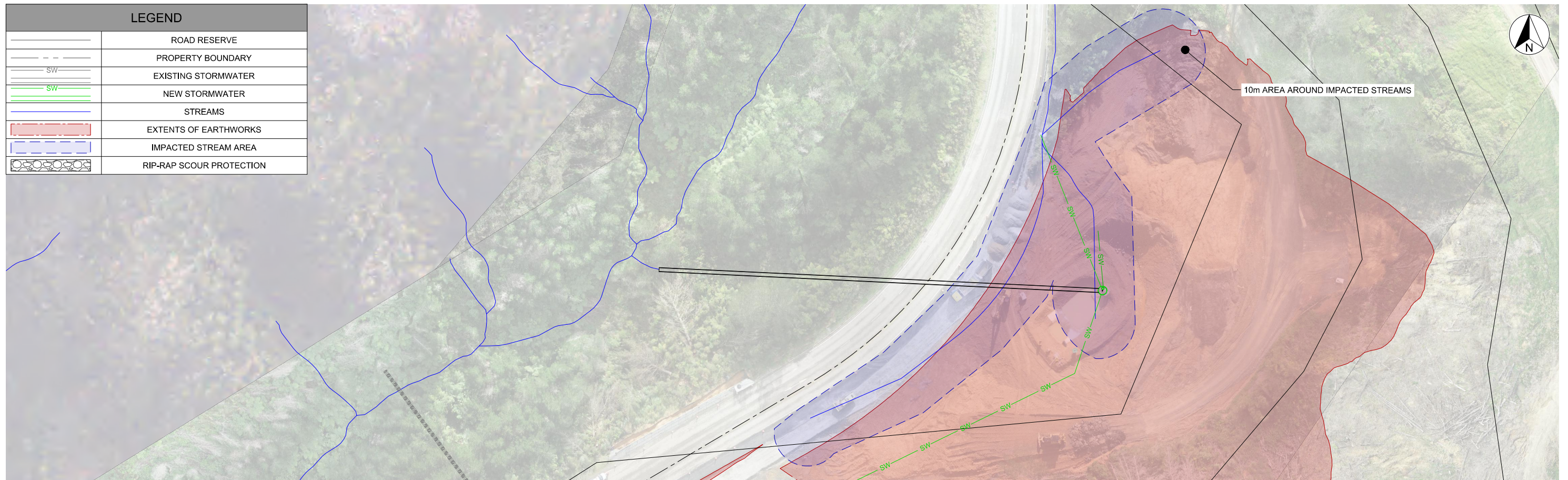
CIVIL

SCALES	ORIGINAL SIZE
1:2000 AT A1	A1
DRAWN	DESIGNED
J. BOOM	S. ROETS
DRAWING VERIFIED	DESIGN VERIFIED
V. GILES	-
APPROVED	APPROVED DATE
-	-

FOR REGIONAL CONSENT

PROJECT
WAKA KOTAHİ NZ TRANSPORT AGENCY
BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0
BRYNDERWYN HILL REPAIRS
TITLE
REGIONAL CONSENT
OVERVIEW PLAN
WSP PROJECT NO. (SUB-PROJECT)
1-11264.01-WSP-DSWI-OA-DR-GE
SHEET NO.
GE2000
REVISION
A

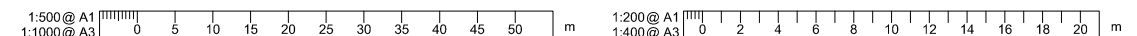
LEGEND	
	ROAD RESERVE
	PROPERTY BOUNDARY
	EXISTING STORMWATER
	NEW STORMWATER
	STREAMS
	EXTENTS OF EARTHWORKS
	IMPACTED STREAM AREA
	RIP-RAP SCOUR PROTECTION



DATUM R.L. 254.00	
GROUND LEVEL (m)	
DEPTH TO INVERT (m)	
PIPE INVERT LEVEL (m)	
DISTANCE (m)	
GRADIENT	7.57% (1:13)
PIPE SIZE AND MATERIAL	DN900 RCP EXISTING PIPE (NO DATA - PURELY INDICATIVE)

LONGITUDINAL PROFILE 0.0 m TO 140.0 m

HORIZONTAL SCALE 1:200 @ A1
VERTICAL SCALE 1:200 @ A1



NOTES:
1. REFER TO SHEET GE0010 FOR GENERAL NOTES

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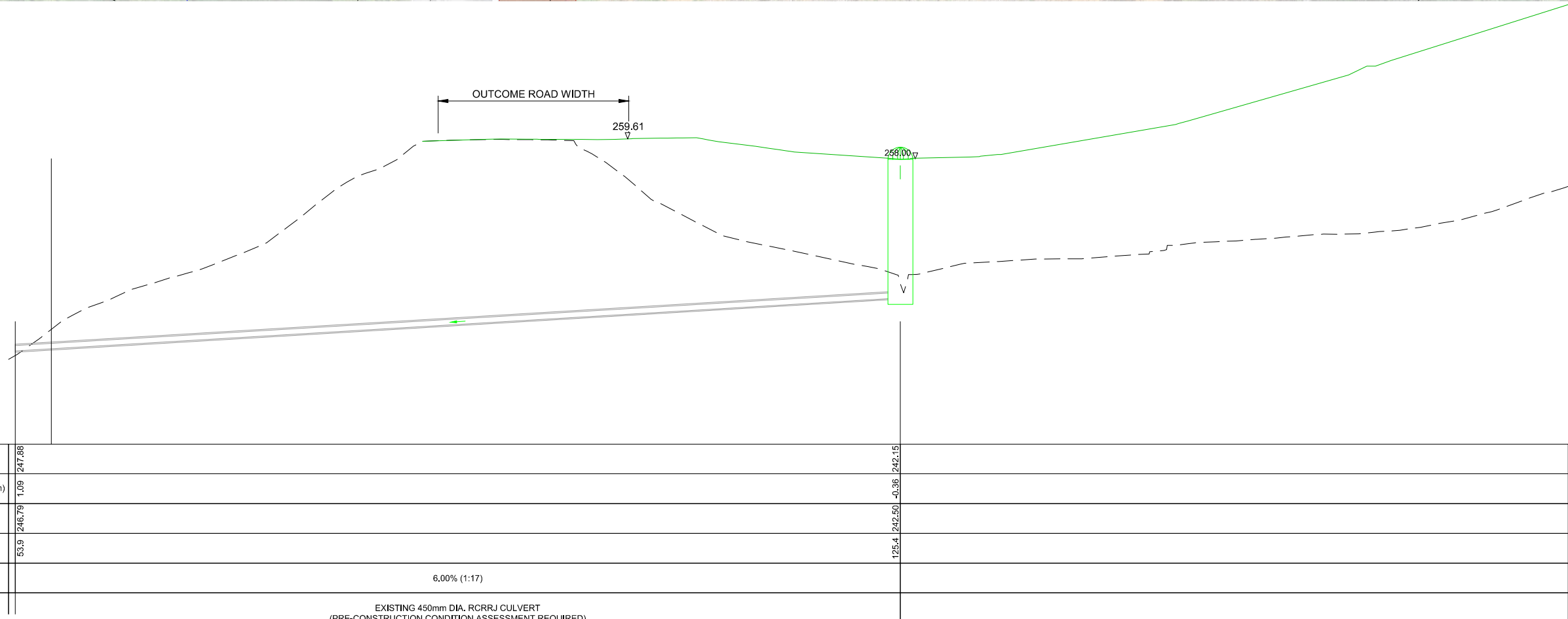
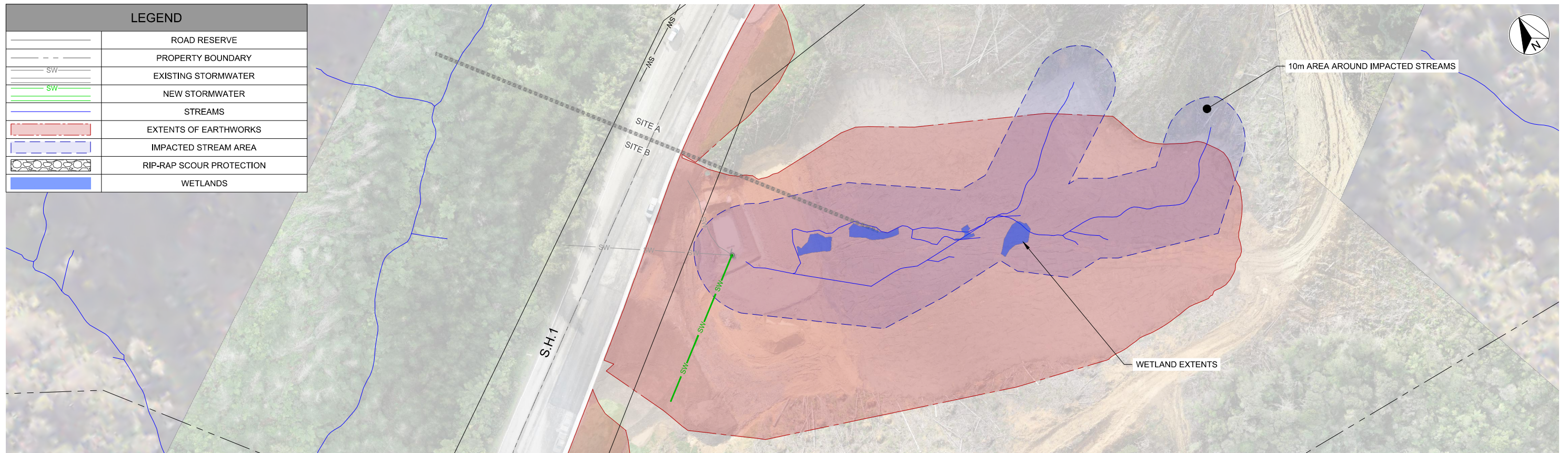
CIVIL

SCALES		ORIGINAL SIZE
1:500 AND 1:200 AT A1		A1
DRAWN	DESIGNED	APPROVED
J. BOOM	S. ROETS	-
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
V. GILES	A. SIMPSON	-

FOR REGIONAL CONSENT

PROJECT		
WAKA KOTAHI NZ TRANSPORT AGENCY		
BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0		
BRYNDERWYN HILL REPAIRS		
TITLE		
REGIONAL CONSENT		
PLAN - SITE A (FILL SITE A)		
WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION
1-11264.01-WSP-SDUE-SA-DR-GE	GE2500	A

LEGEND	
	ROAD RESERVE
	PROPERTY BOUNDARY
	EXISTING STORMWATER
	NEW STORMWATER
	STREAMS
	EXTENTS OF EARTHWORKS
	IMPACTED STREAM AREA
	RIP-RAP SCOUR PROTECTION
	WETLANDS

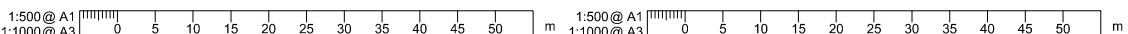


DATUM R.L. 235.00	
EXISTING GROUND LEVEL (m)	247.38
DEPTH FROM EGL TO INVERT (m)	1.09
PIPE INVERT LEVEL (m)	246.79
DISTANCE (m)	53.9
GRADIENT	6.00% (1:17)
PIPE SIZE AND MATERIAL	EXISTING 450mm DIA. RCRRJ CULVERT (PRE-CONSTRUCTION CONDITION ASSESSMENT REQUIRED)

NOTES:

1. REFER TO SHEET GE0010 FOR GENERAL NOTES

LONGITUDINAL PROFILE 0.0 m TO 125.9 m



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A	FOR REGIONAL CONSENT	-	-

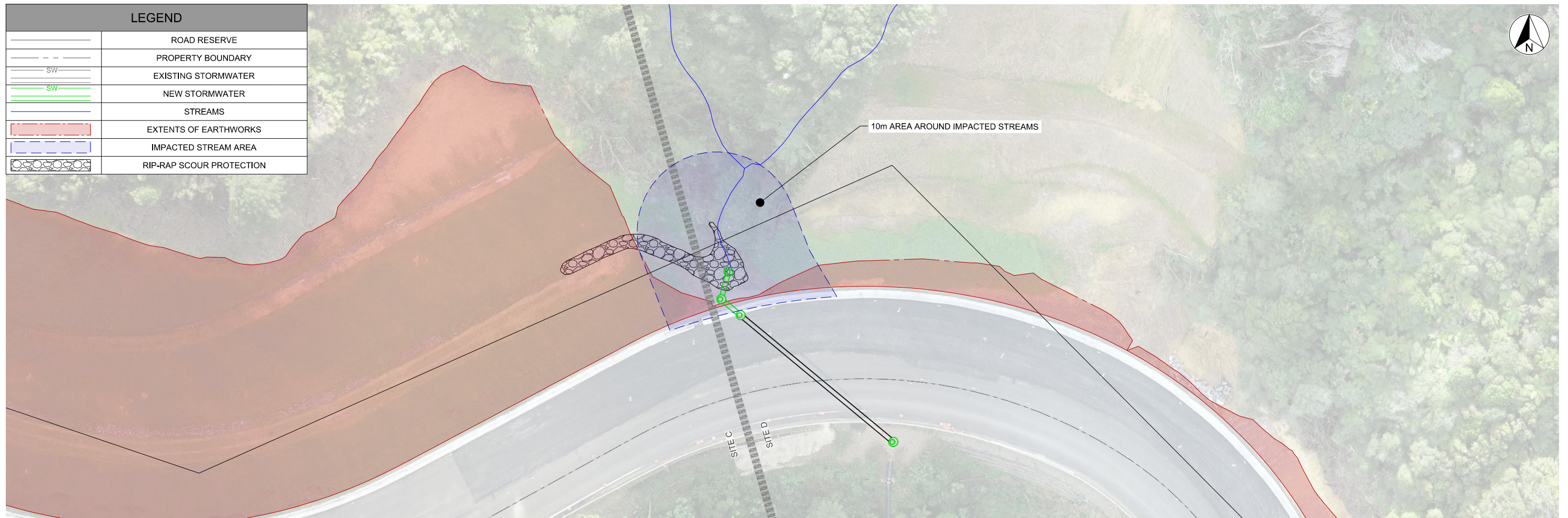


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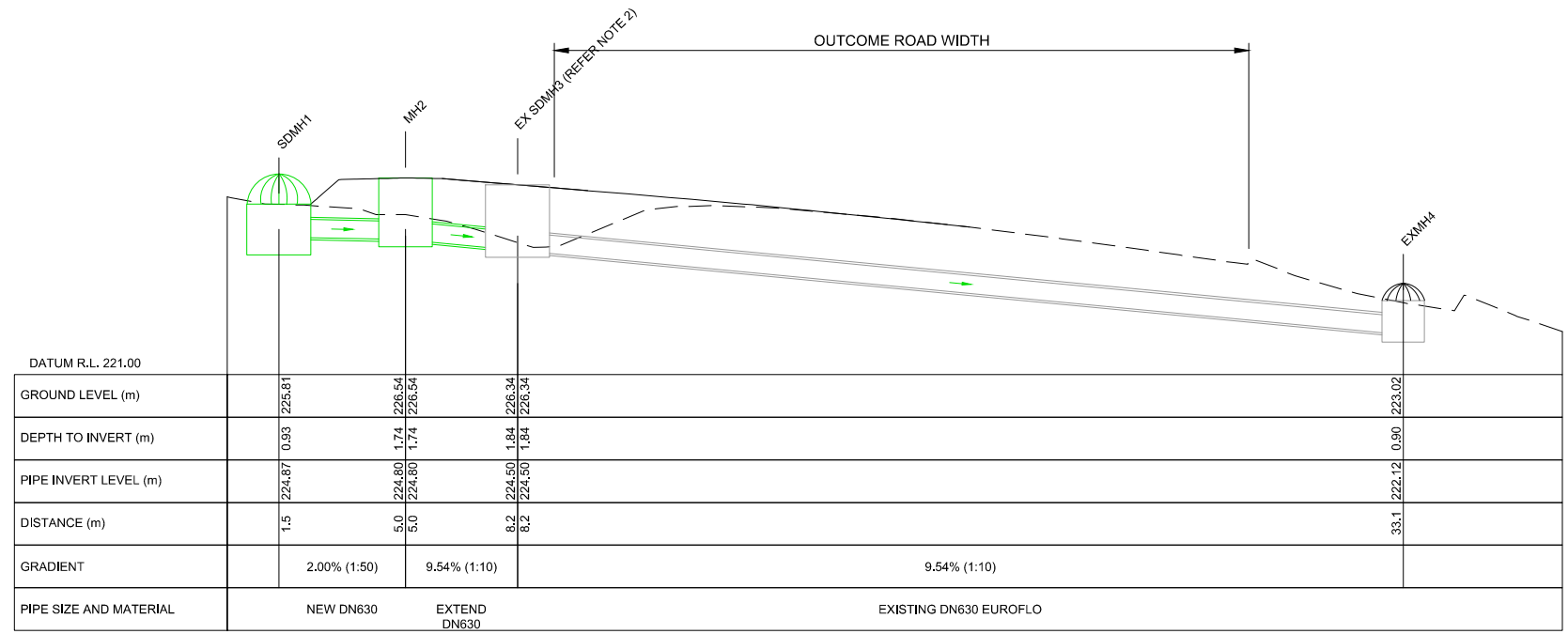
SCALES		ORIGINAL SIZE
1:500 AND 1:200 AT A1		A1
DRAWN	DESIGNED	APPROVED
J. BOOM	S. ROETS	-
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
V. GILES	A. SIMPSON	-

FOR REGIONAL CONSENT

PROJECT	WAKA KOTAHİ NZ TRANSPORT AGENCY
	BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0
	BRYNDERWYN HILL REPAIRS
TITLE	REGIONAL CONSENT
	PLAN - SITE B1 (FILL SITE B)
WSP PROJECT NO. (SUB-PROJECT)	1-11264.01-WSP-SDUE-SB-DR-GE
SHEET NO.	GE2501
REVISION	A

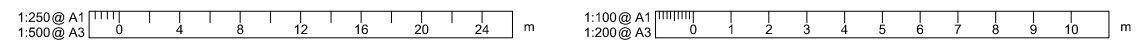


LEGEND	
	ROAD RESERVE
	PROPERTY BOUNDARY
	EXISTING STORMWATER
	NEW STORMWATER
	STREAMS
	EXTENTS OF EARTHWORKS
	IMPACTED STREAM AREA
	RIP-RAP SCOUR PROTECTION



LONGITUDINAL PROFILE 0.0 m TO 37.6 m

NOTES:
1. REFER TO SHEET GE0010 FOR GENERAL NOTES



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CIVIL

SCALES		ORIGINAL SIZE
1:250 AND 1:100 AT A1		A1
DRAWN	DESIGNED	APPROVED
J. BOOM	S. ROETS	-
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
V. GILES	A. SIMPSON	-

FOR REGIONAL CONSENT

PROJECT
WAKA KOTAHİ NZ TRANSPORT AGENCY
BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0
BRYNDERWYN HILL REPAIRS

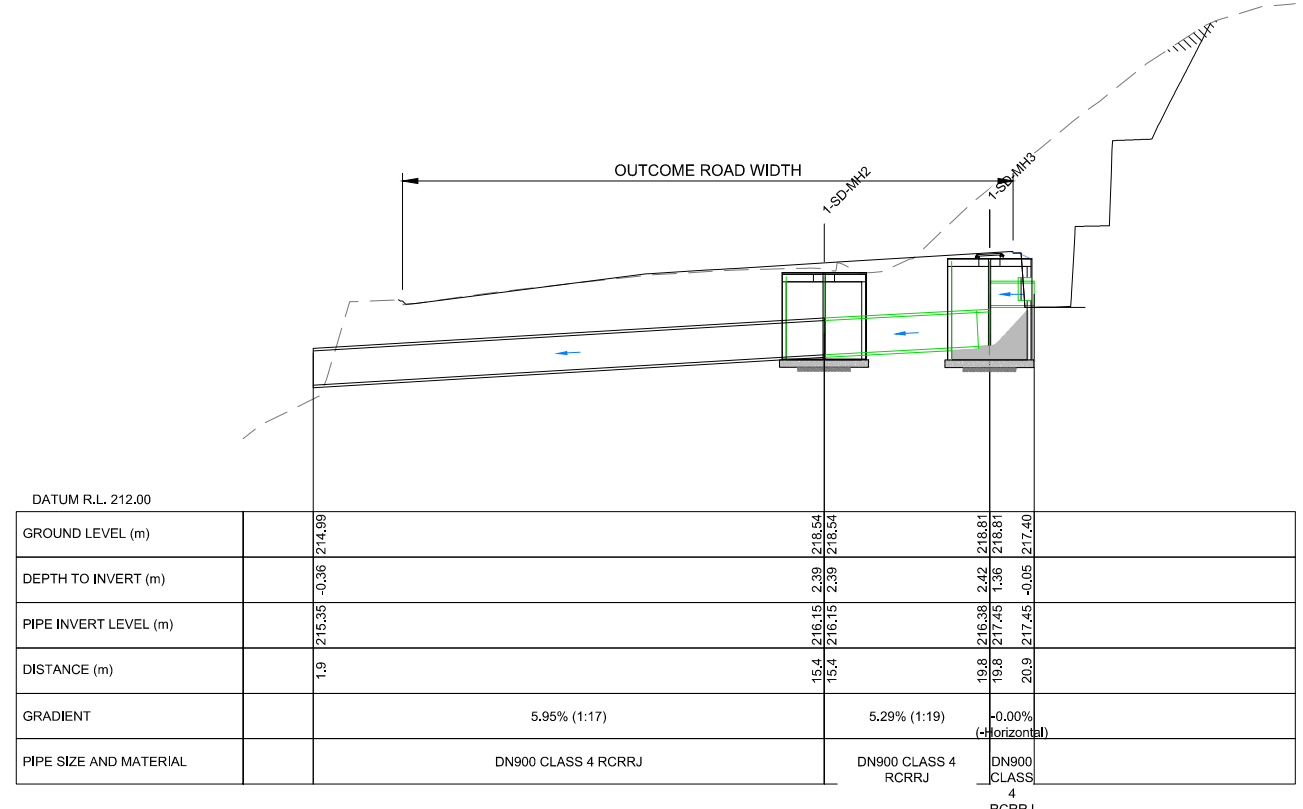
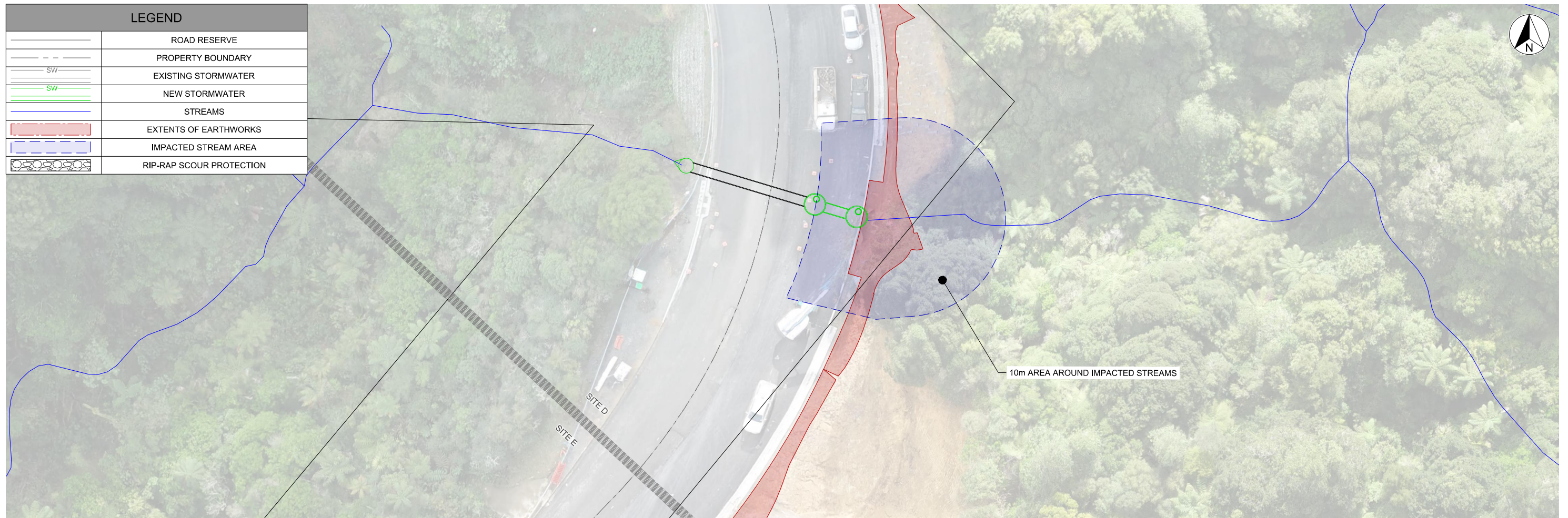
TITLE
REGIONAL CONSENT
PLAN - SITE D1

WSP PROJECT NO. (SUB-PROJECT)
1-11264.01-WSP-SDUE-SD-DR-GE

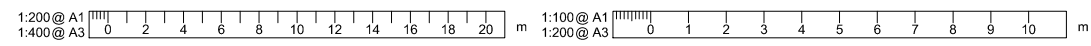
SHEET NO.
GE2503

REVISION
A

LEGEND	
	ROAD RESERVE
	PROPERTY BOUNDARY
	EXISTING STORMWATER
	NEW STORMWATER
	STREAMS
	EXTENTS OF EARTHWORKS
	IMPACTED STREAM AREA
	RIP-RAP SCOUR PROTECTION



NOTES:
1. REFER TO SHEET GE0010 FOR GENERAL NOTES



LONGITUDINAL PROFILE 0.0 m TO 27.8 m

REVISION	AMENDMENT	APPROVED	DATE
A	FOR REGIONAL CONSENT	-	-



CIVIL

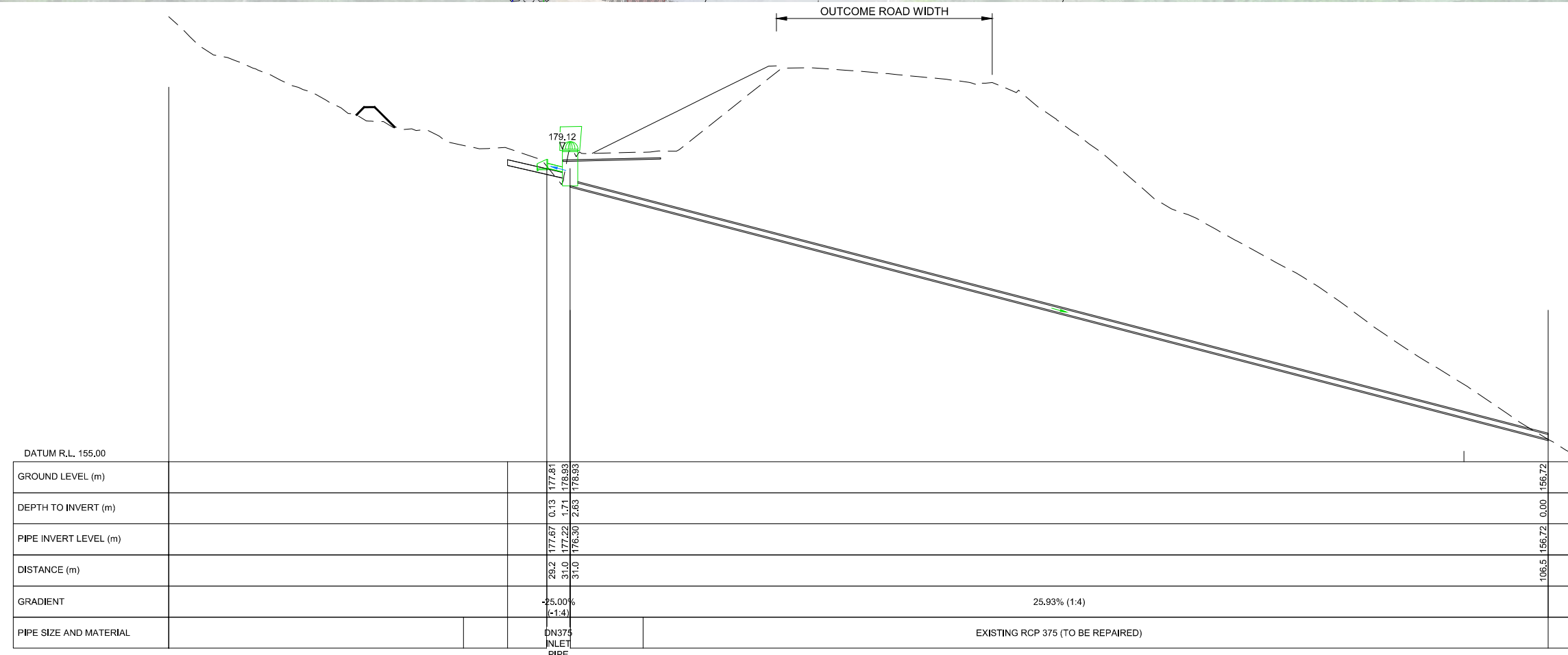
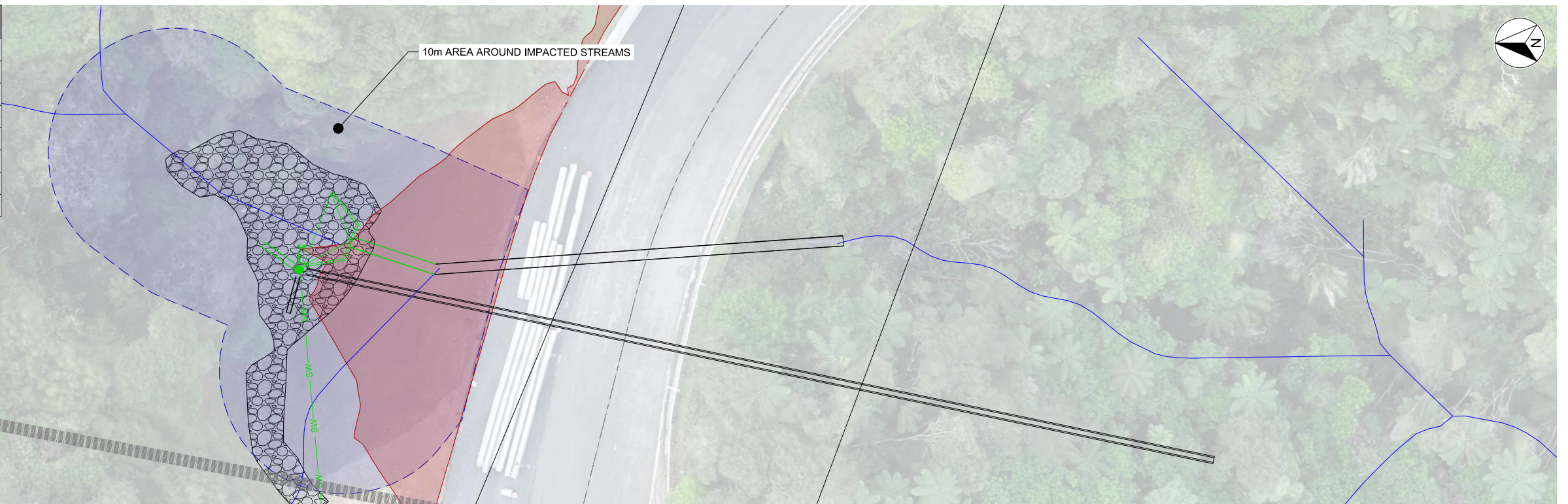
SCALES		ORIGINAL SIZE
1:200 AND 1:100 AT A1		A1
1:400@ A3		

DRAWN	DESIGNED	APPROVED
J. BOOM	S. ROETS	-
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
V. GILES	A. SIMPSON	-

FOR REGIONAL CONSENT

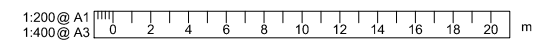
PROJECT	WAKA KOTAHI NZ TRANSPORT AGENCY
BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0	
BRYNDERWYN HILL REPAIRS	
TITLE	REGIONAL CONSENT
PLAN - SITE D2 (WATERFALL)	
WSP PROJECT NO. (SUB-PROJECT)	1-11264.01-WSP-SDUE-SD-DR-GE
SHEET NO.	GE2504
REVISION	A

LEGEND	
	ROAD RESERVE
	PROPERTY BOUNDARY
	EXISTING STORMWATER
	NEW STORMWATER
	STREAMS
	EXTENTS OF EARTHWORKS
	IMPACTED STREAM AREA
	RIP-RAP SCOUR PROTECTION



NOTES:

1. REFER TO SHEET GE0010 FOR GENERAL NOTES



LONGITUDINAL PROFILE 0.0 m TO 108.3 m

HORIZONTAL SCALE 1:200 @ A1
VERTICAL SCALE 1:200 @ A1

REVISION	AMENDMENT	APPROVED	DATE
A	FOR REGIONAL CONSENT	-	-



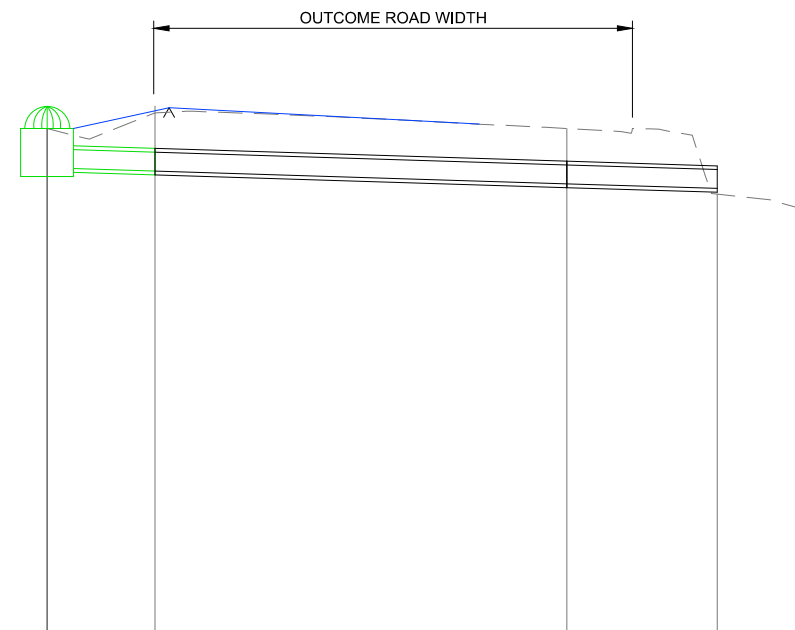
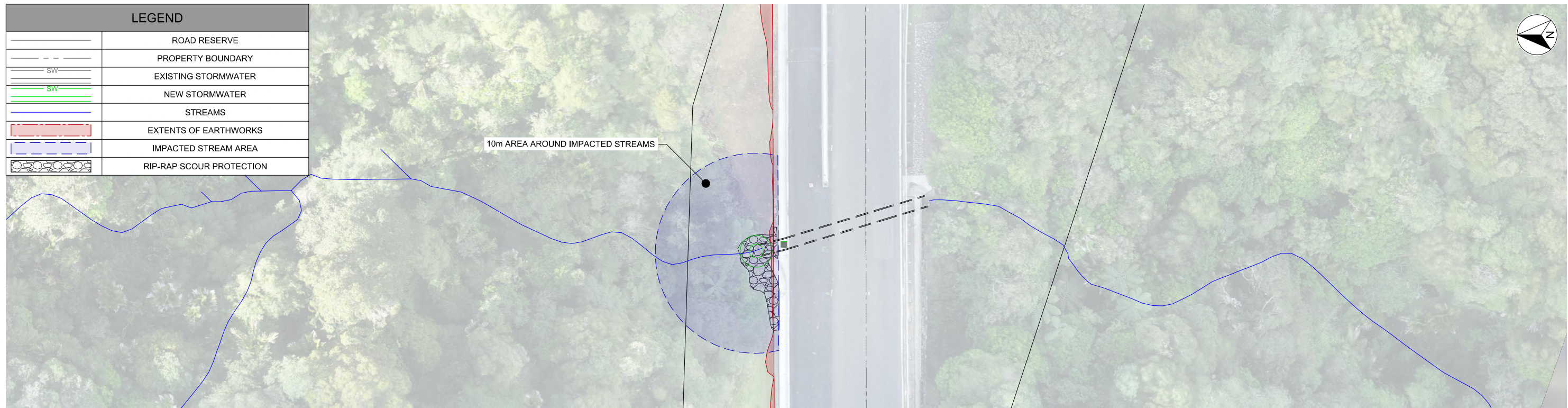
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SCALES		ORIGINAL SIZE
1:200 AT A1		A1
DRAWN	DESIGNED	APPROVED
J. BOOM	S. ROETS	-
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
V. GILES	A. SIMPSON	-

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PROJECT			
WAKA KOTAHI NZ TRANSPORT AGENCY			
BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0			
BRYNDERWYN HILL REPAIRS			
TITLE			
REGIONAL CONSENT			
PLAN - SITE F1			
WSP PROJECT NO. (SUB-PROJECT)		SHEET NO.	REVISION
1-11264.01-WSP-SDUE-SG-DR-GE		GE2507	A

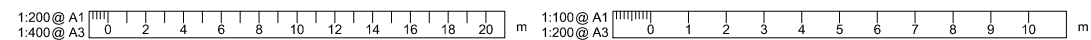
LEGEND	
	ROAD RESERVE
	PROPERTY BOUNDARY
	EXISTING STORMWATER
	NEW STORMWATER
	STREAMS
	EXTENTS OF EARTHWORKS
	IMPACTED STREAM AREA
	RIP-RAP SCOUR PROTECTION



DATUM R.L. 155.00				
RIM LEVEL (m)	168.77	168.19	168.77	167.79
DEPTH TO INVERT (m) AT PIPE ENDS				
PIPE INVERT LEVEL (m) AT PIPE ENDS	167.74	167.65	167.31	167.19
DISTANCE (m)	0.0	2.9	13.8	17.7
GRADIENT	3.10% (1:32)	3.10% (1:32)	3.10% (1:32)	
PIPE SIZE AND MATERIAL	CLASS 4 RCRRJ 600mm Ø		EX. DN600 RRJ	EX. DN525

NOTES:

1. REFER TO SHEET GE0010 FOR GENERAL NOTES



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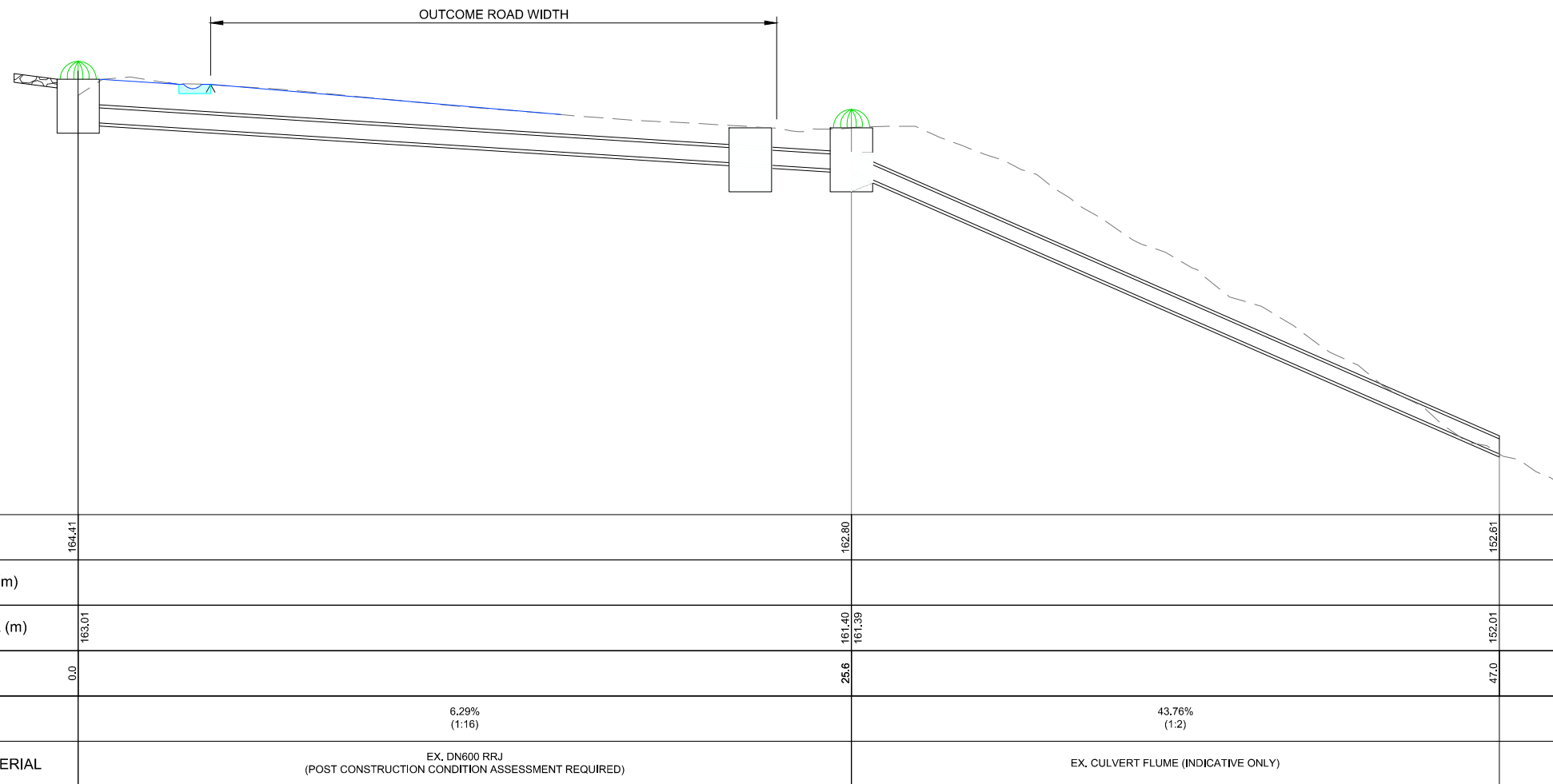
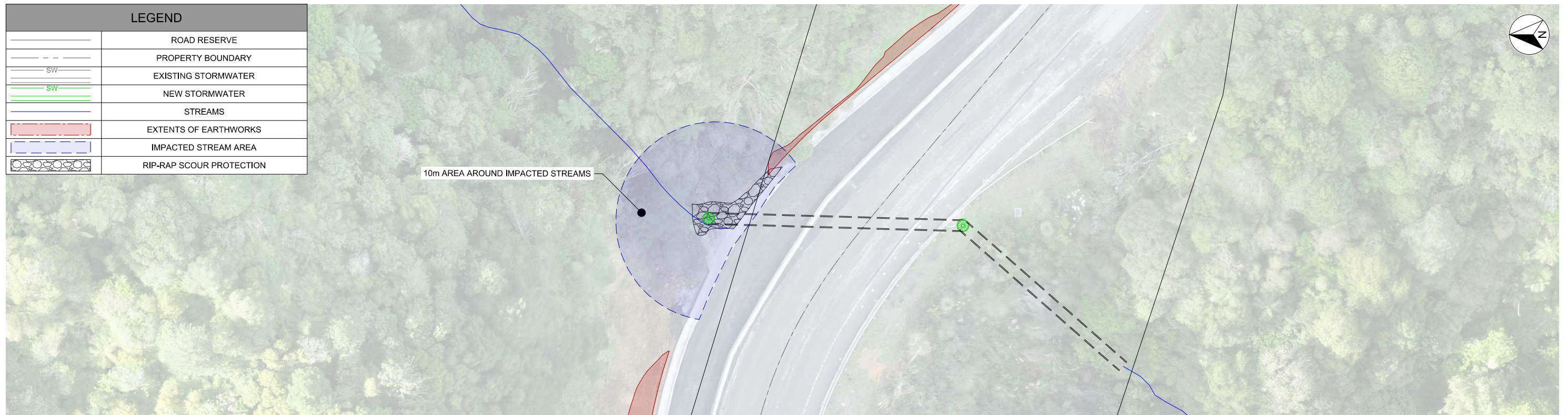
CIVIL

SCALES		ORIGINAL SIZE
1:200 AND 1:100 AT A1		A1
DRAWN	DESIGNED	APPROVED
J. BOOM	S. ROETS	-
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
V. GILES	A. SIMPSON	-

FOR REGIONAL CONSENT

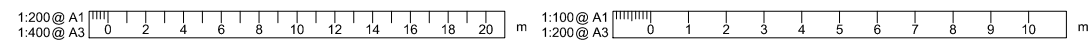
PROJECT			
WAKA KOTAHI NZ TRANSPORT AGENCY			
BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0			
BRYNDERWYN HILL REPAIRS			
TITLE			
REGIONAL CONSENT			
PLAN - SITE G2			
WSP PROJECT NO. (SUB-PROJECT)	SHEET NO.	REVISION	
1-11264.01-WSP-SDUE-SG-DR-GE	GE2508	A	

LEGEND	
	ROAD RESERVE
	PROPERTY BOUNDARY
	EXISTING STORMWATER
	NEW STORMWATER
	STREAMS
	EXTENTS OF EARTHWORKS
	IMPACTED STREAM AREA
	RIP-RAP SCOUR PROTECTION



NOTES:

1. REFER TO SHEET GE0010 FOR GENERAL NOTES



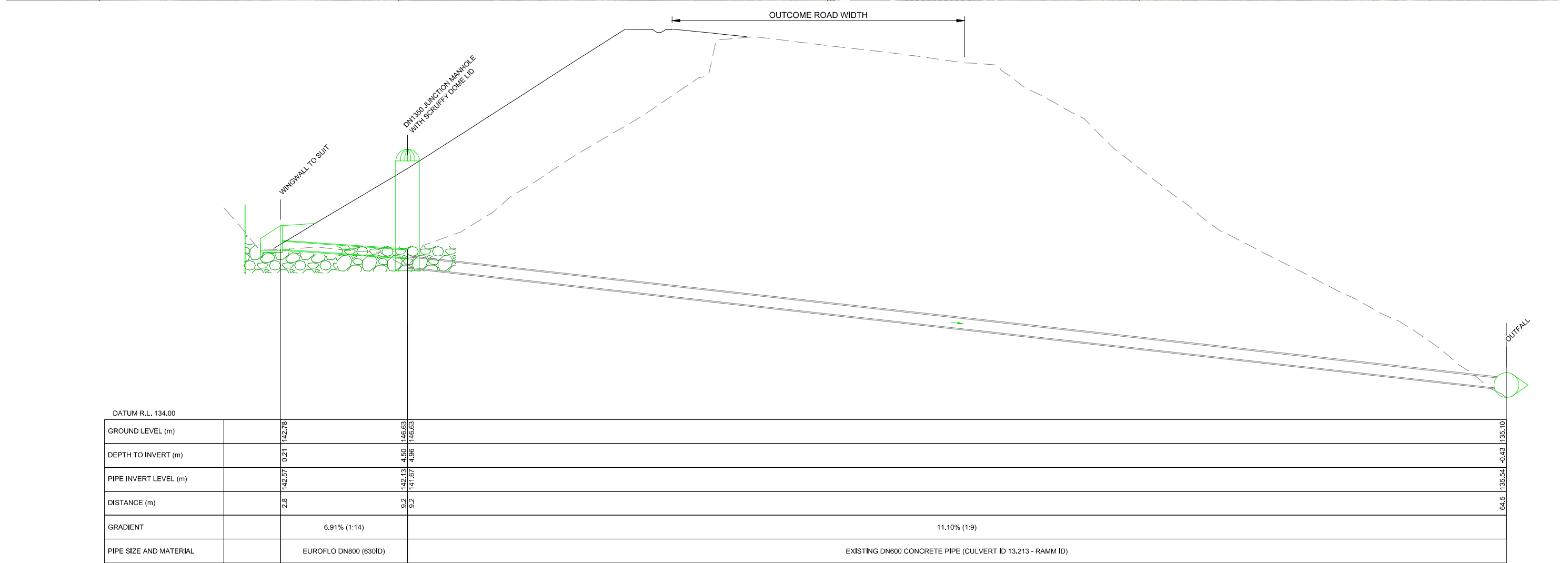
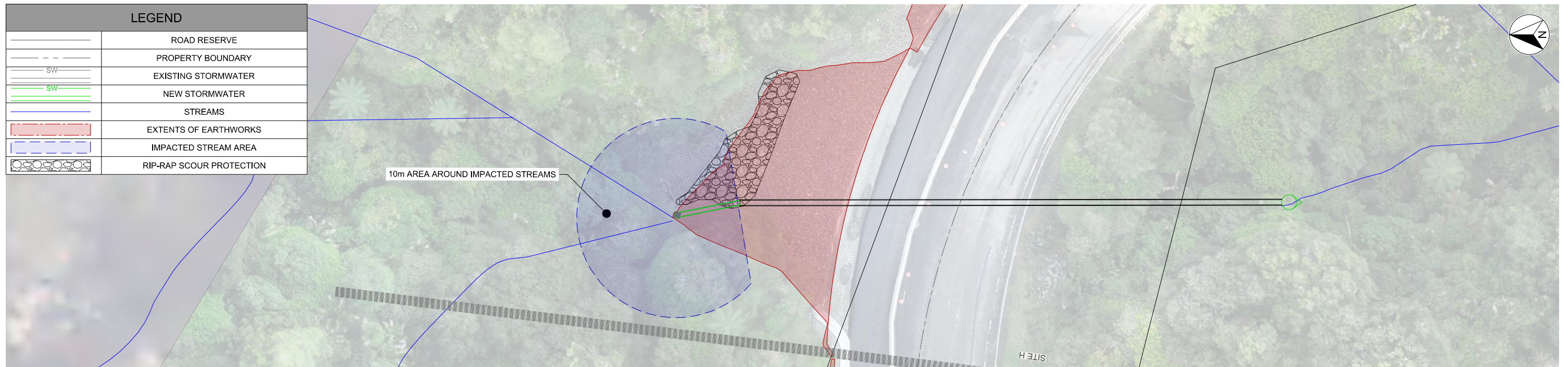
REVISION	AMENDMENT	APPROVED	DATE
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CIVIL

SCALES		ORIGINAL SIZE
1:200 AND 1:100 AT A1		A1
DRAWN	DESIGNED	APPROVED
J. BOOM	S. ROETS	-
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
V. GILES	A. SIMPSON	-

PROJECT			
WAKA KOTAHI NZ TRANSPORT AGENCY			
BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0			
BRYNDERWYN HILL REPAIRS			
TITLE			
REGIONAL CONSENT			
PLAN - SITE G3			
WSP PROJECT NO. (SUB-PROJECT)		SHEET NO.	
1-11264.01-WSP-SDUE-SG-DR-GE		GE2509	
REVISION			
A			



LONGITUDINAL PROFILE 0.0 m TO 64.5 m

NOTES:
 1. REFER TO SHEET GE0010 FOR GENERAL NOTES

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 Whangarei 0148
 New Zealand

CIVIL

SCALES		ORIGINAL SIZE
1:200 AND 1:100 AT A1		A1
DRAWN	DESIGNED	APPROVED
J. BOOM	S. ROETS	-
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
V. GILES	A. SIMPSON	-

FOR REGIONAL CONSENT

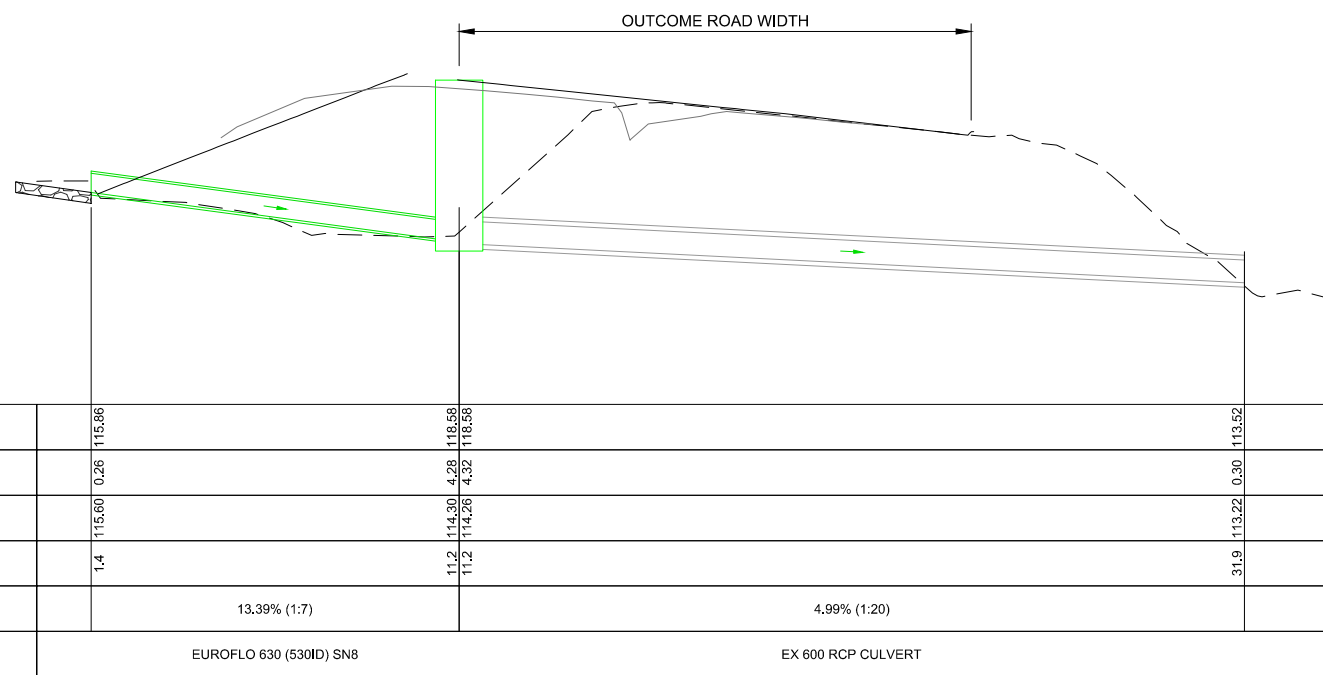
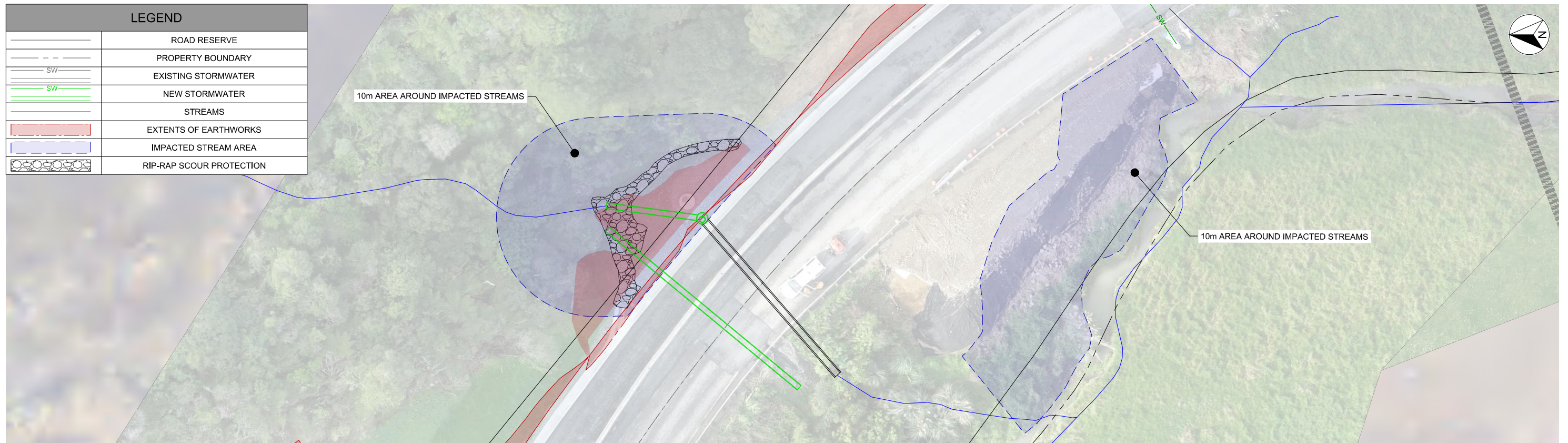
PROJECT
 WAKA KOTAHI NZ TRANSPORT AGENCY
 BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0
 BRYNDERWYN HILL REPAIRS

TITLE
 REGIONAL CONSENT
 PLAN - SITE H

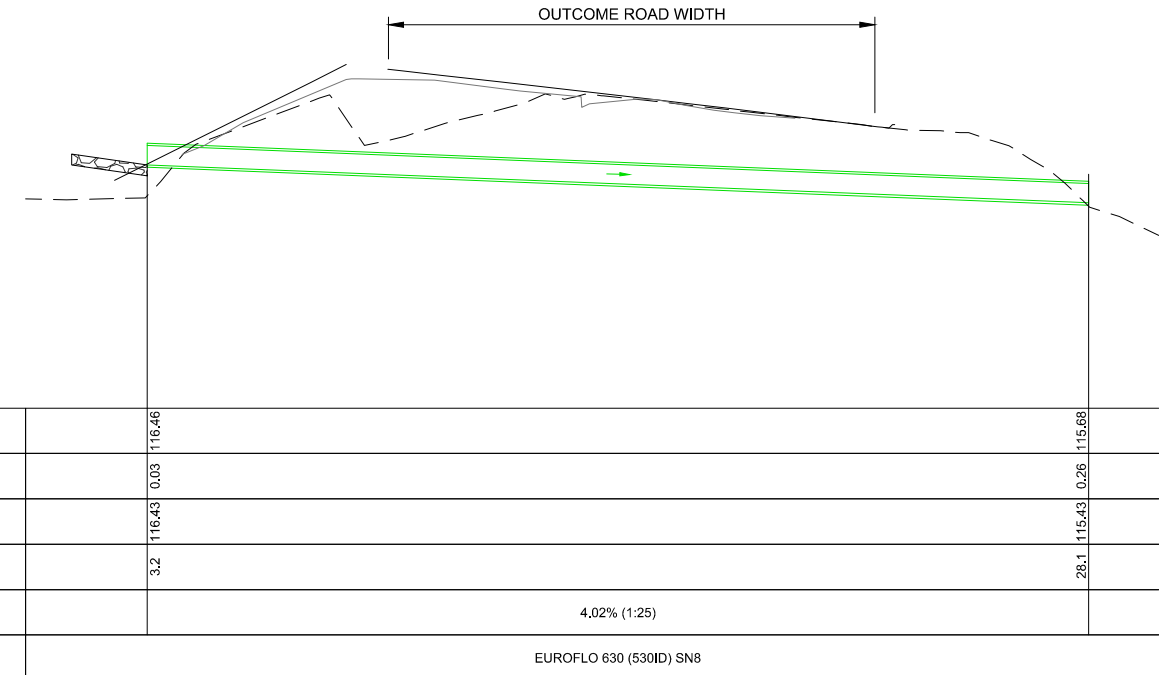
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 1-11264.01-WSP-SDUE-SH-DR-GE

SHEET NO.
 GE2510

REVISION
 A

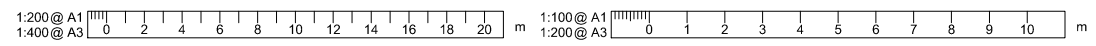


LONGITUDINAL PROFILE 0.0 m TO 34.1 m



LONGITUDINAL PROFILE 0.0 m TO 33.7 m

NOTES:
1. REFER TO SHEET GE0010 FOR GENERAL NOTES



REVISION	AMENDMENT	APPROVED	DATE
A	FOR REGIONAL CONSENT	-	-



CIVIL

SCALES		ORIGINAL SIZE
1:200 AND 1:100 AT A1		A1
DRAWN	DESIGNED	APPROVED
J. BOOM	S. ROETS	-
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
V. GILES	A. SIMPSON	-

FOR REGIONAL CONSENT

PROJECT
WAKA KOTAHI NZ TRANSPORT AGENCY
BRYNDERWYN HILLS - S.H.1 R.S 303 R.P 11450.0 - R.P 13902.0
BRYNDERWYN HILL REPAIRS

TITLE
REGIONAL CONSENT
PLAN - SITE J3

WSP PROJECT NO. (SUB-PROJECT)
1-11264.01-WSP-SDUE-SJ-DR-GE

SHEET NO.
GE2513

REVISION
A