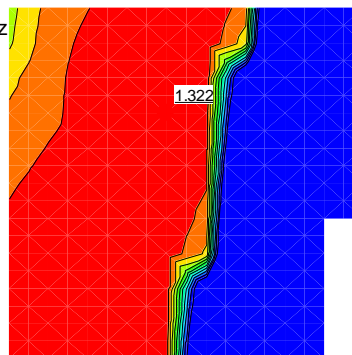


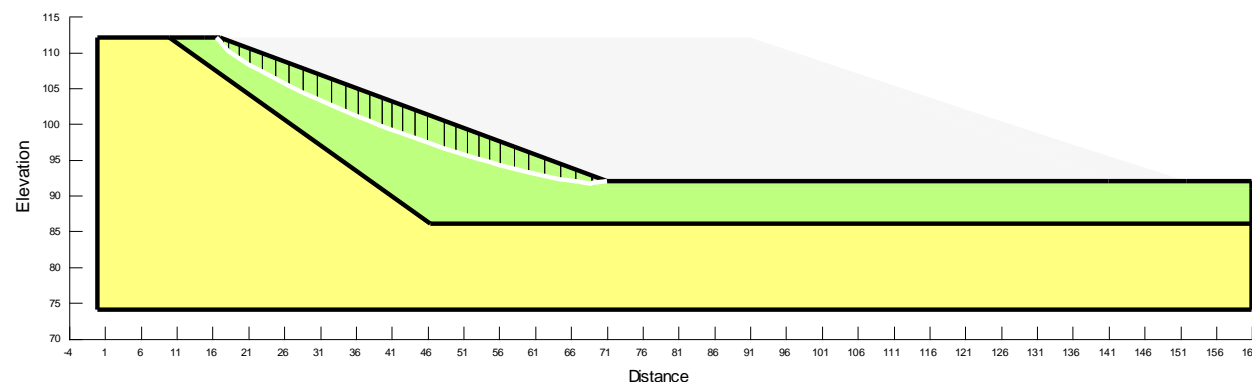


File Name: 181029 416.07238.00001 Parrys Landfill.gsz
 Name: Side Slope Geological Barrier
 Method: Morgenstern-Price
 Factor of Safety: 1.322



Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)
	Bedrock	Mohr-Coulomb	20	0	45	0
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0



Side Slope Subgrade



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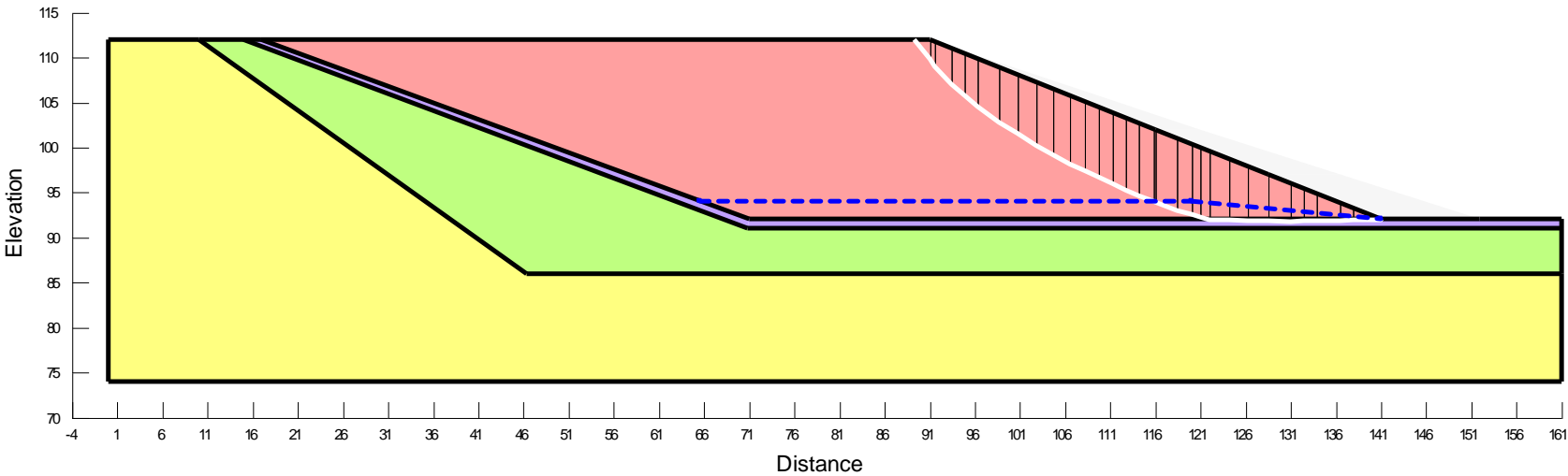
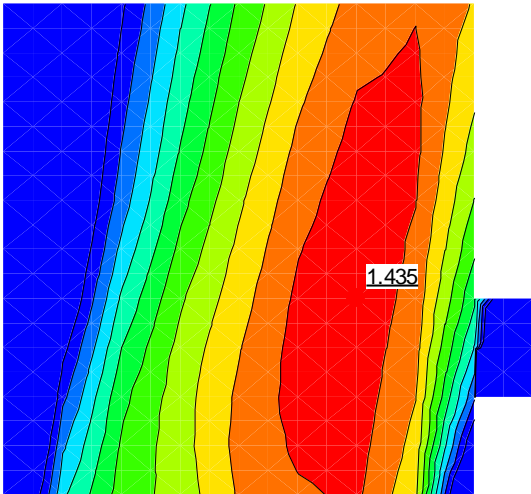
DRAWING SRA1-1

Appendix.

SRA1

File Name: 190318 416.07238.00001 Parrys Landfill.gsz
Name: 1. Mode 1A: Domestic Waste
Method: Morgenstern-Price
Factor of Safety: 1.435

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)	Piezometric Line
<div></div>	Bedrock	Mohr-Coulomb	20	0	45	0	
<div></div>	Domestic Waste	Mohr-Coulomb	11	5	25	0	1
<div></div>	Engineered Clay	Mohr-Coulomb	19	1	24.5	0	
<div></div>	Lining Interface	Mohr-Coulomb	19	0	22	0	



Domestic Waste Mode 1A



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DRAWING SRA2-1





SCALE:

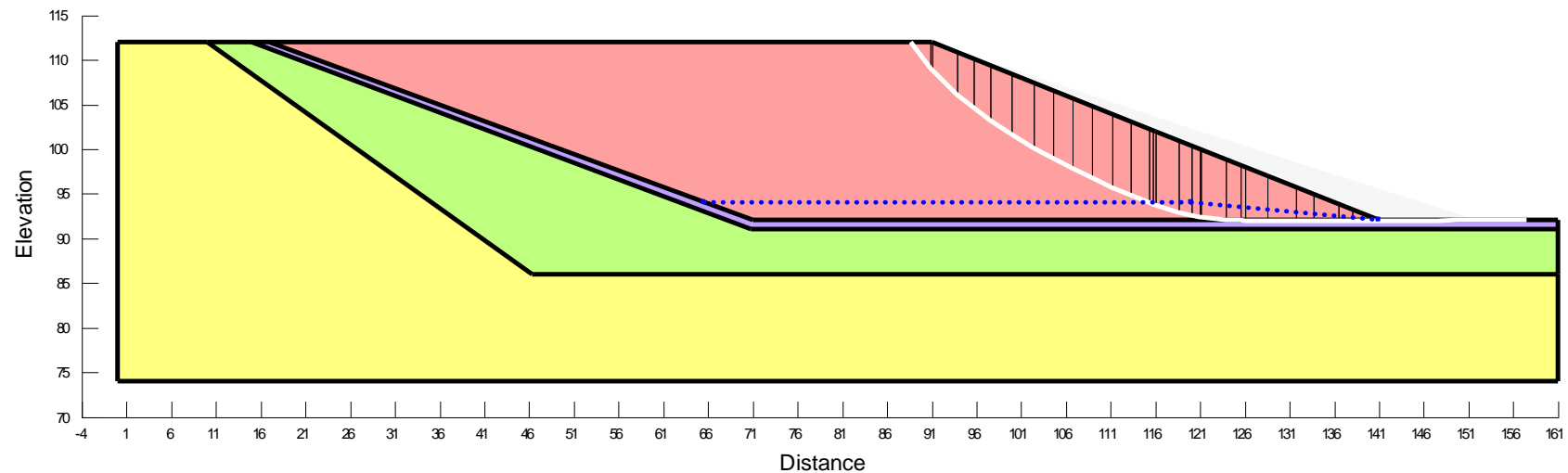
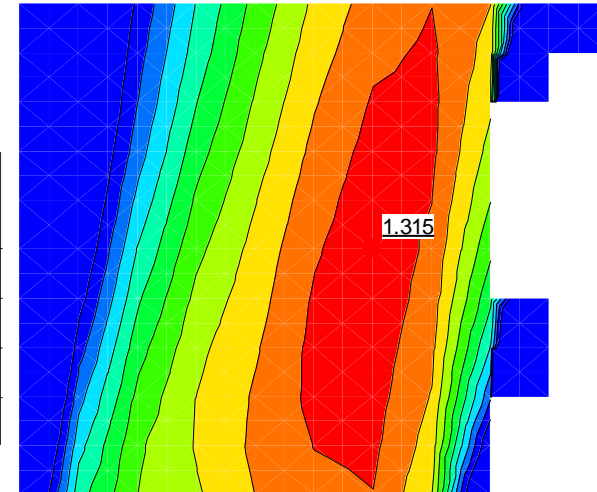
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Appendix.

SRA2

File Name: 190318 416.07238.00001 Parrys Landfill.gsz
 Name: 2. Mode 1B: Domestic Waste
 Method: Morgenstern-Price
 Factor of Safety: 1.315

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)	Piezometric Line	Ru	Include Ru in PWP
	Bedrock	Mohr-Coulomb	20	0	45	0			No
	Domestic Waste	Mohr-Coulomb	11	5	25	0	1	0.1	Yes
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0			No
	Lining Interface	Mohr-Coulomb	19	0	22	0			No



Domestic Waste Mode 1B



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SCALE:

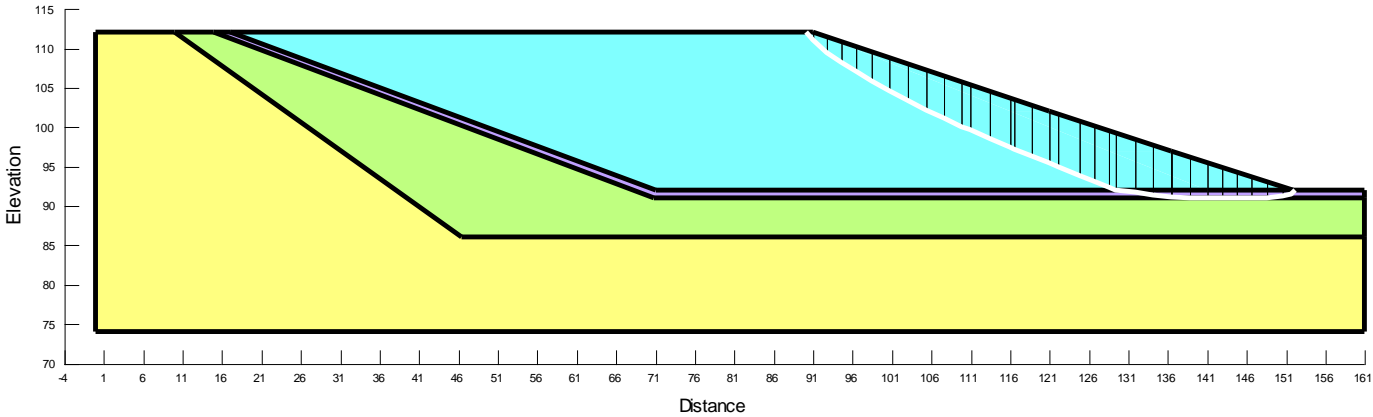
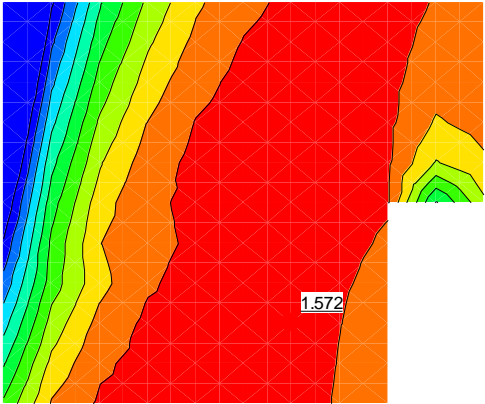
NTS

DRAWING SRA2-2

Appendix.

SRA2

File Name: 181029 416.07238.00001 Parrys Landfill.gsz
Name: 3. Mode 1A: Inert Waste
Method: Morgenstern-Price
Factor of Safety: 1.572



Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)
	Bedrock	Mohr-Coulomb	20	0	45	0
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0
	Inert Waste	Mohr-Coulomb	17	0.5	27	0
	Lining Interface	Mohr-Coulomb	19	0	22	0

Inert Waste Mode 1A



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DRAWING SRA2-3

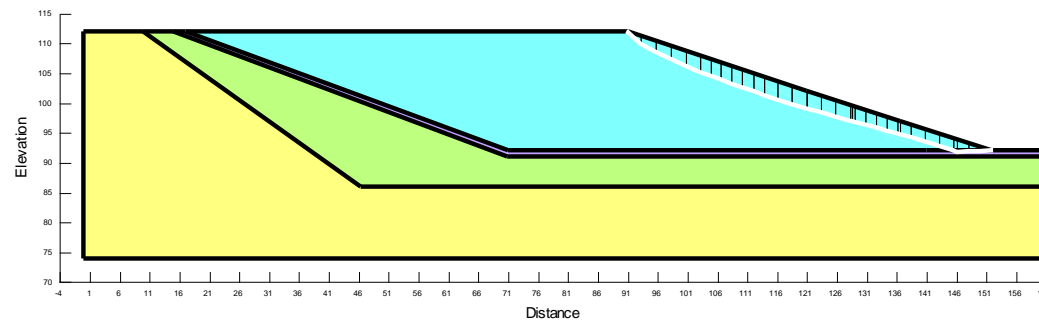
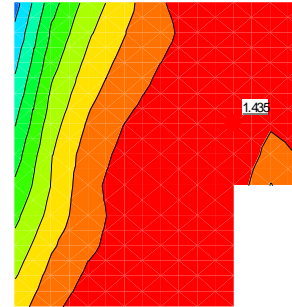
SCALE:

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Appendix.

SRA2

File Name: 181029 416.07238.00001 Parrys Landfill.gsz
 Name: 4. Mode 1B: Inert Waste
 Method: Morgenstern-Price
 Factor of Safety: 1.435



Color	Name	Model	Unit Weight (kN/m³)	Cohesion (kPa)	Phi' (°)	Phi-B (°)	Ru
Yellow	Bedrock	Mohr-Coulomb	20	0	45	0	0
Light Green	Engineered Clay	Mohr-Coulomb	19	1	24.5	0	0
Light Blue	Inert Waste	Mohr-Coulomb	17	0.5	27	0	0.1
Purple	Lining Interface	Mohr-Coulomb	19	0	22	0	0

Inert Waste Mode 1B



Project:
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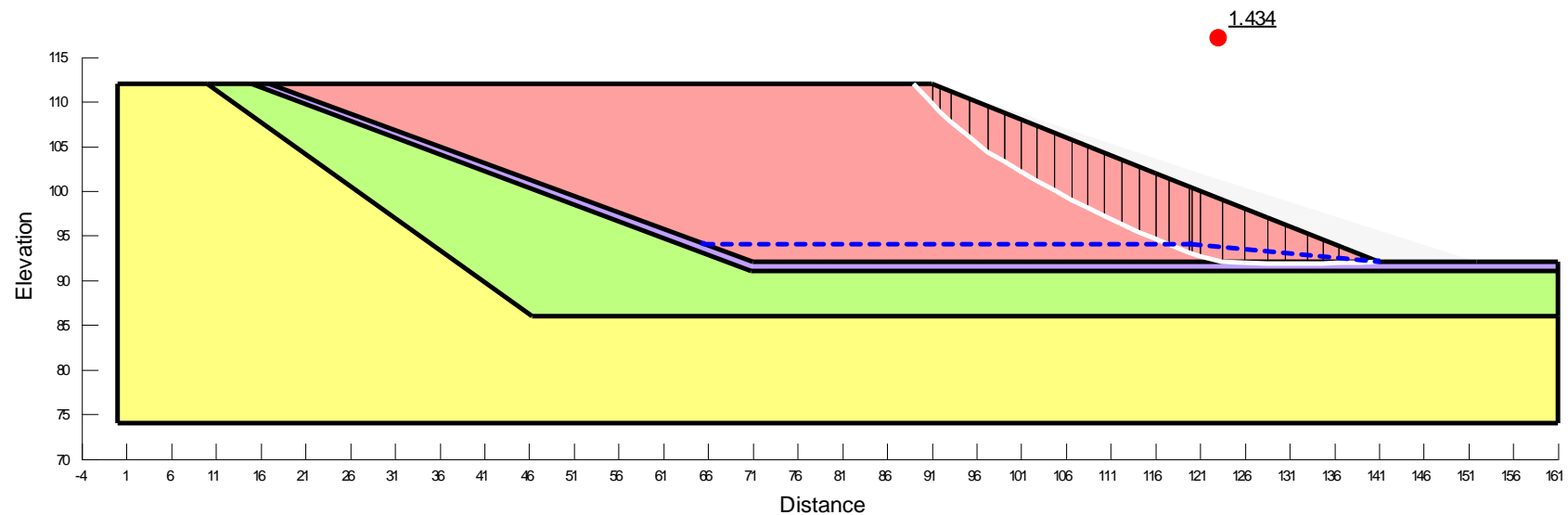
SCALE: NTS

DRAWING SRA2-4

Appendix.
SRA2

File Name: 190318 416.07238.00001 Parrys Landfill.gsz
 Name: 5. Mode 2A: Domestic Waste
 Method: Morgenstern-Price
 Factor of Safety: 1.434

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)	Piezometric Line
	Bedrock	Mohr-Coulomb	20	0	45	0	
	Domestic Waste	Mohr-Coulomb	11	5	25	0	1
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0	
	Lining Interface	Mohr-Coulomb	19	0	22	0	



Domestic Waste Mode 2A



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DRAWING SRA2-5

Appendix.





SRA2

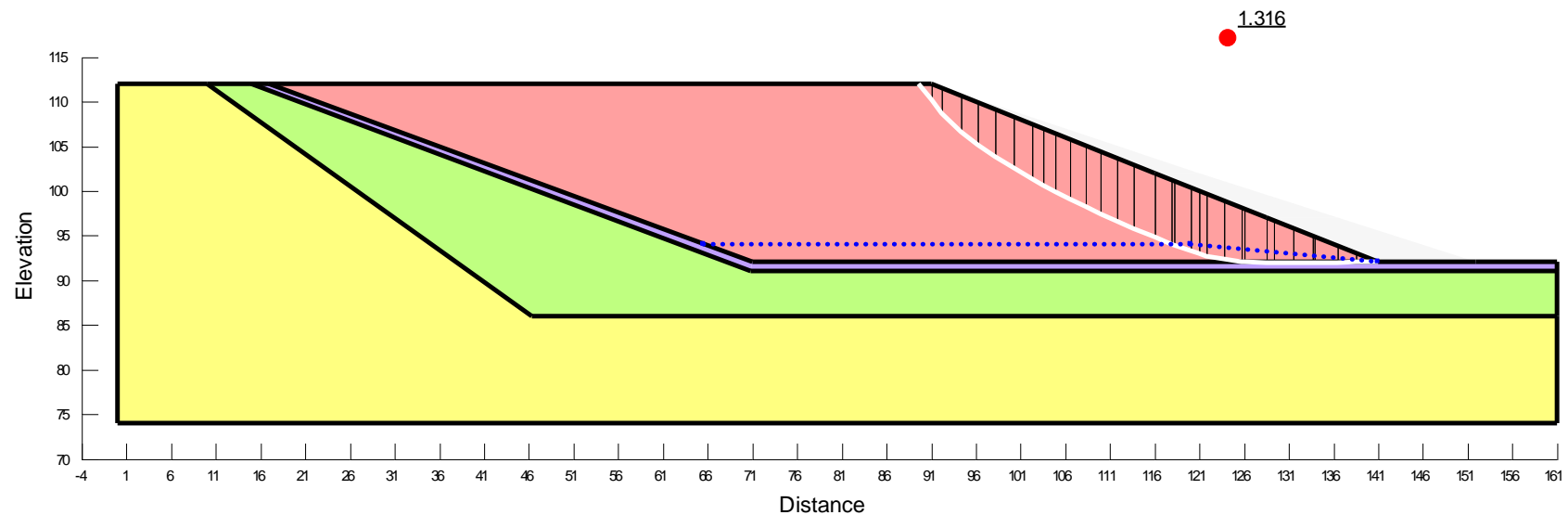
File Name: 190318 416.07238.00001 Parrys Landfill.gsz

Name: 6. Mode 2B: Domestic Waste

Method: Morgenstern-Price

Factor of Safety: 1.316

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)	Piezometric Line	Ru	Include Ru in PWP
	Bedrock	Mohr-Coulomb	20	0	45	0			No
	Domestic Waste	Mohr-Coulomb	11	5	25	0	1	0.1	Yes
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0			No
	Lining Interface	Mohr-Coulomb	19	0	22	0			No



Domestic Waste Mode 2B



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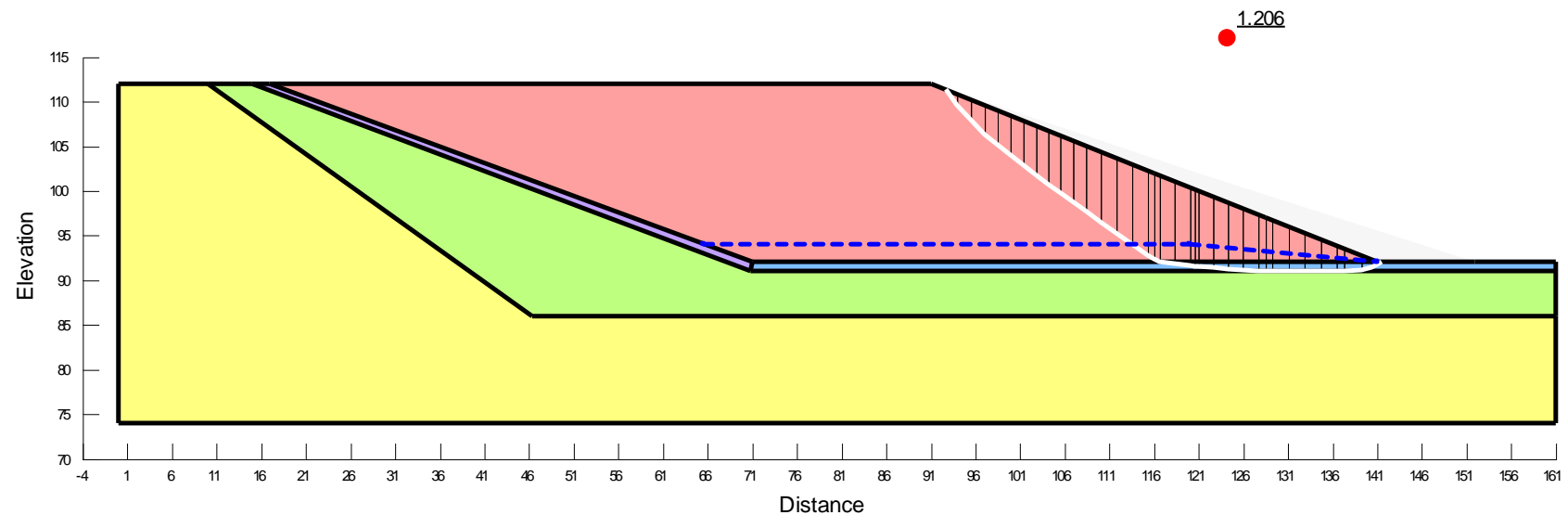
DRAWING SRA2-6

Appendix.

SRA2

File Name: 190318 416.07238.00001 Parrys Landfill.gsz
 Name: 7. Mode 2C: Domestic Waste
 Method: Morgenstern-Price
 Factor of Safety: 1.206

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)	Piezometric Line
	Bedrock	Mohr-Coulomb	20	0	45	0	
	Domestic Waste	Mohr-Coulomb	11	5	25	0	1
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0	
	Lining Interface	Mohr-Coulomb	19	0	22	0	
	Lining Interface (Residual)	Mohr-Coulomb	19	0	14	0	



Domestic Waste Mode 2C



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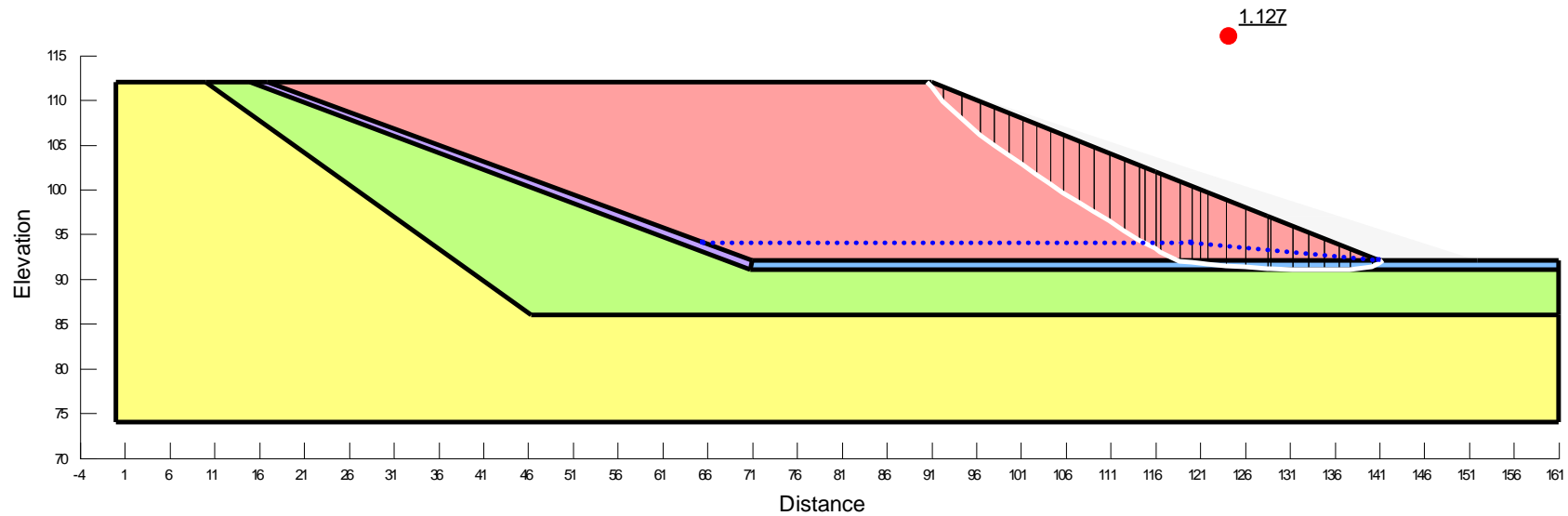
DRAWING SRA2-7

Appendix.

SRA2

File Name: 190318 416.07238.00001 Parrys Landfill.gsz
 Name: 8. Mode 2D: Domestic Waste
 Method: Morgenstern-Price
 Factor of Safety: 1.127

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)	Piezometric Line	Ru	Include Ru in PWP
	Bedrock	Mohr-Coulomb	20	0	45	0			No
	Domestic Waste	Mohr-Coulomb	11	5	25	0	1	0.1	Yes
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0			No
	Lining Interface	Mohr-Coulomb	19	0	22	0			No
	Lining Interface (Residual)	Mohr-Coulomb	19	0	14	0			No



Domestic Waste Mode 2D



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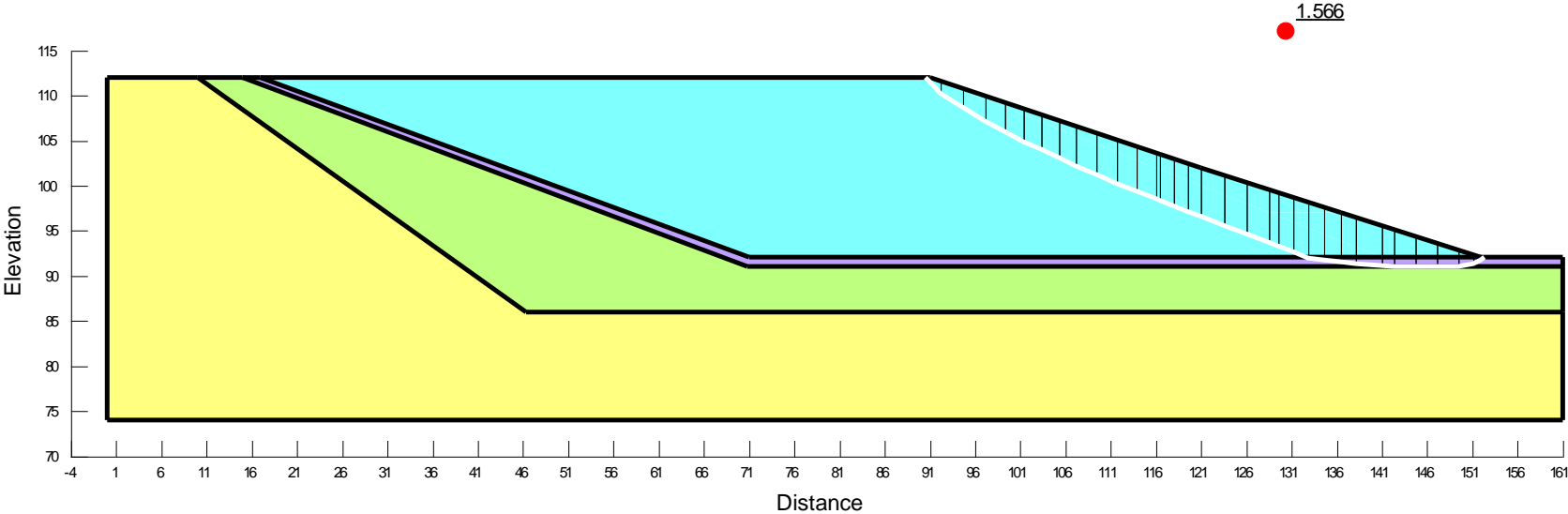
DRAWING SRA2-8

Appendix.

SRA2

File Name: 181029 416.07238.00001 Parrys Landfill.gsz
Name: 9. Mode 2A: Inert Waste
Method: Morgenstern-Price
Factor of Safety: 1.566

Color	Name	Model	Unit Weight (kN/m³)	Cohesion (kPa)	Phi' (°)	Phi-B (°)
<div></div>	Bedrock	Mohr-Coulomb	20	0	45	0
<div></div>	Engineered Clay	Mohr-Coulomb	19	1	24.5	0
<div></div>	Inert Waste	Mohr-Coulomb	17	0.5	27	0
<div></div>	Lining Interface	Mohr-Coulomb	19	0	22	0







Inert Waste Mode 2A

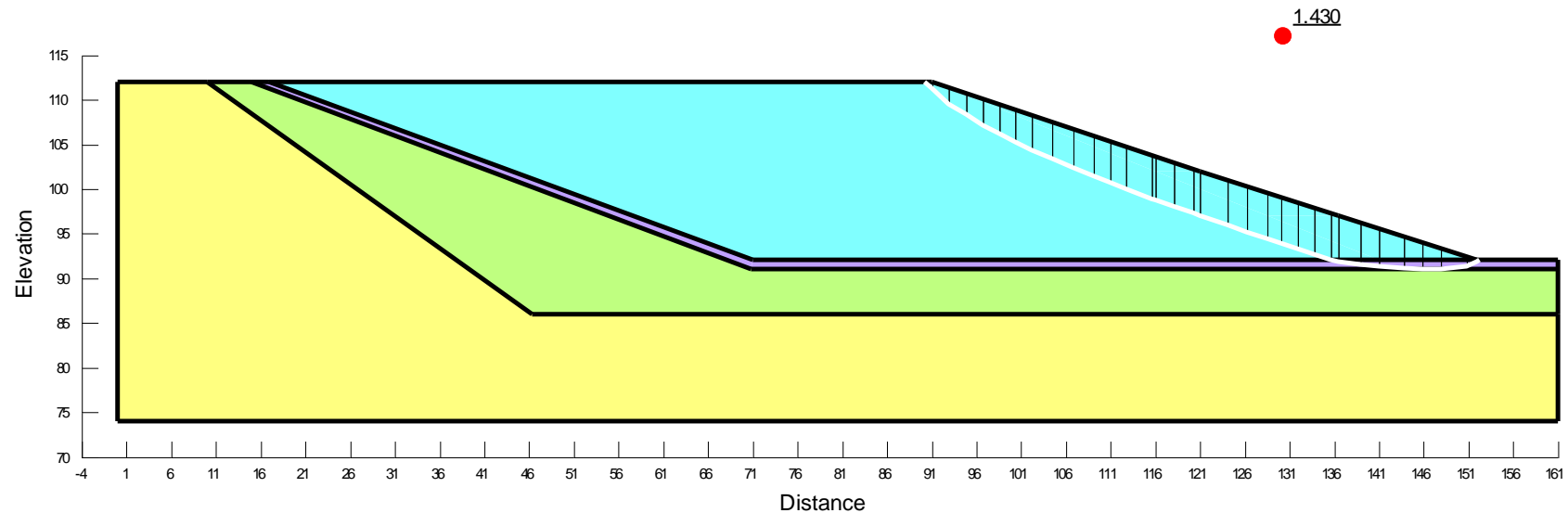


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DRAWING SRA2-9		Appendix. SRA2

File Name: 190318 416.07238.00001 Parrys Landfill.gsz
 Name: 10. Mode 2B: Inert Waste
 Method: Morgenstern-Price
 Factor of Safety: 1.430

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)	Ru
	Bedrock	Mohr-Coulomb	20	0	45	0	0
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0	0
	Inert Waste	Mohr-Coulomb	17	0.5	27	0	0.1
	Lining Interface	Mohr-Coulomb	19	0	22	0	0



Inert Waste Mode 2B



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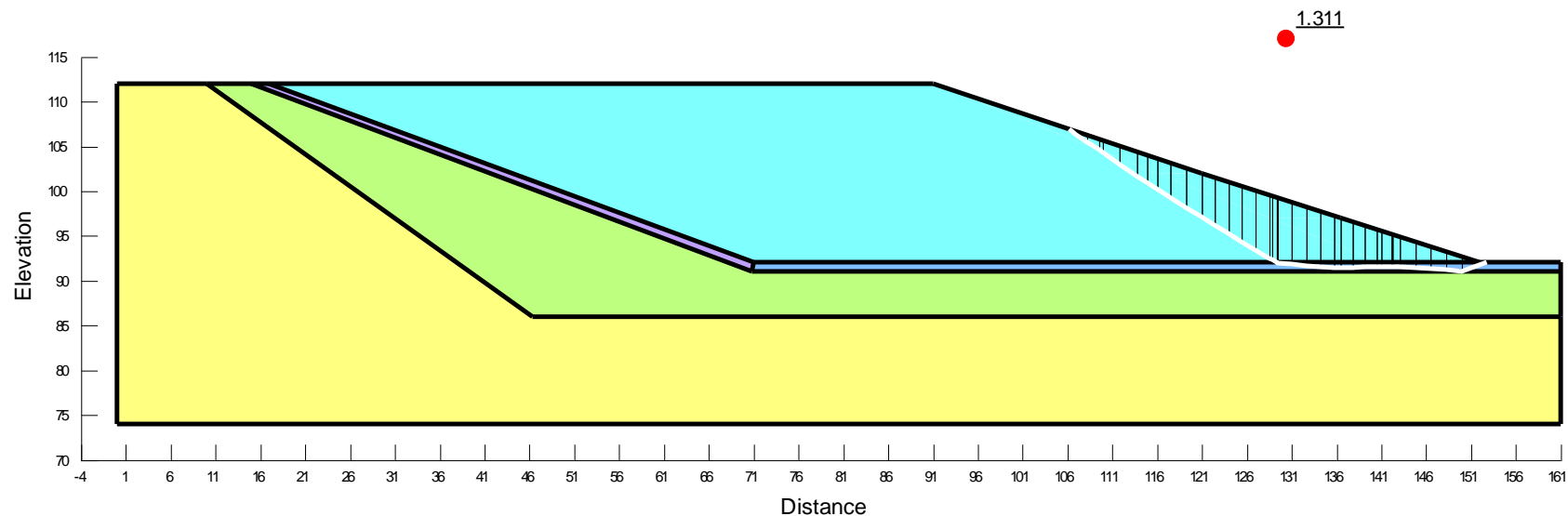
DRAWING SRA2-10

Appendix.

SRA2

File Name: 181029 416.07238.00001 Parrys Landfill.gsz
 Name: 11. Mode 2C: Inert Waste
 Method: Morgenstern-Price
 Factor of Safety: 1.311

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)
	Bedrock	Mohr-Coulomb	20	0	45	0
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0
	Inert Waste	Mohr-Coulomb	17	0.5	27	0
	Lining Interface	Mohr-Coulomb	19	0	22	0
	Lining Interface (Residual)	Mohr-Coulomb	19	0	14	0



Inert Waste Mode 2C



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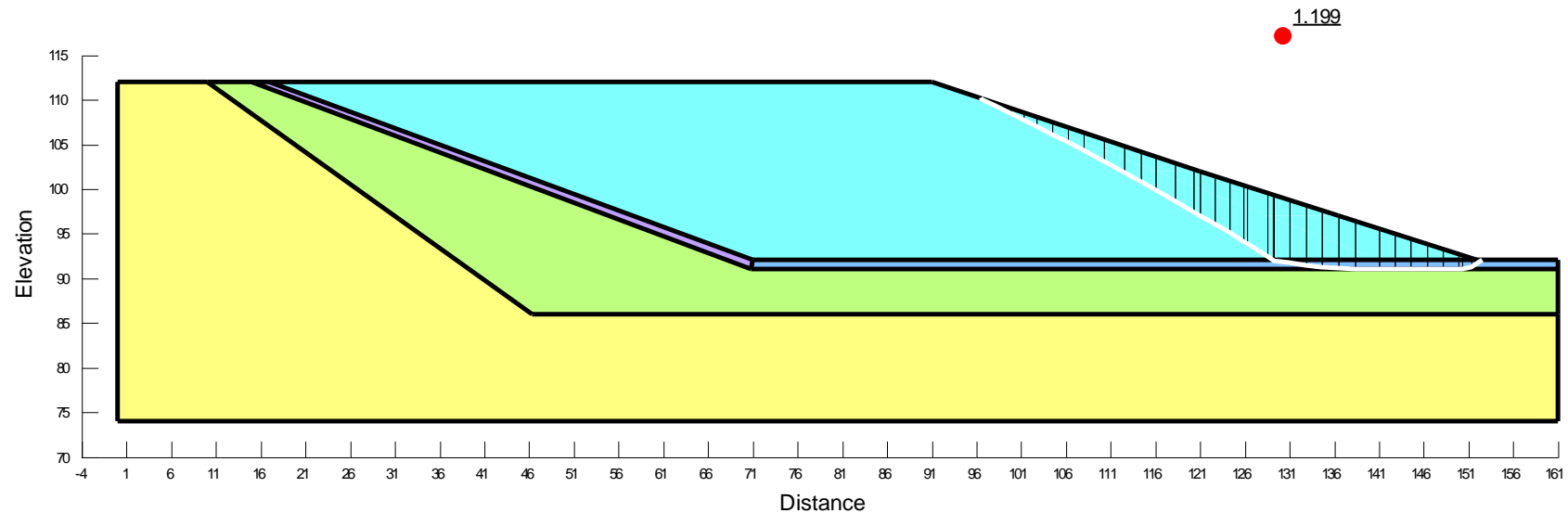
SCALE: NTS

DRAWING SRA2-11

Appendix.
SRA2

File Name: 190318 416.07238.00001 Parrys Landfill.gsz
 Name: 12. Mode 2D: Inert Waste
 Method: Morgenstern-Price
 Factor of Safety: 1.199

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)	Ru
	Bedrock	Mohr-Coulomb	20	0	45	0	0
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0	0
	Inert Waste	Mohr-Coulomb	17	0.5	27	0	0.1
	Lining Interface	Mohr-Coulomb	19	0	22	0	0
	Lining Interface (Residual)	Mohr-Coulomb	19	0	14	0	0



Inert Waste Mode 2D



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



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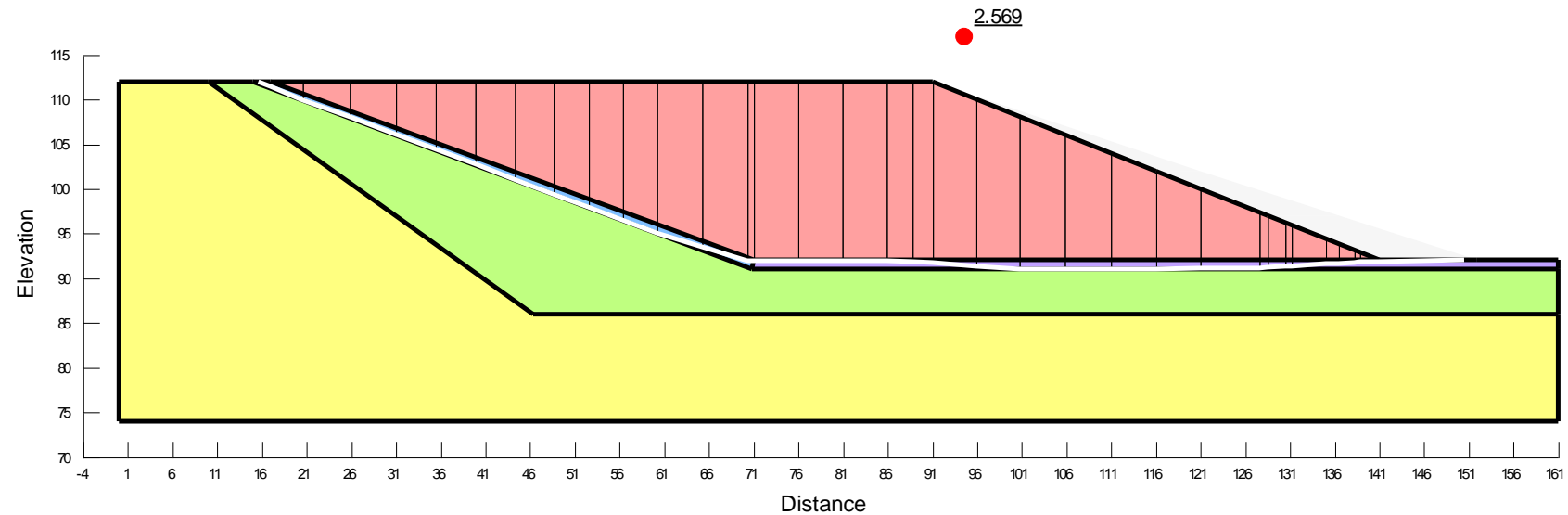
DRAWING SRA2-12

Appendix.

SRA2

File Name: 181029 416.07238.00001 Parrys Landfill.gsz
 Name: 13. Mode 3A: Domestic Waste
 Method: Morgenstern-Price
 Factor of Safety: 2.569

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)
	Bedrock	Mohr-Coulomb	20	0	45	0
	Domestic Waste	Mohr-Coulomb	11	5	25	0
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0
	Lining Interface	Mohr-Coulomb	19	0	22	0
	Lining Interface (Residual)	Mohr-Coulomb	19	0	14	0



Domestic Waste Mode 3A



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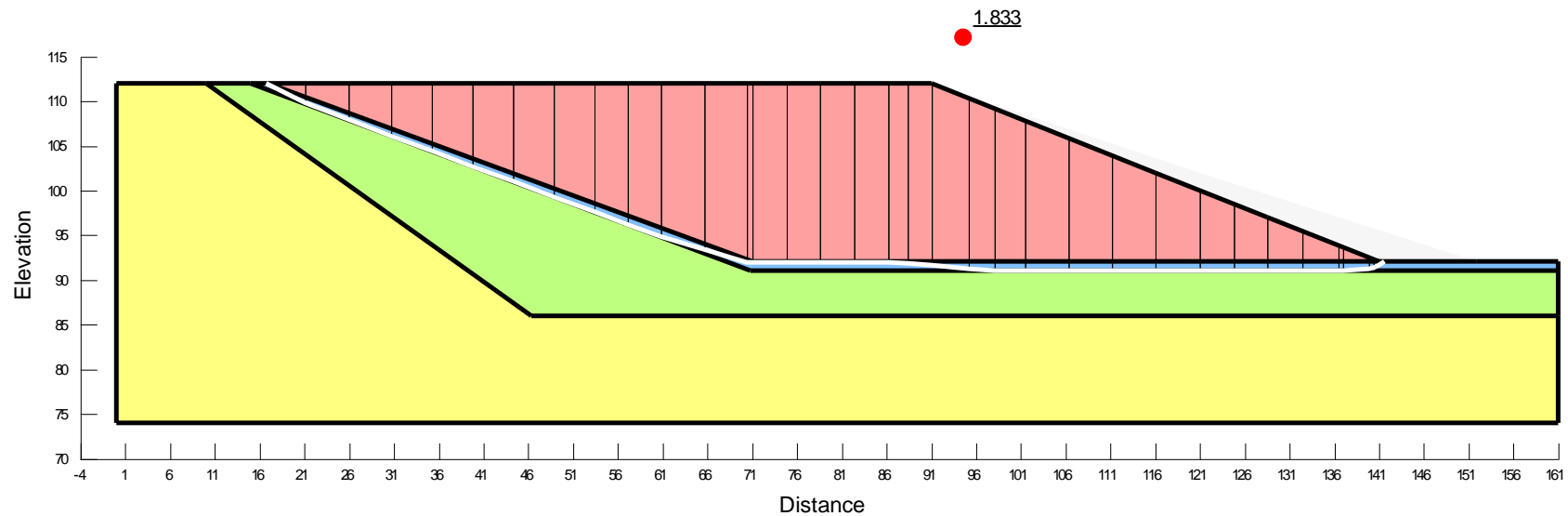
DRAWING SRA2-13

Appendix.

SRA2

File Name: 181029 416.07238.00001 Parrys Landfill.gsz
 Name: 14. Mode 3B: Domestic Waste
 Method: Morgenstern-Price
 Factor of Safety: 1.833

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)
	Bedrock	Mohr-Coulomb	20	0	45	0
	Domestic Waste	Mohr-Coulomb	11	5	25	0
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0
	Lining Interface (Residual)	Mohr-Coulomb	19	0	14	0



Domestic Waste Mode 3B



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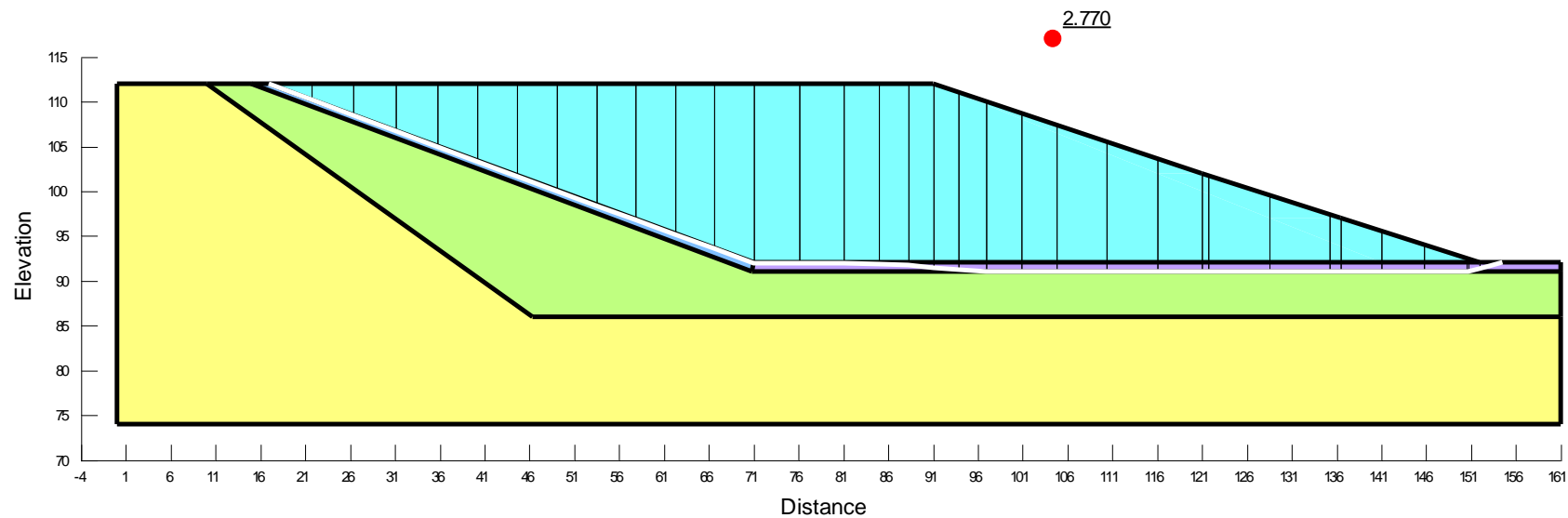
DRAWING SRA2-14

Appendix.

SRA2

File Name: 181029 416.07238.00001 Parrys Landfill.gsz
 Name: 15. Mode 3A: Inert Waste
 Method: Morgenstern-Price
 Factor of Safety: 2.770

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)
	Bedrock	Mohr-Coulomb	20	0	45	0
	Engineered Clay	Mohr-Coulomb	19	1	24.5	0
	Inert Waste	Mohr-Coulomb	17	0.5	27	0
	Lining Interface	Mohr-Coulomb	19	0	22	0
	Lining Interface (Residual)	Mohr-Coulomb	19	0	14	0



Inert Waste Mode 3A



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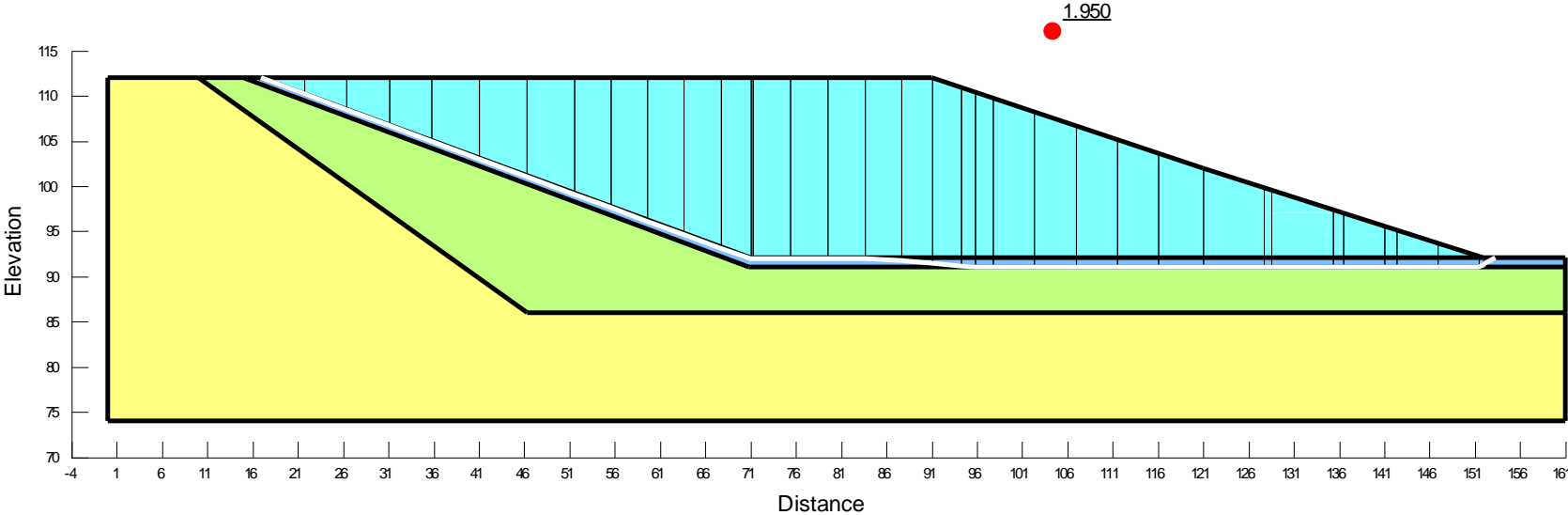
DRAWING SRA2-15

Appendix.

SRA2

File Name: 181029 416.07238.00001 Parrys Landfill.gsz
Name: 16. Mode 3B: Inert Waste
Method: Morgenstern-Price
Factor of Safety: 1.950

Color	Name	Model	Unit Weight (kN/m³)	Cohesion' (kPa)	Phi' (°)	Phi-B (°)
<div></div>	Bedrock	Mohr-Coulomb	20	0	45	0
<div></div>	Engineered Clay	Mohr-Coulomb	19	1	24.5	0
<div></div>	Inert Waste	Mohr-Coulomb	17	0.5	27	0
<div></div>	Lining Interface (Residual)	Mohr-Coulomb	19	0	14	0



Inert Waste Mode 3B



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	STABILITY RISK ASSESSMENT		
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	Drawing:	DRAWING SRA2-16	
			Appendix. SRA2

File Name: 181029 416.07238.00001 Parrys Landfill Integrity.gsz
 Name: Load/Deformation
 Parent: Insitu

Name: Domestic Waste
 Model: Linear Elastic (Total)
 Young's Modulus (E): 550 kPa
 Unit Weight: 11 kN/m³
 Poisson's Ratio: 0.29

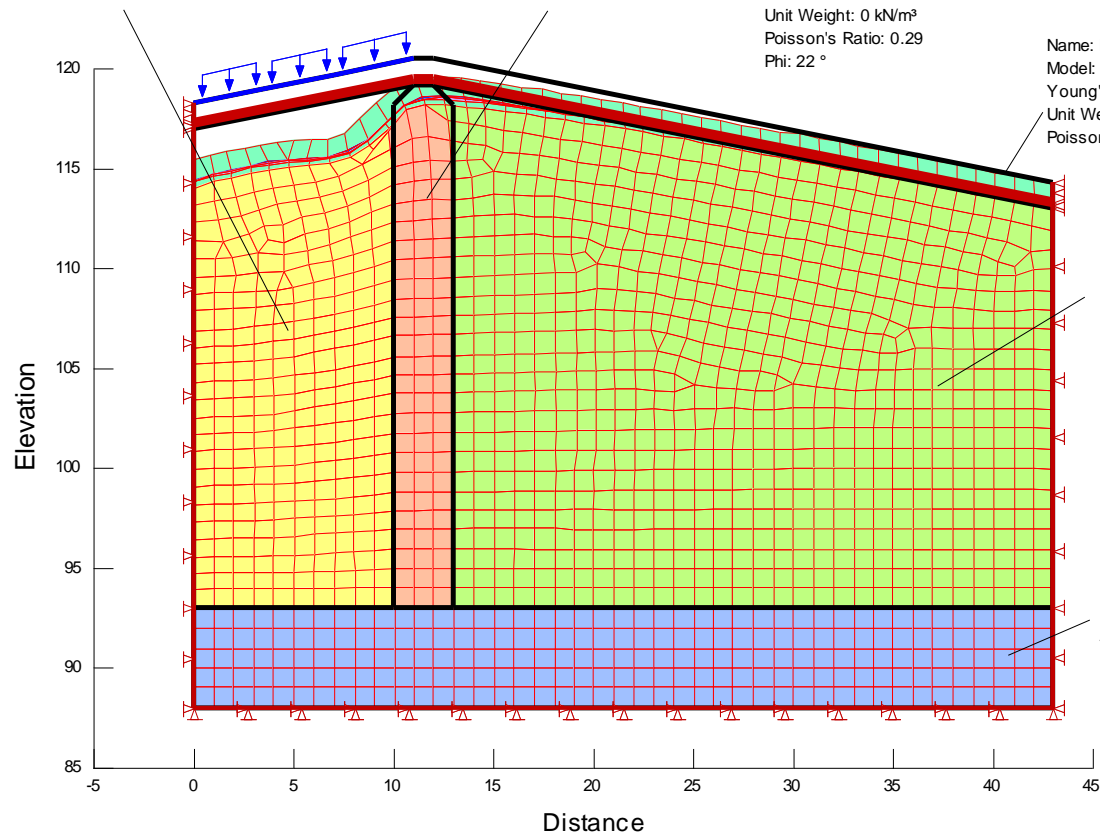
Name: Engineered Bund
 Model: Linear Elastic (Total)
 Young's Modulus (E): 10,000 kPa
 Unit Weight: 19 kN/m³
 Poisson's Ratio: 0.29

Name: Upper Interface
 Model: Elastic-Plastic (Total)
 Young's Modulus (E): 1,000 kPa
 Cohesion: 0.5 kPa
 Unit Weight: 0 kN/m³
 Poisson's Ratio: 0.29
 Phi: 22 °
 Name: Lower Interface
 Model: Elastic-Plastic (Total)
 Young's Modulus (E): 1,000 kPa
 Cohesion: 0.5 kPa
 Unit Weight: 0 kN/m³
 Poisson's Ratio: 0.29
 Phi: 22 °

Name: Restoration Soils
 Model: Linear Elastic (Total)
 Young's Modulus (E): 10,000 kPa
 Unit Weight: 19 kN/m³
 Poisson's Ratio: 0.29

Name: Inert Waste
 Model: Linear Elastic (Total)
 Young's Modulus (E): 10,000 kPa
 Unit Weight: 19 kN/m³
 Poisson's Ratio: 0.29

Name: Subgrade
 Model: Linear Elastic (Total)
 Young's Modulus (E): 130,000 kPa
 Unit Weight: 19 kN/m³
 Poisson's Ratio: 0.29



Waste settlement



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PARRYS QUARRY LANDFILL

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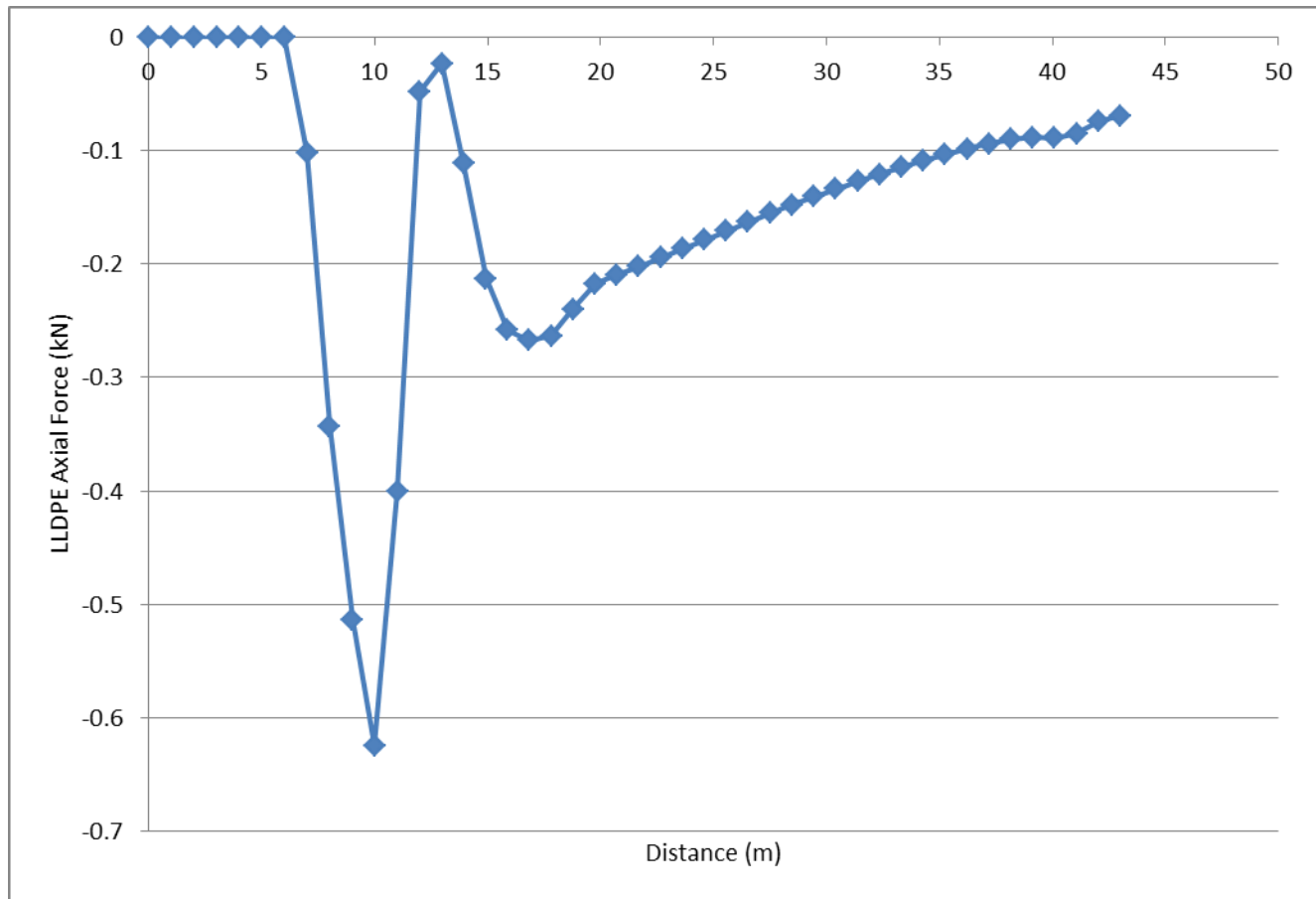
SCALE:

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Appendix.

SRA3



Axial Force of LLDPE across bund



Project:
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DRAWING SRA3-2

Appendix.

SRA3