

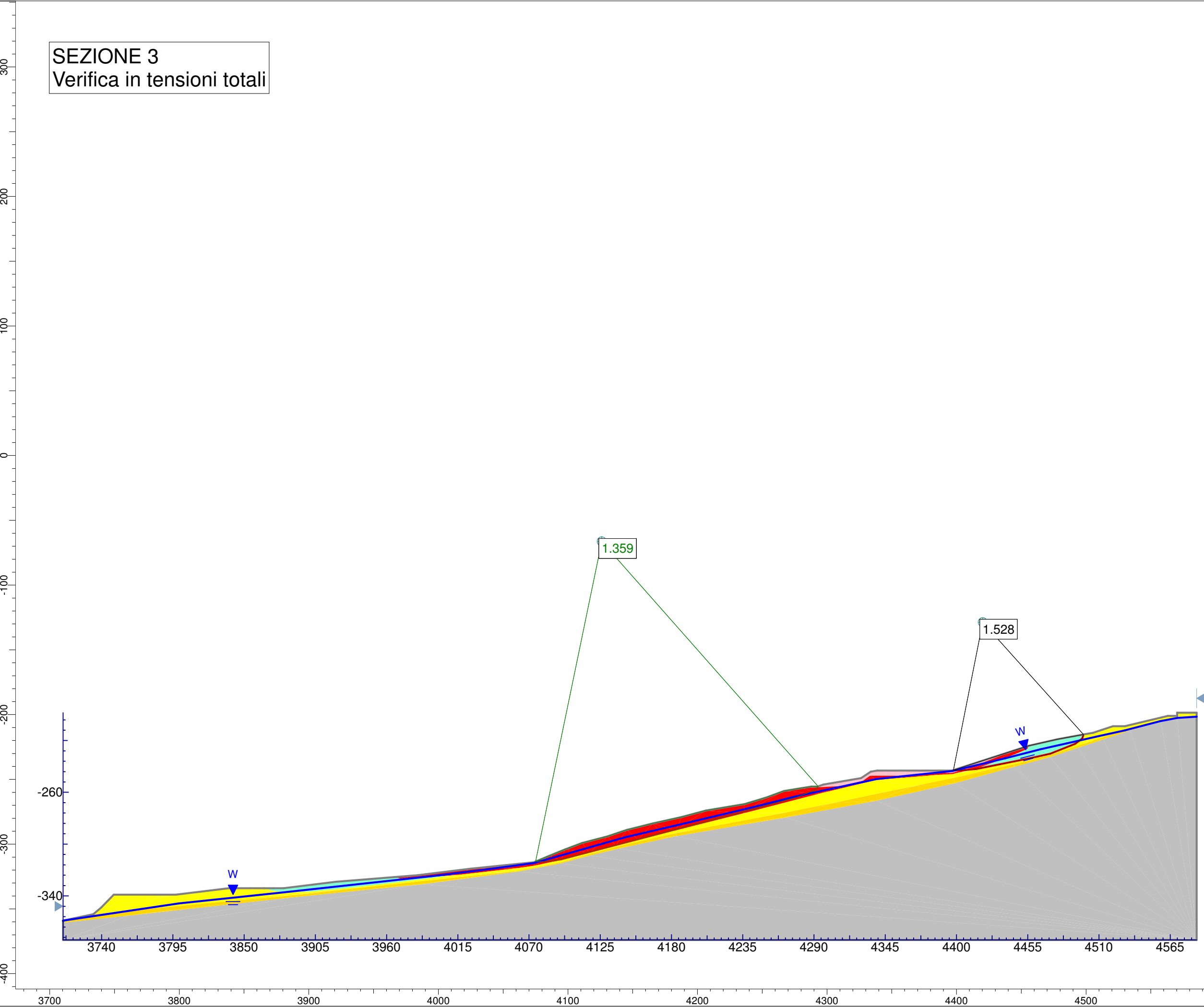
ALLEGATO N. 4

VERIFICHE DI STABILITA' – METODI PSEUDOSTATICI

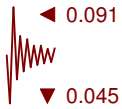
GEMMANO

SEZIONE 3
Verifica in tensioni totali

Analysis Methods
Janbu simplified
Material Properties
Material: Lit_a1
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 42 kPa
Water Surface: None
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 42 kPa
Water Surface: None
Material: Lit_R
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None
Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 60 kPa
Water Surface: None
Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None
Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 3
Verifica in tensioni totali con sisma



Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.091
Seismic Load Coefficient (Vertical): 0.045

Material Properties

Material: Lit_a1
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 42 kPa
Water Surface: None

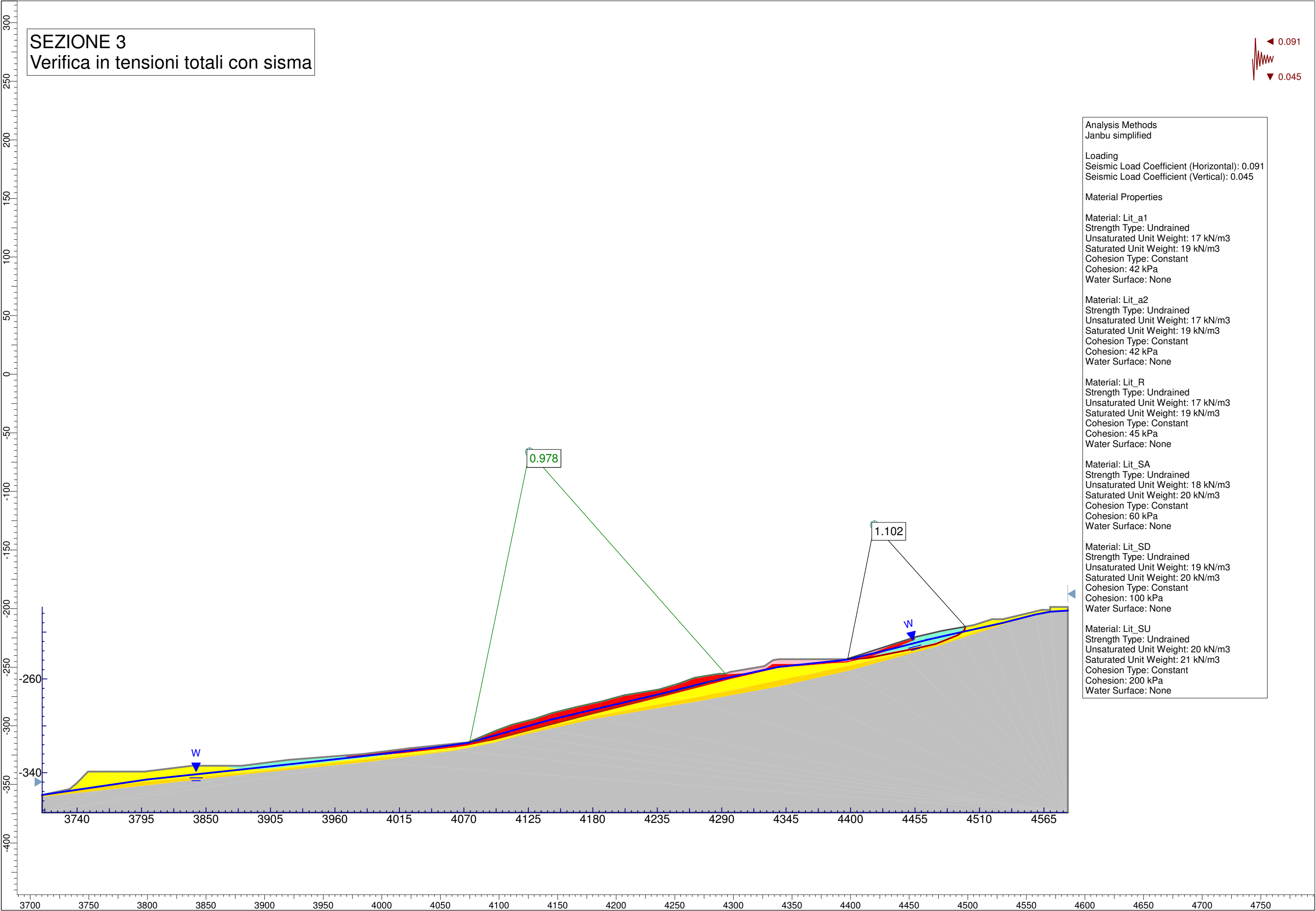
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 42 kPa
Water Surface: None

Material: Lit_R
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 60 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 3
Verifica accelerazione sismica critica
Sup. scivolamento - a1

0.0946 ±

Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.0946

Material Properties

Material: Lit_a1
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 42 kPa
Water Surface: None

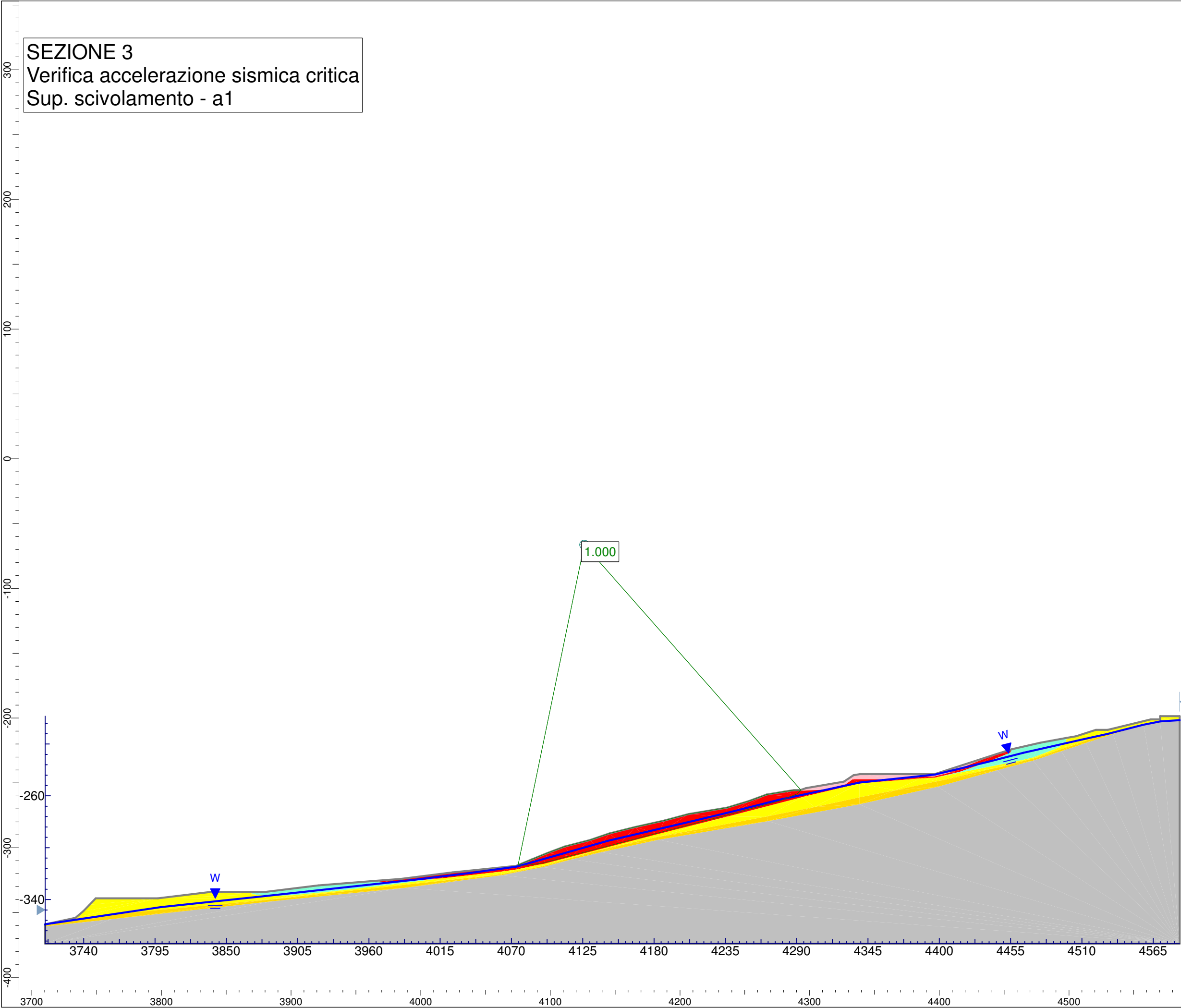
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 42 kPa
Water Surface: None

Material: Lit_R
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None

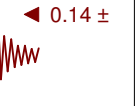
Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 60 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



Verifica accelerazione sismica critica
Sup. scivolamento - a2



Loading Seismic Load Coefficient (Horizontal): 0.14
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Material: Lit_a1
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 42 kPa
Water Surface: None

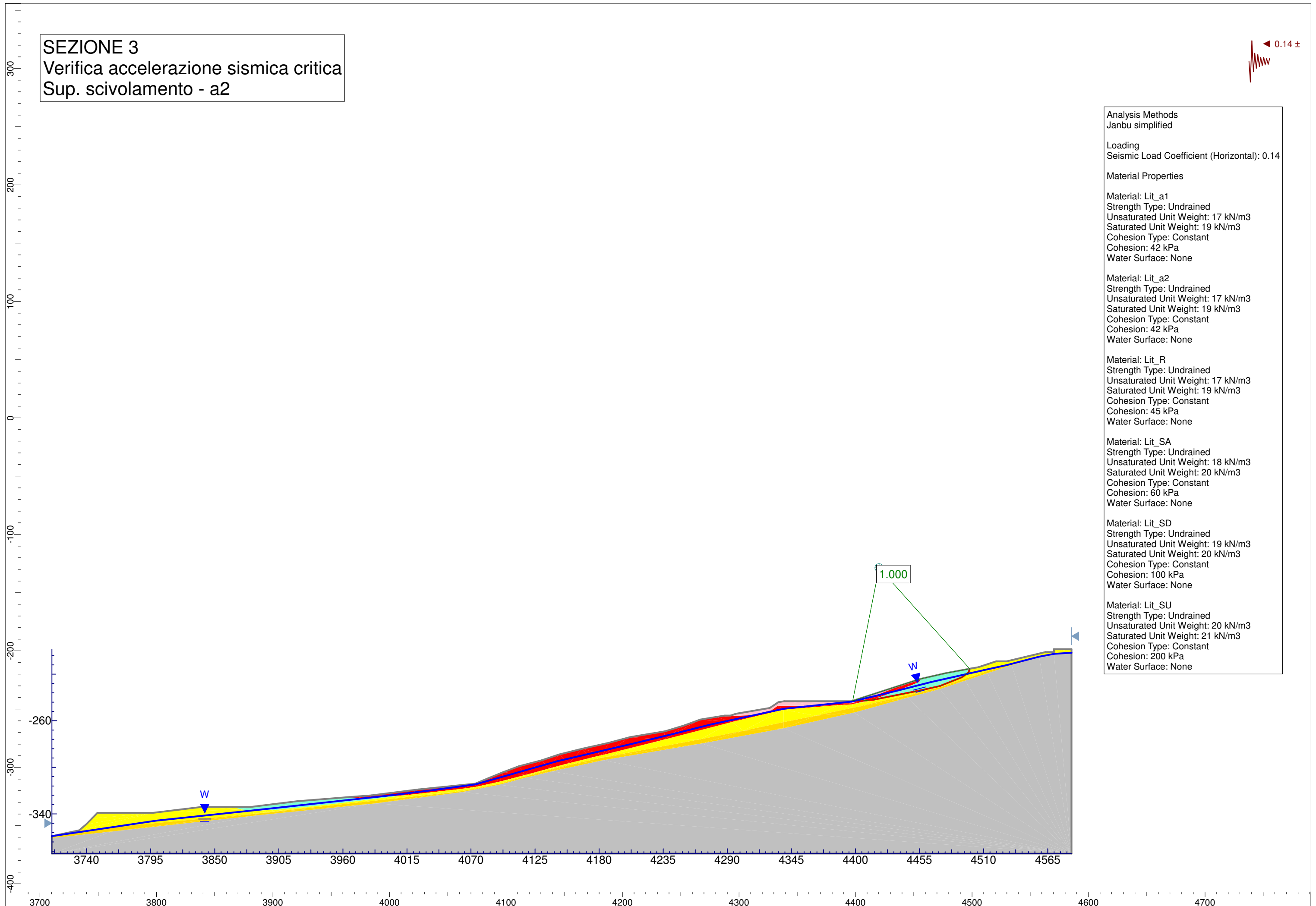
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 42 kPa
Water Surface: None

Material: Lit_R
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m³
Saturated Unit Weight: 19 kN/m³
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None

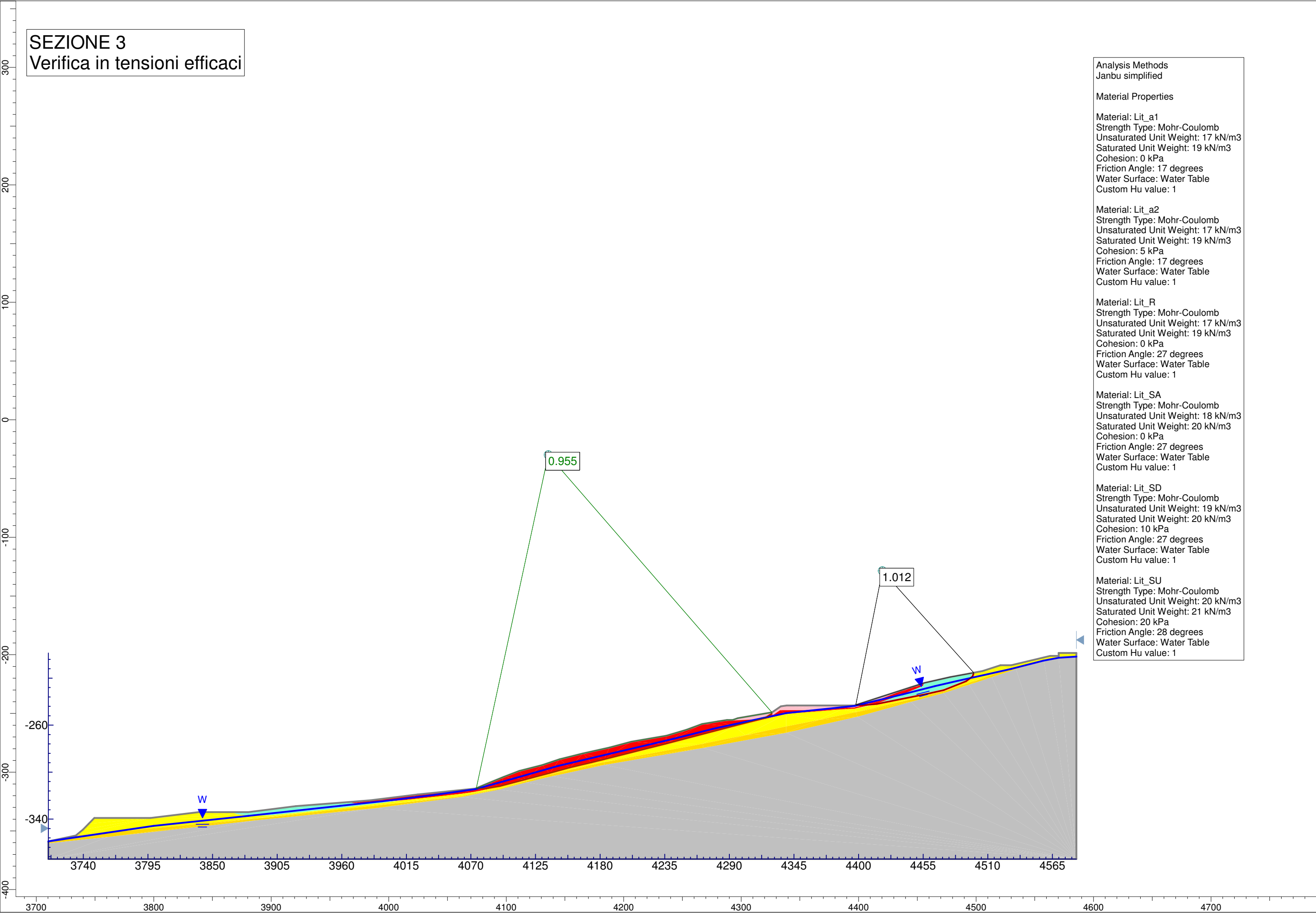
Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m³
Saturated Unit Weight: 20 kN/m³
Cohesion Type: Constant
Cohesion: 60 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m³
Saturated Unit Weight: 20 kN/m³
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

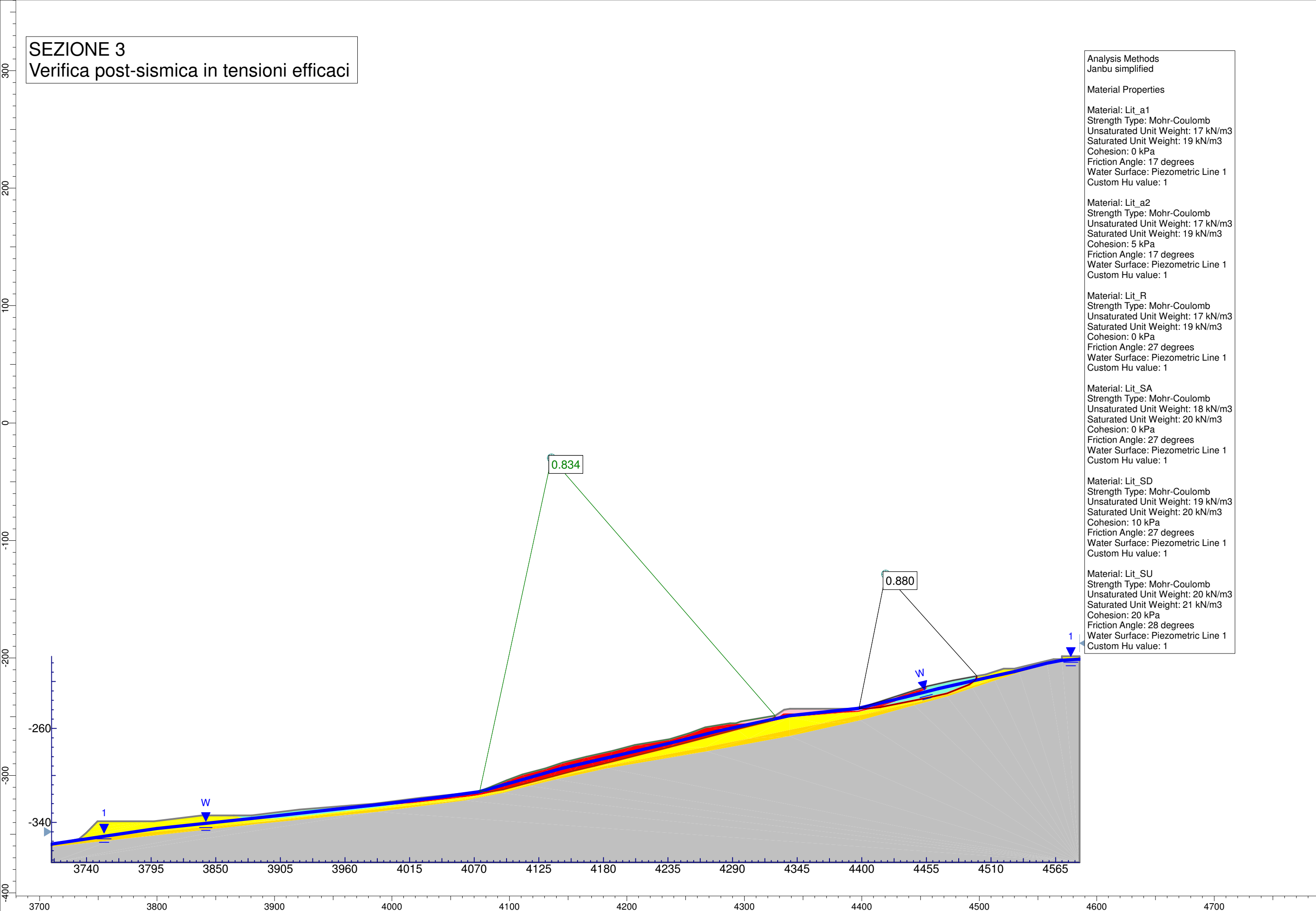
Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m³
Saturated Unit Weight: 21 kN/m³
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 3
Verifica in tensioni efficaci



SEZIONE 3
Verifica post-sismica in tensioni efficaci



SEZIONE 4
Verifica in tensioni totali

Analysis Methods
Janbu simplified

Material Properties

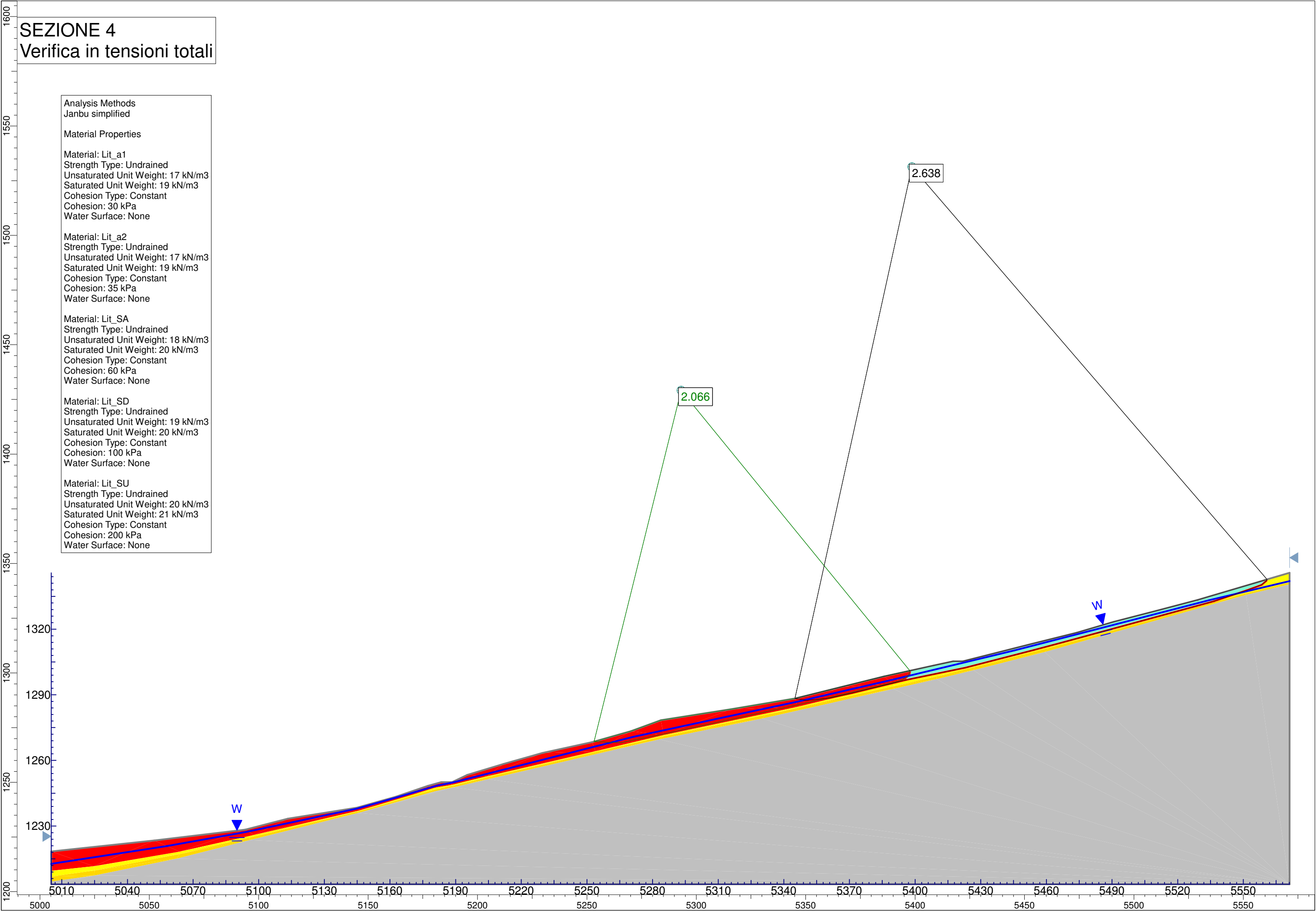
Material: Lit_a1
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 30 kPa
Water Surface: None

Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 35 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 60 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



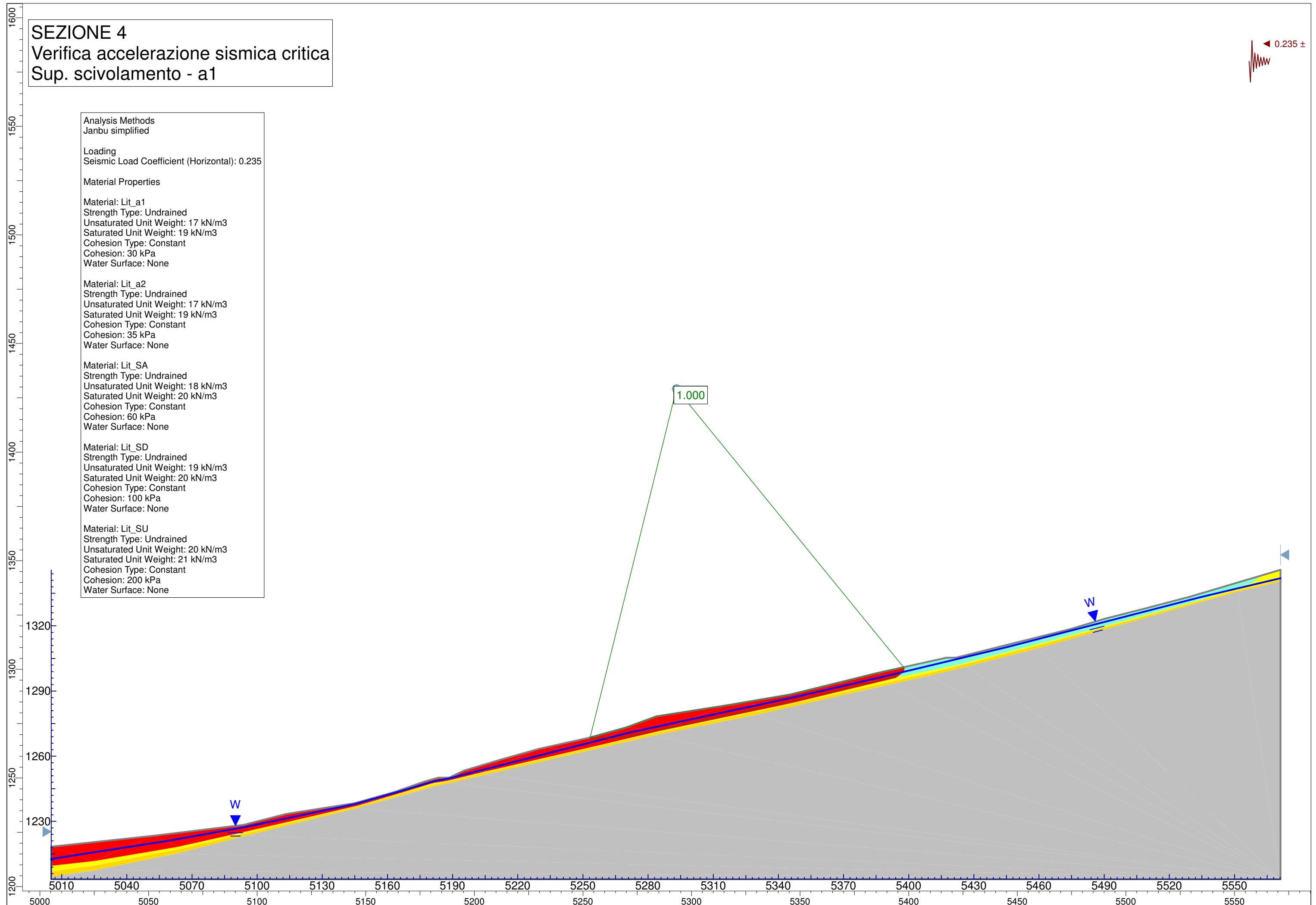
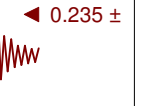
Verifica in tensioni totali - condizioni sismiche

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



Verifica accelerazione sismica critica
Sup. scivolamento - a1

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 4
Verifica accelerazione sismica critica
Sup. scivolamento - a2

0.406 ±

Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.406

Material Properties

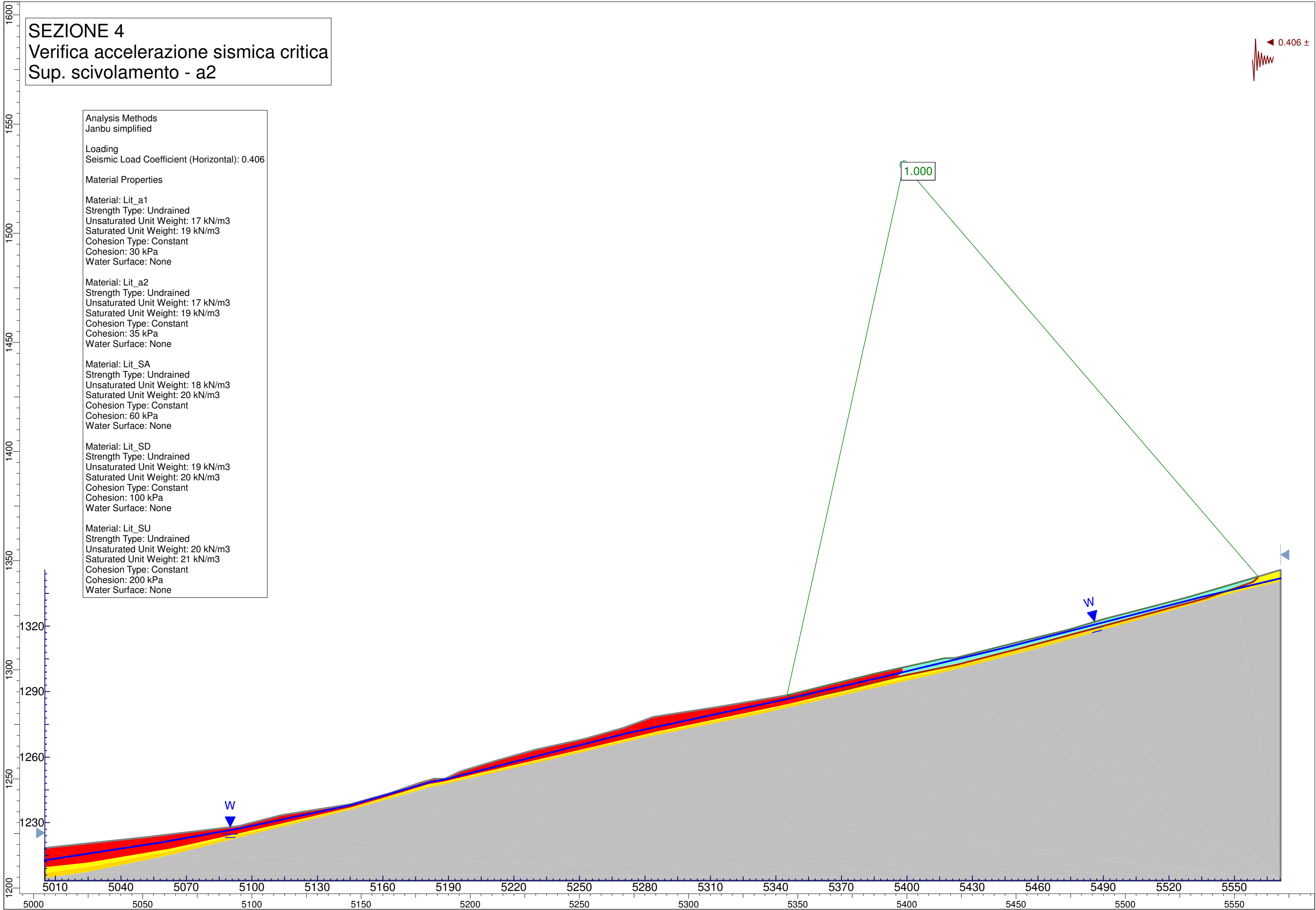
Material: Lit_a1
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 30 kPa
Water Surface: None

Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 35 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 60 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 4
Verifica in tensioni efficaci

Analysis Methods
Janbu simplified

Material Properties

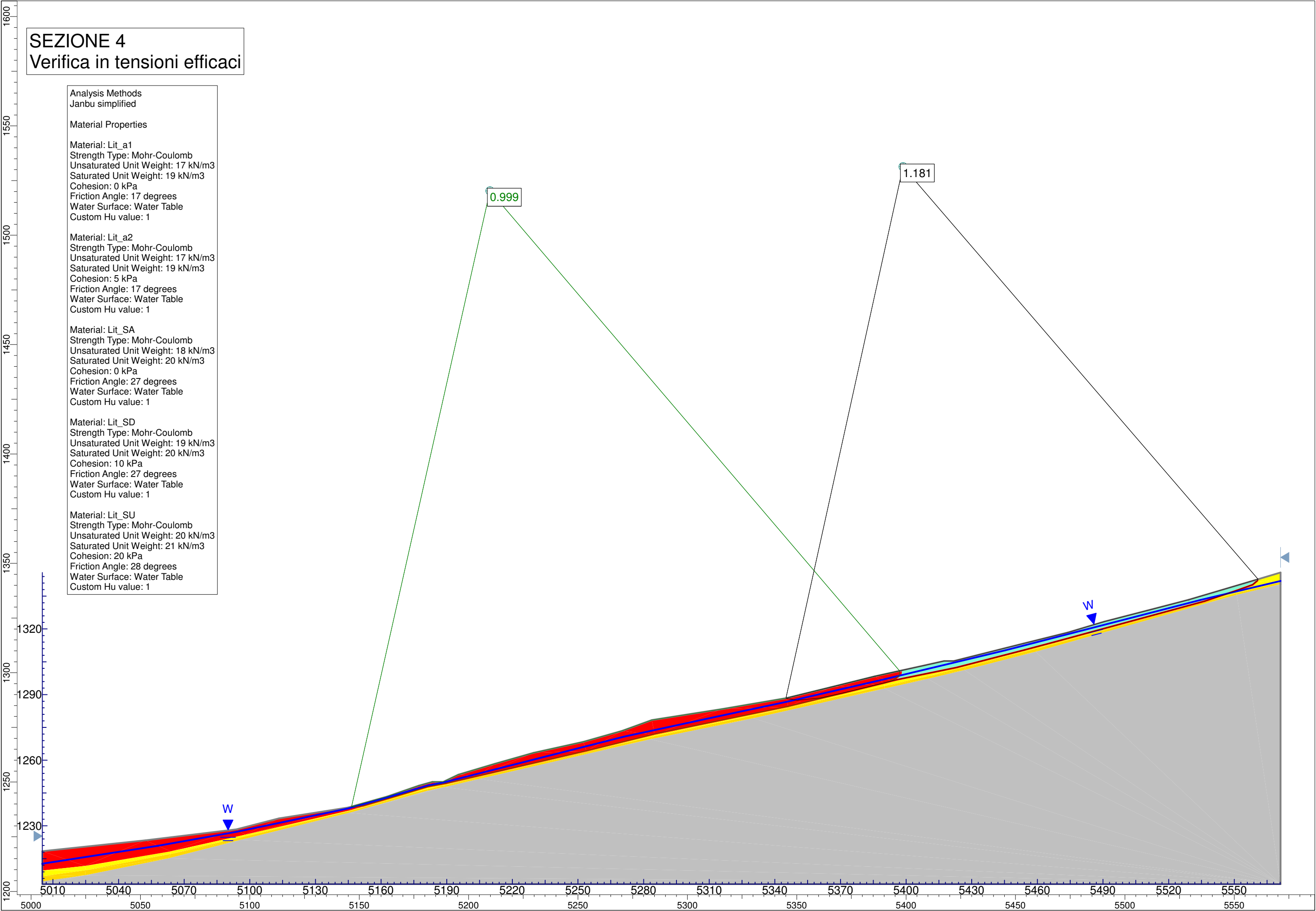
Material: Lit_a1
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion: 0 kPa
Friction Angle: 17 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_a2
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion: 5 kPa
Friction Angle: 17 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_SA
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 0 kPa
Friction Angle: 27 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_SD
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 10 kPa
Friction Angle: 27 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_SU
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion: 20 kPa
Friction Angle: 28 degrees
Water Surface: Water Table
Custom Hu value: 1



SEZIONE 4

Verifica in tensioni efficaci - condizione post sismica

Analysis Methods

Janbu simplified

Material Properties

Material: Lit_a1

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 17 kN/m3

Saturated Unit Weight: 19 kN/m3

Cohesion: 0 kPa

Friction Angle: 17 degrees

Water Surface: Piezometric Line 1

Custom Hu value: 1

Material: Lit_a2

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 17 kN/m3

Saturated Unit Weight: 19 kN/m3

Cohesion: 5 kPa

Friction Angle: 17 degrees

Water Surface: Piezometric Line 1

Custom Hu value: 1

Material: Lit_SA

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 18 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion: 0 kPa

Friction Angle: 27 degrees

Water Surface: Piezometric Line 1

Custom Hu value: 1

Material: Lit_SD

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 19 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion: 10 kPa

Friction Angle: 27 degrees

Water Surface: Piezometric Line 1

Custom Hu value: 1

Material: Lit_SU

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 20 kN/m3

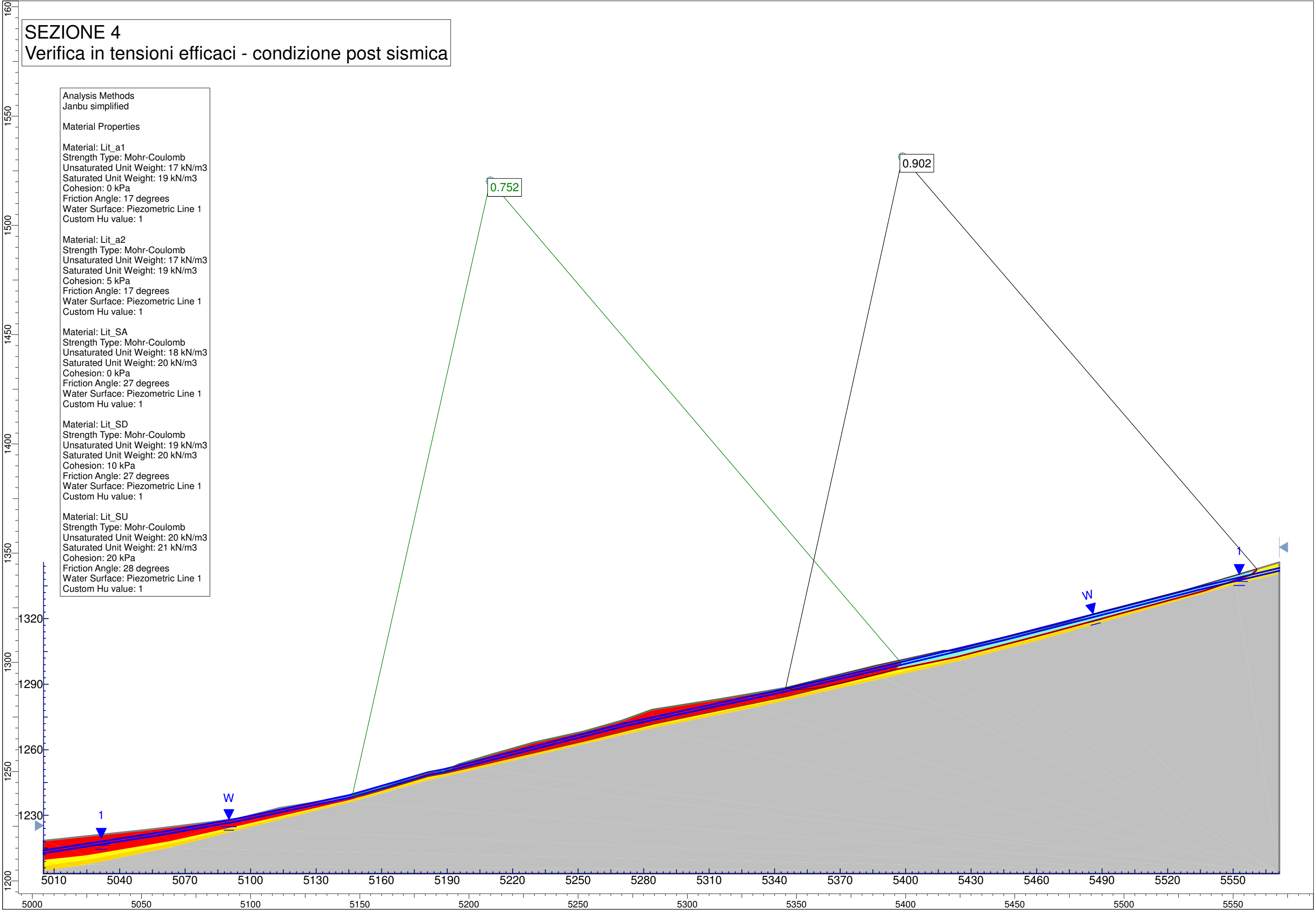
Saturated Unit Weight: 21 kN/m3

Cohesion: 20 kPa

Friction Angle: 28 degrees

Water Surface: Piezometric Line 1

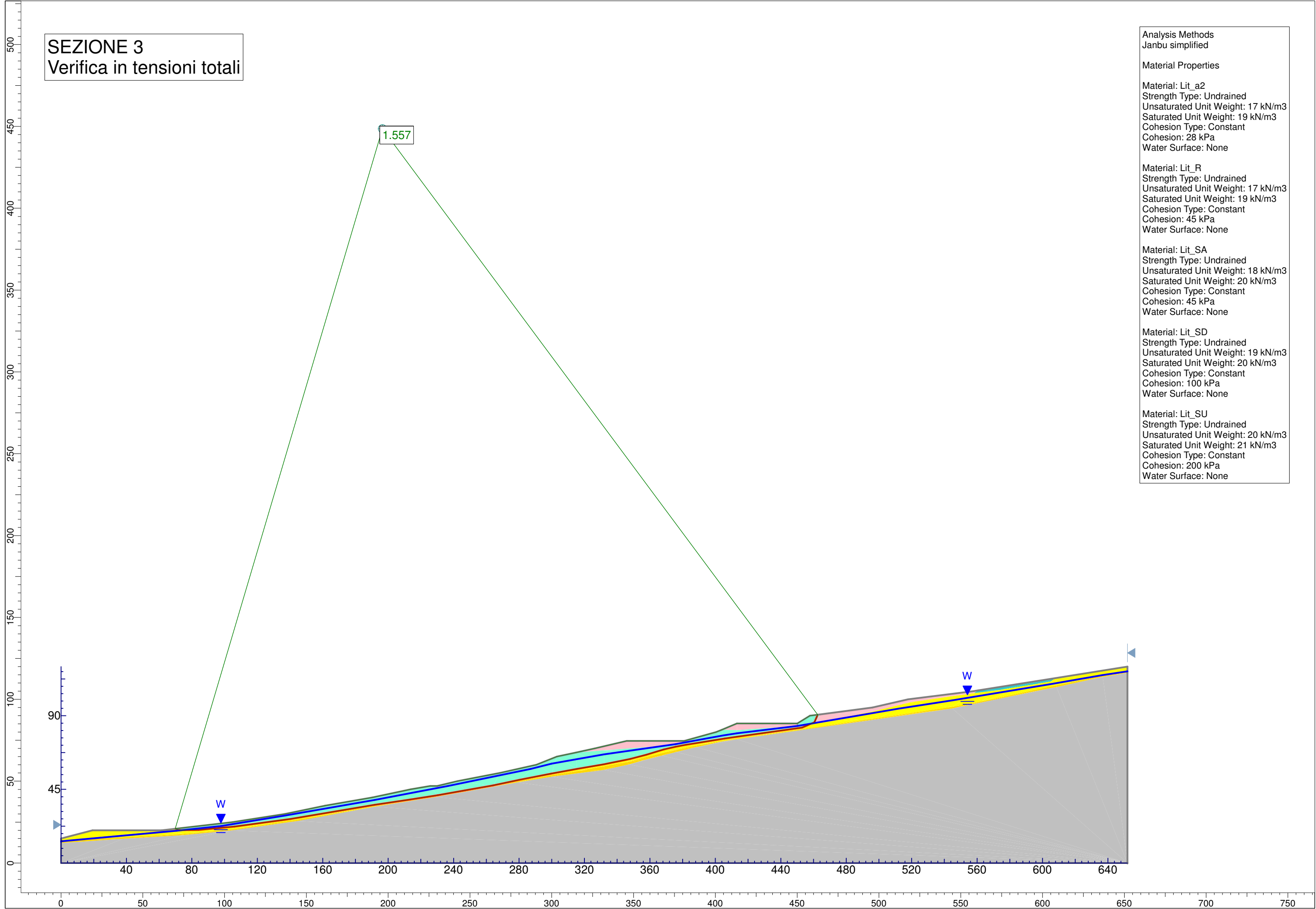
Custom Hu value: 1



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SEZIONE 3
Verifica in tensioni totali

Analysis Methods
Janbu simplified
Material Properties
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 28 kPa
Water Surface: None
Material: Lit_R
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None
Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None
Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None
Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 3
Verifica in tensioni totali con sisma

◀ 0.09 ±
▼ 0.045

Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.09
Seismic Load Coefficient (Vertical): 0.045

Material Properties

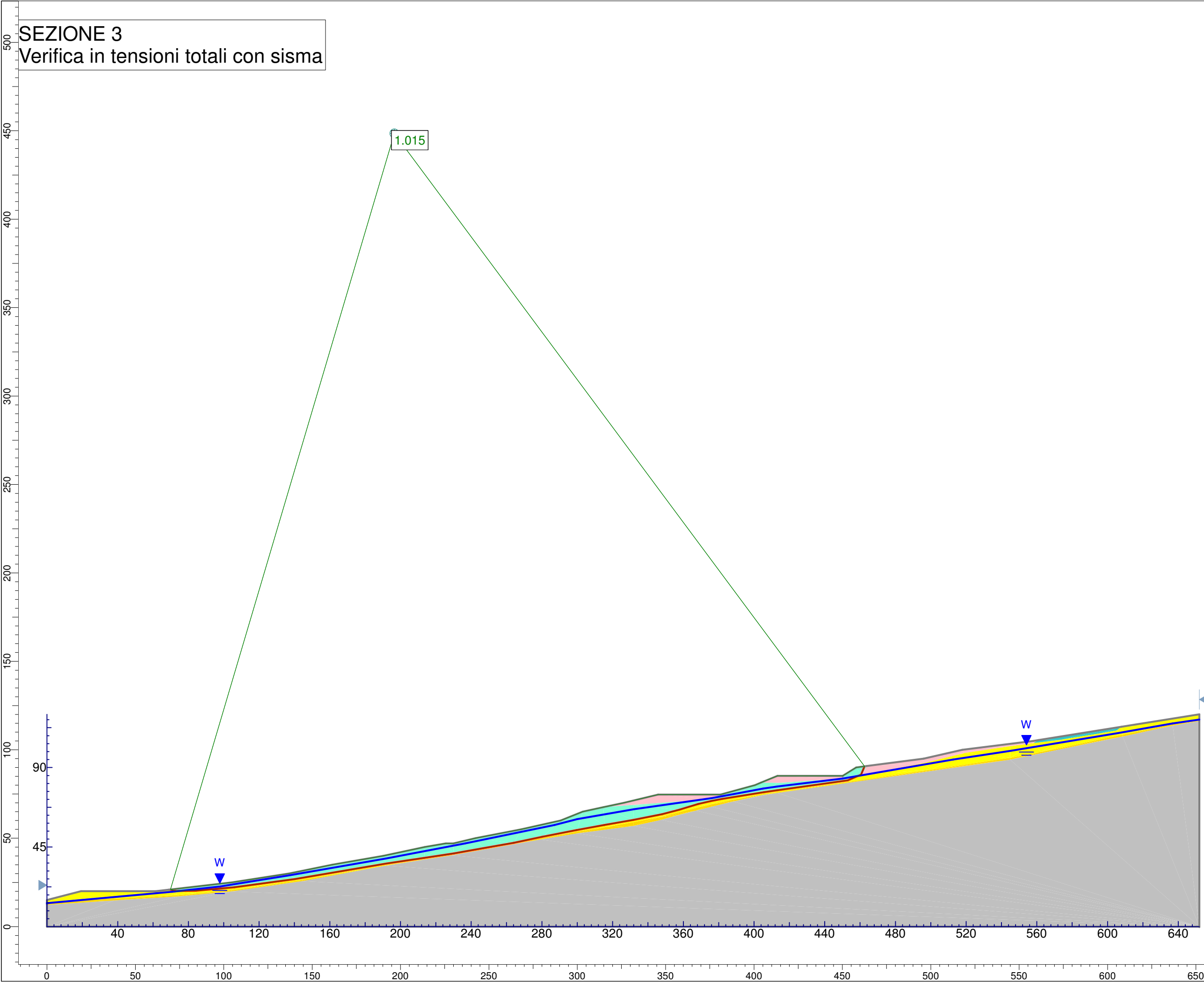
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 28 kPa
Water Surface: None

Material: Lit_R
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None

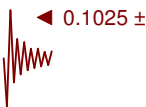
Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

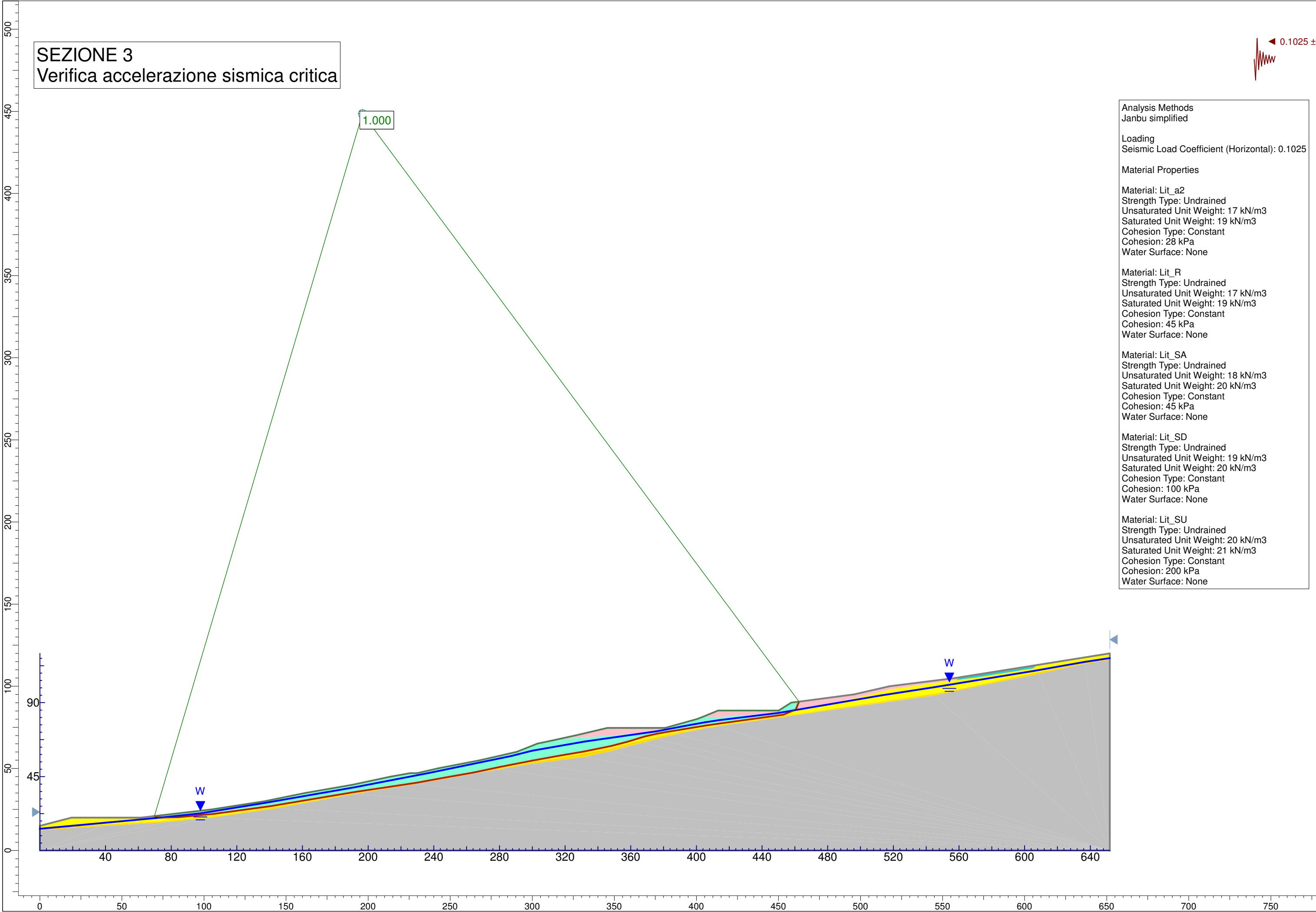
Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



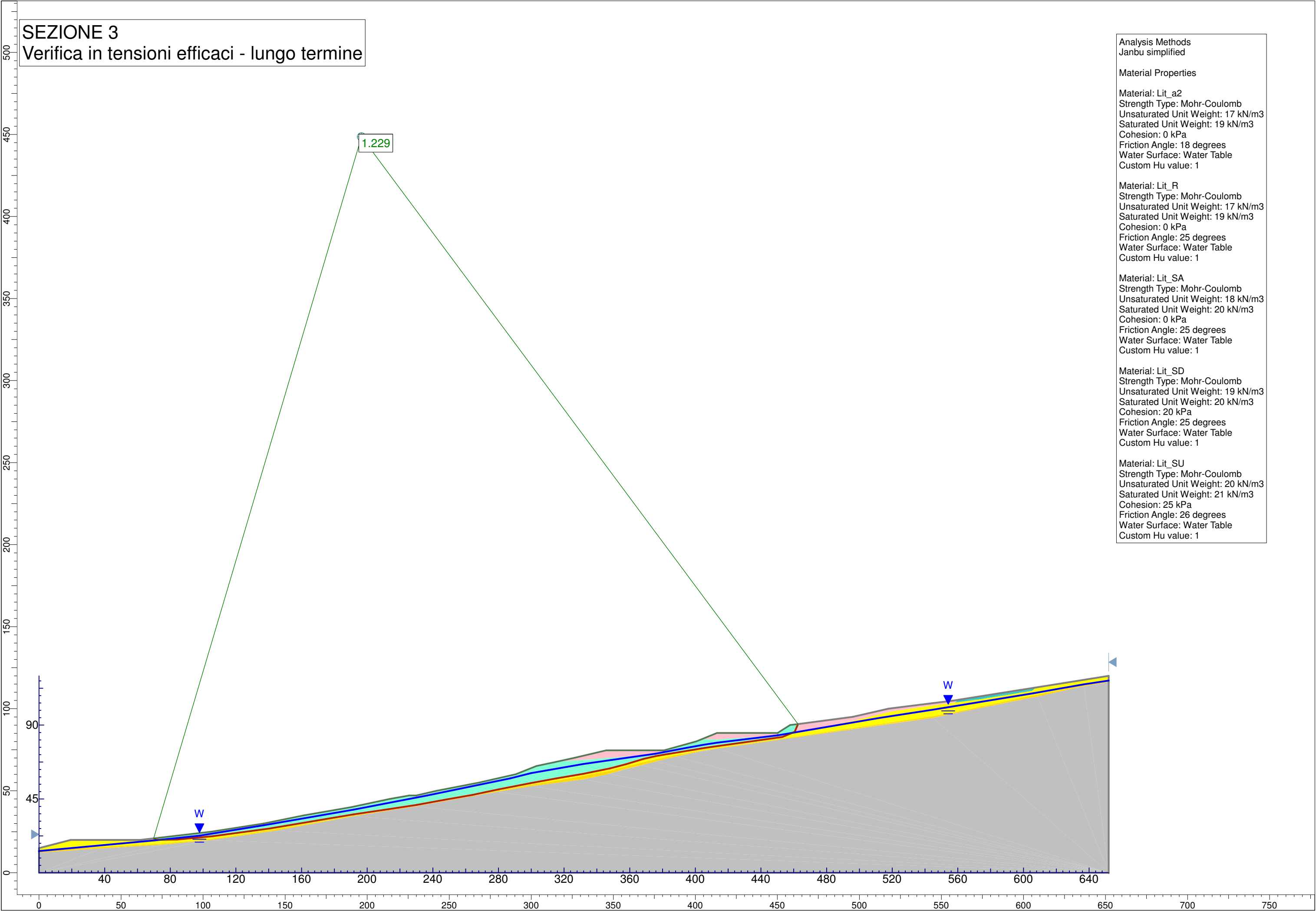
SEZIONE 3
Verifica accelerazione sismica critica



Analysis Methods
Janbu simplified
Loading
Seismic Load Coefficient (Horizontal): 0.1025
Material Properties
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 28 kPa
Water Surface: None
Material: Lit_R
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None
Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None
Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None
Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None

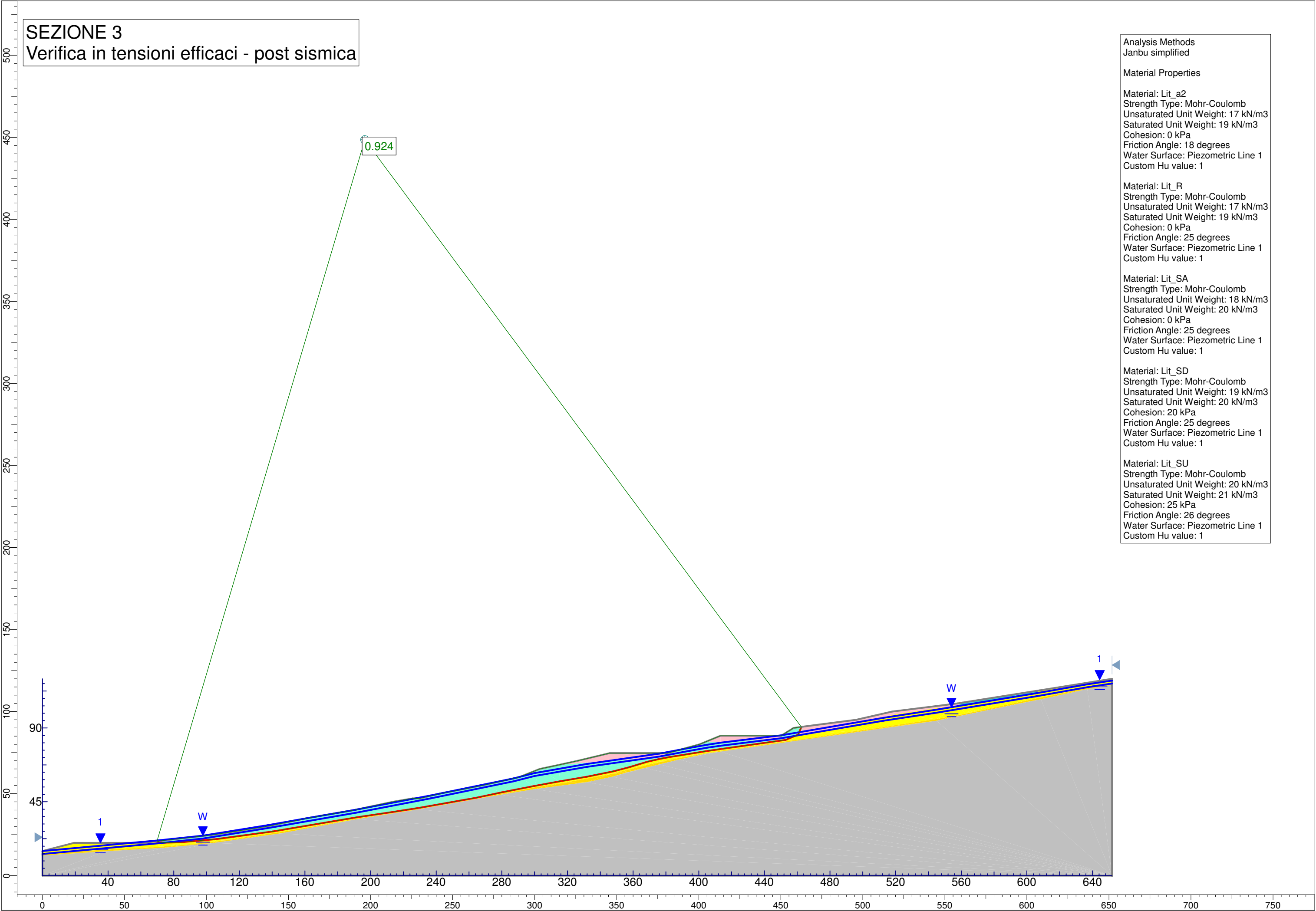


SEZIONE 3
Verifica in tensioni efficaci - lungo termine



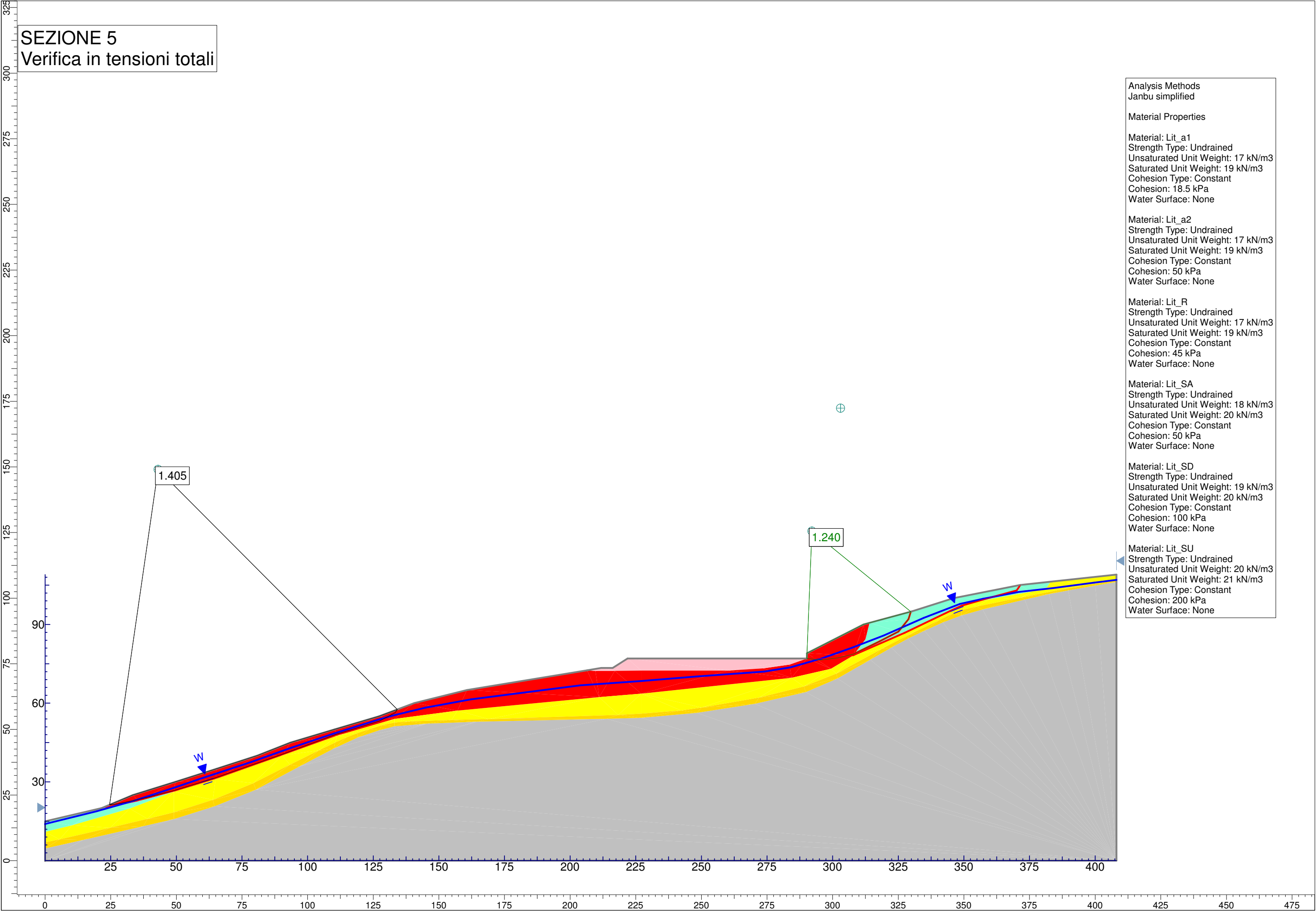
SEZIONE 3
Verifica in tensioni efficaci - post sismica

Analysis Methods
Janbu simplified
Material Properties
Material: Lit_a2
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion: 0 kPa
Friction Angle: 18 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1
Material: Lit_R
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion: 0 kPa
Friction Angle: 25 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1
Material: Lit_SA
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 0 kPa
Friction Angle: 25 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1
Material: Lit_SD
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 20 kPa
Friction Angle: 25 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1
Material: Lit_SU
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion: 25 kPa
Friction Angle: 26 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1



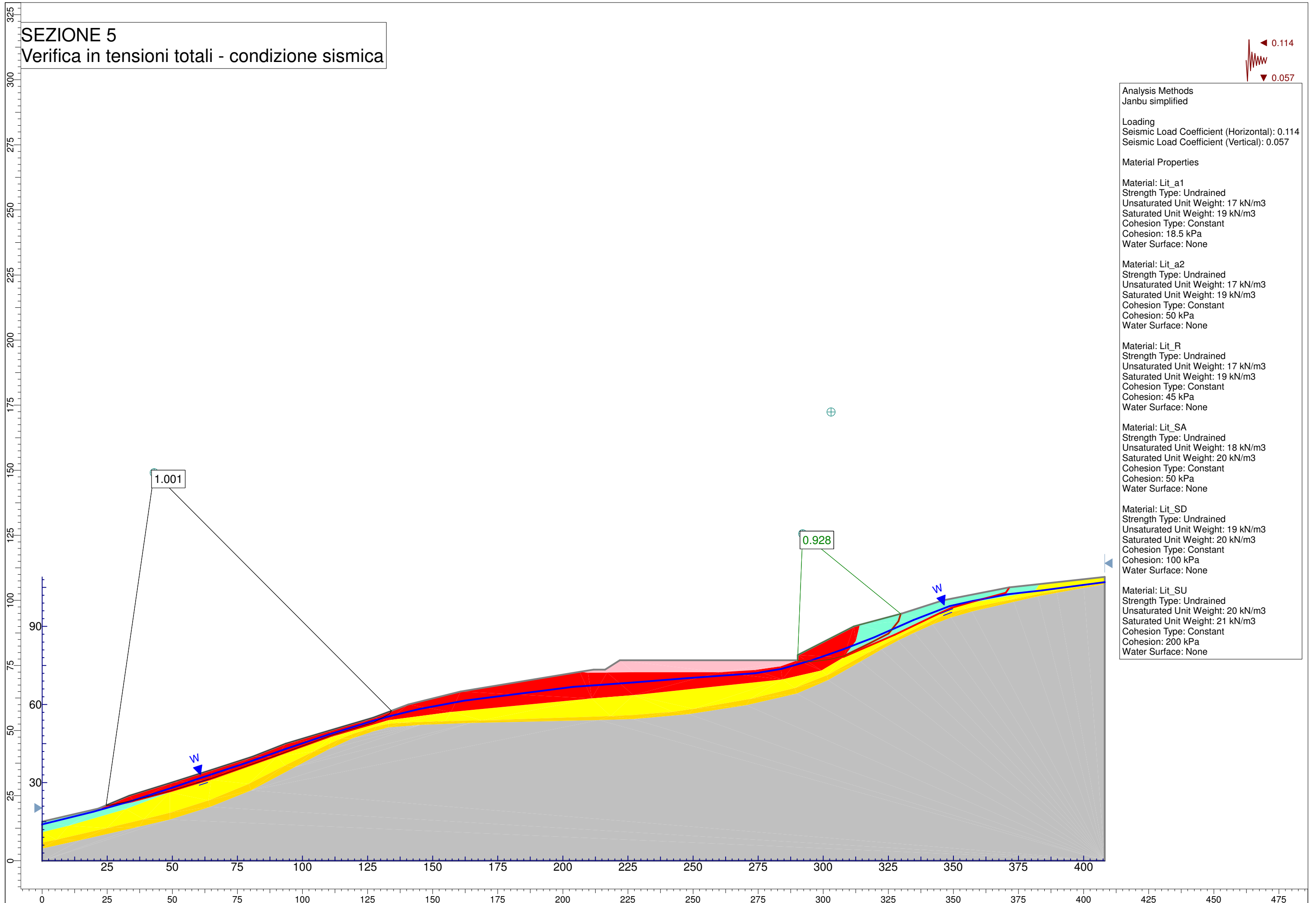
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SEZIONE 5
Verifica in tensioni totali

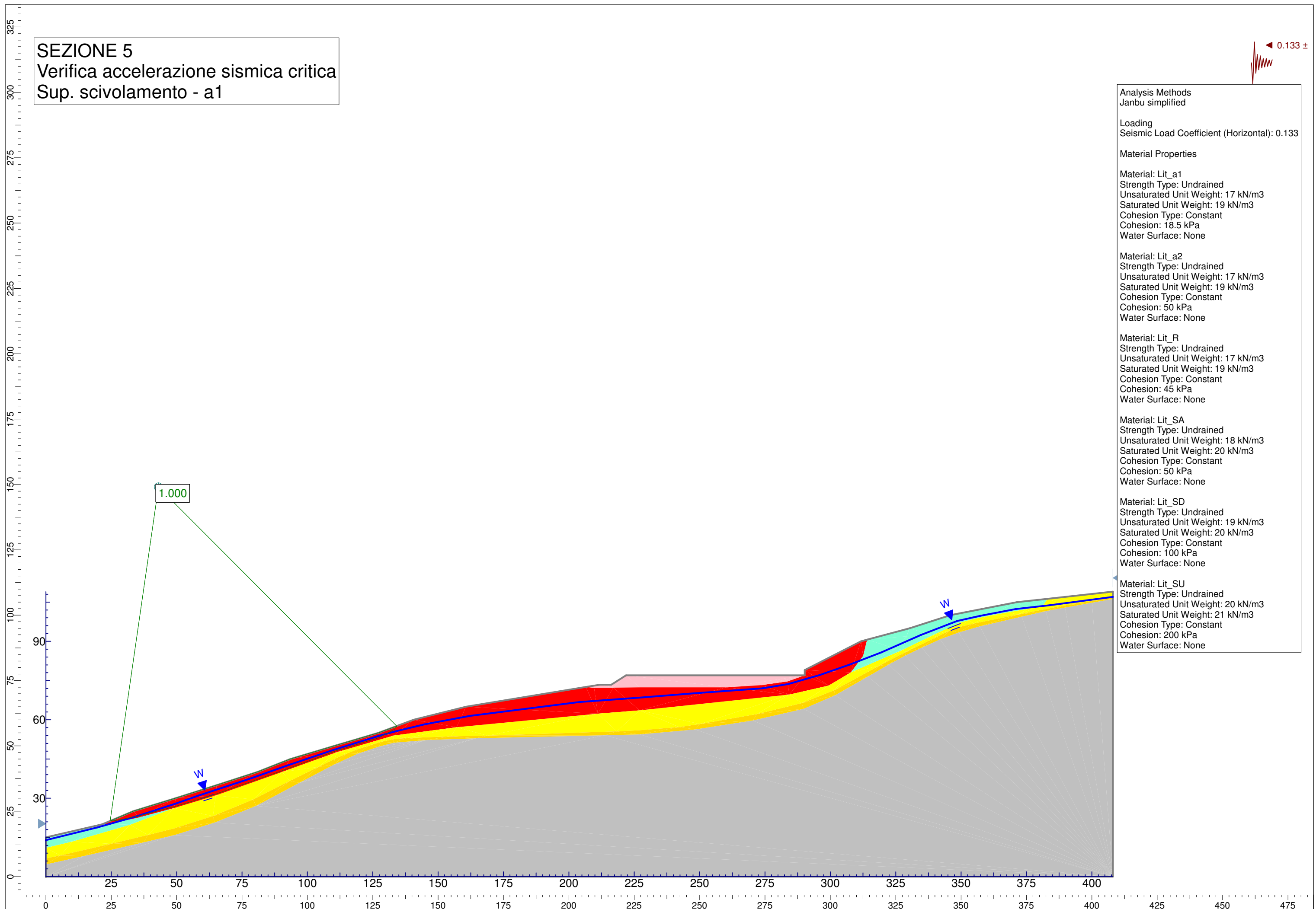


SEZIONE 5
Verifica in tensioni totali - condizione sismica

SEZIONE 5
Verifica in tensioni totali - condizione sismica

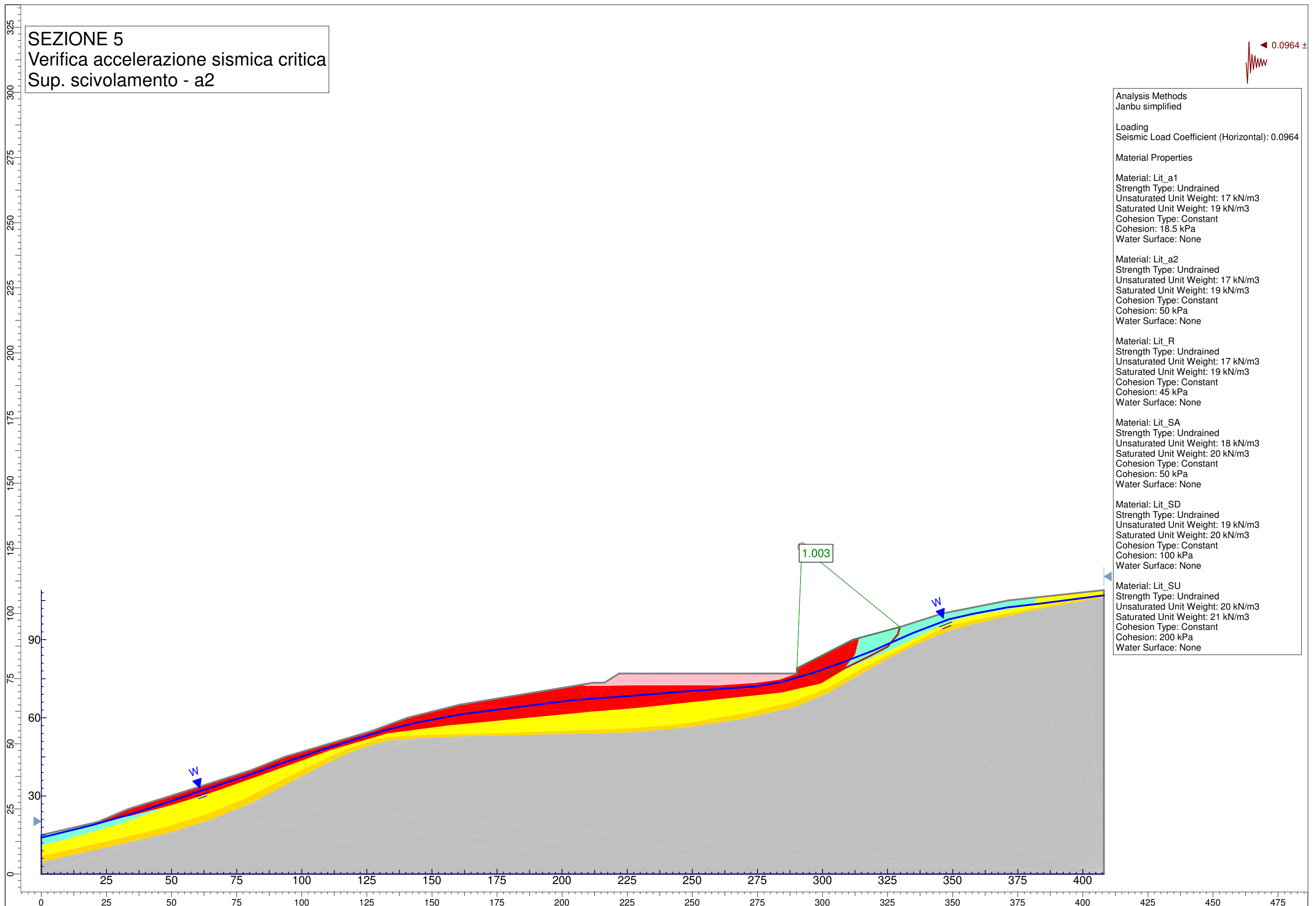


SEZIONE 5
 Verifica accelerazione sismica critica
 Sup. scivolamento - a1



Verifica accelerazione sismica critica
Sup. scivolamento - a2

Verifica accelerazione sismica critica
Sup. scivolamento - a2



SEZIONE 5

Verifica in tensioni efficaci - lungo termine

Analysis Methods

Janbu simplified

Material Properties

Material: Lit_a1

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 17 kN/m3

Saturated Unit Weight: 19 kN/m3

Cohesion: 0 kPa

Friction Angle: 19 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Lit_a2

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 17 kN/m3

Saturated Unit Weight: 19 kN/m3

Cohesion: 0 kPa

Friction Angle: 28 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Lit_R

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 17 kN/m3

Saturated Unit Weight: 19 kN/m3

Cohesion: 0 kPa

Friction Angle: 28 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Lit_SA

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 18 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion: 0 kPa

Friction Angle: 28 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Lit_SD

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 19 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion: 10 kPa

Friction Angle: 28 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Lit_SU

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 20 kN/m3

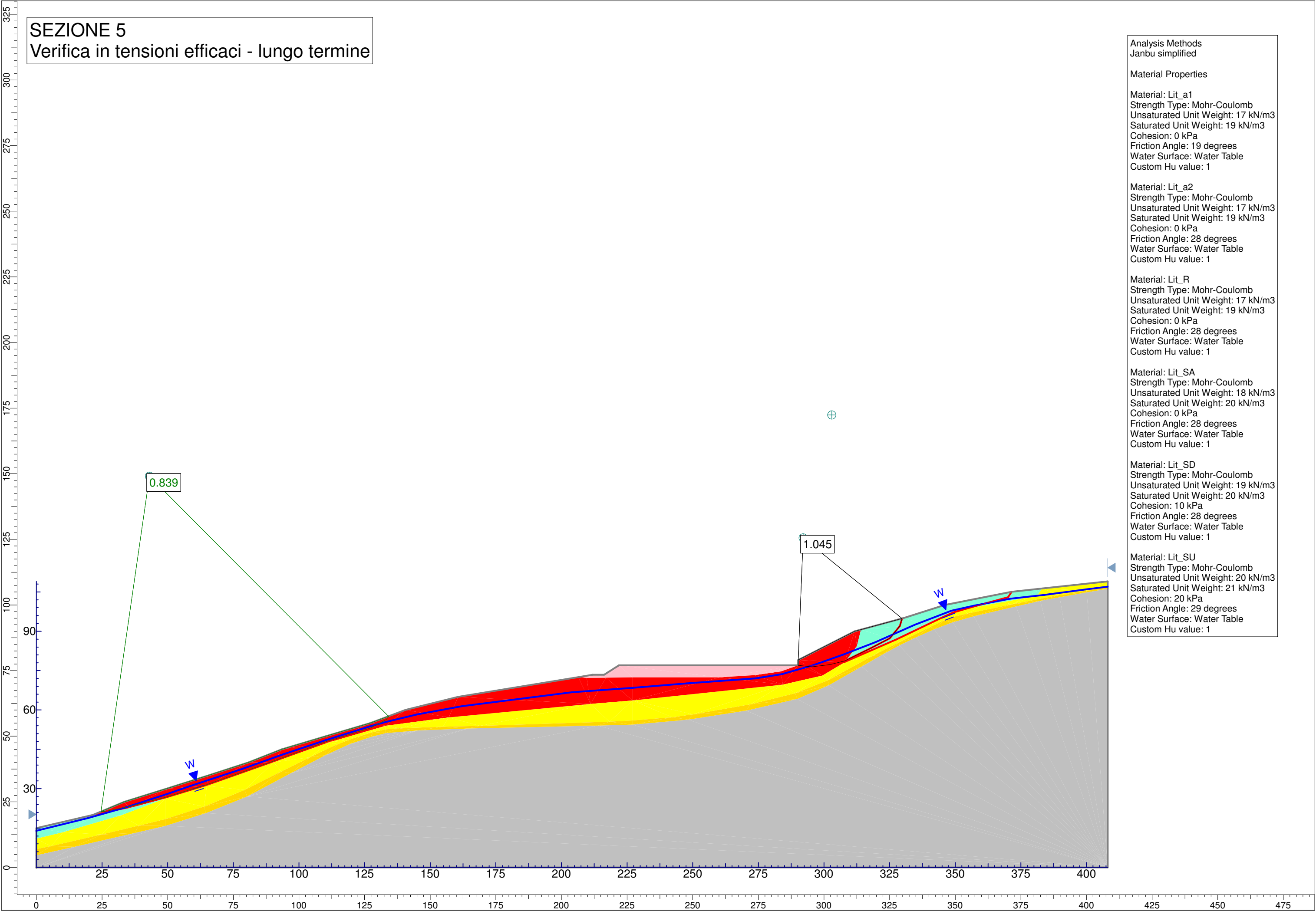
Saturated Unit Weight: 21 kN/m3

Cohesion: 20 kPa

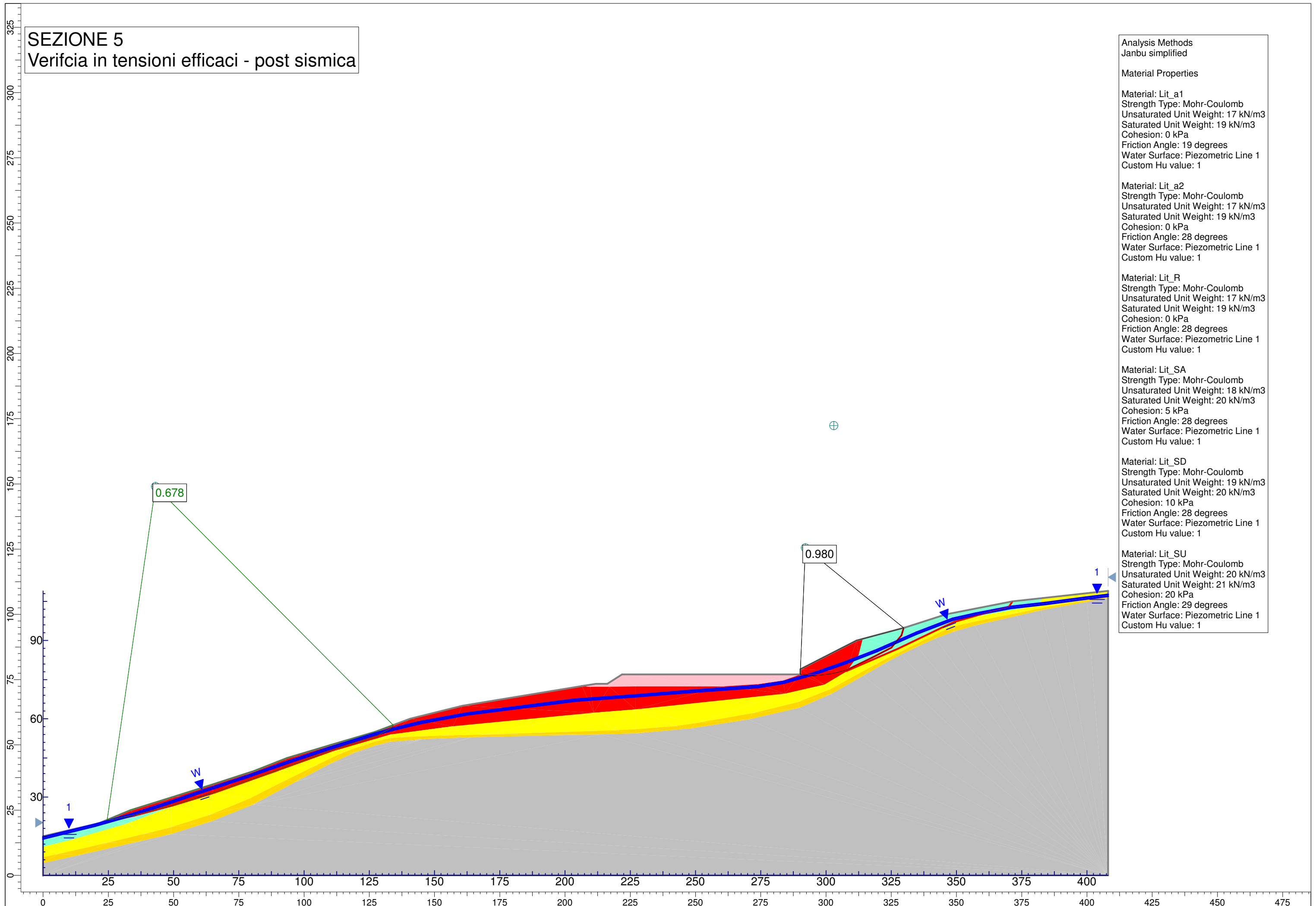
Friction Angle: 29 degrees

Water Surface: Water Table

Custom Hu value: 1



SEZIONE 5
Verifica in tensioni efficaci - post sismica



Analysis Methods Janbu simplified
Material Properties
Material: Lit_a1 Strength Type: Mohr-Coulomb Unsaturated Unit Weight: 17 kN/m3 Saturated Unit Weight: 19 kN/m3 Cohesion: 0 kPa Friction Angle: 19 degrees Water Surface: Piezometric Line 1 Custom Hu value: 1
Material: Lit_a2 Strength Type: Mohr-Coulomb Unsaturated Unit Weight: 17 kN/m3 Saturated Unit Weight: 19 kN/m3 Cohesion: 0 kPa Friction Angle: 28 degrees Water Surface: Piezometric Line 1 Custom Hu value: 1
Material: Lit_R Strength Type: Mohr-Coulomb Unsaturated Unit Weight: 17 kN/m3 Saturated Unit Weight: 19 kN/m3 Cohesion: 0 kPa Friction Angle: 28 degrees Water Surface: Piezometric Line 1 Custom Hu value: 1
Material: Lit_SA Strength Type: Mohr-Coulomb Unsaturated Unit Weight: 18 kN/m3 Saturated Unit Weight: 20 kN/m3 Cohesion: 5 kPa Friction Angle: 28 degrees Water Surface: Piezometric Line 1 Custom Hu value: 1
Material: Lit_SD Strength Type: Mohr-Coulomb Unsaturated Unit Weight: 19 kN/m3 Saturated Unit Weight: 20 kN/m3 Cohesion: 10 kPa Friction Angle: 28 degrees Water Surface: Piezometric Line 1 Custom Hu value: 1
Material: Lit_SU Strength Type: Mohr-Coulomb Unsaturated Unit Weight: 20 kN/m3 Saturated Unit Weight: 21 kN/m3 Cohesion: 20 kPa Friction Angle: 29 degrees Water Surface: Piezometric Line 1 Custom Hu value: 1

MONTEGRIDOLFO

SEZIONE 3

Verifica in tensioni totali

Analysis Methods

Janbu simplified

Material Properties

Material: Lit_SA

Strength Type: Undrained

Unsaturated Unit Weight: 18 kN/m³

Saturated Unit Weight: 20 kN/m³

Cohesion Type: Constant

Cohesion: 70 kPa

Water Surface: None

Material: Lit_SD

Strength Type: Undrained

Unsaturated Unit Weight: 19 kN/m³

Saturated Unit Weight: 20 kN/m³

Cohesion Type: Constant

Cohesion: 100 kPa

Water Surface: None

Material: Lit_SU

Strength Type: Undrained

Unsaturated Unit Weight: 20 kN/m³

Saturated Unit Weight: 21 kN/m³

Cohesion Type: Constant

Cohesion: 200 kPa

Water Surface: None

Material: Lit_a3

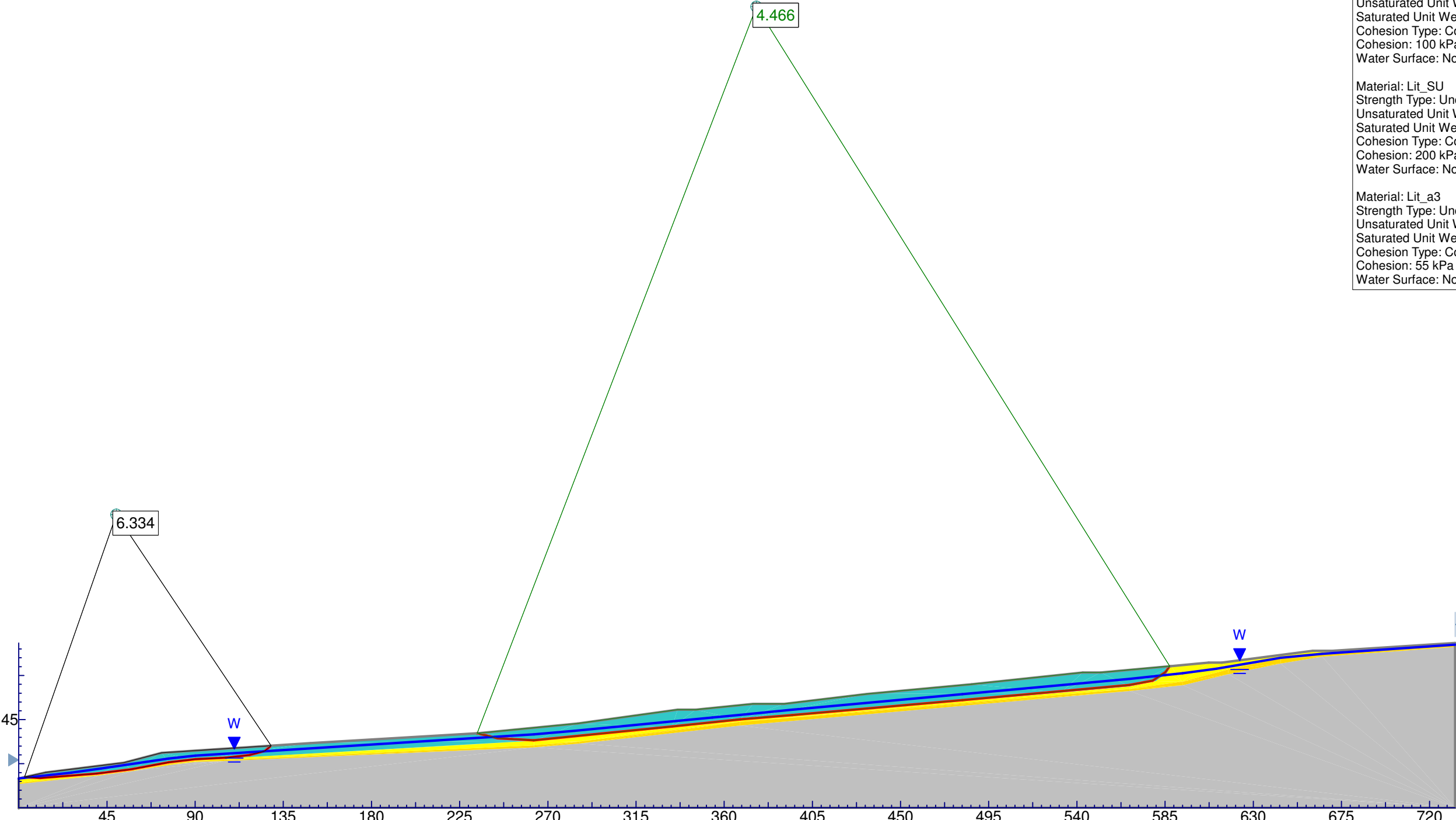
Strength Type: Undrained

Unsaturated Unit Weight: 18 kN/m³

Saturated Unit Weight: 20

Cohesion Type: C

Cohesion: 55 kPa



SEZIONE 3
Verifica in tensioni totali - condizione sismica

◀ 0.093
▼ 0.047

Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.093
Seismic Load Coefficient (Vertical): 0.047

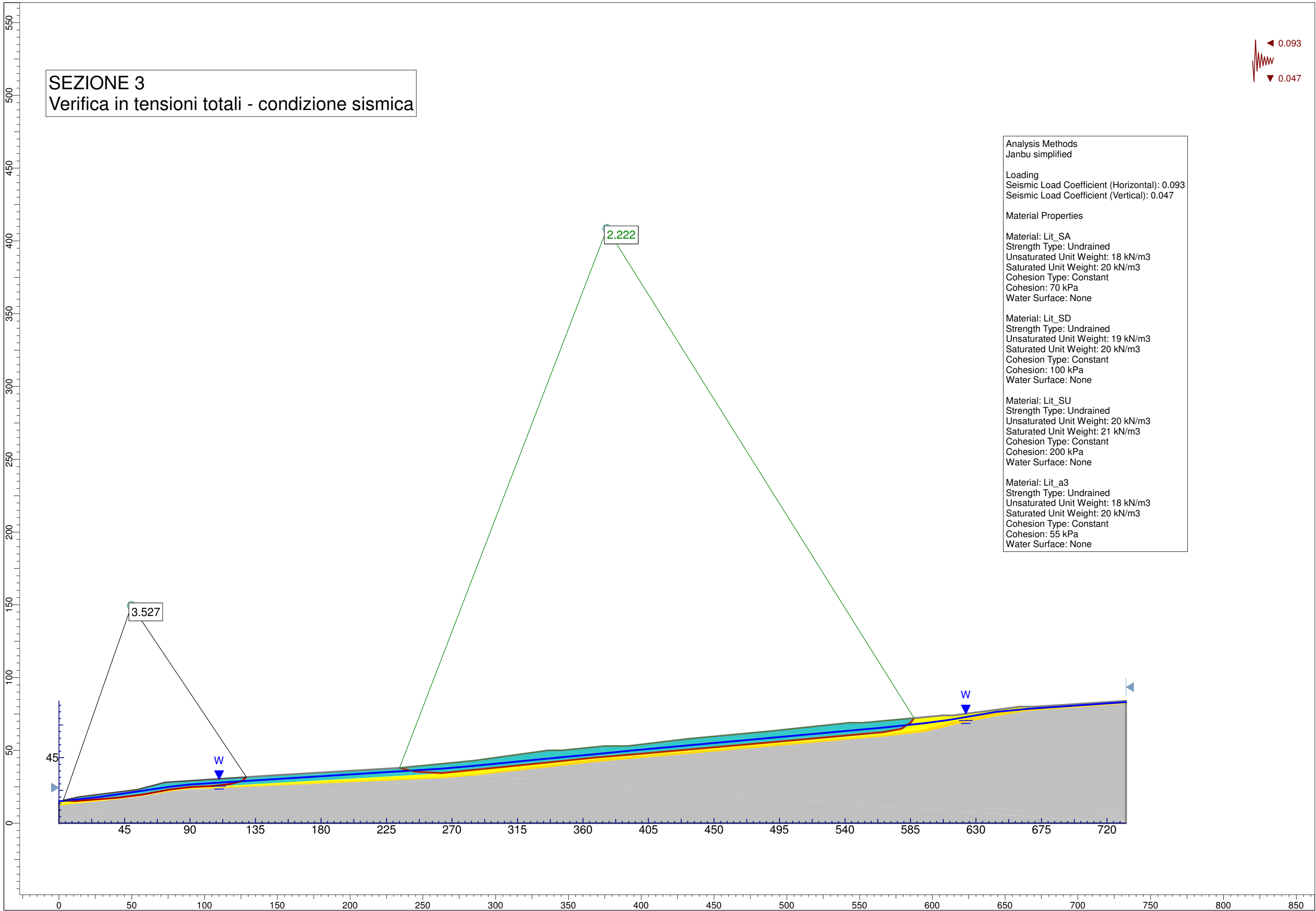
Material Properties

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 70 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None

Material: Lit_a3
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 55 kPa
Water Surface: None



SEZIONI 3
Verifica accelerazione sismica critica

Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.178

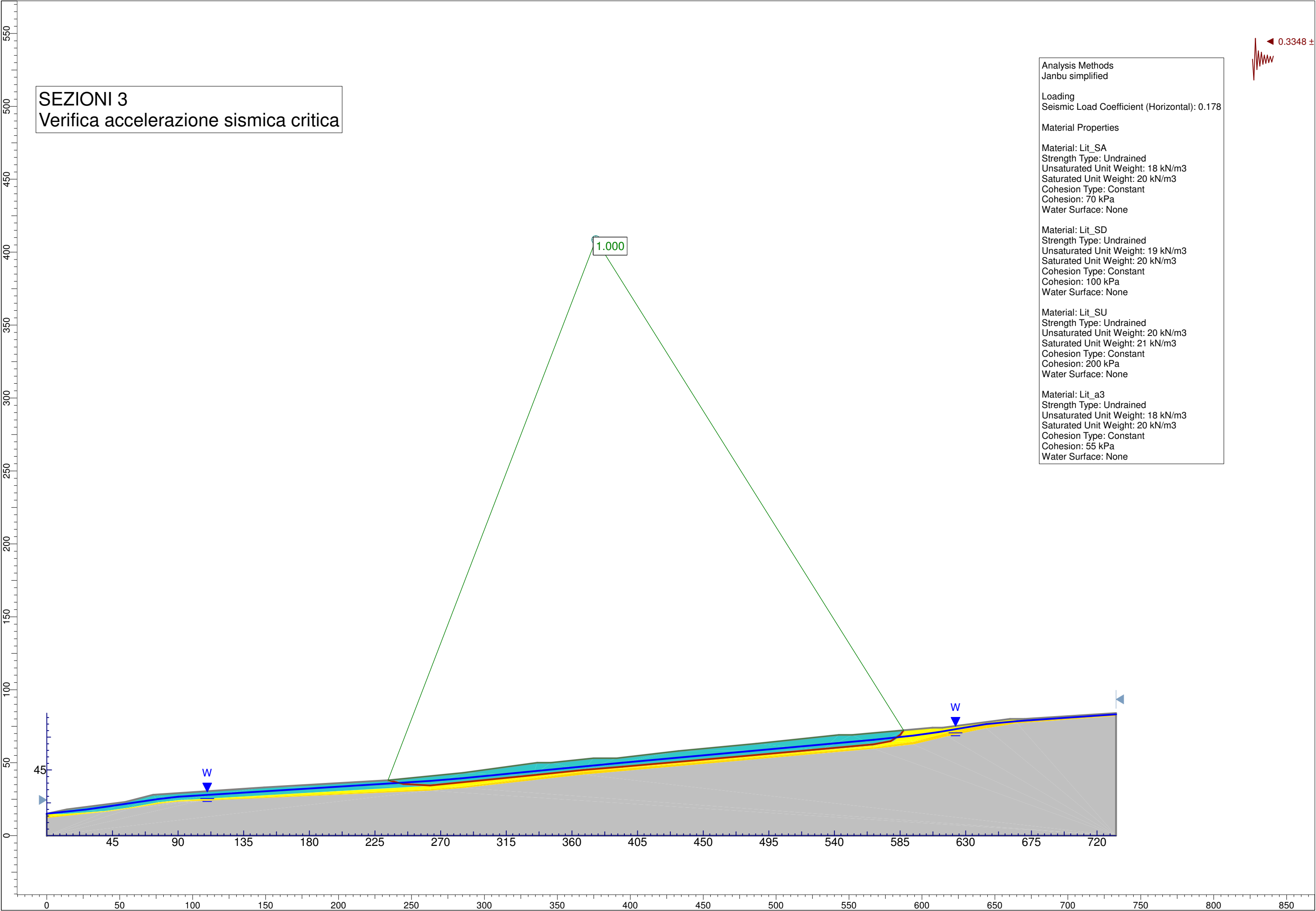
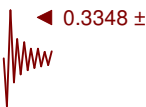
Material Properties

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 70 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None

Material: Lit_a3
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 55 kPa
Water Surface: None



SEZIONE 3
Verifica in tensioni efficaci

Analysis Methods
Janbu simplified

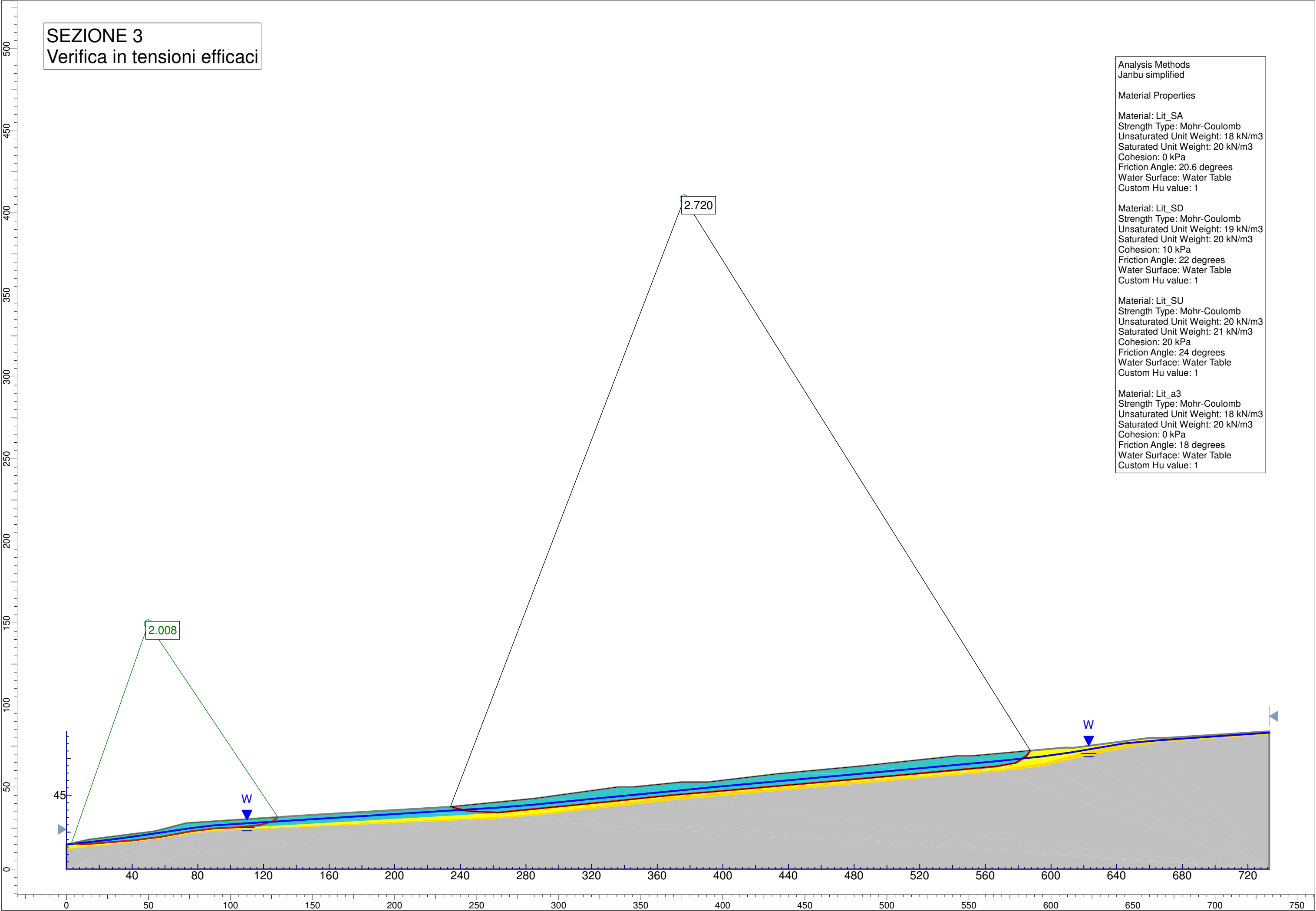
Material Properties

Material: Lit_SA
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 0 kPa
Friction Angle: 20.6 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_SD
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 10 kPa
Friction Angle: 22 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_SU
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion: 20 kPa
Friction Angle: 24 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_a3
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 0 kPa
Friction Angle: 18 degrees
Water Surface: Water Table
Custom Hu value: 1



SEZIONE 3
Verifica in tensioni efficaci - condizione post sismica

Analysis Methods
Janbu simplified

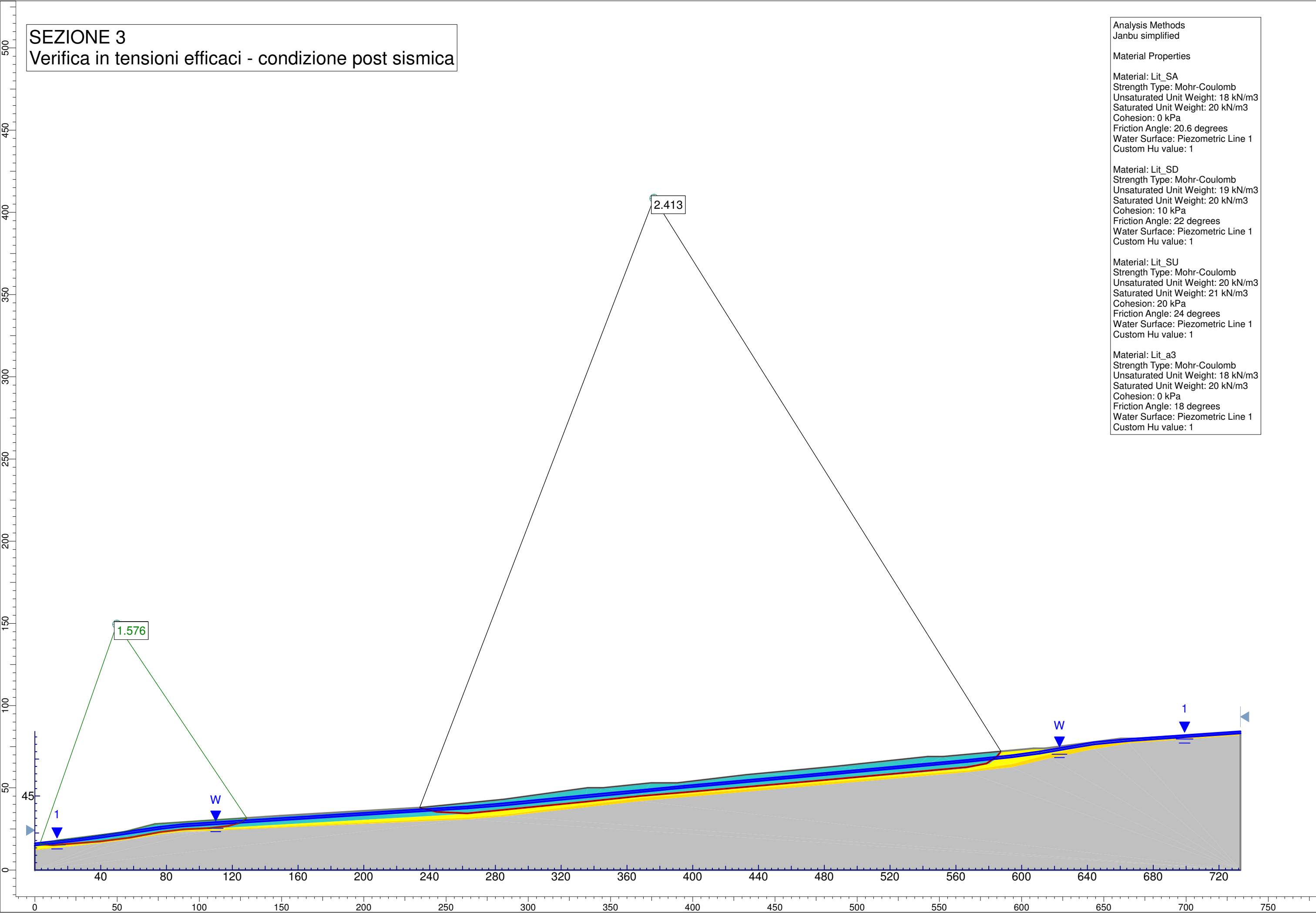
Material Properties

Material: Lit_SA
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 0 kPa
Friction Angle: 20.6 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1

Material: Lit_SD
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 10 kPa
Friction Angle: 22 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1

Material: Lit_SU
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion: 20 kPa
Friction Angle: 24 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1

Material: Lit_a3
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 0 kPa
Friction Angle: 18 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1



MONTESCUDO – MONTECOLOMBO

SEZIONE 9

Verifica in tensioni totali

Analysis Method

Janbu simplified

Material Properties

Material: Lit a1

Strength Type: Undrained

Unsaturated Unit Weight: 17 kN/m³

Saturated Unit Weight: 19 kN/m³

Cohesion Type: Constant

Cohesion: 24 kPa

Water Surface: None

Material: Lit_a2

Strength Type: Undrained

Unsaturated Unit Weight: 17 kN/m³

Saturated Unit Weight: 19 kN/m³

Cohesion Type: Constant

Coneslon: 45 kPa

Water Surface: None

Model 1: 04

Material: Lit_3A
 Strength: Tensile

Unacutrated Unit Weights

Saturated Unit Weight: 20 kN/m³

Cohesion Type: Constant

Cohesion: 50 kPa

Water Surface: No

[illegible]

Material: Lit. S[

Strength Type:

Unsaturated Unit Weight:

Saturated Unit Weight: 20 kN/m³

Cohesion Type: Constant

Cohesion: 100 kPa

Water Surface: No

Material: Lit_SU

Strength Type: Undrained

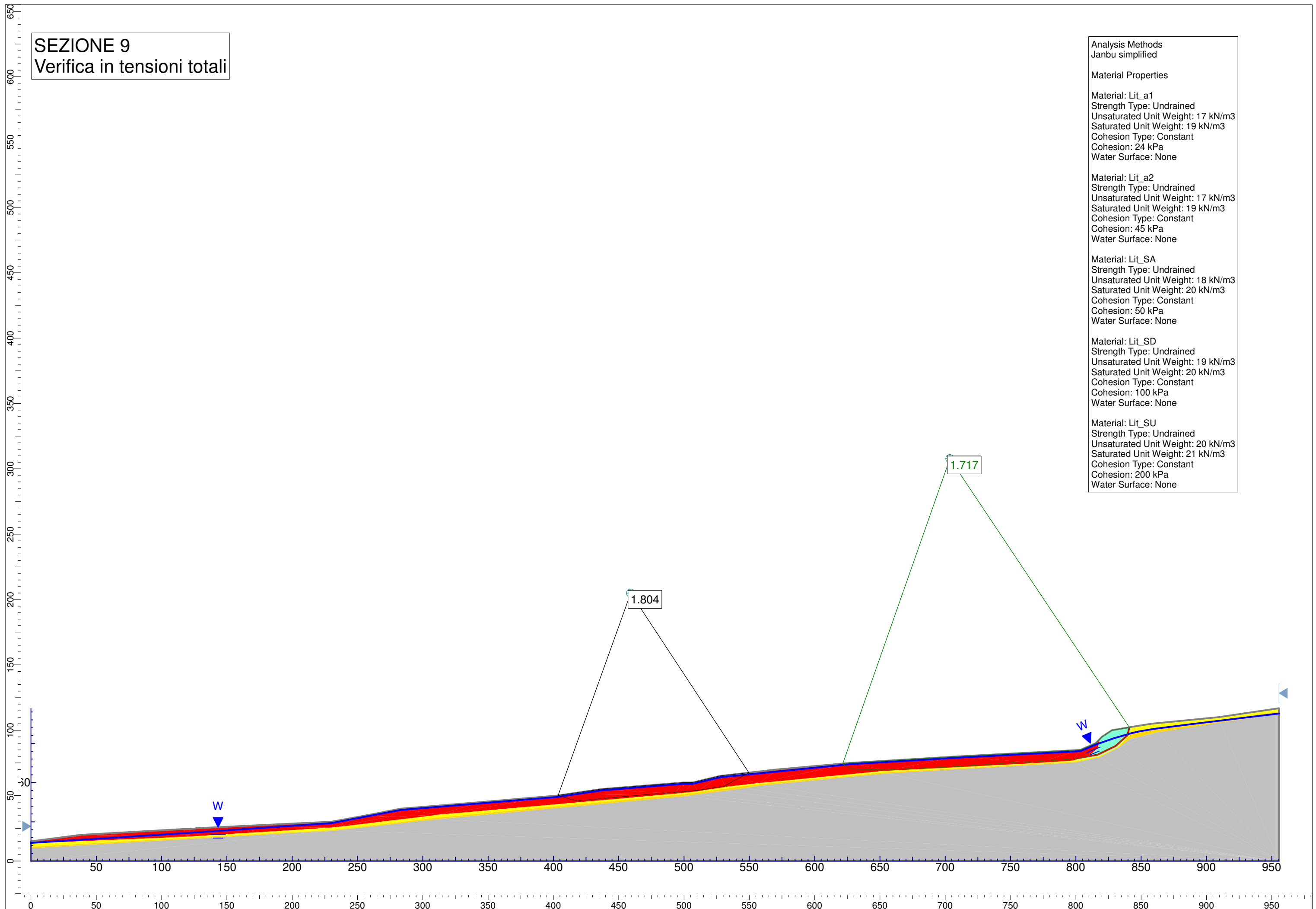
Unsaturated Unit Weight:

Saturated Unit Weight: 21

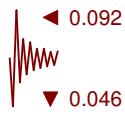
Cohesion Type: C

Cohesion: 200 kPa

Water Surface: No



SEZIONE 9
Verifica in tensioni totali - condizione sismica



Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.092
Seismic Load Coefficient (Vertical): 0.046

Material Properties

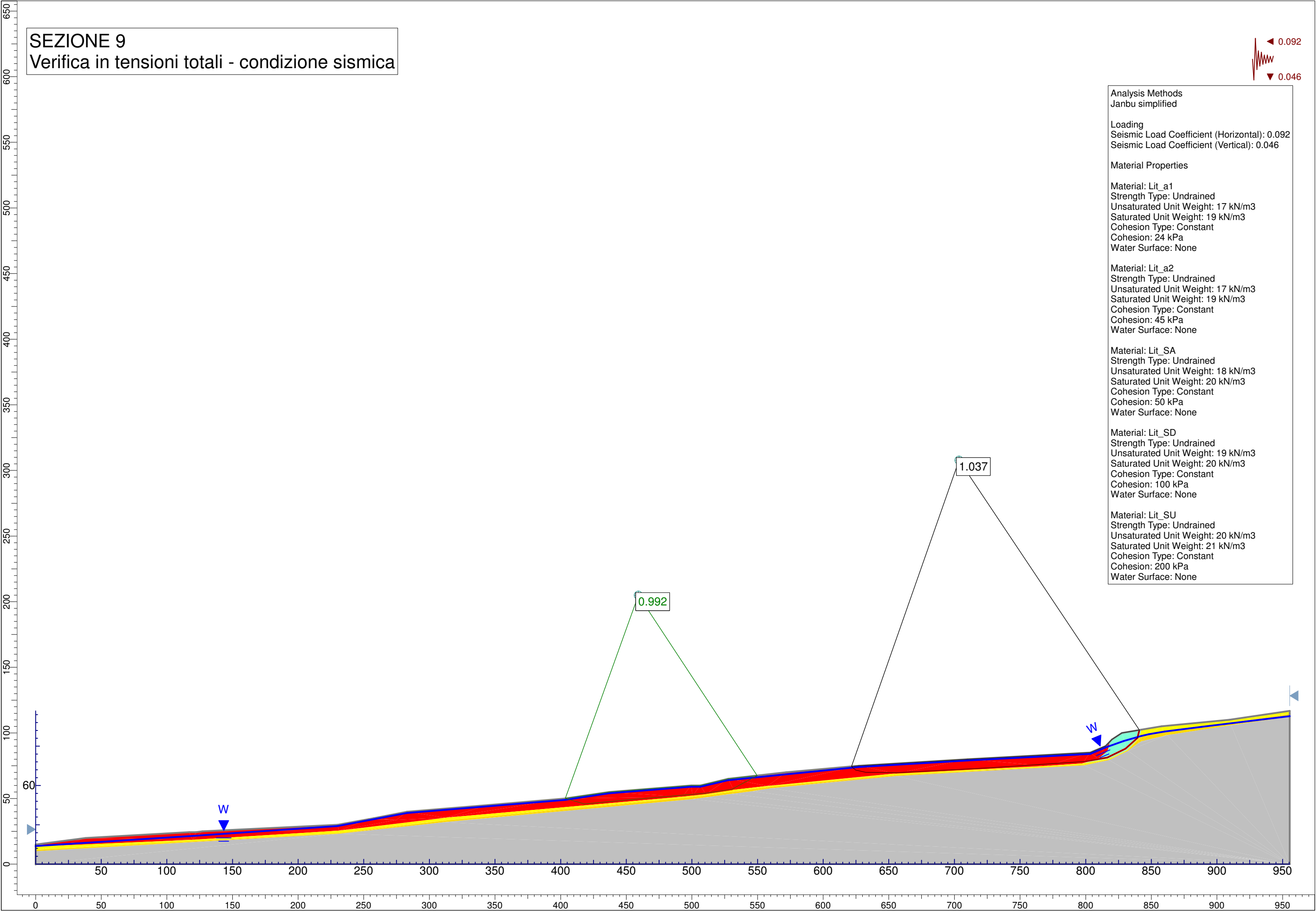
Material: Lit_a1
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 24 kPa
Water Surface: None

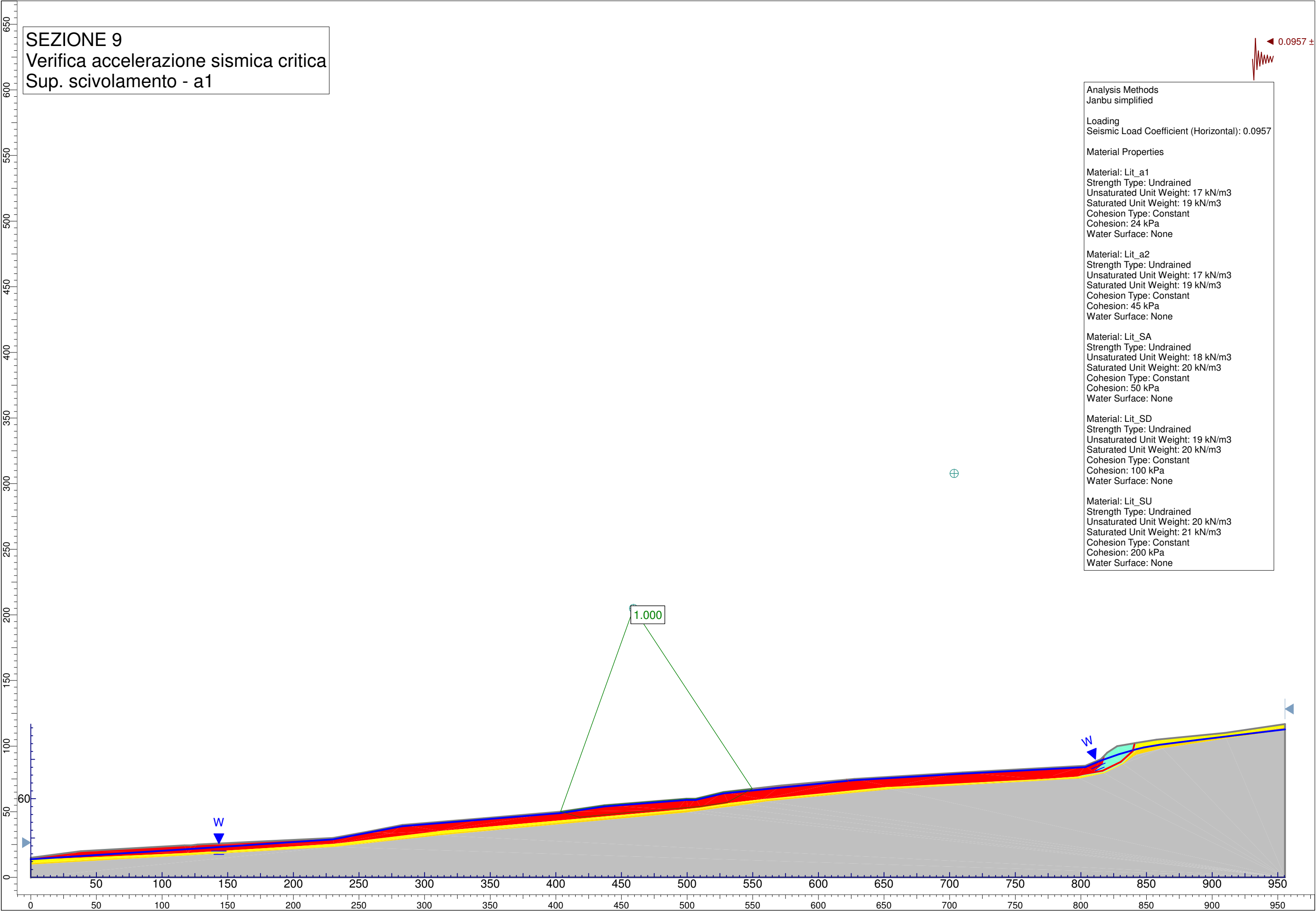
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 50 kPa
Water Surface: None

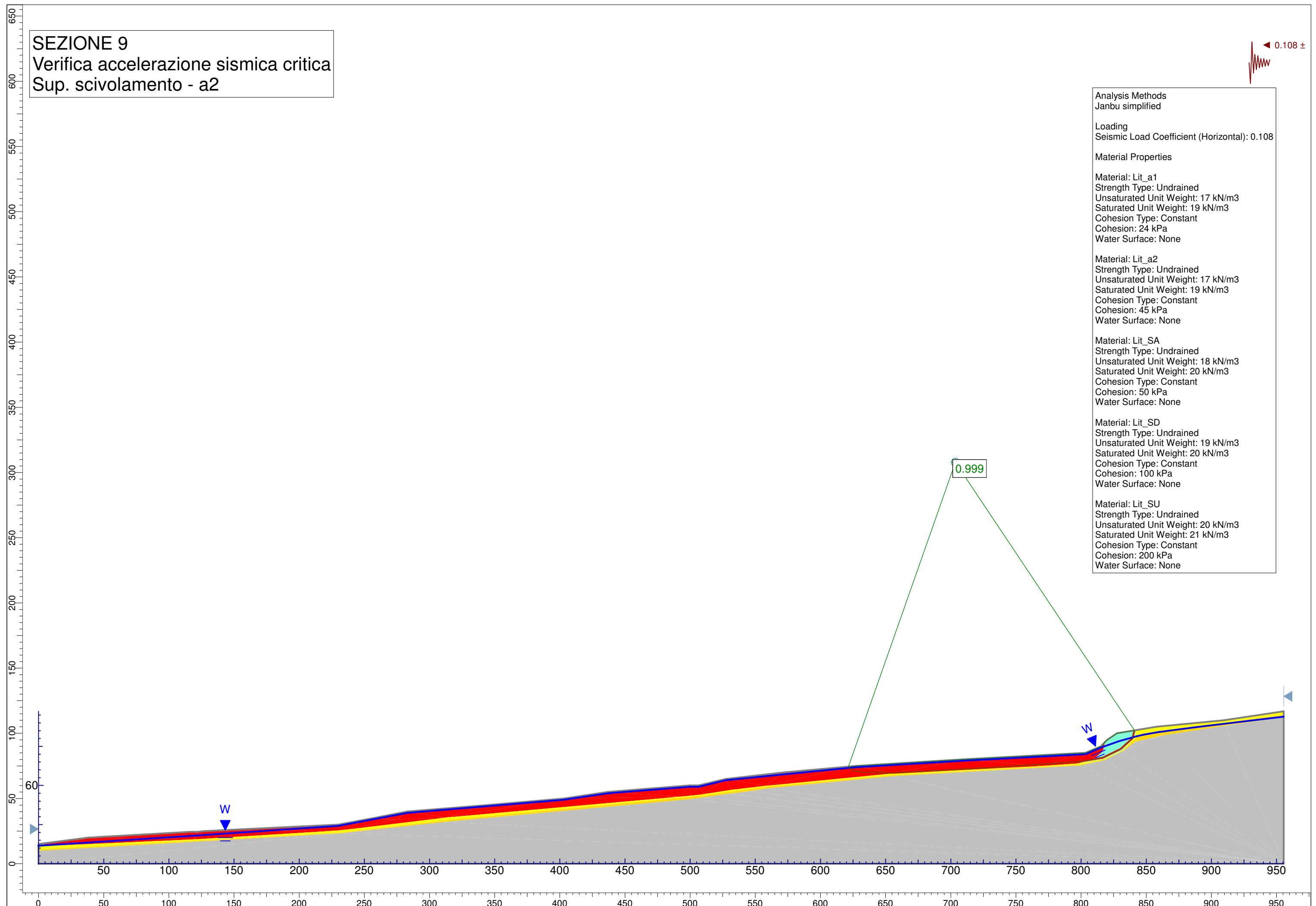
Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None

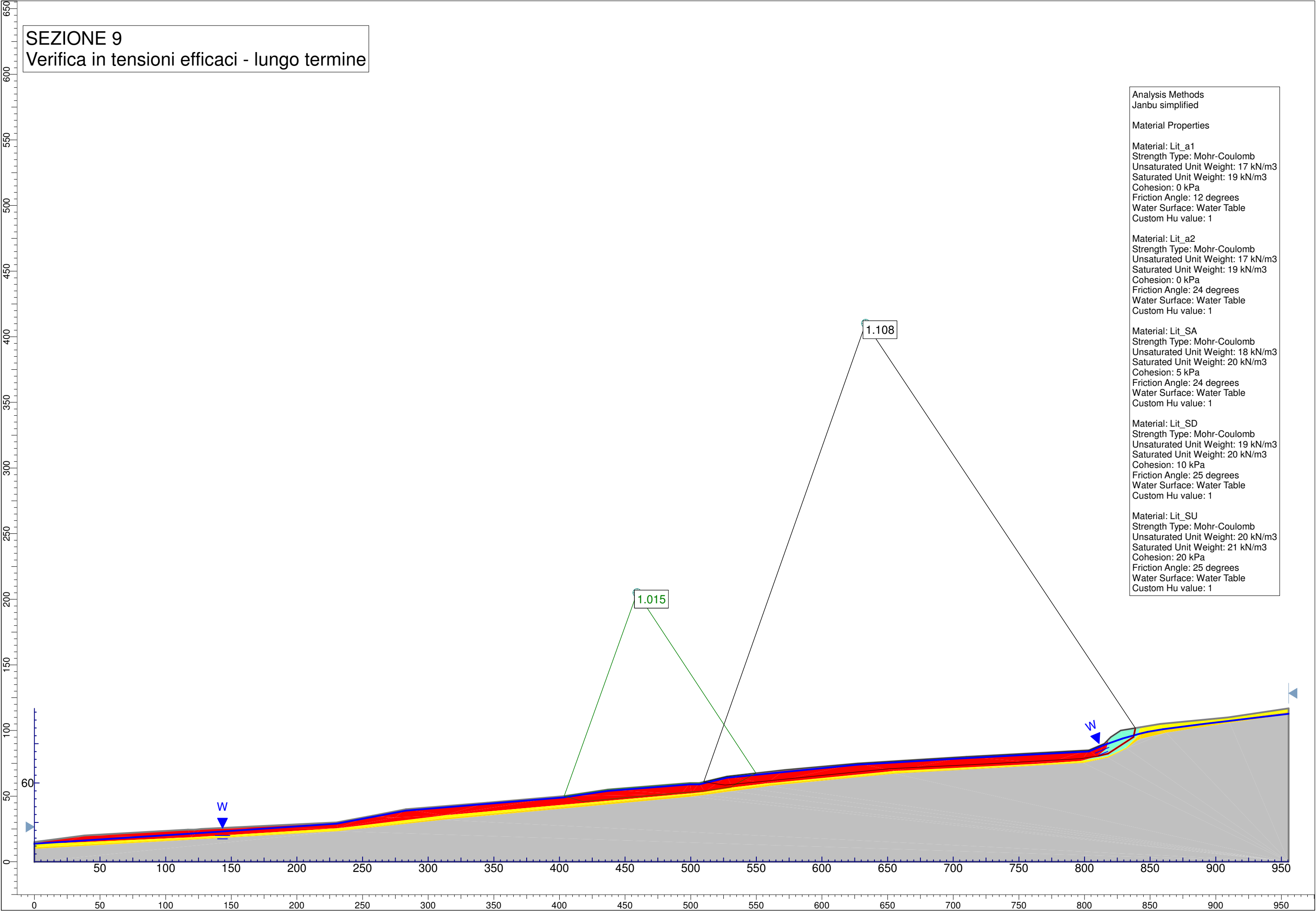




Verifica accelerazione sismica critica
Sup. scivolamento - a2



SEZIONE 9
Verifica in tensioni efficaci - lungo termine



SEZIONE 9
Verifica in tensioni efficaci - condizione post sismica

Analysis Methods
Janbu simplified

Material Properties

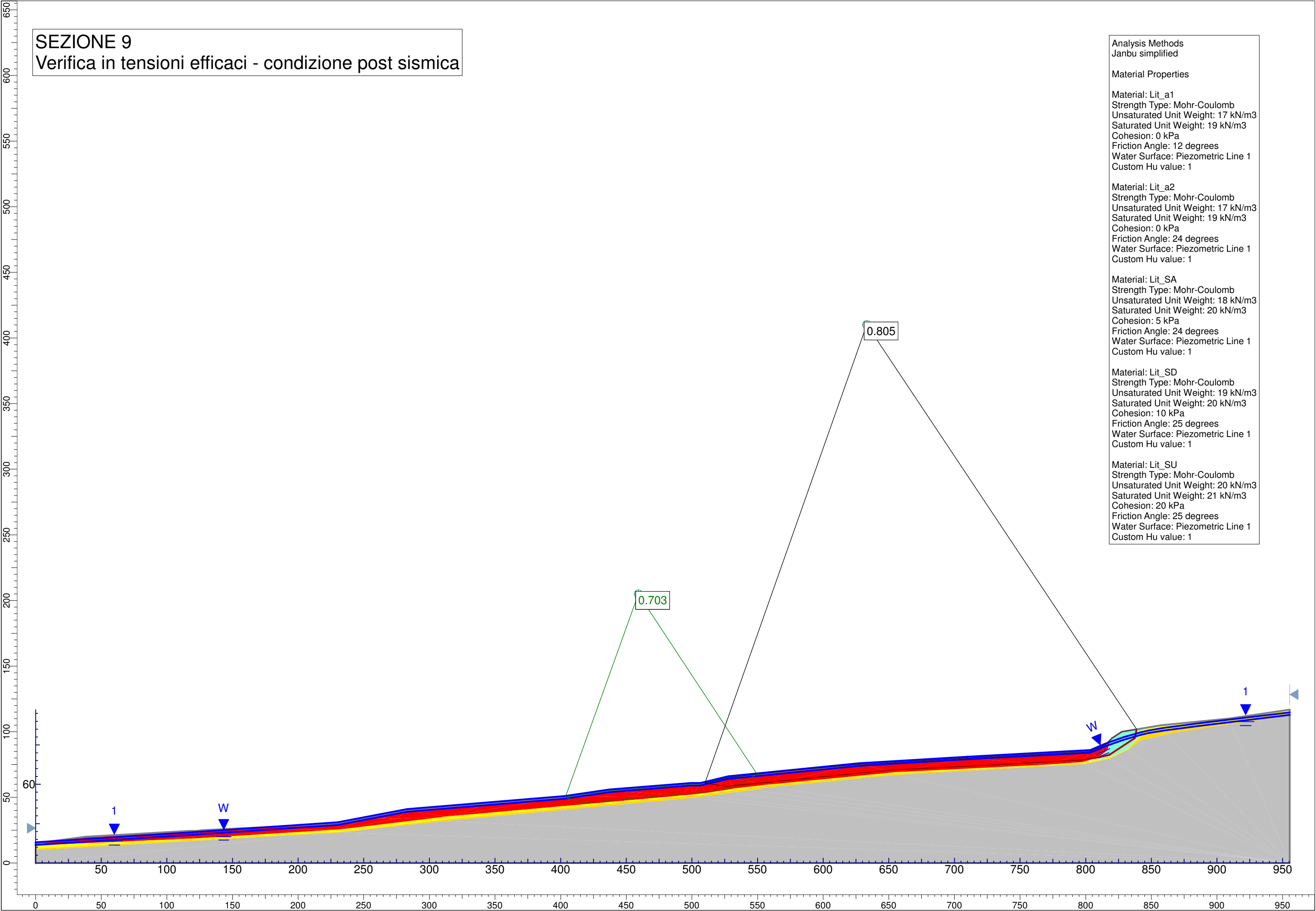
Material: Lit_a1
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion: 0 kPa
Friction Angle: 12 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1

Material: Lit_a2
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion: 0 kPa
Friction Angle: 24 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1

Material: Lit_SA
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 5 kPa
Friction Angle: 24 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1

Material: Lit_SD
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 10 kPa
Friction Angle: 25 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1

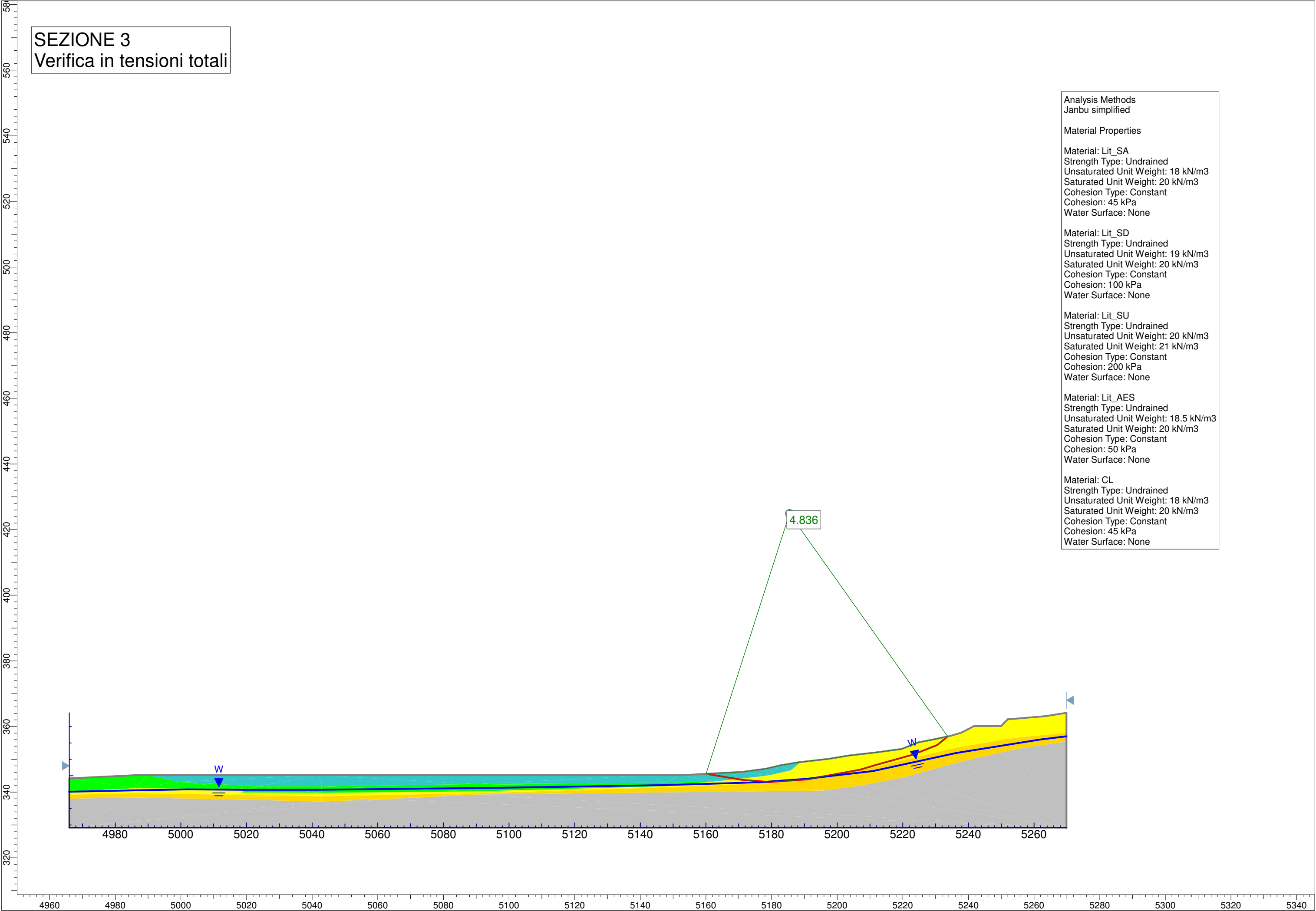
Material: Lit_SU
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion: 20 kPa
Friction Angle: 25 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1



MORCIANO DI R.

SEZIONE 3
Verifica in tensioni totali

Analysis Methods	
Janbu simplified	
Material Properties	
Material: Lit_SA	
Strength Type: Undrained	
Unsaturated Unit Weight: 18 kN/m3	
Saturated Unit Weight: 20 kN/m3	
Cohesion Type: Constant	
Cohesion: 45 kPa	
Water Surface: None	
Material: Lit_SD	
Strength Type: Undrained	
Unsaturated Unit Weight: 19 kN/m3	
Saturated Unit Weight: 20 kN/m3	
Cohesion Type: Constant	
Cohesion: 100 kPa	
Water Surface: None	
Material: Lit_SU	
Strength Type: Undrained	
Unsaturated Unit Weight: 20 kN/m3	
Saturated Unit Weight: 21 kN/m3	
Cohesion Type: Constant	
Cohesion: 200 kPa	
Water Surface: None	
Material: Lit_AES	
Strength Type: Undrained	
Unsaturated Unit Weight: 18.5 kN/m3	
Saturated Unit Weight: 20 kN/m3	
Cohesion Type: Constant	
Cohesion: 50 kPa	
Water Surface: None	
Material: CL	
Strength Type: Undrained	
Unsaturated Unit Weight: 18 kN/m3	
Saturated Unit Weight: 20 kN/m3	
Cohesion Type: Constant	
Cohesion: 45 kPa	
Water Surface: None	



SEZIONE 3
Verifica in tensioni totali - condizione sismica

◀ 0.106 ±
▼ 0.053

Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.106
Seismic Load Coefficient (Vertical): 0.053

Material Properties

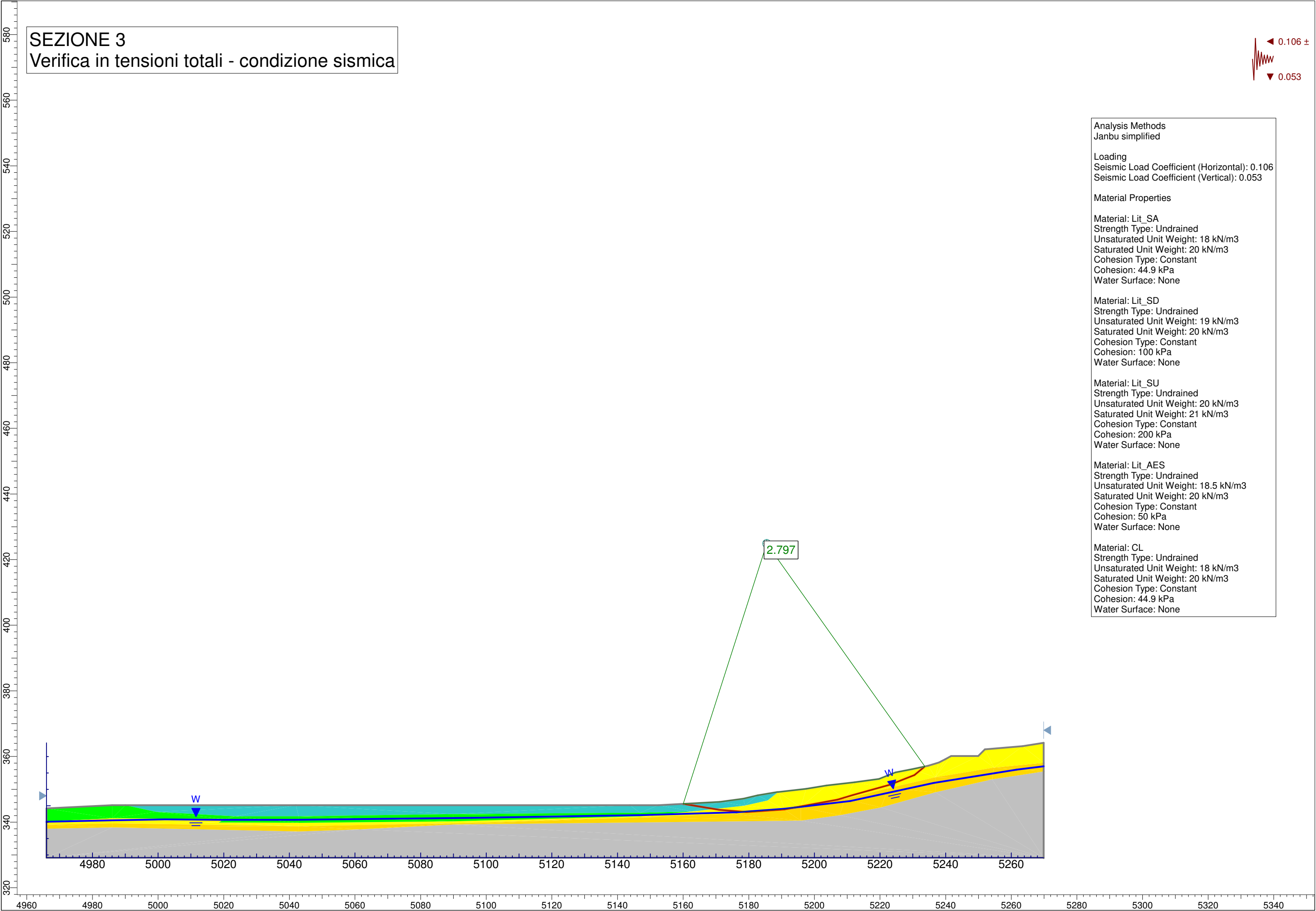
Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 44.9 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None

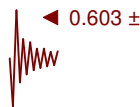
Material: Lit_AES
Strength Type: Undrained
Unsaturated Unit Weight: 18.5 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 50 kPa
Water Surface: None

Material: CL
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 44.9 kPa
Water Surface: None



SEZIONE 3

Verifica accelerazione sismica critica



Analysis Methods

Janbu simplified

Loading

Seismic Load Coefficient (Horizontal): 0.603

Material Properties

Material: Lit_SA

Strength Type: Undrained

Unsaturated Unit Weight: 18 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion Type: Constant

Cohesion: 44.9 kPa

Water Surface: None

Material: Lit_SD

Strength Type: Undrained

Unsaturated Unit Weight: 19 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion Type: Constant

Cohesion: 100 kPa

Water Surface: None

Material: Lit_SU

Strength Type: Undrained

Unsaturated Unit Weight: 20 kN/m3

Saturated Unit Weight: 21 kN/m3

Cohesion Type: Constant

Cohesion: 200 kPa

Water Surface: None

Material: Lit_AES

Strength Type: Undrained

Unsaturated Unit Weight: 18.5 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion Type: Constant

Cohesion: 50 kPa

Water Surface: None

Material: CL

Strength Type: Undrained

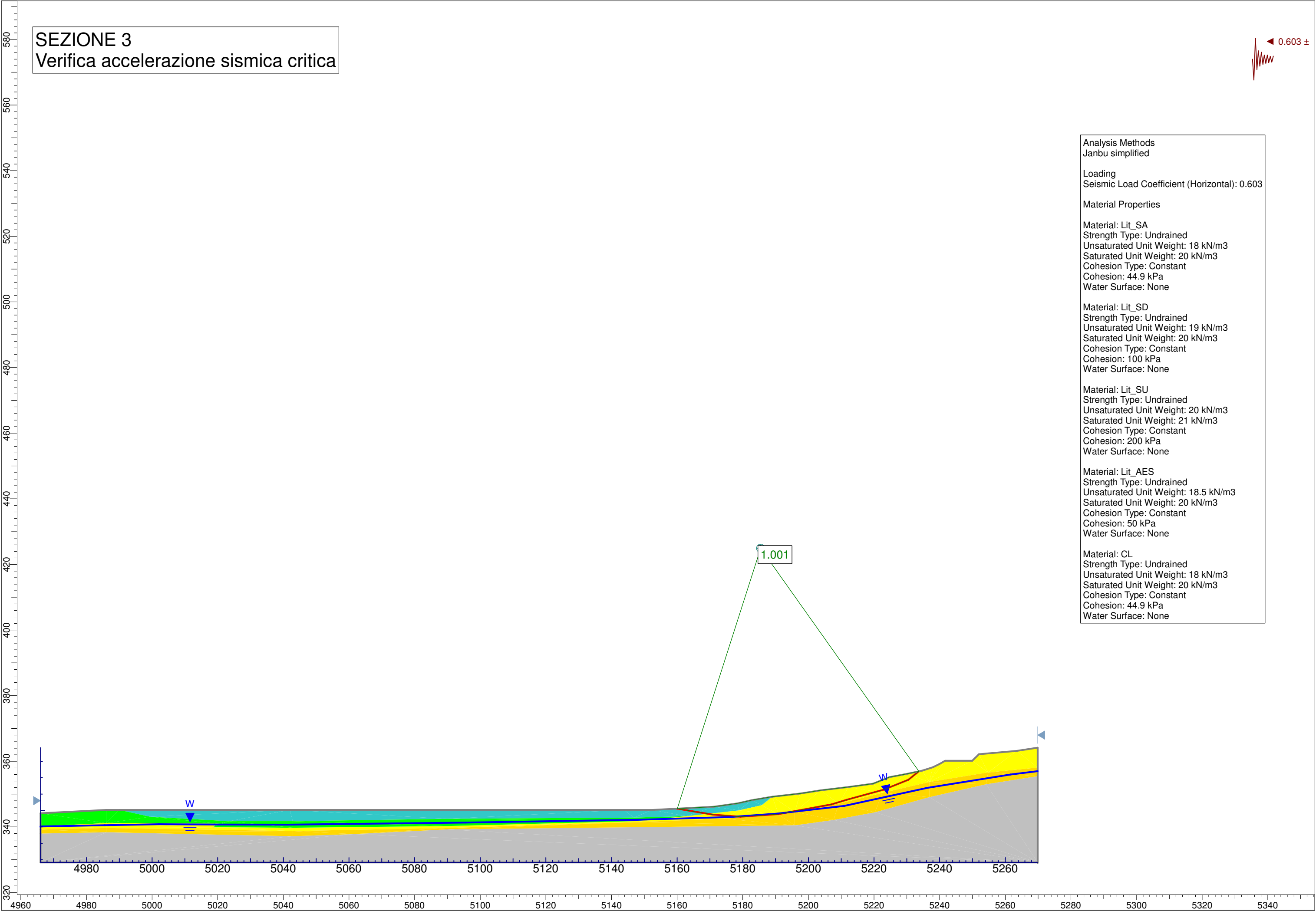
Unsaturated Unit Weight: 18 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion Type: Constant

Cohesion: 44.9 kPa

Water Surface: None



SEZIONE 3
Verifica in tensioni efficaci - lungo termine

Analysis Methods
Janbu simplified

Material Properties

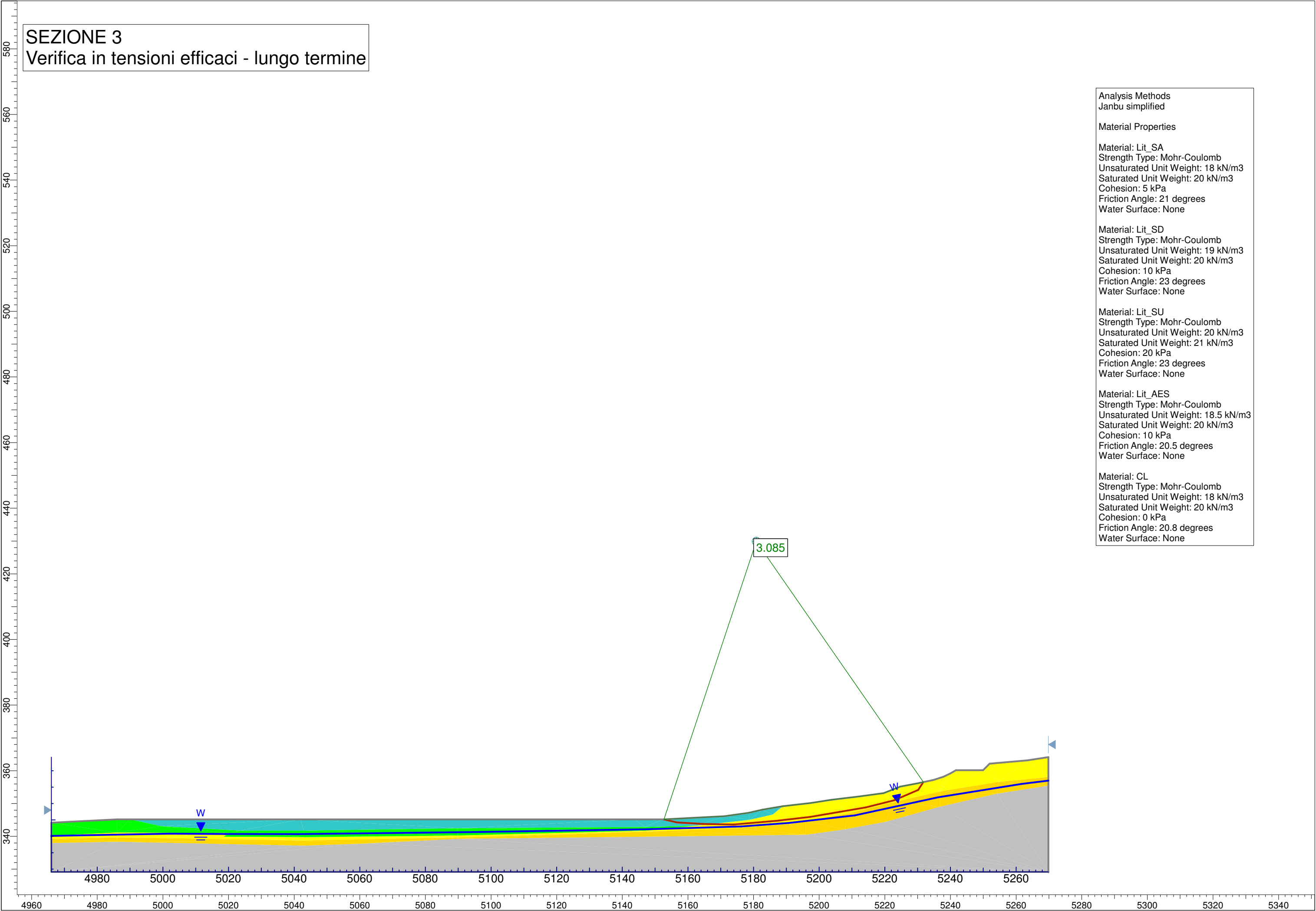
Material: Lit_SA
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 5 kPa
Friction Angle: 21 degrees
Water Surface: None

Material: Lit_SD
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 10 kPa
Friction Angle: 23 degrees
Water Surface: None

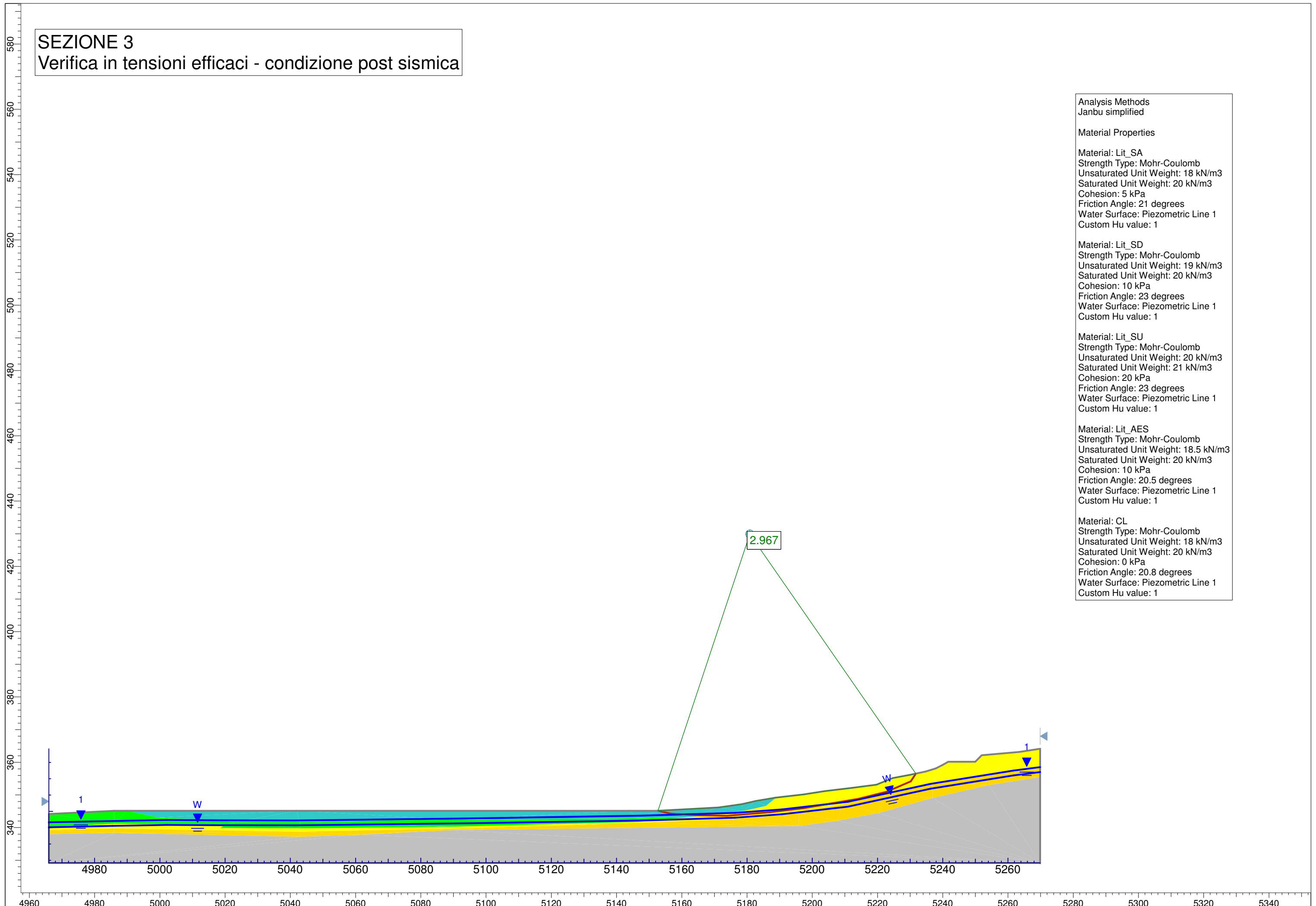
Material: Lit_SU
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion: 20 kPa
Friction Angle: 23 degrees
Water Surface: None

Material: Lit_AES
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18.5 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 10 kPa
Friction Angle: 20.5 degrees
Water Surface: None

Material: CL
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 0 kPa
Friction Angle: 20.8 degrees
Water Surface: None



Verifica in tensioni efficaci - condizione post sismica



Material: CL
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m³
Saturated Unit Weight: 20 kN/m³
Cohesion: 0 kPa
Friction Angle: 20.8 degrees
Water Surface: Piezometric Line 1
Custom Hu value: 1

SALUDECIO

SEZIONE 12
Verifica in tensioni totali

Analysis Methods
Janbu simplified

Material Properties

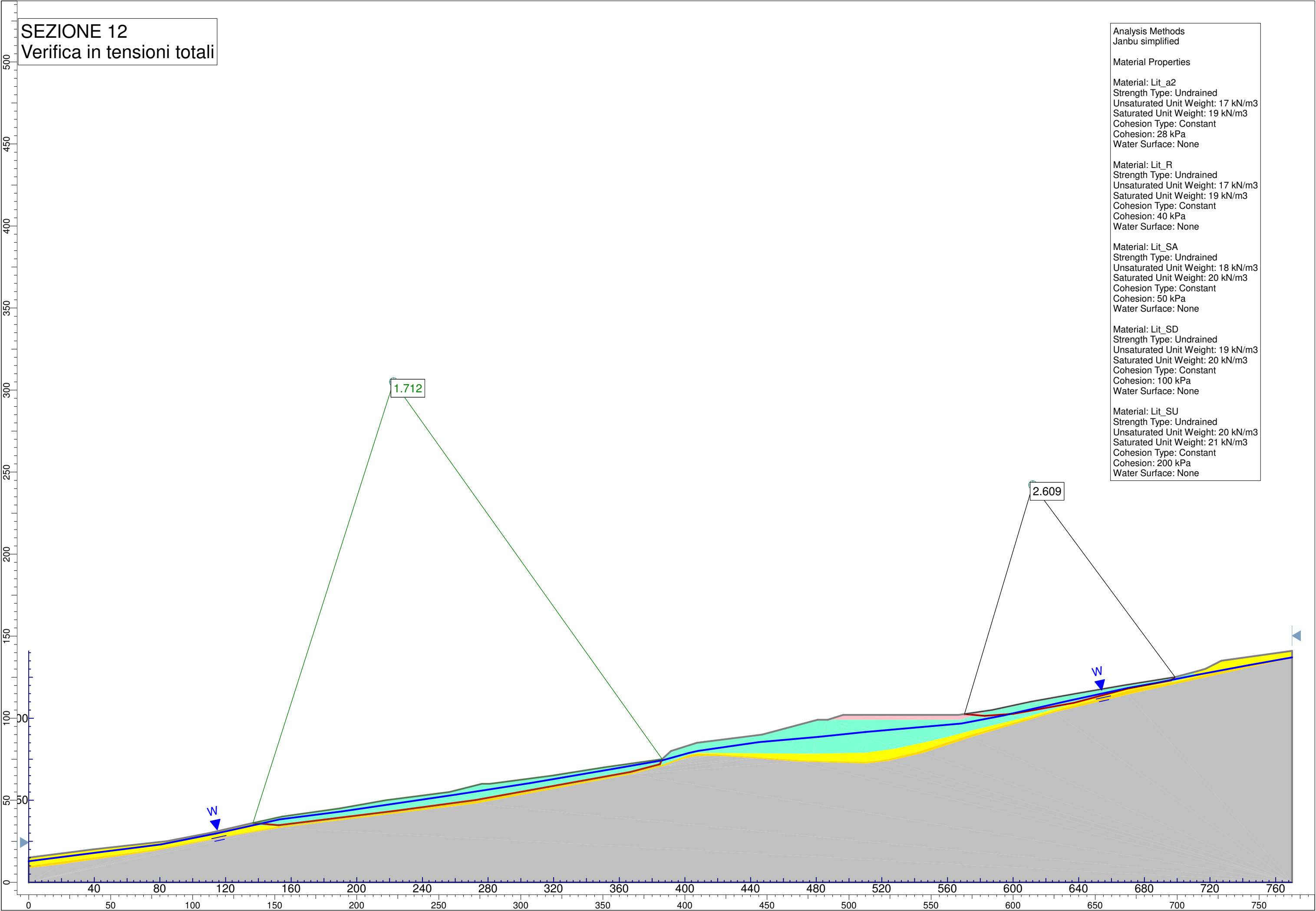
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 28 kPa
Water Surface: None

Material: Lit_R
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 40 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 50 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



Verifica in tensioni totali - condizione sismica

Loading
Seismic Load Coefficient (Horizontal): 0.088
Seismic Load Coefficient (Vertical): 0.044

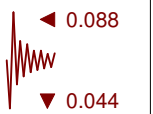
Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 28 kPa
Water Surface: None

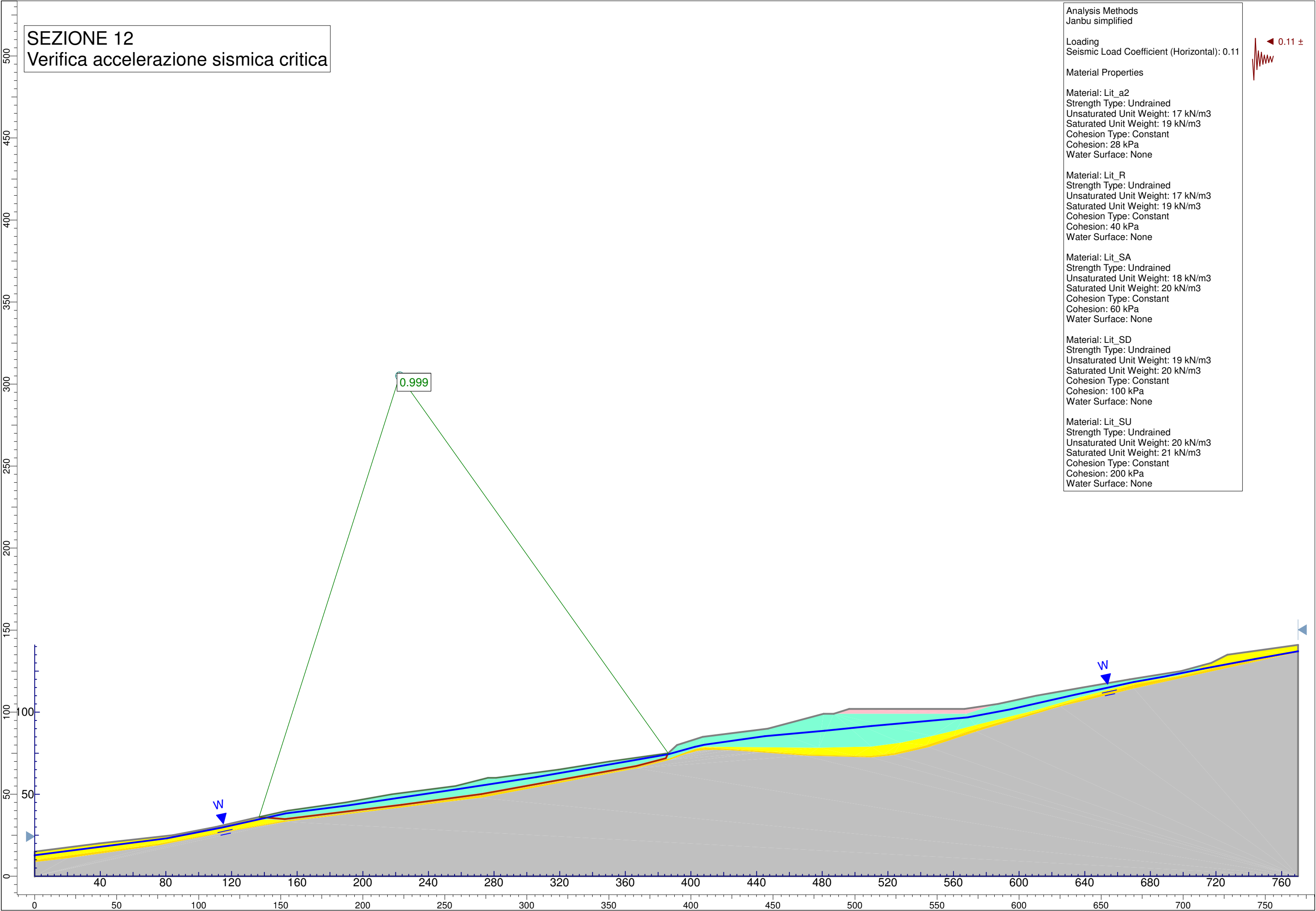
Material: Lit_R
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 40 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 50 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None





SEZIONE 12

Verifica in tensioni efficaci - lungo termine

Analysis Methods

Janbu simplified

Material Properties

Material: Lit_a2

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 17 kN/m3

Saturated Unit Weight: 19 kN/m3

Cohesion: 0 kPa

Friction Angle: 17 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Lit_R

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 17 kN/m3

Saturated Unit Weight: 19 kN/m3

Cohesion: 0 kPa

Friction Angle: 21 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Lit_SA

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 18 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion: 5 kPa

Friction Angle: 21 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Lit_SD

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 19 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion: 10 kPa

Friction Angle: 21 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Lit_SU

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 20 kN/m3

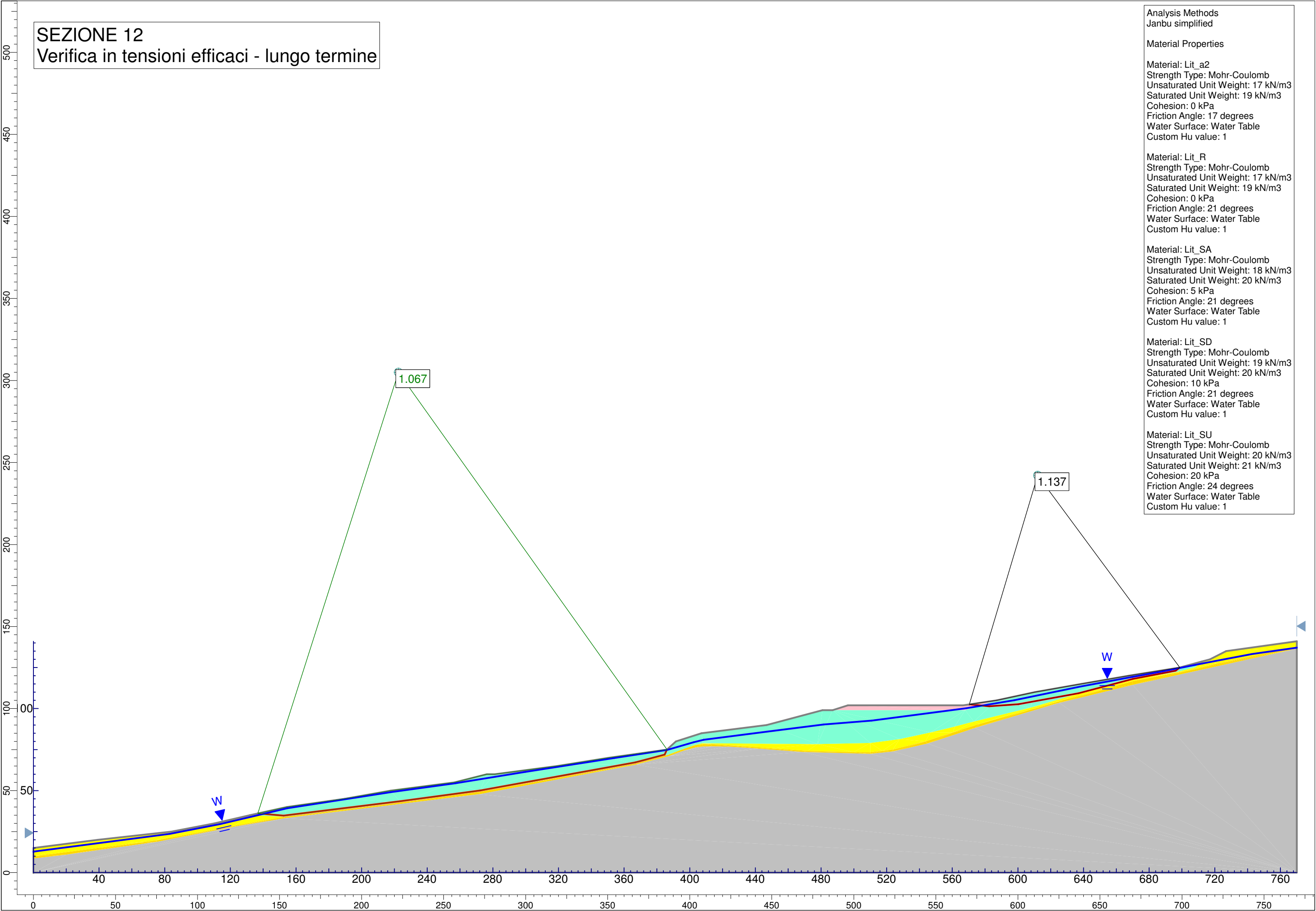
Saturated Unit Weight: 21 kN/m3

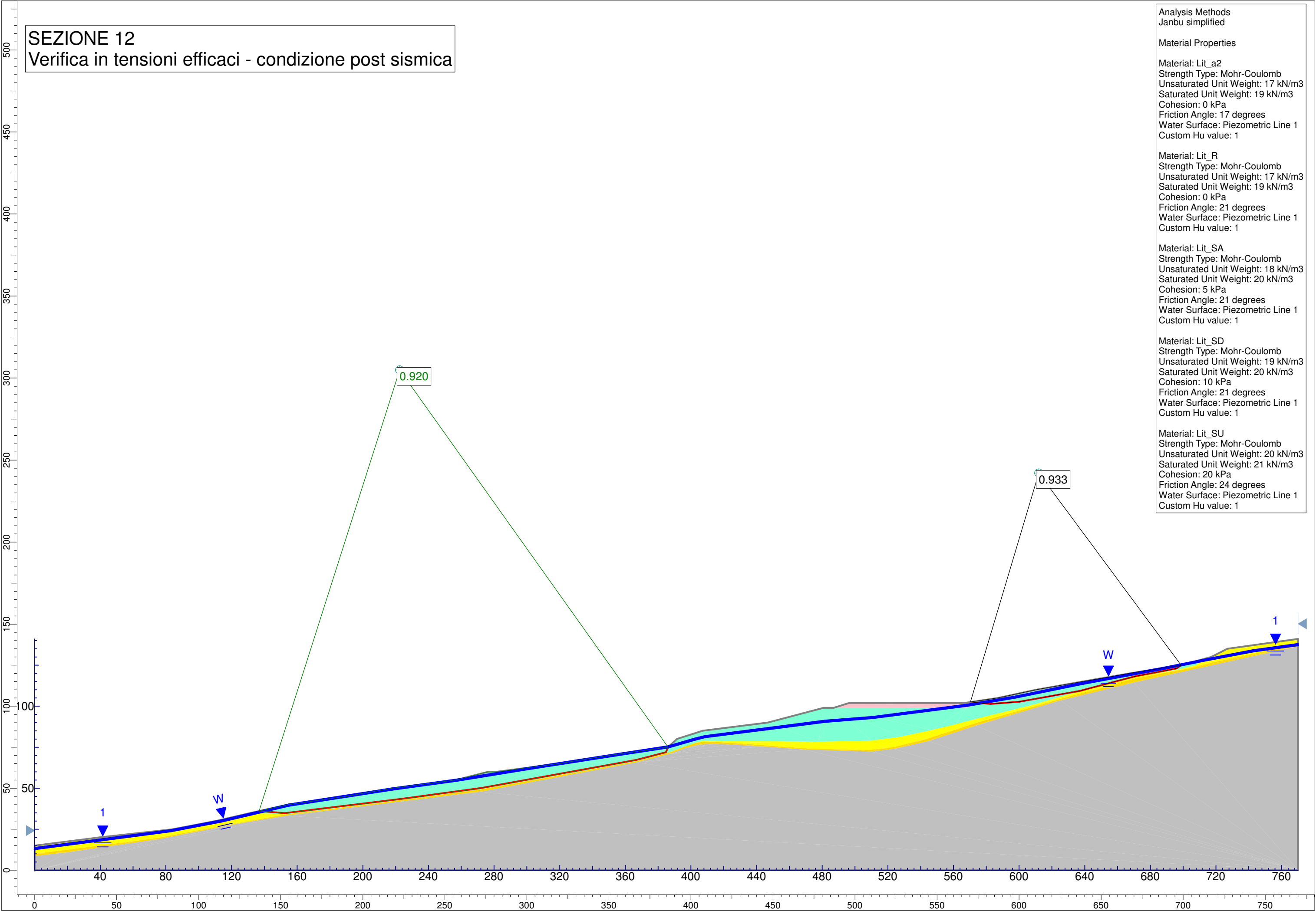
Cohesion: 20 kPa

Friction Angle: 24 degrees

Water Surface: Water Table

Custom Hu value: 1





SEZIONE 14
Verifica in tensioni totali

Analysis Methods
Janbu simplified

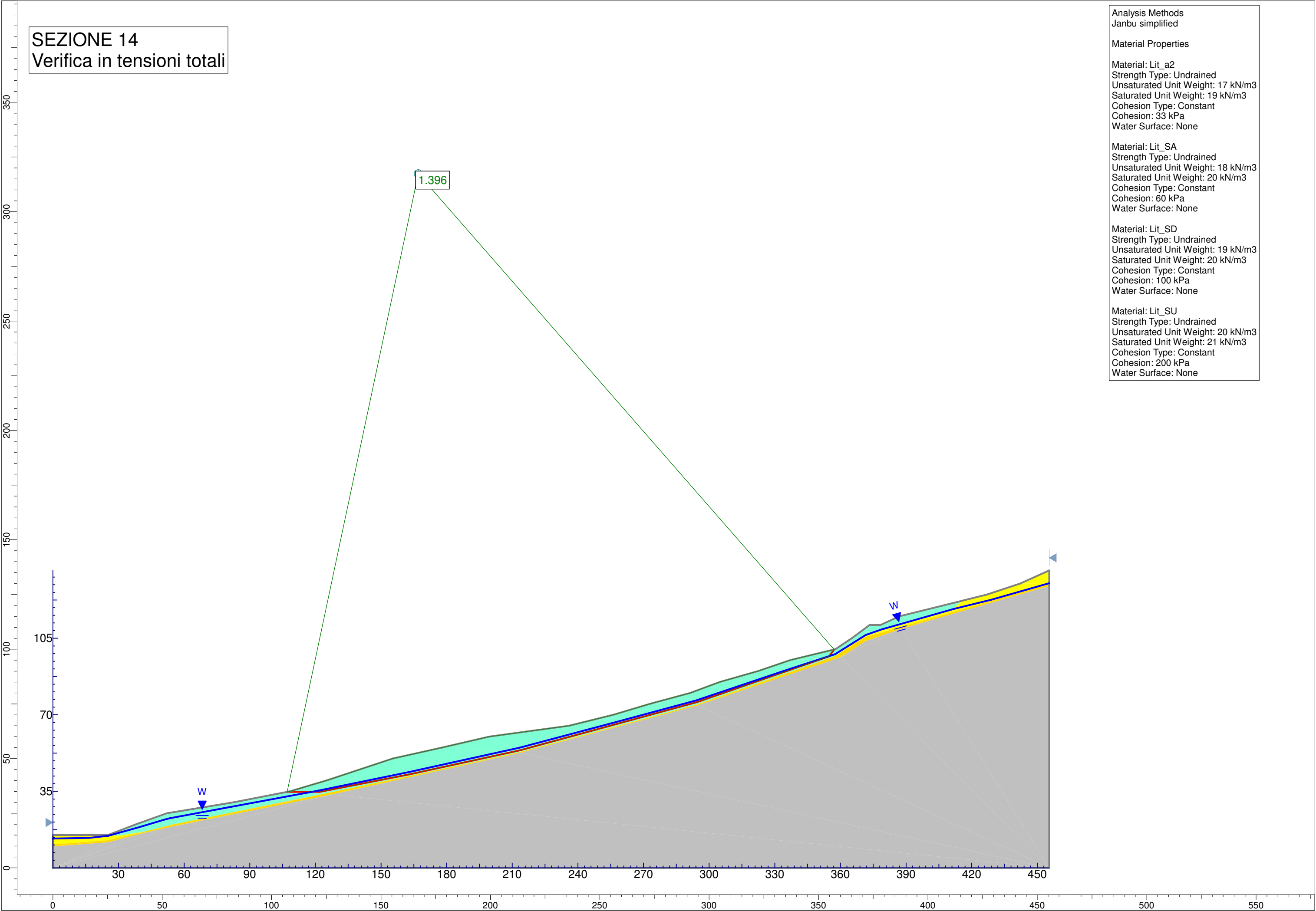
Material Properties

Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 33 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 60 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 14
Verifica in tensioni totali - condizione sismica

◀ 0.088 ±
▼ 0.044

Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.088
Seismic Load Coefficient (Vertical): 0.044

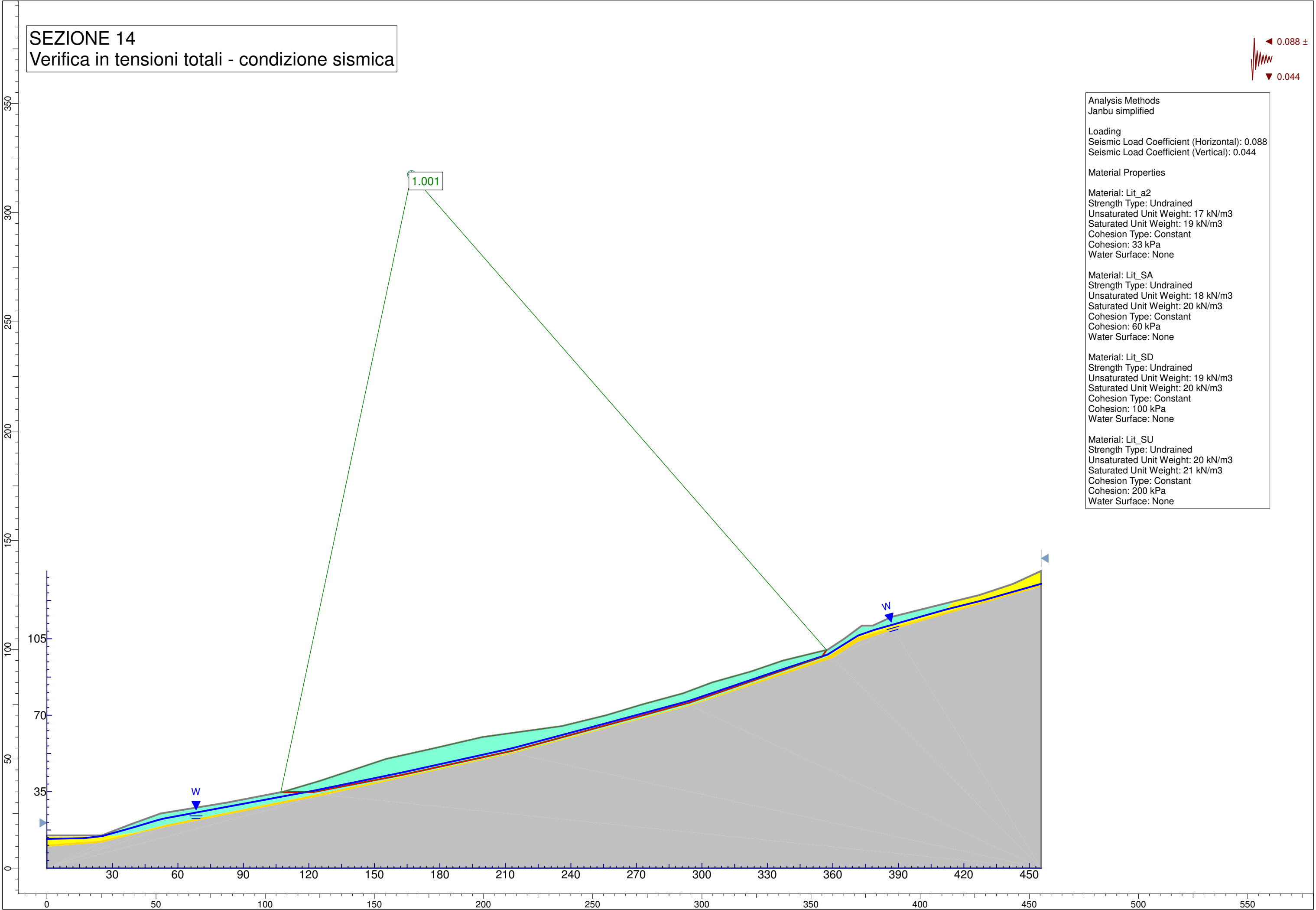
Material Properties

Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 33 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 60 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 14
Verifica accelerazione sismica critica



Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.0993

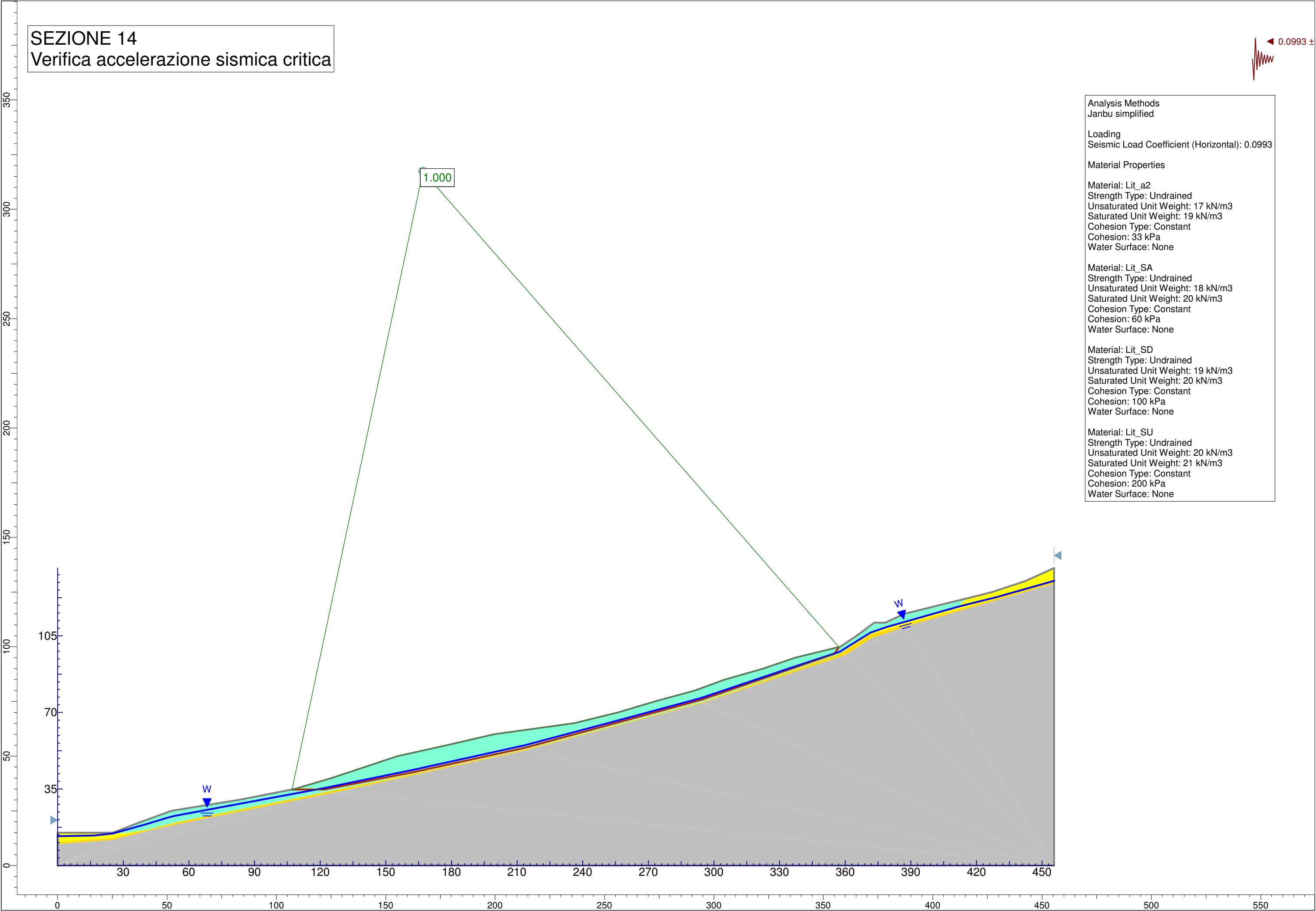
Material Properties

Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 33 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 60 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 100 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 14
Verifica in tensioni efficaci - lungo termine

Analysis Methods
Janbu simplified

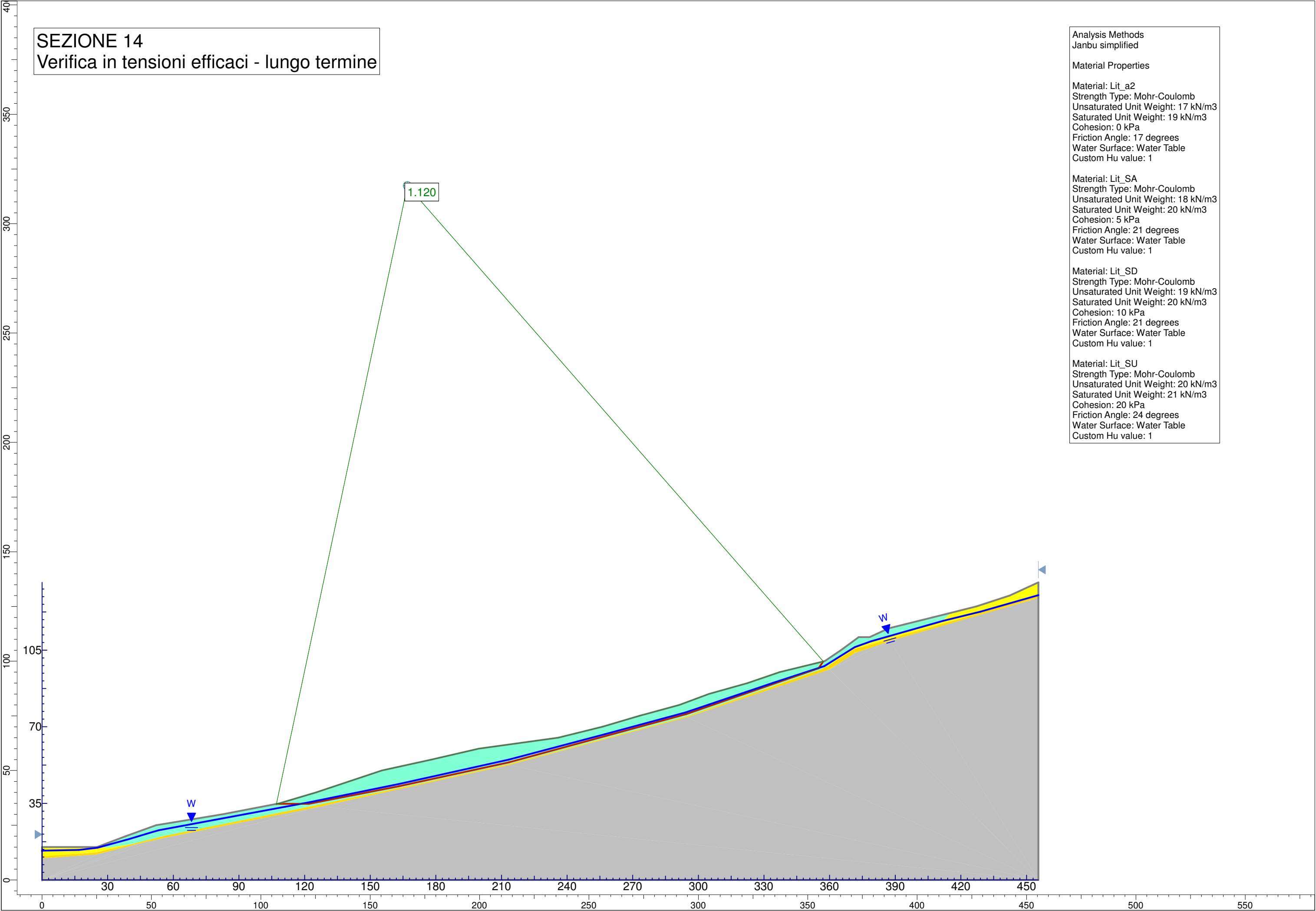
Material Properties

Material: Lit_a2
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion: 0 kPa
Friction Angle: 17 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_SA
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 5 kPa
Friction Angle: 21 degrees
Water Surface: Water Table
Custom Hu value: 1

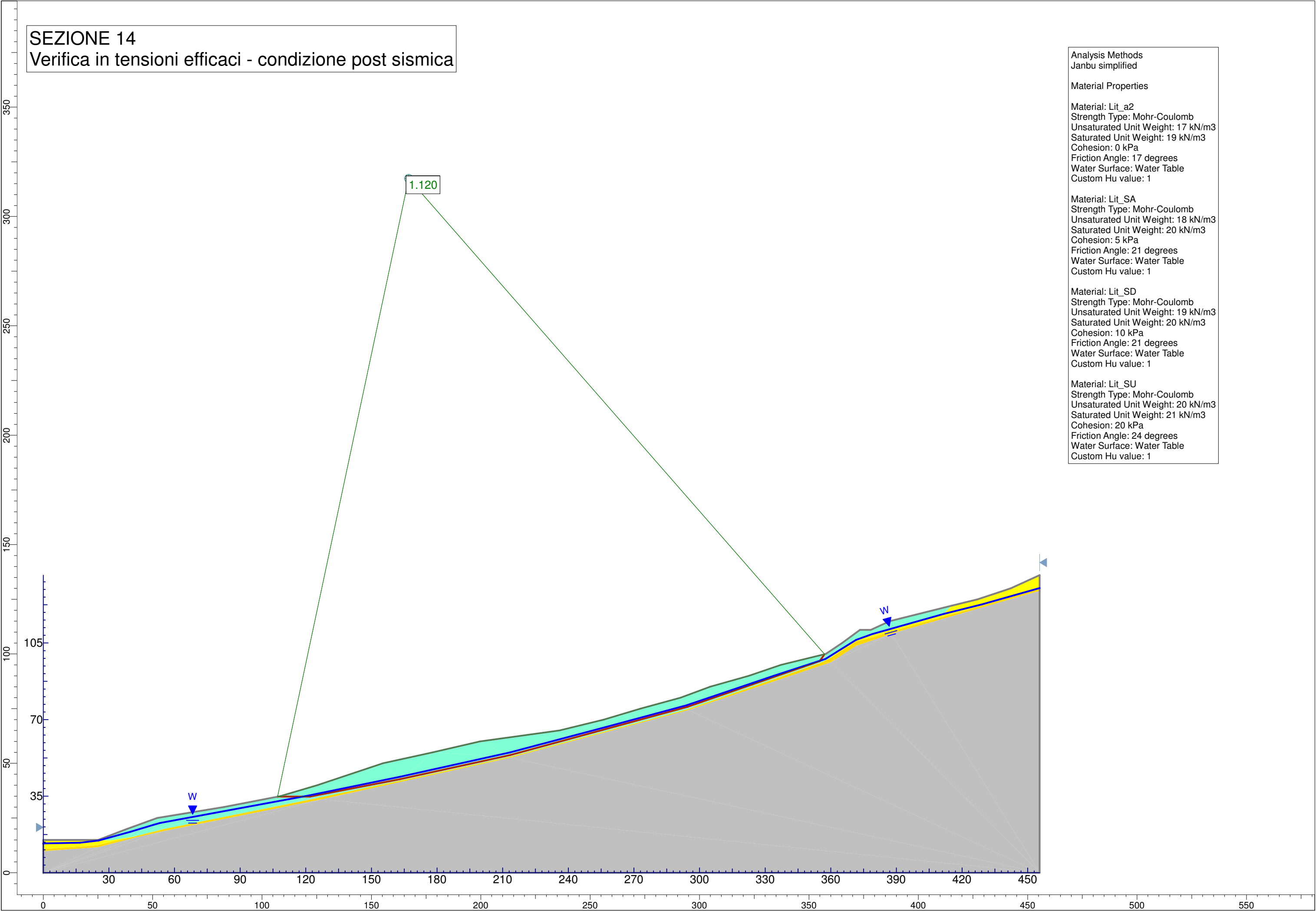
Material: Lit_SD
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 10 kPa
Friction Angle: 21 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_SU
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion: 20 kPa
Friction Angle: 24 degrees
Water Surface: Water Table
Custom Hu value: 1



SEZIONE 14

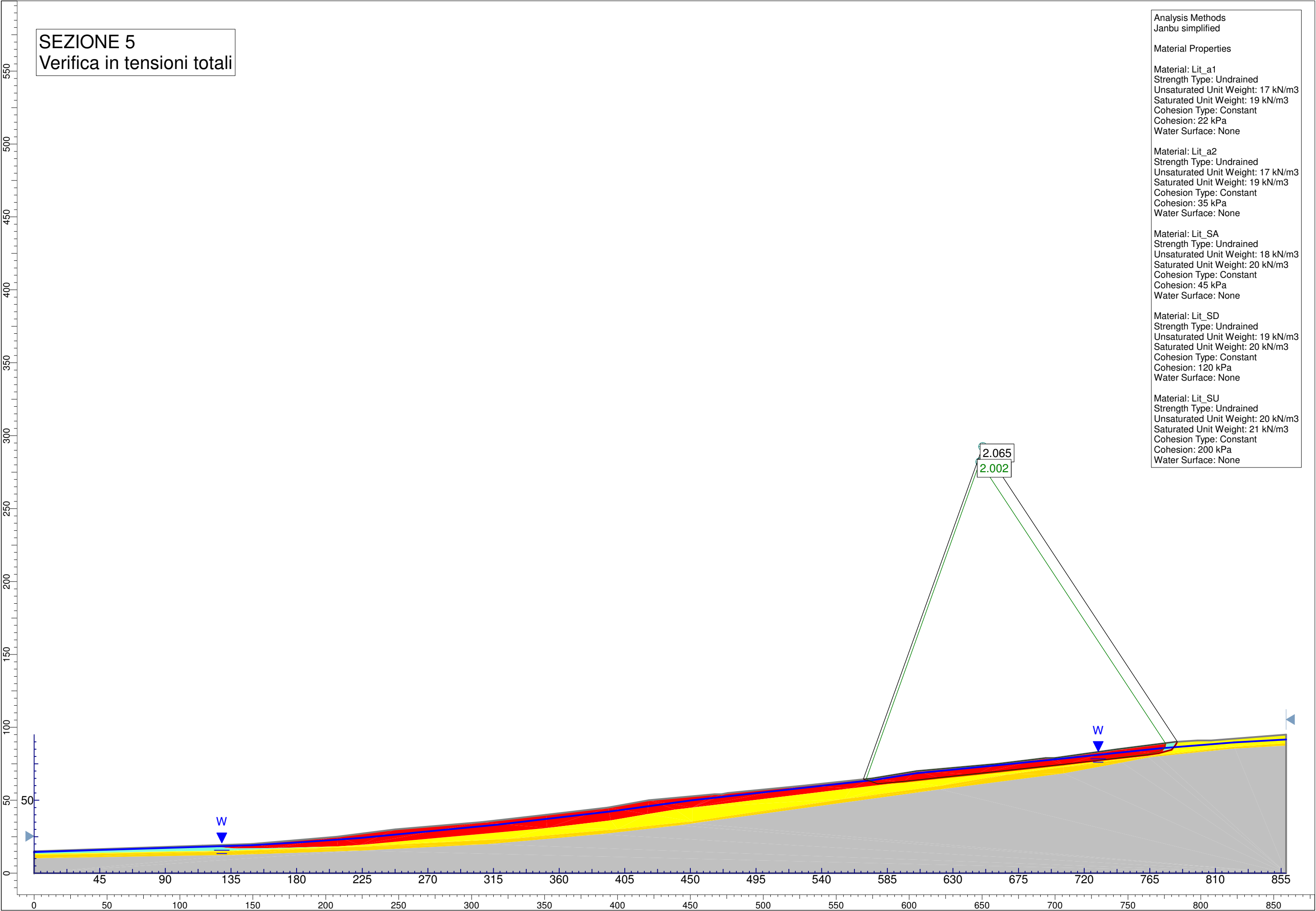
Verifica in tensioni efficaci - condizione post sismica



SAN CLEMENTE

SEZIONE 5
Verifica in tensioni totali

Analysis Methods	
Janbu simplified	
Material Properties	
Material: Lit_a1	
Strength Type:	Undrained
Unsaturated Unit Weight:	17 kN/m3
Saturated Unit Weight:	19 kN/m3
Cohesion Type:	Constant
Cohesion:	22 kPa
Water Surface:	None
Material: Lit_a2	
Strength Type:	Undrained
Unsaturated Unit Weight:	17 kN/m3
Saturated Unit Weight:	19 kN/m3
Cohesion Type:	Constant
Cohesion:	35 kPa
Water Surface:	None
Material: Lit_SA	
Strength Type:	Undrained
Unsaturated Unit Weight:	18 kN/m3
Saturated Unit Weight:	20 kN/m3
Cohesion Type:	Constant
Cohesion:	45 kPa
Water Surface:	None
Material: Lit_SD	
Strength Type:	Undrained
Unsaturated Unit Weight:	19 kN/m3
Saturated Unit Weight:	20 kN/m3
Cohesion Type:	Constant
Cohesion:	120 kPa
Water Surface:	None
Material: Lit_SU	
Strength Type:	Undrained
Unsaturated Unit Weight:	20 kN/m3
Saturated Unit Weight:	21 kN/m3
Cohesion Type:	Constant
Cohesion:	200 kPa
Water Surface:	None



Verifica in tensioni totali - condizione sismica

Loading
Seismic Load Coefficient (Horizontal): 0.09
Seismic Load Coefficient (Vertical): 0.045

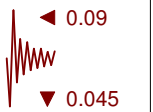
Material: Lit_a1
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 22 kPa
Water Surface: None

Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 35 kPa
Water Surface: None

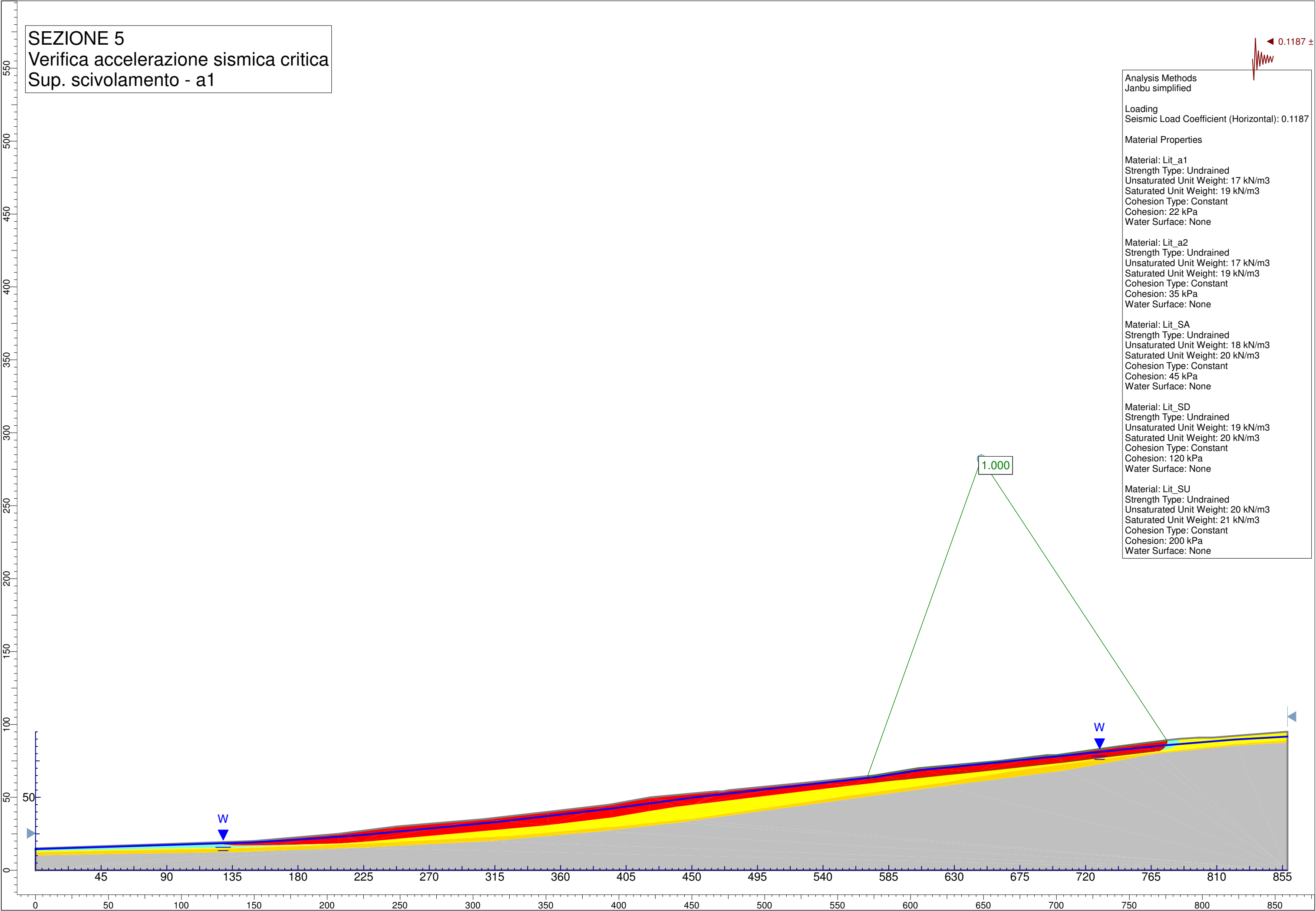
Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 120 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



SEZIONE 5
Verifica accelerazione sismica critica
Sup. scivolamento - a1



SEZIONE 5
Verifica accelerazione sismica critica
Sup. scivolamento - a2

◀ 0.1267 ±

Analysis Methods
Janbu simplified

Loading
Seismic Load Coefficient (Horizontal): 0.1267

Material Properties

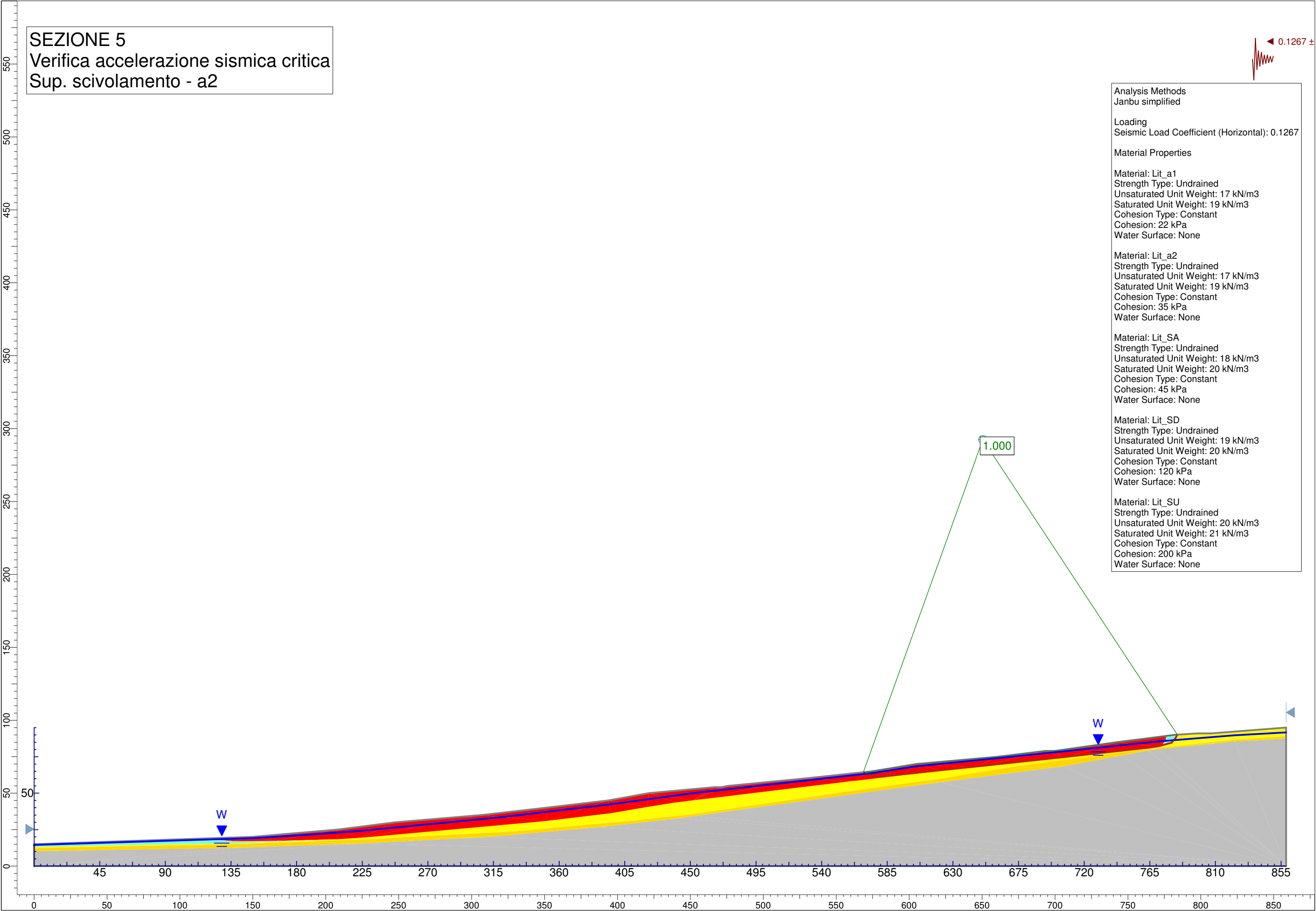
Material: Lit_a1
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 22 kPa
Water Surface: None

Material: Lit_a2
Strength Type: Undrained
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion Type: Constant
Cohesion: 35 kPa
Water Surface: None

Material: Lit_SA
Strength Type: Undrained
Unsaturated Unit Weight: 18 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 45 kPa
Water Surface: None

Material: Lit_SD
Strength Type: Undrained
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion Type: Constant
Cohesion: 120 kPa
Water Surface: None

Material: Lit_SU
Strength Type: Undrained
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion Type: Constant
Cohesion: 200 kPa
Water Surface: None



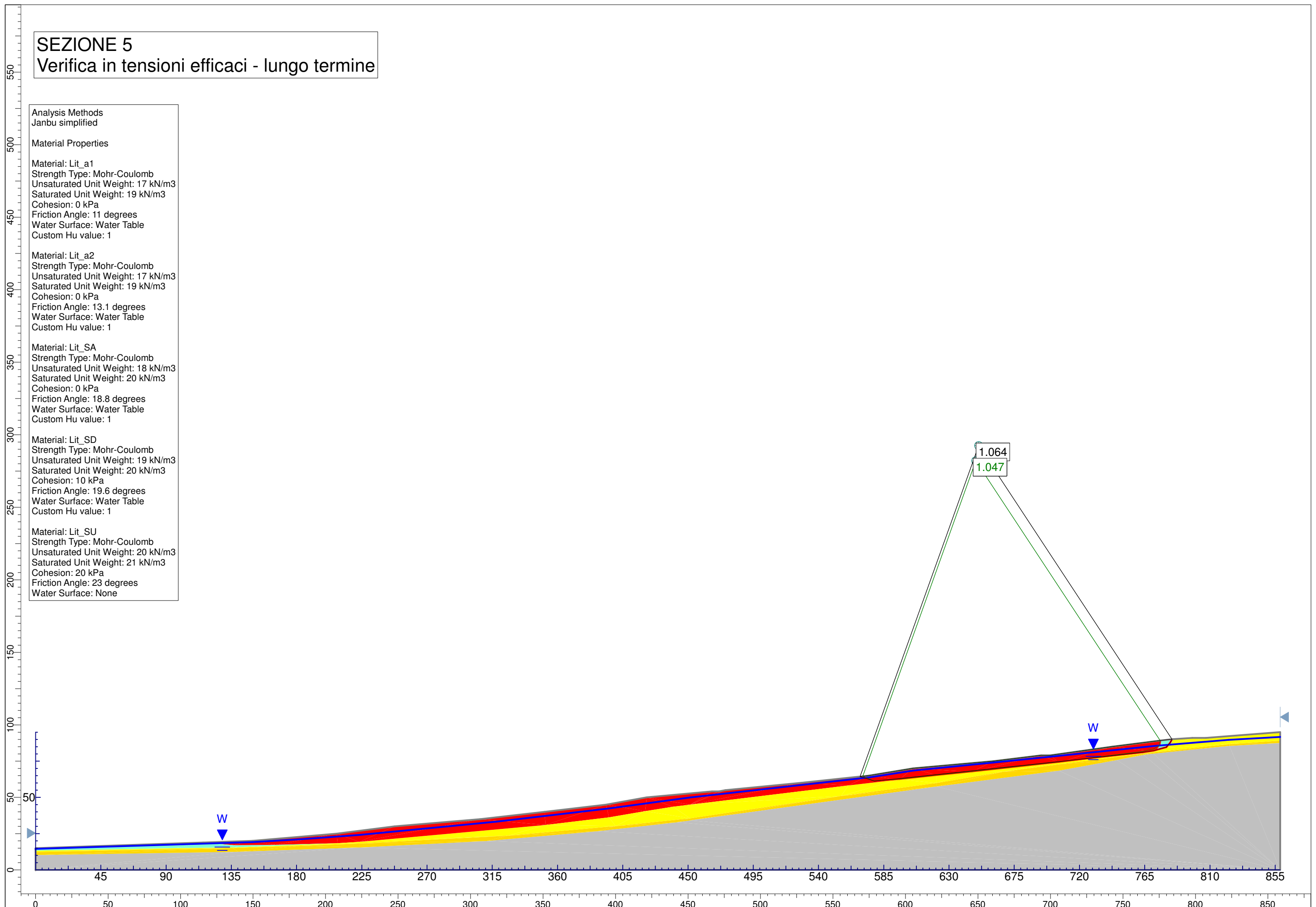
Verifica in tensioni efficaci - lungo termine

Material Properties

Material: Lit_a2
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 17 kN/m3
Saturated Unit Weight: 19 kN/m3
Cohesion: 0 kPa
Friction Angle: 13.1 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_SD
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 19 kN/m3
Saturated Unit Weight: 20 kN/m3
Cohesion: 10 kPa
Friction Angle: 19.6 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Lit_SU
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 20 kN/m3
Saturated Unit Weight: 21 kN/m3
Cohesion: 20 kPa
Friction Angle: 23 degrees
Water Surface: None



SEZIONE 5

Verifica in tensioni efficaci - condizione post sismica

Analysis Methods

Janbu simplified

Material Properties

Material: Lit_a1

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 17 kN/m3

Saturated Unit Weight: 19 kN/m3

Cohesion: 0 kPa

Friction Angle: 11 degrees

Water Surface: Piezometric Line 1

Custom Hu value: 1

Material: Lit_a2

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 17 kN/m3

Saturated Unit Weight: 19 kN/m3

Cohesion: 0 kPa

Friction Angle: 13.1 degrees

Water Surface: Piezometric Line 1

Custom Hu value: 1

Material: Lit_SA

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 18 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion: 0 kPa

Friction Angle: 18.8 degrees

Water Surface: Piezometric Line 1

Custom Hu value: 1

Material: Lit_SD

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 19 kN/m3

Saturated Unit Weight: 20 kN/m3

Cohesion: 10 kPa

Friction Angle: 19.6 degrees

Water Surface: Piezometric Line 1

Custom Hu value: 1

Material: Lit_SU

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 20 kN/m3

Saturated Unit Weight: 21 kN/m3

Cohesion: 20 kPa

Friction Angle: 23 degrees

Water Surface: Piezometric Line 1

Custom Hu value: 1

