

Korištenje formula u predlošcima

Program: Stratigrafija – Izvještaji
Datoteka: Demo_manual_51.gsg

Programi Stratigrafija i Laboratorij dopuštaju korištenje formula za automatske rekalkulacije odabranih podataka ispitivanja. Cilj ovog inženjerskog priručnika je pokazati koliko je jednostavno raditi s formulama i kako ih koristiti za modifikacije izlaznih protokola.

U našem slučaju dodat ćemo graf za omjer trenja R_f izlaznom izvještaju za CPT ispitivanje, što ćemo najprije izračunati koristeći već postojeće podatke. Računamo omjer trenja iz formule:

$$R_f = \left(\frac{f_s}{q_c} \right) * 100 [\%]$$

, gdje je q_c otpornos konusa, a f_s je lokalno trenje.


Zadatak

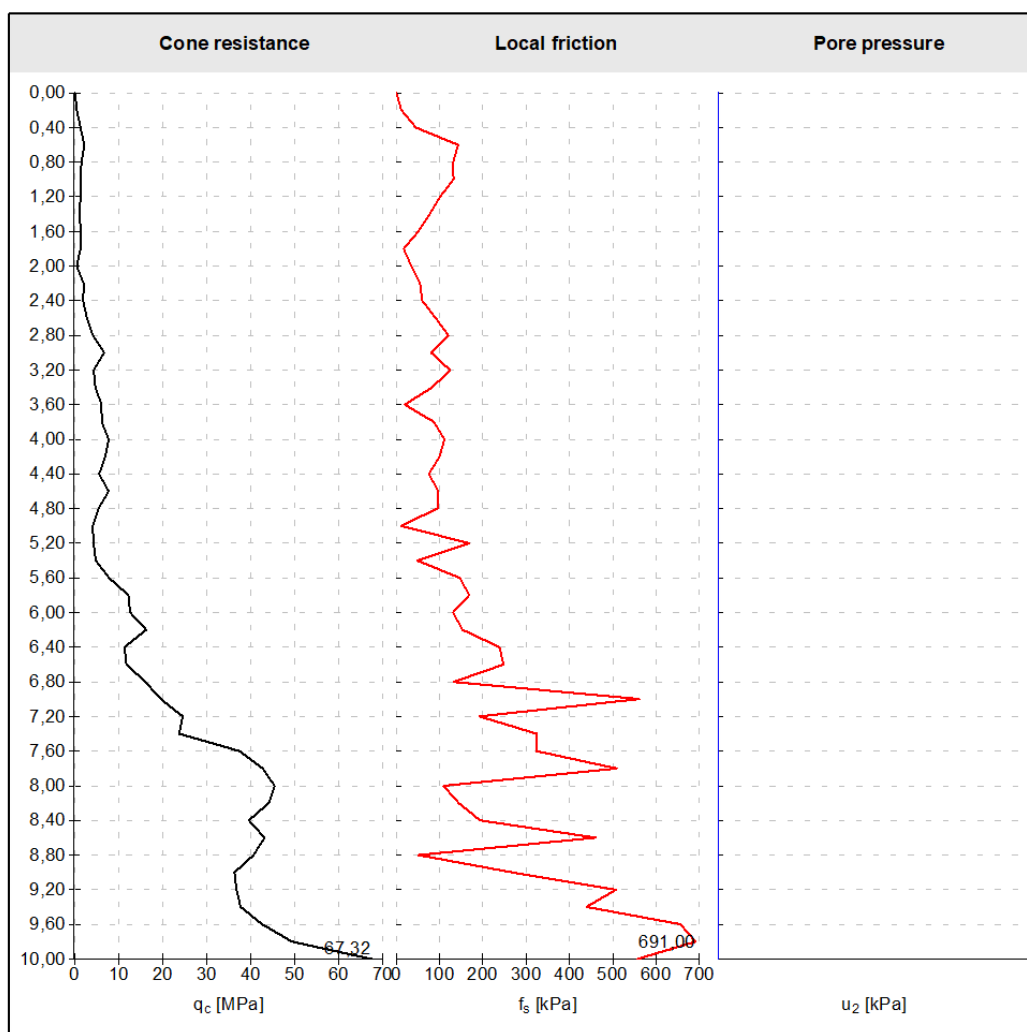
Modificirajte "EN-Standard" CPT predložak kako bi:

- CPT tablica sadržavala stupac "Friction ratio"
- Se izradila formula za automatski proračun novog stupca za unesene podatke
- Se prikazao omjer trenja u izlaznom izvještaju.

Modificirajte predložak s demo datotekom - DEMO - Templates EN.gsg, koju možete pronaći u Fine online primjerima. Nazovite novo kreirani set predložaka EM 51 i spremite ga u Template Manager za buduće korištenje.

CPT izlazni protokol za set predložaka "EN-Standard" ima sljedeći izgled:


GEO5 Laboratoř s.r.o. Sokolovská 232, Praha 8, 18000			Cone penetration test (CPT)	CPT1
Project: Apartment building "Moonlighting" - Geological survey				
Project ID: AA_0014 - 2019	Annex no.: 17.C		Type of test: TE2	
Location: Stará 14/78, Hradec Králové			Type of cone: Ac=1000 mm ²	
Measured: Joe Fieldman	Coordinate System: S-JTSK / Krovak / Balt after adjustment		Application class: 2	
Evaluated: Bill New	Coordinate X: 1039700,63		Acc. to standard: EN ISO 22476-1	
Date of test: 10.08.2016	Coordinate Y: 745200,84		Vertical offset of the origin: 0,00 m	
Scale: 1:66,7	Coordinate Z: 222,00 m		Overall depth: 10,00 m	
Equipment: PenSta A22	Filter location: u ₂		GWT: 5,00 m	

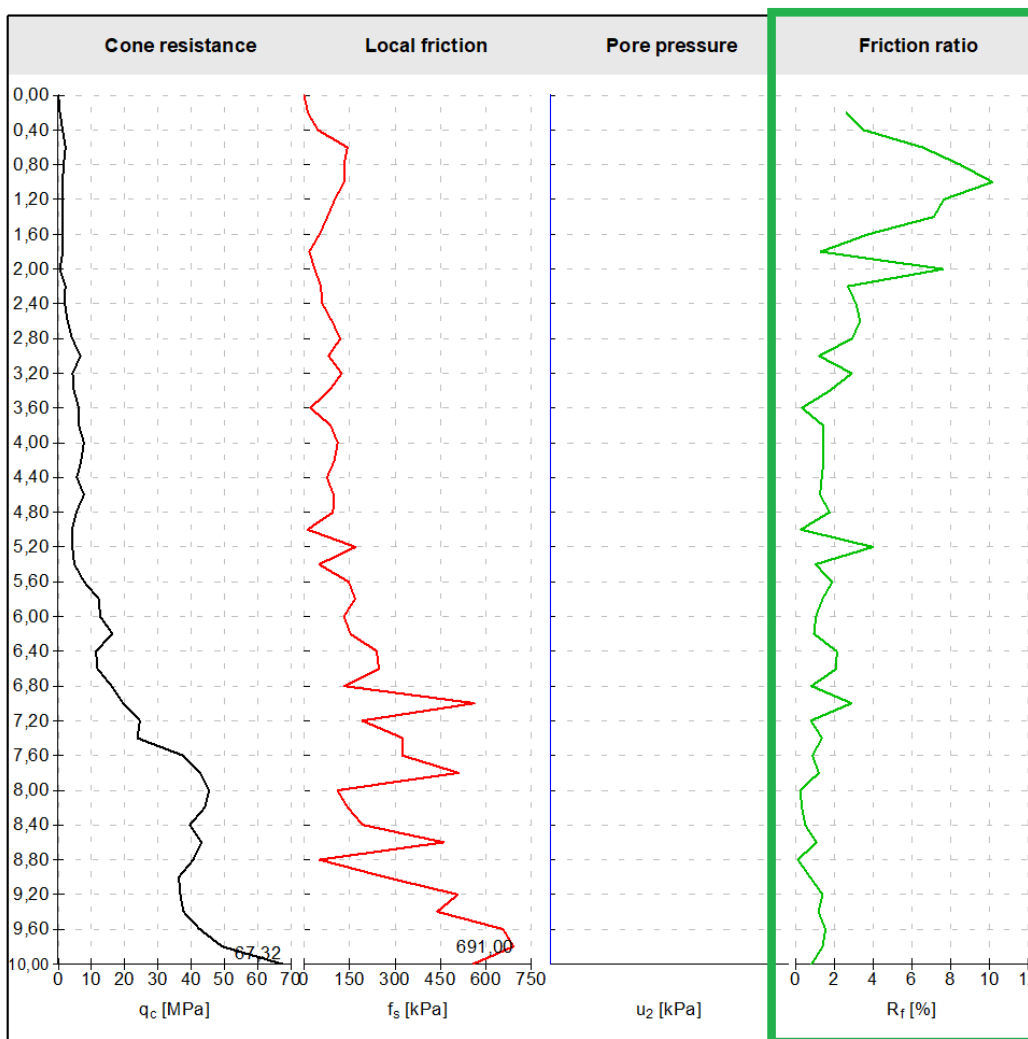


Notes:

- Sunny/ Partially cloudy/ Calm
- Raw data not modified

Potrebno je modificirati protokol da izgleda kao:

GEO5 Laborator s.r.o. Sokolovská 232, Praha 8, 18000			Cone penetration test (CPT)	CPT1
Project: Apartment building "Moonlighting" - Geological survey				
Project ID: AA_0014 - 2019	Annex no.: 17.C		Type of test: TE2	
Location: Stará 14/78, Hradec Králové			Type of cone: Ac=1000 mm ²	
Measured: Joe Fieldman	Coordinate System: S-JTSK / Krovak / Balt after adjustment		Application class: 2	
Evaluated: Bill New	Coordinate X: 1039700,63		Acc. to standard: EN ISO 22476-1	
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Scale: 1:66,7	Coordinate Z: 222,00 m		Overall depth: 10,00 m	
Equipment: PenSta A22	Filter location: u ₂		GWT: 5,00 m	

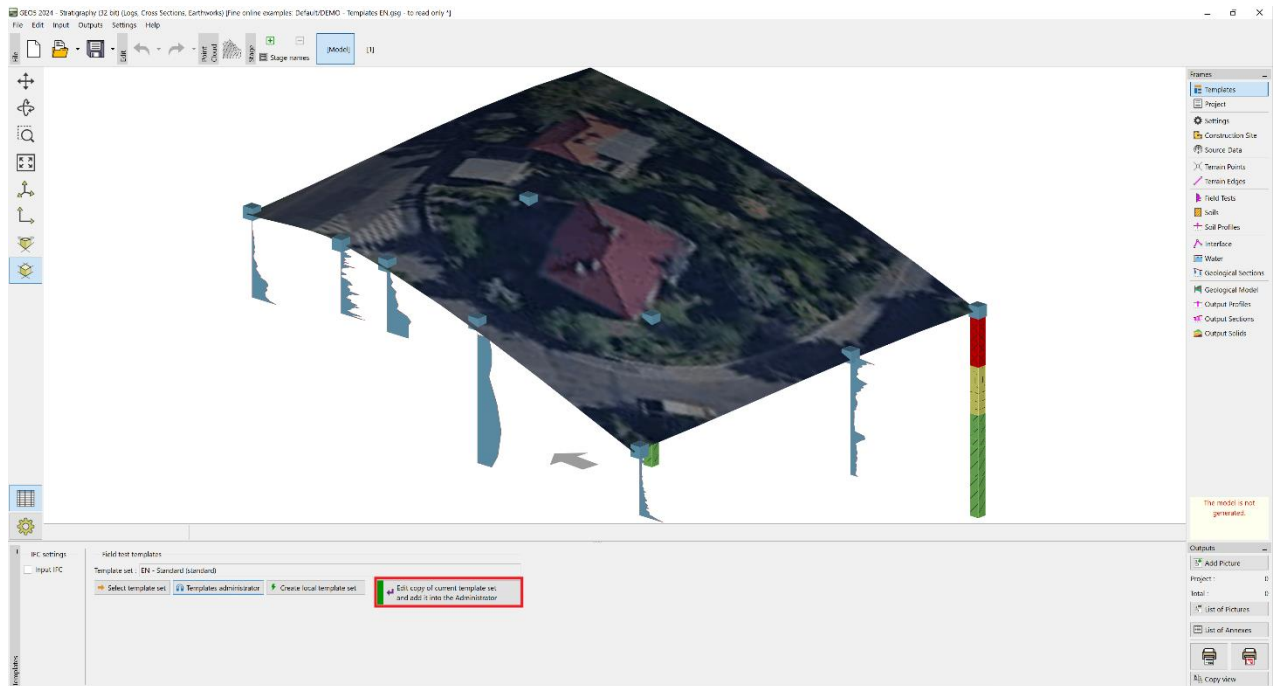


Notes:

- Sunny/ Partially cloudy/ Calm
- Raw data not modified

Rješenje:

Najprije otvorite datoteku DEMO - Templates EN.gsg, koja sadrži podatke od kojih možemo započeti. U kartici Templates, provjerite je li odabran set predložaka koji želimo uređivati - "EN-Standard" (ako je odabran neki drugi set predložaka, odaberite ga iz popisa predložaka koristeći tipku "Select template set"). Pritisnite tipku "Edit copy of current template set and add it into the administrator" kako bi se otvorio prozor za uređivanje seta predložaka.



Imenovat ćemo izrađeni set predložaka kao EM 51. Nakon uređivanja, predložak s ovim imenom će se spremirati u upravitelj kao korisnički set predložaka.

Add copy of standard template set into the administrator

Name :

EM 51

▼

EN

Comment :

— Templates —

No.	Name
-----	------

U tablici odaberite predložak za CPT i pritisnite “Edit”.

Add copy of standard template set into the administrator

Name: EM 51 EN Comment:

Templates

No.	Name	Capability	Comment
1	Borehole	model creation, borehole, well	
2	Well	model creation, borehole, well	
3	CPT	model creation, CPTu	
4	DPT	model creation, DPT	
5	SPT	model creation, SPT, borehole, well	
6	DMT	model creation, DMT	
7	PMT	model creation, PMT, borehole	

Add (to the end)
 Insert (before 3)
 Edit (number 3)
 Remove (number 3)
 Move upwards (number 3)
 Move downwards (number 3)
 Edit formulas (number 3)
 Copy (number 3)
 Paste

Project data template Common data template Field test templates outside set: Borehole Add

Add + Close Cancel

U prozoru “Edit template” nastavite s uređivanjem stavke “Table CPT”.

Edit template

Name: CPT EN Comment:

Input data

No.	Name	Identifier	Type	Parameters	Conditional input	Comment
1	Test name	6	String			General / Fixed
2	Overall depth	6	Number	Symbol: d _{ov} 0.89 m 0.89 ft		Read only - automatically determined from data of field test / General / Fixed
3	Coordinate X	6	Number	0.89 m 0.89 ft		General / Fixed
4	Coordinate Y	6	Number	0.89 m 0.89 ft		General / Fixed
5	Coordinate Z	6	Number	0.89 m 0.89 ft		General / Fixed
6	Vertical offset of the origin	6	Number	Symbol: d _o 0.89 m 0.89 ft		General / Fixed
7	Table CPT	7	Table	Width depth		CPT / Fixed
	Depth	6	Number	Number of elements 4		
	Cone resistance	6	Number			
	Local friction	6	Number			
	Point pressure	6	Number			
8	Data - test	8	Group	Number of elements 6		
	GWT	6	Number			
	Type of test	6	String			
	Type of cone	6	String			
	Application class	6	String			
	Filter location	6	String			
	Equipment	6	String			
9	Data - Pretest	9	Group	Number of elements 7		
	Annex no.	6	String			
	Foundation	6	String			

Add according to sample
 Add (to the end)
 Insert (before 7)
 Edit (number 7)
 Remove (number 7)
 Move upwards (number 7)
 Move downwards (number 7)
 Copy (number 7)
 Paste
 Edit formulas

List of output protocols

No.	Name	Protocol type
1	Field test - one page	Field tests
2	Field test - two pages	Field tests
3	Field test - 150	Field tests
4	Field test - 1:100	Field tests
5	Soil profile - one page	Soil Profiles
6	Soil profile - two pages	Soil Profiles
7	Soil profile - 150	Soil Profiles
8	Soil profile - 1:100	Soil Profiles

Copy All
 Paste

List of mapping for export and import

No.	Name	Comment
1	FINE - MS4 4.0.4	
2	FINE - EN Standard	

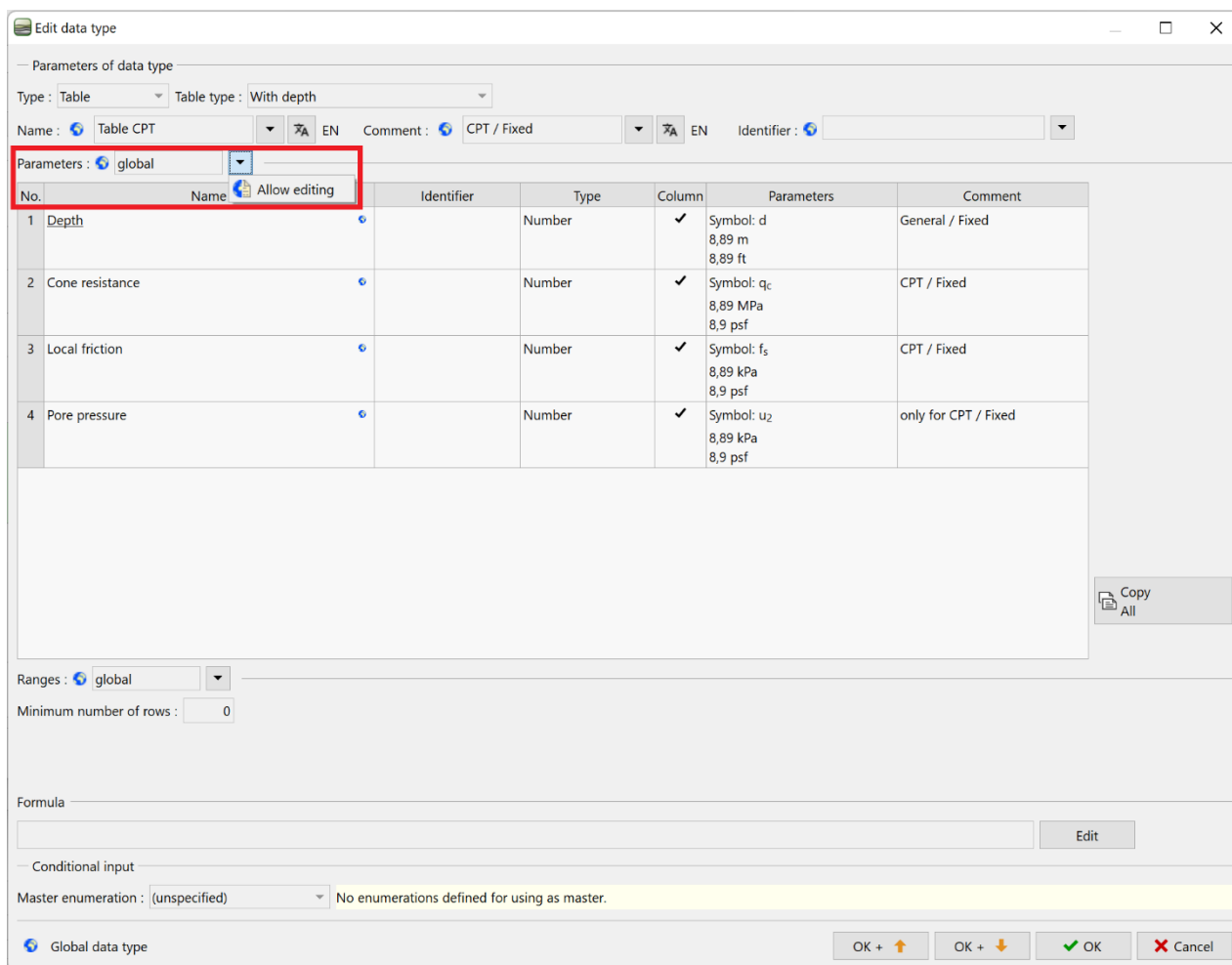
Copy All
 Paste

Default columns for Geological Sections (number of columns 4): input columns
 Graphical representation (number of items 3): input graphical representations

Global libraries: Fine Capability: model creation, CPTu

OK OK OK OK Cancel

Možemo vidjeti da je tablica dio globalne knjižnice. Početno je zadano da ju nije moguće uređivati. Zbog toga je potrebno kliknuti na tipku “Allow editing” kako bismo mogli dodati novu stavku u tablicu.



Parameters of data type

Type: Table Table type: With depth

Name: Table CPT EN Comment: CPT / Fixed EN Identifier:

Parameters: global

No.	Name	Identifier	Type	Column	Parameters	Comment
1	Depth		Number	✓	Symbol: d 8,89 m 8,89 ft	General / Fixed
2	Cone resistance		Number	✓	Symbol: q _c 8,89 MPa 8,9 psf	CPT / Fixed
3	Local friction		Number	✓	Symbol: f _s 8,89 kPa 8,9 psf	CPT / Fixed
4	Pore pressure		Number	✓	Symbol: u ₂ 8,89 kPa 8,9 psf	only for CPT / Fixed

Copy All

Ranges: global

Minimum number of rows: 0

Formula




Conditional input

Master enumeration: (unspecified) No enumerations defined for using as master.

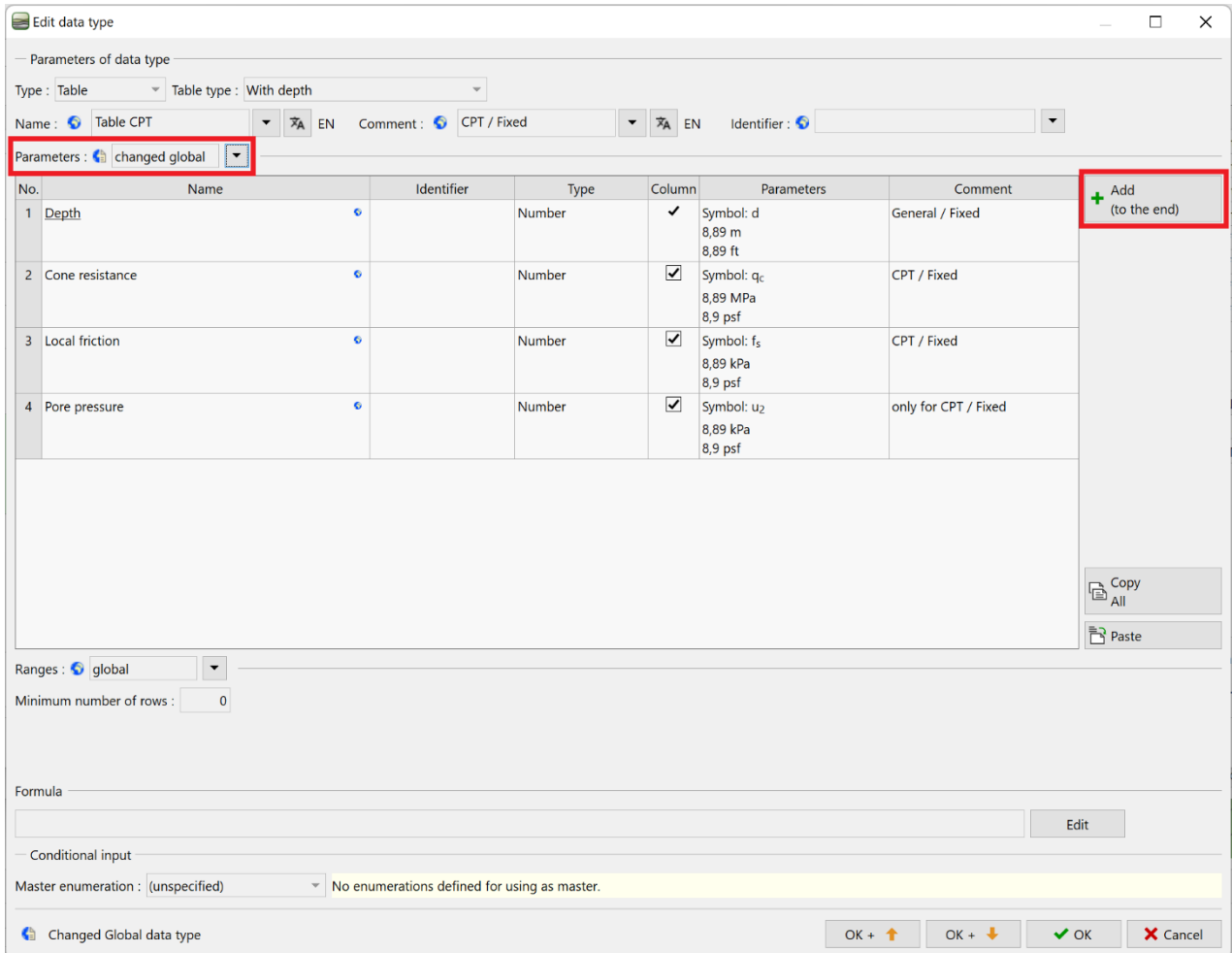
Global data type

OK + OK + OK Cancel

Napomena: Svaki podatak ima simbol pokraj imena, koji odgovara oznaci vrste podataka.

1. **globus**  - prikazuje da je vrsta podataka odabrana iz globalne knjižnice (“Global Library”). Globalna knjižnica sadrži predefinirane vrste podataka koje korisnik može dodati u svoj predložak. Globalna knjižnica se odabire u donjem lijevom kutu dijaloškog prozora.
2. **List papira**  - prikazuje da je vrsta podataka kreirana i imenovana od strane korisnika
3. **globus/list papira**  - prikazuje da je vrsta podataka odabrana iz globalne knjižnice i naknadno modificirana od strane korisnika

Vrsta podataka se promijenila na “changed global” za parametre tablice. Sad možemo nastaviti s dodavanjem nove stavke.



Parameters of data type

Type: Table Table type: With depth

Name: Table CPT EN Comment: CPT / Fixed EN Identifier:

Parameters: changed global

No.	Name	Identifier	Type	Column	Parameters	Comment
1	Depth		Number	<input checked="" type="checkbox"/>	Symbol: d 8,89 m 8,89 ft	General / Fixed
2	Cone resistance		Number	<input checked="" type="checkbox"/>	Symbol: q _c 8,89 MPa 8,9 psf	CPT / Fixed
3	Local friction		Number	<input checked="" type="checkbox"/>	Symbol: f _s 8,89 kPa 8,9 psf	CPT / Fixed
4	Pore pressure		Number	<input checked="" type="checkbox"/>	Symbol: u ₂ 8,89 kPa 8,9 psf	only for CPT / Fixed

Ranges: global

Minimum number of rows: 0

Formula

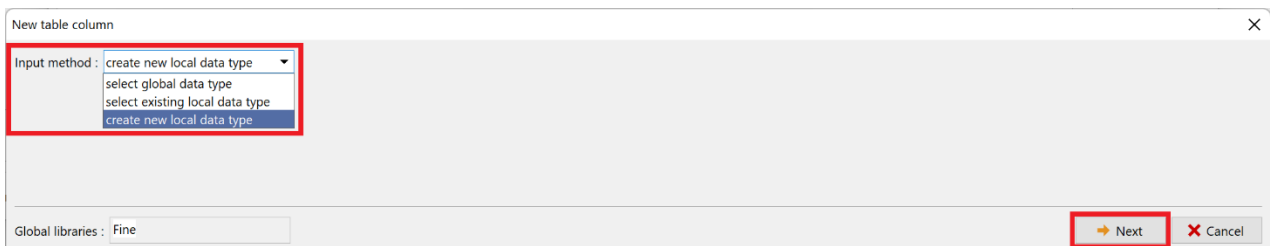
Conditional input

Master enumeration: (unspecified) No enumerations defined for using as master.

Changed Global data type

OK + OK + OK Cancel

Koristite tipku “Add” za dodavanje novog stupca tablice. U našem slučaju određujemo stavku koja nije dio globalne knjižnice. Zato odabrimo “new local data type”. Potvrđujemo s tipkom “Next”.



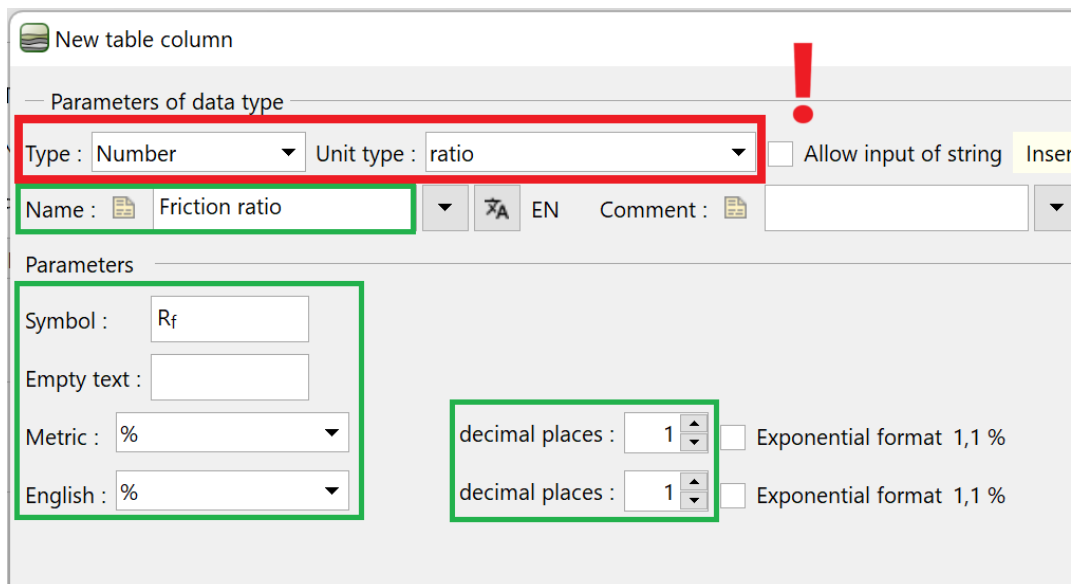
New table column

Input method: create new local data type
select global data type
select existing local data type
create new local data type

Global libraries: Fine

Next Cancel

Odabiremo vrstu podataka (number) i vrstu jedinica (ratio). **Ove dvije vrste moraju biti točno definirane u trenutku kad ih unosimo. Naknadne modifikacije ovih podataka nisu moguće. U slučaju pogreške, potrebno je obrisati kreirane vrste podataka i ponovno ih unijeti.** Unesite ostale podatke: naziv, simbol i odaberite metričke i imperialne jedinice za vrste podataka – u našem slučaju postoci. Ovi podaci se mogu bilo kad izmijeniti. Potvrdite s tipkom “Add”. Dijaloški prozor se neće automatski zatvoriti kako bismo mogli dodati još vrsta podataka, ako to želimo. Zato je potrebno ga zatvoriti pomoću tipke close (x) ili klikom na tipku “Cancel”.



New table column

Parameters of data type

Type : Number Unit type : ratio ☐ Allow input of string **Add**

Name : Friction ratio EN Comment :

Parameters

Symbol : R_f

Empty text :

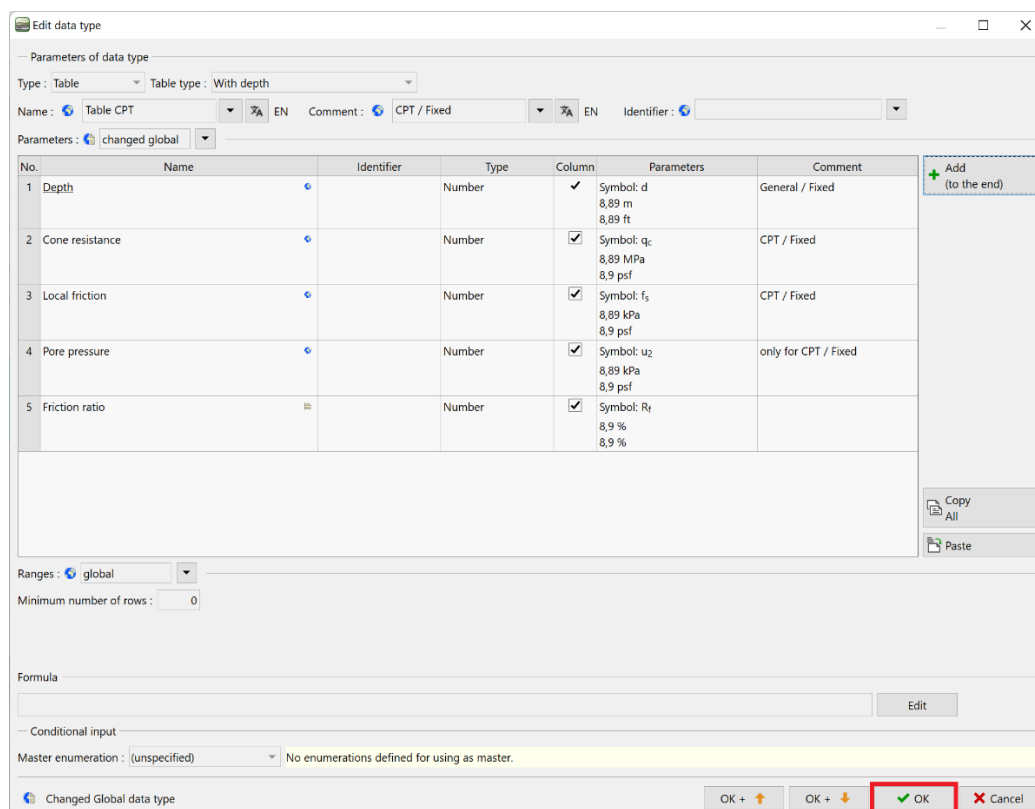
Metric : %

English : %

decimal places : 1 ☐ Exponential format 1,1 %

decimal places : 1 ☐ Exponential format 1,1 %

U CPT tablici, možemo sad vidjeti novu vrstu podataka. Potvrdite sva uređivanja tablice i CPT predloška klikom na tipku “OK”.



Edit data type

Parameters of data type

Type : Table Table type : With depth

Name : Table CPT EN Comment : CPT / Fixed EN Identifier :

Parameters : changed global

No.	Name	Identifier	Type	Column	Parameters	Comment
1	Depth		Number	✓	Symbol: d 8,89 m 8,89 ft	General / Fixed
2	Cone resistance		Number	✓	Symbol: q _c 8,89 MPa 8,9 psf	CPT / Fixed
3	Local friction		Number	✓	Symbol: f _s 8,89 kPa 8,9 psf	CPT / Fixed
4	Pore pressure		Number	✓	Symbol: u ₂ 8,89 kPa 8,9 psf	only for CPT / Fixed
5	Friction ratio		Number	✓	Symbol: R _f 8,9 % 8,9 %	

Copy All Paste

Ranges : global

Minimum number of rows : 0

Formula

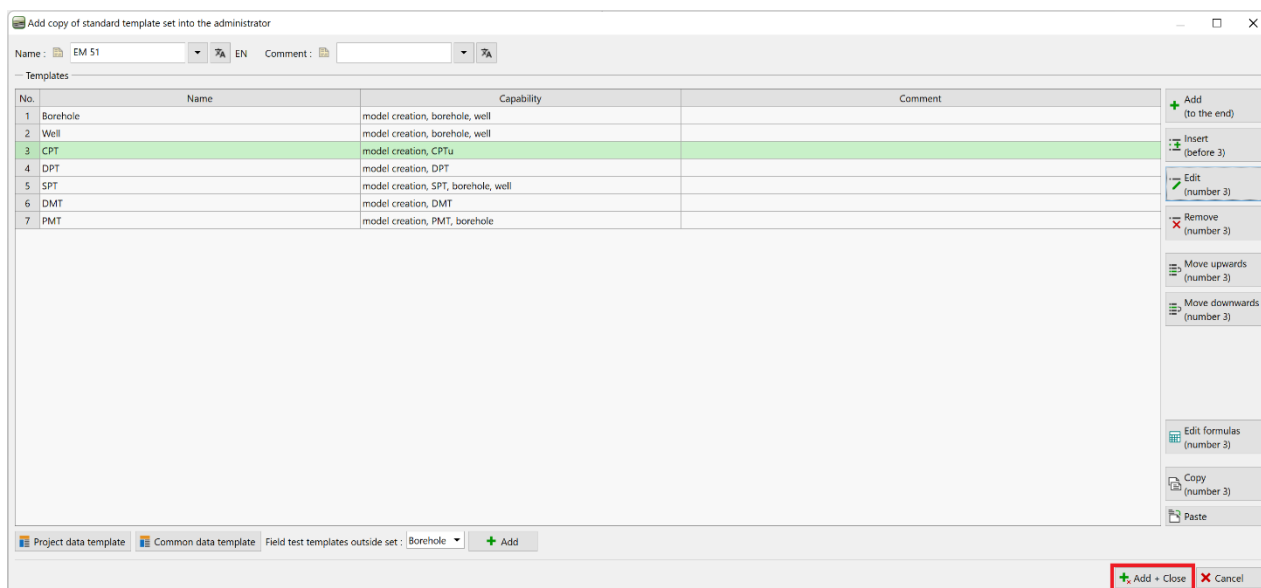
Conditional input

Master enumeration : (unspecified) No enumerations defined for using as master.

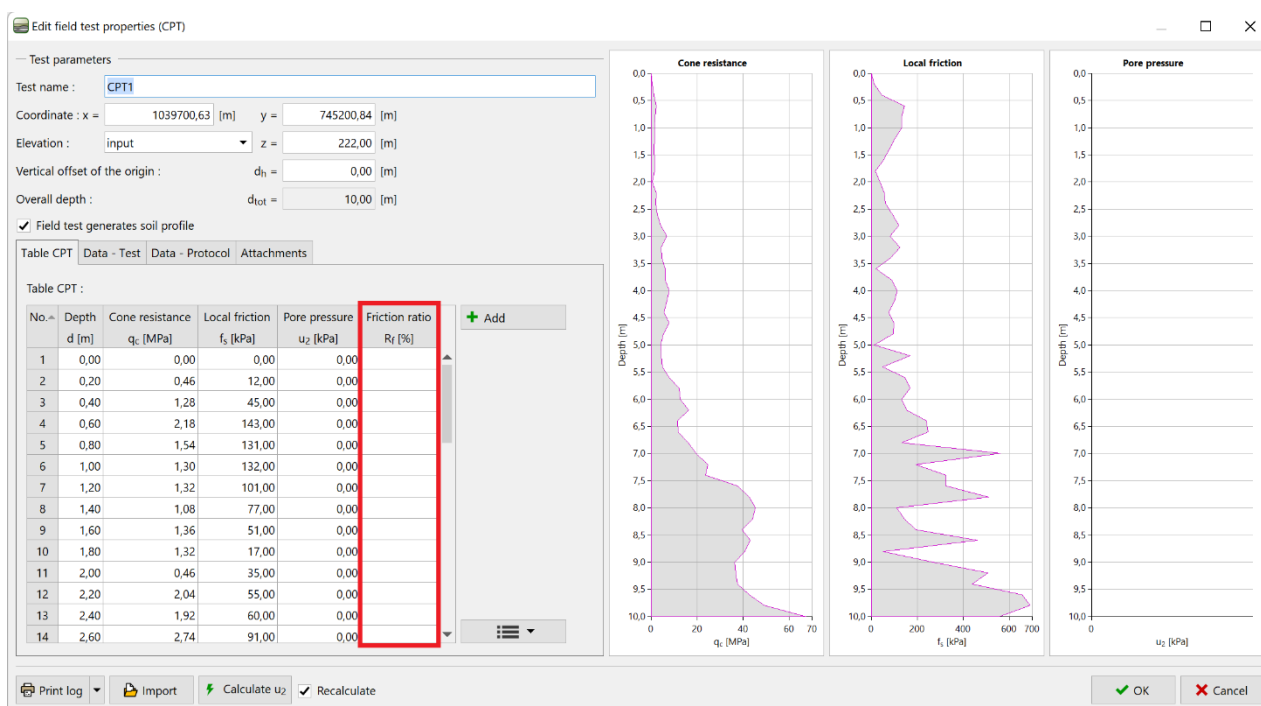
Changed Global data type

OK + OK + **OK** Cancel

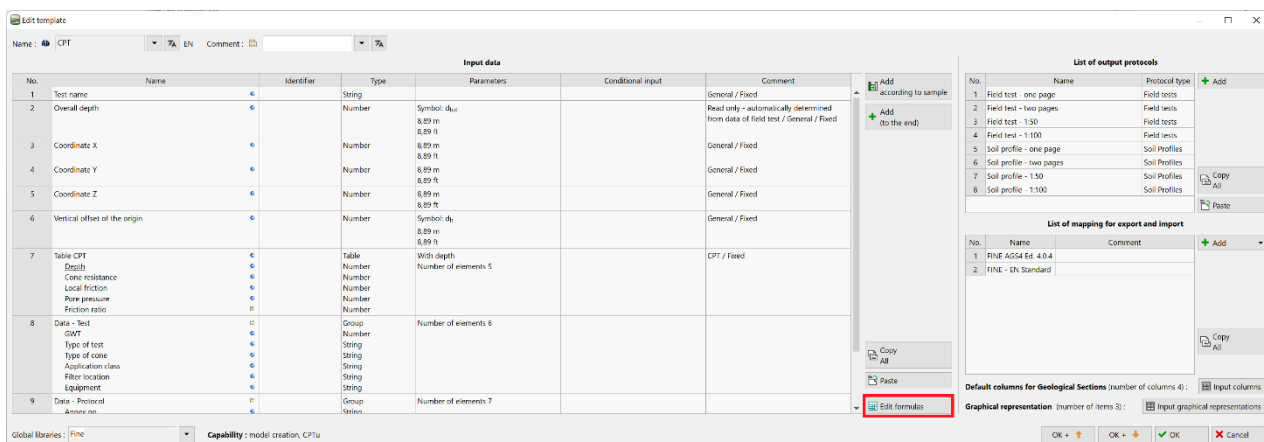
S tipkom "Add + Close" potvrđujemo modifikacije seta predložaka i spremamo modificirani set pod nazivom "EM 51" u upravitelj.



U kartici "Field Tests", otvorite ispitivanje "CPT1". U tablici možete vidjeti sve novo kreirane stupce koji još ne sadržavaju podatke. Sad je moguće unijeti podatke u stupce na standardni način. Ali, u našem slučaju želimo koristiti formulu kako bismo definirali automatske rekalkulacije stupca.

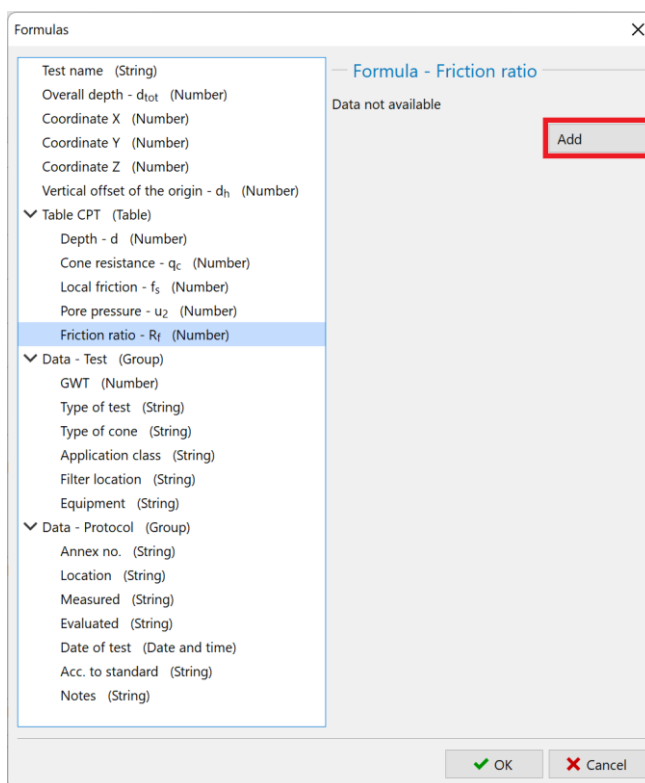


Vratimo se natrag na uređivanje predloška za CPT, te pritisnite tipku “Edit formulas”.



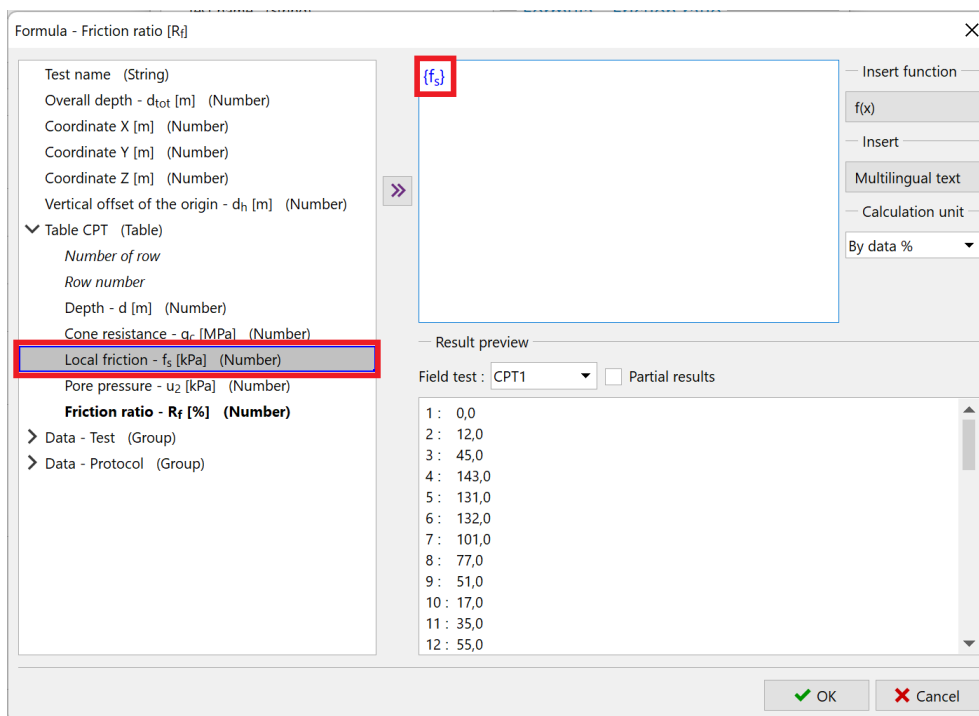
The screenshot shows the 'Edit template' window for a CPT test. The 'Input data' table lists various parameters such as Test name, Overall depth, Coordinates, Vertical offset, and Table CPT. The 'Edit formulas' button is highlighted in the bottom right corner of the window.

Ovdje ćemo odabrati kreiranu vrstu podataka “Friction ratio” iz popisa kojoj ćemo dodati formulu, te kliknuti na tipku “Add”.



The screenshot shows the 'Formulas' dialog box. The 'Friction ratio - Rf (Number)' is selected in the list. The 'Add' button is highlighted in the bottom right corner of the dialog box.

Dvostrukim klikom u popisu podataka možemo dodati reference podataka formulama.



Formula - Friction ratio [Rf]

Test name (String)

Overall depth - d_{tot} [m] (Number)

Coordinate X [m] (Number)

Coordinate Y [m] (Number)

Coordinate Z [m] (Number)

Vertical offset of the origin - d_h [m] (Number)

Table CPT (Table)

Number of row

Row number

Depth - d [m] (Number)

Cone resistance - q_c [MPa] (Number)

Local friction - f_s [kPa] (Number)

Pore pressure - u₂ [kPa] (Number)

Friction ratio - R_f [%] (Number)

Data - Test (Group)

Data - Protocol (Group)

Result preview

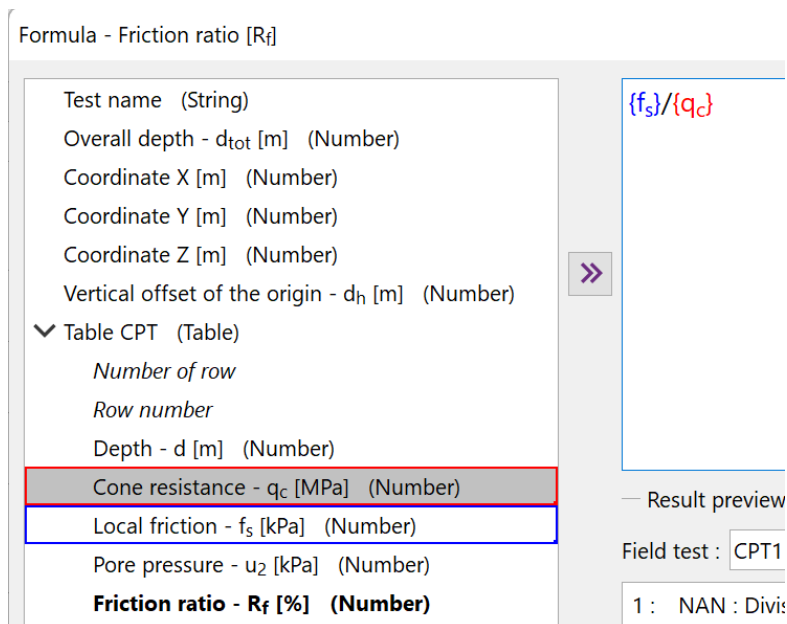
Field test : CPT1

Partial results

1 :	0,0
2 :	12,0
3 :	45,0
4 :	143,0
5 :	131,0
6 :	132,0
7 :	101,0
8 :	77,0
9 :	51,0
10 :	17,0
11 :	35,0
12 :	55,0

OK Cancel

Unesena formula: $\frac{f_s}{q_c}$



Formula - Friction ratio [Rf]

Test name (String)

Overall depth - d_{tot} [m] (Number)

Coordinate X [m] (Number)

Coordinate Y [m] (Number)

Coordinate Z [m] (Number)

Vertical offset of the origin - d_h [m] (Number)

Table CPT (Table)

Number of row

Row number

Depth - d [m] (Number)

Cone resistance - q_c [MPa] (Number)

Local friction - f_s [kPa] (Number)

Pore pressure - u₂ [kPa] (Number)

Friction ratio - R_f [%] (Number)

{fs}/{qc}

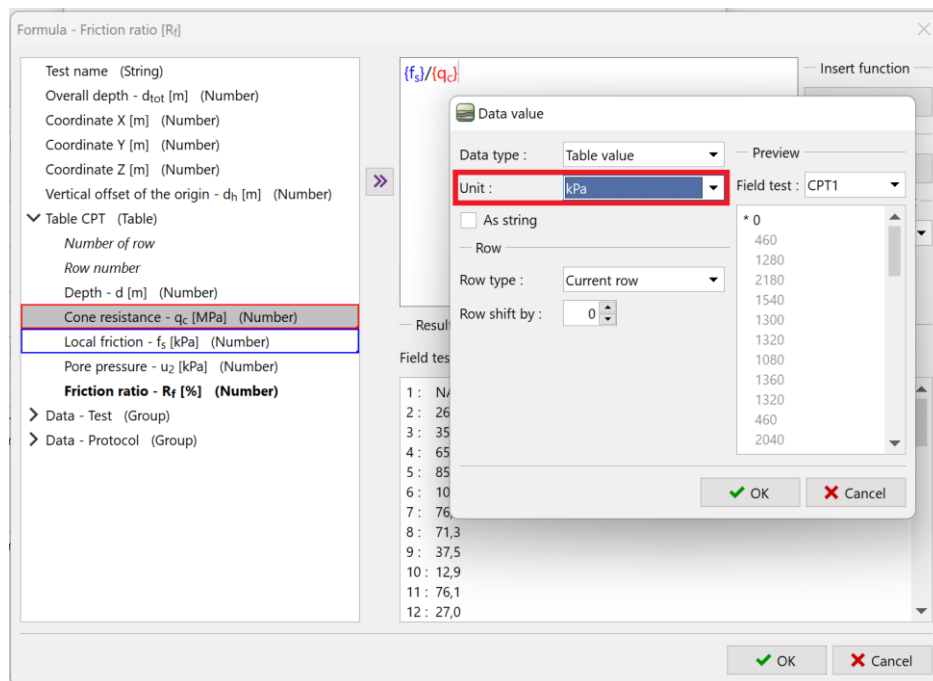
Result preview

Field test : CPT1

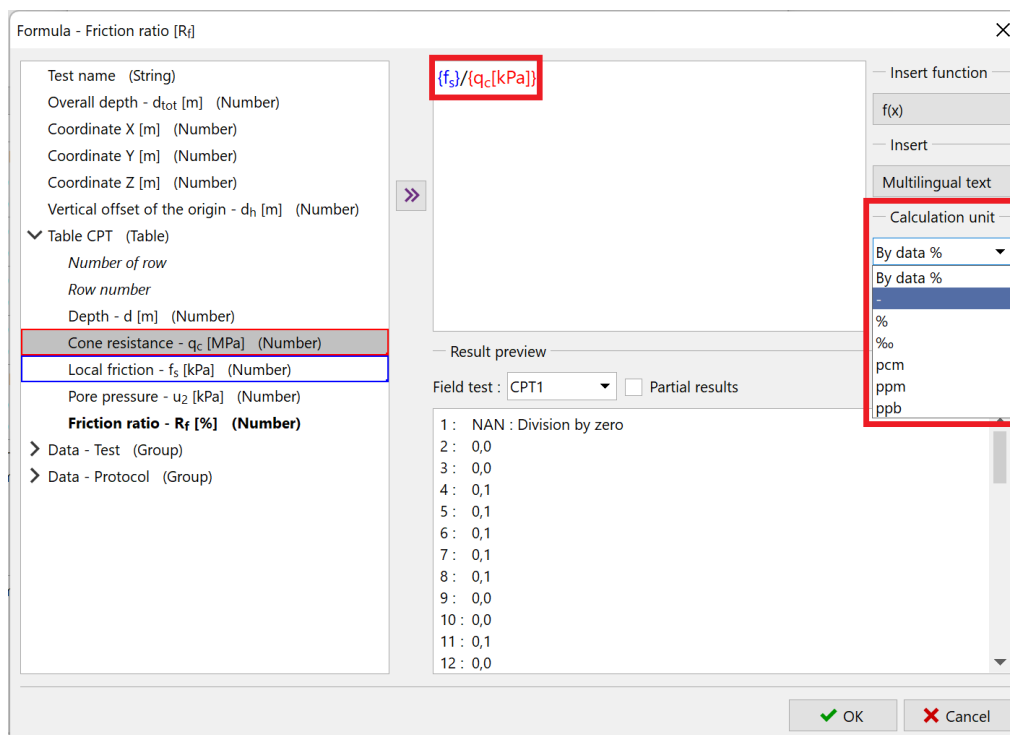
1 : NAN : Divi

Napomena: Osnovne matematičke operacije kao i kompleksnije funkcije se mogu koristiti u kalkulacijama. Unos funkcije je sličan kao u MS Excel.

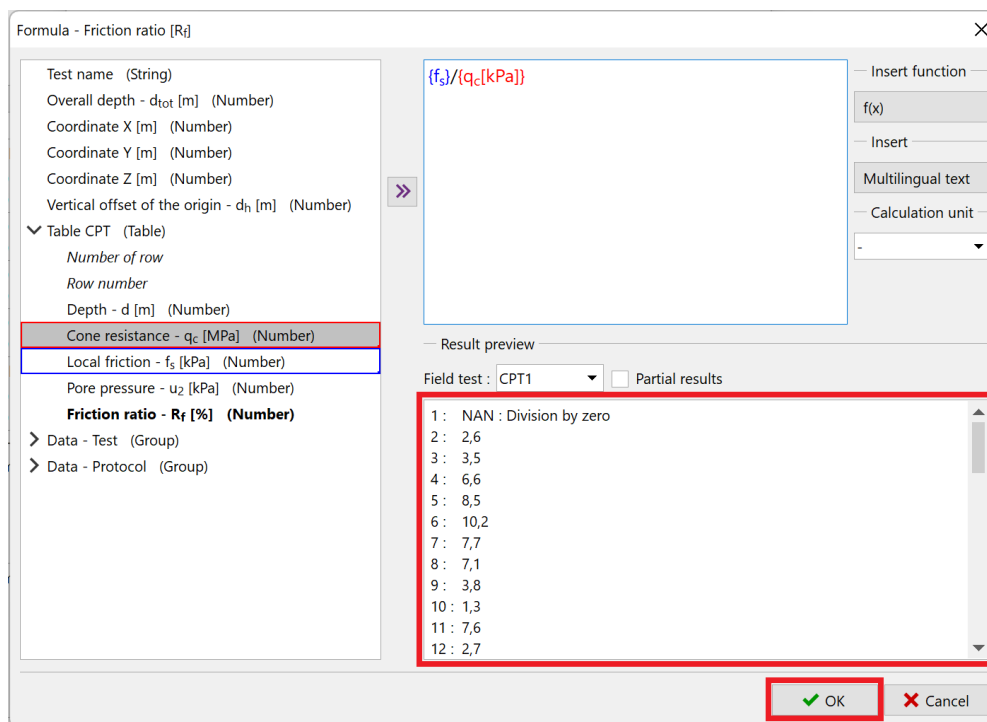
U popisu vidimo da dok je jedinica lokalnog trenja u [kPa], otpornost konusa ima jedinicu u [MPa]. Kako biste postavili točnu jedinicu za proračun, kliknite na q_c vrstu podataka u formuli. Ovo otvara dijaloški prozor u kojem postavljamo jedinicu na [kPa]. Program zatim konvertira jedinice prije provođenja kalkulacije.



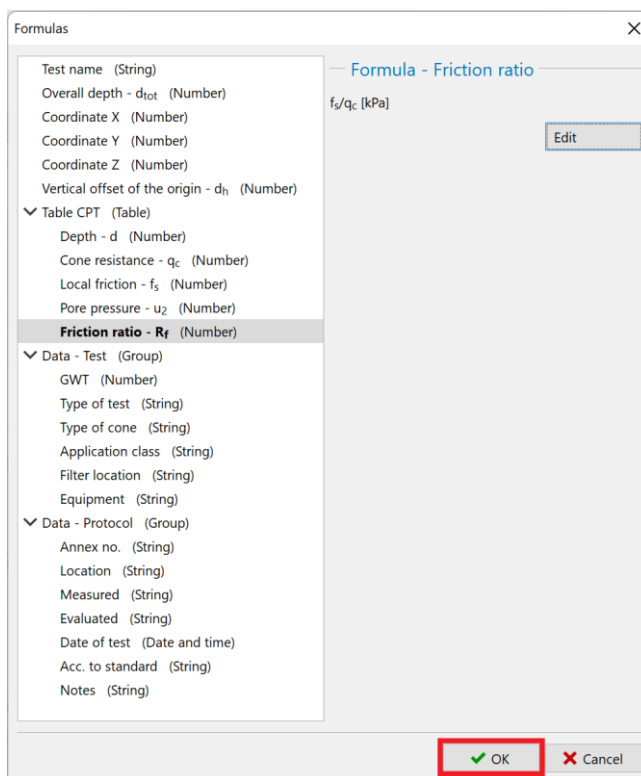
Prilikom definiranja vrste podataka, odredili smo da je jedinica omjera trenja postotak [%]. Kako bilo, rezultat određene formule je bez jedinice. Zato moramo odabrati jeidnicu rezultata kalkulacije kao bez dimenzije [-]. Program zatim automatski proračunava postotak. Kad unosimo kompleksnije formule, ova funkcija eliminira greške konverzije.



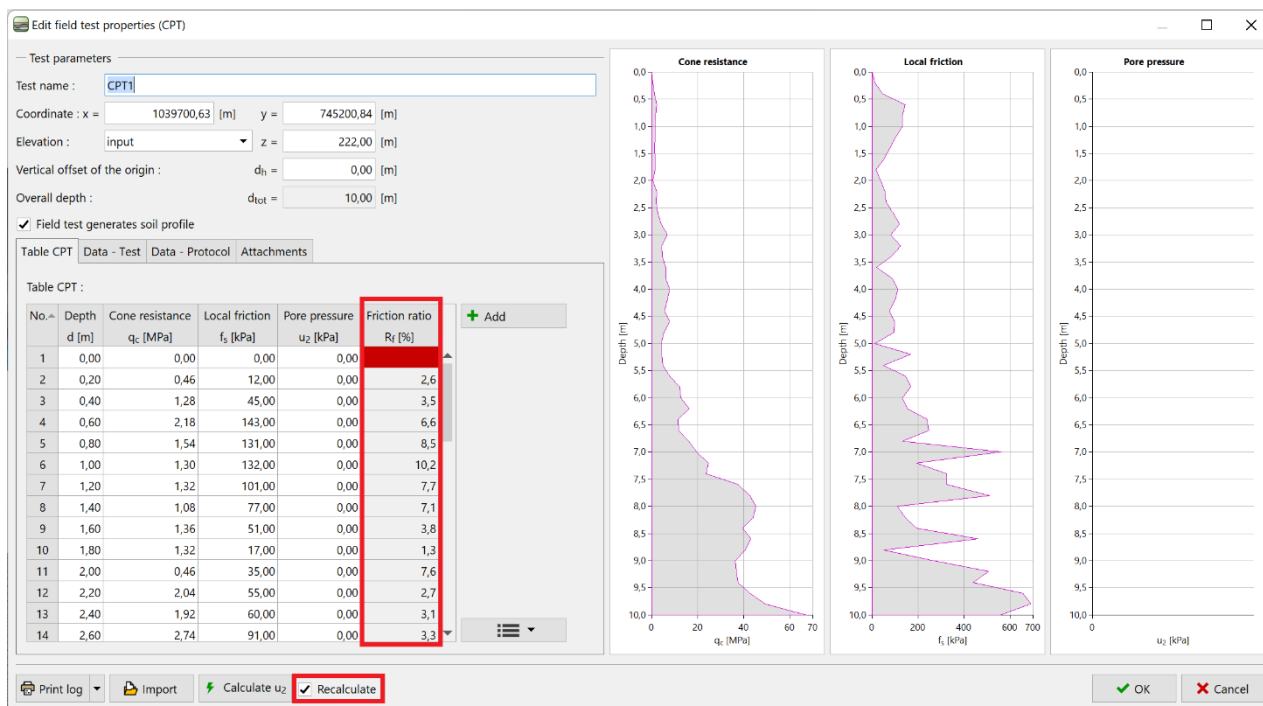
U donjem dijelu prozora, uvijek možemo vidjeti prikaz rezultata. Potvrđujemo unesenu formulu klikom na tipku "OK".



Podaci koji su proračunati koristeći formule su prikazani masno(bold) u popisu.



Ako se sad vratimo u karticu za unos terenskih ispitivanja, možemo vidjeti automatski proračunat stupac tablice. Automatska rekalkulacija se može uključiti ili isključiti na dnu prozora.



U sljedećoj fazi definirat ćemo grafičku reprezentaciju proračunatog stupca – dodajemo četvrti graf prozoru za unos terenskog ispitivanja.

Vratit ćemo se na uređivanje predloška i pritisnuti tipku “Input graphical representations”.

The screenshot shows the 'Edit template' dialog box. The 'Input data' table has the following data:

No.	Name	Identifier	Type	Parameters	Conditional input	Comment
1	Test name		String			
2	Overall depth		Number	Symbol: d_{ov} 8.89 m 8.89 ft		Read only - automatically determined from data of field test / General / Fixed
3	Coordinate X		Number	8.89 m 8.89 ft		General / Fixed
4	Coordinate Y		Number	8.89 m 8.89 ft		General / Fixed
5	Coordinate Z		Number	8.89 m 8.89 ft		General / Fixed
6	Vertical offset of the origin		Number	Symbol: d_v 8.89 m 8.89 ft		General / Fixed
7	Table CPT		Table	Width depth		CPT / Fixed
8	Data - Test		Group	Number of elements 5		
9	Data - Processed		Group	Number of elements 7		

The 'List of output protocols' and 'List of mapping for export and import' are also visible. The 'Input graphical representations' button is highlighted in the bottom right corner.

Ovdje dodajemo novo definirani stupac “Friction ratio” i potvrđujemo promjene.

The 'Graphical representation' dialog box shows the following table:

No.	Type of graphical representations	Content	Default
1	field test graph	Table CPT - Cone resistance	<input checked="" type="radio"/>
2	field test graph	Table CPT - Local friction	<input type="radio"/>
3	field test graph	Table CPT - Pore pressure	<input type="radio"/>

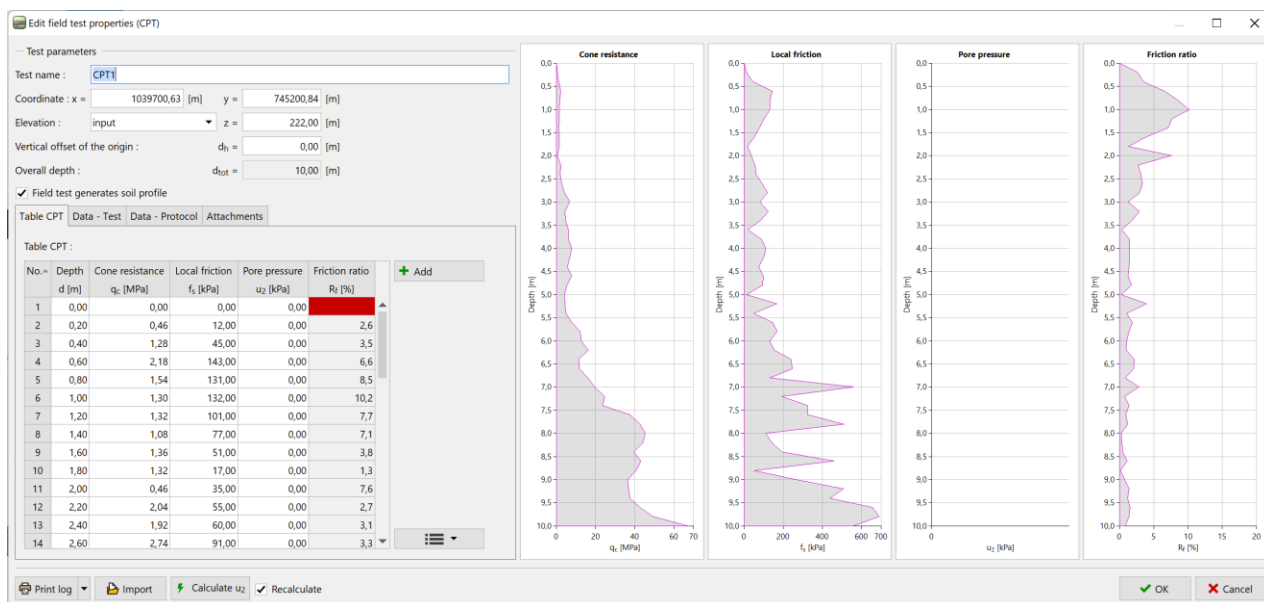
The 'Add (to the end)' button is highlighted in red. Below the table, there are instructions: 'Graphical representations are sorted according to the order in the table' and 'Graphical representation in 3D view is done by the column "Default"'. The 'OK' and 'Cancel' buttons are at the bottom.

The 'New graphical representation' dialog box shows the following fields:

- Type of graphical representations: field test graph
- Table: Table CPT
- Column: Friction ratio

The 'Add' button is highlighted in red. The 'OK' and 'Cancel' buttons are at the bottom.

Nakon povratka na prozor za unos terenskog ispitivanja, vidimo novo dodani graf za proračunati stupac.



Posljednja promjena koja je potrebna je dodavanje novog grafa u izlaznom izvještaju. Vratite se nazad na uređivanje predloška, odaberite željeni izlazni protokol i pritisnite tipku "Edit".

Input data

No.	Name	Identifier	Type	Parameters	Conditional input	Comment
1	Test name		String		General / Fixed	
2	Overall depth		Number	Symbol: d _{tot} 8,89 m 8,89 ft	Read only - automatically determined from data of field test / General / Fixed	
3	Coordinate X		Number	8,89 m 8,89 ft	General / Fixed	
4	Coordinate Y		Number	8,89 m 8,89 ft	General / Fixed	
5	Coordinate Z		Number	8,89 m 8,89 ft	General / Fixed	
6	Vertical offset of the origin		Number	Symbol: d _h 8,89 m 8,89 ft	General / Fixed	
7	Table CPT		Table	With depth Number of elements 5	CPT / Fixed	
8	Data - Test		Group	Number of elements 6		
9	Data - Protocol		Group	Number of elements 7		

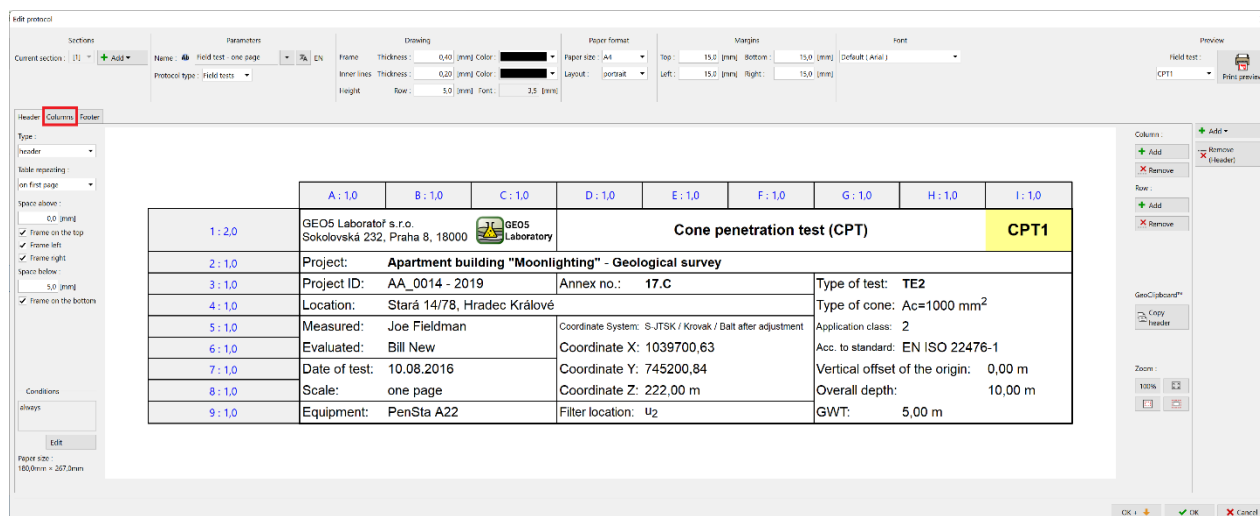
List of output protocols

No.	Name	Protocol type
1	Field test - one page	Field tests
2	Field test - two pages	Field tests
3	Field test - 1:50	Field tests
4	Field test - 1:100	Field tests
5	Soil profile - one page	Soil Profiles
6	Soil profile - two pages	Soil Profiles
7	Soil profile - 1:50	Soil Profiles
8	Soil profile - 1:100	Soil Profiles

List of mapping for export and import

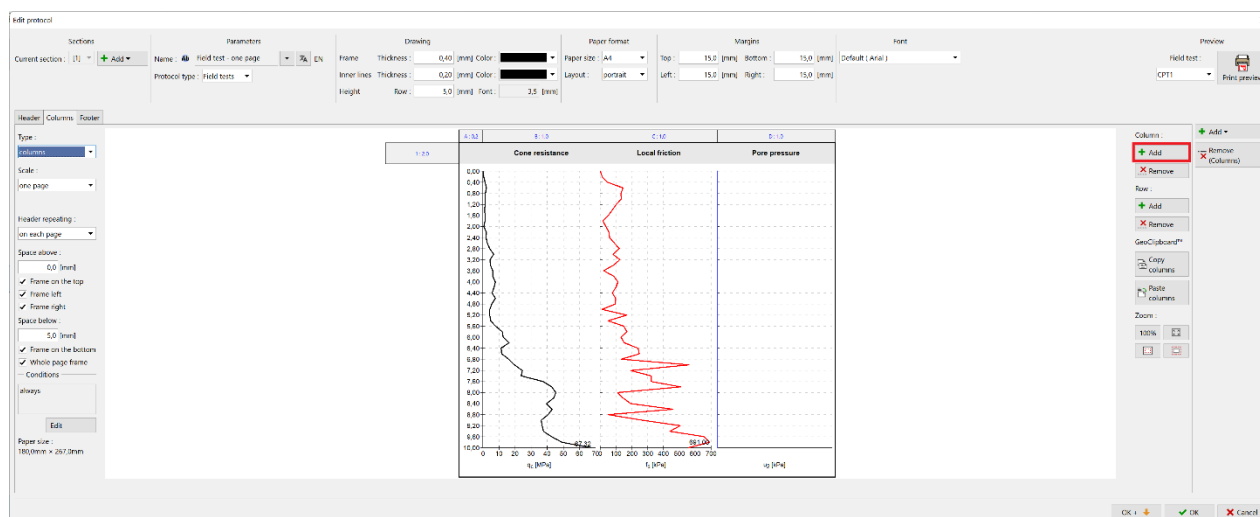
No.	Name	Comment
1	FINE AGS4 Ed. 4.0.4	
2	FINE - EN Standard	

Prelazimo na karticu "Columns", gdje vidimo originalni graf.

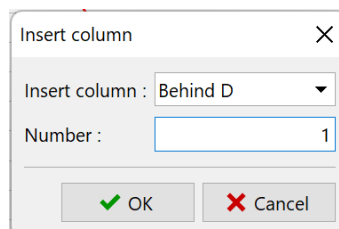


	A: 1.0	B: 1.0	C: 1.0	D: 1.0	E: 1.0	F: 1.0	G: 1.0	H: 1.0	I: 1.0
1: 2.0	GEO5 Laboratoř s.r.o. Sokolovská 232, Praha 8, 18000								CPT1
2: 1.0	Project: Apartment building "Moonlighting" - Geological survey								
3: 1.0	Project ID: AA_0014 - 2019				Annex no.: 17.C		Type of test: TE2		
4: 1.0	Location: Stará 14/78, Hradec Králové							Type of cone: Ac=1000 mm ²	
5: 1.0	Measured: Joe Fieldman				Coordinate System: S-JTSK / Krovak / Balt after adjustment			Application class: 2	
6: 1.0	Evaluated: Bill New				Coordinate X: 1039700.63			Acc. to standard: EN ISO 22476-1	
7: 1.0	Date of test: 10.08.2016				Coordinate Y: 745200.84			Vertical offset of the origin: 0.00 m	
8: 1.0	Scale: one page				Coordinate Z: 222.00 m			Overall depth: 10.00 m	
9: 1.0	Equipment: PenSta A22				Filter location: U2			GWT: 5.00 m	

Klikom na tipku "Add", dodat ćemo stupac s kojim ćemo nastaviti daljnji rad.

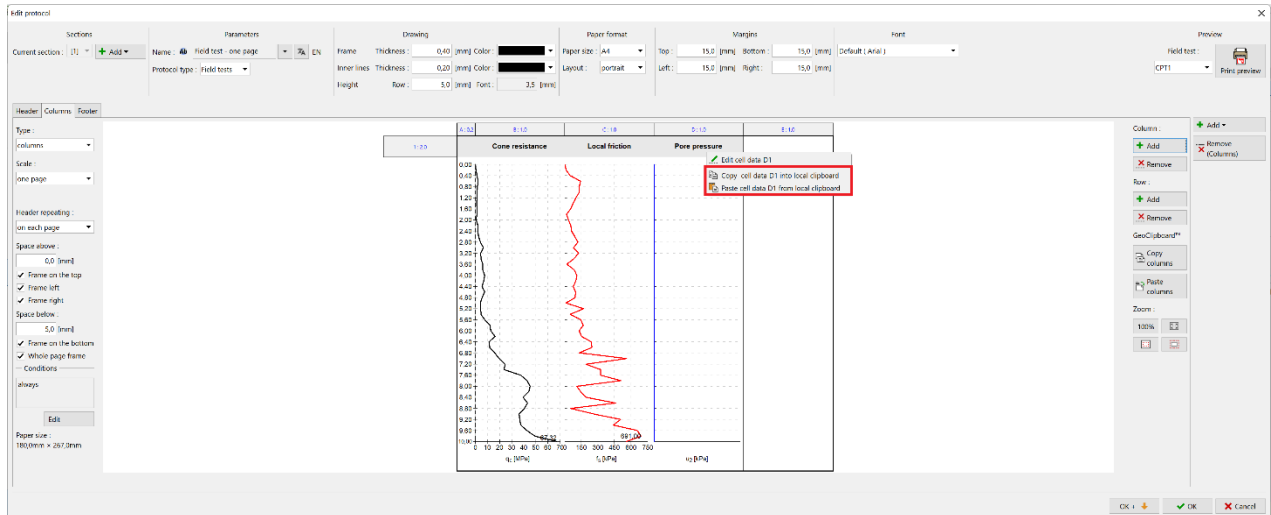


Umetnite jedan stupac iza postojećeg stupca D.

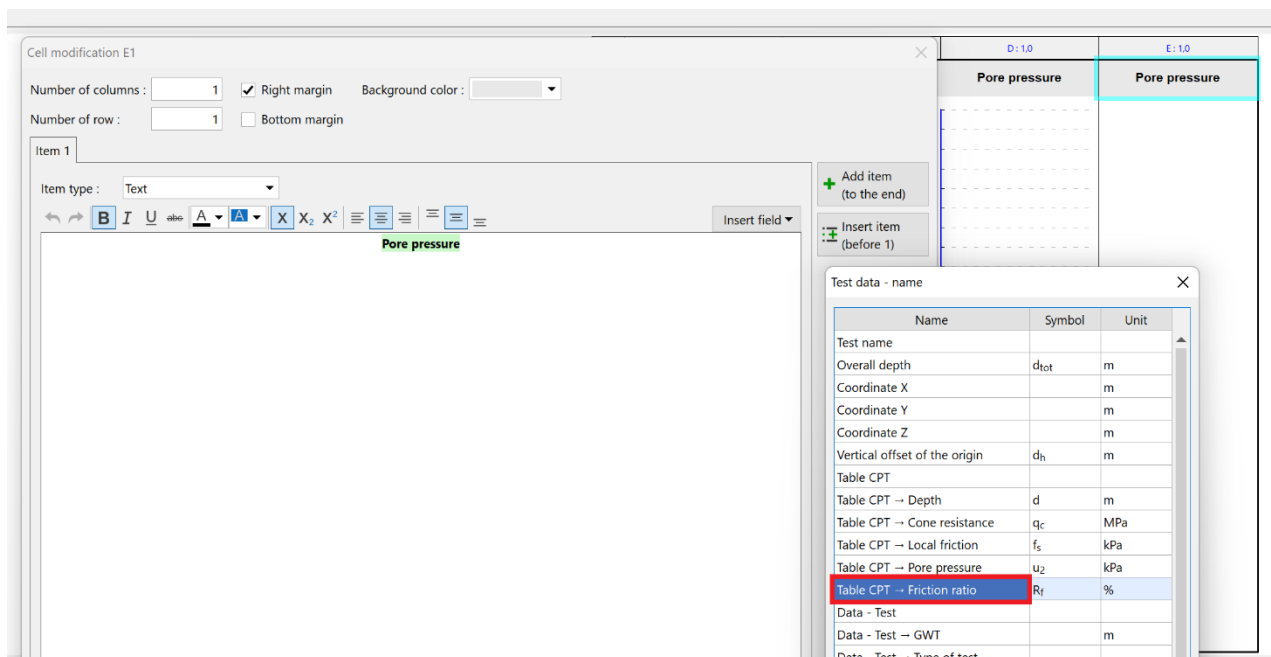


Stupci se sastoje od zaglavlja i tijela.

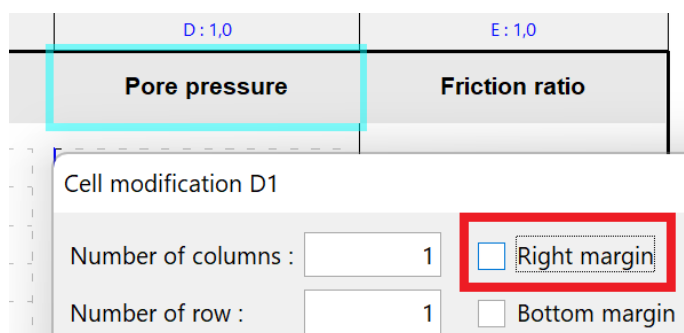
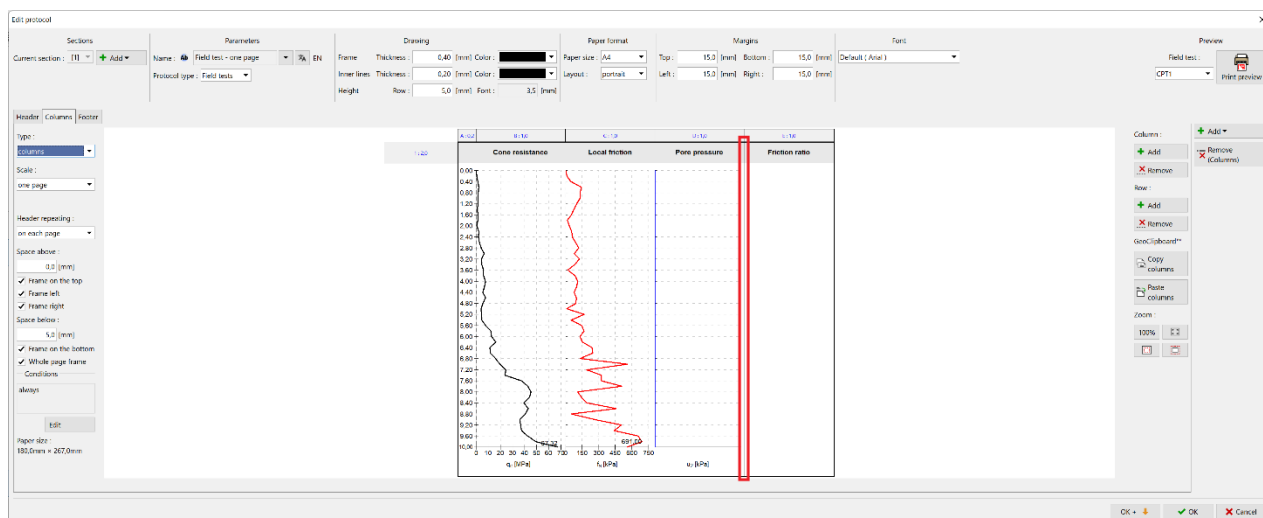
Započnimo s uređivanjem zaglavlja. Kako bismo uštedjeli vrijeme na formatiranju, možemo kopirati ćeliju naziva “Pore pressure” i zalijepiti ju u ćeliju zaglavlja novo dodanog stupca. Mogućnosti za kopiranje i ljepljenje su prikazane pritiskom desne tipke miša na željenoj ćeliji.



Lijevojom tipkom miša u zaglavlju stupca E možemo otvoriti uređivanje ćelije. Kliknut ćemo na naziv “Pore pressure” i promijeniti ga na “Friction ratio” odabirom iz popisa.

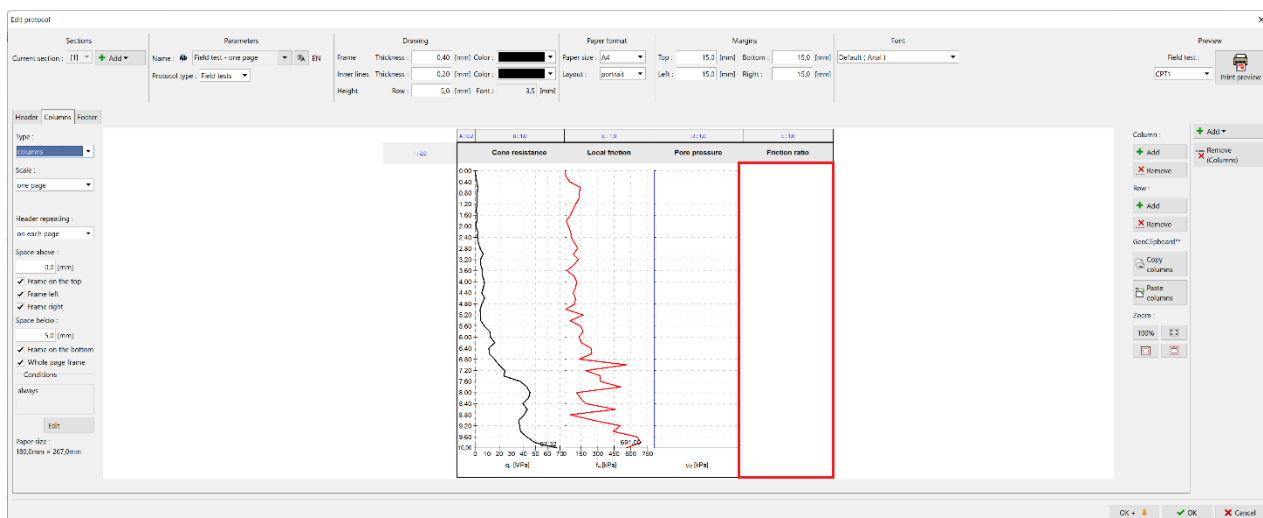


Sad imamo ispravno zaglavlje stupca, ali možemo vidjeti da postoji razdjelna linija između originalnog i novog stupca. Kako bismo je uklonili, otvorite modifikaciju ćelije pod nazivom "Pore pressure" te isključite desnu marginu.

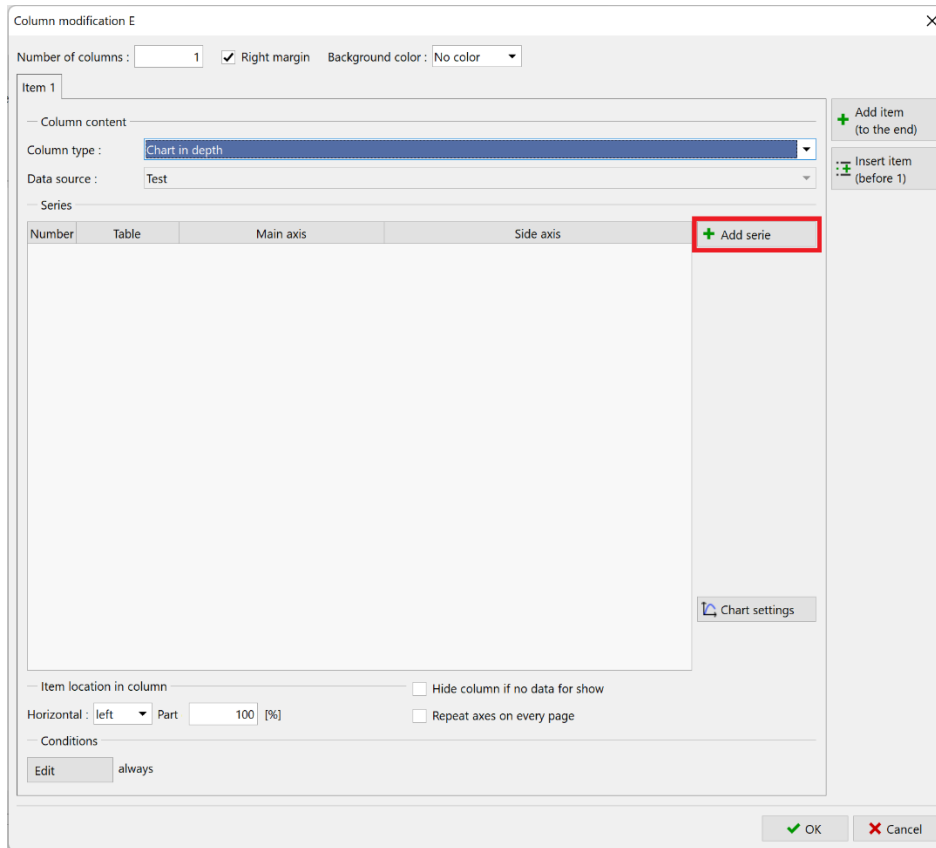


Nastavite na isti način s tijelom stupca u kojem se nalazi graf pornih pritisaka.

Posljednja potrebna modifikacija je dodavanje grafikona novom stupcu. Klikom u prazni prostor stupca, otvaramo njegovo uređivanje.



Ovdje obabiremo vrstu stupca kao “Chart in depth” te pritisnemo tipku “Add serie”.



Column modification E

Number of columns : 1 ☒ Right margin Background color : No color

Item 1

Column content

Column type : Chart in depth

Data source : Test

Series

Number	Table	Main axis	Side axis	
				+ Add serie

Chart settings

Item location in column

Horizontal : left Part 100 [%]

Hide column if no data for show

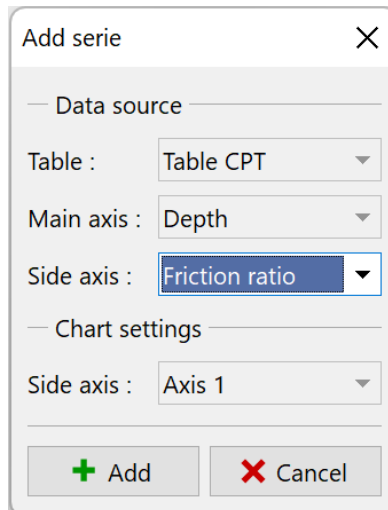
Repeat axes on every page

Conditions

Edit always

OK Cancel

Odabiremo odgovarajuće podatke – “Friction ratio”.



Add serie

Data source

Table : Table CPT

Main axis : Depth

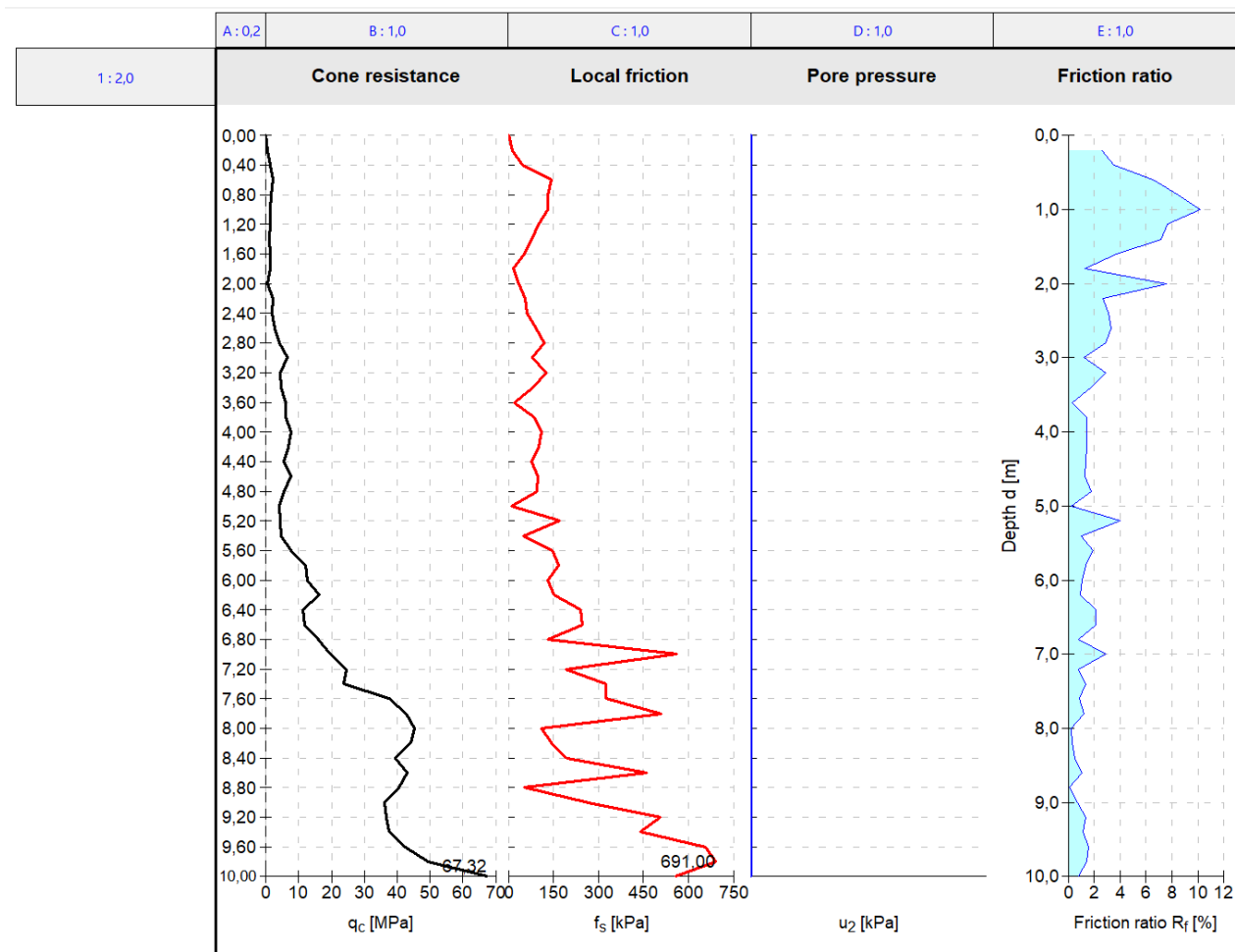
Side axis : Friction ratio

Chart settings

Side axis : Axis 1

+ Add X Cancel

Sad možemo vidjeti željeni graf unutar stupca. Kako bilo, još uvijek trebamo izmijeniti njegov vizualni prikaz kako bi odgovarao ostalim grafovima.



Počnimo s uređivanjem glavne osi (vertikalna). Ovo je jednako za sve grafove – nećemo ovo prikazati za uređeni graf.

Column modification E

Number of columns : 1
☒ Right margin
Background color : No color

Item 1

Column content

Column type : Chart in depth
Data source : Test

Number	Table	Main axis	Side axis
1	Table CPT	Depth [m]	Friction ratio [%]

+ Add serie

Edit serie 1

Delete serie 1

Edit settings of serie 1

Edit main axis settings

Edit settings of side axis

Chart settings

Edit user drawing

Item location in column

Horizontal : left
Part : 100 [%]

☐ Hide column if no data for show
☐ Repeat axes on every page

Conditions

Edit always

+ Add item (to the end)

+ Insert item (before 1)

OK

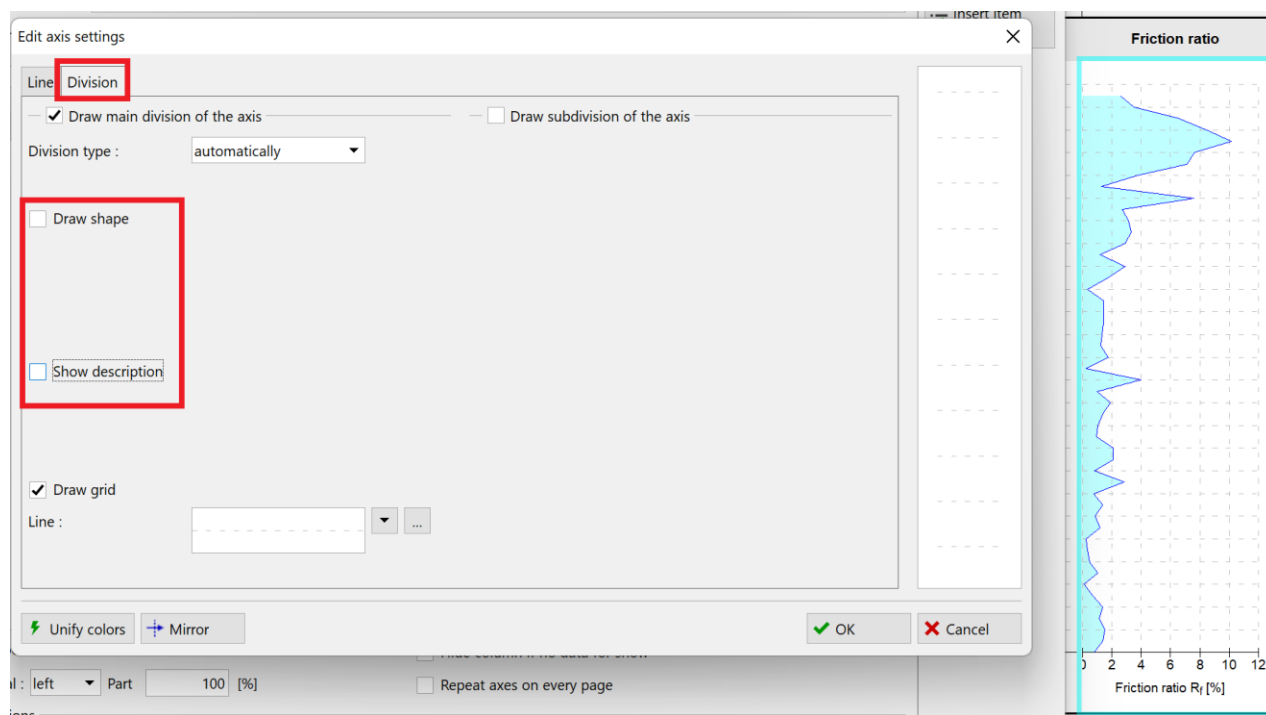
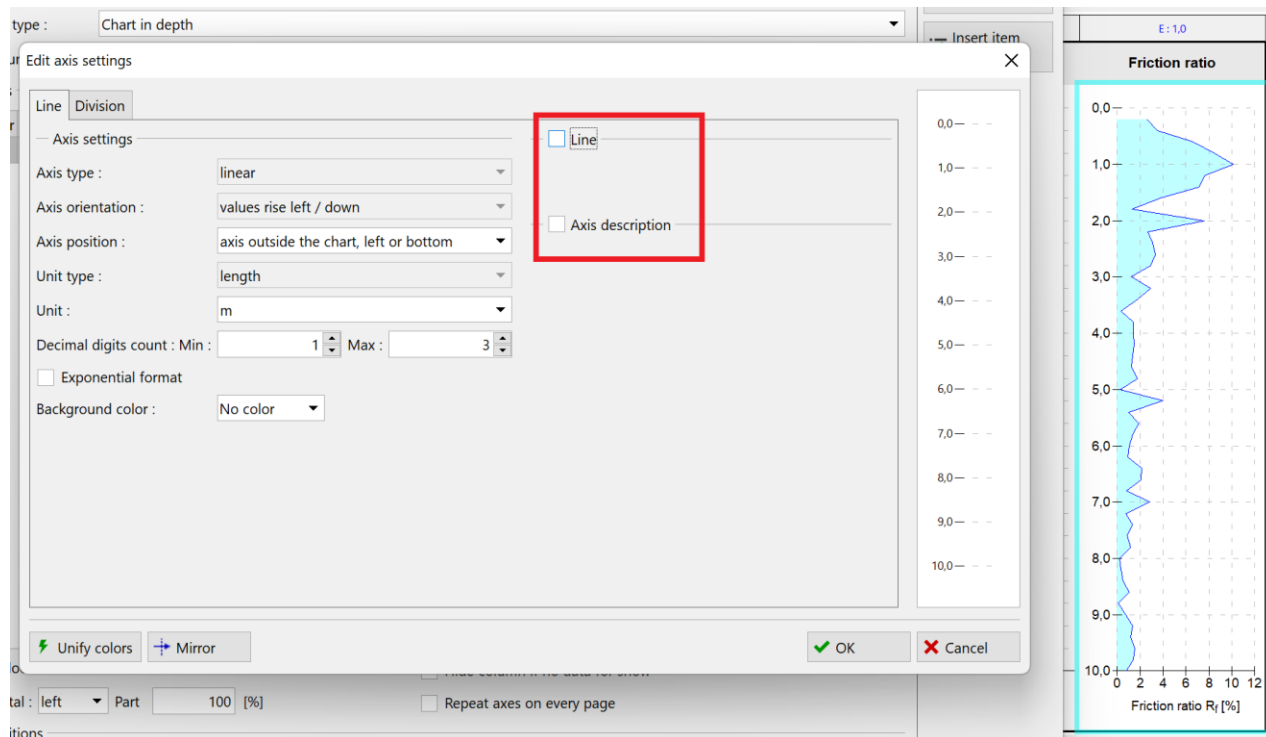
Cancel

Bottom : 15,0 [mm]
Right : 15,0 [mm]

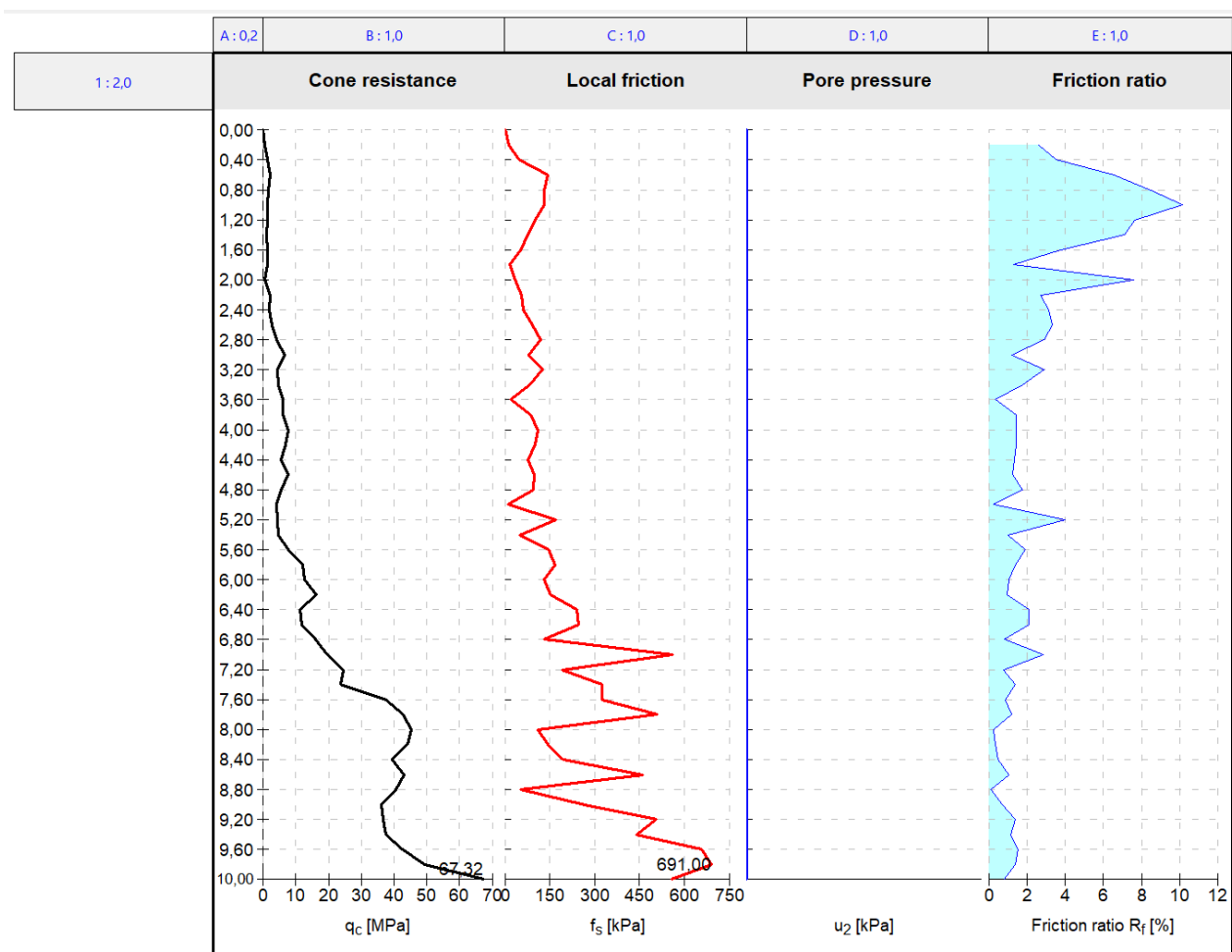
E : 1,0

Friction ratio

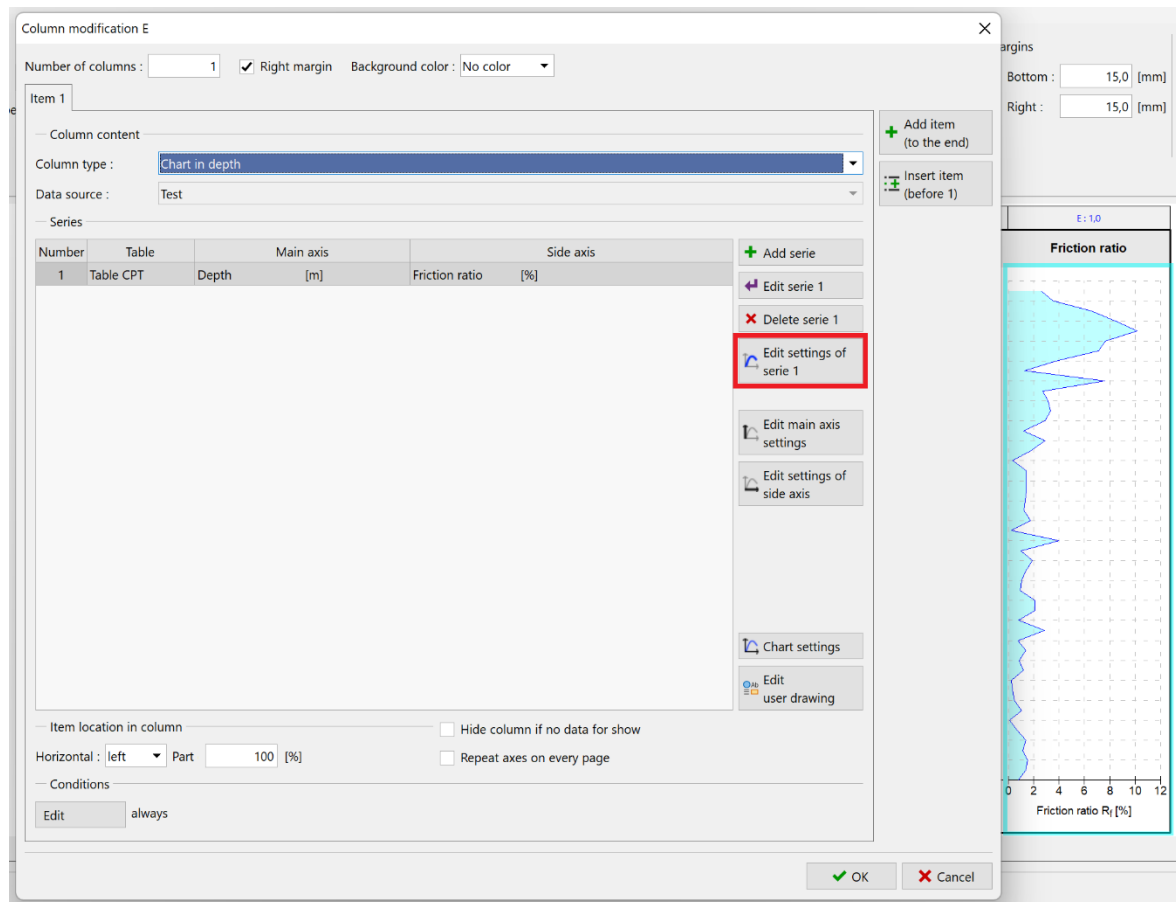
Isključit ćemo prikaz linije, opis osi, te u kartici “Division”, također oblik i opis.



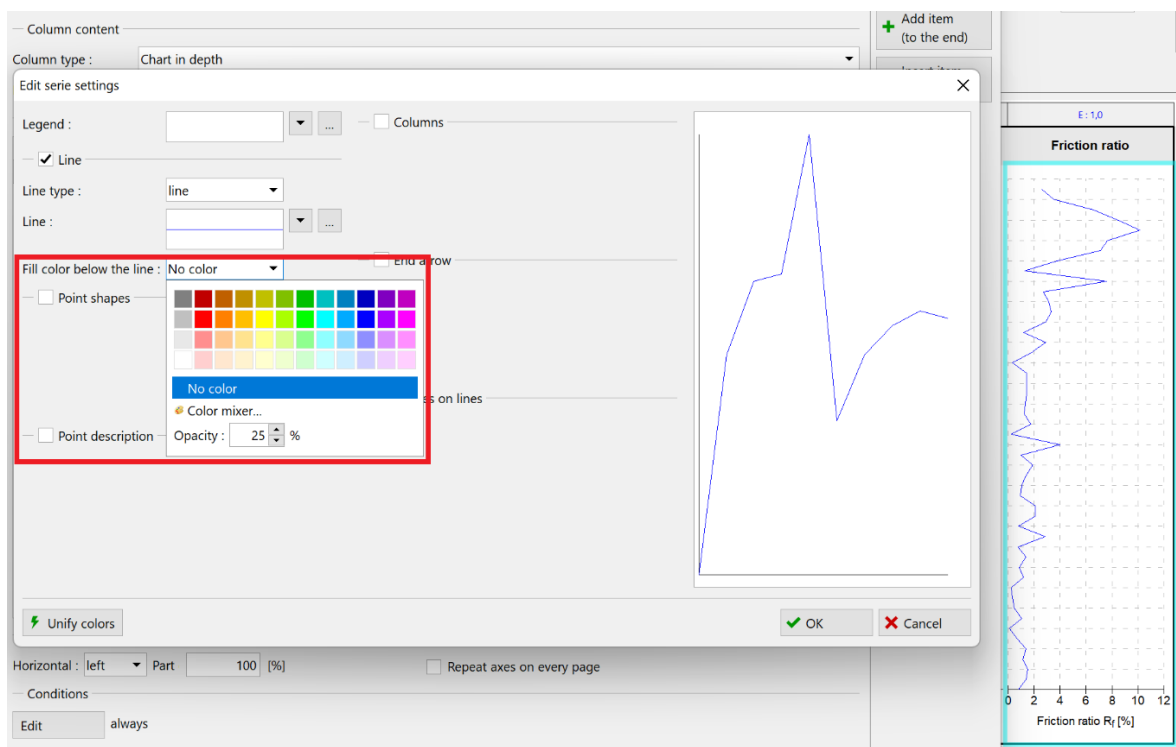
Sad ćemo prilagoditi vizualizaciju kako bi odgovarala ostalim grafikonima.



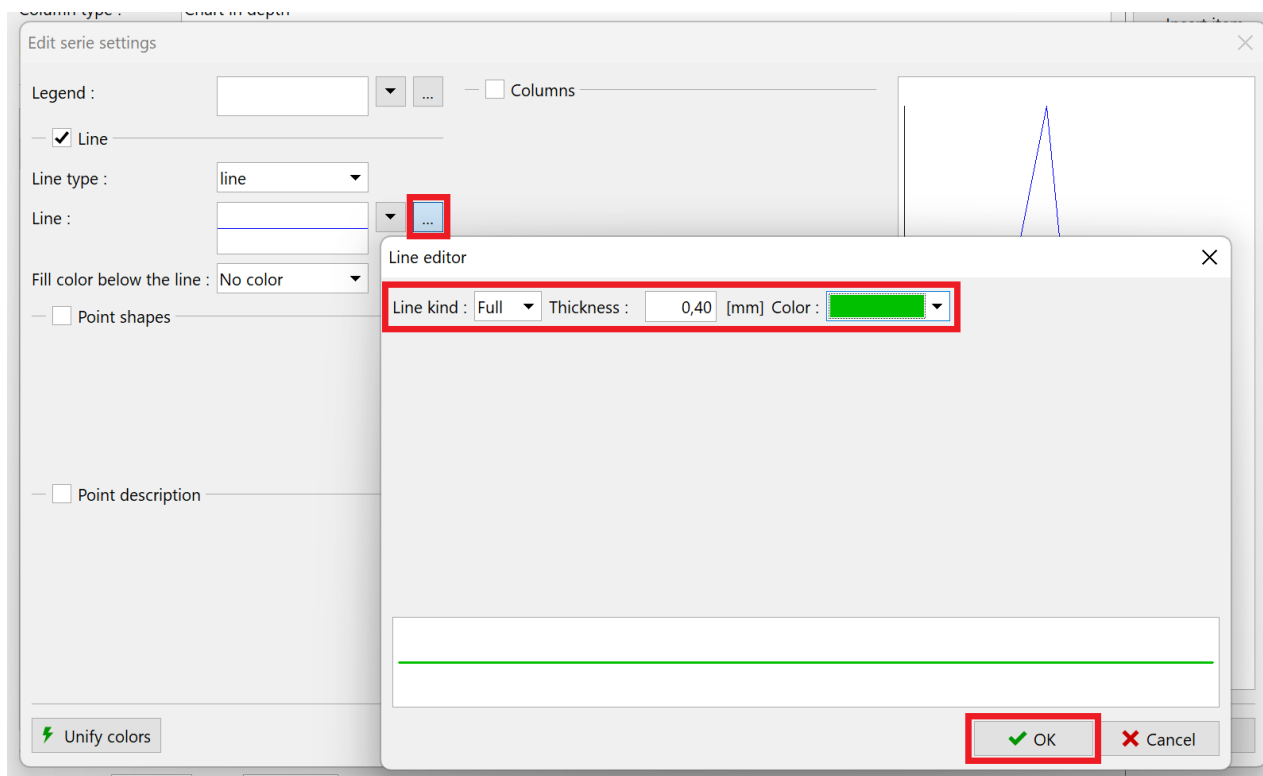
Pritisnite tipku “Edit settings of serie 1”.



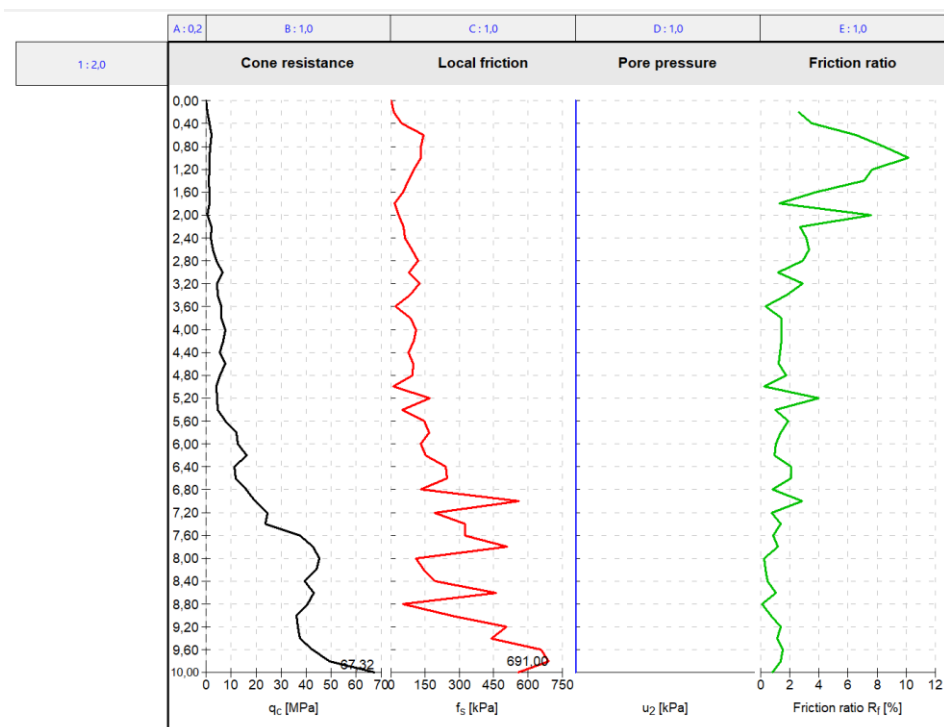
Ovdje ćemo odrediti potrebne modifikacije – isključit ćemo ispunu ispod linije.



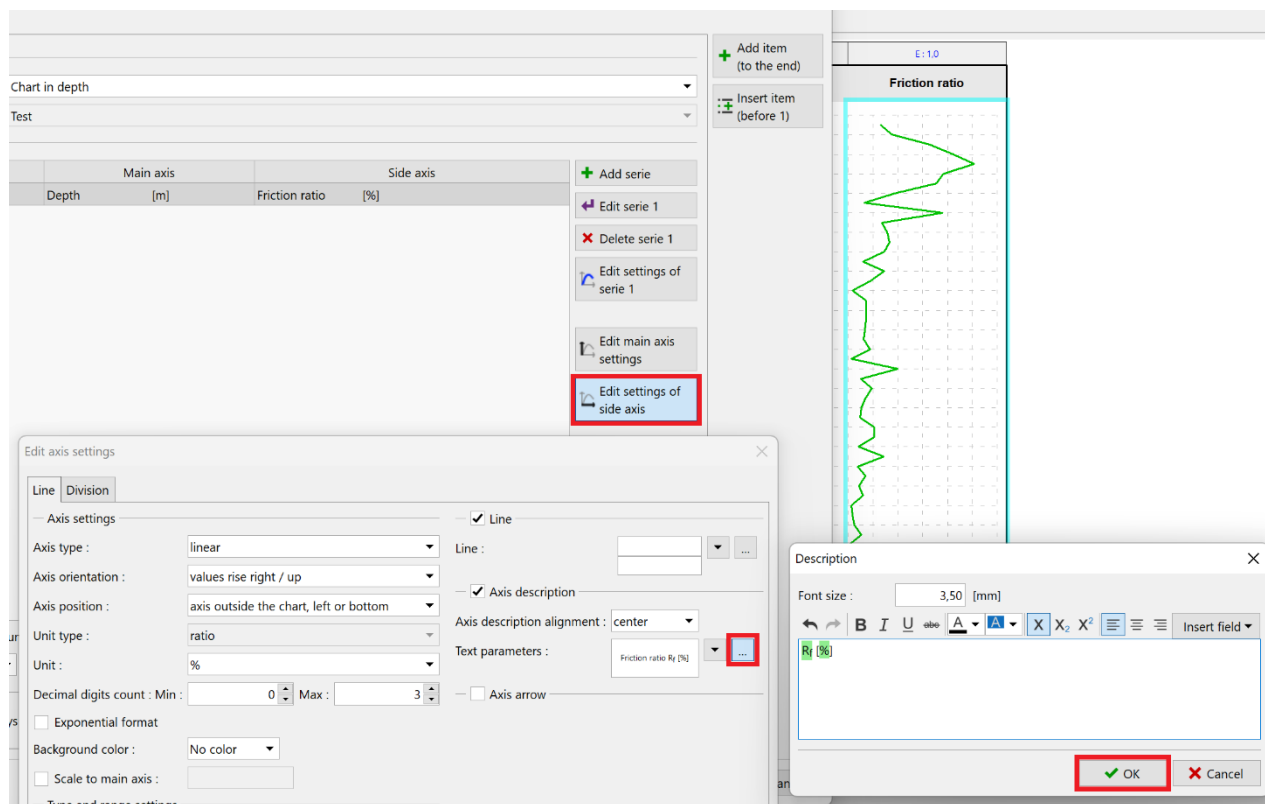
Zatim, pritiskom na tipku s tri točkice, uredit ćemo samu liniju.
Unificirat ćemo debljinu na 0.4 mm i odabrati zelenu boju, koja još nije korištena.



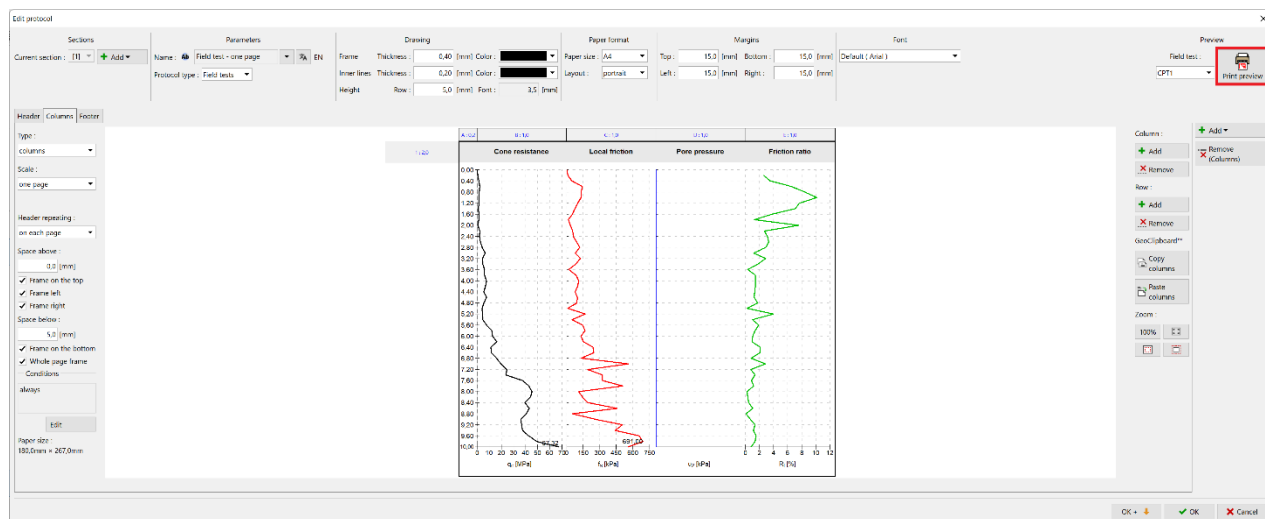
Također ćemo prilagoditi opis sporedne osi kako bi odgovarao ostalim grafovima.

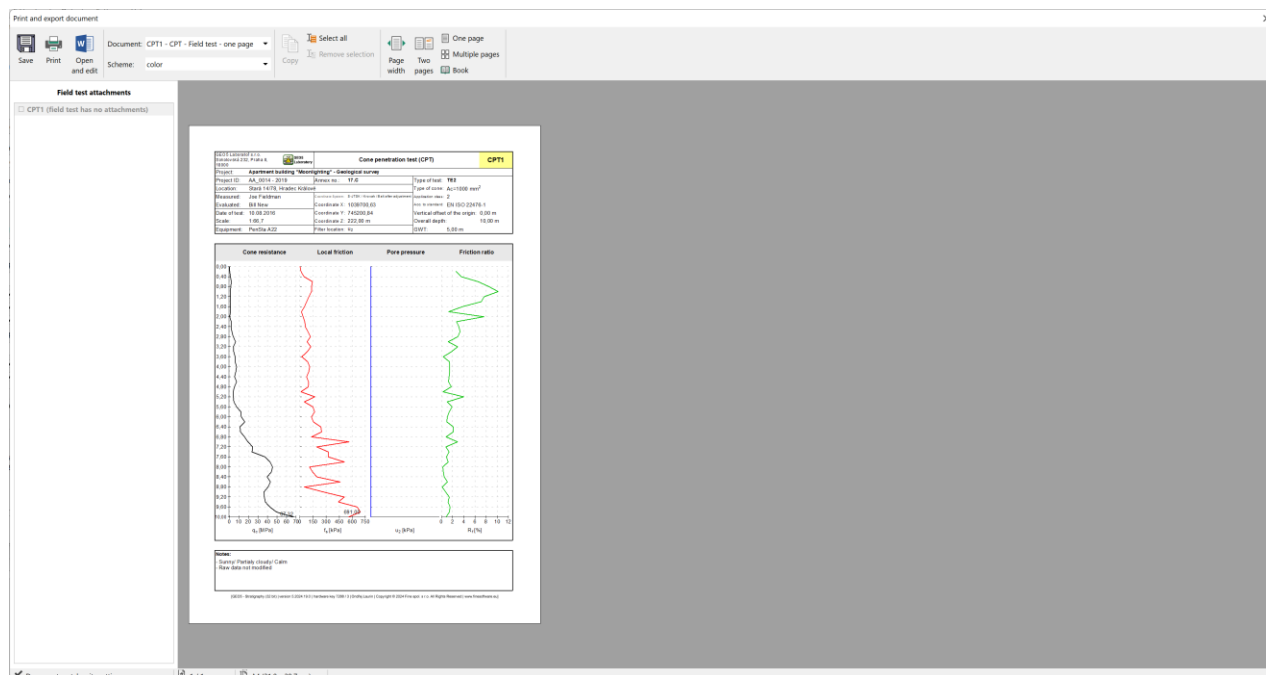


Postupak je sličan ostalim modifikacijama – otvaramo uređivanje sporedne osi i modificiramo opis osi kako bi sadržavao samo simbol.

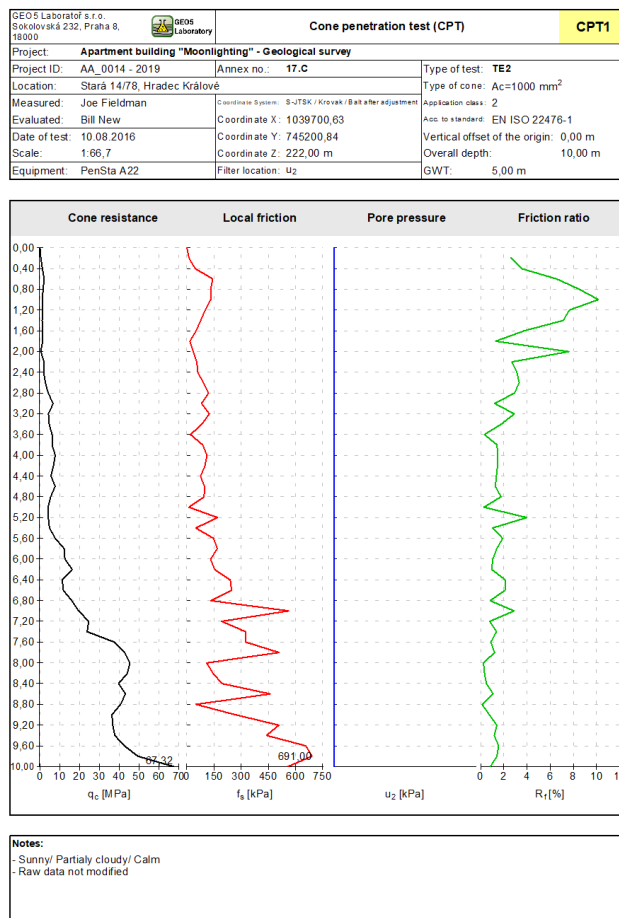


Pritiskom na tipku “Print preview”, možemo provjeriti odgovara li naš izvještaj rješenju ovog zadatka.

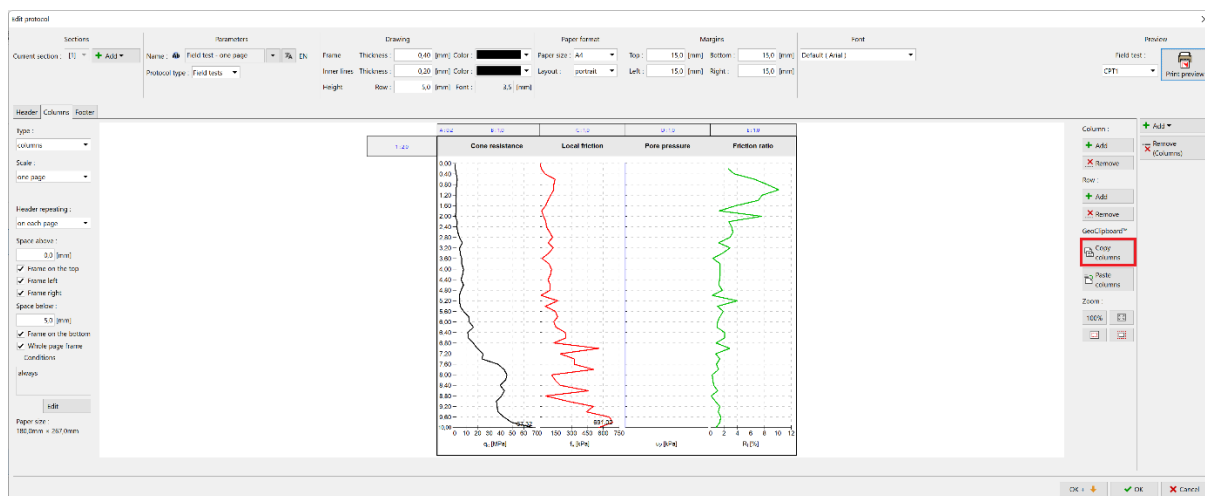




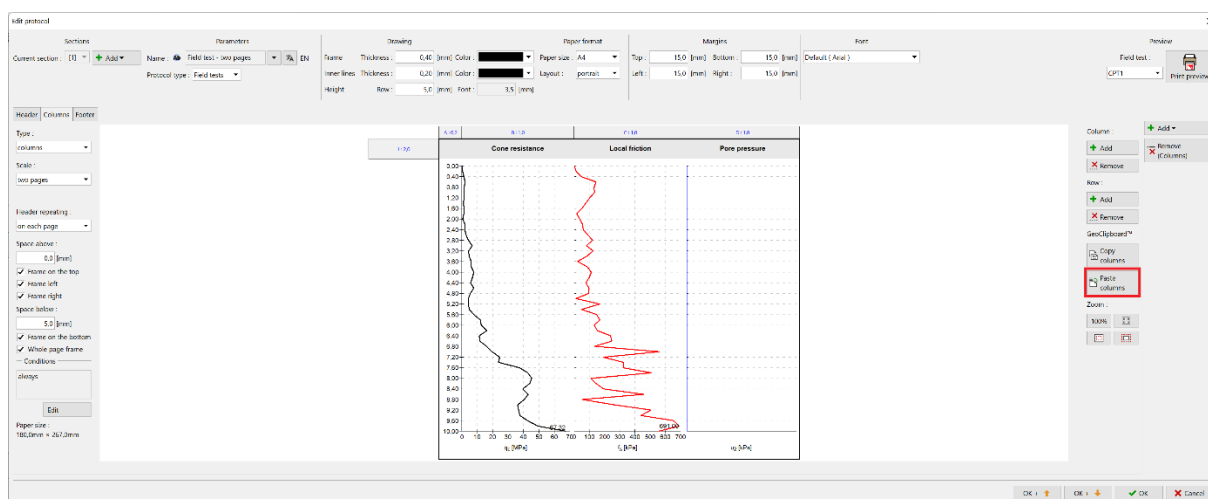
Izrađeni protokol odgovara našem zadatku.



Ako želimo modificirati graf u ostalim protokolima, možemo ga vrlo brzo kopirati. U uređenom izvještaju, kliknemo na karticu Column i pritisnemo tipku “Copy columns”.



Sad otvorite sljedeći izvještaj – u našem slučaju dvostrani izvještaj i umetnite stupce.



Sad prilagodite odgovarajuće mjerilo – dvije stranice.

