

Module BRIDGE

1. Define file of hollow sections widths in ground floor

Defining widths for left object. For drawing of 3d models, we must check (adjust) values in file, where in equal profile exists two different sections – 5/6, 86/87, 88/89, 93/94, 95/96, 175/176.

Copy ground floor of left object on another position and define widths from draft/sketch. We use this procedure on non linear objects in ground floor. It is recommended to lengthen every polyline on start and end points for example 0.50 m, to define regular intersections with cross axis.



Polylines 1 to 12 must be drawn from left to right (in station direction)!



Define heights for left object. For drawing of 3d models, we must check (adjust) values in file, where in equal profile exists two different sections – 5/6, 86/87, 88/89, 93/94, 95/96, 175/176.



Polylines 1 to 6 must be drawn from left to right (in station direction)! Polylines are drawn **horizontal**, so that we can use it as template for drawing of presstressed cable axis in longitudinal profile.



3. Draw 3D cross sections and model of deck construction

Section types			
	ОК	Cancel	

Draw 3D cross sections and model of deck construction

Files	×
3d roadway level file	
Current file *.o3d	
C:\Primeri Moduli\Example2\Example2_3dL.o3d	
Replace file >>	
Roadway file	
Current file *.voz	
C:\Primeri Moduli\Example2\Example2_3d.voz	
Replace file >>	
Hollow construction sections height file	
Current file *.vvk	
C:\Primeri Moduli\Example2\Example2_3dL.vvk	
Replace file >>	
Hollow construction sections width file	
Current file *.svk	
C:\Primeri Moduli\Example2\Example2_3dL.svk	
Replace file >>	
OK Cancel	

×

At the same time the file of console slopes **Example2_3dL.ppk** is created and optional file of setting out points in sections **Example2_3dL.v3d**.

Outer (points 10 to 110) and (or) inner polyline (points 1i to 9i) must be drawn in contraclocwise and closed!



3.1 Draw in WCS coordinate system:

According to console slopes first will be drawn cross sections per segments. Setting out points will be written to file **Example2_3dL.v3d** and console slopes to file **Example2_3dL.ppk**. We define sections per segments from profile 1-5, 6-86, 87-88, 89-93, 94-95, 96-175 and 176-180.

Draw 3D cross sections	and model of hollow de	eck construction		×
	30 40 sl %	20	110 100	
Section area	() From-to	60 O Single	70 Axis number:	1
Writte sections verte	ex coordinates to file]Writte coordinates of vertex 5 and 6	Height of asphalt layers + hidroisolation - Ha [cm]:	8.0
Draw 3D model	Draw as sketc	h 🗹 Draw hidroisolation	TOP lanes	
Sections: Model: Hidroisolation:		ONCRETE_CONSTRUCTION_SECTIONS ONCRETE_CONSTRUCTION_MODEL IDROISOLATION_SECTIONS	BOTTOM lanes Upper border horizontal Lower border under slope Slope [%]	2.50
Colors Sections 3D model	Select color	»>	Console under footway Console LEFT Slope - sl [%]:	2.50
Hidroisolation	Select color Select color	>>	Console RIGHT Slope - sr [%]:	2.50
		OK Cancel	End	



3.2 Draw as draft/sketch (horizontal) in local coordinate system

Defining setting out points file **Example2_3dL_sketch.v3d.**

	<u> </u>	뽄	10	110	10o	
	40 sl %	50 _{3i} 2i	4 1i 9i 1	8i 80	SF % 90	
		4i 5i 60	i 1 6j	7i 7o		
ection area		_		Avis number:		2
) All	○ From-to	() Single		HAID Humbert		
Writte sections verte Writte coordinates of Draw 3D model	x coordinates to file vertex 2 and 9 Writ	te coordinates of vertex 5	and 6	Height of asphalt lay Lanes TOP lanes	ers + hidroisolation - Ha [cm]	: 8.0
ayers				Lower border h	orizontal	
ections:	CONC	RETE_CONSTRUCTION_SE	CTIONS2	BOTTOM lanes		
Iodel:	CONC	RETE_CONSTRUCTION_MO	DDEL	Lower border u	nder slope	
idroisolation:	HIDRO	ISOLATION_SECTIONS		Slope [%]		2.50
olors						
Sections				Console under footw	ay	
	Select color >>			Slope - sl [%]:		2.50
3D model						
t.	Select color >>				luway	
Hidroicolation				Console RIGHT		2.50
1 101 01301010011	Select color > >			Siope - sr [%]:		2.50
				Darallel with re:		





- 4. Draw setting out points and polyline in section vertexes of deck construction
 - 4.1 Draw in WCS coordinate system (from file Example2_3dL.v3d):

File type	Colors
O Monolith sections - *.m3d	Bd Mark text
Section contour	
Outer OInner	Select color >>
Izrisi	Linia ha sana
Coordinate syste origin = WCS	Height text
🗹 Draw points 🛛 Draw marks 🖓 Draw heights	Select color >>
Polyline	
Draw polyine in model	Polyline
Connect vertexes	
() 2d (€) 3d	Select color >>
Draw polyline horizontal 2d	
OK Can	el
OK Cano	el
OK Cano Points	rel X
OK Cano Points Types	zel X
OK Cano Points Types	x
OK Cano	
OK Cano Points Types • + • •	
OK Cano	
OK Cano Points Types	

Cancel

OK



4.2 Draw in local coordinate system and in 2d (from file Example2_3dL_sketch.v3d):

4.2.1

rsta datoteke	Barve
○ Monolitni prerezi - *.m3d	Tekst oznak tock
iontura prerezov	Pokazi baryo >>
•) Zunanja 🛛 🔿 Notranja	PORAZI DAI VO 22
zrisi Izhodisce koordinatnega sistema = WCS	Tekst visin
 √Izris tock	
	Pokazi barvo >>
Crtovje	
Povezava tock	Crtovje
● 2d ○ 3d	Pokazi barvo >>
Izris crtovia borizontalno 2d	

Types				
	·	+	\times	1
\bigcirc	\odot	÷	X	\oplus
	·	+	X	
	\odot	ф	X	٢
Point percent % Colors				50
	Selec	t colors >>		
	_	_		



4.2.2

Drawing of longitudinal connection 2d points 10, 20, 30, 50, 3i, 2i, 7i, 6i, 80, 110, 100 in local coordinate system can be used as ground floor draft/sketch for presstressed cable axes drawing , especially **in examples**, where object is not linear, roadways with widening ...

ection contour Outer O Inner	
Outer OInner	
	Select color >>
zrisi	
Coordinate syste origin = WCS	Height text
Draw points Draw marks Draw heights	Select color >>
Polyline	
☑ Draw polyine in model	Polyline
Connect vertexes	
• 2d	Select color >>
Draw polyline horizontal 2d	
OK Cancel raw marking points and polyline in section vertexes of deck File type	construction X Colors
OK Cancel Draw marking points and polyline in section vertexes of deck File type O Monolith sections - *.m3d Hollow sections - *.v3d Section contour	construction X Colors Mark text Select color >>
OK Cancel Draw marking points and polyline in section vertexes of deck File type O Monolith sections - *.m3d Hollow sections - *.v3d Section contour O Outer Immeri	construction X Colors Mark text Select color >>
OK Cancel Draw marking points and polyline in section vertexes of deck File type Monolith sections - *.m3d Monolith sections - *.m3d Hollow sections - *.v3d Section contour Outer Izrisi Coordinate syste origin = WCS	construction X Colors Mark text Select color >> Height text
OK Cancel Oraw marking points and polyline in section vertexes of deck File type Monolith sections - *.m3d Monolith sections - *.m3d Hollow sections - *.v3d Section contour Outer Outer Izrisi Coordinate syste origin = WCS Draw points Draw marks Draw heights	construction X Colors Mark text Select color >> Height text Select color >>
OK Cancel Oraw marking points and polyline in section vertexes of deck File type Monolith sections - *.m3d Hollow sections - *.v3d Section contour Outer Outer Izrisi Coordinate syste origin = WCS Draw points Draw marks Draw heights Polyline ØDraw nolvine in model	construction × Colors Mark text Select color >> Height text Select color >>
OK Cancel Draw marking points and polyline in section vertexes of deck File type O Monolith sections - *.m3d Hollow sections - *.v3d Section contour Outer Outer Izrisi Coordinate syste origin = WCS Draw points Draw marks Draw heights Polyline Oraw polyine in model Connect vertexes	construction × Colors Mark text Select color >> Height text Select color >> Polyline
OK Cancel Oraw marking points and polyline in section vertexes of deck File type Omobility Monolith Sections - *.m3d Image: Outer Outer Outer Izrisi Coordinate syste origin = WCS Draw points Draw marks Draw points Oraw polyline Oraw polyline in model Connect vertexes Image: Other in model Onconcet vertexes Image: Other in model Onconcet vertexes Image: Other in model Image: Other in m	construction × Colors Mark text Select color >> Polyline Select color >>

- 5. Draw sections vertexes setting out points table of deck construction
 - 5.1 Draw in WCS coordinate syste (from file Example2_3dL.v3d):

			Marking	points	
raw sections vertexes marking points table of deck construction	×	point	Y	Х	Н
File type		1_1_0	588306.235	140918.567	100.004
Monolith sections - *.m3d Hollow sections - *.v3d		1_2_0	588306.235	140921.667	100.081
Columns		1_3_0	588306.235	140922.567	100.104
Coloumn number of marks:	1	1_4_0	588306.235	140922.567	99.854
Coloumn number of Y-coordinates:	3	1_5_0	588306.235	140921.067	99.516
Coloumn number of elevation marks:	5	1_6_0	588306.235	140921.067	97.004
Colors		1_7_0	588306.235	140916.067	97.004
Title text		1_8_0	588306.235	140916.067	99.391
Select color >>		1_9_0	588306.235	140914.567	99.69
Text in rows		1_10_0	588306.235	140914.567	99.94
Select color >>		1_11_0	588306.235	140915.467	99.926
		1_1_1	588306.235	140918.567	99.304
Vertical lines		1_2_1	588306.235	140919.317	99.323
Select color >>		1_3_1	588306.235	140919.767	99.334
Horizontal lines		1_4_1	588306.235	140919.767	97.804
Select color >>		1_5_1	588306.235	140917.367	97.804
		1_6_1	588306.235	140917.367	99.274
OK Cancel		1_7_1	588306.235	140917.817	99.285

5.2 Draw in local coordinate system (from file Example2_3dL_sketch.v3d):

File type		
Monolith sections - *.m3d	Hollow sections - *.v3d	
Columns		
Coloumn number of marks:		1
Coloumn number of Y-coordinates:		3
Coloumn number of elevation marks	5:	5
Colors		
Title text		
Sele	ect color >>	
Text in rows		
Sele	ect color >>	
Vertical lines		
Sele	ect color >>	
Horizontal lines		
Sele	ect color >>	

	Marking	points	
point	Y	Х	Н
1_1_0	0.000	0.000	0.000
1_2_0	0.000	3.100	0.078
1_3_0	0.000	4.000	0.100
1_4_0	0.000	4.000	-0.150
1_5_0	0.000	2.500	-0.488
1_6_0	0.000	2.500	-3.000
1_7_0	0.000	-2.500	-3.000
1_8_0	0.000	-2.500	-0.613
1_9_0	0.000	-4.000	-0.305
1_10_0	0.000	-4.000	-0.055
1_11_0	0.000	-3.100	-0.078
1_1_I	0.000	0.000	-0.700
1_2_I	0.000	0.750	-0.681
1_3_I	0.000	1.200	-0.670
1_4_I	0.000	1.200	-2.200
1_5_I	0.000	-1.200	-2.200
1_6_I	0.000	-1.200	-0.730
1_7_I	0.000	-0.750	-0.719

1. Draw 2d cross sections of deck construction

Draw 2D cross sections of deck construction

es		
3d roadway level file		
Current file *.o3d		
C:\Primeri moduli\Example2\Example2_3dL.03d		
Replace file >>		
Roadway file		
Current file *.voz		
C:\Primeri moduli\Example2\Example2_3d.voz		
Replace file >>		
Console slope file		
Current file *.ppk		
C:\Primeri moduli\Example2\Example2_3dL.ppk		
Replace file >>		
ections		Roadway drawing type in draining area
Section type		O Under roadway slope O Under console slope
O Monolith O Hollow		0 11 0
Section insertion direction		Colors
Horizontal Overtical		Section text marks
		Select color >>
Drawing type		
O Sketch ONormal		Elevation marks symbol
Drawing without roadway	der insertion	Select color >>
tvia numberi	1	Elevation marks text
Axis number:	1	Elevation marks text Select color >>
Axis number: Sections drawing step:	1	Elevation marks text Select color >>
Axis number: Sections drawing step: Distance between sections [m]:	1 1 12.0	Elevation marks text Select color >> Roadway
uxis number: lections drawing step: Distance between sections [m]: Asphalt layer height [cm]:	1 1 12.0 8.0	Elevation marks text Select color >> Roadway Select color >>
ixis number: iections drawing step: Distance between sections [m]: isphalt layer height [cm]: iews	1 1 12.0 8.0	Elevation marks text Select color >> Roadway Select color >> Axis
Axis number: Sections drawing step: Distance between sections [m]: Asphalt layer height [cm]: Tiews Views width [m]:	1 12.0 8.0 10.0	Elevation marks text Select color >> Roadway Select color >> Axis Select color >>

 Breaking points distances in construction cross sections
 Image: Construction cross sections

 Image: Construction cross sectionseconstructing cross sections
 Image: Cons

R.S.COM – Mladinska ulica 33 – 200 Maribor – Slovenija

Cancel

OK

×

×

			PP 1 km 0+0.000		
	492.303	i% = 2.145 >	492 226	i% = -2.145 >	492.142
L					

2. Draw longitudinal section in axis of hollow deck construction

If we do according to upper procedure, we don't need to draw ahead longitudinal section of object in object axis, this command enable that.

Draw longitudinal section in axis of hollow construction	n ×
Files	
3d roadway level file	
Current file *.o3d	
C:\Primeri moduli\Example2\Example2_3dL.o3d	
Replace file >>	
Hollow sections height file	
Current file *.vvk	
C:\Primeri moduli\Example2\Example2_3dL.vvk	
Replace file >>	
ngth scale:	1.000
ОК	Cancel



Module BRIDGE

CABLE PRESSTRESSING

CABLE PRESSTRESSING

- 1. Define cable axis files in cross sections in draft/sketch ground floor and longitudinal section
 - 1.1 Draw cross axis horizontal with command Civil -> Cross axis -> Draw cross axis.

Cross axis file		
Curent file *.pro		
C:\Primeri Moduli\Example2\Example2	2_3dL.pro	
Replace file >>		
Marks and axis lines		
Mark insertion side		
€Left	○ Right	
Draw axis horizontal		
Step:		1
Number profix		P
Number prenx Prenx:		
		50.0
Axis line length [m]:		50.0
Axis line length [m]: Mark and station distance from axis line	es [m]:	50.0
Axis line length [m]: Mark and station distance from axis line Line color	≃s [m]:	50.0
Axis line length [m]: Mark and station distance from axis line Line color	es [m]: Select color >>	50.0
Axis line length [m]: Mark and station distance from axis line Line color	es [m]: Select color >>	50.0
Axis line length [m]: Mark and station distance from axis line Line color Fext Style	es [m]: Select color >> Height [mm]	50.0
Axis line length [m]: Mark and station distance from axis line Line color Fext Style MOD_Arial	es [m]: Select color >> Height [mm] V 0 6.0 • 5.0 0 :	50.0 1.0 3.5 () 3.0
Axis line length [m]: Mark and station distance from axis line Line color Fext Style MOD_Arial	es [m]: Select color >> Height [mm] 0 6.0	50.0 1.0 3.5 () 3.0
Axis line length [m]: Mark and station distance from axis line Line color Fext Style MOD_Arial	es [m]: Select color >> Height [mm] $\bigcirc 6.0 extbf{@} 5.0 extbf{O}$:	50.0 1.0 3.5 () 3.0
Axis line length [m]: Mark and station distance from axis line Line color Fext Style MOD_Arial	es [m]: Select color >> Height [mm] O 6.0	50.0 1.0 3.5 () 3.0
Axis line length [m]: Mark and station distance from axis line Line color Fext Style MOD_Arial Color	es [m]: Select color >> Height [mm] O 6.0	50.0 1.0 3.5 () 3.0

1.2 Draw cable axis in draft/sketch ground floor and longitudinal section. (see examples in appendix – 12)

Longitudinal section

Longitudinal section and ground floor

1.3 Define cable file from ground floor and longitudinal section - creating file CableL1.kal

Define presstressing cable axis files in cross sections from ground floor and longitudinal section

Cross axis file	
Current file *.pro	
C:\Primeri Moduli\Example2\Example2_3dL.pro	
Replace file >>	
Deltha stations [m]:	0.000
Fi cables [cm]:	10.8
Protecting concrete layer [cm]:	4.5
Delthafi [cm]:	3.2
OK	Cancel

Longitudinal section



Ground floor



Selected cross axis file: C:\Primeri Moduli\Example2\Example2_3dL.pro
Checking dates in file ... finished.
Length of longitudinal axis = 132.400
X and Y coordinates of construction STARTING and ENDING polyline points longitudinal and COMPARISSION AXIS in ground floor must be equal!
Select polyline in LONGITUDINAL SECTION - TOP CONSTRUCTION BORDER:
Longitudinal construction length = 132.400
Select polyline in LONGITUDINAL SECTION - BOTTOM CONSTRUCTION BORDER:
Longitudinal construction length = 132.400
Select polyline - COMPARISSION AXIS in GROUND FLOOR:
Cable number < 1 >/End:
Select polyline in LONGITUDINAL SECTION - CABLE AXIS:
Select polyline in LONGITUDINAL SECTION - CABLE AXIS:
Select polyline in GROUND FLOOR - CABLE AXIS:
Select polyline in GROUND FLOOR - CABLE AXIS:
Select polyline in ENDING FLOOR - CABLE AXIS:
Select polyline in GROUND FLOOR - CABLE AXIS:
Select polyline

Whith the same command we define files for other cables. For multiple cable drawing files must have the same cahracters to cable numbers in names! (CableL2.kal, CableL3.kal, CableR1.kal, CableR2.kal, CableR3.kal,...)

X

- 2. Draw cables in draft/sketch ground floor and longitudinal section
 - 2.1 Multiple negative cables on top longitudinal and in ground floor: CableL1 do CableL17

Colors, blocks and section numb	ers			×
Cross section file Current file *.pro C:\Primeri Moduli\Example2\Exar	nple2_3dL <mark>.</mark> pro			
Replace file >>				
Drawing option in ground floor		aw axis	○ None	
Drawing option in longitudinal secti	on O Dra	aw axis	○ None	
Colors Cable axis				
	Select	color >>		
Cables				
	Select	color >>		
Cable marks				
	Select	color >>		
Blocks On cable startpoint			2	
Head OCI	utch	() Ancoring	None	
On cable endpoint Head	utch	O Ancoring	○ None	
Drawing option Single Multiple	le numbers from file	e 🔽 Draw table	Draw vertical assistant	ce lines
Mark prefix:		Draw suffix for	side	
	OK	Cancel		
	Table lines and	I text colors	<	
	Cable axis			
	Select o	olor >>		
	Text			
	Select o	olor >>		
	Lines			
	Select o	olor >>		
	Vertical inner li	nes		
	Select o	olor >>		
	ОК	Cancel		

Block CABLE_HEAD_LEFT

Block CABLE_HEAD_RIGHT



Selected cross section file: C:\Primeri Moduli\Example2\Example2_3dL.pro
Checking dates in file ... finished.
Select basic BLOCK for LEFT head:
Select basic BLOCK for RIGHT head:
Select polyline - TOP BORDER of construction longitudinal section:
Pick AXIS position in ground floor:
Starting cable files text <cablel>:
STARTING cable number <1>:
ENDING cable number <2>: 17
File C:\Primeri Moduli\Example2\cablel1.kal not found.

Cable line file: C:\Primeri Moduli\Example2\cablel1.kal. Longitudinal section processing ... Section processing in ground floor ... finished. Pick table X0Y origin point of cable. 1: Draw table of 1. cable ... finished. File C:\Primeri Moduli\Example2\cablel2.kal not found. Cable line file: C:\Primeri Moduli\Example2\cablel2.kal. Longitudinal section processing ... Section processing in ground floor ... finished. Draw table of 2. cable ... finished.



2.2 Multiple - negative cables on top, longitudinal and in ground floor: CableR1 to CableR17





R.S.COM – Mladinska ulica 33 – 200 Maribor – Slovenija

2.3 Multiple – bottom positive cables longitudinal and in ground floor: CableL18 to CableL27

Selected cross section file: C:\Primeri Moduli\Example2\Example2_3dL.pro
Checking dates in file ... finished.
Select basic BLOCK for LEFT head:
Select basic BLOCK for RIGHT head:
Select polyline - TOP BORDER of construction longitudinal section:
Pick AXIS position in ground floor:
Starting cable files text <CableL>:
STARTING cable number <18>:
ENDING cable number <28>: 27
File C:\Primeri Moduli\Example2\CableL18.kal not found.
Cable line file:
C:\Primeri Moduli\Example2\CableL18.kal.
Longitudinal section processing ...
Section processing in ground floor ... finished.
Pick table X0Y origin point of cable. 18:
Draw table of 18. cable ... finished.



2.4 Multiple – bottom positive cables longitudinal and in ground floor: CableR18 to CableR27





3. Draw cables in real ground floor 2d or 3d

2d draw

Draw cables CableL1 to CableL27 and CableR1 to CableR27

Draw cable in real ground floor	×
Files	
3d roadway level file	
Current file *.o3d	
C:\Primeri Moduli\Example2\Example2	_3dL.o3d
Replace file >>	
Roadway file	
Current file *.voz	
C:\Primeri Moduli\Example2\Example2	_3d.voz
Replace file >>	
Drawing option	
Draw 3d Y- coordinates horizontal	Draw as sketch
Mark prefix:	Writte suffix for side
	OK Cancel

R.S.COM – Mladinska ulica 33 – 200 Maribor – Slovenija

Colors Cable axis			
	Select o	olor >>	
Cables			
	Select o	olor >>	
Cable marks			
	Select o	olor >>	
Blocks			
On cable sta	artpoint		
• Head (Clutch	OAncoring	○ None
On cable en	dpoint		
● Head (Clutch		None

Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz Checking dates in files ... finished. Section checking ... finished. Select basic BLOCK for LEFT head: Select basic BLOCK for RIGHT head: Starting text of cable files <CableL>: Number of STARTING cable <1>:

Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz Checking dates in files ... finished. Section checking ... finished. Select basic BLOCK for LEFT head: Select basic BLOCK for RIGHT head: Starting text of cable files <CableL>: CableR Number of STARTING cable <1>: Number of ENDING cable <27>:



Draw cables CableL1 to CableL17 and CableR1 to CableR17

	~
Files	
3d roadway level file	
Current file *.o3d	
C:\Primeri Moduli\Example2\Example2_3dL.o3d	
Replace file >>	
Roadway file	
Current file *.voz	
C:\Primeri Moduli\Example2\Example2_3d.voz	
Replace file >>	
Drawing option	
Single Multiple O 2d O 3d	
Draw 3d Y- coordinates horizontal Draw as sketch	
Mark prefix:	
OK Cancel	
Colors and blocks X	
Drawing option in ground floor	
Draw axis and cable Draw axis None	
Colors	
Cable axis	
Select color >>	
Select color >>	
Cables	
Select color >>	
Cable marks	
Select color >>	
Diada	
Blocks	
Head O Clutch O Ancoring O None	
On cable endpoint	
Head Clutch Ancoring None	
Mark prefix: Draw suffix for side	
OK Cancel	
BLOCK CABLE HEAD LEFT 3D BLOCK CABLE HEAD RIGHT	_3D

Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz Checking dates in files ... finished. Section checking ... finished. Select basic BLOCK for LEFT head: Select basic BLOCK for RIGHT head: Starting text of cable files <CableR>: CABLEL Number of STARTING cable <1>: Number of ENDING cable <27>: 17

Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz Checking dates in files ... finished. Section checking ... finished. Select basic BLOCK for LEFT head: Select basic BLOCK for RIGHT head: Starting text of cable files <CABLEL>: CABLER Number of STARTING cable <1>: Number of ENDING cable <17>:



Draw cables CableL18 to CableL27 and CableR18 to CableR27

Draw cable in real ground floor

Files	
3d roadway level file	
Current file *.o3d	
C:\Primeri Moduli\Example2\Example3	2_3dL.o3d
Replace file >>	
Roadway file	
Current file *.voz	
C:\Primeri Moduli\Example2\Example3	2_3d.voz
Replace file >>	
Drawing option	
○ Single	○ 2d
Draw 3d Y- coordinates horizontal	Draw as sketch
Mark prefix:	Writte suffix for side
	OK Cancel

X

Draw axi	s and cable	O Draw ax	is () None
Colors Cable axis			
	Select o	olor >>	
Cables -			
	Select o	olor >>	
Cable mark	s		
	Select c	olor >>	
Blocks On cable s	tartpoint		
Head	O Clutch		ONone
On cable e Head	ndpoint OClutch		○ None
Mark prefix:			uffix for side

Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz Checking dates in files ... finished. Section checking ... finished. Select basic BLOCK for LEFT head: Select basic BLOCK for RIGHT head: Starting text of cable files <CABLER>: CABLEL Number of STARTING cable <1>: 18 Number of ENDING cable <1>: 27

Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d
Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz
Checking dates in files ... finished.
Section checking ... finished.
Select basic BLOCK for LEFT head:
Select basic BLOCK for RIGHT head:
Starting text of cable files <CABLEL>: CABLER
Number of STARTING cable <18>:
Number of ENDING cable <27>:



4. Draw cables in cross sections

Draw cables CableL1 to CableL17 and CableR1 to CableR17

Draw cables in cross sections X	
Left side Kight sice	
Files 3d roadway level file	
Current file *.o3d	Draw cables in cross sections X
C: \Primeri Moduli \Example2\Example2_3dL.03d	
Replace file >>	Mark prefix:
Roadway file	
C:\Primeri Moduli\Example2\Example2_3d.voz	
Replace file >>	Writte suffix for side
Slope console file	Mark insertion side
Current file *.ppk	○Left ○Center ○Right ○Top ●Bottom
c. Primer Houdingzampiez (zkanpiez_suc.ppk	Colors
Replace file >>	Cables
Section type	Select color >>
Drawing option	SEIECT COIOT >>
O Single Multiple Axis number: 1	Cable marks
Distance from LEFT border to break point of LEFT console A [cm]: 25.0	Select color >>
Distance from RIGHT border to break point of RIGHT console B [cm]: 25.0	
	OK Canad
OK Cancel	OK Caricer
Selected file *.o3d: C:\Primeri Moduli\Exa Selected file *.voz:C:\Primeri Moduli\Exa Selected file *.ppk: C:\Primeri Moduli\Exa Sections checking finished. Starting text of cable files <cabler>: CA STARTING cable number <18>: 1 ENDING cable number <27>: 17 Cable drawing file:C:\Primeri Moduli\Exam Section processing Draw cable finished.</cabler>	kample2\Example2_3dL.o3d ample2\Example2_3d.voz kample2\Example2_3dL.ppk ABLEL nple2\CABLEL1.kal.
Selected file *.o3d: C:\Primeri Moduli\Exa Selected file *.voz:C:\Primeri Moduli\Exa Selected file *.ppk: C:\Primeri Moduli\Exa Sections checking finished. Starting text of cable files <cablel>: CAU STARTING cable number <1>: ENDING cable number <17>: Cable drawing file:C:\Primeri Moduli\Exam Section processing Draw cable finished.</cablel>	ample2\Example2_3dL.o3d mple2\Example2_3d.voz ample2\Example2_3dL.ppk BLER ple2\CABLER1.kal.

Draw cables CableL18 to CableL27 and CableR18 to CableR27

Draw cables in cross sections		×
Left side	Hight sice	
Files		
3d roadway level file Current file *.o3d		
C:\Primeri Moduli\Example2\Example2_3d	o3d	
Replace file >>		Draw cables in cross sections X
Roadway file Current file *,voz C:\Primeri Moduli\Example2\Example2_3d	.voz	Mark prefix:
Replace file >>		Writte aufflic for side
Slope console file		Writte suffix for side
Current file *.ppk C:\Primeri Moduli\Example2\Example2_3dl	L.ppk	Mark insertion side
Replace file >>		Colors
Section type		Cables
O Monolith Hollow	- coordinates horizontal Draw as sket	setch Select color >>
Drawing option		
O Single Multiple	Axis number:	1 Cable marks
Distance from LEFT border to break point of L	EFT console A [cm]:	25.0 Select color >>
Distance from RIGHT border to break point of	RIGHT console B [cm]:	25.0
	Cancel	OK Cancel

Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz Selected file *.ppk: C:\Primeri Moduli\Example2\Example2_3dL.ppk Sections checking... finished. Starting text of cable files <CABLEL>: STARTING cable number <18>: ENDING cable number <27>: Cable drawing file:C:\Primeri Moduli\Example2\CABLEL18.kal. Section processing ... Draw cable ... finished.

```
Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d
Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3dL.opk
Selected file *.ppk: C:\Primeri Moduli\Example2\Example2_3dL.ppk
Sections checking... finished.
Starting text of cable files <CABLEL>: CABLER
STARTING cable number <18>:
ENDING cable number <27>:
Cable drawing file:C:\Primeri Moduli\Example2\CABLER18.kal.
Section processing ...
Draw cable ... finished.
```



5. Insert YOZ basis points in cross sections

O Monoli	pe th	Hollow		
Drawing t	ype	● Normal		
Y0Z Origin	of coordin tis point	ate system Bottom axi	s point	
xis numbe	r:		1	_
Section vie	ews			
Width [m]	:		10.0	1
Height [m]:		10.0	
Colors				
Texst:	Texst: Select color >>			
	Cala	ct color >>		İ

STARTING section number <1>: ENDING section number <2>: 180



Draw table of cable coordinates in cross sections
 6.1 Left side

Section type Monolith Hollow	Views Width [m]: 10.0
Drawing type O Sketch Normal	Height [m]: 10.0
Coordinate system Y0Z origin	Title text
○ Top axis point Bottom axis point	Select color >>
Cable position for draw Left Axis Right	Text Select color >>
Axis number:	Outer lines Select color >>
Mark prefix:	Inner lines Select color >>

STARTING section number <1>: 3 ENDING section number <180>: 178



Draw table of cable coordinates in cross sections

O Monolith O Hollow	Views Width [m]: 10.0
Drawing type O Sketch Normal	Height [m]: 10.0
Coordinate system Y0Z origin O Top axis point Bottom axis point	Colors Title text Select color >>
Cable position for draw OLeft OAxis ORight	Text Select color >>
Axis number:	Outer lines Select color >>
Mark prefix:	Inner lines Select color >>

×

STARTING section number <3>: ENDING section number <178>:



R.S.COM - Mladinska ulica 33 - 200 Maribor - Slovenija

7. Draw table of cable specifications

7.1 Left side

Draw table of cable specifica	ations	× Mark
Drawing area		1
O 2d €) 3d	10
Cable position		11
		12
	0.1	13
l extual dates		14
Titele text: Cable specifika	ation	15
Mark prefix:		16
Writte suffix for side		17
Writte suffix for side	2	18
Cable type:	19 x 150 mm2	19
Cable weight [kg]:	22.7	2
		20
Colors		21
litte text		22
Select color >	>	23
Text in lines		24
Text III III es		25
Select color >	>>	26
Outer table lines		21
		3
Select color >	>>	5
Inner table lines		6
Calact calact		7
Select color >		8
		9
OK	Creat	Oum

Cable specifikation					
Mark	pcs	TYPE	L [m]	Wght [kg]	
1-L	1	19 x 150 mm2	17.4	395.0	
10-L	1	19 x 150 mm2	55.3	1255.3	
11-L	1	19 x 150 mm2	65.5	1486.9	
12-L	1	19 x 150 mm2	65.3	1482.3	
13-L	1	19 x 150 mm2	75.3	1709.3	
14-L	1	19 x 150 mm2	85.3	1936.3	
15-L	1	19 x 150 mm2	95.4	2165.6	
16-L	1	19 x 150 mm2	13.2	299.6	
17-L	1	19 x 150 mm2	13.2	299.6	
18-L	1	19 x 150 mm2	47.7	1082.8	
19-L	1	19 x 150 mm2	42.6	967.0	
2-L	1	19 x 150 mm2	17.3	392.7	
20-L	1	19 x 150 mm2	37.5	851.3	
21-L	1	19 x 150 mm2	26.6	603.8	
22-L	1	19 x 150 mm2	16.6	376.8	
23-L	1	19 x 150 mm2	47.6	1080.5	
24-L	1	19 x 150 mm2	42.5	964.8	
25-L	1	19 x 150 mm2	37.5	851.3	
26-L	1	19 x 150 mm2	26.6	603.8	
27-L	1	19 x 150 mm2	16.6	376.8	
3-L	1	19 x 150 mm2	25.5	578.9	
4-L	1	19 x 150 mm2	25.3	574.3	
5-L	1	19 x 150 mm2	35.4	803.6	
6-L	1	19 x 150 mm2	35.2	799.0	
7-L	1	19 x 150 mm2	45.5	1032.9	
8-L	1	19 x 150 mm2	45.3	1028.3	
9-L	1	19 x 150 mm2	55.5	1259.9	
Sum			1112.7	25258.4	

7.2 Right side

Draw table o	of cable specification	5113	
Drawing are	a () 3	d	
Cable positio	On O Axis	 Right 	
Textual date Titele text:	cable specifikatio	on	
Mark prefix:	uffix for side		
✓ writte s			-
Cable type:	[19 x 150 mm	2
Cable type: Cable weight	[kg]:	19 x 150 mm	22.700
Cable type: Cable weight Colors Title text	[kg]:	19 x 150 mm	22.700
Cable type: Cable weight Colors Title text	[kg]: Select color >>	19 x 150 mm	22.700
Cable type: Cable weight Colors Title text	[kg]: Select color >>	19 x 150 mm	22.700
Cable type: Cable weight Colors Title text	[kg]: Select color >> es Select color >>	19 x 150 mm	22,700
Cable type: Cable weight Colors Title text	[kg]: Select color >> es Select color >>	19 x 150 mm	22.700
Cable type: Cable weight Colors Title text	[kg]: Select color >> es Select color >> le lines Select color >>	19 x 150 mm	22.700
Cable type: Cable weight Colors Title text	[kg]: Select color >> es Select color >> le lines Select color >> e lines	19 x 150 mm	22.700

Cable specifikation					
Mark	pcs	TYPE	L [m]	Wght [kg]	
1-R	1	19 x 150 mm2	17.4	395.0	
10-R	1	19 x 150 mm2	55.3	1255.3	
11-R	1	19 x 150 mm2	65.5	1486.9	
12-R	1	19 x 150 mm2	65.3	1482.3	
13-R	1	19 x 150 mm2	75.3	1709.3	
14-R	1	19 x 150 mm2	85.3	1936.3	
15-R	1	19 x 150 mm2	95.4	2165.6	
16-R	1	19 x 150 mm2	13.2	299.6	
17-R	1	19 x 150 mm2	13.2	299.6	
18-R	1	19 x 150 mm2	47.7	1082.8	
19-R	1	19 x 150 mm2	42.6	967.0	
2-R	1	19 x 150 mm2	17.3	392.7	
20-R	1	19 x 150 mm2	37.5	851.3	
21-R	1	19 x 150 mm2	26.6	603.8	
22-R	1	19 x 150 mm2	16.6	376.8	
23-R	1	19 x 150 mm2	47.6	1080.5	
24-R	1	19 x 150 mm2	42.5	964.8	
25-R	1	19 x 150 mm2	37.5	851.3	
26-R	1	19 x 150 mm2	26.6	603.8	
27-R	1	19 x 150 mm2	16.6	376.8	
3-R	1	19 x 150 mm2	25.5	578.9	
4-R	1	19 x 150 mm2	25.3	574.3	
5-R	1	19 x 150 mm2	35.4	803.6	
6-R	1	19 x 150 mm2	35.2	799.0	
7-R	1	19 x 150 mm2	45.5	1032.9	
8-R	1	19 x 150 mm2	45.3	1028.3	
9-R	1	19 x 150 mm2	55.5	1259.9	
Sum			1112.7	25258.4	

R.S.COM – Mladinska ulica 33 – 200 Maribor – Slovenija

8. Define anchor blocks

- 8.1 Define anchor blocks on top
- 8.1.1 Define anchor blocks for CableL17:

Define anchor blocks on top				×
LEFT AND	IORING	RIGHT	ANCORING	
Τv		SECTION	Tvn	
. VIEW	BASIC	BASIC	VIEW .	
• Tvn Tvr			Tyn Tyn	
, Ssid	GROUND FLOOR and 3D	GROUND FLODR and 3D	, Y , L Ssid	
1 1		P S S	1 1	
Anchor block width (Ssid):	0.70 Distance to	insertion pointanchor blocks	; (Y):	0.45
Anchor block mark	17-	L Color	Select color >>	
	ОК	Cancel		
		CAP	BLE 17	
Define anchor blocks on top				×
LEFT AN	Eoring	RIGHT	ANCORING	
	SECTION	SECTION		
	In 9		Ivn	
	BASIC	BASIC	VIEW	
_ <u>▼ Tvn</u> _ Tv _ <u>↓ Y ↓</u>	h Cat		Tvn Tvn •	
Ssid	GROUND FLOOR and 3D	GROUND FLODR and 3D	Ssid 🗼	
	Tvn - pg	Piss Tru o		
	· [
Anchor block width (Ssid):	0.700 Distance to	insertion pointanchor blocks	s (Y):	0.450
Anchor block mark	175	Color		
	ок	Cancel	Select color >>	

CABLE 17	

8.1.2 Insert anchor blocks in ground floor and longitudinal section

olors, blocks and section	numbers				
Cross section file					
C:\Primeri Moduli\Exampl	e2\Example2_3dL	.pro			
Replace file >>					
Drawing option in ground f	oor				
O Draw axis and cable		ODrav	v axis	None	
Drawing option in longitudi	nal section				
O Draw axis and cable		ODrav	v axis	None	
Colors					
Cable axis					
		Select o	olor >>		
Cables					
		Select o	olor >>		
Cable marks					_
		Select o	olor >>		
Blocks					
On cable startpoint					
OHead	O Clutch		Ancoring	○ None	
On cable endpoint					
Head			Ancoring	○ None	
Drawing option					
Single Multiple	Cable number	s from file	Draw table	Draw vertical assistance	lines
Mark prefix:			Draw suffix for	side	
		OK	Cancel		

Selected cross section file: C:\Primeri Moduli\Example2\Example2_3dL.pro
Checking dates in file ... finished.
Select basic BLOCK for LEFT anchoring:
Select basic BLOCK for LEFT anchoring in ground floor:
Select basic BLOCK for RIGHT anchoring in ground floor:
Select basic BLOCK for RIGHT anchoring in ground floor:
Select polyline - TOP BORDER of construction longitudinal section:
Pick AXIS position in ground floor:
< Draw 1. cable >/End:
Selected cable line file: C:\Primeri Moduli\Example2\CableL17.kal.
Longitudinal section processing ...
Section processing in ground floor ... finished.
< Draw 2. cable >/End:E



8.1.3 Insert anchor blocks in cable axis ending points in cross sections

lzris blokov v oseh ka	ablov v precnih prere	zih ×	
Section type Monolith	Hollow		
Drawing type O Sketch	Normal		
Axis number:		1	
Section areas Width [m]: Height [m]:		10.0	
Drawing option Single	() Multiple		Select BLOCK on cable STARING point: Select BLOCK on cable ENDING point: < Insert blocks >/End:
Insertion side	○ Right		Select existing cable line file. Selected cable lines file: C:\Primeri Moduli\Example2\CableL17.kal.
C	Cancel		< Insert blocks >/End:E





8.1.4 Insert anchor blocks in real 2d ground floor

Draw cable in real ground floor	×
Files	
3d roadway level file	
Current file *.o3d	
C:\Primeri Moduli\Example2\Example2_3	dL.o3d
Replace file >>	
Roadway file	
Current file *.voz	
C:\Primeri Moduli\Example2\Example2_3	d.voz
Replace file >>	
Drawing option	
Single Multiple	
Draw 3d Y- coordinates horizontal	Draw as sketch
Mark prefix:	Writte suffix for side
Colors and blocks X Drawing option in ground floor	
Obraw axis and cable Obraw axis None	
Colors	
Select color >>	
Cables	
Select color >>	
Cable marks	
Select color >>	rted file *.o3d: C:\Primeri Moduli\Example2\Example2 3dL.o3d
Blocks Selec	cted file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz
On cable startpoint Check	king dates in files finished.
O Head O Clutch ● Ancoring O None Select	ion checking finished. ct basic BLOCK for LEFT anchoring in ground floor:
On cable endpoint Select	ct basic BLOCK for RIGHT anchoring in ground floor:
OHead OClutch ● Ancoring ONone < Dra	aw 1. cable >/End: ct existing cable line file.
Cabe	le line file:
Mark prefix: Draw suffix for side C:\Pr	rimeri Moduli\Example2\CableL17.kal. ion processing finished.
Draw	1. cable finished.



Insert anchor blocks in real 3d ground floor 8.1.5

Draw cable in real ground floor

Files	
3d roadway level file	
Current file *.o3d	
C:\Primeri Moduli\Example2\Example	e2_3dL.o3d
Replace file >>	
Roadway file	
Current file *.voz	
C: \Primeri Moduli \Example 2 \Example	e2_3d.voz
Replace file >>	
Drawing option	
● Single ○ Multiple	○ 2d
Draw 3d Y- coordinates horizontal	Draw as sketch
Mark prefix:	Writte suffix for side
	OK Cancel
Colors and blocks X Drawing option in ground floor	
O Draw axis and cable O Draw axis None	
Colors	
Cable axis	
Select color >>	
Cables	
Select color >>	
Cable marks	
Select color >>	
Blocks	Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3d
Head Clutch Ancoring None	Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.v Checking dates in files finished.
	Section checking finished.
	Select basic BLOCK for LEFT anchoring in ground floor: Select basic BLOCK for RIGHT anchoring in ground floor:
	< Draw 1. cable >/End:
	Select Existing cable line file. Cabele line file:
Mark prefix: Draw suffix for side	C:\Primeri Moduli\Example2\CableL17.kal.
	Draw 1. cable finished.
OK Cancel	< Draw 2. cable >/End:E

.03d

X



8.2 Define bottom anchor blocks

8.2.1 Define anchor blocks for CableL22:

Define bottom anchor blocks			×
LEFT	ANCORING	RIGHT ANCOF	RING
	SECTION	SECTION Twn	
. VIEW	BASIC	BASIC	VIEW .
Tvn	Tvn GROUND FLOOR and 3D	GROUND FLOOR and 3D	Tyn [*] JYJ Ssid
	. Tvn ≻		
Anchor block width (Ssid):	0.725 Distance t	o insertion pointanchor blocks (Y):	0.425
Anchor block mark	2	Color Select o	olor >>
	OK	Cancel	
	ÖK	Currer	
	4	CABL	E 22

Define bottom anchor blocks	80			>
LEFI	ANCORING	RI	IGHT ANCORING	
MEM				
, view [™] Tvn ↓ Y ↓ ↓ Ssid	GROUND FLOOR and 3D	GROUND FLOOR a] /
		Said		
Anchor block width (Ssid): Anchor block mark	0.725 Distan	22R	locks (Y): Select color >>	0.425
-	OK	Cancel	(
CABLE	22]

8.2.2 Insert anchor blocks in ground floor and longitudinal section

Cross section file				
Current file *.pro				
C:\Primeri Moduli\Exam	ple2\Example2_3dL.pro	2		
Replace file >>				
Drawing option in ground	floor			
O Draw axis and cable	2000/2 (O Draw axis	None	
Drawing option in longitu	dinal section			
O Draw axis and cable	ः (🔵 Draw axis	None	
Colors Cable axis				
	S	elect color >>		
Cables				
	S	elect color >>		
Cable marks				
	S	Select color >>		
Blocks				
On cable startpoint				
Head	O Clutch	Ancoring	○ None	
On cable endpoint				
Head	Olutch	Ancoring	○ None	
Drawing option Single OMultiple	Cable numbers fr	om file Draw table	Draw vertical assistance lin	ies
Mark prefix:		Draw suffix for s	ide	

R.S.COM – Mladinska ulica 33 – 200 Maribor – Slovenija

Selected cross section file: C:\Primeri Moduli\Example2\Example2_3dL.pro Checking dates in file ... finished. Select basic BLOCK for LEFT anchoring: Select basic BLOCK for LEFT anchoring in ground floor: Select basic BLOCK for RIGHT anchoring: Select basic BLOCK for RIGHT anchoring in ground floor: Select polyline - TOP BORDER of construction longitudinal section: Select polyline - TOP BORDER of construction longitudinal section: Pick AXIS position in ground floor: Select existing CABLE LINE file. Selected cable line file: C:\Primeri Moduli\Example2\CableL22.kal. Longitudinal section processing ... Section processing in ground floor ... finished. < Draw 2. cable >/End:E



8.2.3 Insert anchor blocks in cable axis ending points in cross sections

Section type		
○ Monolith	Hollow	
Drawing type		
○ Sketch	Normal	
Axis number:		1
Section areas		
Width [m]:		10.0
Height [m]:		10.0
Drawing option		
Single	O Multiple	
Insertion side		
● Left	○ Right	
0	KCancel	
Select BLOCK on	cable STARING p	oint:
Select BLOCK on (Insert blocks	Cable ENDING po	int:
Select existing	cable line file	

R.S.COM - Mladinska ulica 33 - 200 Maribor - Slovenija





8.2.4 Insert anchor blocks in real 2d ground floor

Draw cable in real ground floor

Files	
3d roadway level file	
Current file *.o3d	
C:\Primeri Moduli\Example2\Example	e2_3dL.o3d
Replace file >>	
Roadway file	
Current file *.voz	
C:\Primeri Moduli\Example2\Example	e2_3d.voz
Replace file >>	
Drawing option	
Single O Multiple	
Draw 3d Y- coordinates horizontal	Draw as sketch
Mark prefix:	Writte suffix for side
	OK Cancel

×

Colors and blocks X	
Drawing option in ground floor O Draw axis and cable O Draw axis None	
Colors Cable axis	
Select color >>	
Cables	
Select color >>	
Cable marks	
Select color >>	
Blocks	
On cable startpoint O Head O Clutch Ancoring O None	Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz
On cable endpoint O Head O Clutch Ancoring O None	Checking dates in files finished. Section checking finished. Select basic BLOCK for LEFT anchoring in ground floor: Select basic BLOCK for RIGHT anchoring in ground floor:
Mark prefix: Draw suffix for side	Select existing cable line file. Cabele line file: C:\Primeri Moduli\Example2\CableL22.kal.
OK Cancel	Draw 1. cable finished. < Draw 2. cable >/End:E



8.2.5 Insert anchor blocks in real 3d ground floor

Draw cable in real ground floor

×

Files	
3d roadway level file	
Current file *.o3d	
C: \Primeri Moduli \Example2 \Examp	le2_3dL.o3d
Replace file >>	
Roadway file	
Current file *.voz	
C:\Primeri Moduli\Example2\Examp	le2 3d.voz
Replace file >>	
)rawing option	
Single O Multiple	◯ 2d
✓Draw 3d Y- coordinates horizontal	Draw as sketch
Mark prefix:	Writte suffix for side

Cable avis			
Cable axis	Selectio	olor	
	Selectio		
Cables			
	Select c	olor >>	
Cable marks	;		
	Select o	olor >>	
Blocks			
On cable sta	Clutch		ONers
O Head	Clutter	Ancoring	Onone
On cable en		Ancarina	() None
Oneau	Clutter	Ancoring	ONONE
Mark prefix:		Draw su	ffix for side

Selected file *.o3d: C:\Primeri Moduli\Example2\Example2_3dL.o3d Selected file *.voz:C:\Primeri Moduli\Example2\Example2_3d.voz Thecking dates in files ... finished. Section checking ... finished. Select basic BLOCK for LEFT anchoring in ground floor: Select basic BLOCK for RIGHT anchoring in ground floor: Select basic BLOCK for RIGHT anchoring in ground floor: Select basic BLOCK for RIGHT anchoring in ground floor: Select existing cable line file. Select existing cable line file. Select existing cable line file. Select ine file: :\Primeri Moduli\Example2\CableL22.kal. Section processing ... finished. Draw 1. cable ... finished. C Draw 2. cable >/End:E



9. Appendix - draw presstressed cable axis in ground floor and longitudinal section

Use command BRIDGE -> Cable presstressing -> Draw cable axis in ground floor and longitudinal section

In dialog box we select drawing type:



9.1 Draw line and parable in longitudinal section





Draw line and parable in ground floor



.181 + 1.00 + 1.20		
	J 1.00 J	9.00

 \times

9.3 Draw parable and contra parable in longitudinal section



Draw parable and contra parable in longitudinal section



×

9.4 Draw parable and contra parable in ground floor



Draw parable and contra parable in ground floor



×