



**REPUBLIKA E SHQIPËRIË
AUTORITETI RRUGOR SHQIPTAR**

RAPORT TEKNIK

STUDIM PROJEKT – ZBATIM AKSET RRUGORE SKRAPAR – KORCE

3.5 Relacioni Teknik i Veprave te Medha te Artit

(PROJEKT - ZBATIMI)

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TIRANË TETOR 2017

RELACION TEKNIK

OBJEKTI:

STUDIM PROJEKT-ZBATIM AKSET RRUGORE SKRAPAR – KORÇË
AKSI MALIQ – LOZHAN I RI – STRELCE

URA HD 2X20m MBI LUMIN DEVOLL, KM 16 +981

GRUPI I PROJEKTITMIT:

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3.5 RELACION TEKNIK MBI ZGJIDHJEN KONSTRUKTIVE TE URES HD 2 x 20 m MBI LUMIN DEVOLL, KM 0 +440

3.1 Pershkrimi i objektit

Ne kete projekt parashikohet ndertimi i nje ure beton arme qe lidh dy brigjet e lumit Devoll. Percaktimi i pozicionit per vendosjen e ures, eshte bere ne perputhje me studimin hidrologjik si dhe ate gjologo-inxhinierik. Ura do te kete nje pozicion planimetrik, 90°, me shtratin e lumit Devoll. Mbistruktura eshte e vendosur horizontalisht duke bere rakordimet perkatese me projektin e rruges. Gjeresia totale e ures eshte 9.0 m, me dy kalime me gjeresi 3.50 m secila. Ura do te kete nje gjatesi prej 2 x 20.0 m si dhe dy trotuar nga 1.0 m secili. Pasqyra e lire ujqore eshte 5.0 m duke iu referuar nivelit maksimal te ujqrave te ketij lumi.

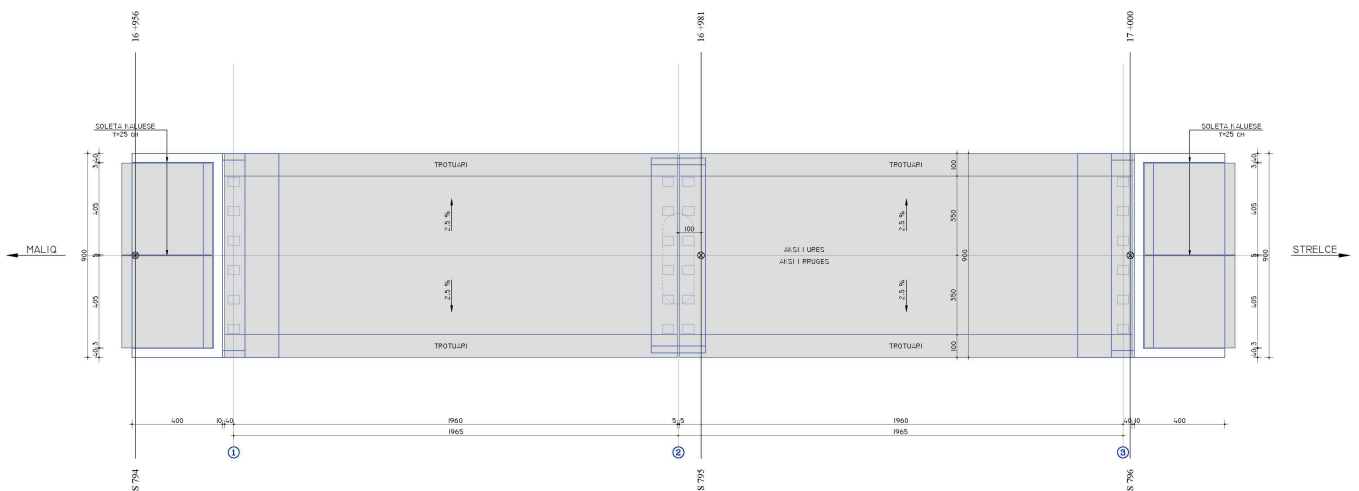


Fig.1 (Planimetria)

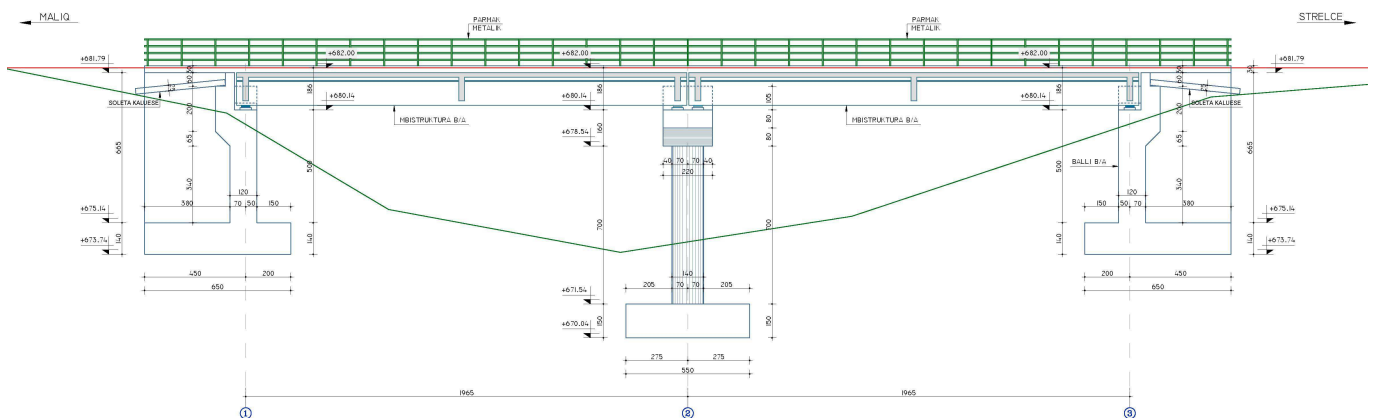


Fig.2 (Prerje gjatesore)

Nenstruktura e ures eshte realizuar me themele te cekta, nisur edhe nga rekomandimet gjeologo-inxhinierike. Themelet mbeshteten mbi shtresen zhavorrore e cila sipas relacionit gjeologjik eshte e pershtatshme per te suportuar ngarkesat qe vijen ne themel.

Mbeshtetjet anesore te ures jane realizuar me anen e ballnave beton arme. Trashesia e murit vertikal te ballnave eshte 120 cm. Nga pas shpatullave jane vendosur soletat rakorduese me trashesi 25cm dhe permasa 4.0 m x 3.5 m ne plan. Per te mbrojtur skarpaten e mbushjes nga pas ballnave, keto te fundit zgjatohen ne formen e mureve beton arme. Ballnat jane realizuar me beton te klasit C25/30 (M-300).

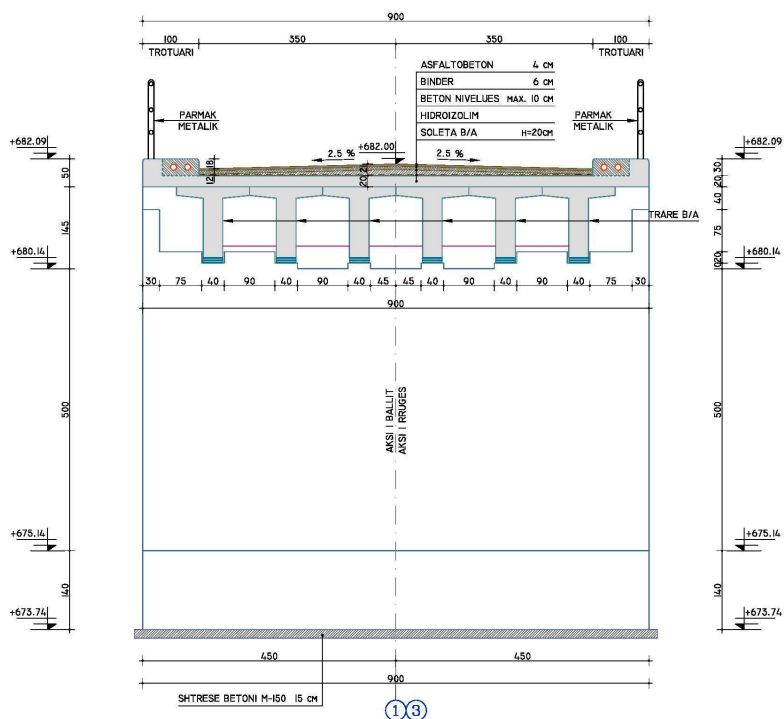


Fig. 3 (Prerja terthore ne ball)

Mbeshtetjet e mesit jane te realizuar me ane te nje pile b/a. Pila ka lartesi 7.0m, deri ne nivelin e jastekut. Pilat beton arme ne pjesen e sipërme te tyre bashkohen me nje tra (jastek) beton arme i cili ka nje gjeresi 220 cm dhe lartesi qe varion nga 160 cm ne mbeshtetje deri ne 80 cm ne maje.

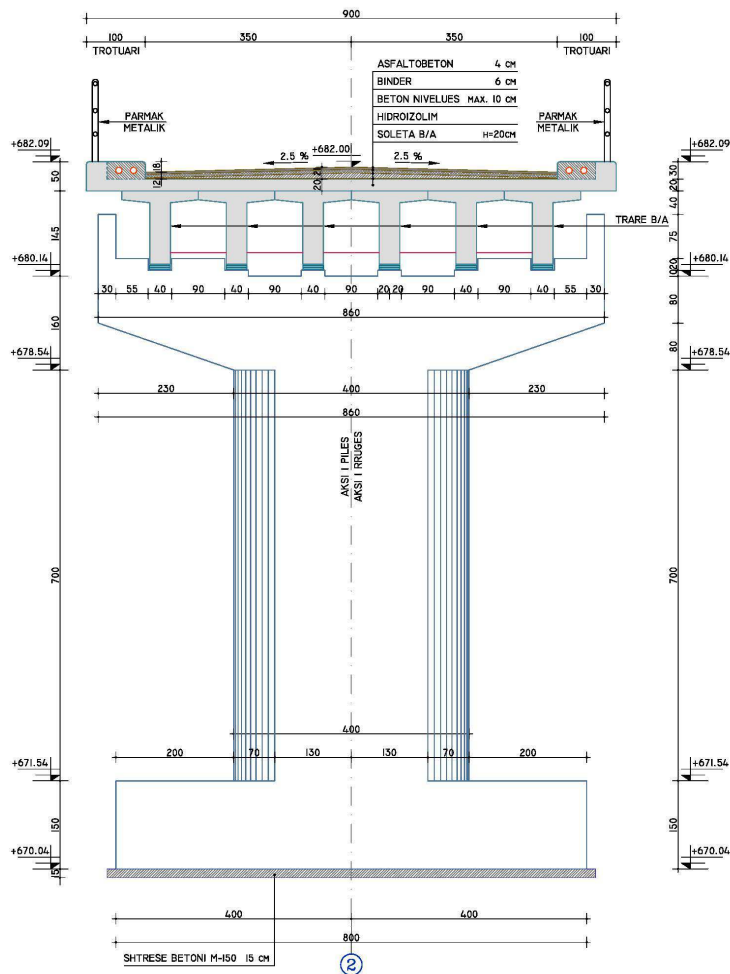


Fig. 4 (Prerja terthore ne pile)

Mbistruktura e ures eshte e parashikuar te ndertohet me trare beton arme te zakonshem C30/37 (M-400). Traret do te kene prerje terthore ne forme “T“. Gjatesia e tyre do te jete 20 m. Ne ure do te vendosen 6 trare. Ne pjesen e sipërme te tyre traret monolitizohen me ane te nje solete beton arme me trashesi 20 cm. Ne te dy ekstremet e trareve dhe ne mesin e tyre, jane vendosur diafragma b/a me trashesi 25 cm. Mbeshtetjet e trareve me jastekun e pilave dhe shpatullave do te realizohet me ane te cernierave prej neopreni me permasa 40x30x10.

Ne ure jane parashikuar dy trotuar me gjeresi 1.0 m. Soleta e trotuareve do jete me trashesi 30 cm eshte zgjatim i soletes se ures. Ne brendesi te tyre do te vendosen 2 tuba plastik me diameter Ø110 mm. Ne ane te trotuareve eshte parashikuar te vendoset mbrojtese metalike per kembesore.

Mbi mbeshtetjet e mbistruktures, ne pila dhe ne ballna jane lene hapësira prej 10 cm ku do te vendosen fugat e diletacionit.

Ne ure do te vendoset shtresa asfaltike 4.0 cm, shtresa e binderit 6.0 cm, nje shtrese beton pendence me trashesi maksimale 10 cm ne mesin e ures si dhe hidroizolimi. Gjithashtu ne ure do te vendosen dhe tubat e kullimit te ujrave te shiut.

Per rregullimin e trafikut ne ure eshte parashikuar te vendosen te gjithe elementet e nevojshem te sinjalistikes horizontale dhe vertikale.

3.2 Materialet

Betoni C25/30

• Rezistenca karakteristike kubike	Rck	=	30	N/mm ²
• Rezistenca karakteristike cilindrike	fck	=	25	N/mm ²
• Sforcimi mesatar aksial ne terheqje	fctm	=	2.2	N/mm ²
• Moduli sekant i elasticitetit	E	=	31	kN/mm ²
• Vlera llogaritese e rrezistences ne shtypje	fcd	=	15	N/mm ²
• Vlera llogaritese e rrezistences ne terheqje	ftd	=	1.15	N/mm ²

Betoni C30/37

• Rezistenca karakteristike kubike	Rck	=	37	N/mm ²
• Rezistenca karakteristike cilindrike	fck	=	30	N/mm ²
• Sforcimi mesatar aksial ne terheqje	fctm	=	2.9	N/mm ²
• Moduli sekant i elasticitetit	E	=	32	kN/mm ²
• Vlera llogaritese e rrezistences ne shtypje	fcd	=	20	N/mm ²
• Vlera llogaritese e rrezistences ne terheqje	ftd	=	1.3	N/mm ²

Armatura e çelikut FeB44k ose ekuivalent

• Rezistenca karakteristike ne terheqje	ftk	=	540	N/mm ²
• Rezistenca karakteristike e rrjedhshmerise	fyk	=	430	N/mm ²
• Vlera mesatare e modulit te elasticitetit	Esm	=	210	kN/mm ²
• Faktori i pjesshem i sigurise	γc	=	1.15	
• Vlera llogaritese e rrezistences se rrjedhshmerise	fyd	=	374	N/mm ²
• Vlera llogaritese e zgjatimit te rrjedhshmerise	esy _d	=	0.187%	

3.3 Ngarkesat

g) Te perhershme

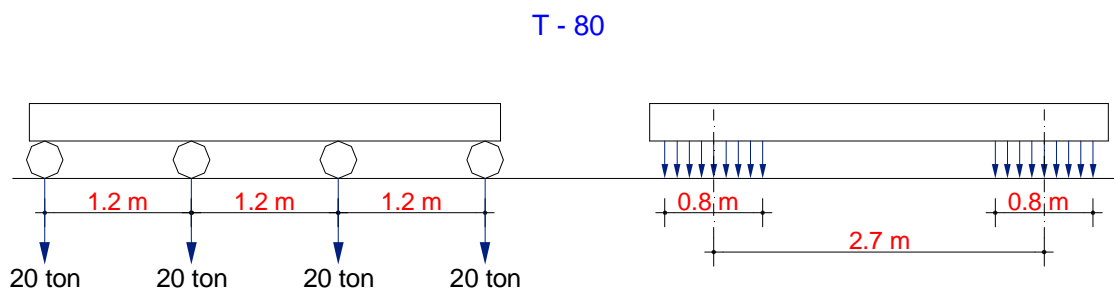
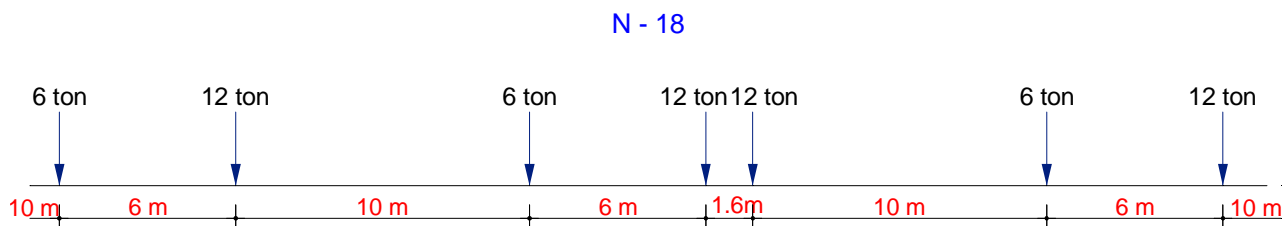
Si ngarkese e perhershme konsiderohet pesha vetjake e elementeve, ngarkesat nga shtresat si dhe presioni i dheut. Pesha vetjake e elementeve llogaritet automatikisht nga programi (*Dead load*) ndersa ngarkesa e shtresave te trotuarit dhe rruges si dhe presioni i dheut (mbushjes nga pas ballnave) futen ne program si ngarkese uniformisht e shperndare.

h) Te perkohshme

Si ngarkese e perkohshme, konsiderohet ngarkesa e trafikut dhe ngarkesa nga turma. Ngarkesa e trafikut futet ne program si ngarkese (*Moving load*) ndersa ngarkesa nga turma ne trotuar vendoset si ngarkese uniformisht e shperndare (*Live load*). Jane marre ne konsiderate dy tipe skeme ngarkesash:

5. Ngarkesat sipas KTP

Ngarkesat vertikale normative te levizshme per llogaritjen e urave ne rruget automobilistike, qe jane marre ne keto llogaritje, perbehen nga dy lloj skemash N-18 dhe T-80. Cdo skeme eshte e perbere nga nje kolone e vazhdueshme automjetesh si ne figuren e meposhtme.

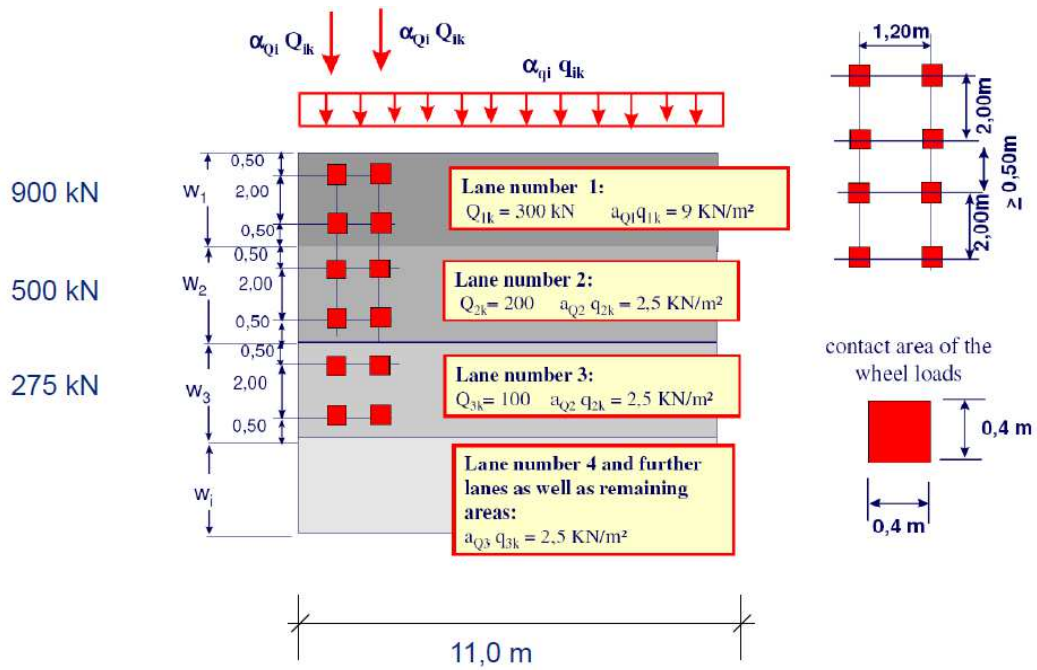


6. Ngarkesat sipas Eurocode

Per percaktimin e efekteve te trafikut rrugor, sipas eurocode, lidhur me verifikimet e gjendjes kufitare limit ULS dhe gjendjes kufitare te sherbimit SLS eshte marre ne konsiderate modelet e meposhtme te ngarkesave:

- Modeli 1 i ngarkeses (*LM1*) eshte e perbere nga dy nensisteme ngarkesash:
 - 1) Nje sistem prej dy ngarkesash boshti te perqendruara, sipas skices se meposhtme, ku cdo bosht ka peshen $\alpha_Q Q_k = 300kN$ perfshire dhe amplifikimin dinamik.

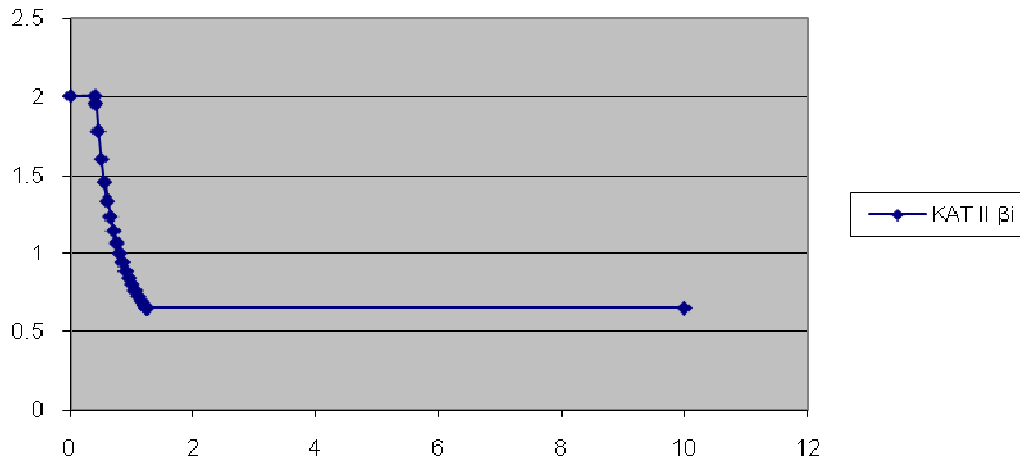
2) Nje sistem prej ngarkesash te shperndara qe kane nje dendesi peshe $\alpha_q q_k = 9 \frac{kN}{m^2}$



i) *Te veçanta*

Reagimi sizmik eshte llogaritur per troje te kategorise II dhe intensitet 8 balles me koeficient sizmik $k_E = 0.22$. Ndersa vlerat e koeficientit dinamik β_i merren nga grafiku i meposhtem.

KAT II β_i



Grafiku i ndryshimit te koeficientit dinamik β ne funksion te perodes T .

3.4 Kombinimi i ngarkesave

Me poshte po paraqit disa nga kombinimet e perdoruara

a) Sipas EC

Kombinimi ULS

$$\text{Comb 1} \quad 1.35 \cdot D + 1.35 \cdot L + 1.5 \cdot (0.75TS + 0.4UDL)$$

$$\text{Comb 5} \quad 1 \cdot D + 0.2 \cdot L + 0.2 \cdot LM1 + 1 \cdot E$$

Kombinimi SLS

$$\text{Comb 7} \quad 1 \cdot D + 1 \cdot L + 1 \cdot LM1$$

$$\text{Comb 8} \quad 1 \cdot D + 1 \cdot L + 1 \cdot N18$$

b) Sipas KTP

Kombinimi

$$\text{Comb 9} \quad 1.2 \cdot D + 1.4 \cdot L + 1.4 \cdot N18$$

$$\text{Comb 10} \quad 1.2 \cdot D + 1.1 \cdot T80$$

Ku:

D – Te gjitha ngarkesat e perhershme (pesha vetjake, shtresat dhe presioni i dheut)

E – Ngarkesa sizmike

L – Ngarkesa ne trotuar

$LM1=TS+UDL$ – Modeli i ngarkeses sipas EC

3..5 Metoda e analizës

Per llogaritjen e ures eshte perdorur programi Sap2000v14.0.0. Ky program bazohet ne metoden e elementeve te fundem. Ura eshte modeluar si nje strukture tredimensionale ku cdo element plan i saj eshte modeluar si element **shell** ndersa elementet njedimensionale (kolona, trare dhe pilota) jane modeluar si element **frame**. Ndersa dhe si bazament eshte modeluar nga nje seri sustash te shperndara uniformisht nen themel.

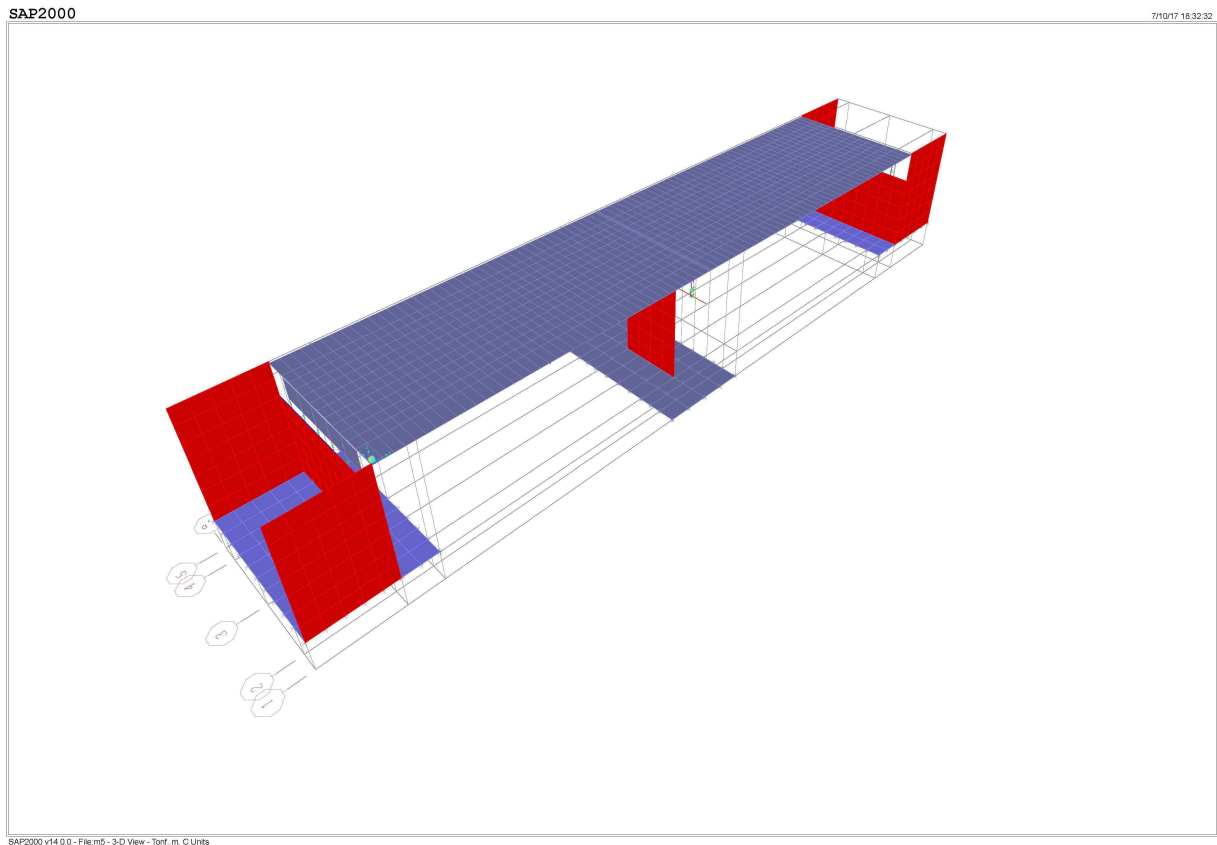


Fig. 4 (Pamja 3D e modelit llogarites)

3..6 Rezultate ne forme tabelare.

Table: Active Degrees of Freedom

Table: Active Degrees of Freedom					
UX	UY	UZ	RX	RY	RZ
Yes	Yes	Yes	Yes	Yes	Yes

Table: Area Section Properties, Part 1 of 3

Table: Area Section Properties, Part 1 of 3											
Section	Material	MatAngle Degrees	AreaType	Type	DrillDOF	Thickness m	BendThick m	Arc Degrees	InComp	CoordSys	Color
ASEC2	C25/30	0.000	Shell	Shell-Thin	Yes	0.120000	0.120000				Blue
Diafragma	C25/30	0.000	Shell	Shell-Thin	Yes	0.250000	0.250000				8388863
KRAHET	C25/30	0.000	Shell	Shell-Thin	Yes	0.400000	0.400000				Red
Pila	C25/30	0.000	Shell	Shell-Thin	Yes	1.400000	1.400000				Red
SHPATULLA	C25/30	0.000	Shell	Shell-Thin	Yes	1.200000	1.200000				Red
Soleta	C25/30	0.000	Shell	Shell-Thin	Yes	0.200000	0.200000				12615808
TH_PILA	C25/30	0.000	Shell	Shell-Thin	Yes	1.600000	1.600000				12615808
TH_SHPATU LLA	C25/30	0.000	Shell	Shell-Thin	Yes	1.200000	1.200000				16744576

Table: Area Section Properties, Part 2 of 3

Table: Area Section Properties, Part 2 of 3												
Section	TotalWt Tonf	TotalMass Tonf-s2/m	F11Mod	F22Mod	F12Mod	M11Mod	M22Mod	M12Mod	V13Mod	V23Mod	MMod	WMod
ASEC2	0.0000	0.00	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
Diafragma	0.0000	0.00	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
KRAHET	126.9000	12.94	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
Pila	92.4000	9.42	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
SHPATULLA	270.0000	27.53	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
Soleta	210.4688	21.46	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
TH_PILA	198.0000	20.19	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
TH_SHPATU LLA	351.0000	35.79	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Table: Area Section Properties, Part 3 of 3

Table: Area Section Properties, Part 3 of 3

Section	GUID	Notes
ASEC2		
Diafragma		
KRAHET		Added 3/5/2015 1:53:13 PM
Pila		Added 7/9/2017 7:08:54 PM
SHPATULLA		Added 3/5/2015 1:05:15 PM
Soleta		Added 3/6/2015 10:12:14 AM
TH_PILA		Added 2014-04-16 4:20:24 MD
TH_SHPATULLA		Added 3/5/2015 12:12:51 PM

Table: Bridge Object Definitions 06 - Abutments

Table: Bridge Object Definitions 06 - Abutments

BridgeObj	Location	BearingDir	DiaphProp	SubType	BentProp	SubElev	HorizOff	BearProp	BearResProp	BearElev	BearAngle
						m	m			m	Degrees
URA MBI LUMIN DEVOLL 2X20m	Start	Default	BDIA1	Bent	SHPATULLA 2	-1.55000	0.00000	FIKSE	None	-1.45000	0.000
URA MBI LUMIN DEVOLL 2X20m	End	Default	BDIA1	Bent	SHPATULLA 2	-1.55000	0.00000	LEVIZESE	None	-1.45000	0.000

Table: Bridge Object Definitions 07 - Bents, Part 1 of 2

Table: Bridge Object Definitions 07 - Bents, Part 1 of 2

BridgeObj	SpanName	BentProp	Continuous	BearingDir	BentElev	HorizOff	DiaphBefore	DiaphAfter	ResPropSS	ResElevSS	MeshAtBent	BearProp1
					m	m				m		
URA MBI LUMIN DEVOLL 2X20m	Span1	PILA 5 m	No	Default	-1.55000	0.00000	BDIA1	BDIA1	None	-0.60960	No	LEVIZESE

Table: Bridge Object Definitions 07 - Bents, Part 2 of 2

Table: Bridge Object Definitions 07 - Bents, Part 2 of 2

BridgeObj	SpanName	BrResProp1	BearElev1 m	BearAngle1 Degrees	BearProp2	BrResProp2	BearElev2 m	BearAngle2 Degrees
URA MBI LUMIN DEVOLL 2X20m	Span1	None	-1.45000	0.000	FIKSE	None	-1.45000	0.000

Table: Case - Response Spectrum 1 - General

Table: Case - Response Spectrum 1 - General

Case	ModalComb o	GMCf1 Cyc/sec	GMCf2 Cyc/sec	PerRigid	DirCombo	DampingTy pe	ConstDamp	EccenRatio	NumOverrid e
Siz	CQC	1.0000E+00	0.0000E+00	SRSS	SRSS	Constant	0.0500	0.000000	0

Table: Frame Section Properties 01 - General, Part 1 of 4

Table: Frame Section Properties 01 - General, Part 1 of 4

SectionName	Material	Shape	t3 m	t2 m	Area m2	TorsConst m4	I33 m4	I22 m4	AS2 m2	AS3 m2
BRD25	C25/30	Bridge Section			5.422500	0.198304	0.720239	40.790446	2.940871	3.521707
BRD26	C25/30	Bridge Section			5.422500	0.198304	0.720239	40.790446	2.940871	3.521707
BRD27	C25/30	Bridge Section			5.422500	0.198304	0.720239	40.790446	2.940871	3.521707
BRD28	C25/30	Bridge Section			5.422500	0.198304	0.720239	40.790446	2.940871	3.521707
BRD3	C25/30	Bridge Section			5.422500	0.198304	0.720239	40.790446	2.940871	3.521707
BRD4	C25/30	Bridge Section			5.422500	0.198304	0.720239	40.790446	2.940871	3.521707
C100X100	C25/30	Rectangular	1.000000	1.000000	1.000000	0.140833	0.083333	0.083333	0.833333	0.833333
PILA 120	C25/30	Circle	1.200000		1.130973	0.203575	0.101788	0.101788	1.017876	1.017876
PILOTA 100	C25/30	Circle	1.000000		0.785398	0.098175	0.049087	0.049087	0.706858	0.706858
T100X100	C25/30	Rectangular	1.000000	1.000000	1.000000	0.140833	0.083333	0.083333	0.833333	0.833333
T220X160	C25/30	Rectangular	1.600000	2.200000	3.520000	1.659563	0.750933	1.419733	2.933333	2.933333
T220X80	C25/30	Rectangular	0.800000	2.200000	1.760000	0.289576	0.093867	0.709867	1.466667	1.466667
Trau T	C25/30	PC Conc I Girder	1.250000	1.300000	0.603750	0.017854	0.092135	0.034329	0.395064	0.398188
VAR1		Nonprismatic								
VAR2		Nonprismatic								

Table: Frame Section Properties 01 - General, Part 2 of 4

Table: Frame Section Properties 01 - General, Part 2 of 4

SectionName	S33 m3	S22 m3	Z33 m3	Z22 m3	R33 m	R22 m	ConcCol	ConcBeam	Color	TotalWt Tonf	TotalMass Tonf-s2/m
BRD25	0.811905	8.158089	1.513685	12.970667	0.360728	2.714691	No	No	Gray8Dark	0.0000	0.00
BRD26	0.811905	8.158089	1.513685	12.970667	0.360728	2.714691	No	No	Blue	0.0000	0.00
BRD27	0.811905	8.158089	1.513685	12.970667	0.360728	2.714691	No	No	Green	0.0000	0.00
BRD28	0.811905	8.158089	1.513685	12.970667	0.360728	2.714691	No	No	Cyan	0.0000	0.00
BRD3	0.811905	8.158089	1.513685	12.970667	0.360728	2.714691	No	No	Yellow	0.0000	0.00
BRD4	0.811905	8.158089	1.513685	12.970667	0.360728	2.714691	No	No	White	0.0000	0.00
C100X100	0.166667	0.166667	0.250000	0.250000	0.288675	0.288675	Yes	No	White	0.0000	0.00
PILA 120	0.169646	0.169646	0.288000	0.288000	0.300000	0.300000	Yes	No	Green	0.0000	0.00
PILOTA 100	0.098175	0.098175	0.166667	0.166667	0.250000	0.250000	Yes	No	4259584	0.0000	0.00
T100X100	0.166667	0.166667	0.250000	0.250000	0.288675	0.288675	No	Yes	Blue	45.0000	4.59
T220X160	0.938667	1.290667	1.408000	1.936000	0.461880	0.635085	No	Yes	Red	35.2000	3.59
T220X80	0.234667	0.645333	0.352000	0.968000	0.230940	0.635085	No	Yes	Red	0.0000	0.00
Trau T	0.119216	0.052814	0.206237	0.104979	0.390647	0.238454	No	No	Yellow	362.2500	36.94
VAR1									Red		
VAR2									Red		

Table: Frame Section Properties 01 - General, Part 3 of 4

Table: Frame Section Properties 01 - General, Part 3 of 4

SectionName	FromFile	AMod	A2Mod	A3Mod	JMod	I2Mod	I3Mod	MMod	WMod	GUID
BRD25	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
BRD26	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
BRD27	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
BRD28	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
BRD3	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
BRD4	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
C100X100	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
PILA 120	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
PILOTA 100	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
T100X100	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
T220X160	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
T220X80	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
Trau T	No	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	
VAR1										
VAR2										

Table: Frame Section Properties 01 - General, Part 4 of 4

Table: Frame Section Properties 01 - General, Part 4 of 4

SectionName	Notes
BRD25	Added 7/9/2017 7:03:12 PM
BRD26	Added 7/9/2017 7:03:12 PM
BRD27	Added 7/9/2017 7:03:13 PM
BRD28	Added 7/9/2017 7:03:13 PM
BRD3	Added 7/10/2017 12:39:24 AM
BRD4	Added 7/10/2017 12:39:24 AM
C100X100	Added 3/5/2015 12:10:02 PM
PILA 120	Added 3/5/2015 12:10:48 PM
PILOTA 100	Added 3/5/2015 12:13:29 PM
T100X100	Added 3/5/2015 12:09:03 PM
T220X160	Added 3/5/2015 12:08:13 PM
T220X80	Added 7/9/2017 6:38:20 PM
Trau T	Added 3/5/2015 12:01:30 PM
VAR1	Added 7/9/2017 6:39:13 PM
VAR2	Added 7/9/2017 6:39:41 PM

Table: Frame Section Properties 02 - Concrete Column, Part 1 of 2

Table: Frame Section Properties 02 - Concrete Column, Part 1 of 2

SectionName	RebarMatL	RebarMatC	ReinfConfig	LatReinf	Cover m	NumBars3D ir	NumBars2D ir	NumBarsCir c	BarSizeL	BarSizeC	SpacingC m	NumCBars2
C100X100	FeB44k	FeB44k	Rectangular	Ties	0.040000	7	7		16d	10d	0.150000	3
PILA 120	FeB44k	FeB44k	Circular	Spiral	0.050000			20	20d	10d	0.150000	
PILOTA 100	FeB44k	FeB44k	Circular	Spiral	0.050000			16	16d	8d	0.150000	

Table: Frame Section Properties 02 - Concrete Column, Part 2 of 2

Table: Frame Section Properties 02 -
Concrete Column, Part 2 of 2

SectionName	NumCBars3	ReinfType
C100X100	3	Design
PILA 120		Design
PILOTA 100		Design

Table: Frame Section Properties 03 - Concrete Beam

Table: Frame Section Properties 03 - Concrete Beam

SectionName	RebarMatL	RebarMatC	TopCover	BotCover	TopLeftArea	TopRightArea	BotLeftArea	BotRightArea
e			m	m	m2	m2	m2	m2
T100X100	FeB44k	FeB44k	0.050000	0.050000	0.000000	0.000000	0.000000	0.000000
T220X160	FeB44k	FeB44k	0.050000	0.050000	0.000000	0.000000	0.000000	0.000000
T220X80	FeB44k	FeB44k	0.030000	0.030000	0.000000	0.000000	0.000000	0.000000

Table: Frame Section Properties 05 - Nonprismatic

Table: Frame Section Properties 05 - Nonprismatic

SectionName	NumSegments	SegmentNumber	StartSect	EndSect	LengthType	AbsLength	VarLength	EI33Var	EI22Var
						m			
VAR1	1	1	T220X160	T220X80	Variable		2.3000	Parabolic	Linear
VAR2	1	1	T220X80	T220X160	Variable		2.3000	Parabolic	Linear

Table: Grid Lines

Table: Grid Lines

CoordSys	AxisDir	GridID	XRYZCoord	LineType	LineColor	Visible	BubbleLoc	AllVisible	BubbleSize
			m						m
GLOBAL	X	a'	-4.50000	Primary	Gray8Dark	Yes	End	Yes	1.250000
GLOBAL	X	A	0.00000	Primary	Gray8Dark	Yes	End		
GLOBAL	X	a''	2.00000	Primary	Gray8Dark	Yes	End		
GLOBAL	X	b'	17.25000	Primary	Gray8Dark	Yes	End		
GLOBAL	X	B	20.00000	Primary	Gray8Dark	Yes	End		
GLOBAL	X	b''	22.75000	Primary	Gray8Dark	Yes	End		
GLOBAL	X	c'	38.00000	Primary	Gray8Dark	Yes	End		
GLOBAL	X	C	40.00000	Primary	Gray8Dark	Yes	End		
GLOBAL	X	c''	44.50000	Primary	Gray8Dark	Yes	End		
GLOBAL	Y	1	0.00000	Primary	Gray8Dark	Yes	Start		
GLOBAL	Y	2	1.00000	Primary	Gray8Dark	Yes	Start		
GLOBAL	Y	3	4.50000	Primary	Gray8Dark	Yes	Start		
GLOBAL	Y	4	8.00000	Primary	Gray8Dark	Yes	Start		
GLOBAL	Y	5	9.00000	Primary	Gray8Dark	Yes	Start		
GLOBAL	Z	Z3	-8.95000	Primary	Gray8Dark	Yes	End		
GLOBAL	Z	Z2	-7.05000	Primary	Gray8Dark	Yes	End		
GLOBAL	Z	Z1	0.00000	Primary	Gray8Dark	Yes	End		

Table: Lane Centerline Points

Table: Lane Centerline Points

Lane	Point	CoordSys	X m	Y m	Z m	GlobalX m	GlobalY m	GlobalZ m
LANE1	1	GLOBAL	0.00000	2.75000	0.00000	0.00000	2.75000	0.00000
LANE1	2	GLOBAL	80.00000	2.75000	0.00000	80.00000	2.75000	0.00000
LANE2	1	GLOBAL	0.00000	6.25000	0.00000	0.00000	6.25000	0.00000
LANE2	2	GLOBAL	80.00000	6.25000	0.00000	80.00000	6.25000	0.00000

Table: Lane Definition Data, Part 1 of 2

Table: Lane Definition Data, Part 1 of 2

Lane	LaneFrom	LayoutLine	Station m	Width m	Offset m	LoadGroup	DiscAlong m	DiscAcross m	DiscSpan	DiscSpanFac	DiscLane	DiscLaneFac
LANE1	Layout Line	AKSI	0.00000	3.00000	1.75000	Default	1.00000	1.00000	Yes	4.000000	Yes	10.000000
LANE1	Layout Line	AKSI	80.00000	3.00000	1.75000	Default						
LANE2	Layout Line	AKSI	0.00000	3.00000	-1.75000	Default	1.00000	1.00000	Yes	4.000000	Yes	10.000000
LANE2	Layout Line	AKSI	80.00000	3.00000	-1.75000	Default						

Table: Lane Definition Data, Part 2 of 2

Table: Lane Definition Data, Part 2 of 2

Lane	LeftType	RightType	Color
LANE1	Interior	Interior	16777088
LANE1			
LANE2	Interior	Interior	Yellow
LANE2			

Table: Load Case Definitions, Part 1 of 2

Table: Load Case Definitions, Part 1 of 2

Case	Type	InitialCond	ModalCase	BaseCase	DesTypeOpt	DesignType	AutoType	RunCase	CaseStatus	GUID
DEAD	LinStatic	Zero			Prog Det	DEAD	None	Yes	Finished	
MODAL	LinModal	Zero			Prog Det	OTHER	None	Yes	Finished	
N-18	LinMoving	Zero			Prog Det	BRIDGE LIVE	None	Yes	Finished	
T-80	LinMoving	Zero			Prog Det	BRIDGE LIVE	None	Yes	Finished	

Table: Load Case Definitions, Part 1 of 2

Case	Type	InitialCond	ModalCase	BaseCase	DesTypeOpt	DesignType	AutoType	RunCase	CaseStatus	GUID
N-13	LinMoving	Zero			Prog Det	BRIDGE LIVE	None	Yes	Finished	
IT	LinMoving	Zero			Prog Det	BRIDGE LIVE	None	Yes	Finished	
LIVE	LinStatic	Zero			Prog Det	LIVE	None	Yes	Finished	
EC	LinMoving	Zero			Prog Det	BRIDGE LIVE	None	Yes	Finished	
MBUSHJA V	LinStatic	Zero			Prog Det	SUPER DEAD	None	Yes	Finished	
Shtresat	LinStatic	Zero			Prog Det	SUPER DEAD	None	Yes	Finished	
MBUSHJA H	LinStatic	Zero			Prog Det	SUPER DEAD	None	Yes	Finished	
Siz	LinRespSpec		MODAL		Prog Det	QUAKE	None	Yes	Finished	

Table: Load Case Definitions, Part 2 of 2

Table: Load Case Definitions, Part 2 of 2

Case	Notes
DEAD	
MODAL	
N-18	
T-80	
N-13	
IT	
LIVE	
EC	
MBUSHJA V	
Shtresat	
MBUSHJA H	
Siz	

Table: Load Pattern Definitions

Table: Load Pattern Definitions

LoadPat	DesignType	SelfWtMult	AutoLoad	GUID	Notes
DEAD	DEAD	1.000000			
LIVE	LIVE	0.000000			

Table: Load Pattern Definitions

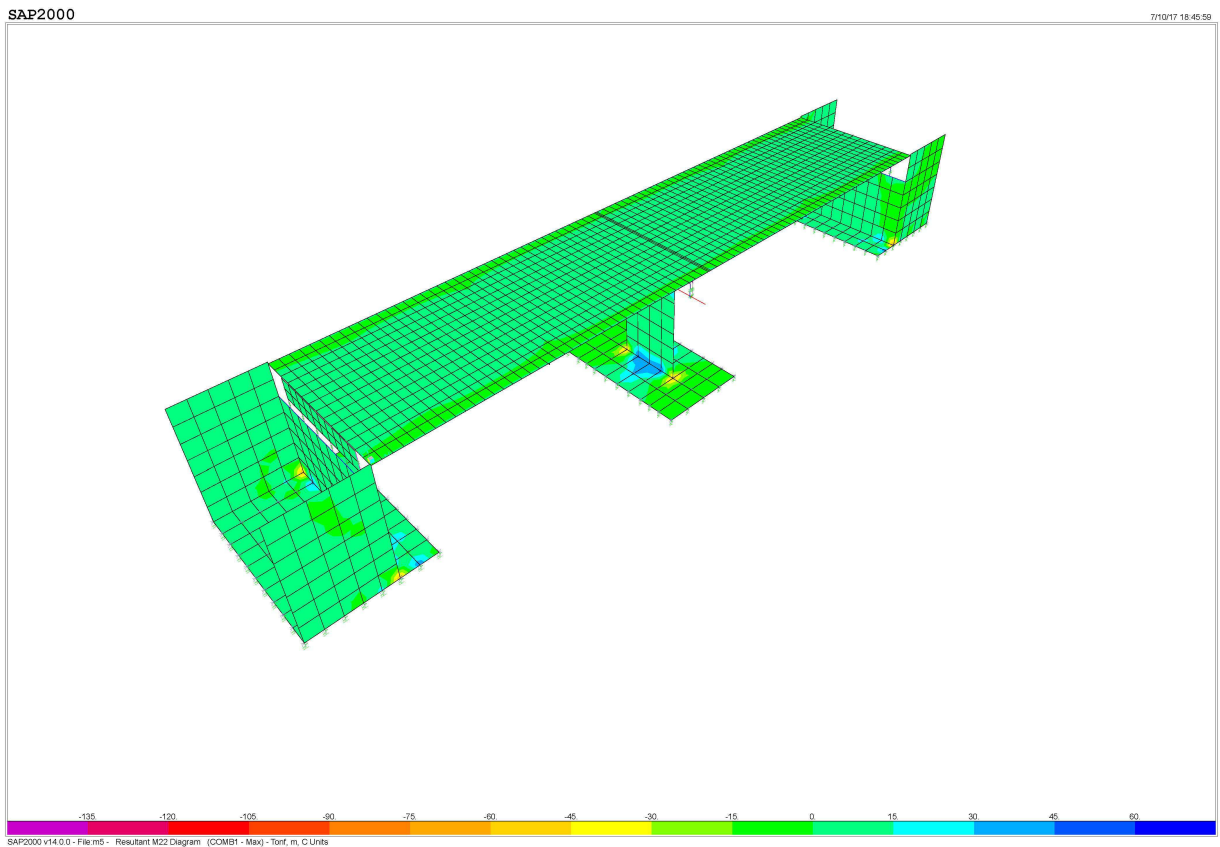
LoadPat	DesignType	SelfWtMult	AutoLoad	GUID	Notes
Movie TS	BRIDGE LIVE	0.000000			
Movie N-18	BRIDGE LIVE	0.000000			
MBUSHJA H	SUPER DEAD	0.000000			
Movie T-80	BRIDGE LIVE	0.000000			
Shtresat	SUPER DEAD	0.000000			
MBUSHJA V	SUPER DEAD	0.000000			

Table: Material Properties 03b - Concrete Data

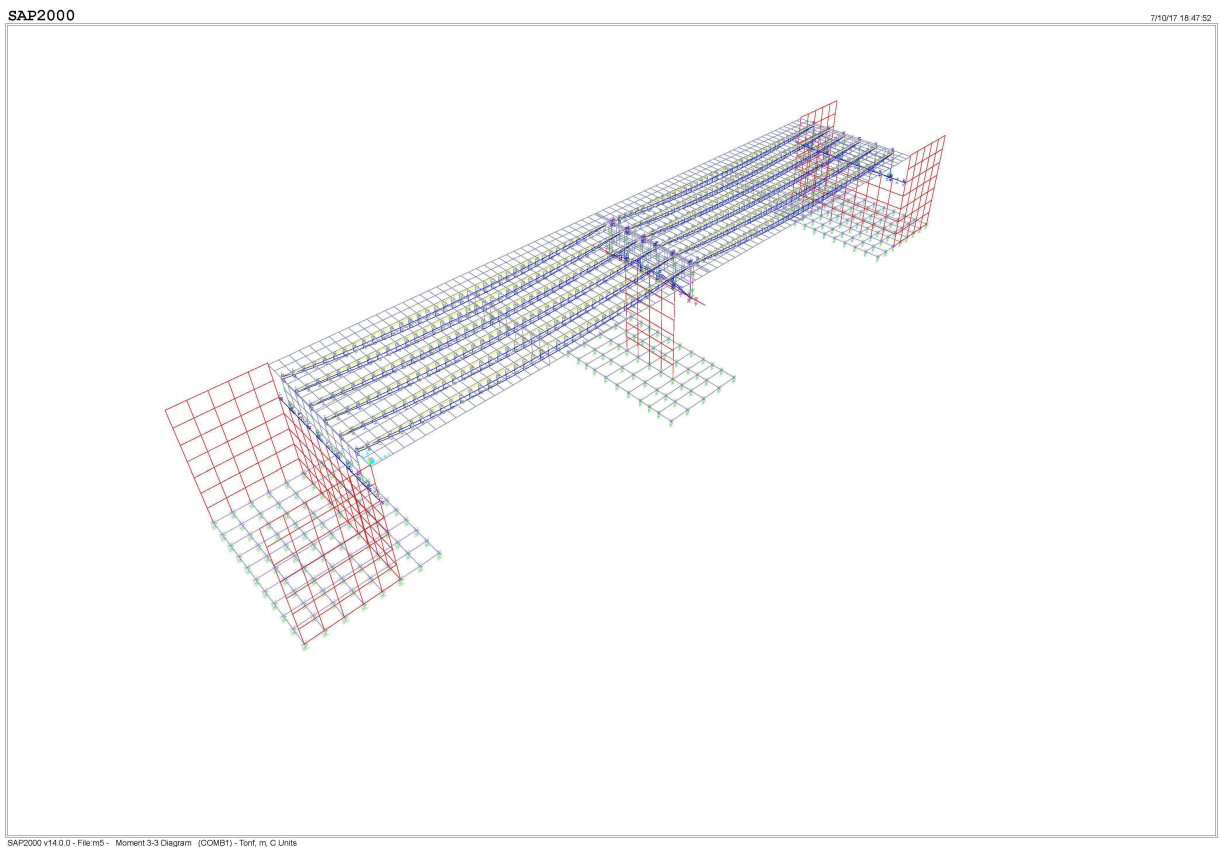
Table: Material Properties 03b - Concrete Data

Material	Fc Tonf/m2	LtWtConc	SSCurveOpt	SSHysType	SFc	SCap	FinalSlope	FAngle Degrees	DAngle Degrees
4000Psi	2812.28	No	Mander	Takeda	0.002219	0.005000	-0.100000	0.000	0.000
C25/30	2500.00	No	Mander	Takeda	0.002219	0.005000	-0.100000	0.000	0.000

3.7 Rezultate ne forme grafike



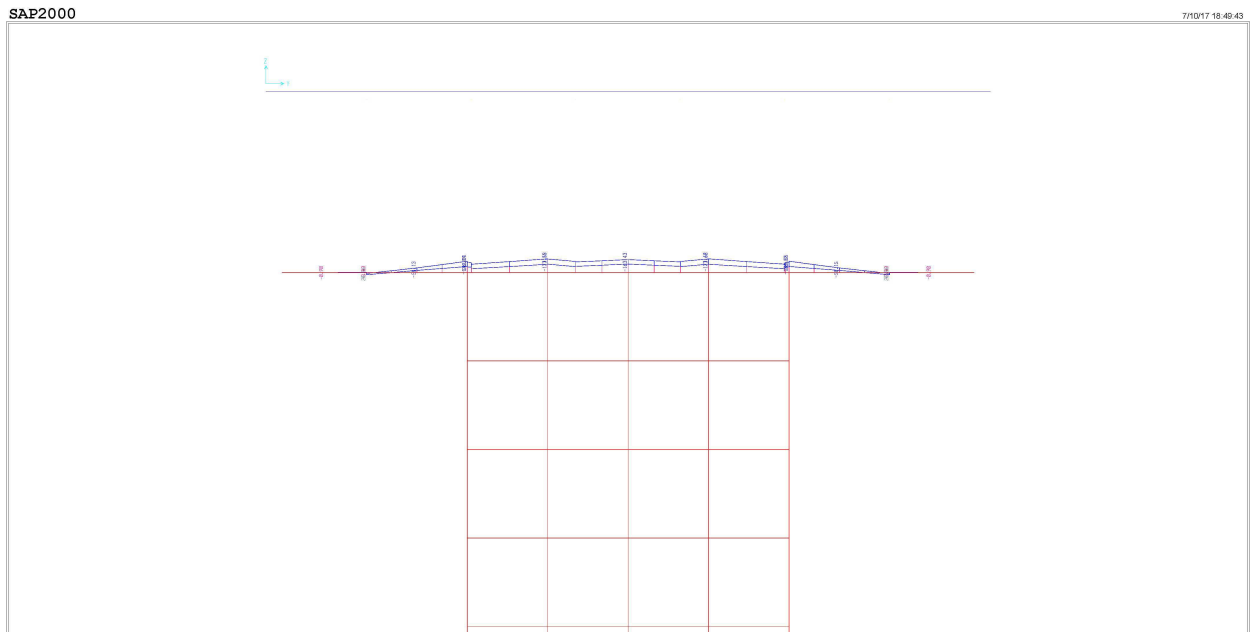
Epiura e momentit perkules ne jastekun e pilotave per COMB2



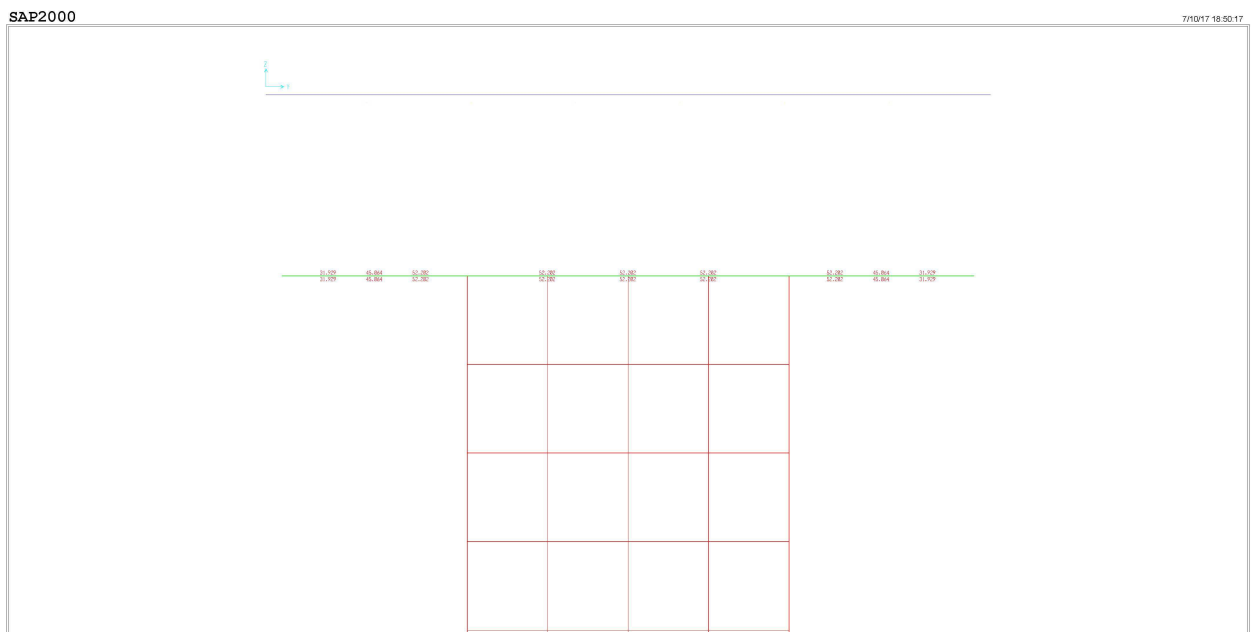
Epiura e Momentit perkules te Traut T

3..8 Verifikimi i skesionit terthor te jastekut te pilave.

Me poshte paraqitet epiura e momentit perkules per traun e pilave:



Epiura e momentit M3-3 (Ton.m)per kombinimin ULS (Comb 2)



Percaktimi i armatures ne perkulje.

Referenca:

9. Kushtet teknike te projektimit Shqiptare KTP 22, 23-78, KTP-N2-89.
10. Eurocode 1: Action on structures – Part 2:Traffic loads on bridges, Eurocode 2, 7 dhe 8.
11. Eurocode 7: Geotechnical Design
12. Foundation Analysis and Design, Fifth Edition, Joseph E. Bowles, P.E. S.E