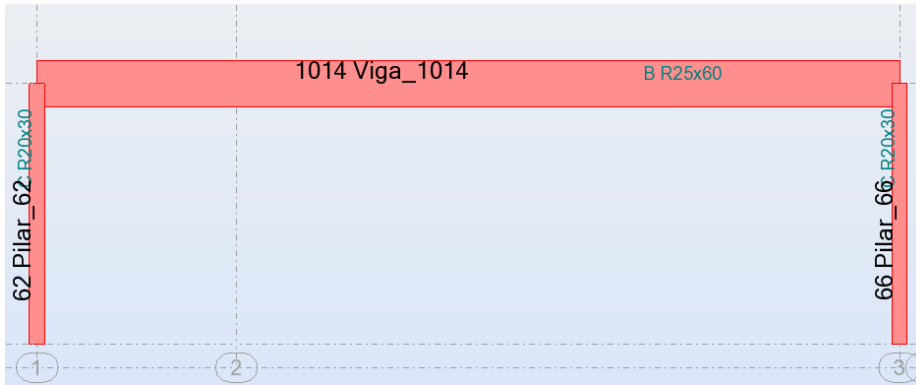
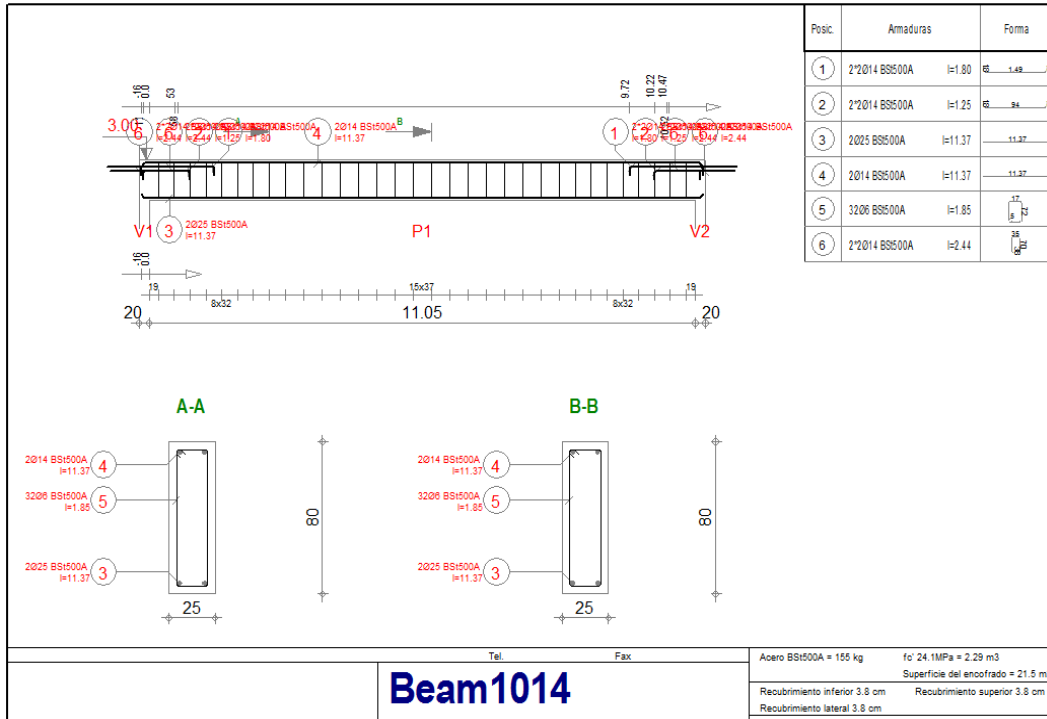


Final drawing with the total deflection 2.1 cm at 5.525 m

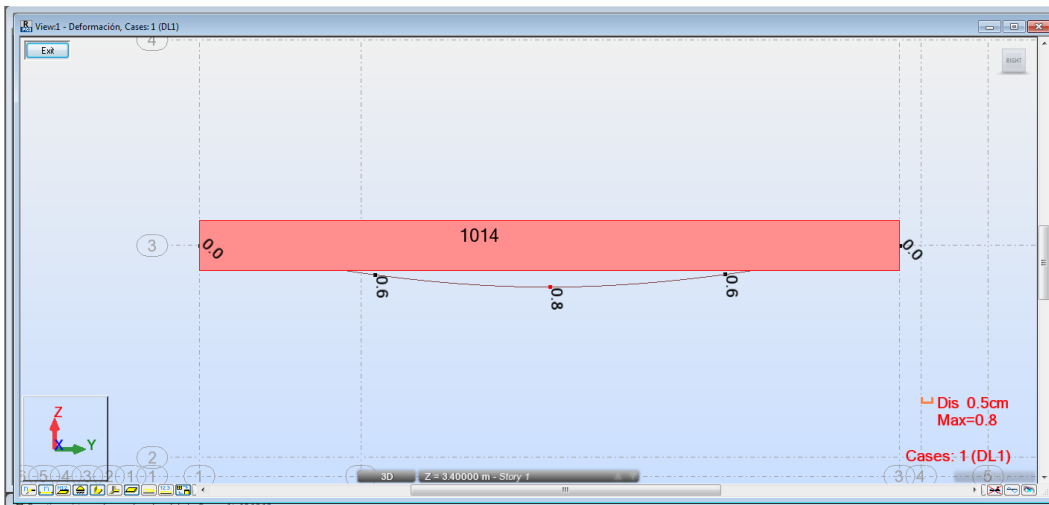


The frame composed by Columns 62 and 66 and the beam 1014

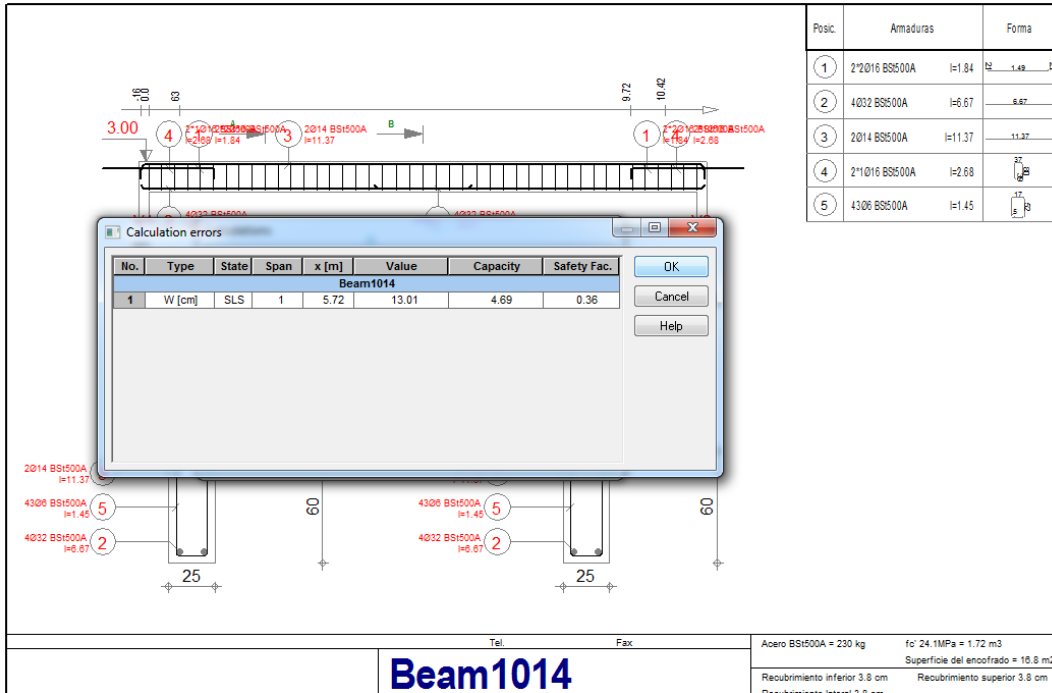
Question 2



Section without optimizing BR 25x80

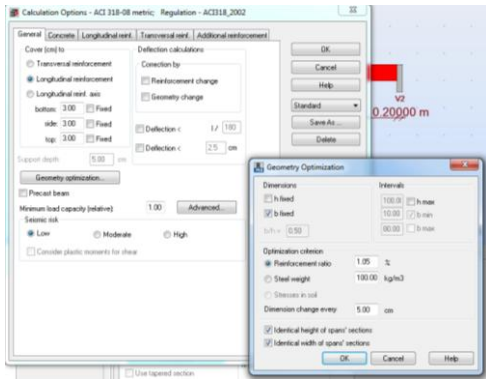


Deflection of the beam BR25x80

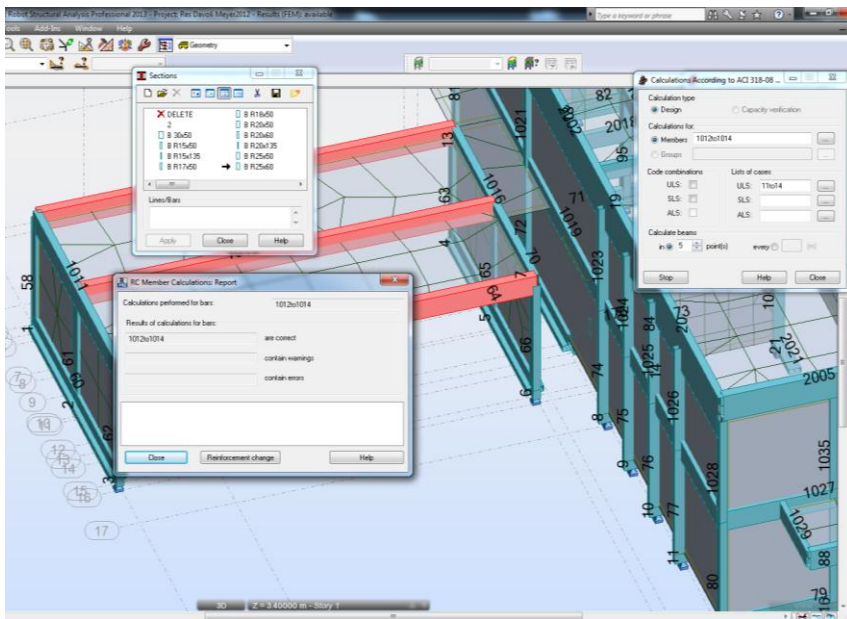
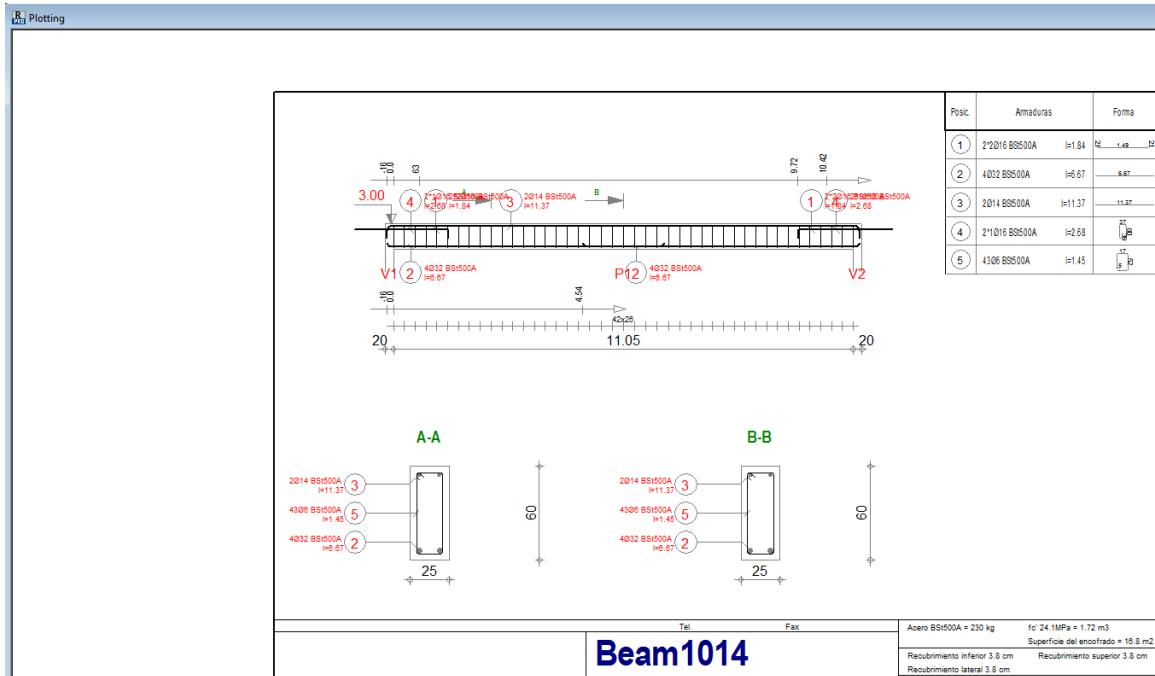


Beam1014

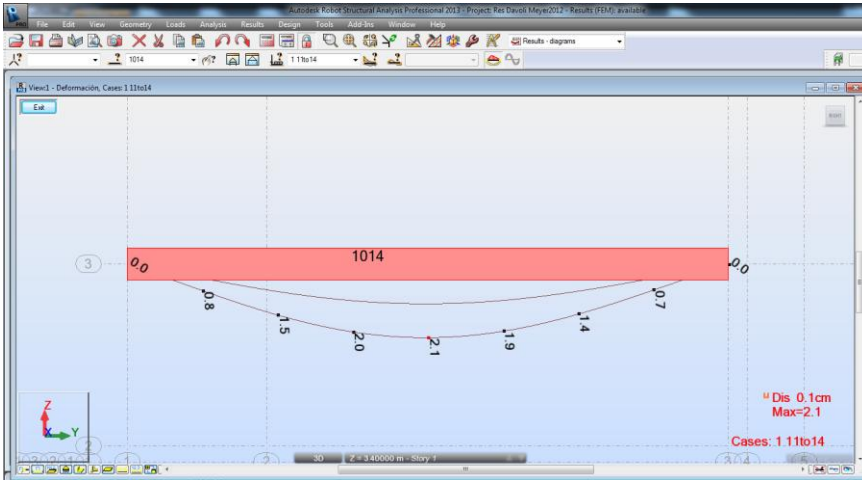
Acero BS500A = 230 kg f_c 24.1MPa = 1.72 m³
 Superficie del encofrado = 16.8 m²
 Recubrimiento inferior 3.8 cm Recubrimiento superior 3.8 cm
 Recubrimiento lateral 3.8 mm



Running with geometry optimization the calculation error pops up



Updated the beam geometry to BR25x60, the calculations are correct



Posic.	Amaduras	Forma
1	2*2016 B8S00A h=1.84	
2	2025 B8S00A h=1.37	
3	2014 B8S00A h=1.37	
4	4106 B8S00A h=1.45	
5	2*1016 B8S00A h=1.82	

No.	Type	State	Span	x [m]	Value	Capacity	Safety Fac.
Beam1014							
1	W [cm]	SLS	1	5.72	11.69	4.69	0.40

Beam1014

Tel. Fax

Acero B8S00A = 148 kg f_c 24.1MPa = 1.72 m³

Recubrimiento inferior: 3.0 cm Superficie del encofrado = 15.8 m²

Recubrimiento superior: 3.0 cm

Running calculations for the final drawings the calculations error pops up

