

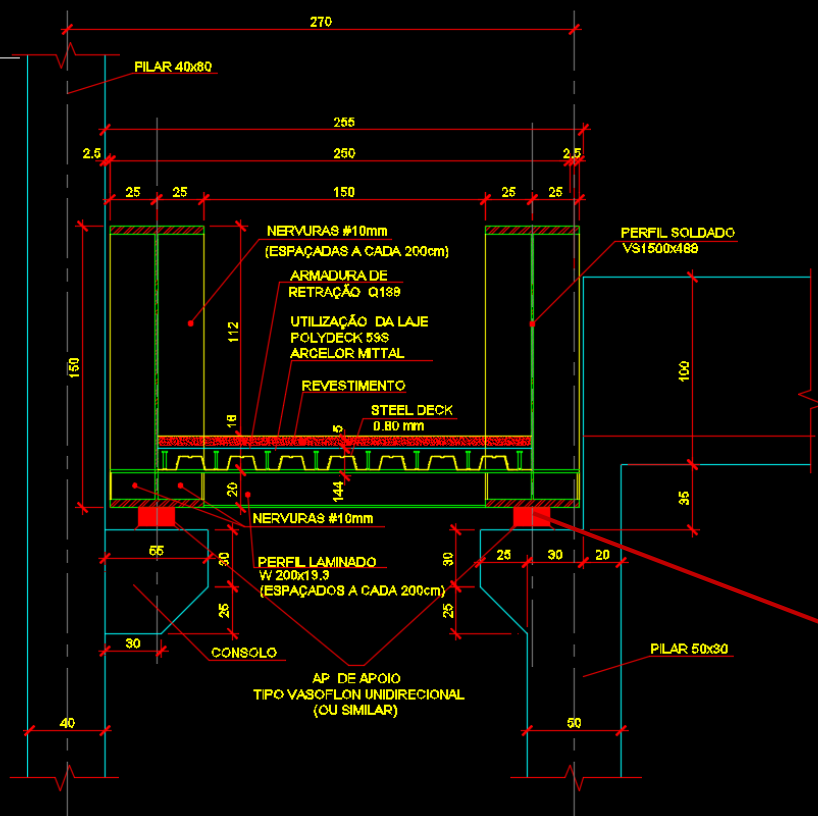
Desafio: passarelas



7 unidades previstas, sendo que para 3 delas o material já foi adquirido de acordo com o desenho original

CORTE A-A (NA REGIÃO DOS PILARES)

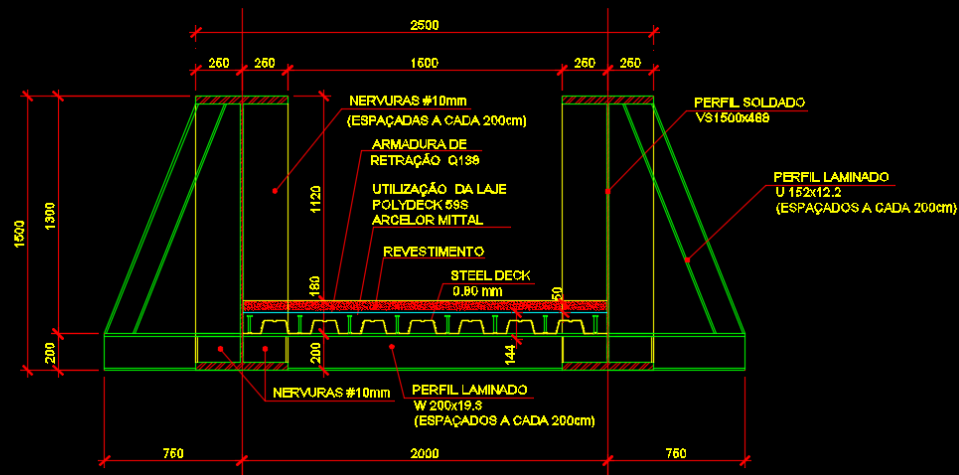
ESC. 1:25



CORTE B-B (VÃO PASSARELA)

ESC. 1:25

MEDIDAS EM MILÍMETRO (mm)



Comprimento total: 32.1 m

Peso estimado: 30 Ton

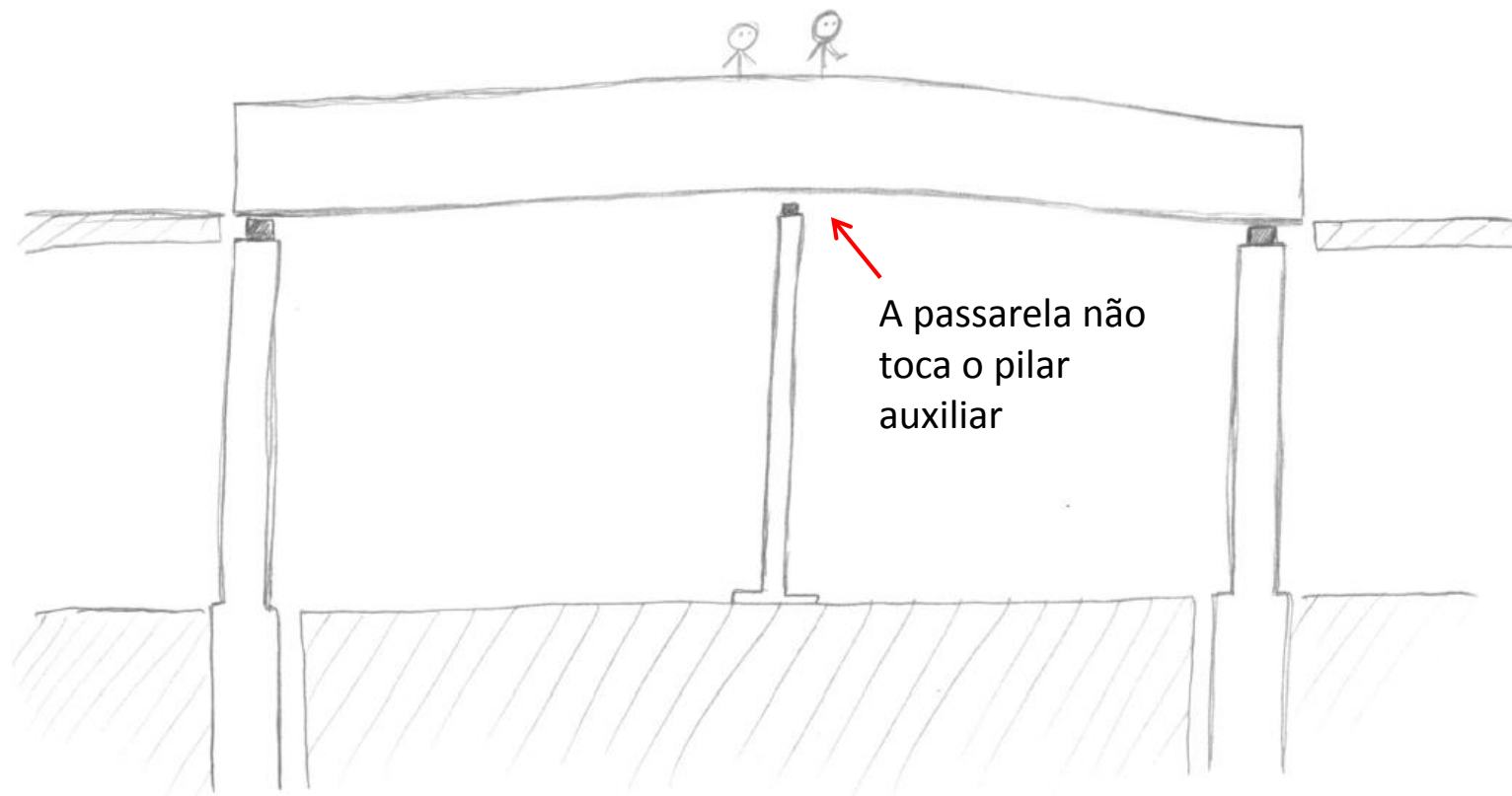


Passarela no Soleil, França

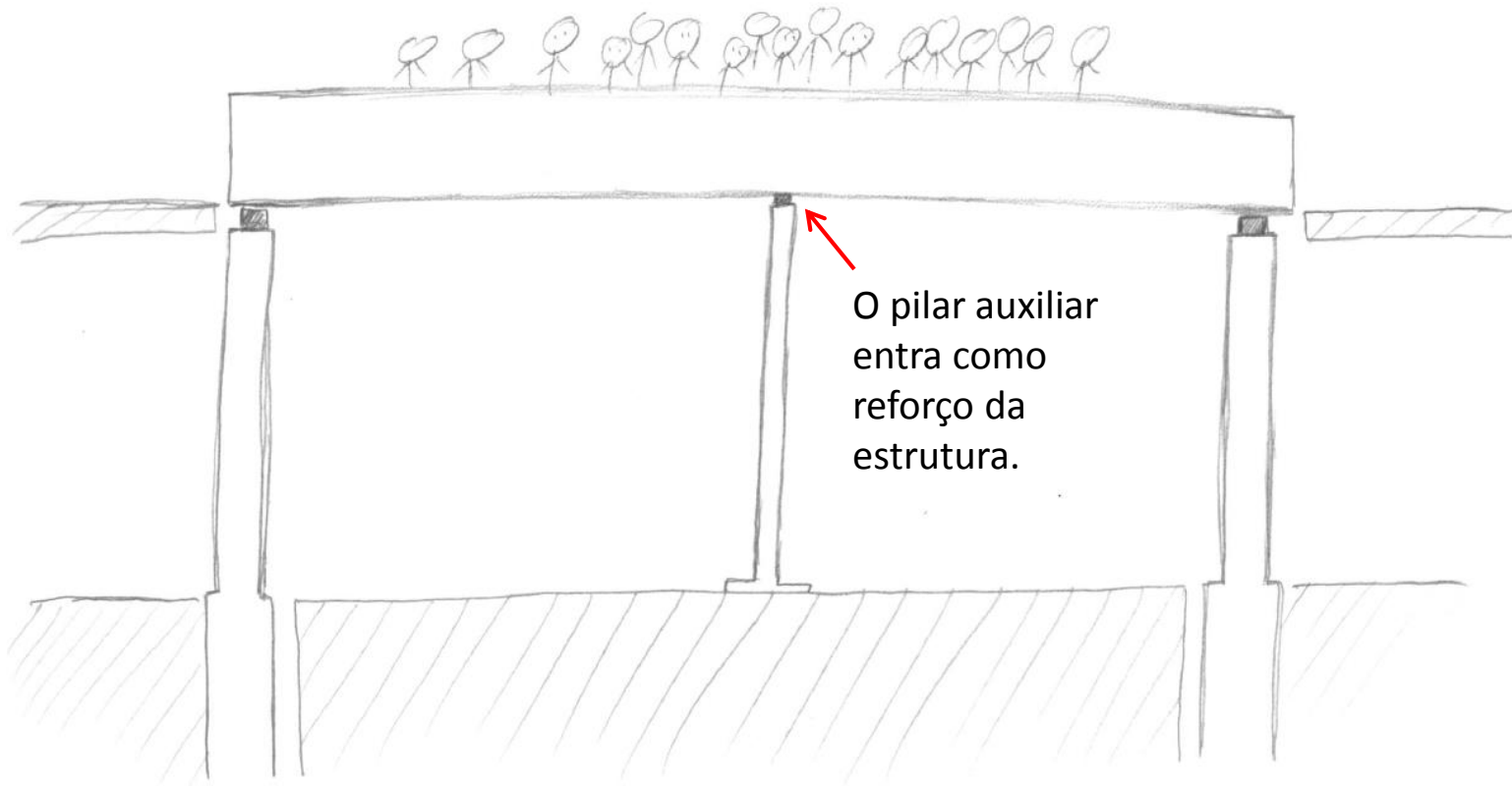
Suportes extras para
redução da vibração.



Passarela no Diamond,
Inglaterra



Uso comum

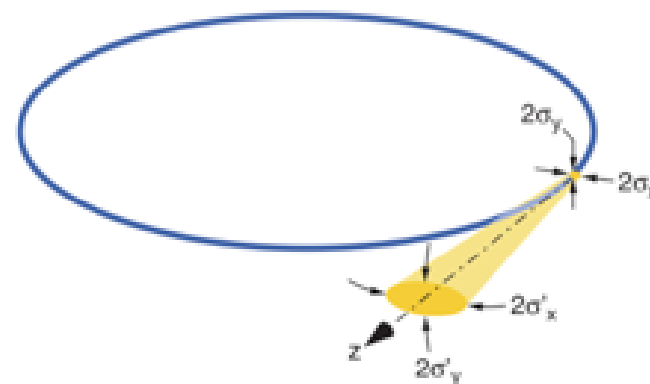


O pilar auxiliar
entra como
reforço da
estrutura.

Ocasões especiais, atendendo à norma de 500kg/m² de capacidade.

O Projeto Sirius

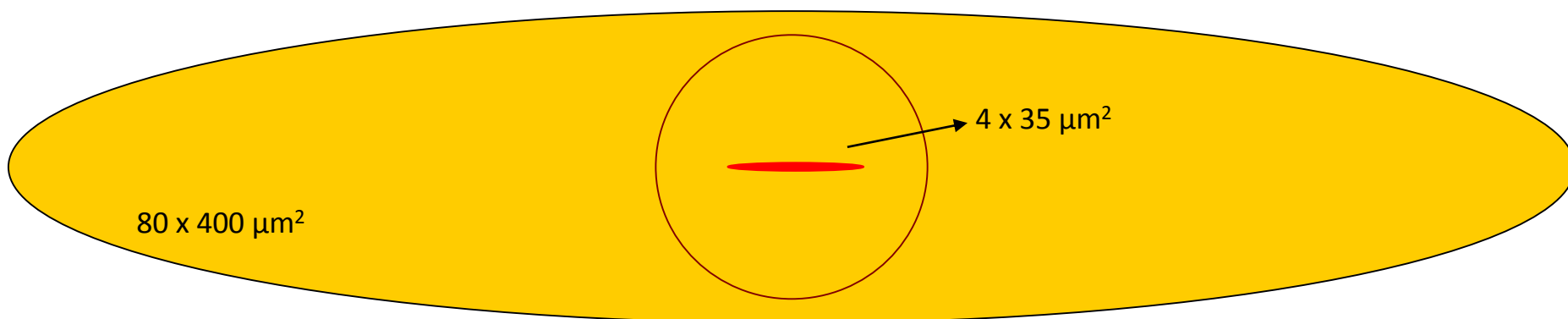
					
	LNLS - UVX ^[1]	LNLS - Sirius ^[2]	Soleil ^[1]	Diamond ^[1]	Shanghai ^[1]
Energia (GeV)	1,37	3,0	2,75	3,0	3,5
Diâmetro Médio (m)	30	165	113	179	137
Brilho relativo dipolos (10 keV *)	1	72 000	1 560	3 600	2 200
Brilho relativo dipolos (50 keV *)	1	$22 \cdot 10^9$	$1,9 \cdot 10^9$	$4,4 \cdot 10^9$	$5,8 \cdot 10^9$
Numero de linhas de dipolo	24	20	32	48	40
Número de linhas de dispositivo de inserção	4	18	22	22	18
Emitância (nm.rad)	100	0.28	3,7	2,7	3,9



Brilho

$$B = \frac{\text{Number of photons}}{\sigma_x \sigma'_x \sigma_y \sigma'_y \cdot 0.1\% \text{bandwidth}}$$

Emittance



Estrutura em fibra de carbono da Dragon Plate



Peso da estrutura: 6,35 kg



820 kg



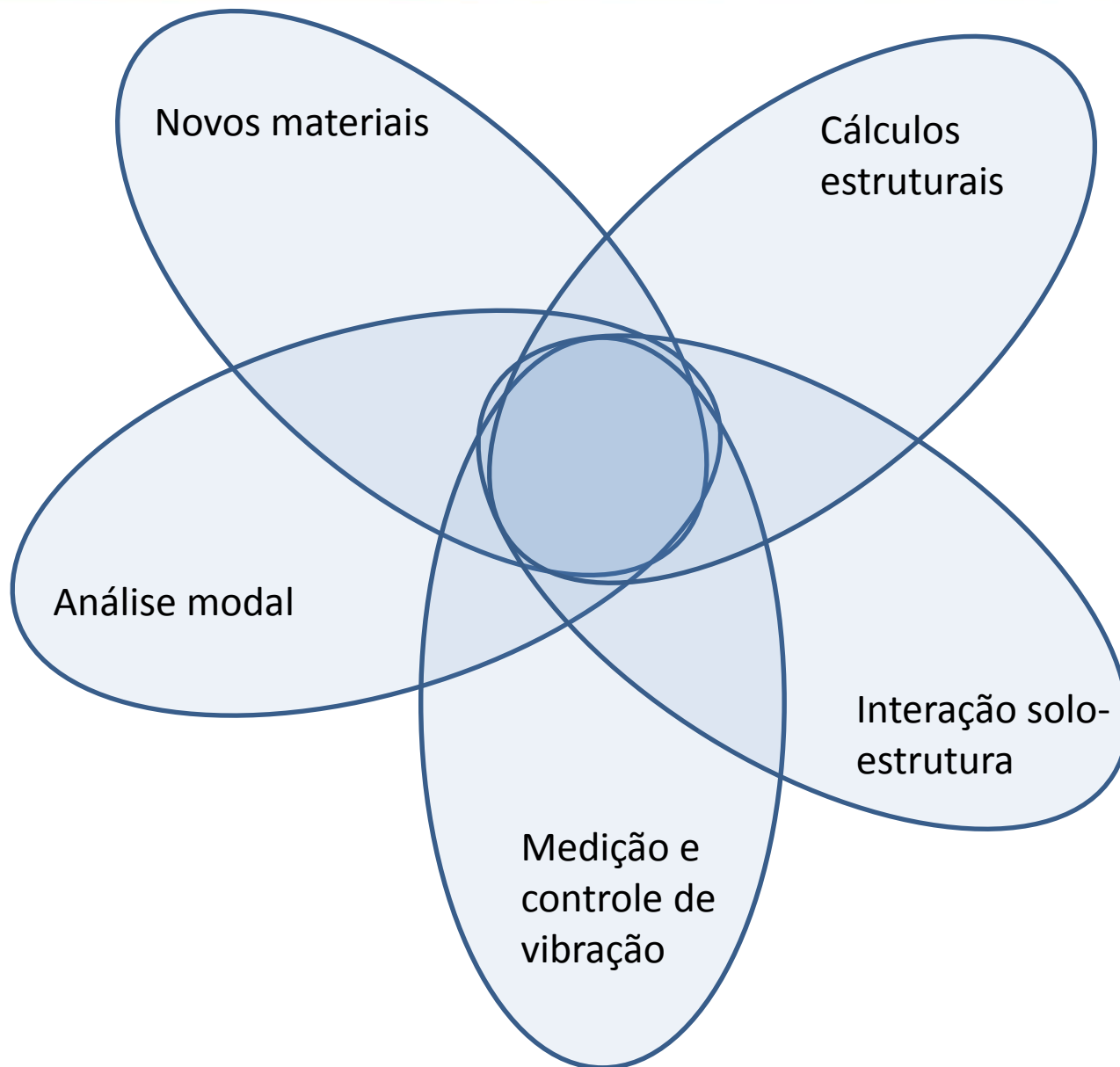
1270 kg

Fibre-reinforced polymer composite bridges in Europe

Bridge	Main span	Location	Year	Pultrusion	Infusion
A19 Tees viaduct	cladding	Teeside	1989	ACCS	
Aberfeldy Footbridge	64 m	Scotland	1993	ACCS	
Andel bridge		Netherlands	1995		
Bonds Mill Lift Bridge	8.23 m	Gloucestershire	1995	ACCS	
Bradkirk (Blackpool) footbridge over railway (NGCC page)		Lancashire	2009		✓
(Autovia del) Cantabrico	13 m	Spain			
Cuenca Parque de los Moralejos		Spain	2011		
Cueva de Oñati-Arrikutz walkway		Spain	2008	✓	
Dawlish railway station	18 m	Devon	2012		
Den Dungen draw bridge		Netherlands			
Earlsdon reservoir		Scotland	2013	✓	
Friedberg B3 highway bridge	deck	Germany	2008	ASSET	
Friesland bridge		Netherlands	2002		
Garstang Mount Pleasant M6 bridge		Lancashire	2006	ASSET	
Halgavor bridge	47 m	Cornwall	2001	✓	✓
Holländerbrücke (Reinbek near Hamburg)		Germany	2009	FBD450	
Kolding bridge	40 m	Denmark	1997		
Lleida pedestrian footbridge 1	38 m	Spain	2004		
Lleida pedestrian footbridge 2		Spain	2010		
Lunetten bicycle/pedestrian bridge	12 m	Utrecht	2010		
Madrid footbridge	44 m	Spain	2011		✓
Moscow arched footbridge		Russia	2008		✓
Nørre Aaby		Denmark	2008	✓	
Ooypoort	56 m	Netherlands	2014		✓
Rotterdam Oosterwolde 60-tonne rated road lift bridge		Netherlands	2010		
Spiering Bridge	12 m	Netherlands	2015		
St Austell railway bridge	14 m	Cornwall	2007		
Strait of Gibraltar bridge	proposal	Mediterranean Sea	Future		
West Mill Bridge	10 m	Oxfordshire	2002	ASSET	
Whatstandwell footbridge		Derbyshire	2009	✓	
Winterthur cable-stayed bridge	carbon tendons	Switzerland	1996		
Ynyslas footbridge over the River Leri Pipex PDF		Wales	2009	✓	



Desafio: passarelas



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