

[illegible]

novembre 2019

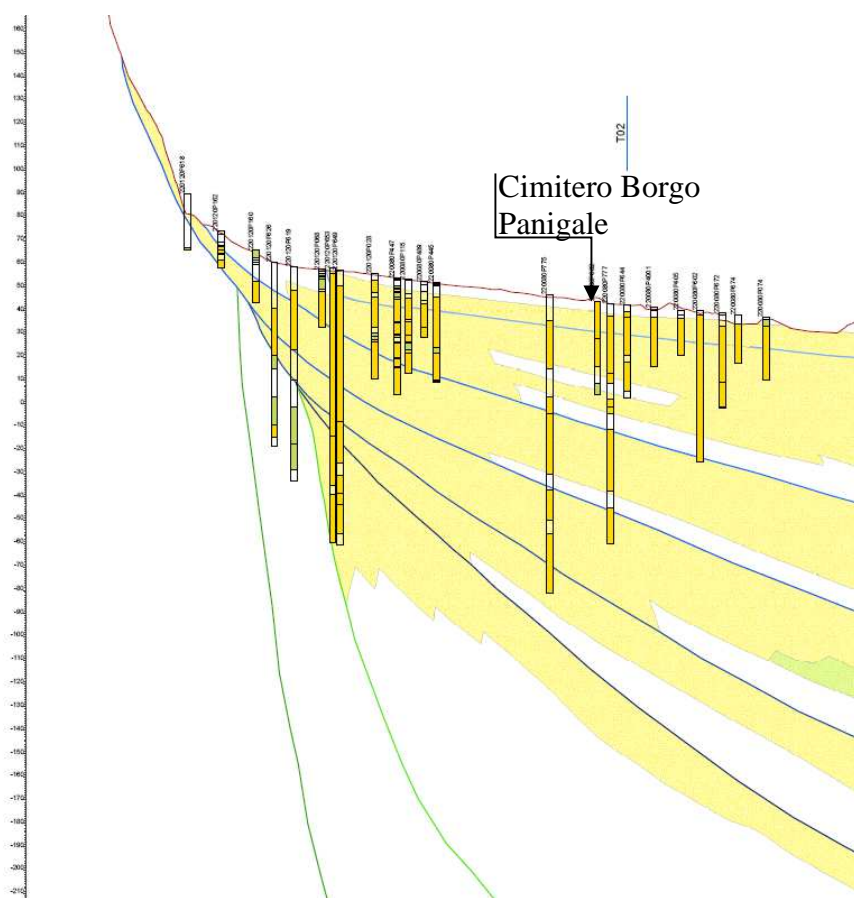
1. PREMESSA

Il seguente elaborato ad integrazione di quanto richiesto dal Comune di Bologna Settore Ambiente e Verde U.O. Suolo.

2. MODELLO DI SOTTOSUOLO

Il modello utilizzato per lo studio della risposta sismica fino al bedrock utilizzato è il seguente:

	Soil Material Type	Thickness of layer (m)	Maximum shear modulus G_{max} (MPa)	Total unit weight (kN/m ³)	Shear wave velocity (m/sec)	Location of water table	Depth at middle of layer (m)	Vertical effective stress (kPa)
Surface	argilla limosa	5,0	77,47	19,00	200	W	2,5	47,50
	ghiaie	25,0	294,39	20,00	380		17,5	345,00
	argilla limosa	50,0	560,65	22,00	500		55,0	1145,00
Bedrock	bedrock		1630,99	25,00	800		80,0	1695,00



2. CURVE DI SMORZAMENTO

Le curve utilizzate sono le seguenti:

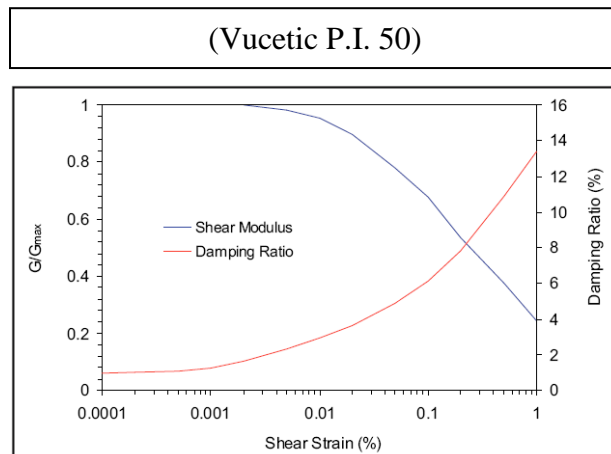


Figura 1: per le argille

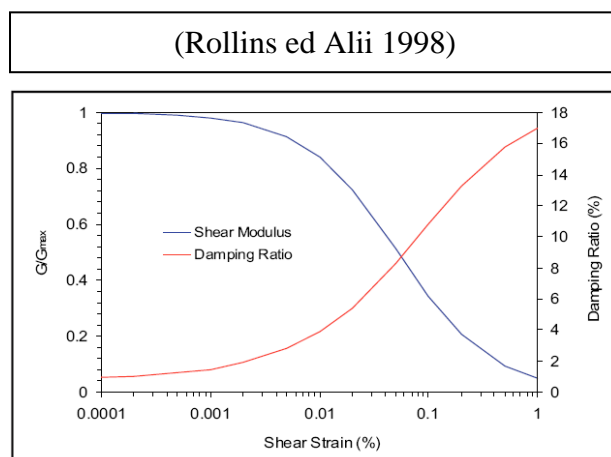


Figura 2: ghiaie

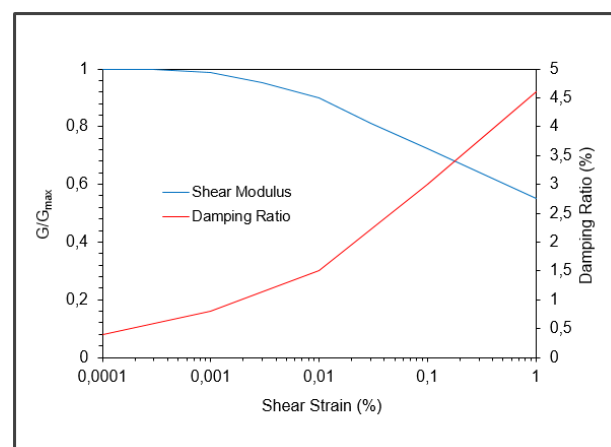
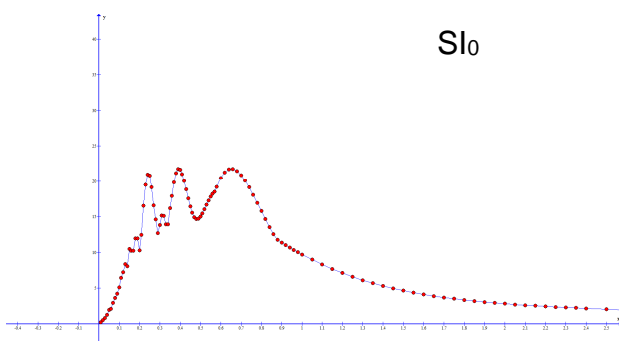
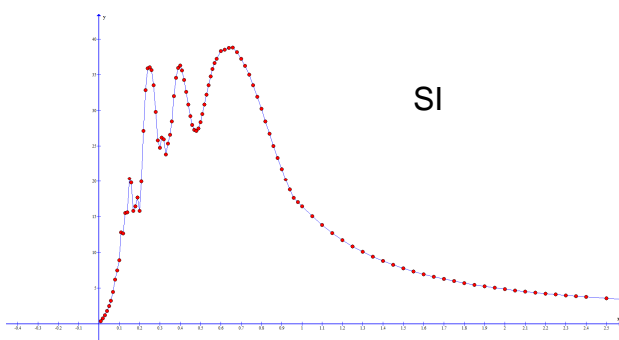


Figura 3: rock

3. FATTORI DI AMPLIFICAZIONE (SI)

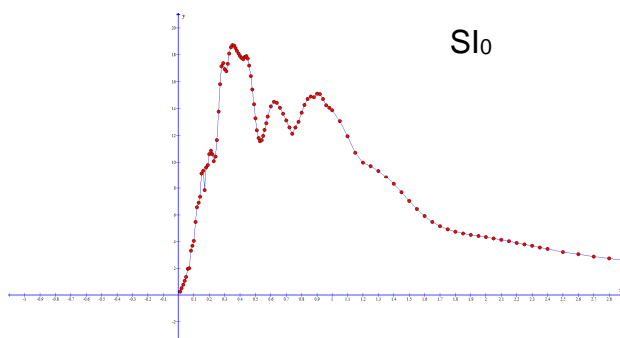
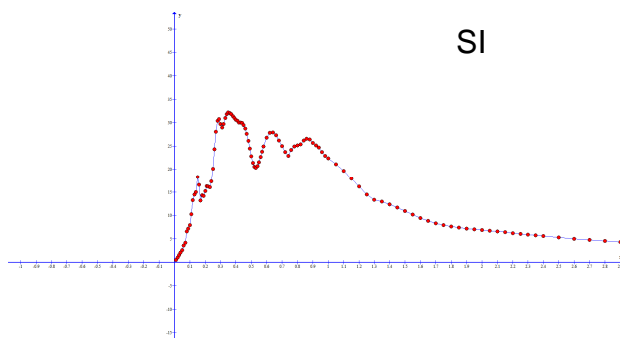
I fattori di amplificazione per gli intervalli considerati sono di seguito tabellati:

accelerogramma 46		
	0.1-0.5	0.5-1.0
SI0	6,03	8,129
SI	10,502	15,113
SI/SI0	1,74	1,86



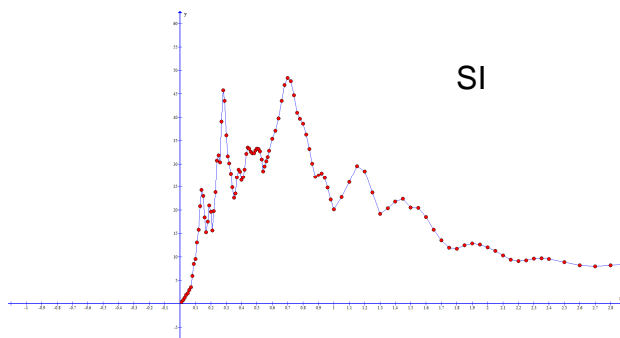
accelerogramma 126

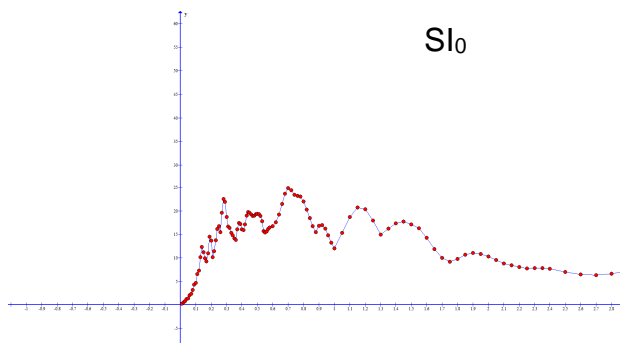
	0.1-0.5	0.5-1.0
SI0	5,591	6,848
SI	9,562	12,385
SI/SI0	1,71	1,81



accelerogramma 354

	0.1-0.5	0.5-1.0
SI0	6,103	9,432
SI	10,827	17,405
SI/SI0	1,77	1,85





Bologna, novembre 2019

In fede:

(Dott. Geol. Raffaele Sandrelli)

