



COMUNE DI RAVENNA

"STUDIO DI MICROZONAZIONE SISMICA  
(APPROFONDIMENTO AL II e III LIVELLO DAL  
REGIONE EMILIA-ROMAGNA N. 112/2007 E  
SMI)" DEL COMUNE DI RAVENNA

Geologica Toscana - Prospezioni Geofisiche

Viale Marconi, 106 - 53036 Poggibonsi (SI)

Tel. 0577 935891 - Fax. 0577 989279

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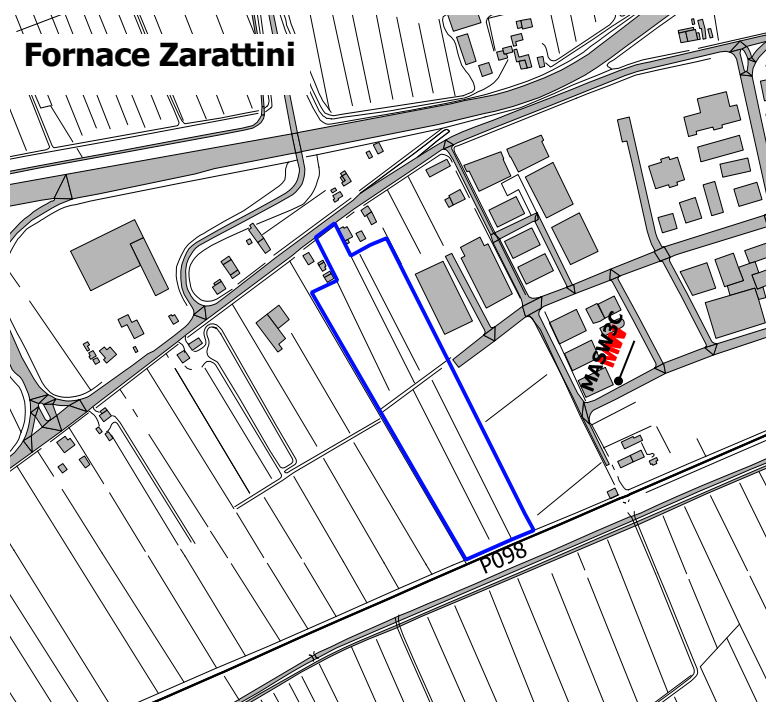
## 14. Territorio



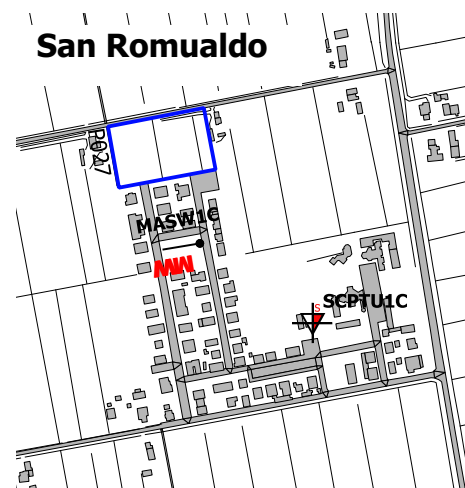
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Scala 1:10.000

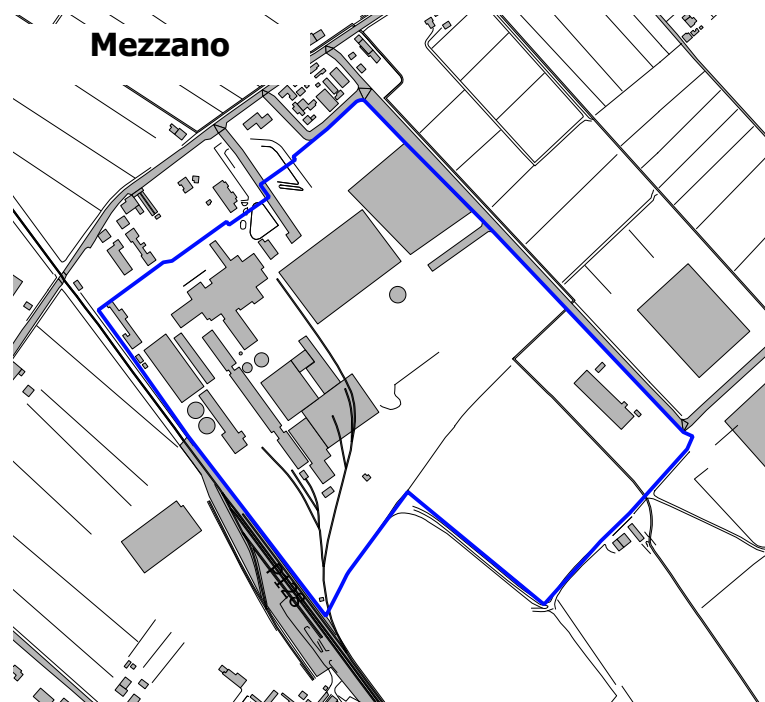
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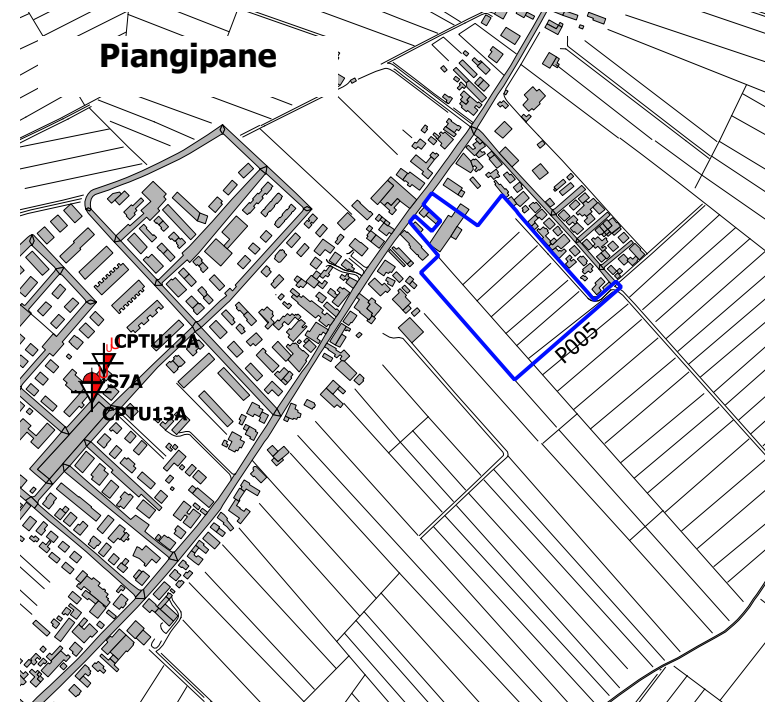
### San Romualdo



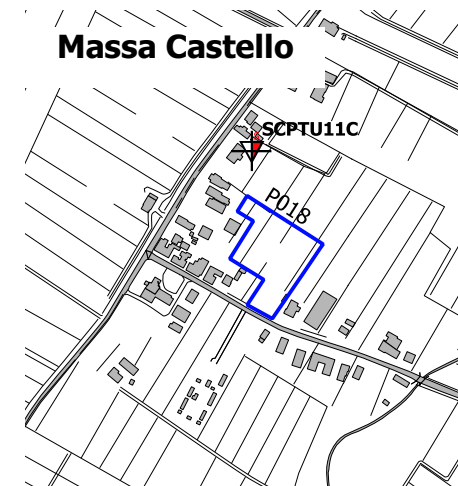
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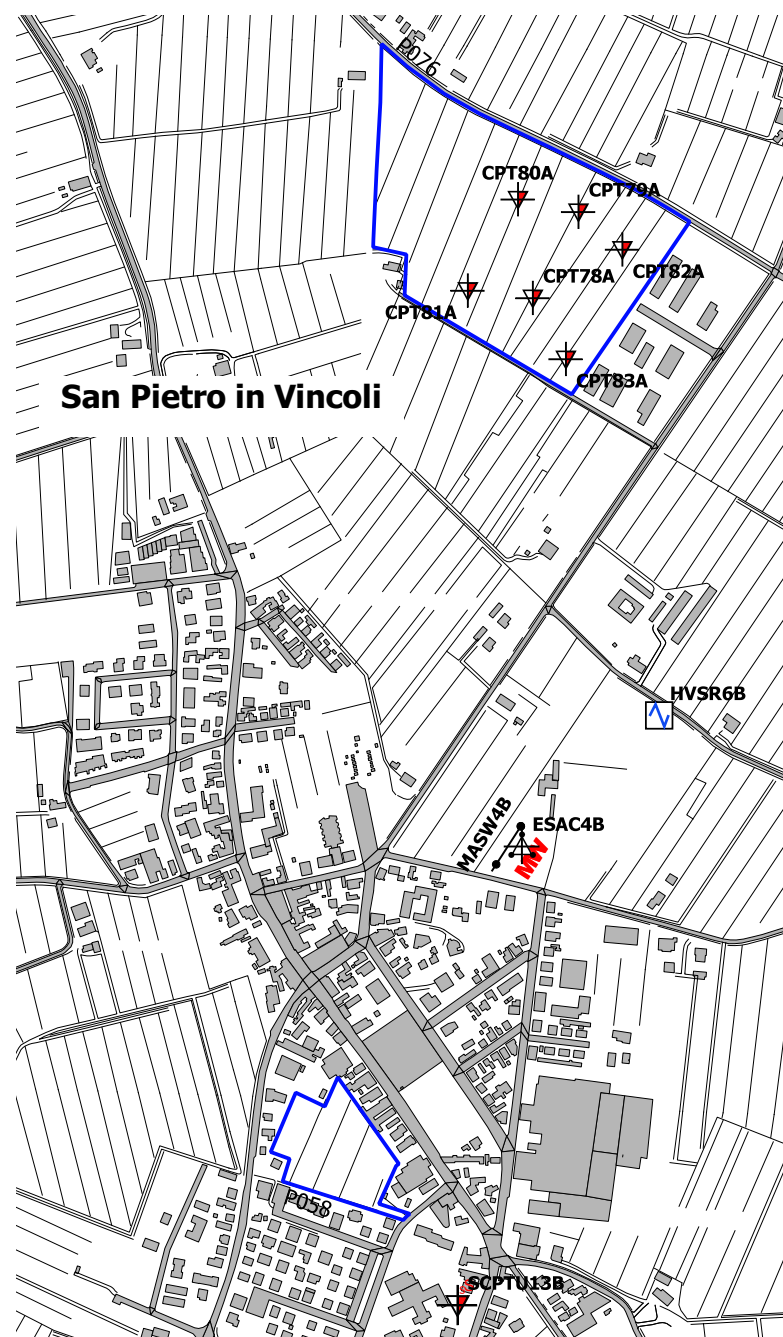
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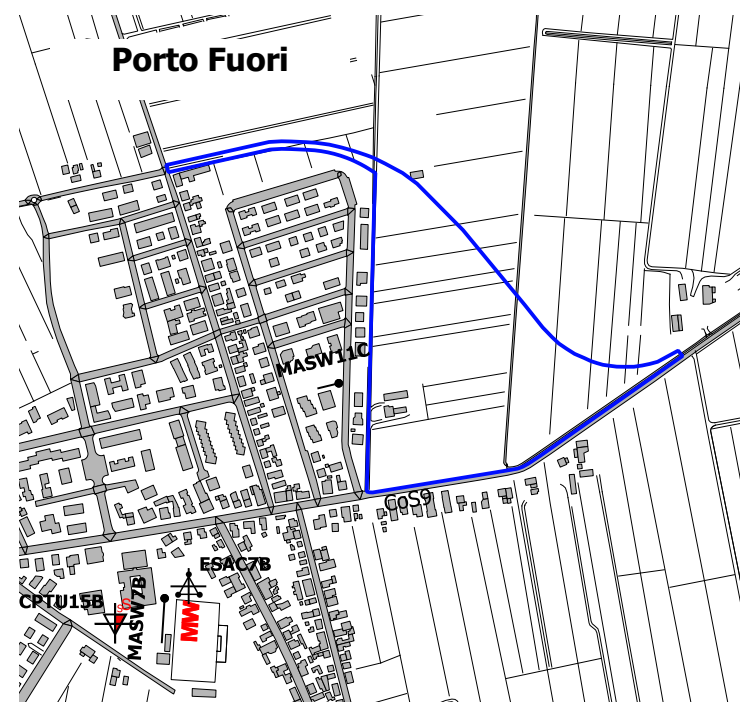
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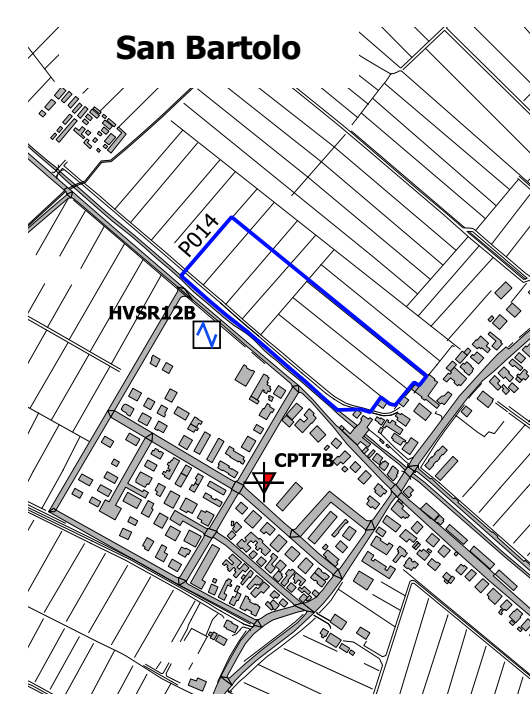
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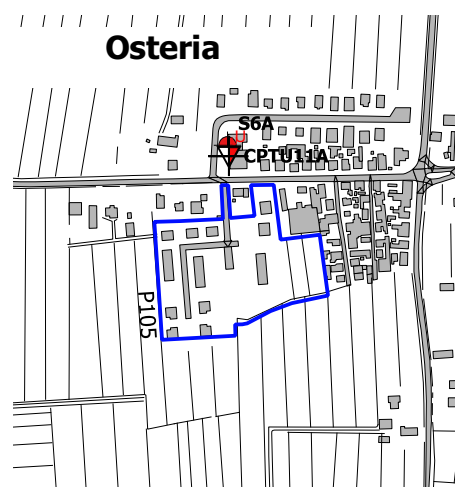
### Porto Fuori



### San Bartolo



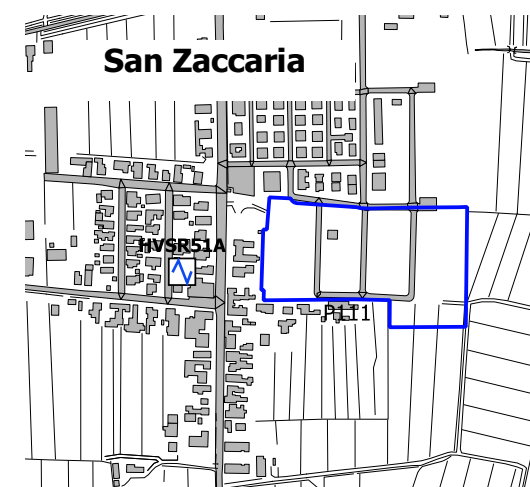
### Osteria



### San Michele



### San Zaccaria



#### CARTA DELLE INDAGINI

- Sondaggio a carotaggio continuo
- Prova penetrometrica statica con punta meccanica
- Prova penetrometrica statica con piezocono
- Prova sismica in foro tipo down-hole
- Prova penetrometrica statica con cono sismico
- Array sismico, ESAC/SPAC
- Stazione microtremore a stazione singola
- MASW
- Prova REfractionMicrotremors
- Confine comunale





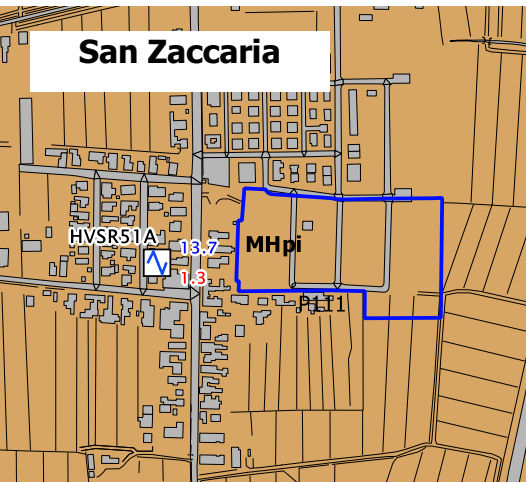
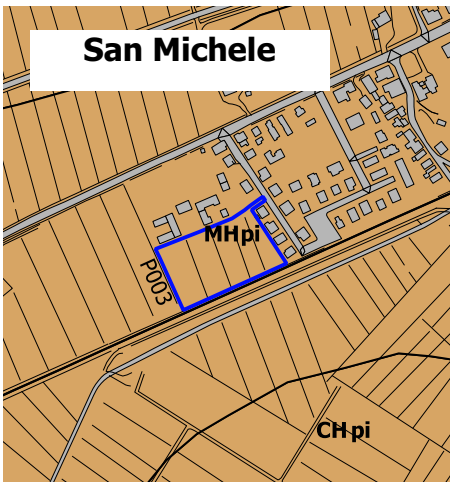
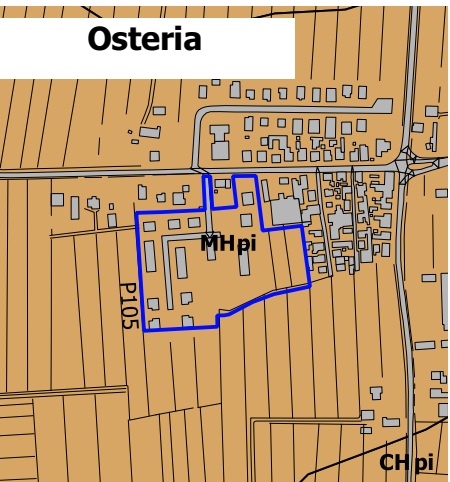
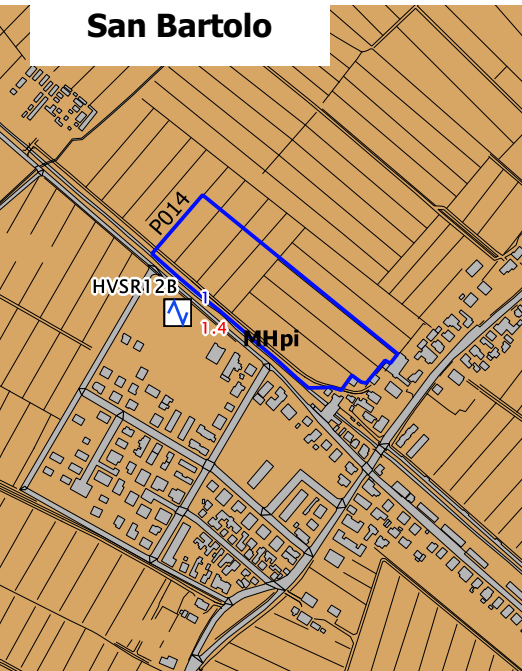
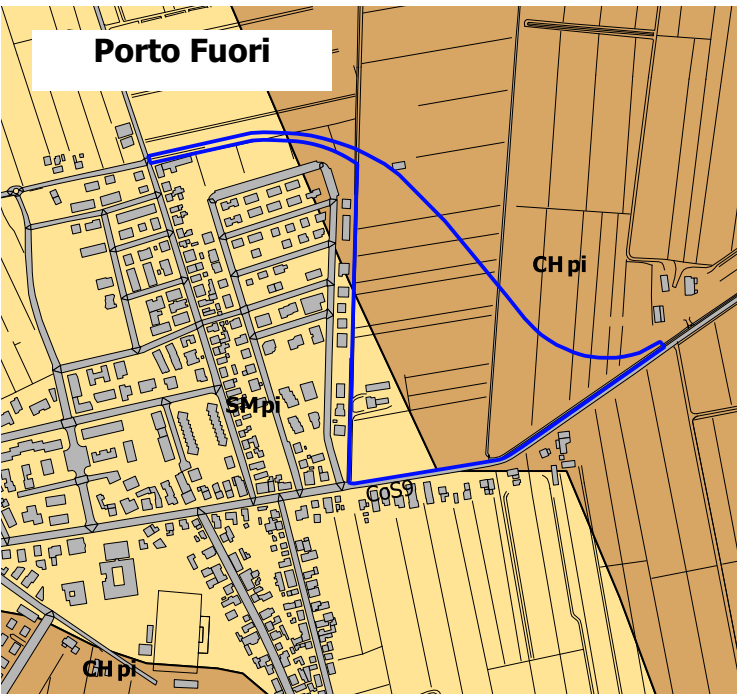
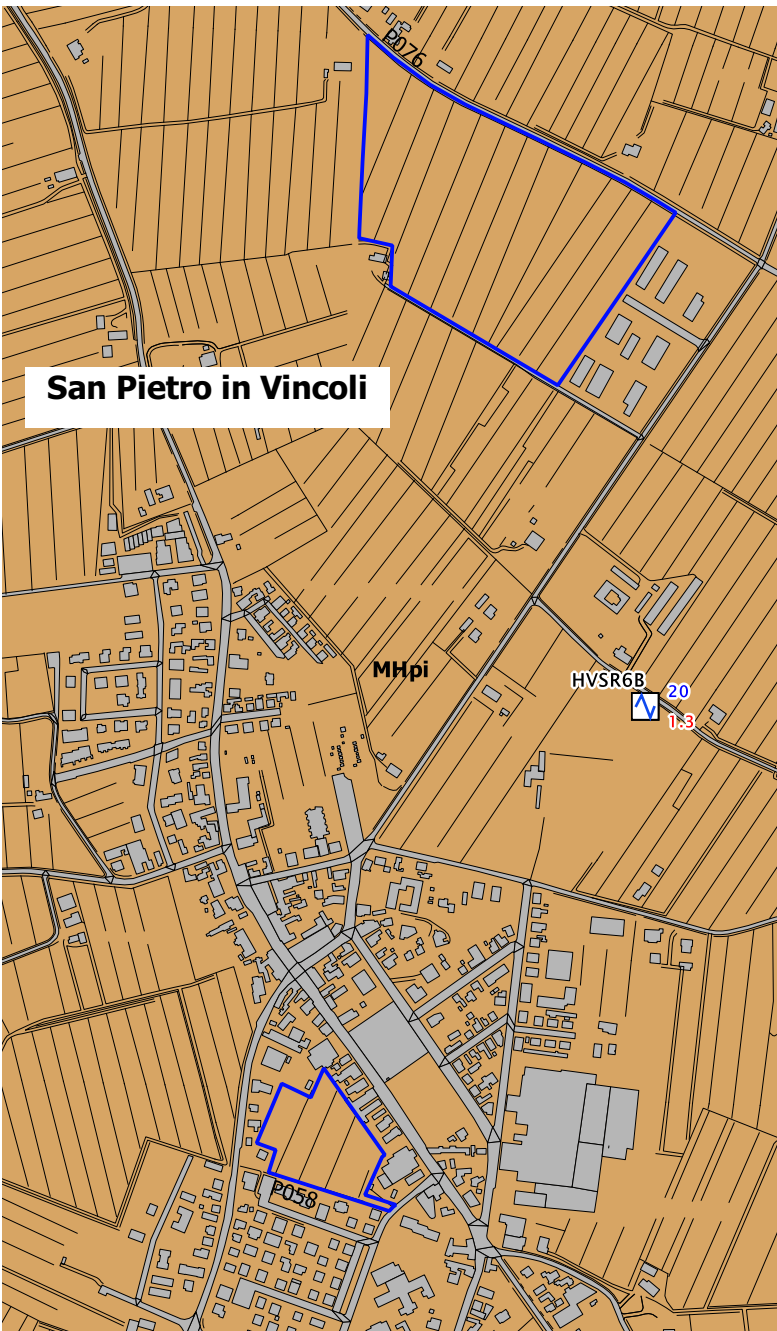
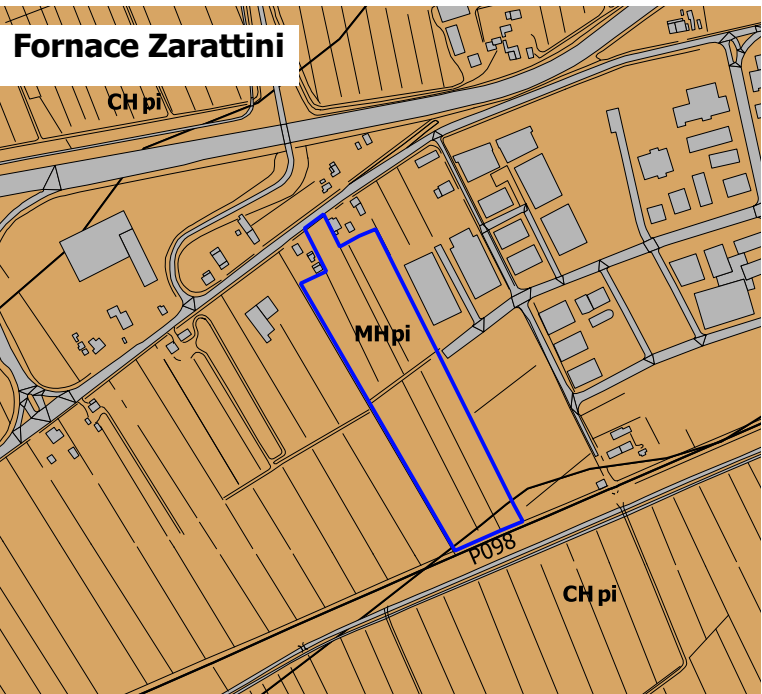
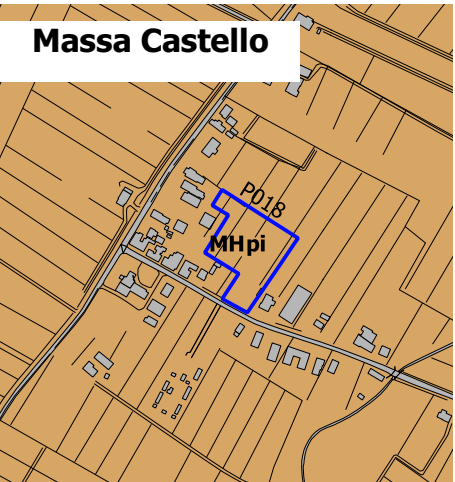
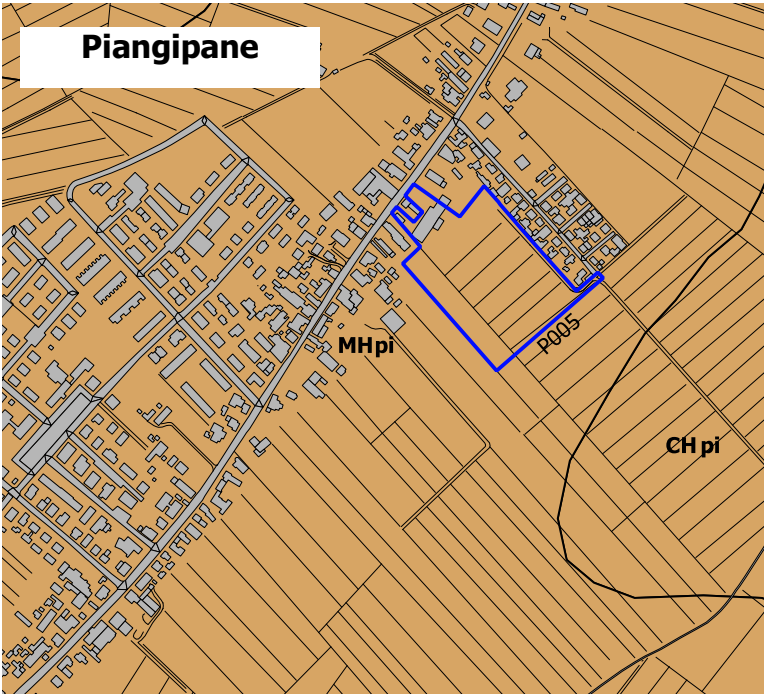
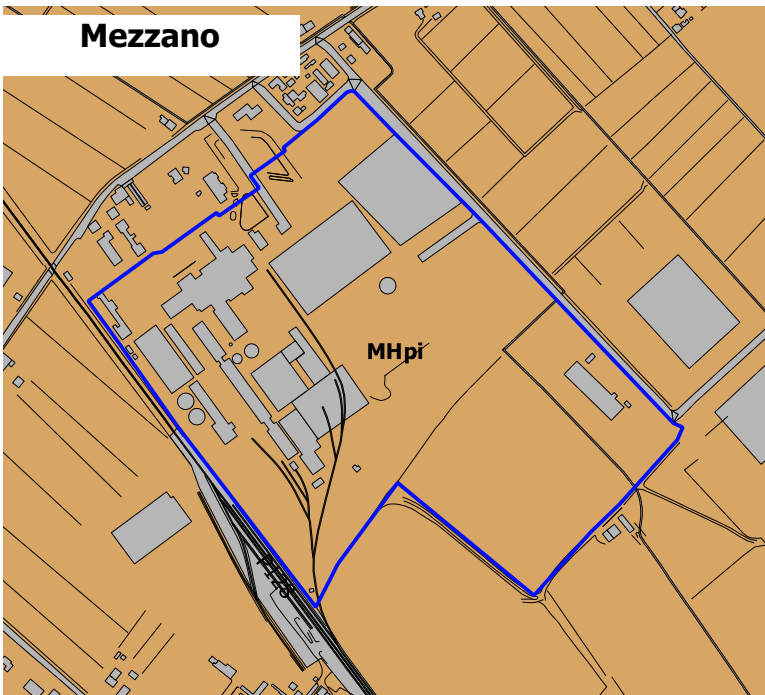
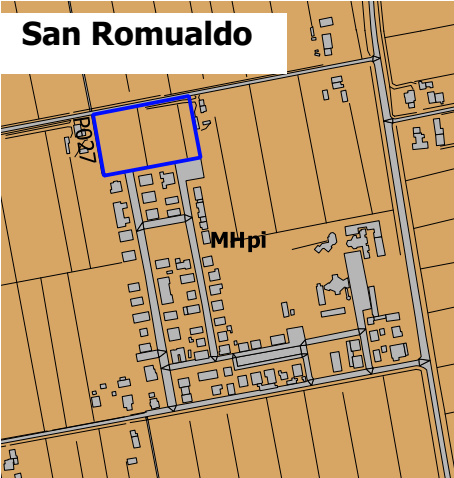
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14. Territorio



250      0      250      500      750      1000 m

Scala 1:10.000



CARTA GEOLOGICO TECNICA E DELLE FREQUENZE NATURALI DEI TERRENTI

Terreni che possono determinare amplificazione

MH - Limi inorganici, sabbie fini, limi micacei o diatomitici

Depositi suscettibili di amplificazione e cedimenti

SM - Sabbie limose, miscela di sabbia e limo

SP - Sabbie pulite con granulometria poco assortita

CH - Argille inorganiche di alta plasticità, argille grasse

Misure di rumore ambientale tipo HVSR

HVSR: in blu è riportata la f0 in Hz e in rosso la relativa A0





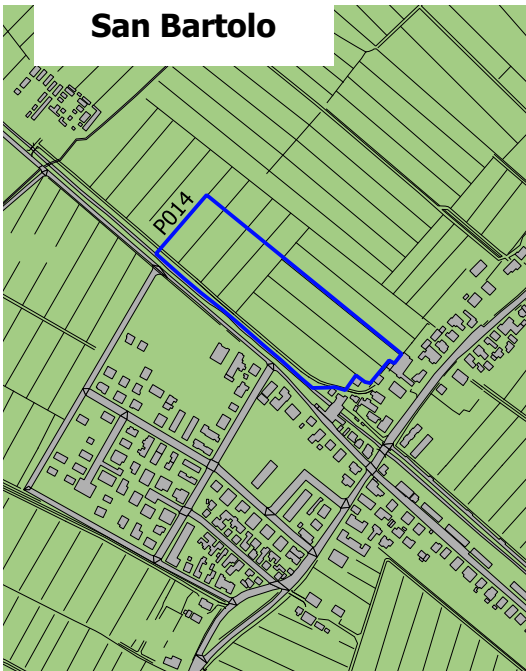
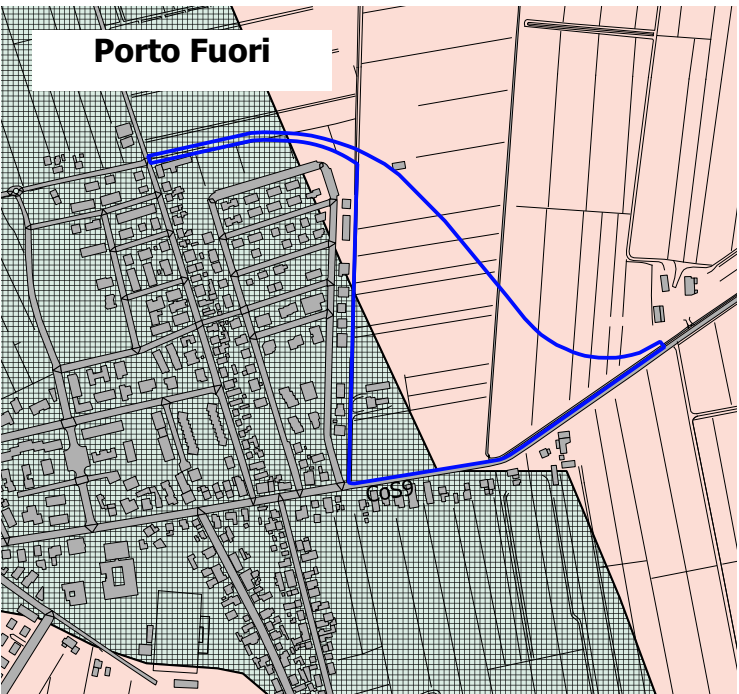
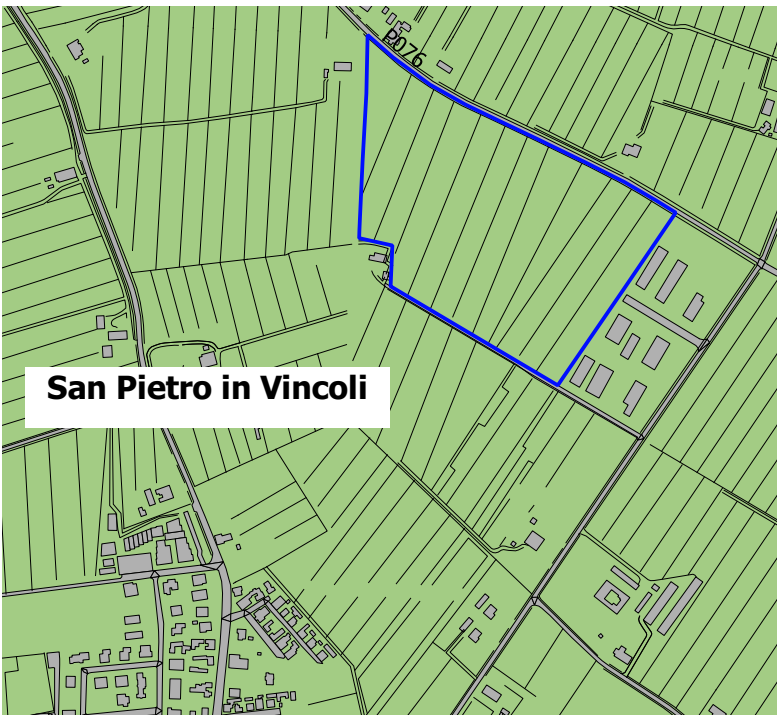
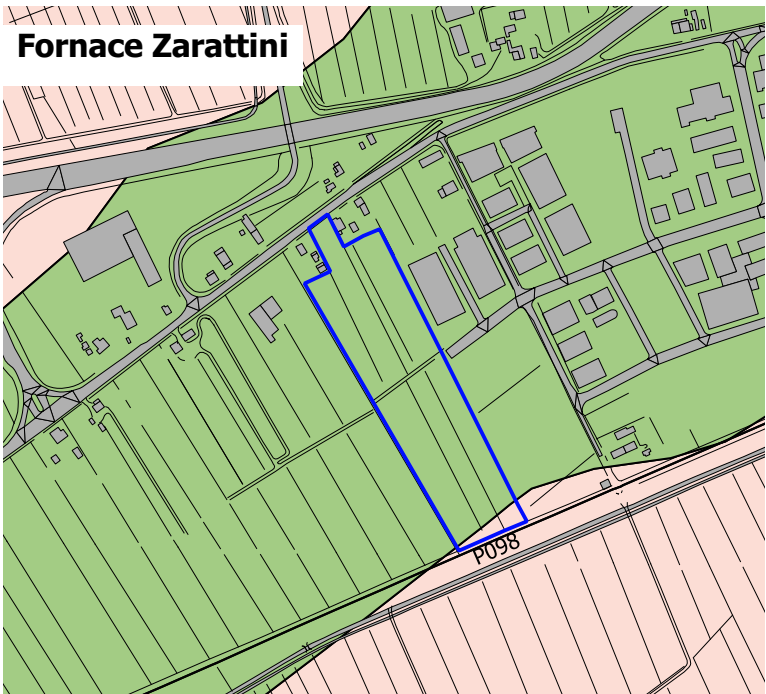
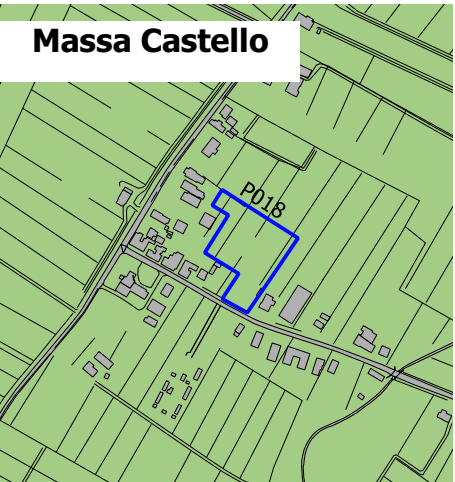
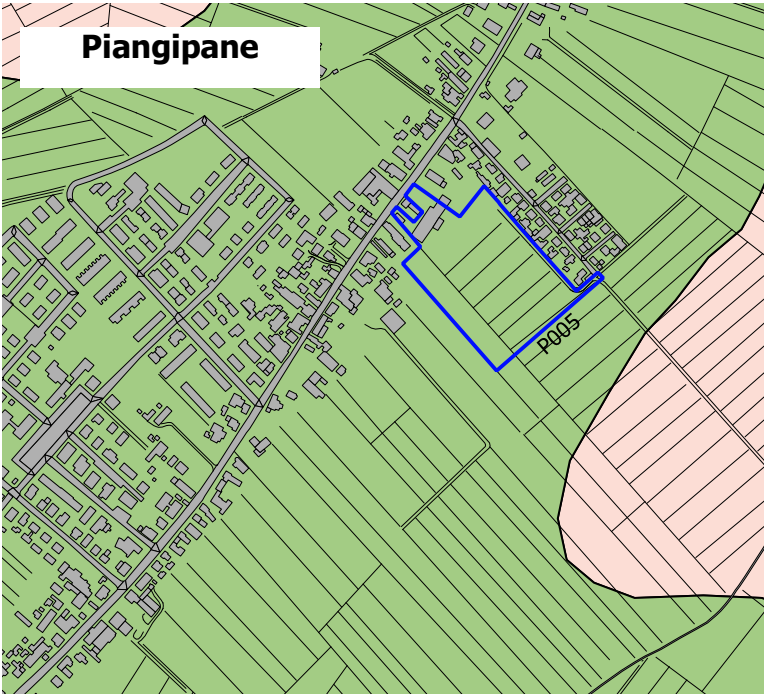
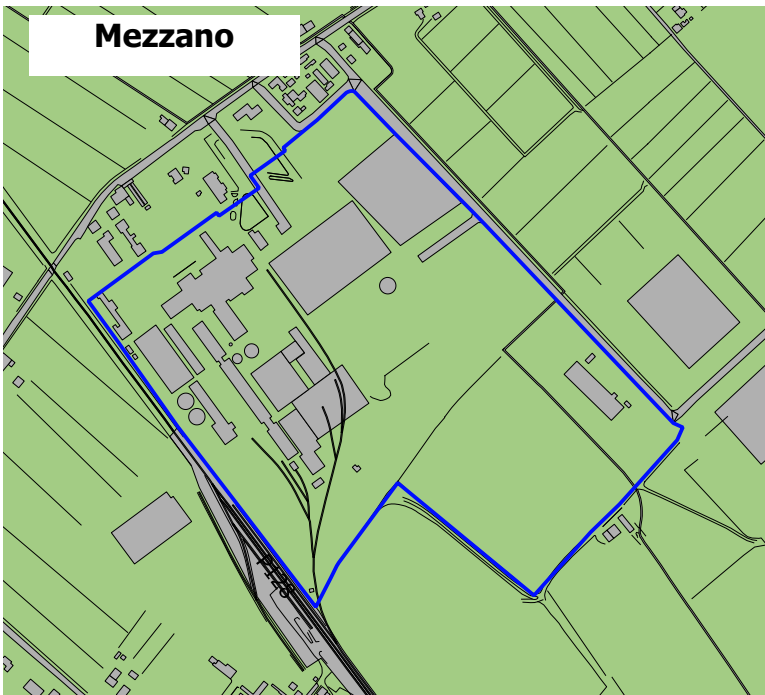
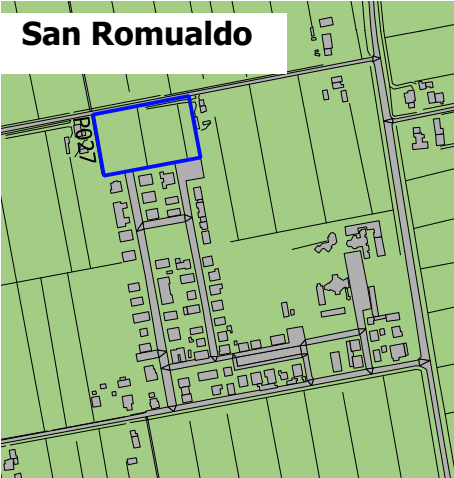
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CARTA DELLE AREE SUSCETTIBILI DI EFFETTI LOCALI

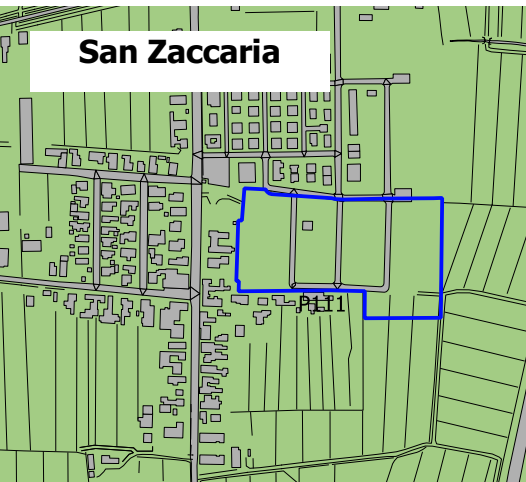
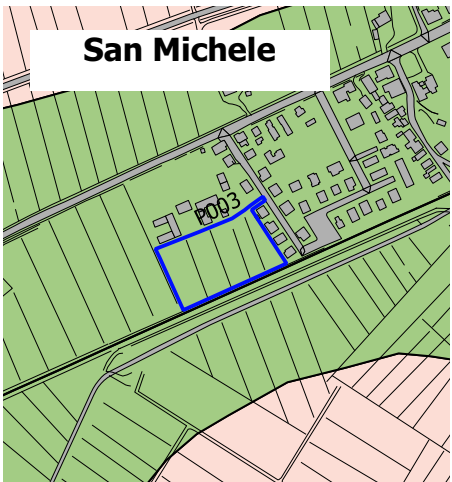
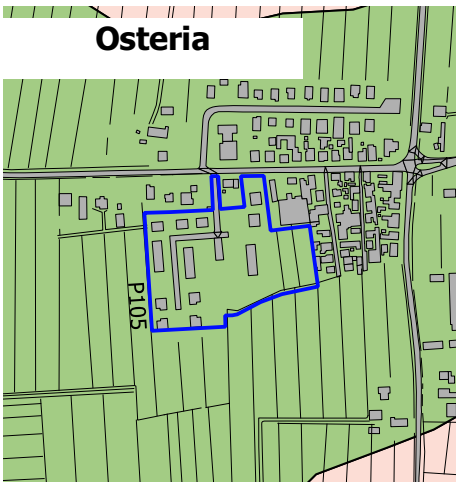
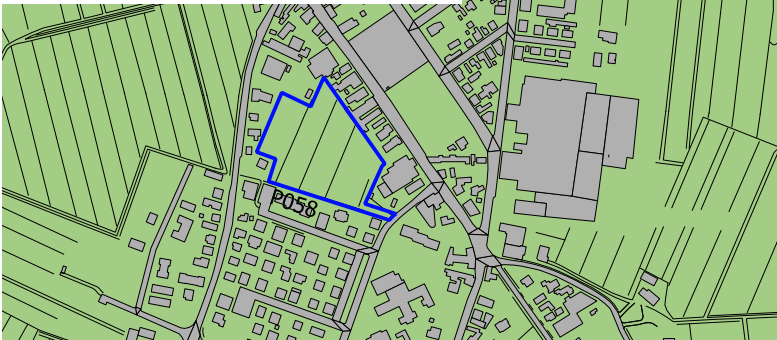
Zone suscettibili di amplificazioni locali

 Amplificazione del moto sismico attesa come possibile effetto dell'assetto litostratigrafico locale

Zone suscettibili di amplificazione e di instabilità

 Liquefazioni in presenza di importanti spessori di terreni granulari saturi nei primi 20 m da piano campagna

 Cedimenti differenziali in aree che presentano terreni con significative variazioni laterali delle caratteristiche meccaniche







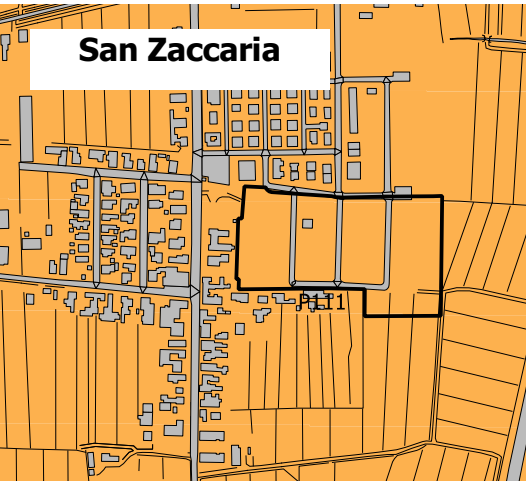
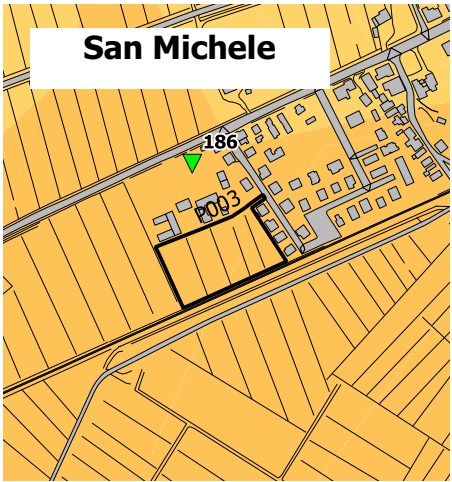
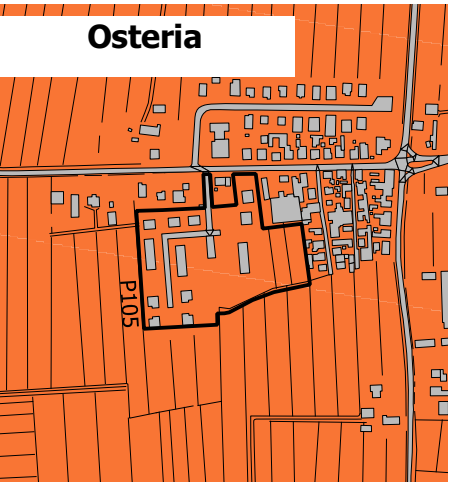
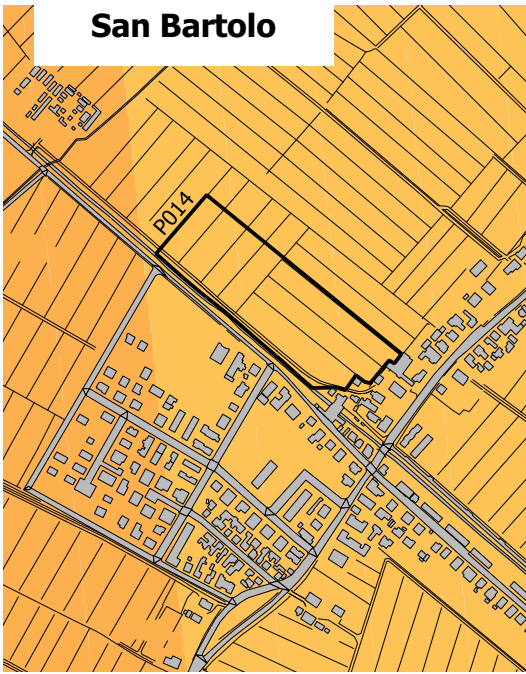
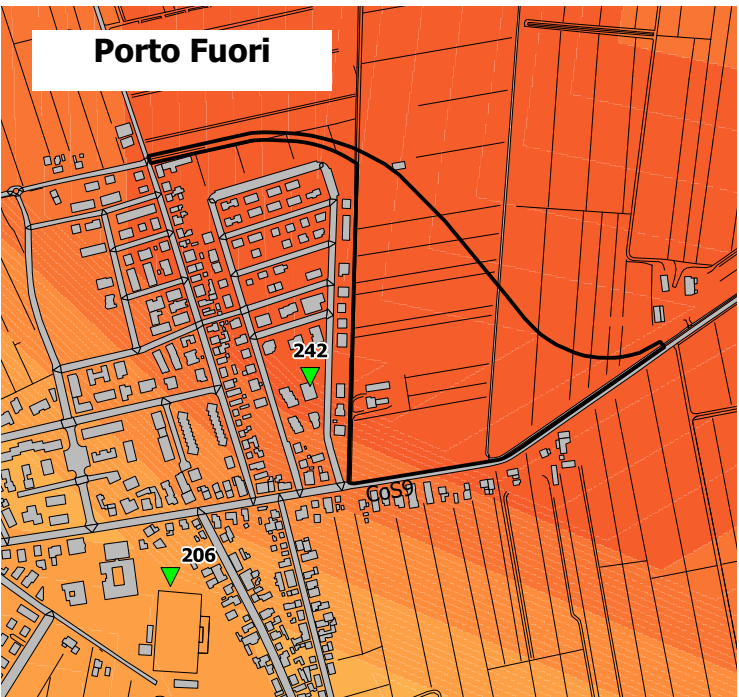
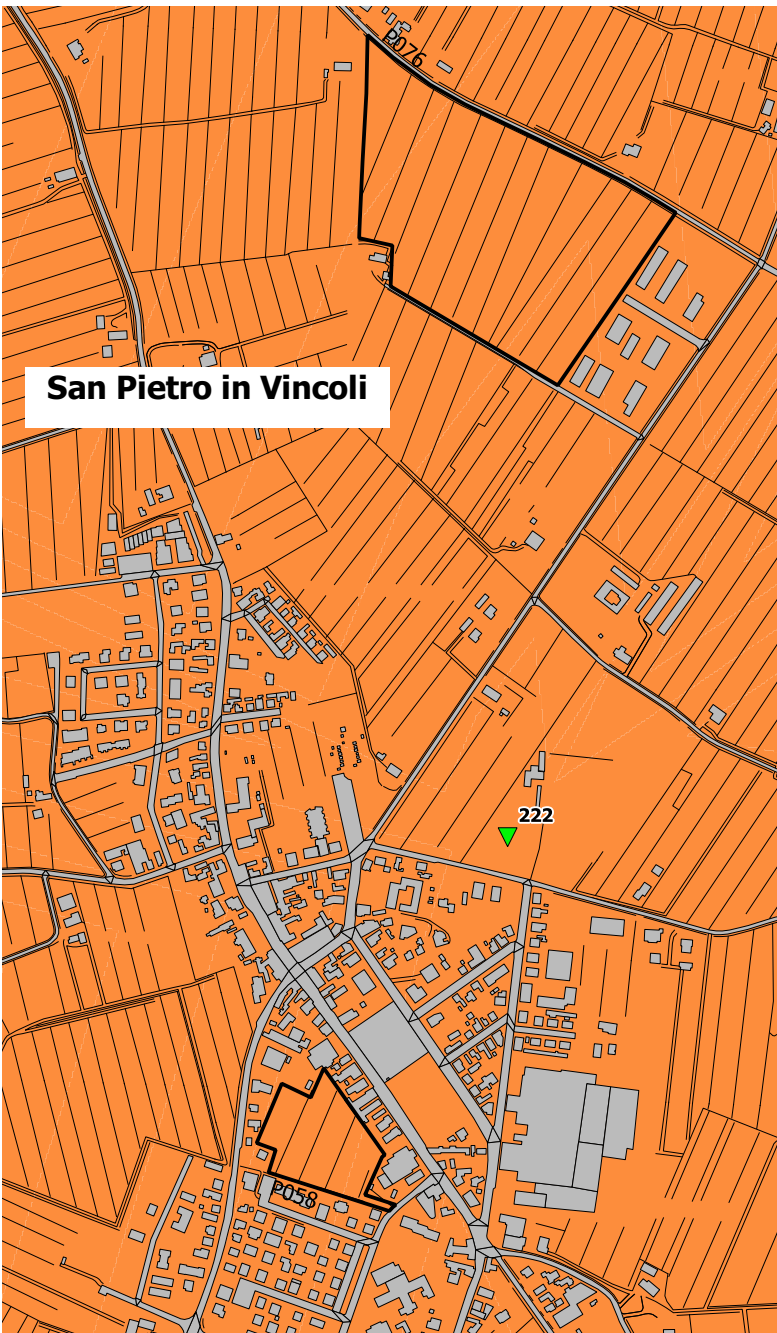
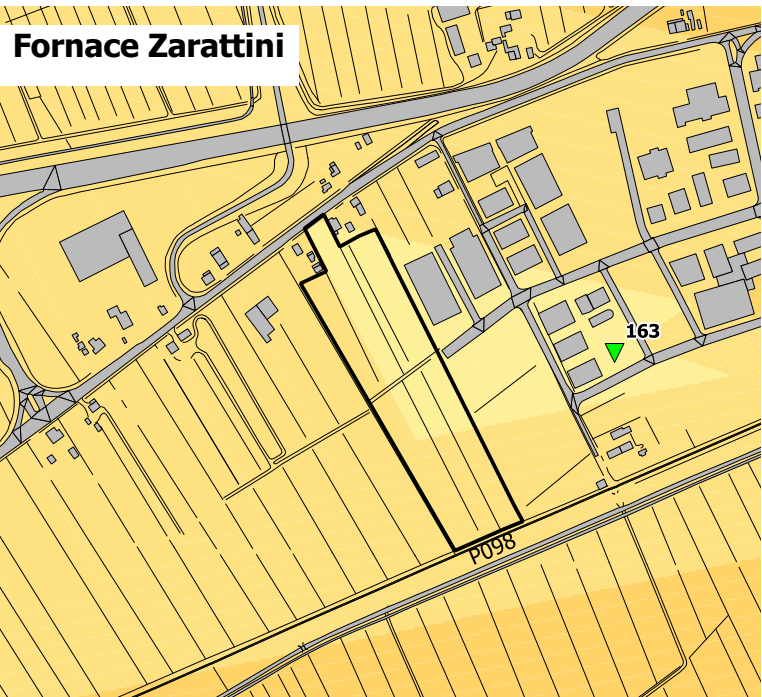
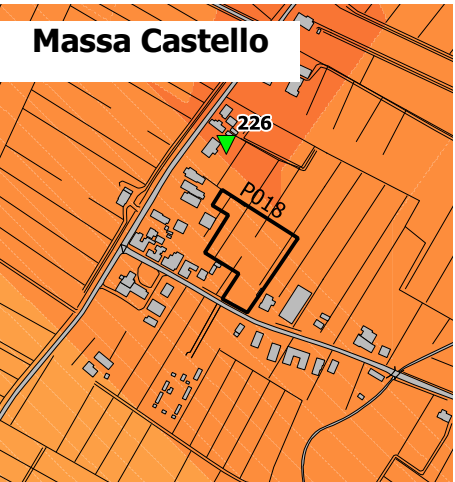
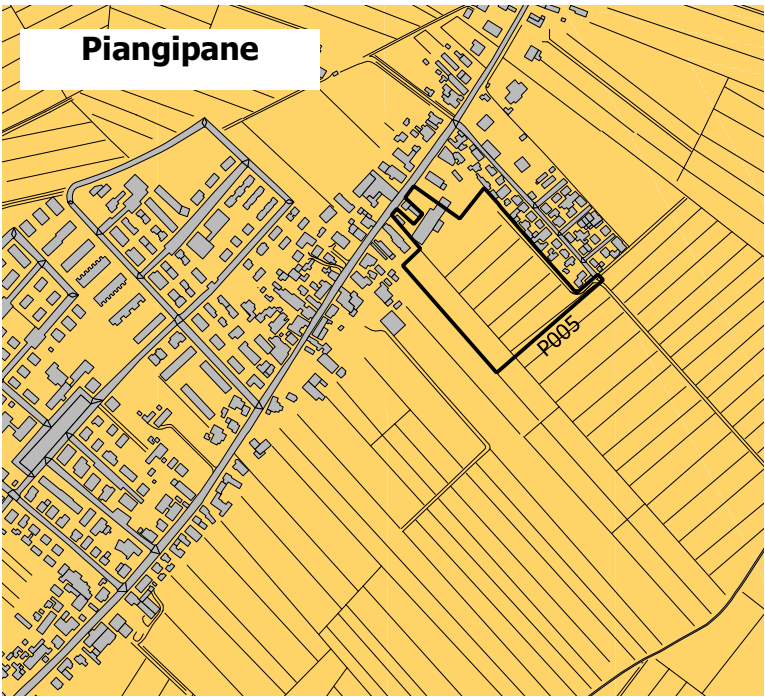
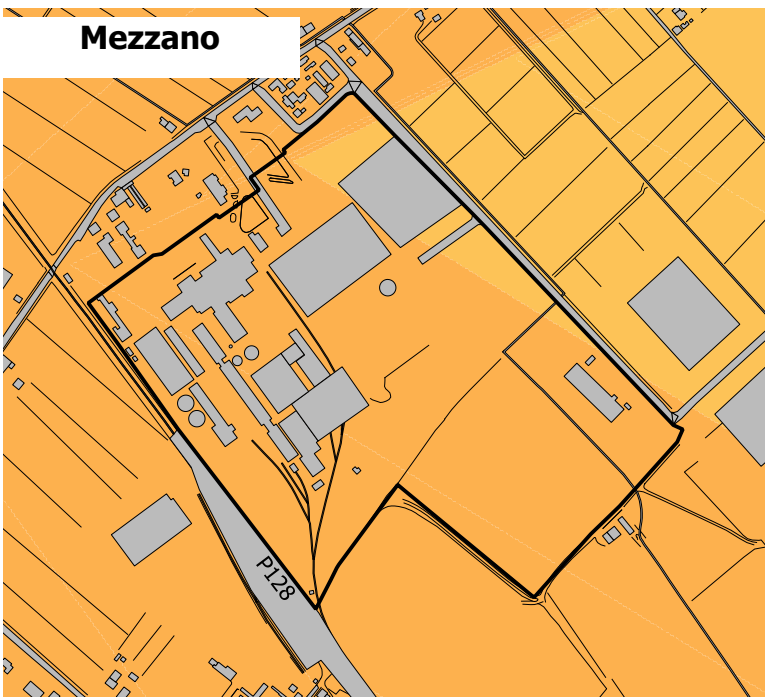
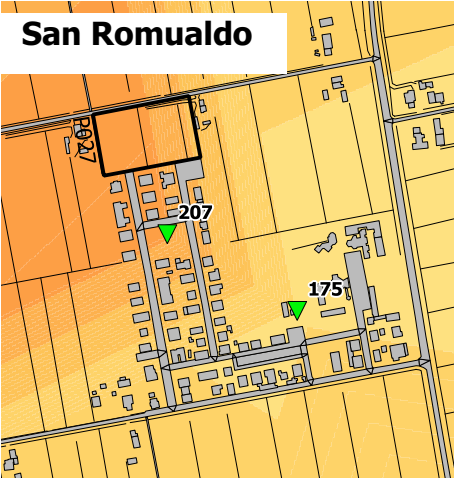
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CARTA DELLE VELOCITA' DELLE ONDE DI TAGLIO S (Vs)

▼ Punto di misura della velocità dello onde di taglio S (Vs30)

150 - 160 m/sec
160 - 170 m/sec
170 - 180 m/sec
180 - 190 m/sec
190 - 200 m/sec
200 - 210 m/sec
210 - 220 m/sec
220 - 230 m/sec
230 - 240 m/sec
240 - 250 m/sec
250 - 260 m/sec
260 - 270 m/sec
270 - 280 m/sec
280 - 290 m/sec
290 - 300 m/sec





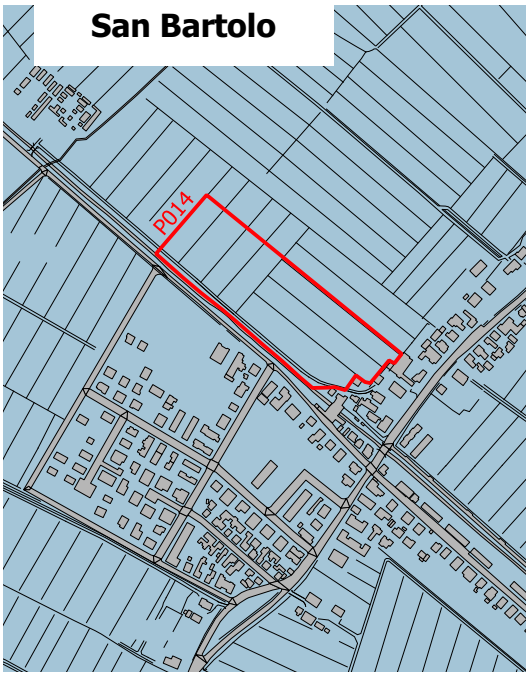
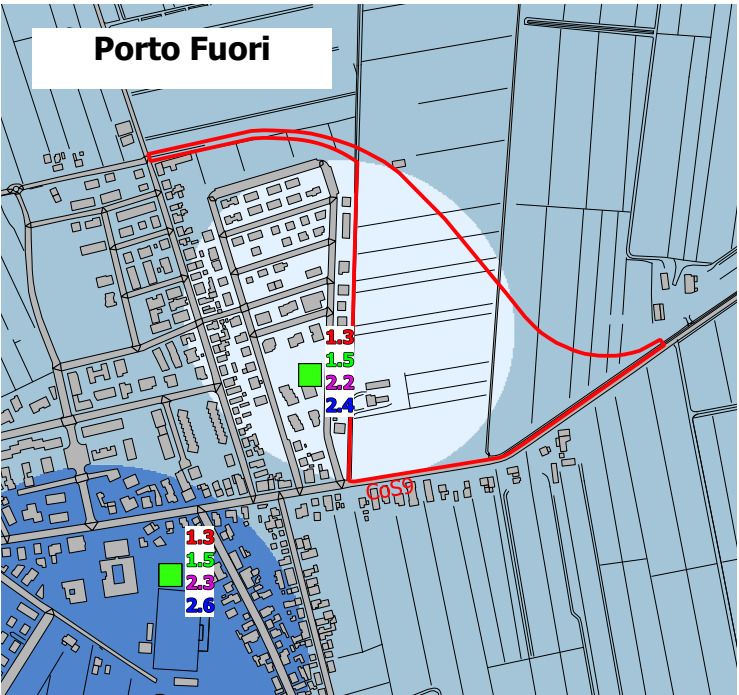
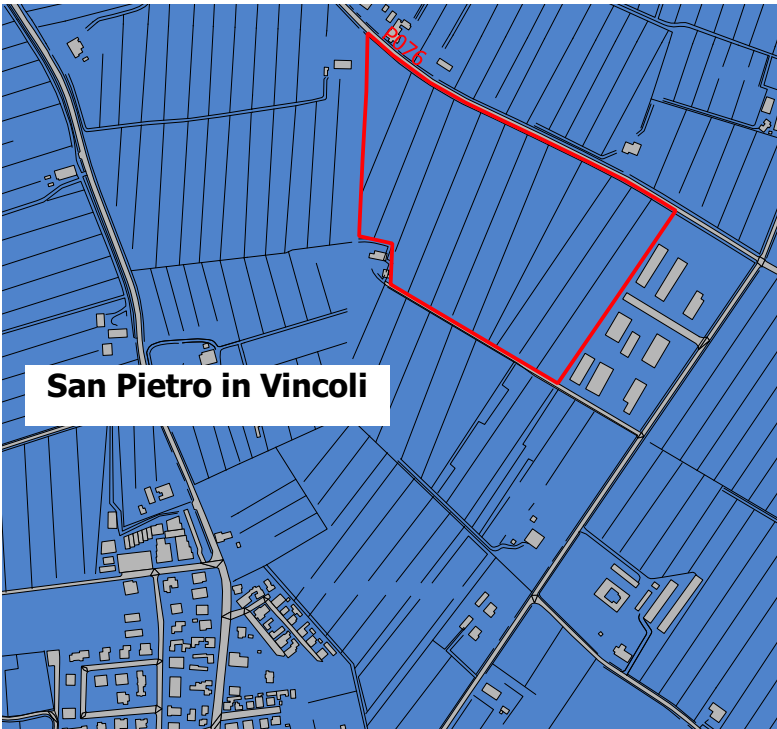
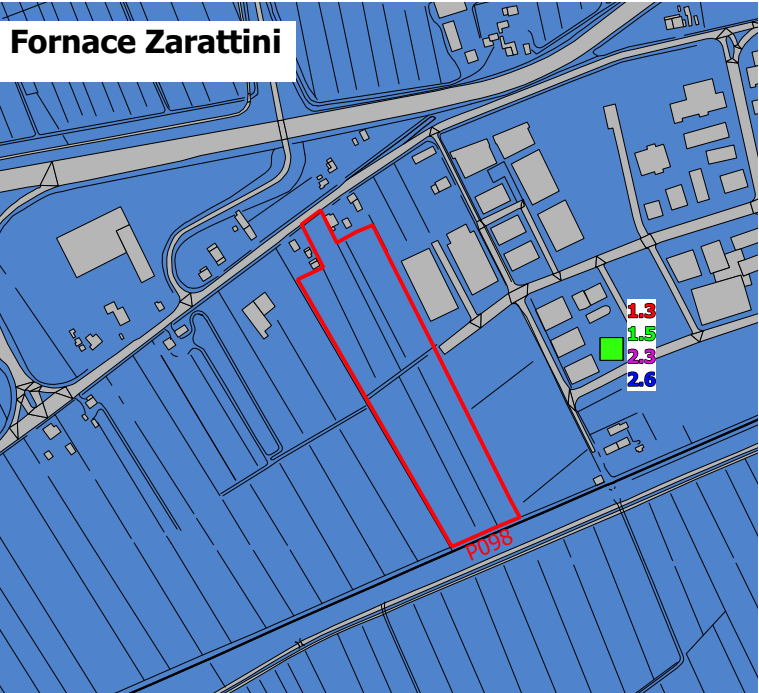
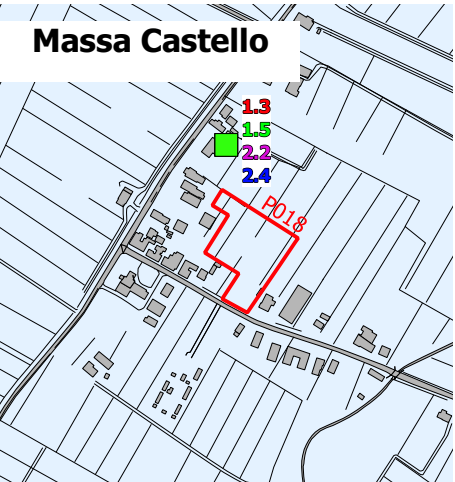
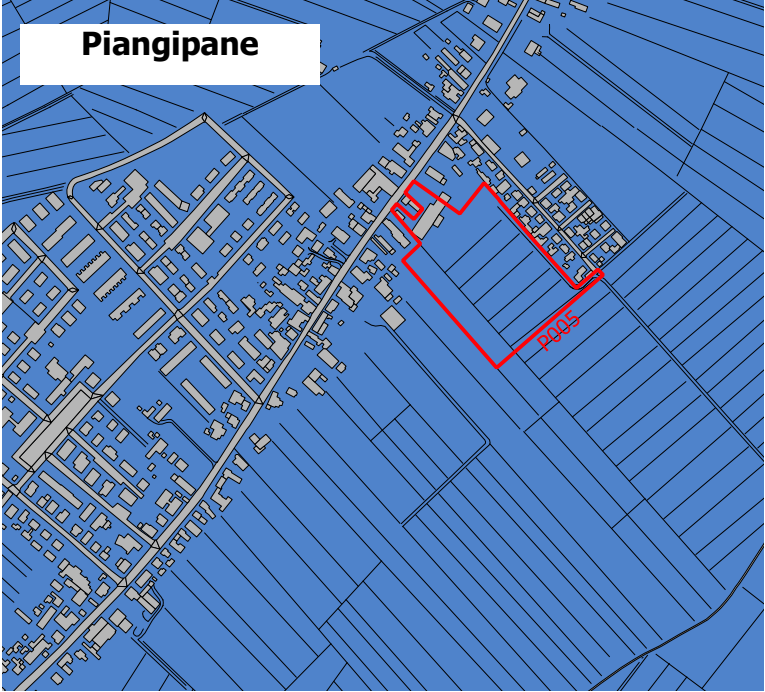
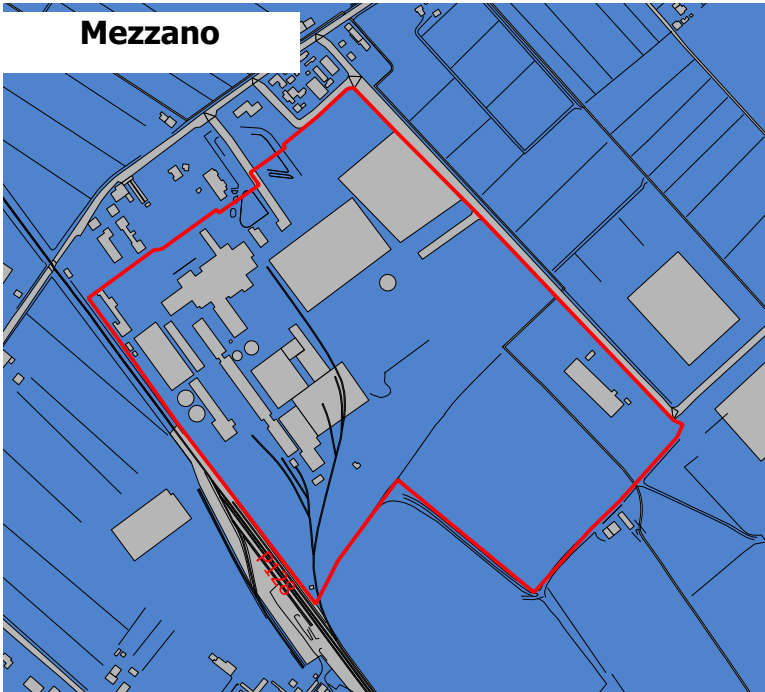
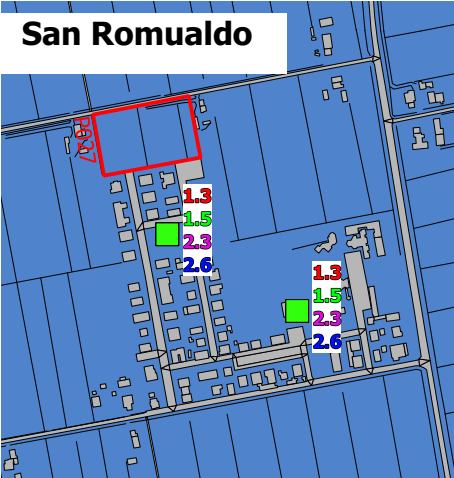
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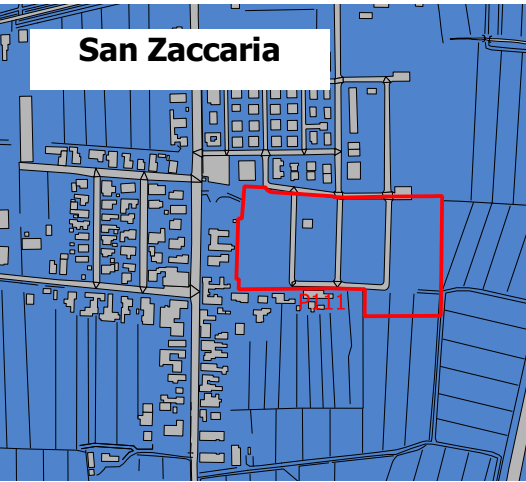
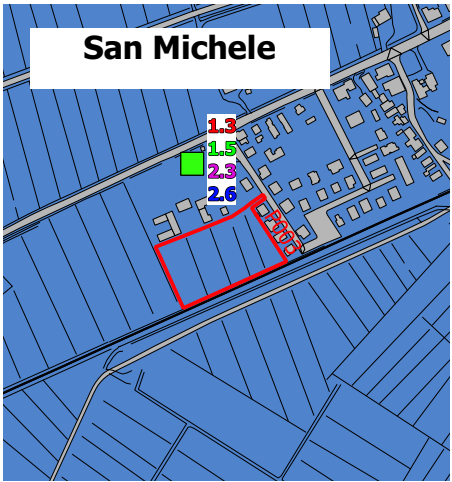
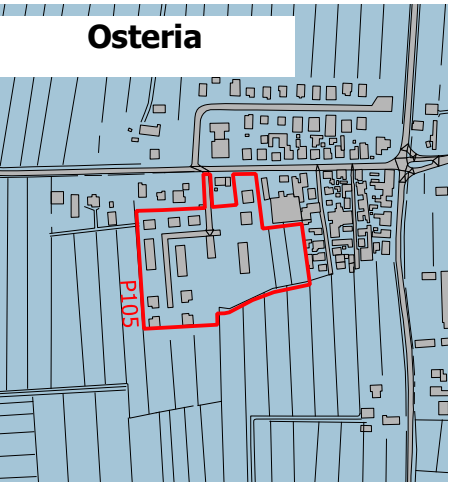
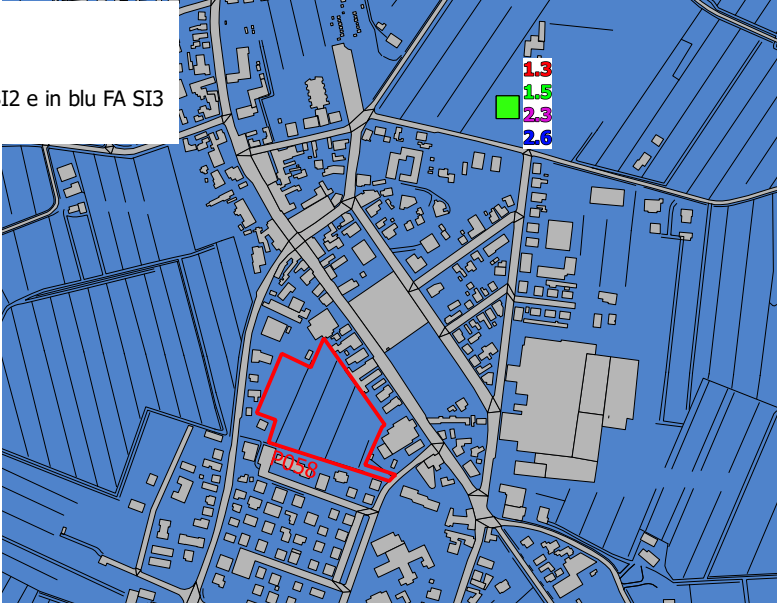


CARTA DEI FATTORI DI AMPLIFICAZIONE

■ Fattori di amplificazione: in rosso FA PGA, in verde FA SI1, in magenta FA SI2 e in blu FA SI3

Coefficiente di amplificazione FA SI3

- Fattore di amplificazione FA SI3=2,4
- Fattore di amplificazione FA SI3=2,5
- Fattore di amplificazione FA SI3=2,6







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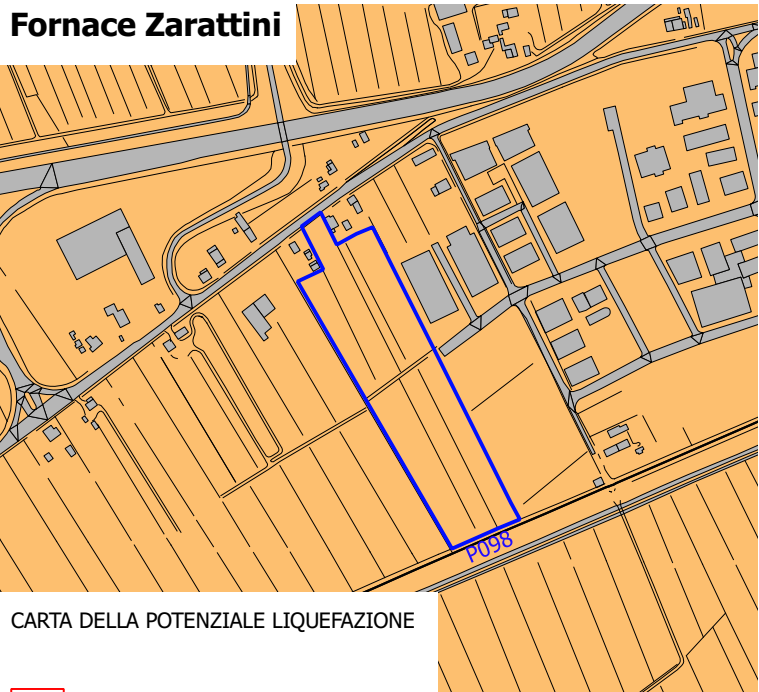
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Fornace Zarattini



CARTA DELLA POTENZIALE LIQUEFAZIONE

Confine comunale

- 10

20

Indice del potenziale di liquefazione: 10 m basso - 20 m basso
- 10

20

Indice del potenziale di liquefazione: 10 m moderato - 20 m basso
- 10

20

Indice del potenziale di liquefazione: 10 m basso - 20 m moderato
- 10

20

Indice del potenziale di liquefazione: 10 m moderato - 20 m moderato
- 10

20

Indice del potenziale di liquefazione: 10 m alto - 20 m moderato
- 10

20

Indice del potenziale di liquefazione: 10 m alto - 20 m alto
- 10

20

Indice del potenziale di liquefazione: 10 m moderato - 20 m alto
- 10

20

Indice del potenziale di liquefazione: 10 m molto alto - 20 m alto
- 10

20

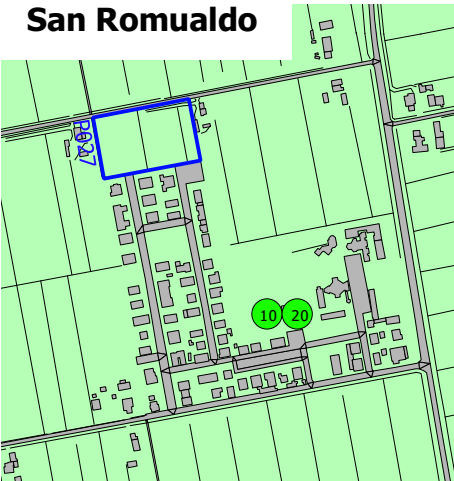
Indice del potenziale di liquefazione: 10 m alto - 20 m molto alto
- 10

20

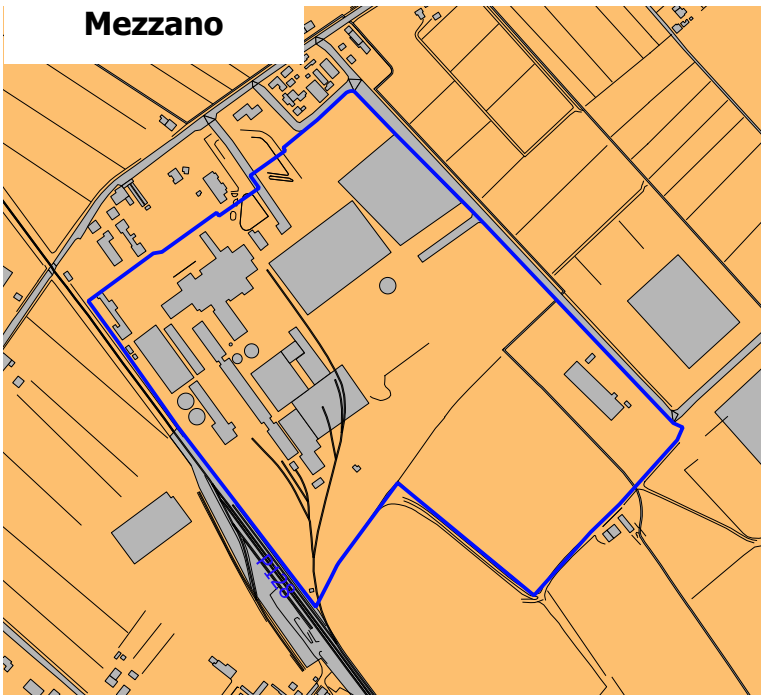
Indice del potenziale di liquefazione: 10 m molto alto - 20 m molto alto

- Indice del potenziale di liquefazione basso
- Indice del potenziale di liquefazione moderato
- Indice del potenziale di liquefazione alto
- Indice del potenziale di liquefazione molto alto

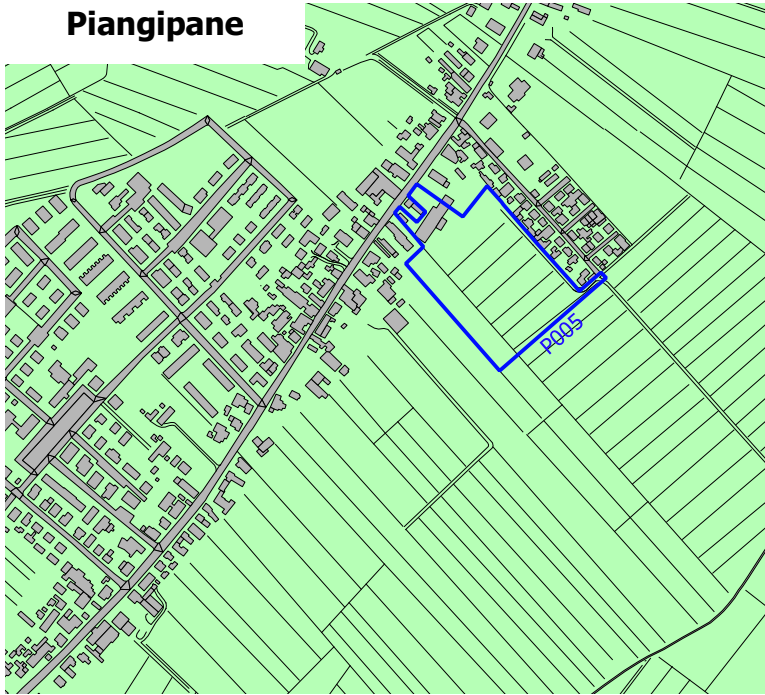
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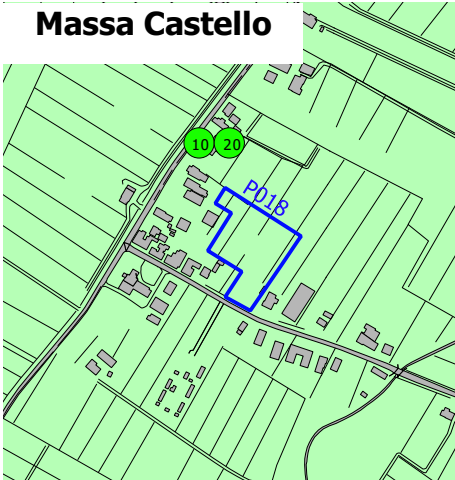
Mezzano



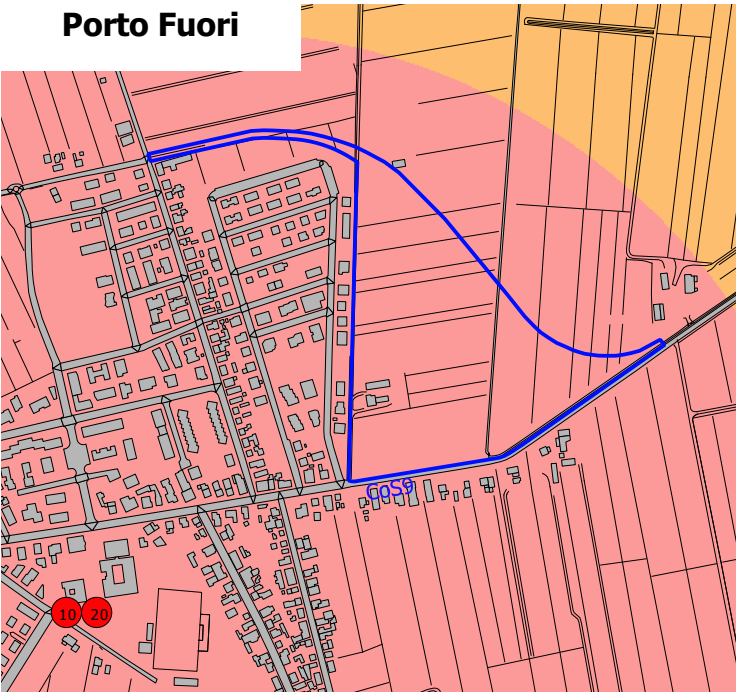
Piangipane



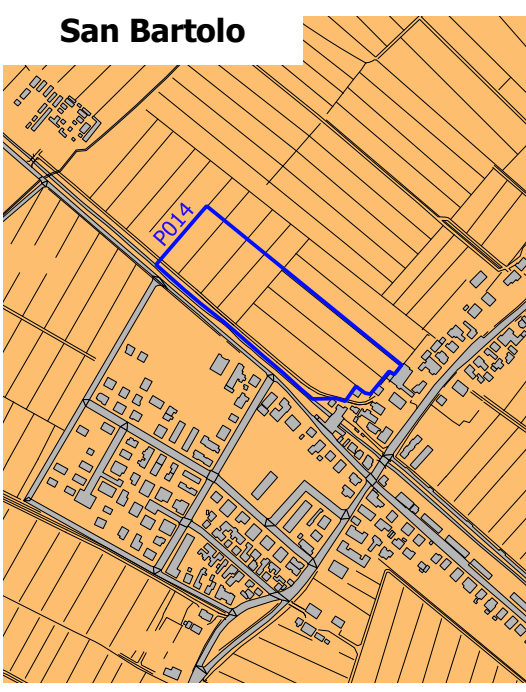
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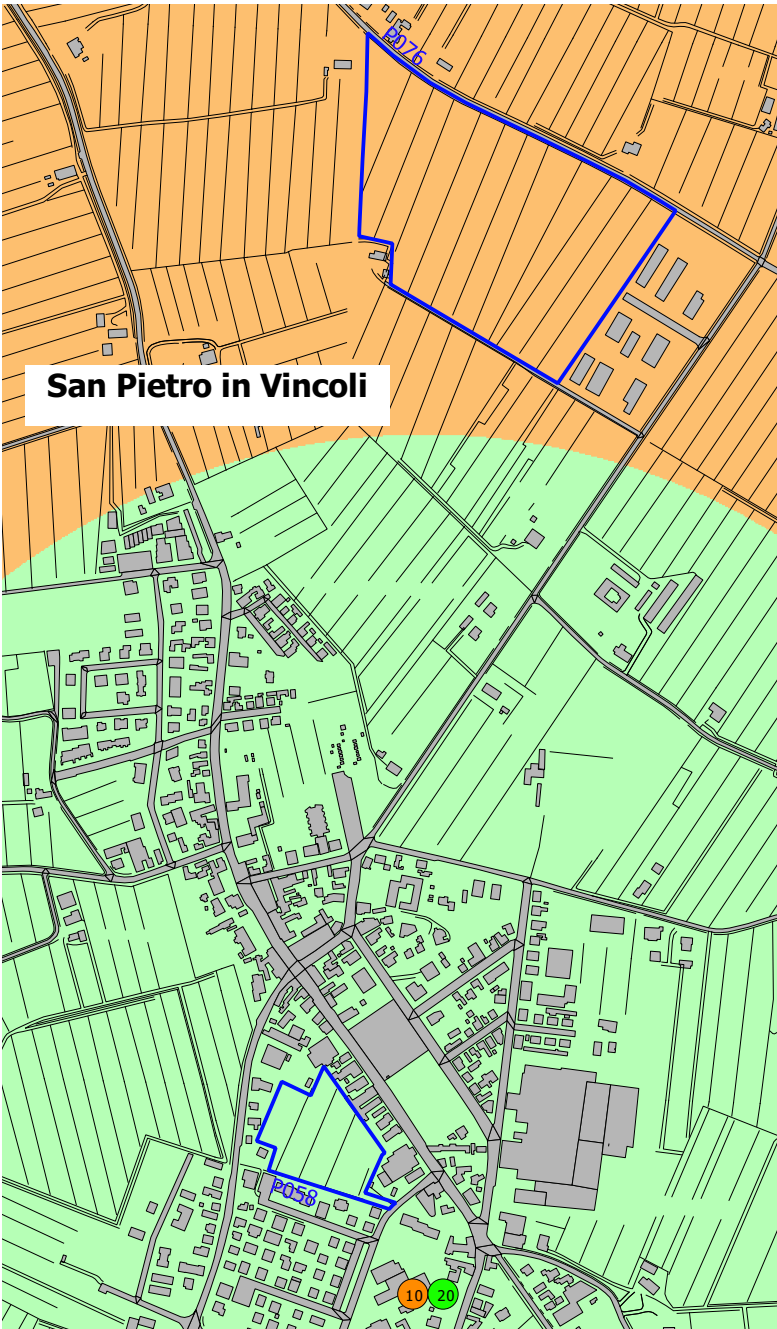
Porto Fuori



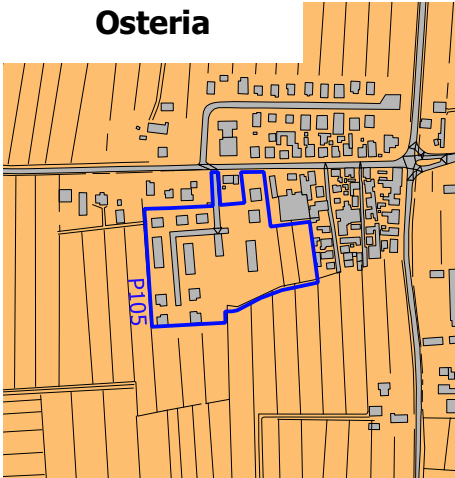
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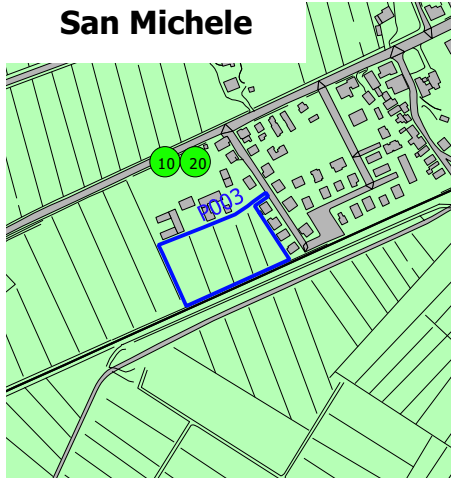
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Osteria



San Michele



San Zaccaria

