

Mapping Freetown's water network using OSM data

Lightning talk

Sige

Alexandre Duclaux,
July, 29th 2018



About us

Sige

Mapping
& Virtual Reality

- Based in Rabat, Morocco
- Since 2012
- 6 people
- International team and customers

www.sige.ma

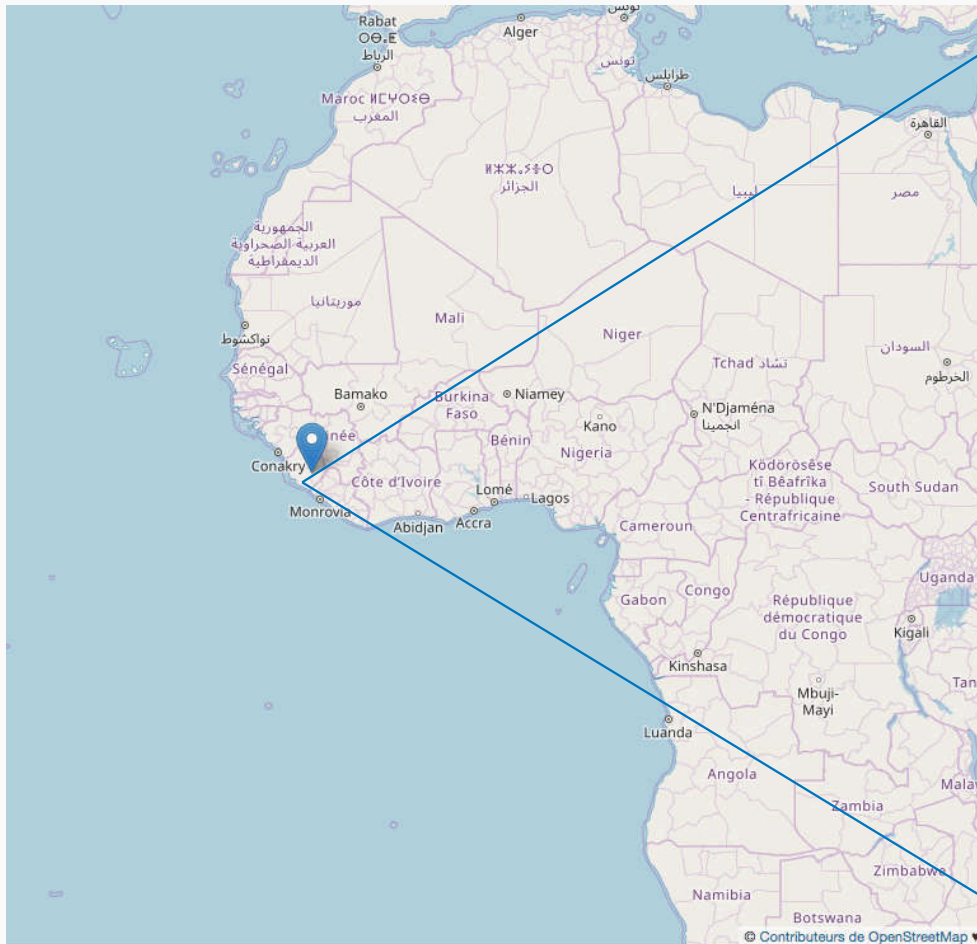


Context

Physical Mapping, Distribution System Condition Assessment and Hydraulic Modeling for Guma Valley Water Company (GVWC)



Context



Context



Mission

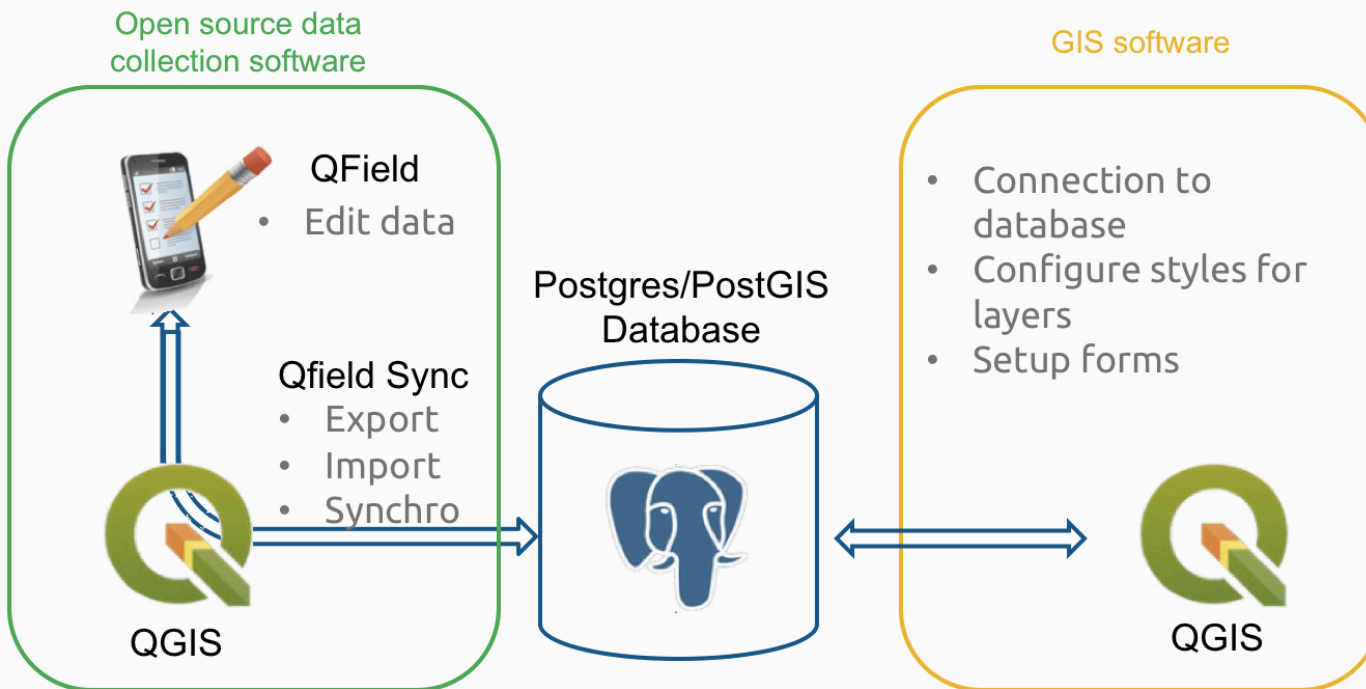
Mapping

- >100mm pipes
- All Network components
- <100mm and spaghetti pipes as Offtake points
- Encroaching structures



Means

100% Opensource software architecture

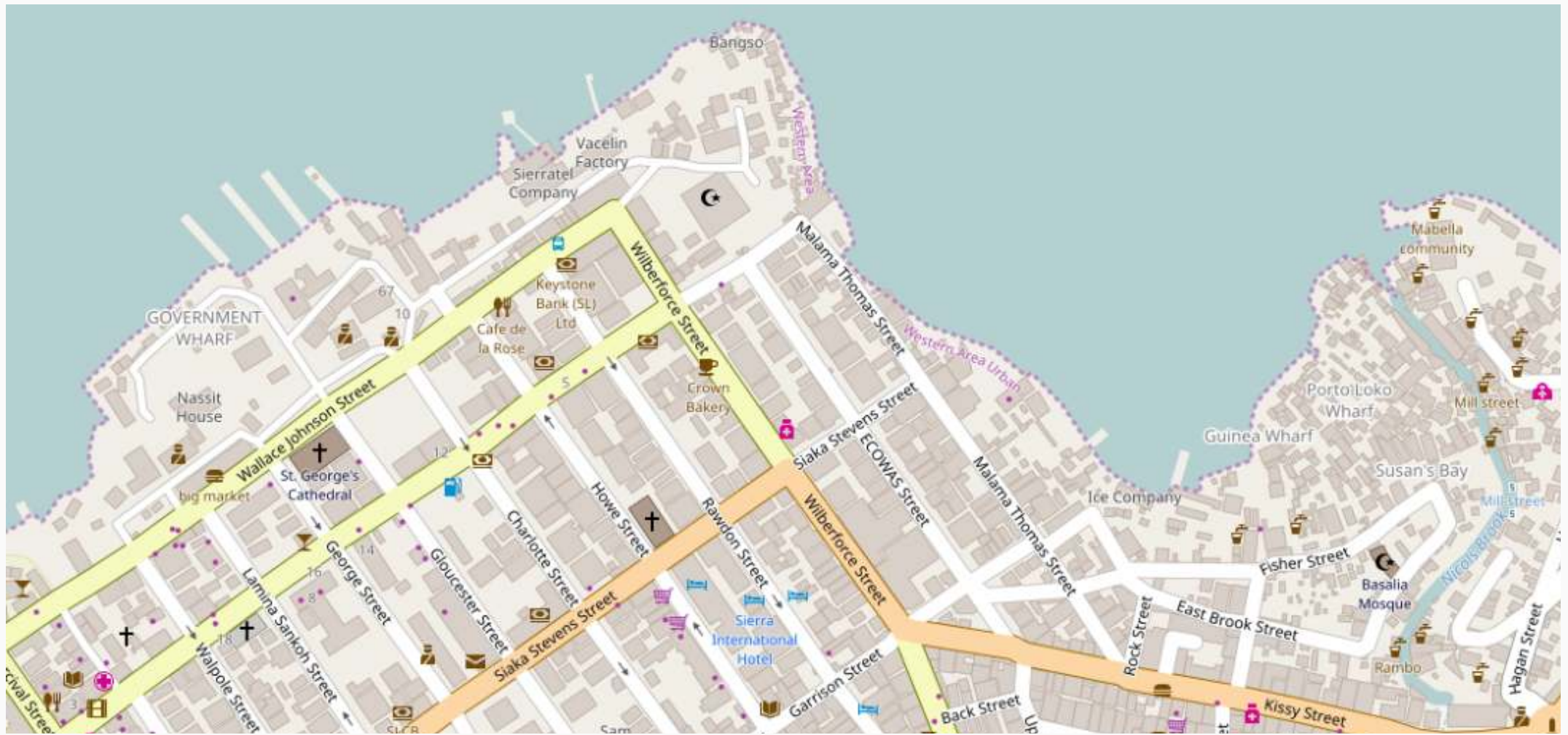


Up to 11 mappers at the same time

Superior accuracy GNSS devices



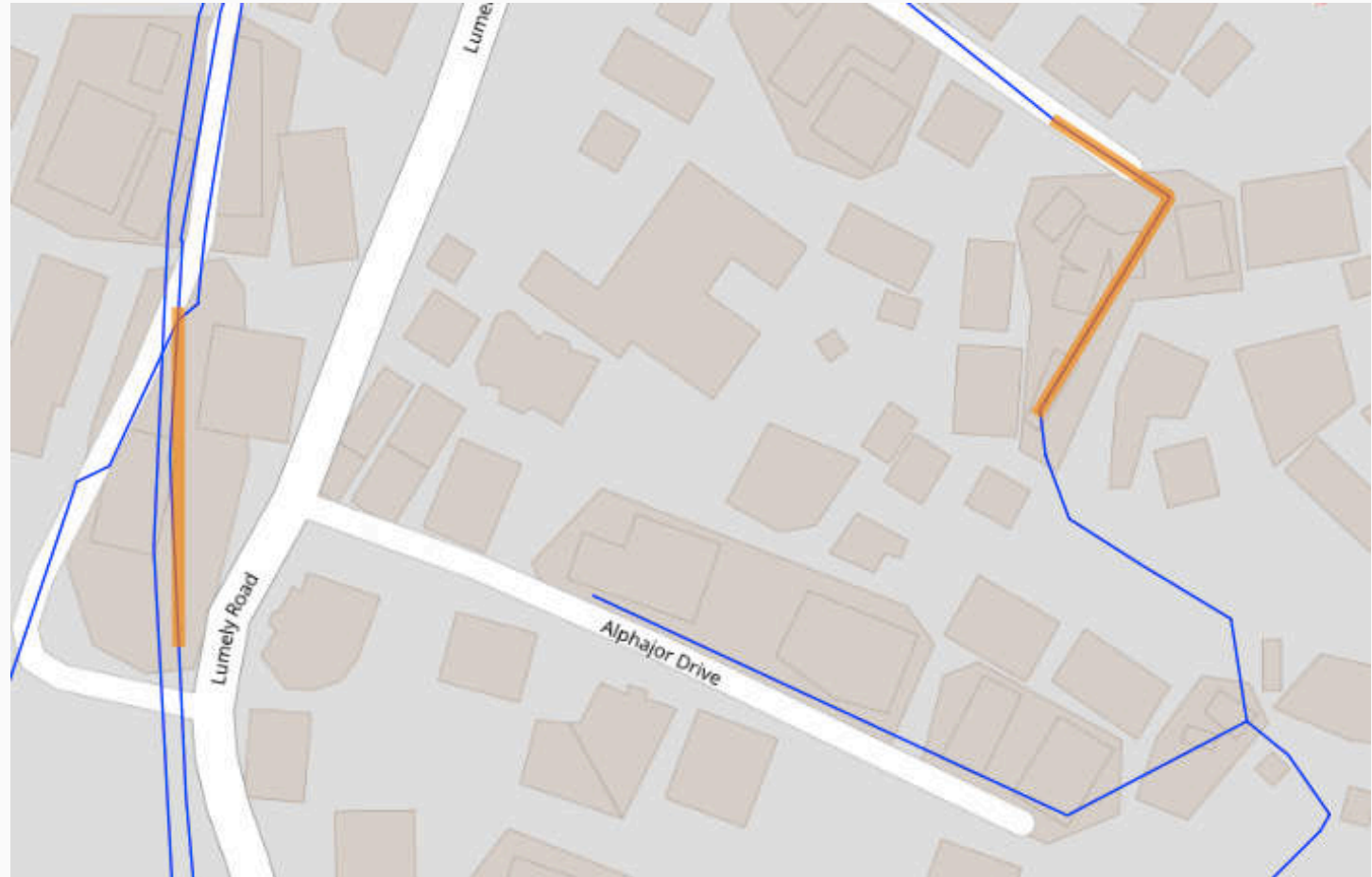
Using Openstreetmap data



Using Openstreetmap data

To map encroaching structures from :

- Mapped encroachments
- Crossing pipe VS OSM entities



Using Openstreetmap data

OSM data to be improved



Bing © 2018 Microsoft Corporation, © 2018 DigitalGlobe, ©CNES (2018) Distribution Airbus DS

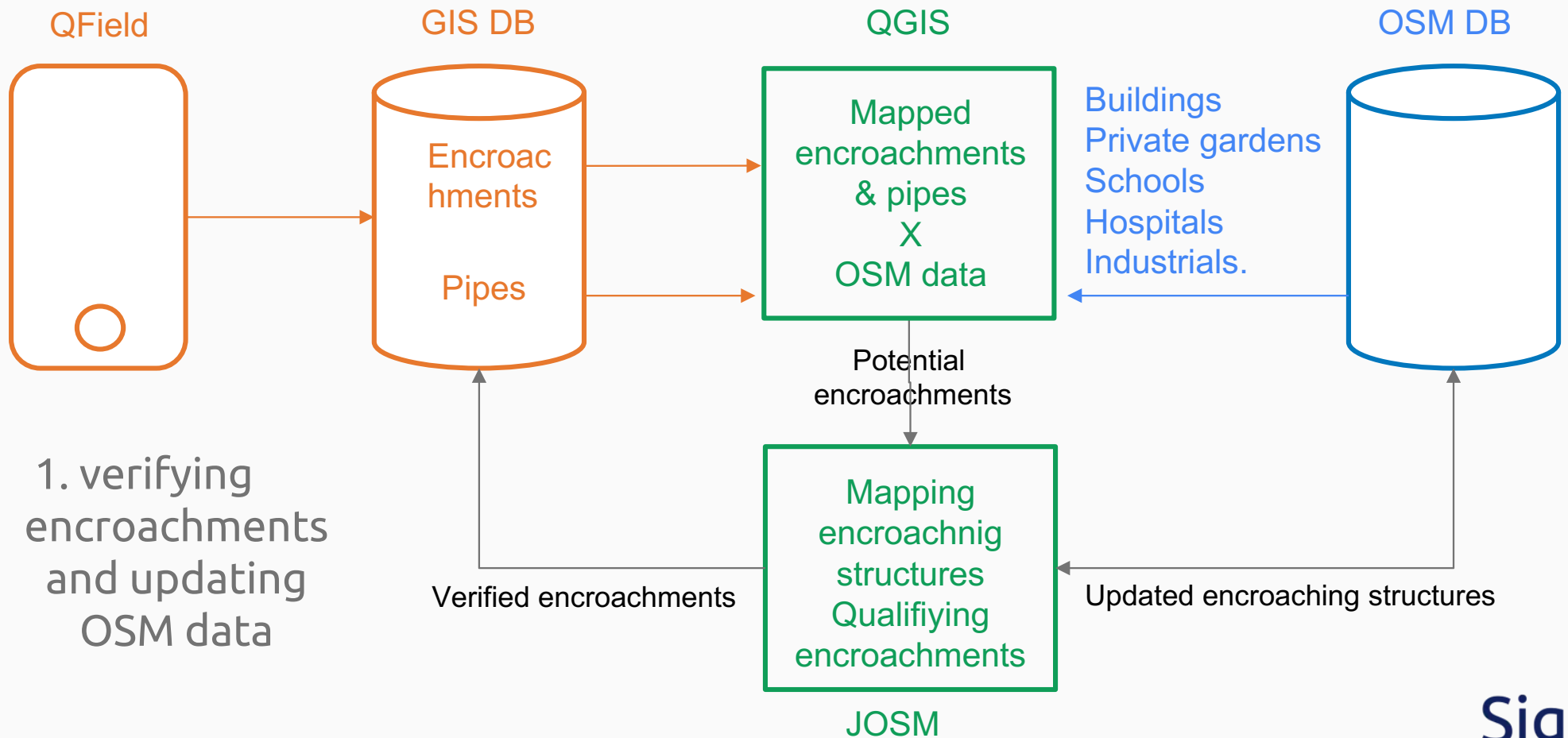
Using Openstreetmap data



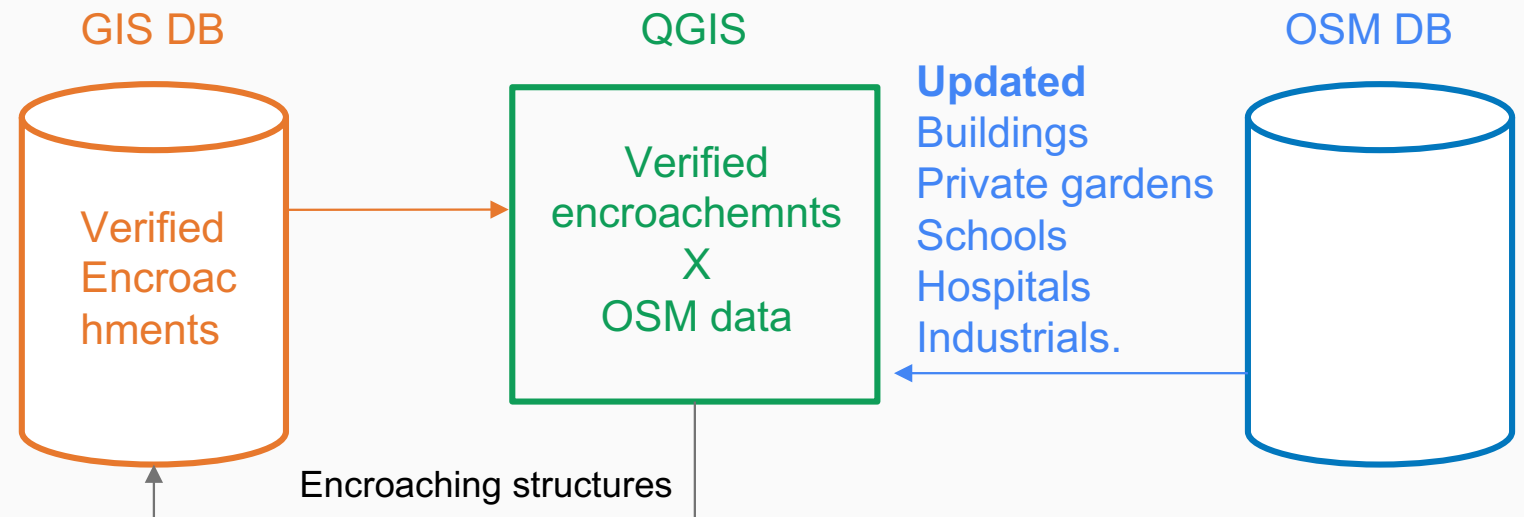
Hired 2 youth mappers



Using Openstreetmap data



Using Openstreetmap data



2. Import encroaching structures to the GIS database

Using Openstreetmap data

Youth mappers :

- Jacob farna
- Joseph Sorieson
Kamara

Trained on JOSM

Created buidings :

6602

Modified buildings :

2173

Retrieved encroaching
structures : **3847**



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Thank you for
your attention !

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