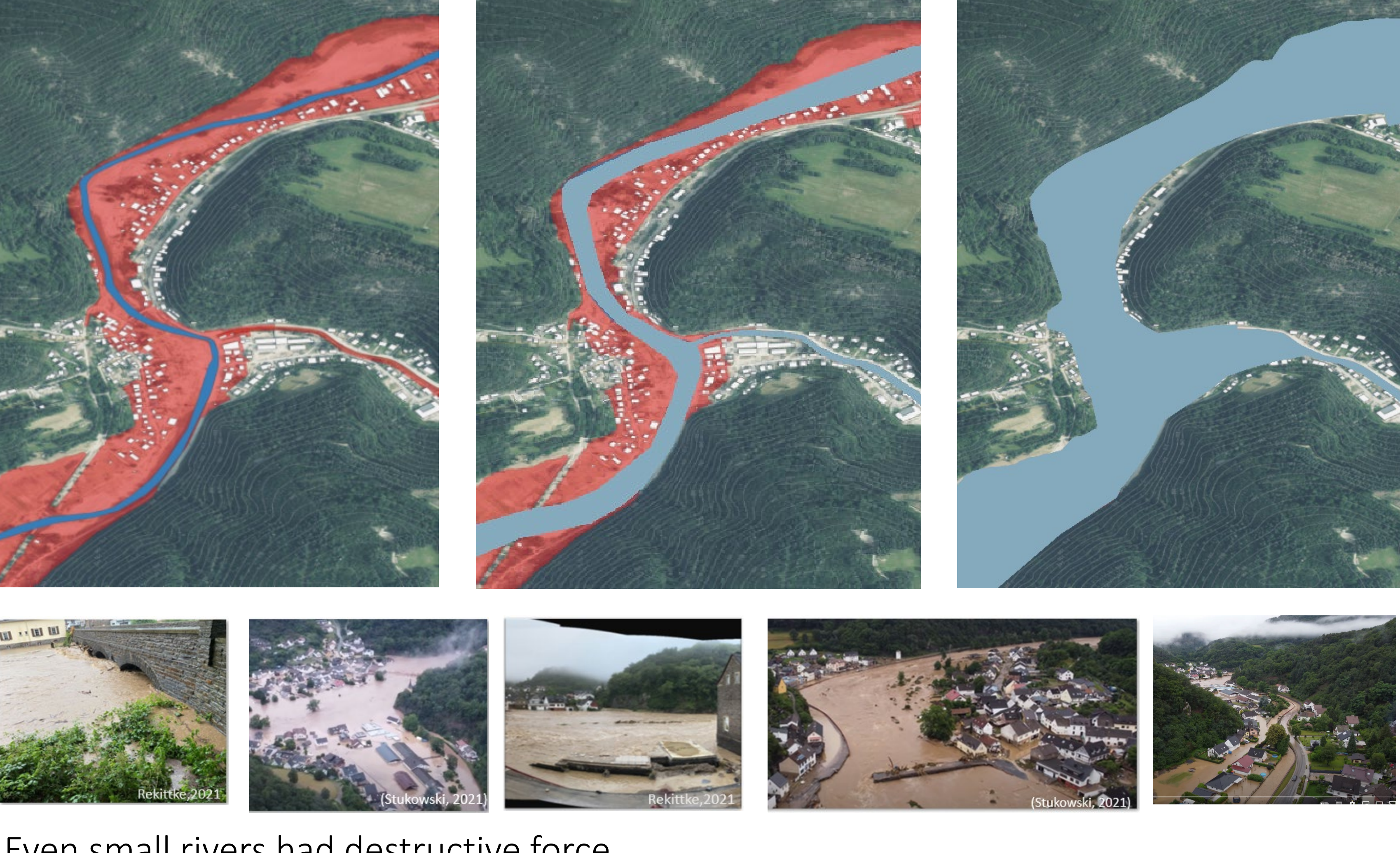


What happened?

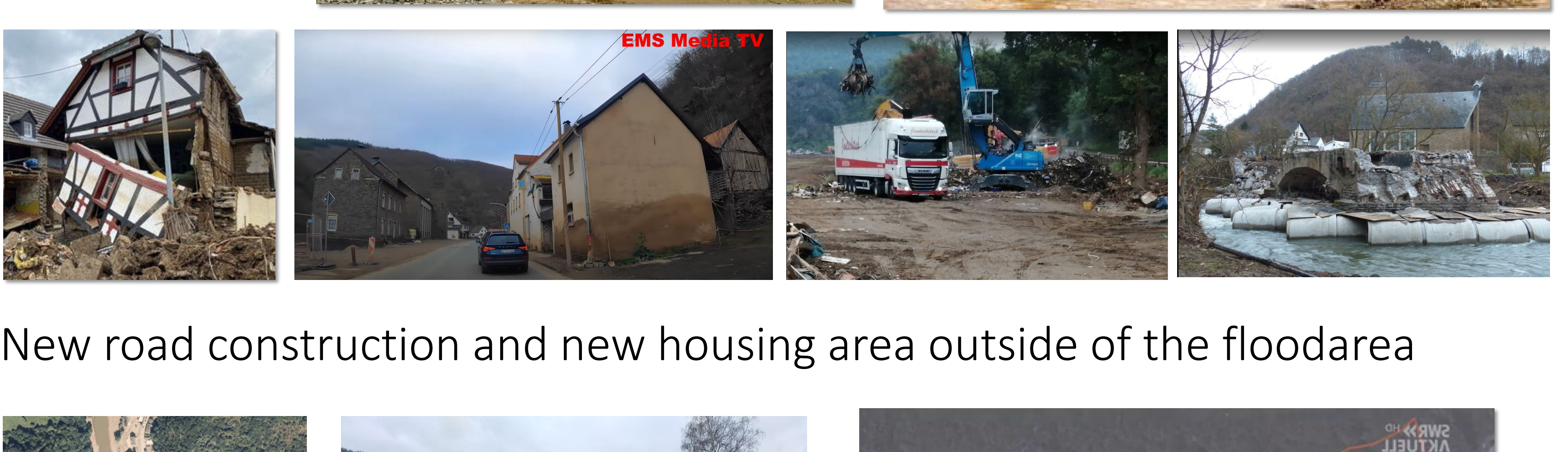


Even small rivers had destructive force



What happens?

Cleanup and quick fixes all over the valley.



New road construction and new housing area outside of the floodarea



What should happen?

Design idea:

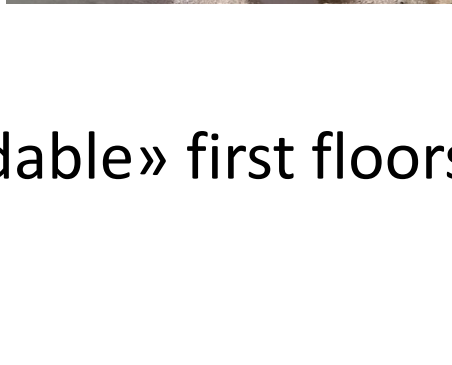
Leaving the Villages mostly unchanged, but change the spaces between.

- Space for the river to expand
- Floodable space during heavy rain
 - Terraces acting as multi level floodplains

Infrastructure and houses:

Outwashing was one of the big reasons why roads collapsed during and after the flood, to prevent this the plan is to use a combination of:

- Plants
- Steps (terracing)
- «Solid wall»



River:

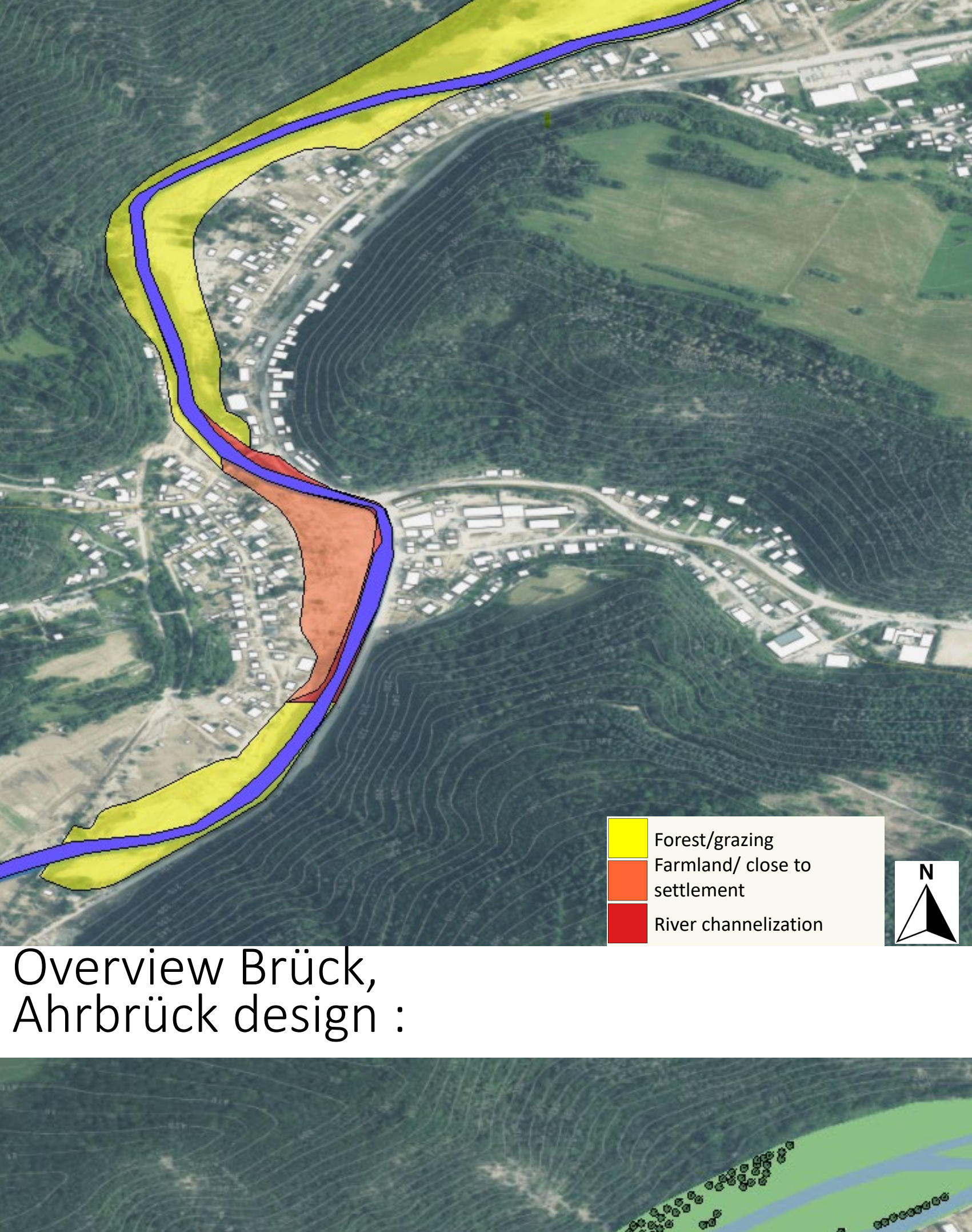
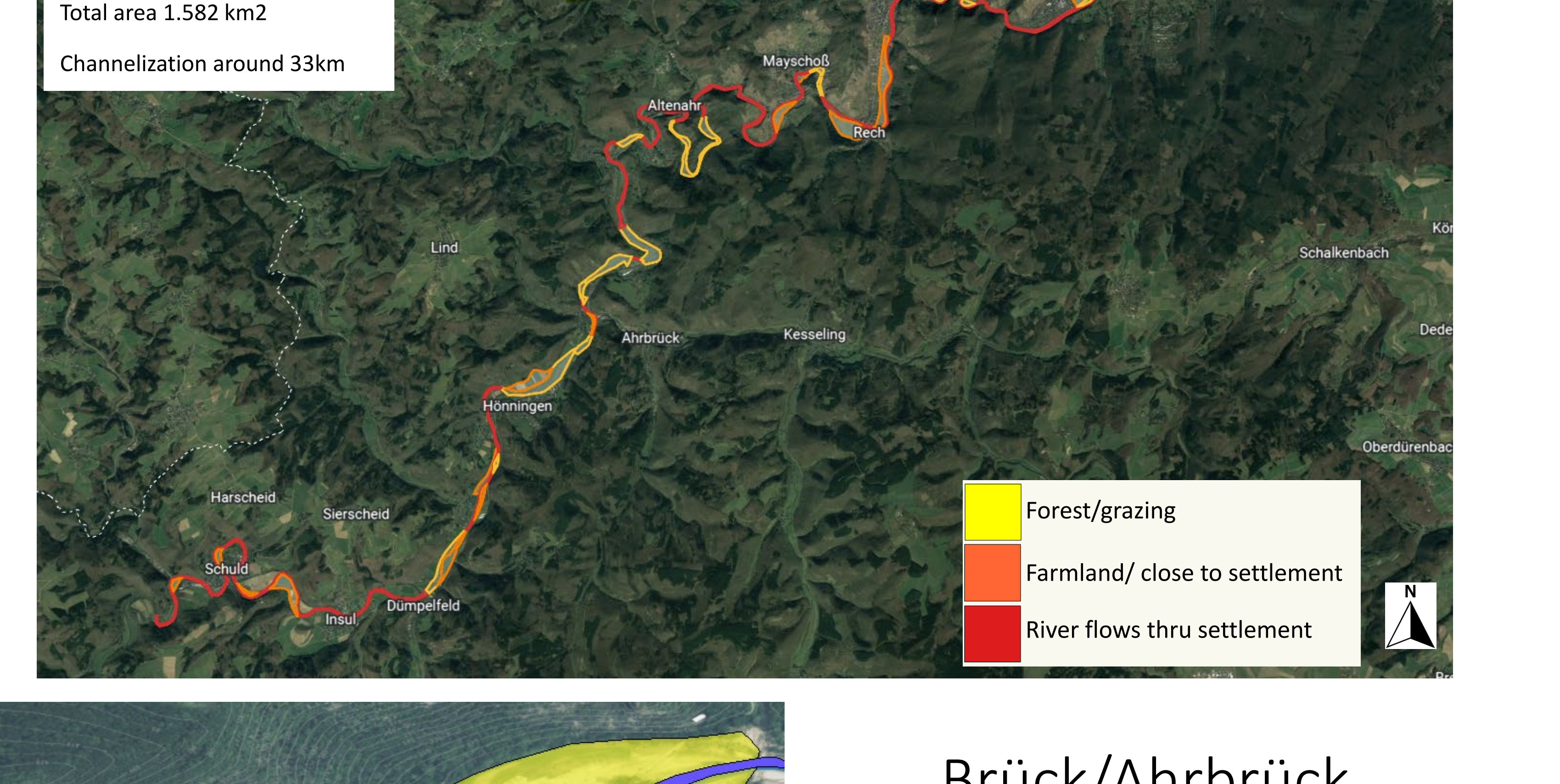
Establish a new wider and deeper riverbed

Establish a “floodplain” thru the whole valley. That optimizes the spaces between the villages leaving the villages as «normal» as possible

In areas where the river can't get more space:

Deepen the riverbed and channelize to maximize flow speed.

Mapping of suitable areas to expend the riverbed:



Brück/Ahrbrück

Two spacious areas around Ahrbrück can be used to give space to the river (Marked yellow)

In Brück there is some space where the river potentially could get some space. (Marked orange)

Channelization is beneficial to bypass housing area. (Marked red)

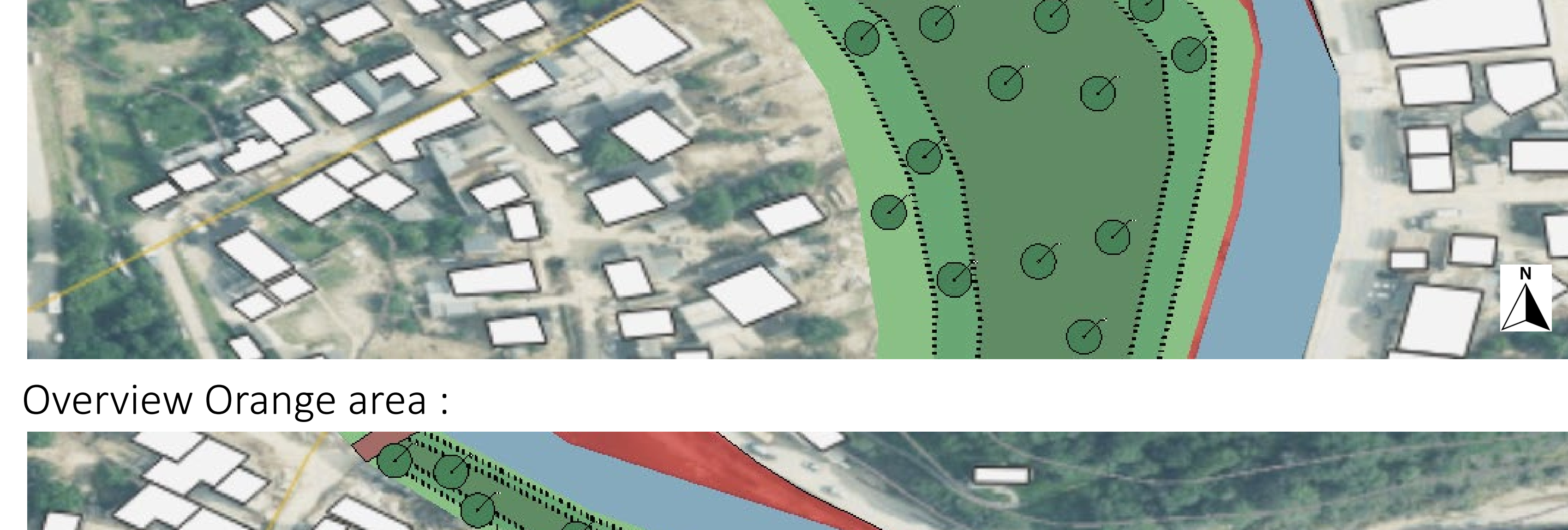
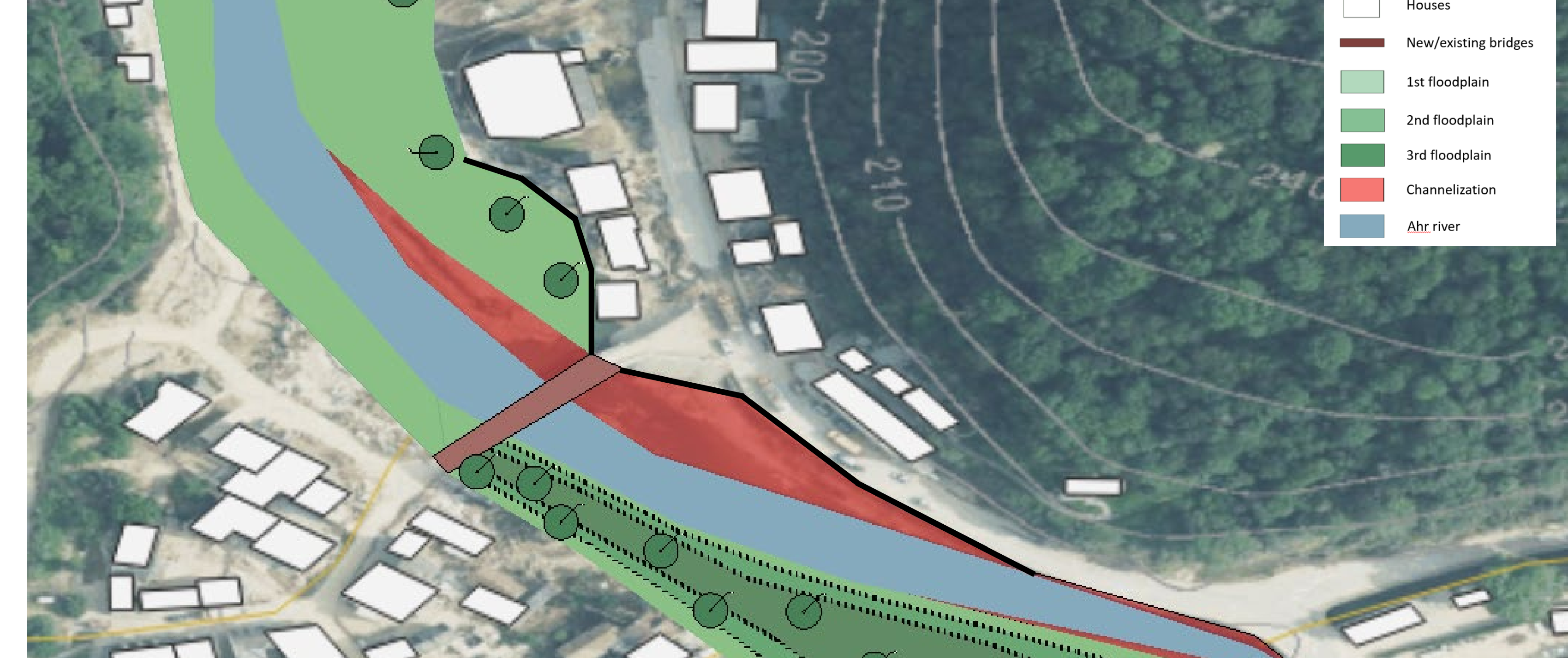
Overview Brück, Ahrbrück design :



Overview yellow area above Brück :



Overview yellow area below Brück :



Principle Section A-A :

