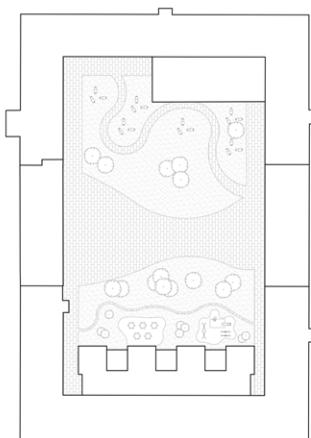
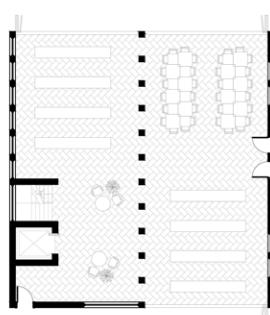
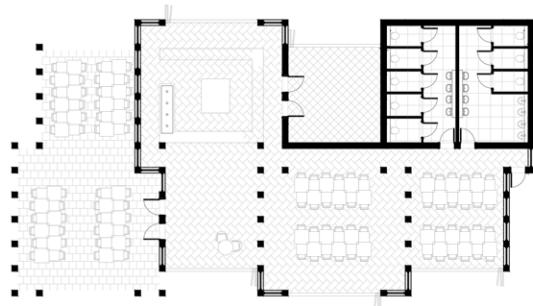
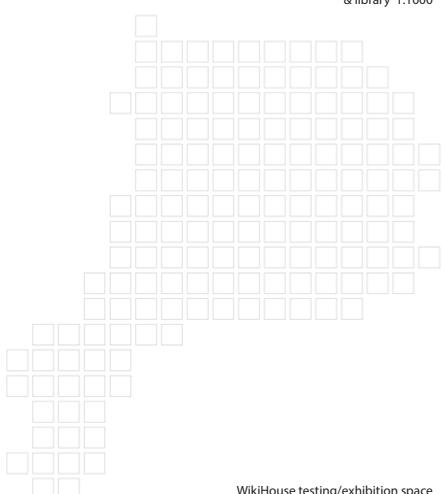
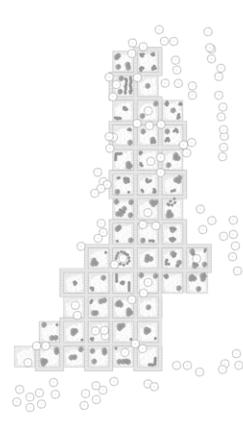




**4**

GP surgery  
1:1000

Sports facilities  
1:1000

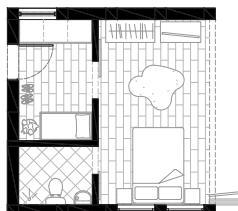
CNC milling sheds  
1:2500

WikiHub, nursery  
& library 1:1000

Communal kitchens  
1:200

Restaurant  
1:200

WikiHouse testing/exhibition space  
1:1000

Allotment area  
1:1000

## Demolition, retrofit and addition of public spaces.

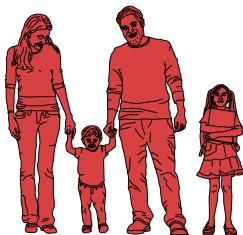
Decide upon the public spaces required for the site based on the existing allotment area just beyond the site. This will offer some food for the restaurant which will be located on site, however will also provide extra outdoor space. In addition to the restaurant communal kitchens will be located throughout the site creating a bridge from the existing infrastructure (which will be retrofitted) to the new through food classes and lessons. Decide upon the public spaces required for the site based on the existing allotment area just beyond the site. This will offer some food for the restaurant which will be located on site, however will also provide extra outdoor space. In addition to the restaurant communal kitchens will be located throughout the site creating a bridge from the existing infrastructure (which will be retrofitted) to the new through food classes and lessons. Decide upon the public spaces required for the site based on the existing allotment area just beyond the site. This will offer some food for the restaurant which will be located on site, however will also provide extra outdoor space. In addition to the restaurant communal kitchens will be located throughout the site creating a bridge from the existing infrastructure (which will be retrofitted) to the new through food classes and lessons.

**Rosie & Joshua Radcliffe**

Rosie, aged 24, is a single mother currently on the waiting list to move from her current social home. York's social housing, currently in high demand, means that both herself and son Joshua, aged 6 months old, are deemed low on the priority waiting list as they already have been allocated a home. Due to parenting stigma, Rosie feels more than often lonely even though she has time available.

Ground Floor Plan  
1:100**Thomas Horne**

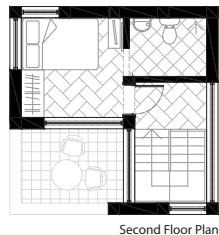
Thomas works as a mortgage broker. Due to long working hours and a commitment to his career he also feels social exclusion. Currently aged 32, he is looking to buy his first home.

Ground Floor Plan  
1:100**The Collins Family**

Mark and Jennifer have been married for 3 years. Aged 41 and 39 they have two children, Mia and Jacob. Mia is currently 7 whilst Jacob is 3 years old. Upon returning to work, Jennifer is finding the stress of part time employment and having two young children incredibly high. Mark has his own mechanical company, fixing cars in York, however, this current renting family financially are struggling.

Ground Floor Plan  
1:100

First Floor Plan 1:100

Second Floor Plan  
1:100**Giacomo Riviera & Maria Lenton**

Giacomo, aged 27, lives with his girlfriend Maria, aged 26. Maria has been born in York, has lived there her whole life and as such has social connections. However, as a mature part time veterinarian student and in a placement role, she has barely any time for social interaction. Similarly, Giacomo is a computer analyst, just starting his own technological company and as such struggles to balance the work and leisure aspects to life.

Ground Floor Plan  
1:100

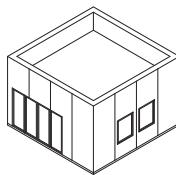
First Floor Plan 1:100

**Parth Talavi**

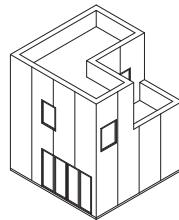
Parth is an international art student at the University of York. He has travelled from India to study. Currently, aged 19, he struggles to socially connect with the other students on his course.

Ground Floor Plan  
1:100**Patricia Lopez**

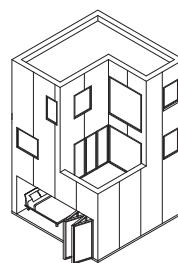
Patricia, originally from southern Spain, has been a British citizen for over 35 years. Now aged 82 and with daily news of Brexit, Patricia feels ever increasing feelings of vulnerability, in comparison to her retirement home residents. These feelings and her actual disability is leading to almost complete social isolation, which is detrimental to Patricia's Health.

Ground Floor Plan  
1:100

1 Storey Isometric View



2 Storey Isometric View



3 Storey Isometric View

## Design a dwelling using the WikiHouse construction method.

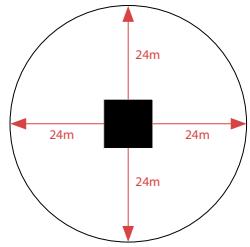
Once the demographic of the local area has been discovered, design individual units based upon key characters and findings. The private space seeks to test the 'Technical housing standards', arguing that by stripping back a dwelling to its simplest form of a place to sleep and having one extra function tailored to a person's liking, the unit can reduce the total space described by the 'Technical housing standards'. The dwelling's social spaces: the kitchen, living room, dining room and play space will now become communal areas throughout

the project as a way of integrating the local community and forcing interaction with neighbours, whilst still offering enough private space to be isolated if the person decides.

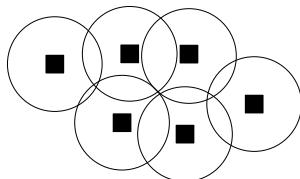


## 6

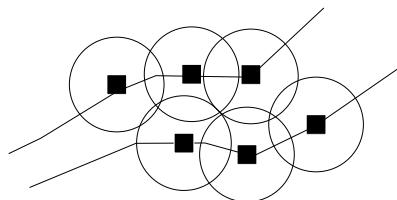
HIAB Concept



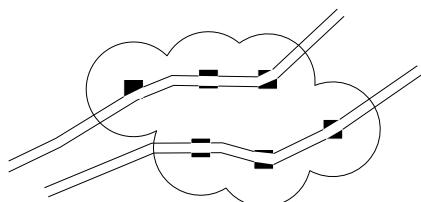
Start with a 10mx10m HIAB square with a 24m reach



Place together to cover build area, keeping the square vacant



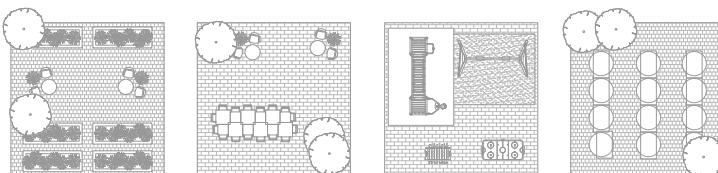
Allow one route in and one route out as HIAB cannot turn in this space



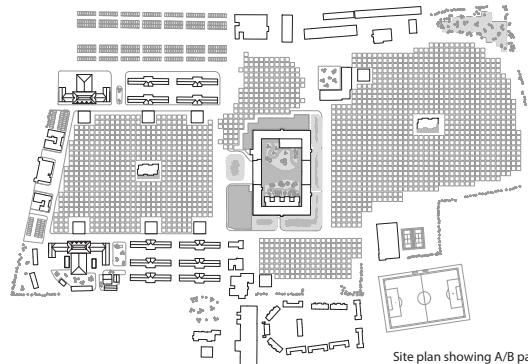
Allow one route in and one route out as HIAB cannot turn in this space



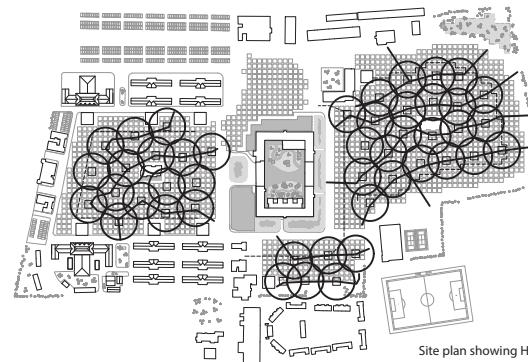
Perspective of community HIAB build



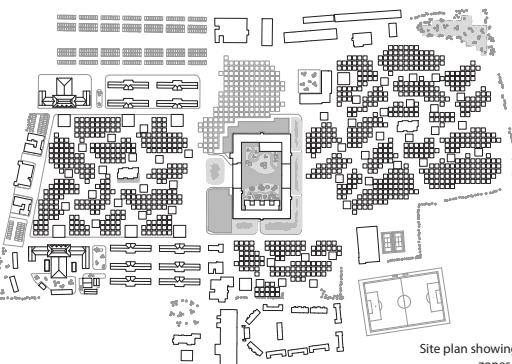
1:200 Examples of HIAB zone post need for the third storey build



Site plan showing A/B pattern overlay on site



Site plan showing HIAB zone and transportation routes 1:5000



Site plan showing product of HIAB zones and routes 1:5000

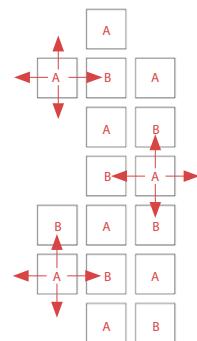
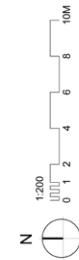
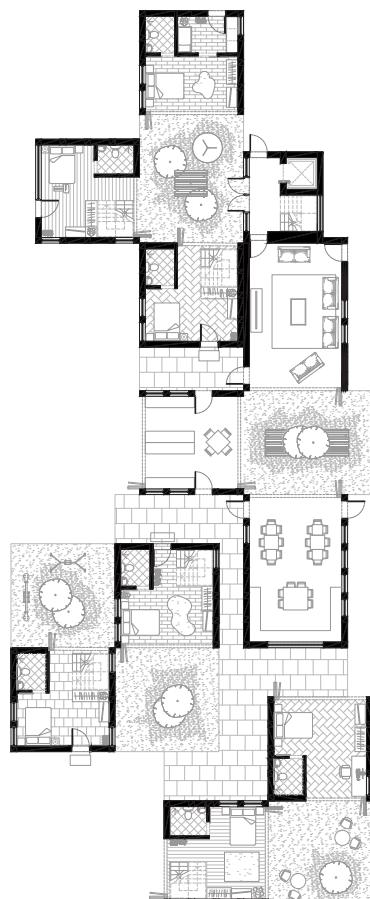
## Building logistics.

The first step to breaking the rigorous A/B grid is to calculate how the WikiHouse expansion kit will be logistically buildable. This is done via introducing HIABs to the project. The HIAB zones are 10m x 10m and allow for a maximum reach of 24m carrying a maximum of 750kg. The average structural plywood sheet weighs approximately 27.5kg. To build a singular frame, which will be transported to the roof when expanding you will need 12 sheets of plywood cut and assembled. This totaling 300kg allowing for the HIAB to achieve its maximum reach.

The concept is to place HIAB zone with one another to create a buildable area. Once they have been located on site, a road must be placed to allow an entrance and an exit point from zone to zone, allowing the HIAB to return to the industrial location on site post build. As the 10m x 10m zones do not allow for turning, there is a singular entrance point and a singular exit point. When the zones are not in operation as construction for

each cluster/zone will take place at different times, the zones can become more than just a vacant space on the site. Given are four examples of changeable zones: a park, a dining area, a play area and a market area.

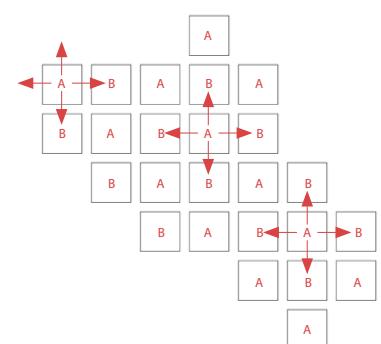
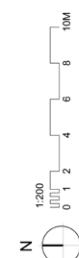
The finished product of introducing the HIAB roads are shown in the final 1:5000 site plan leaving clusters of varying sizes: small, medium and large.



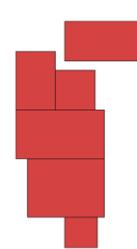
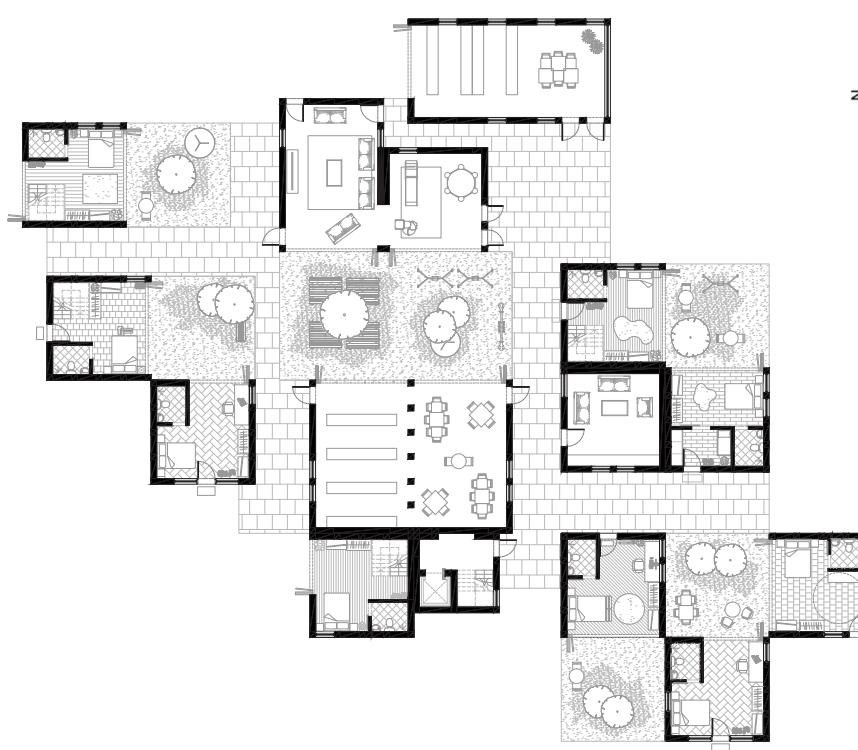
Cluster Starting Point

1:200 Small Cluster Ground Floor Plan

Add shared Space



Cluster Starting Point

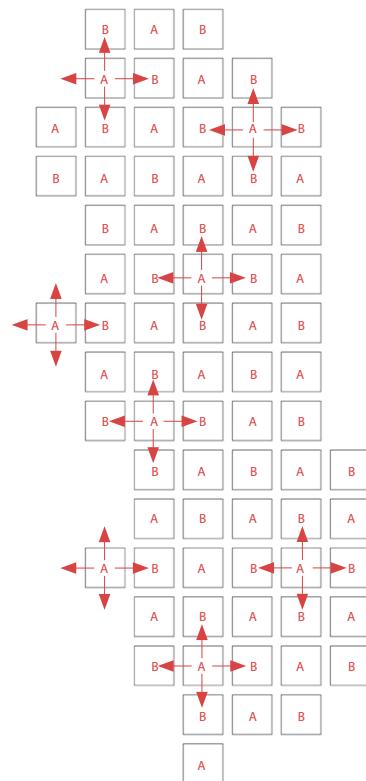
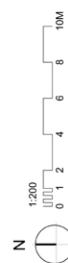
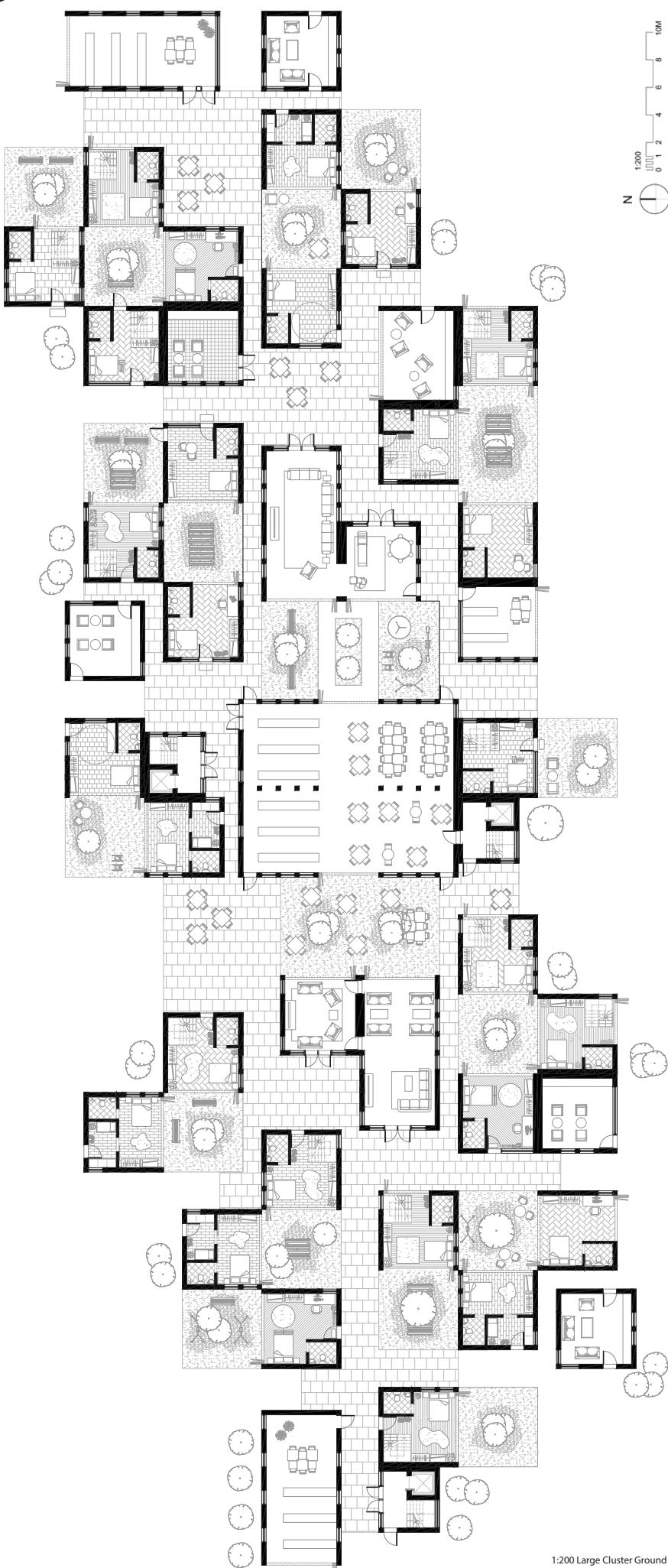


1:200 Medium Cluster Ground Floor Plan

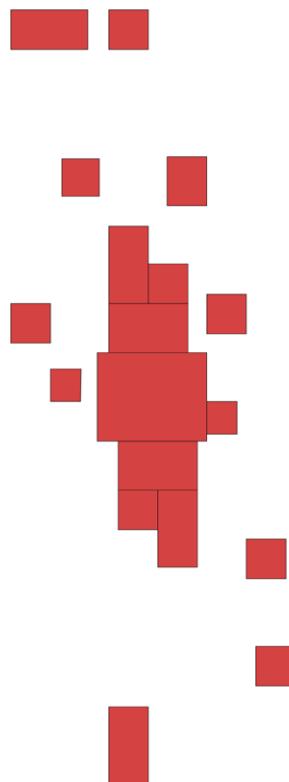
Add shared Space



8



Cluster Starting Point



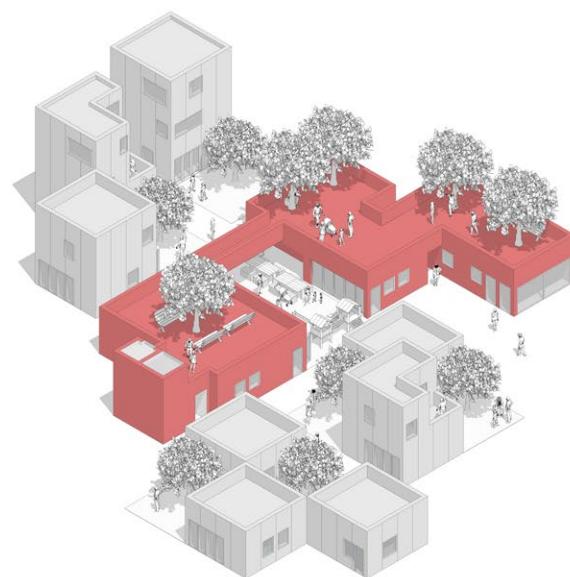
Add shared Space

## Breaking the grid.

Once the HIA&B zones have been 'breath' and creates a sense of space like introduced the grid now forms clusters. That of the most desired place in York, the This rigid cluster grid is broken down by medieval street. This feeling of place and adding communal space depending on a sense of space is something the project the cluster size. The examples of small, has tried to capture medium and large start in a simple A & B pattern. Then the communal space is introduced, and the dwellings shift towards a shared garden space. This allows for the in-between spaces to



Isometric View of Small Cluster

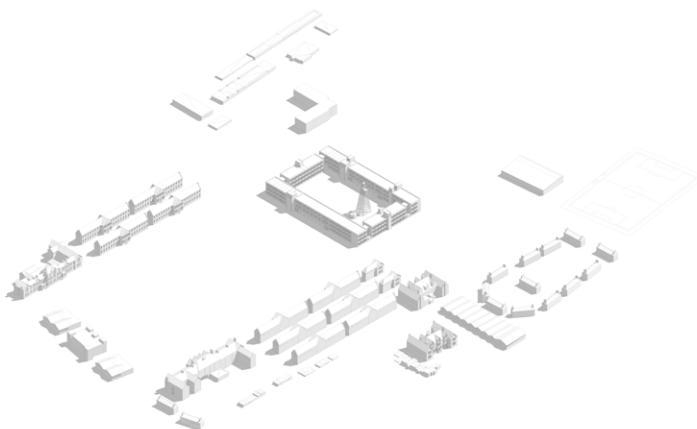


Isometric View of Small Cluster

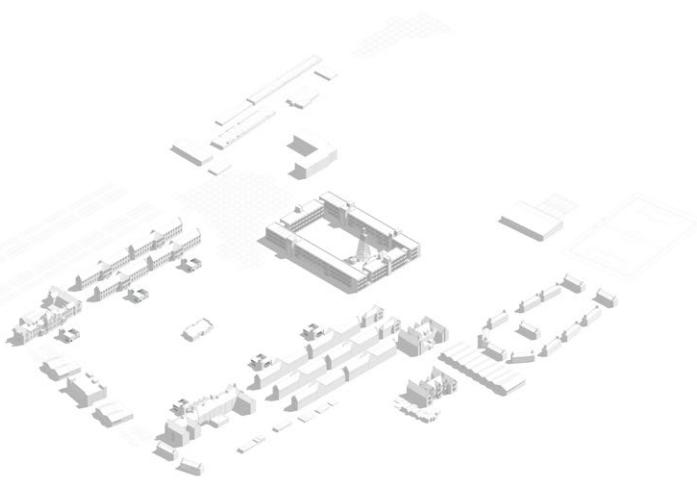


Isometric View of Medium Cluster

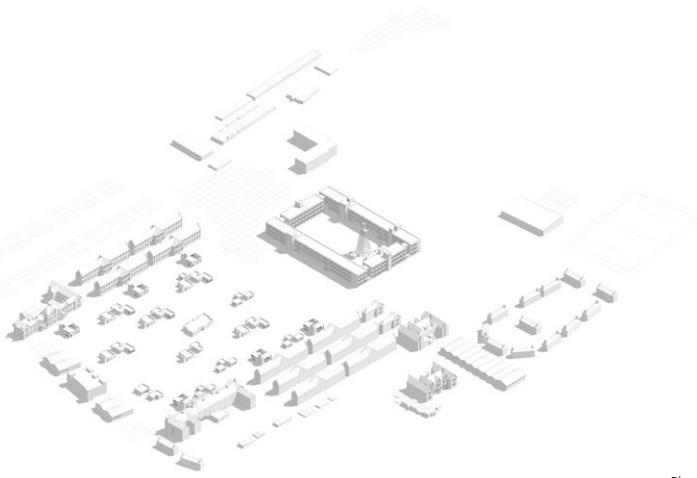
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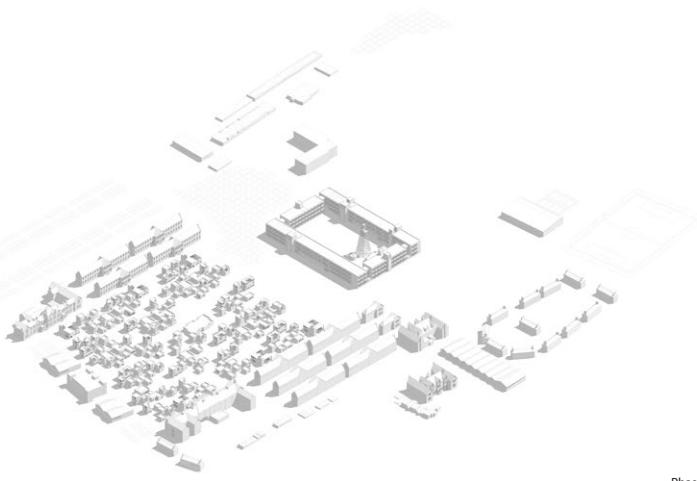
Phase 1



Phase 2



Phase 3

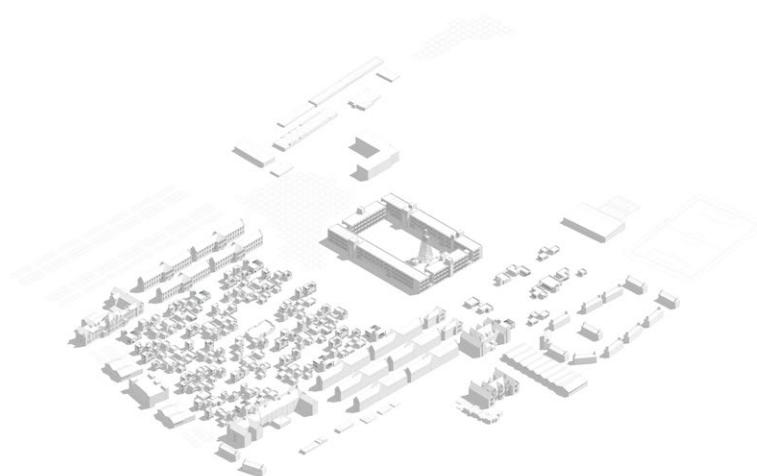


Phase 4

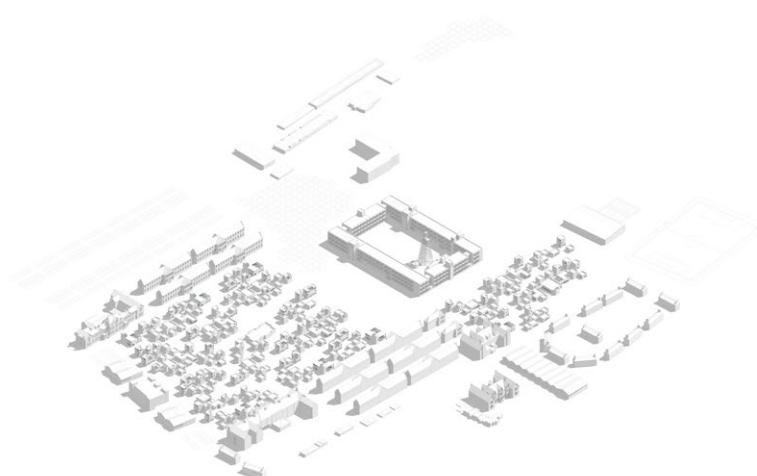
## Phasing 1-4

Phases 1 – 4 highlight a clear structure when developing upon the Imphal Barracks site. Phase 1 gives way to the first set of people due to inhabit the site. The existing listed infrastructure will provide temporary accommodation for the first new set of inhabitants. This phase will also convert the old administration hub into the WikiHub for the site and convert the industrial units into cnc milling factories. Phase 2 will be the first build on the site and the aim is to first build the public spaces to the west of the site, these being: the library (retrofit), the school and nursery (retrofit and addition), the parking spaces, allotment area, Wiki exhibition space, the restaurant, the sports center (retrofit), the GP surgery (retrofit) and the communal kitchens to the west of the site. Future residents of this area whom <sup>cannot yet</sup> temporary accommodation should sign up online and

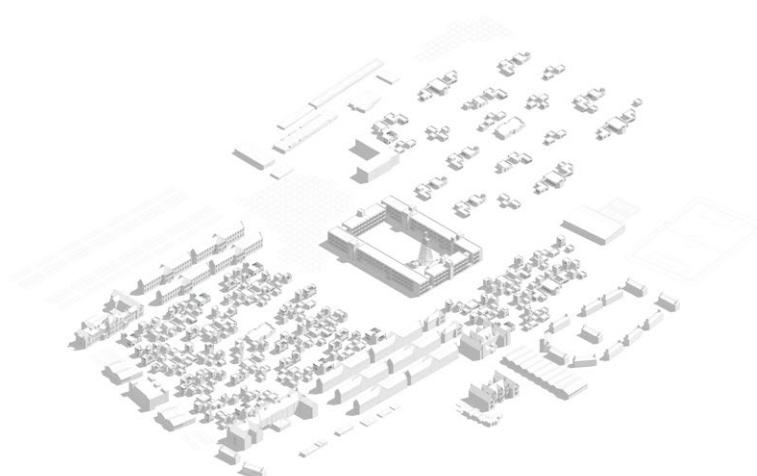
come help when they can to reduce waiting time on waiting lists in the future. Phase 3 introduces the semi-public spaces to the site. These will be the main hub of the private clusters. Phase 4 highlights the first private spaces being added to the site and finishes the initial west area.



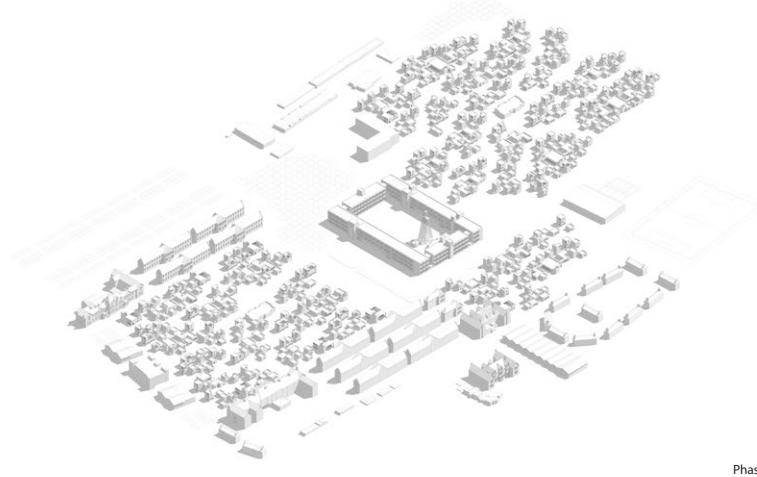
Phase 5



Phase 6



Phase 7



Phase 8

## Phasing 5-8

Phase 5, located to the southern area of the site, introduces an area primarily consisting of family units. The program for the existing Imphal Barracks accommodates for singles to live within the site, however just beyond the back gate are col de sac areas for serving members and officers. In keeping with the surrounding context and being closely located to the newly introduced school, this area provides for the family typologies identified within the demographics and characters. Phase 5 will introduce the shared cores once more, followed by phase 6 the individual dwellings. Phase 7 looks towards the east area of the site. The allotment area being situated towards the north east, linking to some of York's allotment areas and the park, will house more elderly. Although the percentage of elderly in this area will be greater, the project will still integrate people from all demographics within the cluster units. This phase again delivers the semi-public spaces prior to phase 8, the private.



