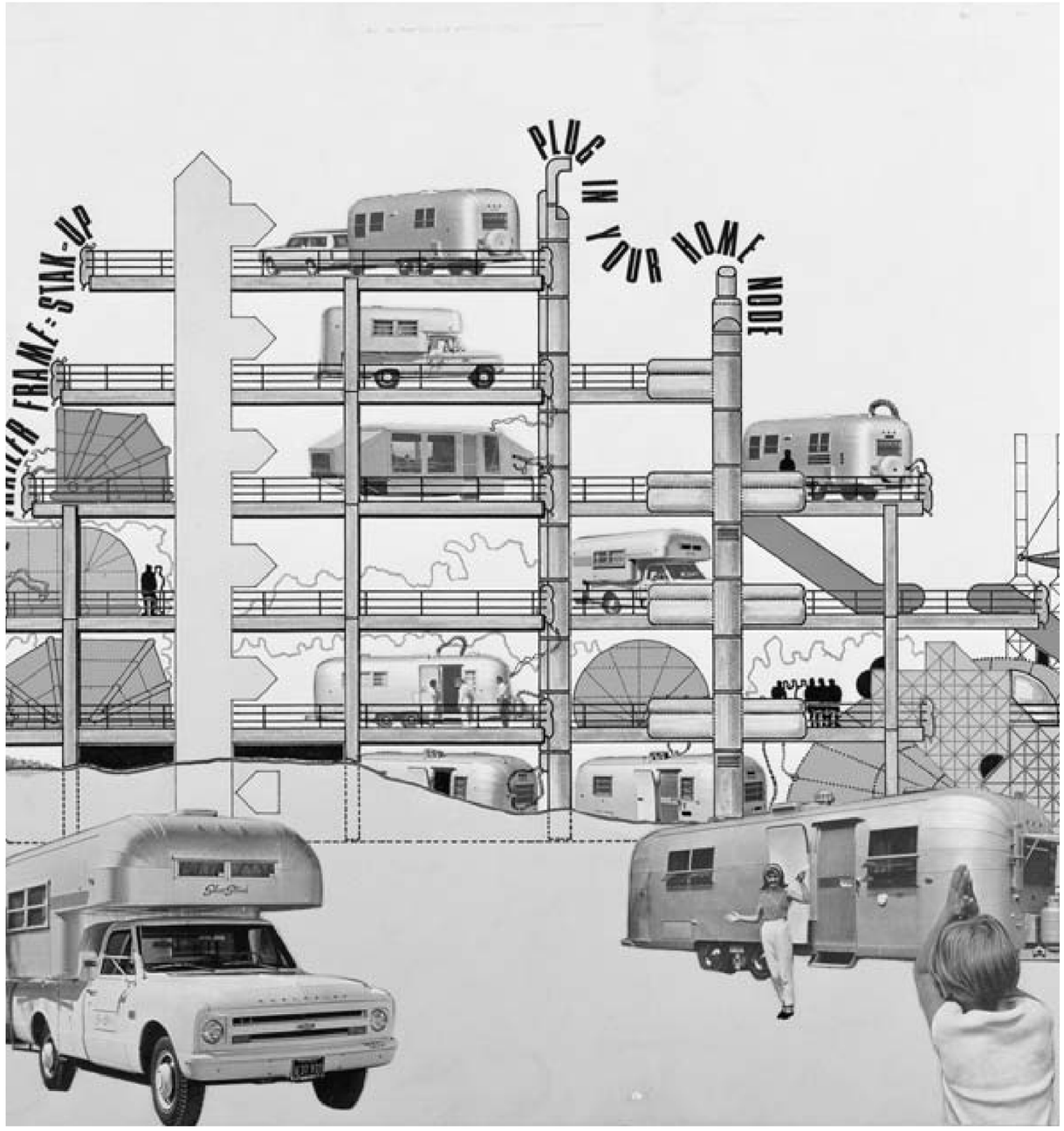


PLUG IN(fill)

reimagining the role of mobile housing

Suburban sprawl creates fragmented cities through growth at the fringe. How can alternative housing stratagies be implemented in order to counteract the commuter based lifestyle of suburbia?

2000 | 1,337,000 people
Google Earth

2002 | 1,414,000 people
Google Earth

2004 | 1,496,000 people
Google Earth

2006 | 1,582,000 people
Google Earth

2008 | 1,674,000 people
Google Earth

2010 | 1,771,000 people
Google Earth

2012 | 1,873,000 people
Google Earth

2014 | 1,981,000 people
Google Earth

2016 | 2,096,000 people
city growth | 2002 - 2022

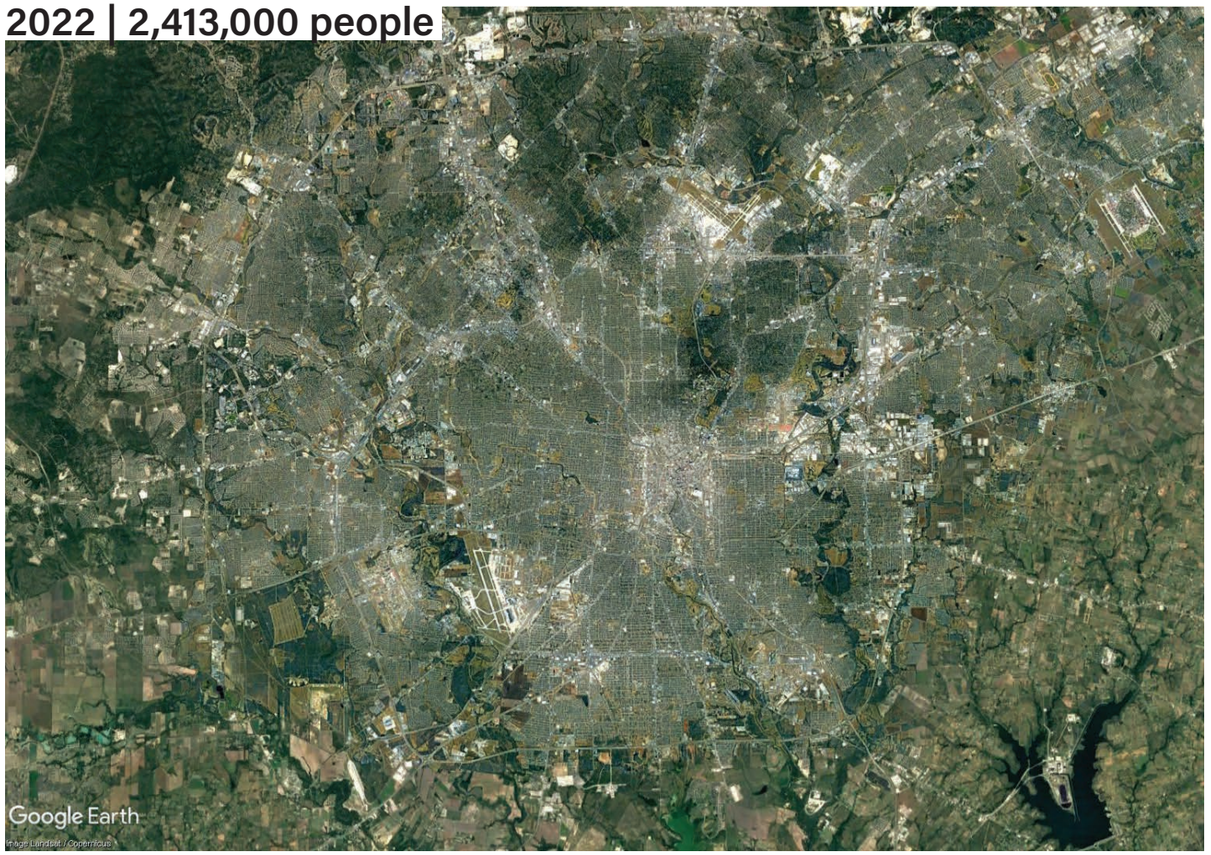
2018 | 2,217,000 people
Google Earth

2020 | 2,320,000 people
Google Earth

2022 | 2,413,000 people
Google Earth

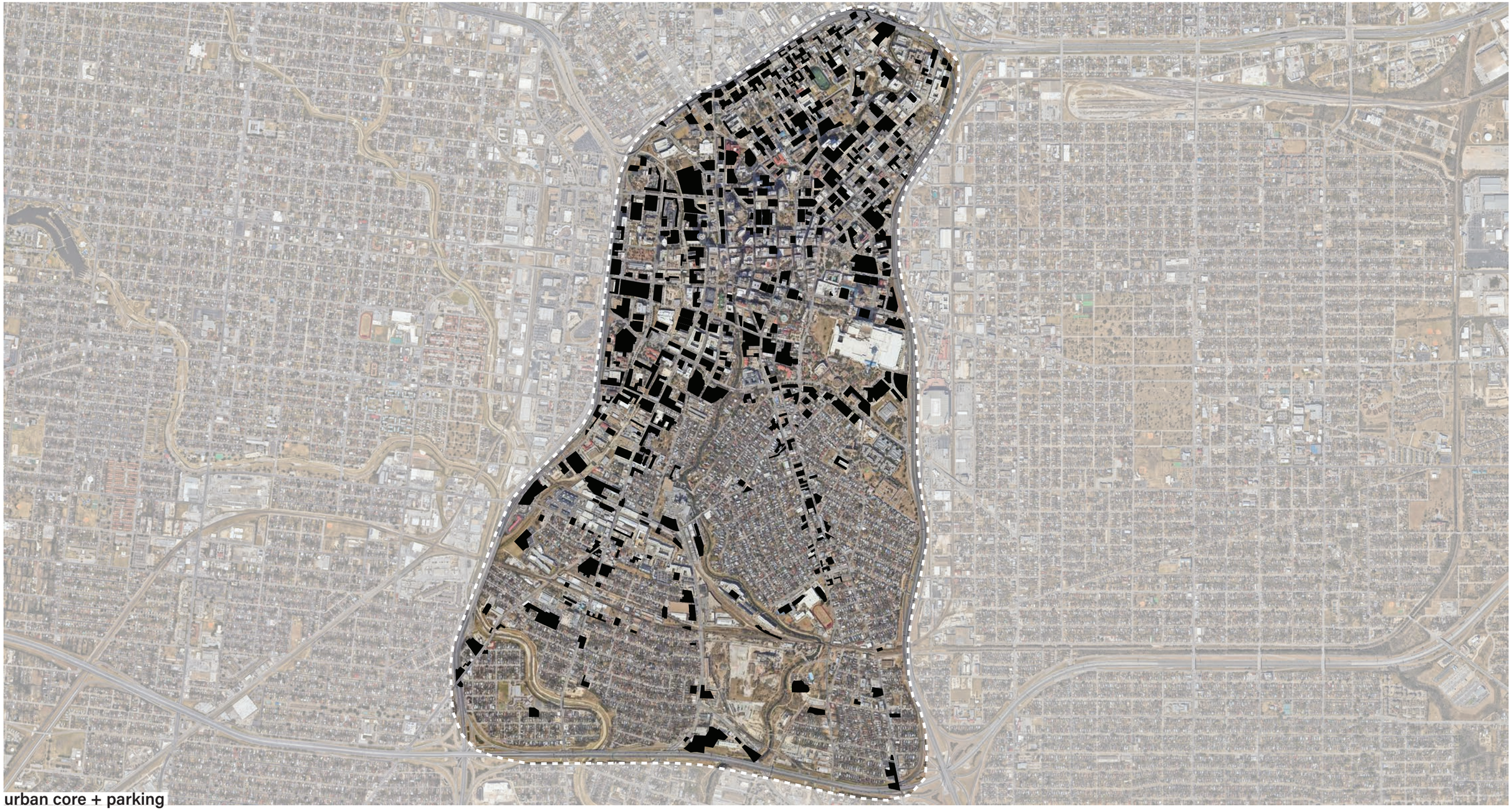
2000 | 1,337,000 people

2022 | 2,413,000 people



city growth | 2002 + 2022

urban core



urban core + parking

surface parking

parking structure

urban core + parking

01 surface parking (lot)

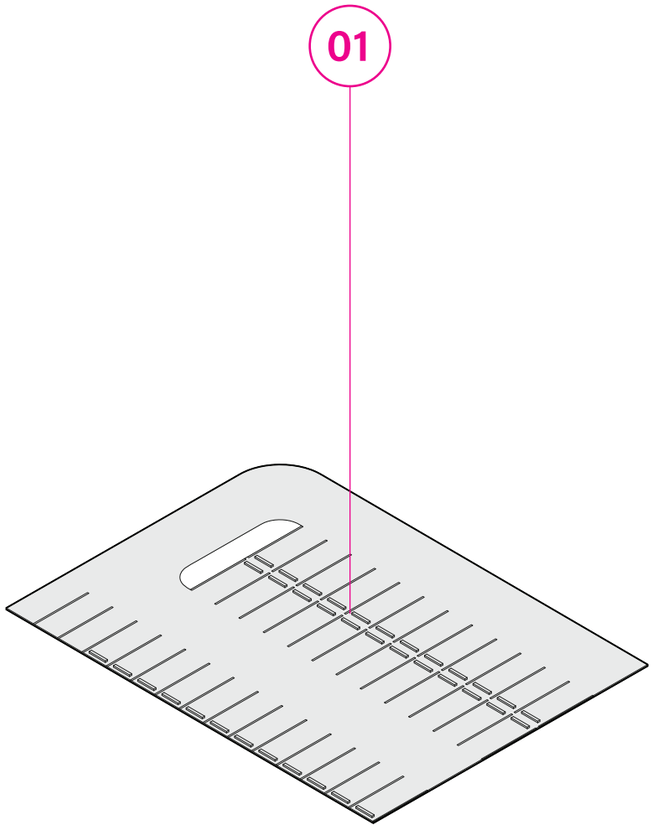
02 surface parking (infill)

03 parking structure (stacked)

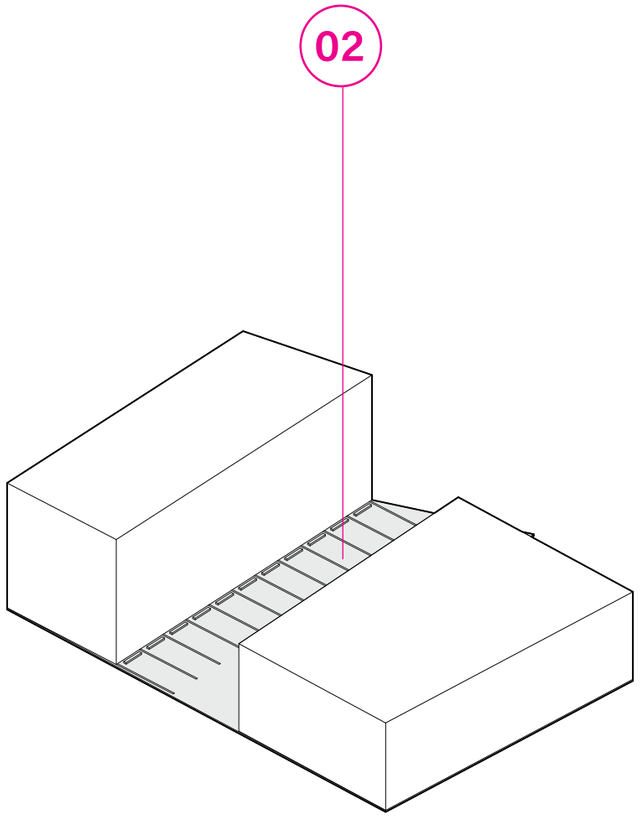
surface parking

parking structure

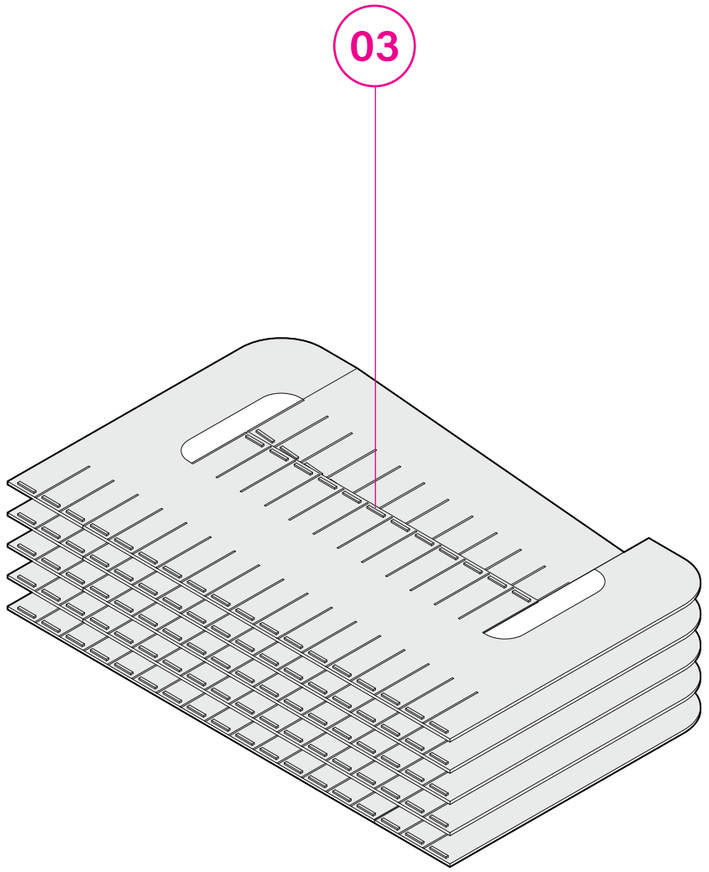
urban core + parking typologies



01 surface parking (lot)

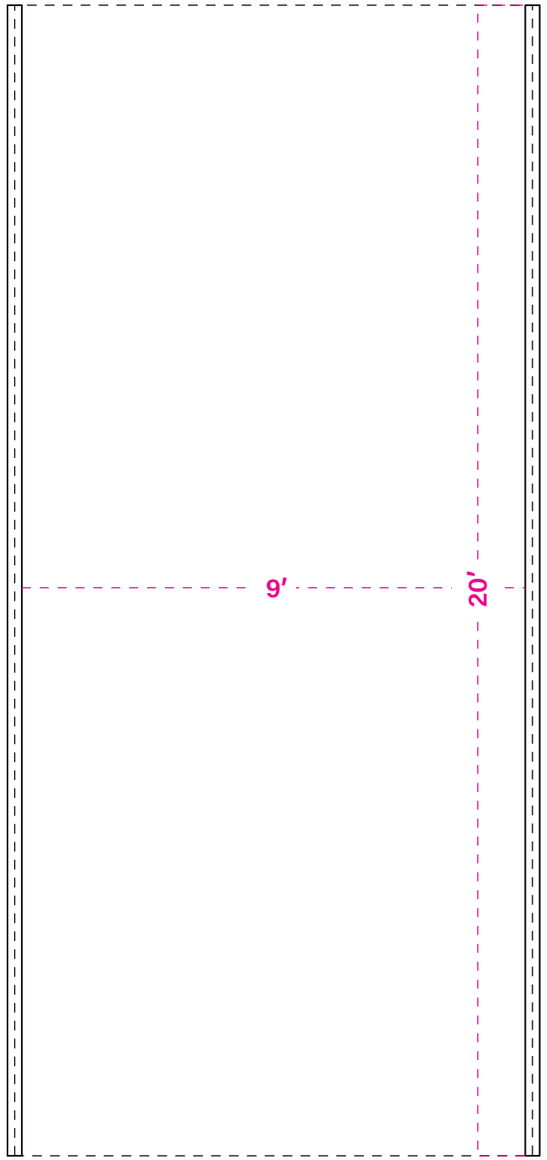


02 surface parking (infill)



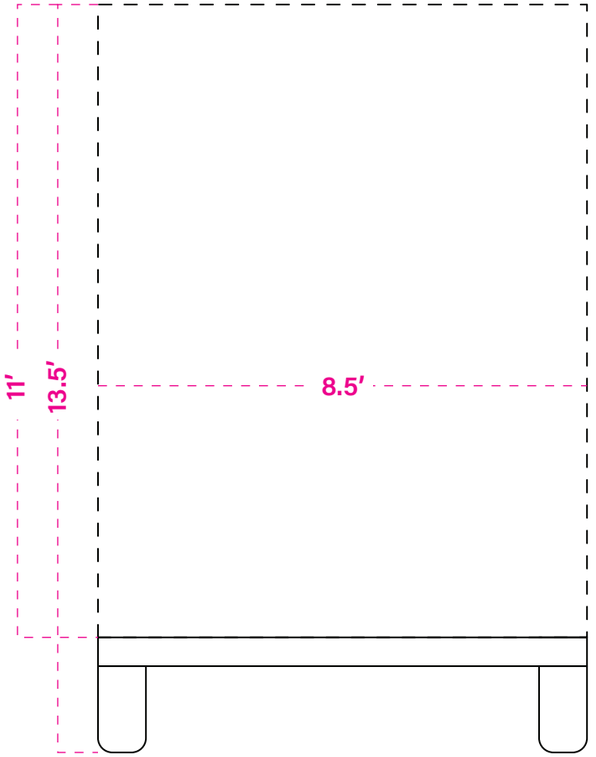
03 parking structure (stacked)

parking typologies



01 **standard parking dimensions**

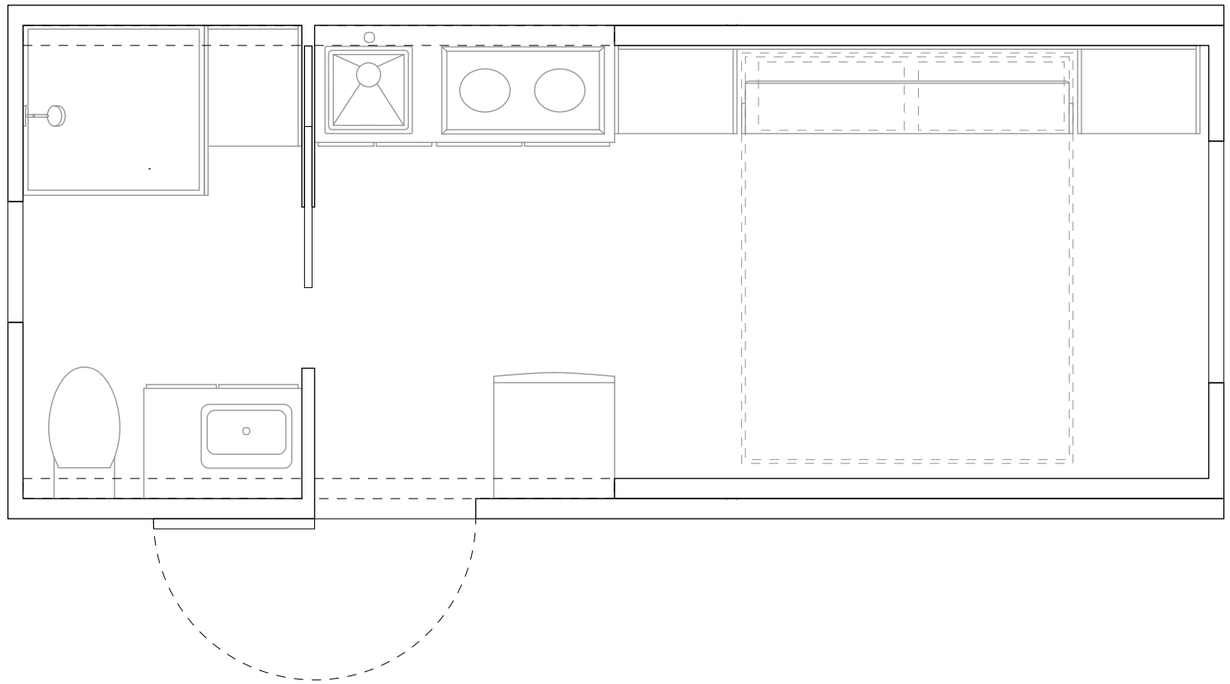
standard parking dimensions are 9′ wide and 20′ long



02 **maximum trailer dimensions**

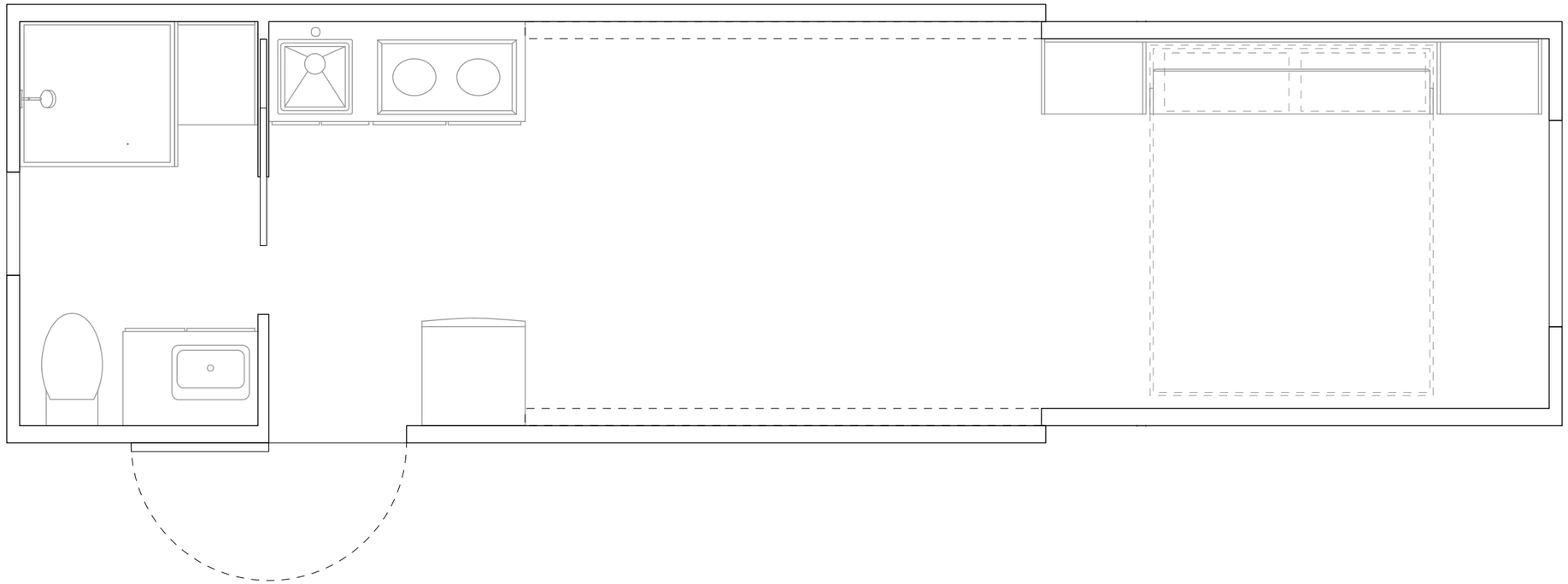
maximum trailer dimensions (without permit) are 40′ long and 8.5′ wide, with a total height no taller than 13.5′.

mobile housing module | design parameters



0′ 1′ 3′ 6′

mobile housing module | plan

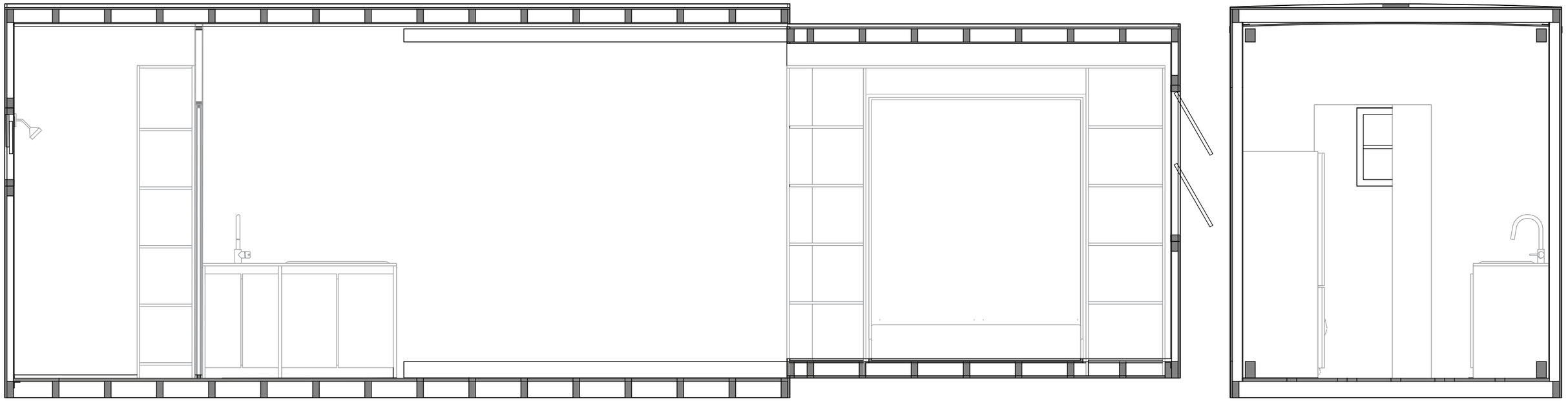


0′ 1′ 3′ 6′

mobile housing module | plan expanded

0′ 1′ 3′ 6′

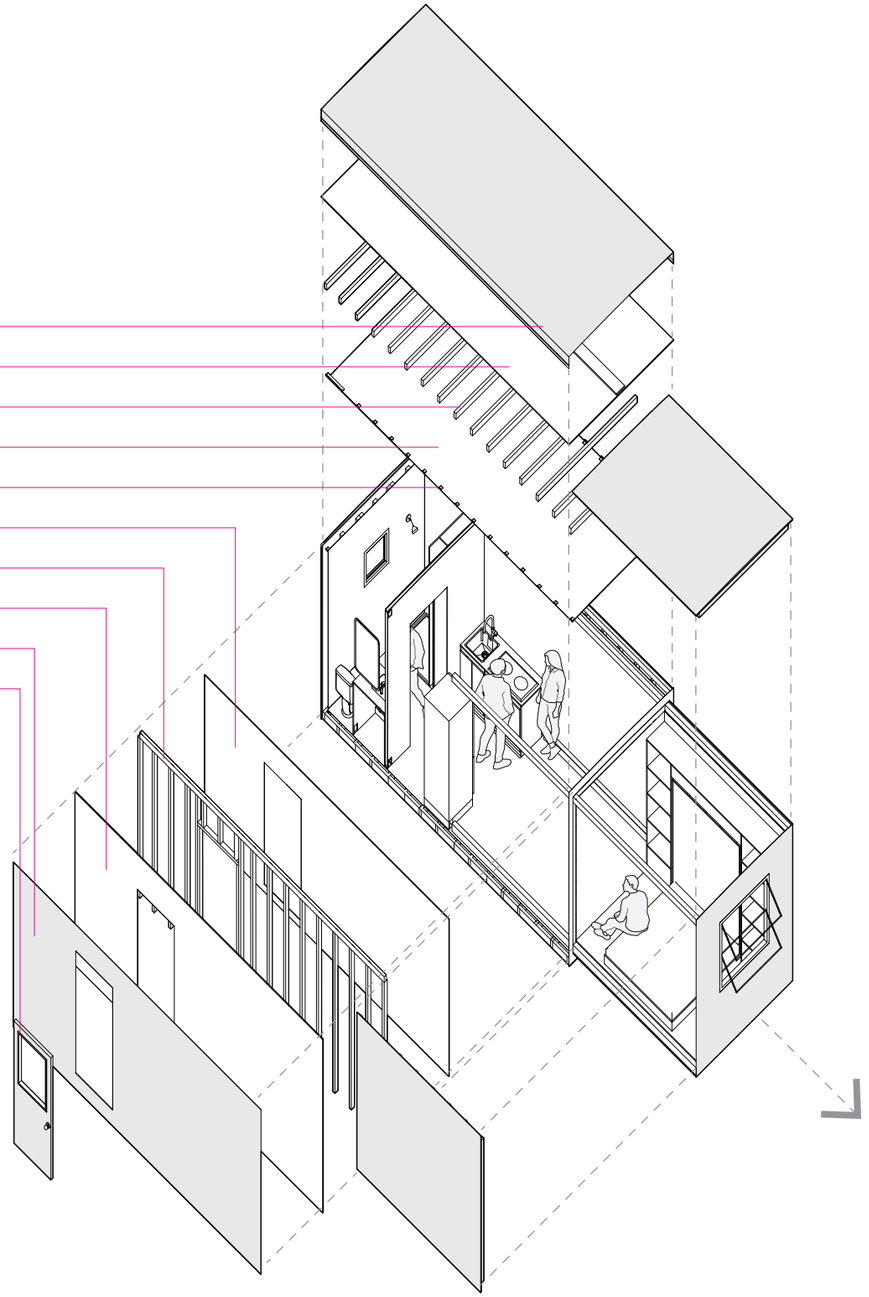
mobile housing module | elevation



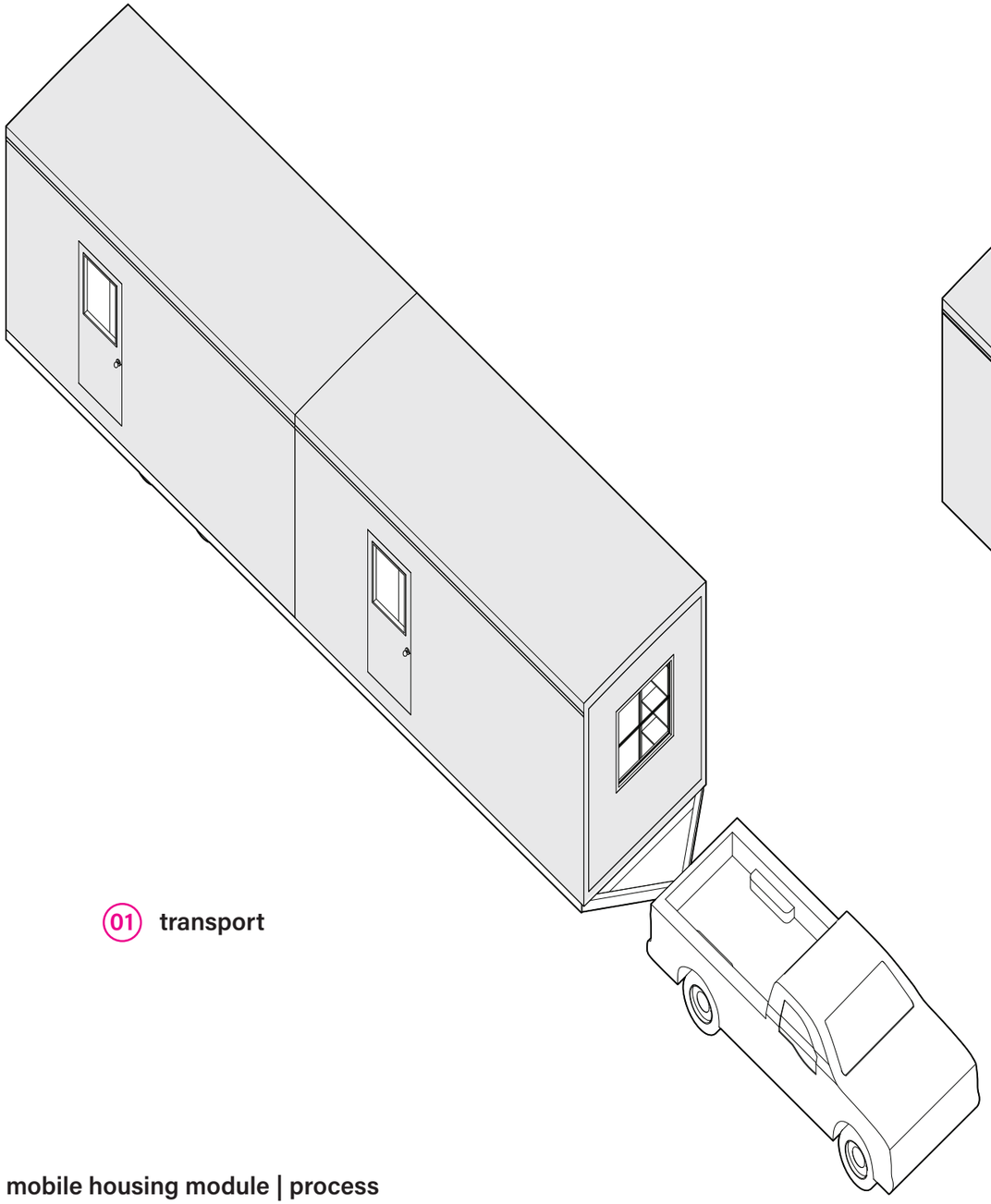
0′ 1′ 3′ 6′

mobile housing module | section

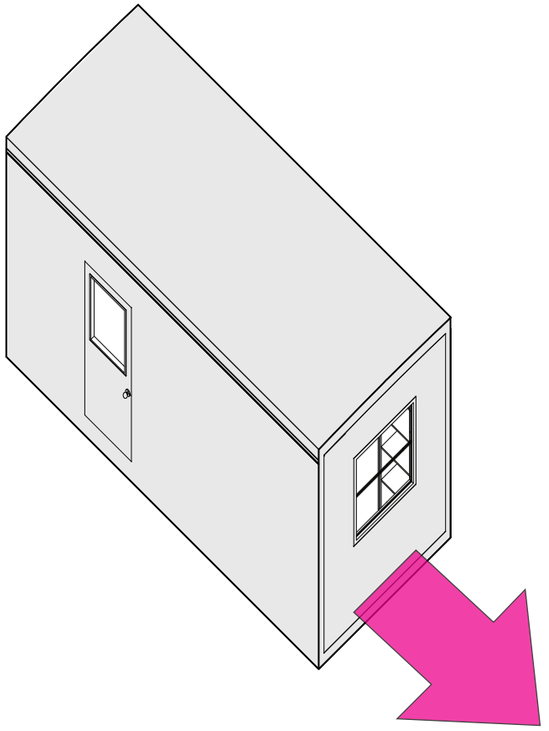
aluminum siding
3/4″ sheathing
steel structure
1/2″ plywood panel
steel cleat
1/2″ plywood panel
steel structure
3/4″ sheathing
aluminum siding
door



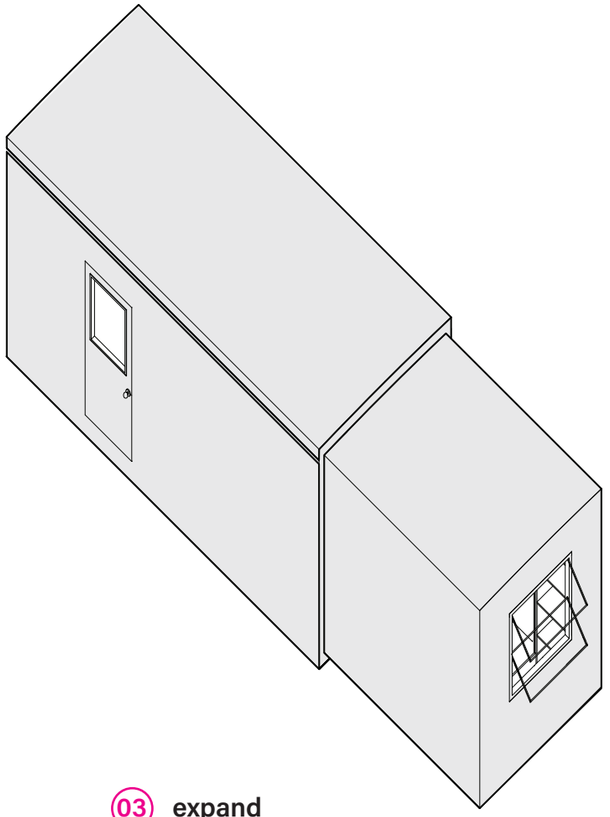
mobile housing module | exploded



01 transport

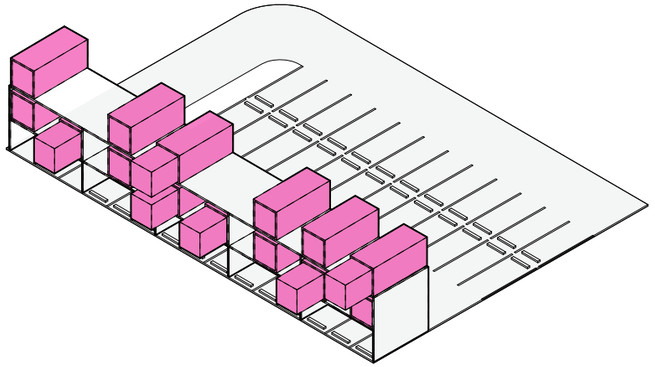


02 place

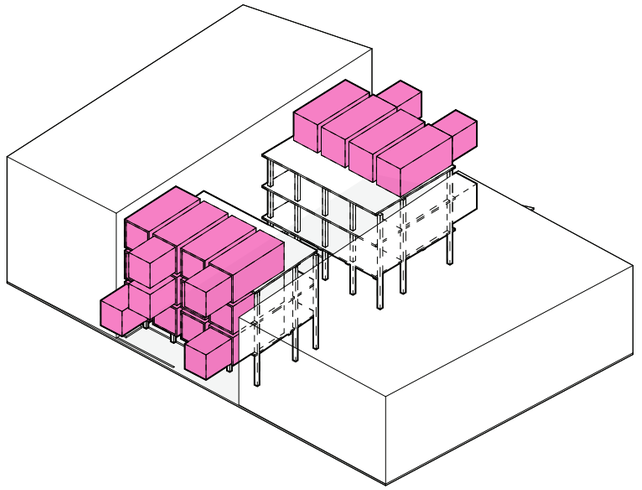


03 expand

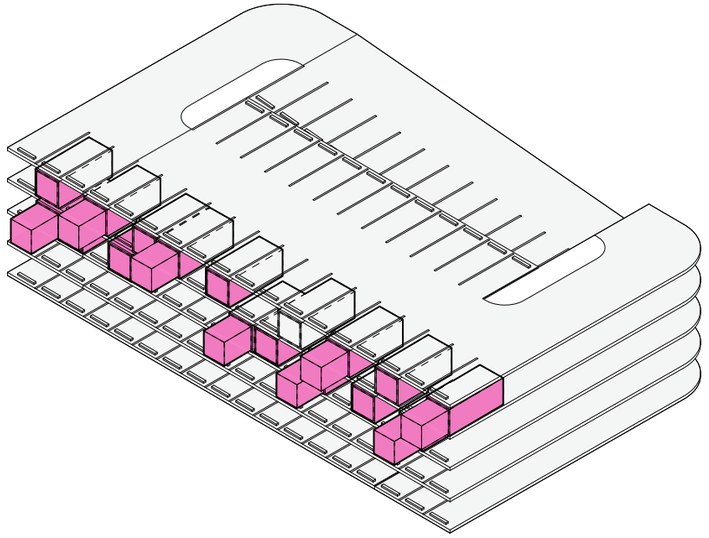
mobile housing module | process



01 surface parking (lot)

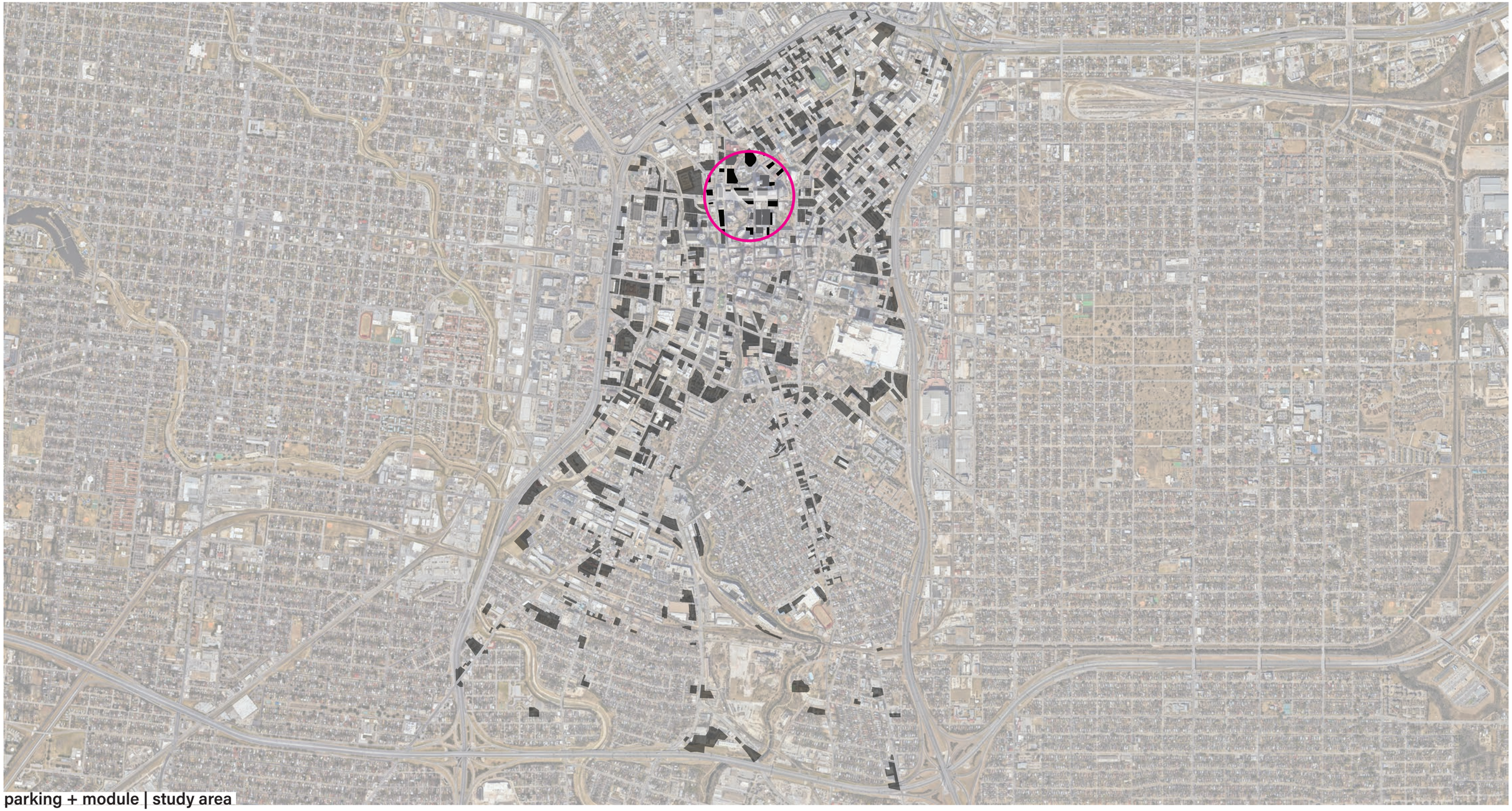


02 surface parking (infill)

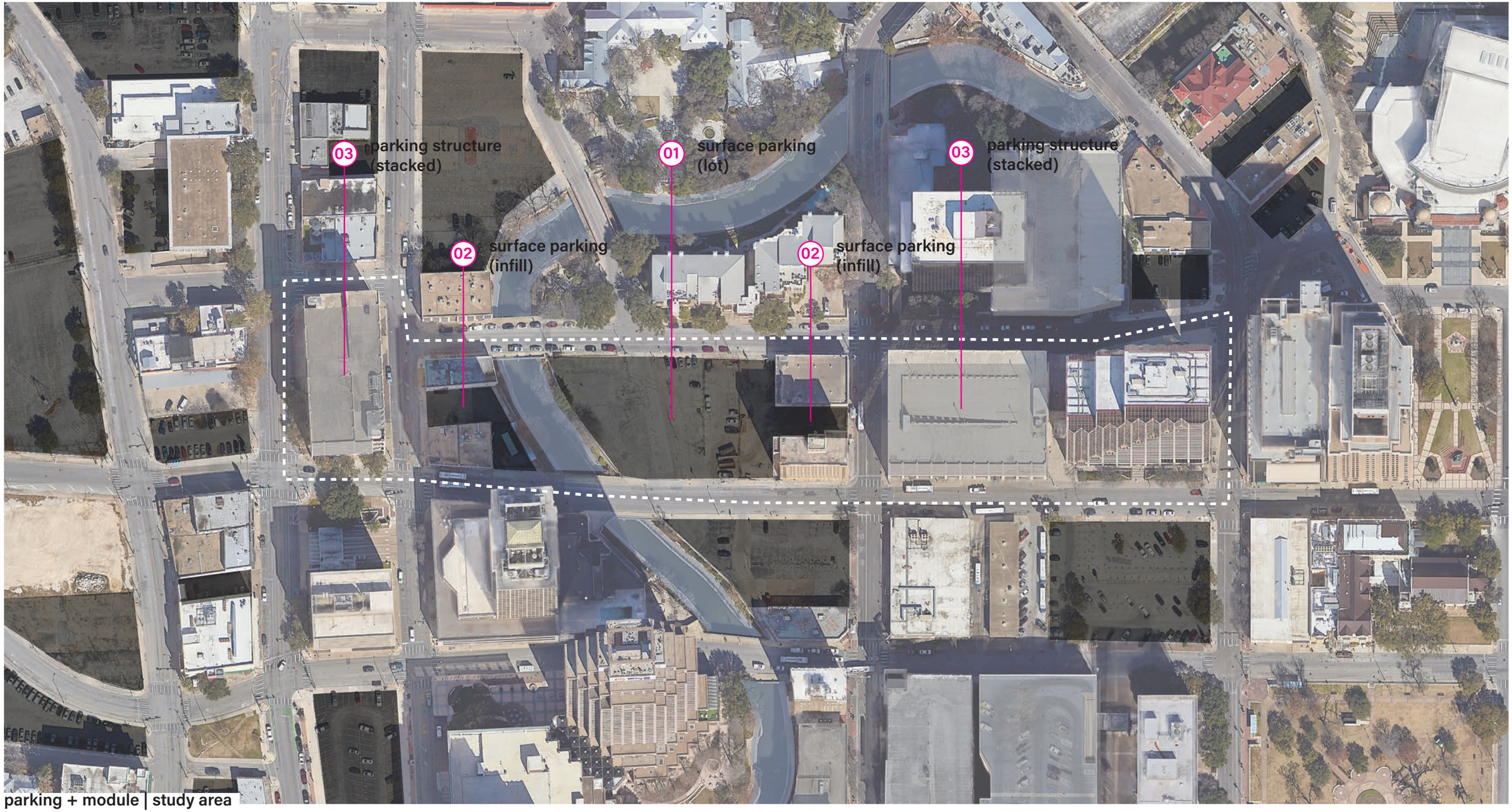


03 parking structure (stacked)

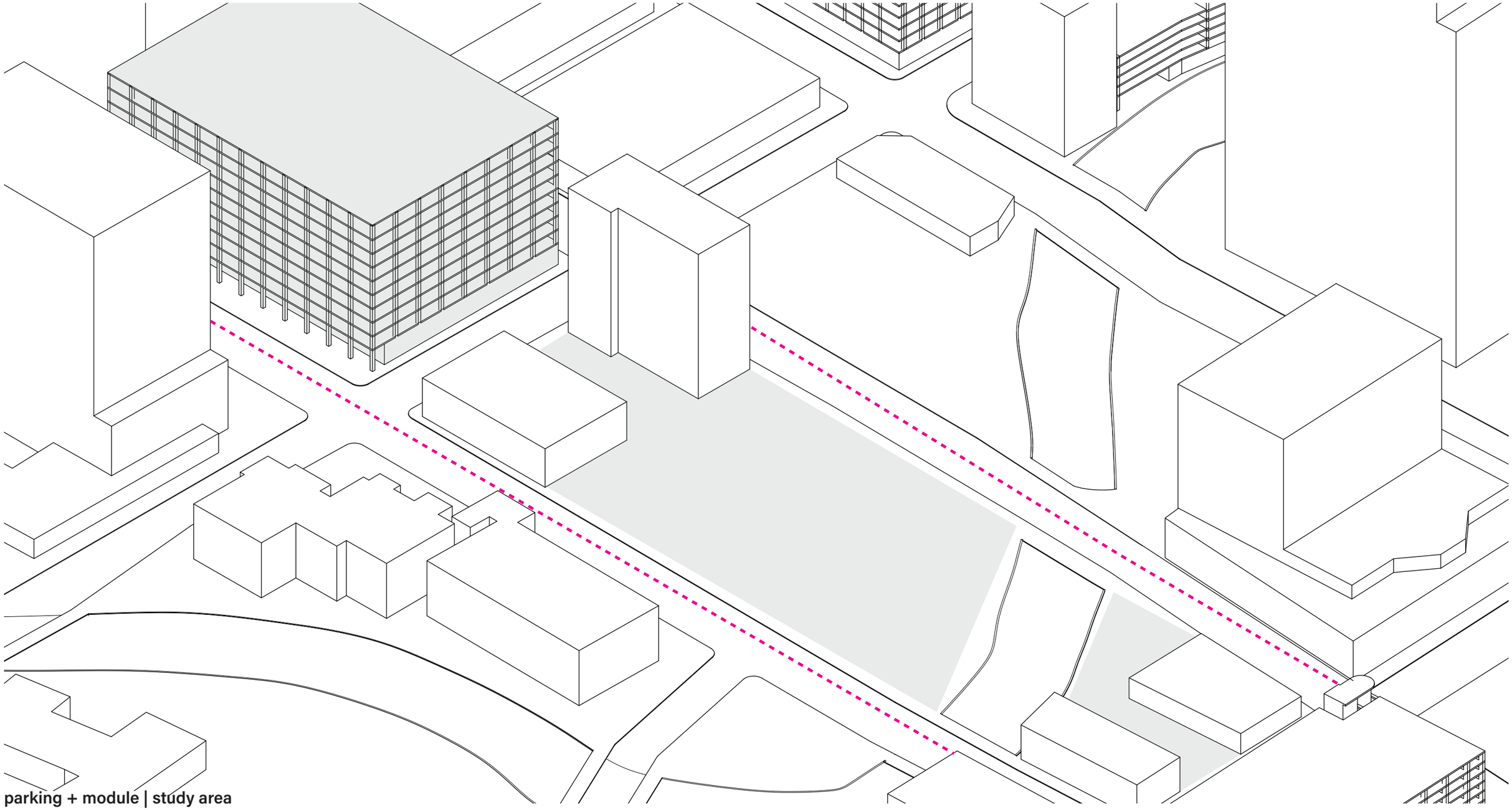
parking typologies + module



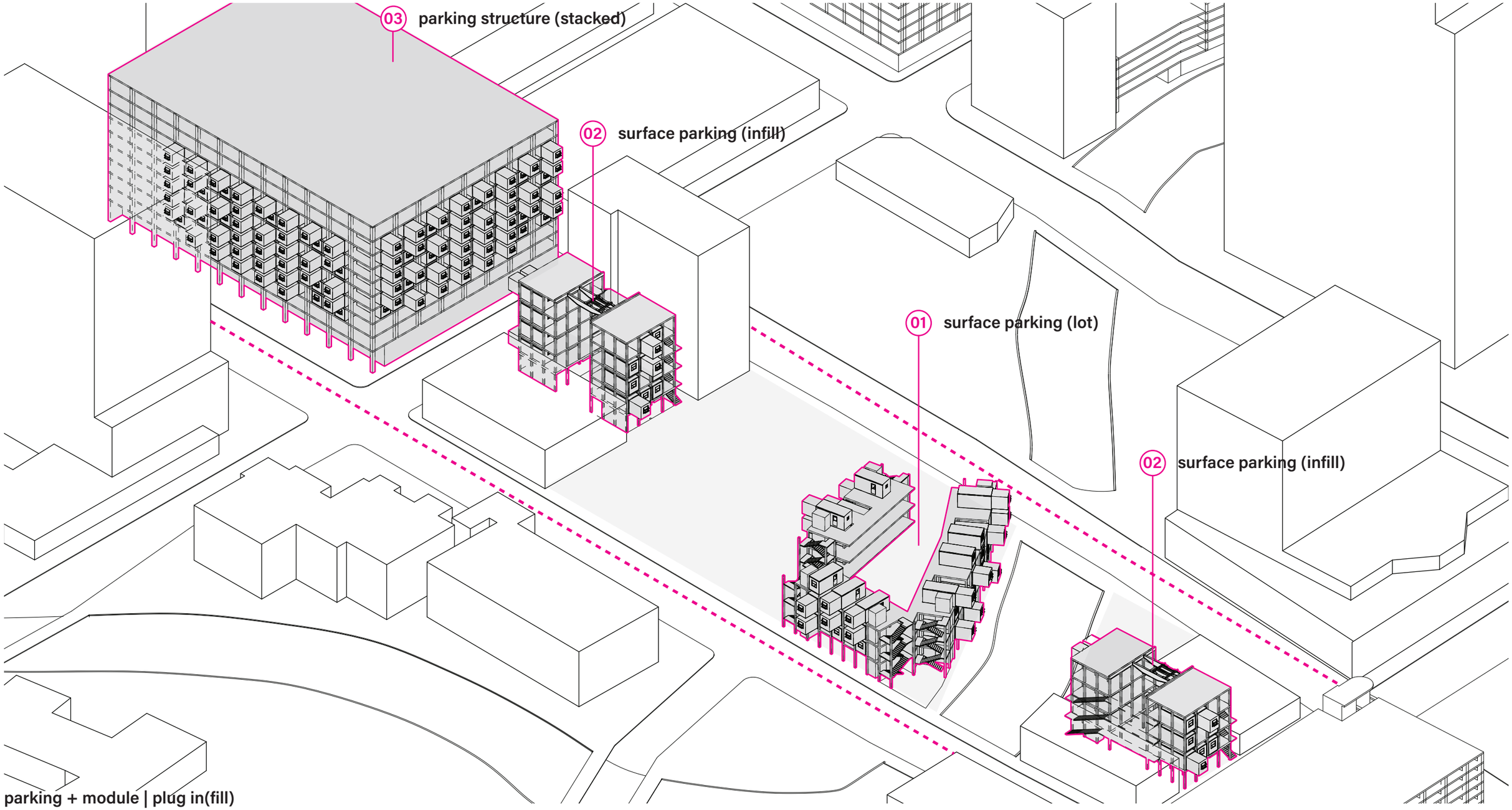
parking + module | study area



parking + module | study area



parking + module | study area



parking + module | plug in(fill)