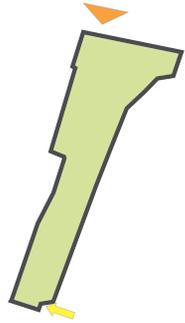


DESIGN

TABLE OF CONTENTS

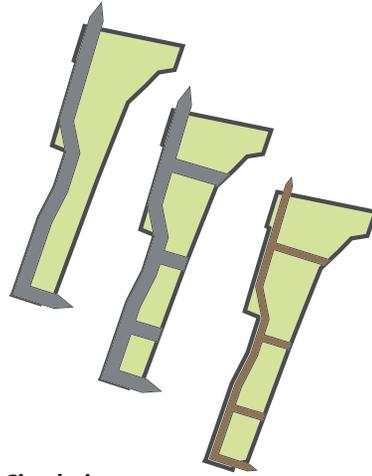
- 1 SITE OPTIONS ANALYSIS
- 2 DEVELOPMENT ISSUES
- 3 UNIT GROUPING
- 4 HOUSING OPTION 1
- 5 HOUSING OPTION 2



Access

Using both potential access points allows for through circulation which makes for efficient circulation eliminating the need to turn around within the property and minimizing congestion.

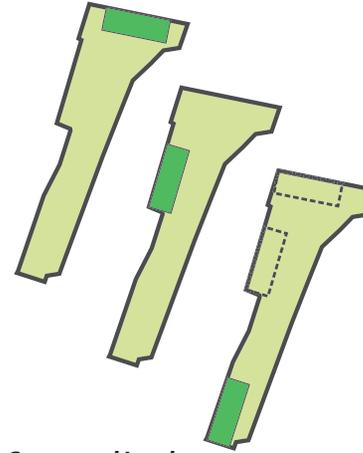
Two access points are a higher security risk than one but the added efficiency and convenience outweigh the negatives.



Circulation

With two access points, the circulation option that is most efficient is one road connecting the front to the back. Branch roads allow for better road access to all housing.

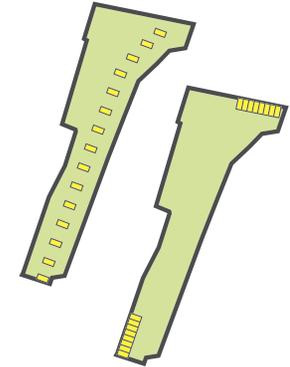
Because of the small area of the site, walking access is an option that minimizes the site area needed for transportation. This case will not support parking in front of the residence.



Communal Land

Because of the minimal area available for housing, communal land must be used efficiently. Using more than 15% of the total site area may not allow for the required number of housing units.

Communal land located at the front or back of the property will act as a barrier between the housing and the street. Communal land located in the center will have better access from all housing units. This central 'zocalo' location is common in Mexican towns. One option would be to divide the communal land into 2 or 3 parcels at streetfront and in the center.



Parking

Dispersed parking either in the form of single spaces or two lots is an option that avoids large lots and places parking within reach of most housing units.

Social housing requirements allow for 25% parking or one spot for every four houses. A more realistic goal for future planning is to allow one spot for every two houses.

COMMUNAL GREENSPACE

Agriculture

Traditionally the Mazahuas have grown vegetables and raised small livestock such as poultry for personal consumption and sale at local markets. The planning should allow for some land to be used in this manner. Due to the shortage of space on the lot, such land would be difficult or impossible to include as private yards attached to each house. A more efficient solution is to include a co-operative plot for the use of all residents.

Communal Organization

In a co-operative venture such as the communal ownership and upkeep of the plot, the communal lands, roads and services, it is important to have a communal meeting area. Such a space should be included in the planning and could be converted into commercial, market space or workshop space when not used for meetings.

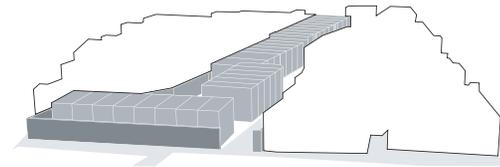
Crafts

Traditionally, the Mazahuas people have been involved in the production of crafts such as textiles, weaved-goods, pottery, stoneware and jewelry. This activity is an important part of the Mazahuas culture and also provides another source of income. Space for the production of these crafts should be included in the planning of the personal residences and communal services.

RELATIONSHIP WITH STREET

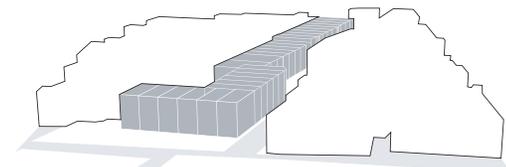
Inward Facing with Wall

This option separates the housing development from the surrounding neighbourhood. A wall provides security, and privacy for the occupants but isolates the community to a greater degree from their neighbours. Walled communities are common in Mexico. Many houses in the surrounding neighbourhood have installed walls at the perimeter of the property.



Open

This option incorporates the neighbourhood with the community and allows a greater penetration of light into the development. Negative aspects are less privacy for the occupants and less security.



UNIT GROUPING

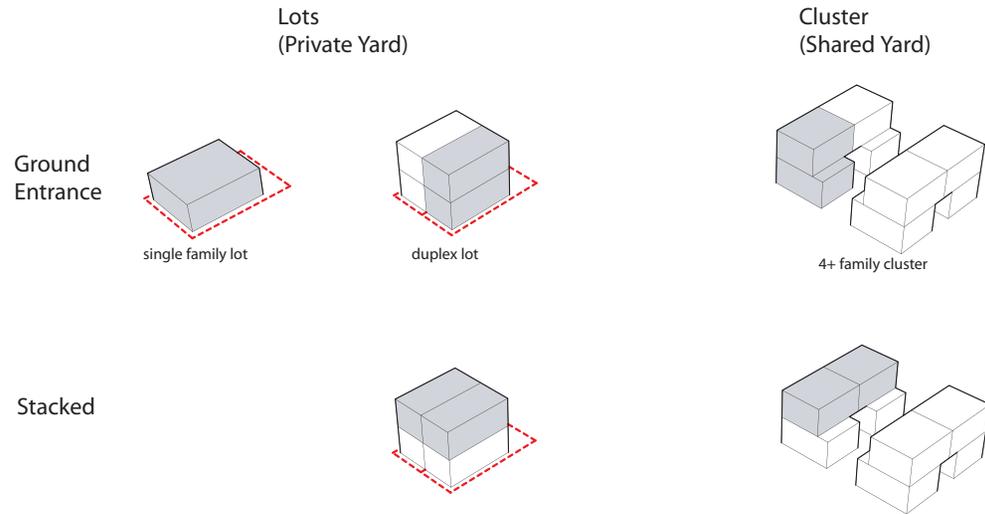
There are two general strategies for the layout of the housing units on the lot.

Detached Units and Apartment Units

Both strategies have their pros and cons. And each can be further broken into sub-options.

For this project, I have chose to develop both an apartment style housing development and a detached unit housing development.

Detached Units



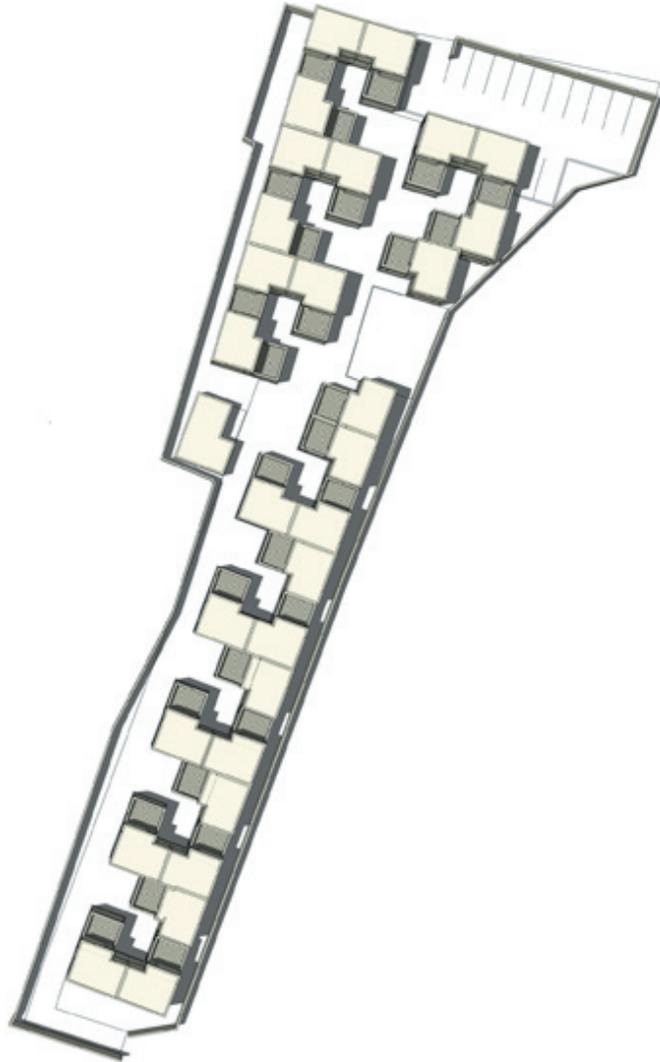
Detached units offer more flexibility for future development and expansion. Each unit is detached from its neighbours, giving the owner more freedom for modification and personalization.

Apartment Units

Apartment units allow more room to be used for communal purposes. Cost savings can be pursued through the communal sharing of services and infrastructure.

In the proceeding pages, I will show how apartments can be structured to allow for maximum personalization and flexibility.

HOUSING OPTION 1



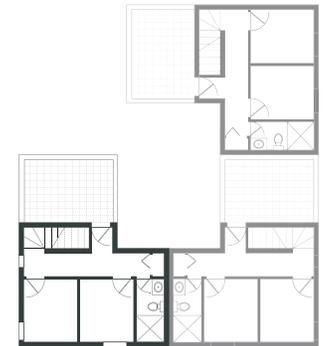
View looking SE

Option 1 investigates the possibilities of progressive housing starting with a small footprint. The growth of the house alters the environment creating a series of semi-privat courtyards.

32 m² initial area
64 m² final area
2 storeys



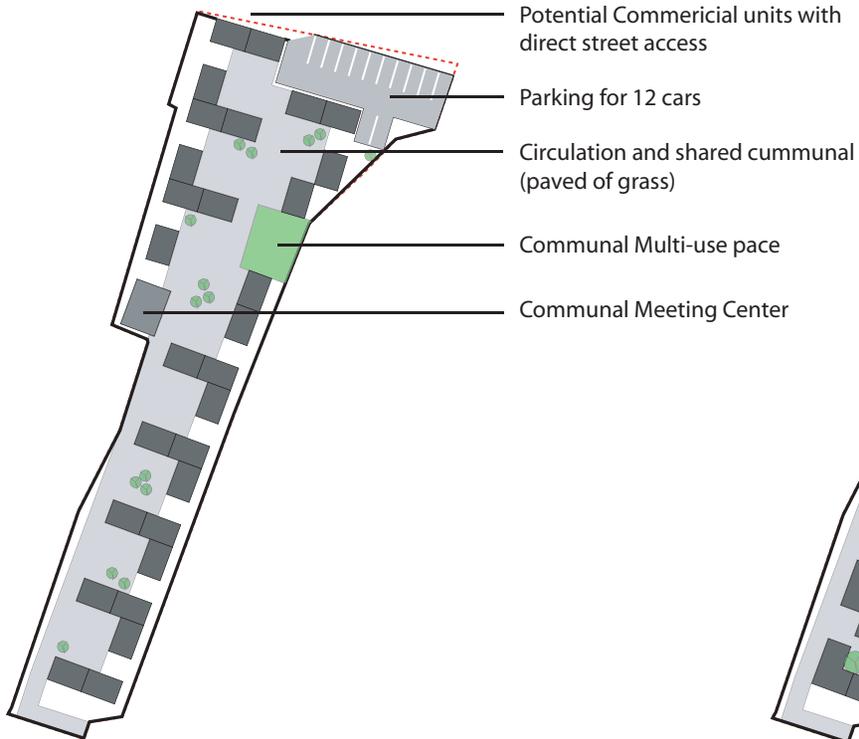
Floorplan - 1st floor



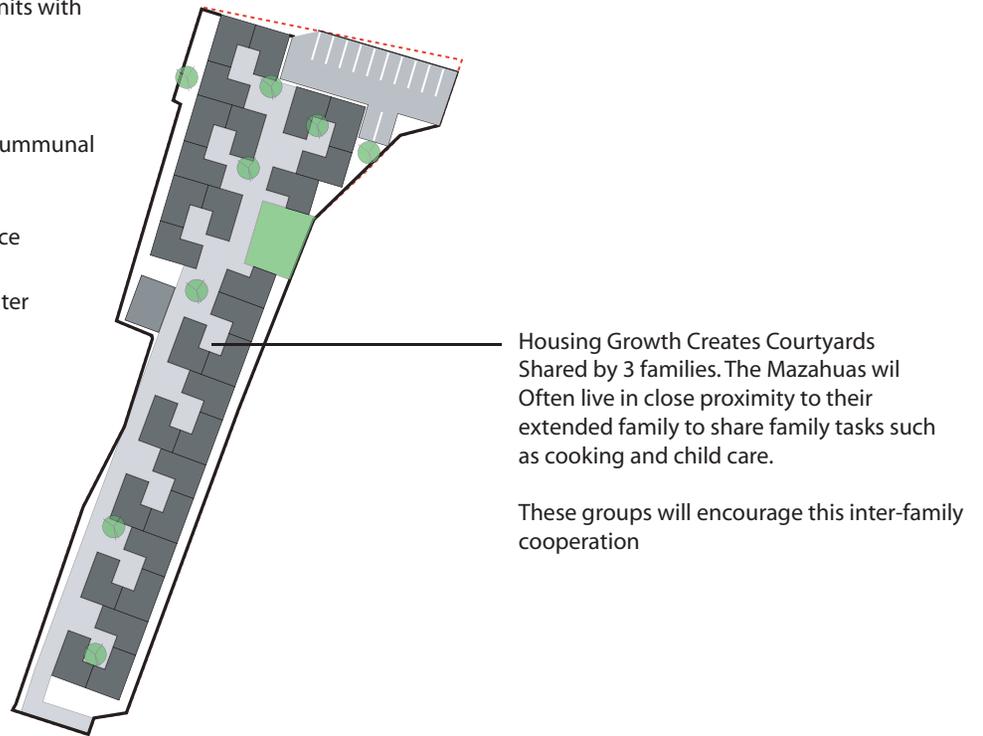
Floorplan - 2nd floor

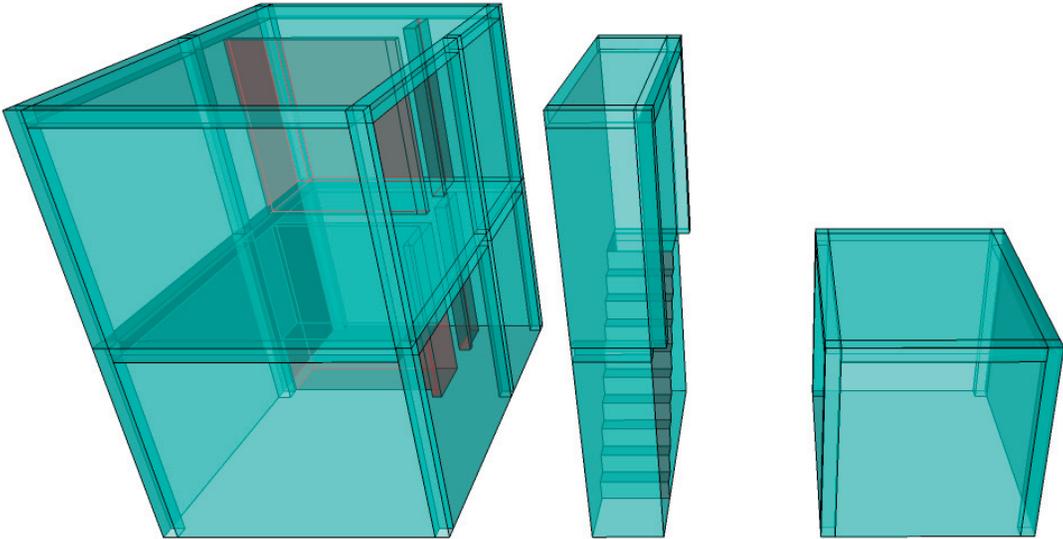
HOUSING OPTION 1 EVOLUTION

INITIAL HOUSING



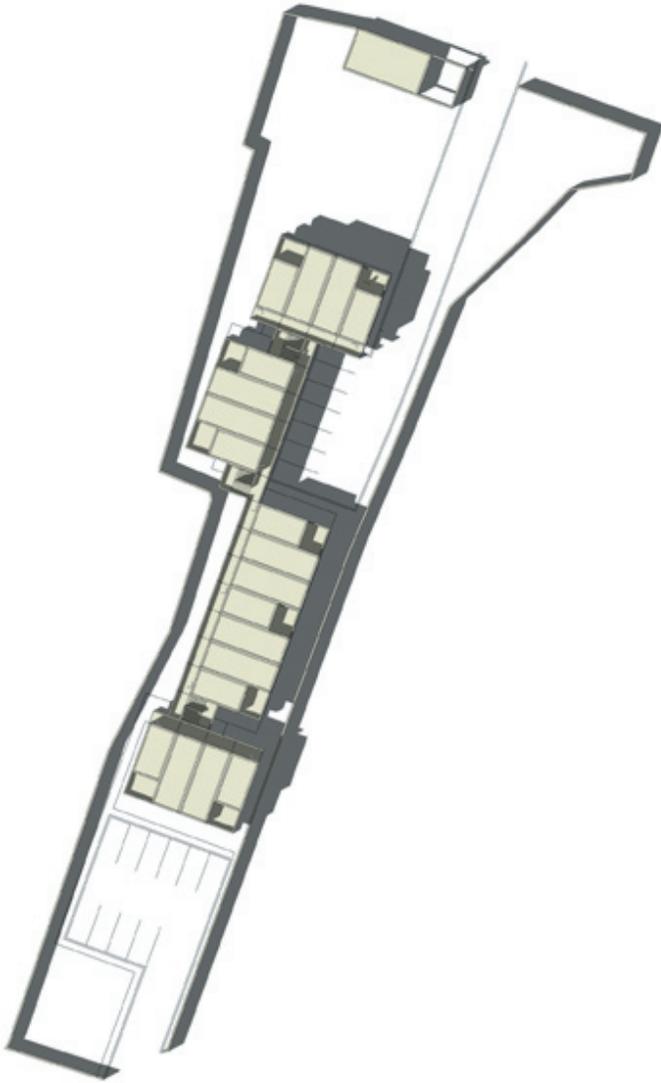
FUTURE DEVELOPMENT



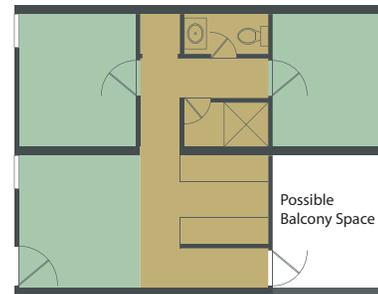


Unit showing expansion possibilities

HOUSING OPTION 2



Option 3 develops the apartment typology following Habraken's Supports methodology. Each housing unit has multiple development possibilities within a flexible framework. This option maximizes communal land area with possibilities for a market or agriculture.



Core contains fixed appliances.

Option 2

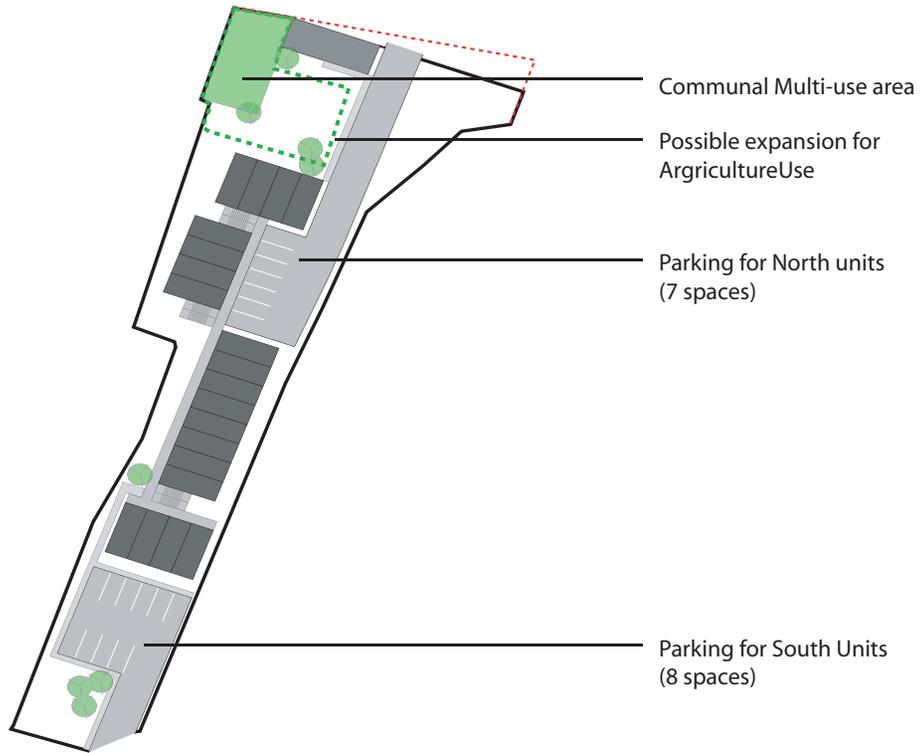
56 m²

1 storey

Each bay is 3m wide

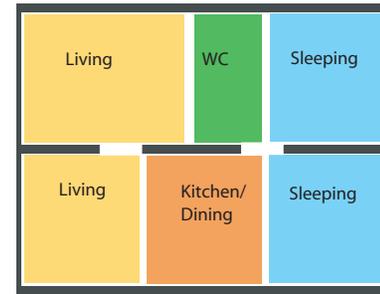
HOUSING OPTION 2 PLANS

SITE PLAN



UNIT PLAN

Interior flexibility allows for multiple layouts.



Flexible divider wall can be punctured for doorway.



End walls can be moved in to create balcony space and punctured for windows.