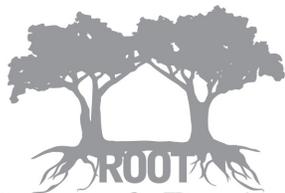


DUPLEX DEVELOPMENT GUIDE



Architecture & Development

WHEN IS A DUPLEX SUITABLE FOR YOUR DEVELOPMENT?

Duplexes have obvious advantages for developers. By buying one lot of land, you can boost the sellable square footage and create two smaller homes.

We've seen this style of living become more and more popular in Denver, especially in the west of the city. Neighborhoods just outside the main business districts are planned with enough density that markets, coffee shops, and leisure trails are all within a walkable distance.

It's this trend towards a more sustainable, walkable lifestyle that attracts buyers to these inner ring neighborhoods. We find the buyers of duplexes are older millennials and baby boomers looking for a lifestyle more grounded in the neighborhood they live in and with less home maintenance.

These people are more concerned with having every day facilities close to them and reducing commute times into the central districts. They value this convenience more than having a large detached house with plenty of land (and lots of yard work).

Health is also extremely important to these groups. Access to leisure routes and natural areas for activities like jogging and cycling rank high on their list of desirable features.

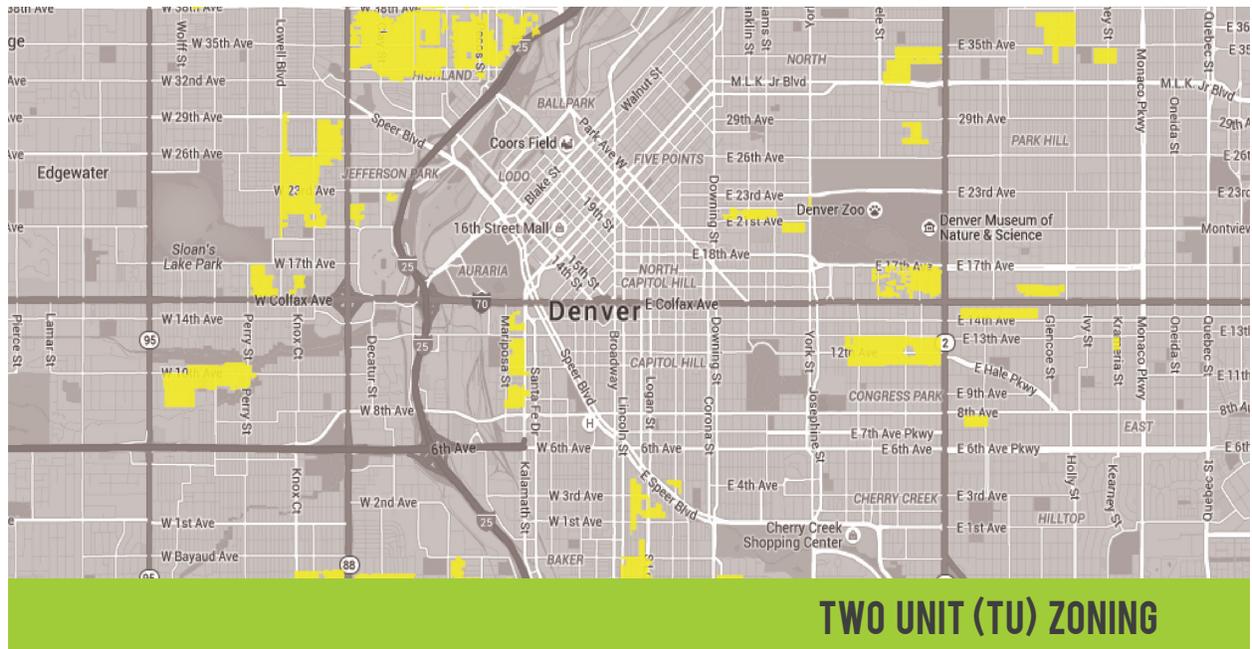


In this guide, we're going to give you an overview of the whole development process for duplexes.

We'll put everything we talk about here in context by relating it to a duplex development we designed in the Berkeley neighborhood.

Our first section looks at the city as a whole.

WHAT AREAS OR NEIGHBORHOODS ARE RIGHT FOR DUPLEXES?



As you can see from the map, the duplex development type suits the higher density and more connected nature of the first inner ring outside the central district.

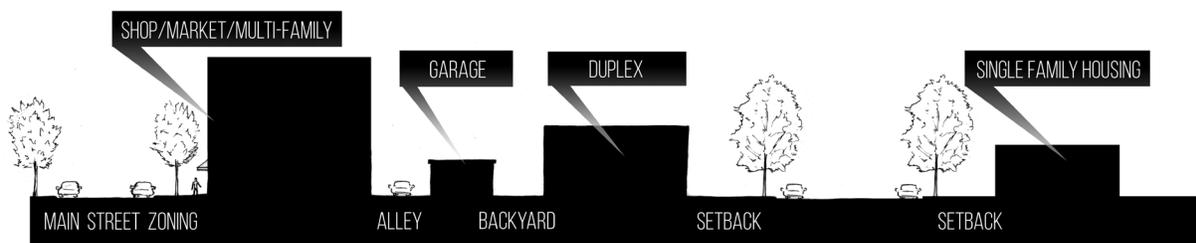
The neighborhoods that are attractive and best suited for this type of development tend to sit in the north-west quadrant of the city and scattered pockets around the first ring of urban neighborhood districts.

The most TU permits pulled in 2015 were in the following neighborhoods;

- Highlands (Lower and West)
- Sunnyside
- Berkeley
- Sloane's Lake

In these neighborhoods, you'll usually find a short parade of shops, coffee shops and markets within walking distance of most homes. Some have more facilities than others, but the theme that ties them all together is the sense that you can walk for less than 10 minutes and grab life essentials, have a place to exercise or unwind.

As duplex owners value proximity to facilities so much, the best lots for duplex developments lie 1 or 2 blocks off the main strip. This also lines up nicely with the permitting codes (more on these in the next section).



On the east side around City Park and Congress Park, you'll find similar urban neighborhoods. However, these neighborhoods tend to be more established and have fewer opportunities or demand a higher price point for land. That said, there are small pockets of opportunity here if you can be quick off the mark - but competition to secure these lots is likely to be fierce.

To the south around Harvard Gulch, Englewood and Rosedale you'll typically

find a lower land cost and a lower exit point on sales. We still think this is an exceptional market and has some wonderful family-oriented neighborhoods.

In general, you're going to be working in the north-west. Duplex development has been tried and tested here for a few years now, as buyers find these areas attractive and prices have been rising fast.

Our Berkley Duplex Development is shown below.

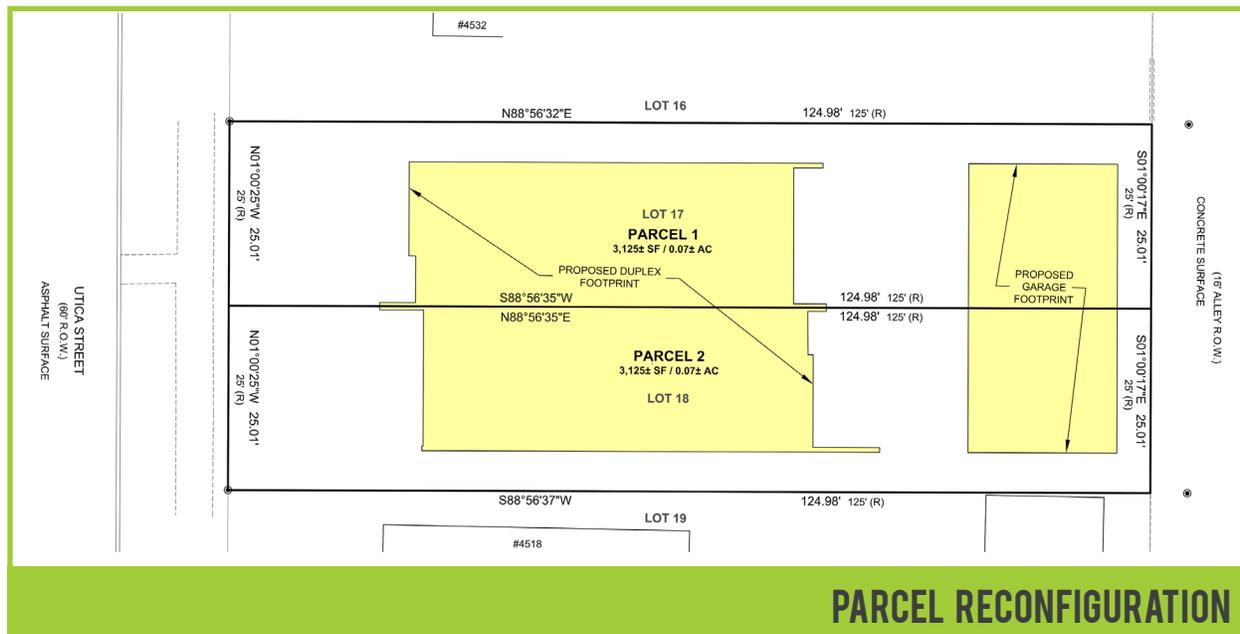


This lot had an existing property that was in a state of disrepair, covered with health hazards such as asbestos material. It looked out of place with other properties that had been redeveloped.

This is an ideal project for redevelopment, when you can take a health hazardous house and improve the neighborhood by creating a beautiful healthy new home that contributes to the fabric of the city.



ZONING AND LOT SIZE



Our intent when looking for properties to redevelop is to be like a surgeon and carefully replace, update and renew one decaying property at a time, contributing a new layer to the overall fabric of a beautiful city.

This can be sharply contrasted to many suburban developments that tend to use the "Axe vs. the Scalpel" and completely wipe out green fields in exchange for monotonous tract homes.

This is a sketch of the parcel reconfiguration of our Berkeley Duplex. You can see how we were able to split the lot in half to create two new homes. When you find a lot to buy, the first place you want to look at is at the zoning status of the lot. Due diligence on the zoning and lot size restrictions is crucial.

In 2002, Blueprint Denver was adopted. This plan took a comprehensive look at the city of Denver, its current state and future needs. By doing this it highlighted ideal areas for various levels of development. To find the zoning status of a lot, put the address into one of the tools below;

1) Denver Zoning Map

<http://www.denvergov.org/maps/map/zoning>

Enter the address in the bar above the map. A balloon will pop up with the zoning status.

2) Denver Property Taxation and Assessment System (includes more detailed info on the lot)

<https://www.denvergov.org/property>

Enter the address. Click to enter the record. Click "Property Map" tab. The zoning status is on the left hand column.

WHAT THE ZONING LETTERS MEAN

When you're looking at the zoning status of the lot, you'll see that it's represented as a series of letters.

It could look at little like this: **U-TU-B**. Let's dig in to what that means;

The first is the Zoning Letter;

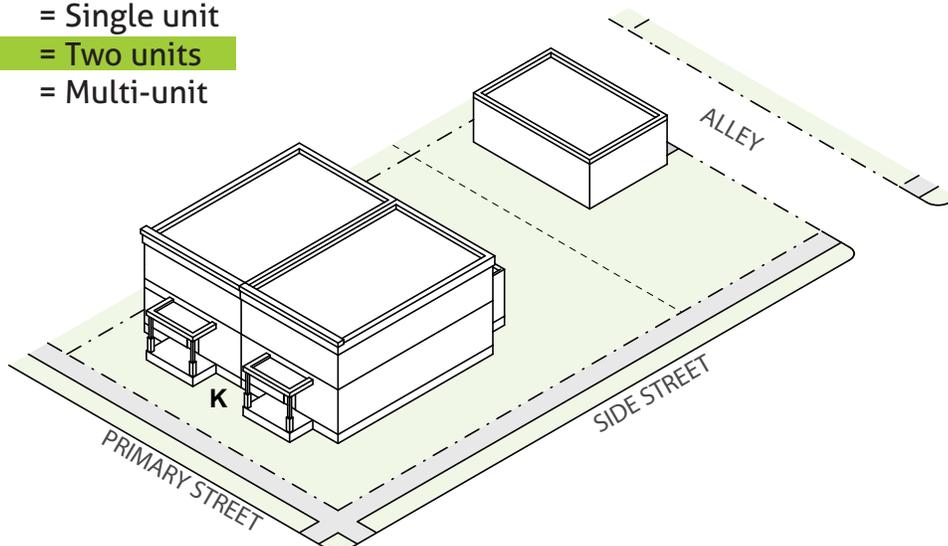
U = Urban
E = Urban Edge
S = Suburban

The Urban and Urban Edge zones are designed to be more walkable and have better access to public transportation - all features that the duplex target market desires.

The second element of the zoning status is the Unit Type allowed. For duplex development we're typically looking for U-TU and E-TU zoning. Other types (like TH, townhouse and GMX/General Mixed Use) can accommodate duplexes but these lots attract higher land values because they allow higher densities. This generally makes them uneconomical for duplex development.

The second group of letters in the zoning status;

SU = Single unit
TU = Two units
MU = Multi-unit



These letters define what type of unit(s) can be developed on the lot. Two Unit (TU) coding is perfectly aligned with the duplex use.

This makes the land value more likely to stay around a price point that supports good returns for a duplex development. Codes that allow more units can be suitable for duplex developments, but generally they will be priced higher and so it would make more sense financially to develop more units on this type of lot.

The third letter is a code for the minimum lot size. In the case of a duplex, this is the smallest possible lot each home can have after the original lot has been split.

"B" = minimum lot size of 4,500 sqft.
"C" = minimum lot size of 5,500 sqft.

Most of our duplexes fall within the C category.

For the complete description of all zoning types see Division 5.2 of the Denver Zoning Code:

<https://www.denvergov.org/content/denvergov/en/community-planning-and-development/zoning/denver-zoning-code.html>

WHAT TO LOOK OUT FOR

There are a number of issues that can make a potential project undevelopable. This is why we always recommend having your architect on-board during the "due diligence" stage to complete a full feasibility study.

The following are some common issues, but are just few among many more that can hold back a project. The worst aspect is that these problems are not always obvious in the beginning. Architects spend years learning how to identify and overcome these issues and deal with them regularly. Use your architect's knowledge to help you avoid expensive mistakes. When you are doing due diligence on any lot, it's imperative that you find out if it lies within a historic center or flood plain. These designations can add time onto the permitting process and increase build cost - sometimes dramatically.

Historic centers require additional permitting and attract a level of scrutiny that can cause significant delays and added cost if you don't follow the rules correctly. We've helped clients who have come to us after being refused permitting because their designs didn't match the character of the historic surroundings. The subsequent redesign and permitting of the project was successful, but the cost and delay for the client was made much more painful because they had not sought out advice earlier on.



There are large areas of Denver that lie within a flood plain. Homes in these areas need special adaptations to make sure that properties are ready and protected when floods occur. We've worked on a few flood plain schemes, like the one pictured below, where we raised the first floor five and a half feet above the curb.

In this case we were not able to do a third floor penthouse because of the raised floor level. This can deeply affect the financial proforma of a project. By helping the developer understand this issue early on, we were able to find solutions which allowed the project to proceed and still achieve a good return. There are a number of factors that go into making a project successful, and having the right team in place to look at the project comprehensively can make a difficult site successful.

It is always a delicate balance between maximizing features, understanding what the market wants and delivering a quality project. This is why we recommend having a quality architect, general contractor, and realtor on your team early to understand the full project.

On the Root AD website, we have a blog of an interview between a new developer in the Denver area and Amy Freeman, realtor for Root. This interview reveals some deep insights into what buyers find valuable and what could eat up your budget unnecessarily.

You can read it here:

<http://root-ad.com/qa-on-denver-duplex-development/>

PERMITTING

Permitting in Denver can be an extensive process. It's likely to take anywhere between 3-6 months if all goes well. In counties further out from the urban center, like Jefferson, permitting can be done and dusted within 2 weeks.

This longer timeframe is mainly due to the volume of new development in Denver. Not only does it present a logistical challenge to the authorities, they also want to make sure that quality is not lost in the rush to satisfy demand.

There are some things which can make the process easier though. You and especially your architect, need to have a strong relationship with the reviewer assessing your scheme. I usually start this process before I've even submitted any permitting plans by meeting with them for an initial chat.

Getting feedback upfront from reviewers not only saves the costs of changing or re-permitting a scheme if they don't like it, but it develops a relationship with them that could prove extremely valuable in the permitting process proper.

Building relationships early on means that if anything needs adjusting or explaining during the permitting process, your reviewer is much more likely to pick up

the phone and discuss it directly with your architect. This saves going through a series of formal letters and procedures which can eat time. In a process that can take months, even if all goes to plan, time savings like this can add up to a serious financial benefit to the scheme.

Your architect should be able to tell you if there are any additional permits required for your scheme project. This may include Sewer Use and Development Permits, Demolition Permits, Landmark Approval and others.



NEXT STEP

IF YOU'RE A DEVELOPER OR BUILDER

and are looking for a high-quality architect that understands the business of development, please contact me (Zeke) to arrange an initial chat about your project.

Just send an email to zfreeman@root-ad.com and we can arrange a suitable time.