

# SPLIT VISIONS

## A **PLANBOOK** OF REMODELING IDEAS FOR SPLIT-LEVEL AND SPLIT-ENTRY HOUSES

*Brooklyn Park*

*Burnsville*

*Circle Pines*

*Coon Rapids*

*Dakota County*

*Golden Valley*

*Hennepin County*

*Maplewood*

*Mounds View*

*New Hope*

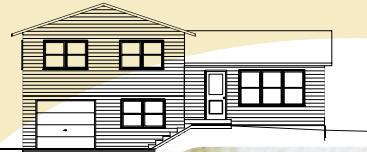
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BY **ROBERT GERLOFF**, AIA + **JEREMIAH BATTLES**

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# INTRODUCTION

## WHO INVENTED THE SPLIT?

We don't know precisely who invented the house type we now call the split-level (or its common variant, the split-entry), but we do know the split first appeared in the Chicago area during the 1930s. *Modern Homes*, a Sears & Roebuck planbook published in 1935, included several houses with all the traits of the contemporary split-level: living spaces a half-flight of stairs up from the garage level, bedrooms stacked over the garage a half-flight up from the living level, and a half-basement level with daylight windows.

It took some time before planbook editors, builders, and homeowners settled on a name for this new house type. Sears tried calling them "modern homes," but that name didn't stick. Other early names included multi-level homes, hillside homes, and "splanches" (split-level ranches). By the late 1940s, just as the post-WWII building boom was gearing up, the term split-level became widely accepted.

From their modest beginnings in Chicago, splits spread rapidly across the Midwest and other northern states, though the house type is also found throughout the United States and Canada. Splits were an alternative to the Cape Cods and ramblers that had dominated post-WWII suburbs. Because they were built on different levels without a full basement, they cost less to build than ranches. And while they were only a story-and-a-half, they had the presence of a two-story home. Splits also offered a unique separation of social space, with bedrooms perched a half-story above the formal living space, and the informal living space found a half-story below. The split was designed to appeal to a new generation of homeowners, and it caught on quickly.

## WHAT IS A SPLIT?

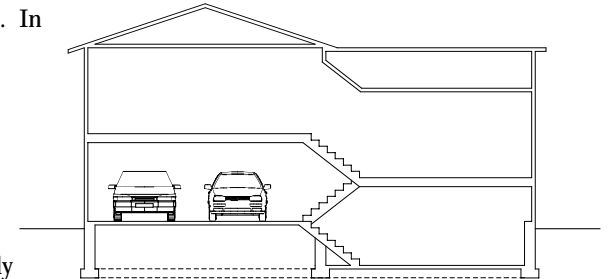
Splits are unique for the way in which they divide the living spaces into multiple levels, shaking up the traditional American housing pattern of formal rooms on the main level, with bedrooms upstairs and a full basement below.

Three factors drove this break with tradition. First, home buyers were demanding more square footage in houses, but lots weren't getting any wider. Stacking the bedrooms over the garage was a simple way to squeeze a larger house onto a lot. Second, home buyers were looking for houses with a more substantial presence. Ranches, however efficient, just didn't have the same emotional appeal as the traditional two-story Colonial, or even the story-and-a-half Cape Cod. Splits look more substantial. Third, and most important, builders in the Midwest were seeking ways to minimize the costs of excavating full basements.

## WHY IS A SPLIT A SPLIT?

Splitting the house into different levels was a clever way to minimize excavation and simplify footings and foundation walls, and hence reduce construction costs. In southern states, where winters are warm, ranch houses can be built on simple (and inexpensive) slab-on-grade foundations. In northern states, however, houses are built on stable "frost footings," continuous strips of concrete poured safely below the depth of typical frost penetration. Splitting the house allows a garage slab to be at grade, a basement level to sit a half-flight below grade, and both to sit on frost footings, safe from winter heaving (see illustration). In other words, the split design is driven more by construction expediency than by design intent.

This half-basement has additional advantages. It's less expensive to dig, for example. It also allows for taller windows, making for brighter, sunnier bedrooms (though split-level basement bedrooms still aren't ideal). And because it's only a half level away from the living levels, it seems more like part of the house. In other words it's a "basement that isn't really a basement."



THE *split-level* HOME PEAKED IN THE 1950S AND  
HAS CONTINUED TO QUIETLY PROSPER EVER SINCE.

## WHAT'S A SPLIT-LEVEL AND WHAT'S A SPLIT-ENTRY?

Two distinctly different house types—the split-**level** and the split-**entry**—are lumped together under the general description of “split.”

A typical split-**level** home has three or more distinct areas of living space, each separated by a half level. For example, the garage and family room are on the lower level, with the private bedroom area directly above it. Halfway between, located vertically and adjacent to these spaces, is the formal living area, which brings the three spaces together. Any house with three or more distinct living areas is a split-level.

A typical split-**entry** home has two distinct floors stacked on top of one another, connected by a flight of stairs, much like a ranch house raised halfway out of the ground. The front entry, however, is located at the halfway point between the two levels, hence the term “split-entry.” Any house where the main entry is on a separate level from the rest of the house is a split-entry.

## HOW DID WE SELECT THE HOUSES?

The three types of splits featured in this book—split-entry short-faced, split-entry long-faced, and split-level traditional (see photos below)—are the most common variations built in the Twin Cities area. The names are purely descriptive and of our own devising; they evolved as a tool to help differentiate the infinite number of variations creative builders have designed over the years (see photos on page 5).

However diverse, splits share some similar characteristics: they're built on two or three levels, have simple hip or gable roofs, are found on standard suburban sites (rarely on city lots), and have front doors and garages facing the street.

## WHY DID WE CREATE THIS BOOK?

Most of the split-level and split-entry homes built in the inner-ring suburbs in the 1940s, '50s, and '60s don't work well for today's lifestyles. They feel cramped, chopped up, and dark in comparison to most houses being built today.

We have created this book to help homeowners—and potential buyers—make their homes more modern and livable by offering straightforward, cost-effective solutions to common split problems identified on our web site [www.split-level.com](http://www.split-level.com) (see page 4). Our goal is to show homeowners a vision of how splits can be transformed with a little thought, care, and cash.

The book is divided into three sections, one for each of the three most popular types of split. For each type, we first introduce the basic design, then show ideas for how to expand the entry, improve the facade to increase curb appeal, open up the main level, redesign the basement, and better connect the house to the yard. Wherever possible, we show ideas for remodeling the existing house rather than adding on. Short sidebars scattered throughout the book answer common questions about such basic projects as how to rebuild a deck, replace a window, or add a fireplace. In the final pages we discuss how to start a remodeling project, including tips on how to survive the remodeling process.

Remodeling can be a trial, yet the benefits are many. Remodeling will make your split more efficient and livable, lighter and airier, more attractive and welcoming. Remodeling will also increase your house's appeal and market value.



*Split-Entry Short-faced*



*Split-Entry Long-faced*



*Split-Level Traditional*

To gain a better understanding of how splits work and don't work, and what projects we should attempt, we started a website aimed at split-level and split-entry owners. The website **www.split-level.com** served as a place to post comments regarding splits. The website succeeded beyond what we had ever imagined. We received wonderful comments from people throughout Minnesota and across the country. On

the website we asked people to answer three specific questions about living in a split. The responses to these three questions would determine the design projects that we would undertake in this book. The following is a summary of the most common responses.

## WHAT DO YOU **LIKE** ABOUT YOUR SPLIT-LEVEL HOME?

- The distinct separation of different levels for different uses. The bedrooms are in one area, the living room, dining room, and kitchen are in another area, and the family room and utility rooms are in still another.
- The basement doesn't seem like a basement. This refers to the lower level being only partially underground, thus allowing for larger windows and more light in the spaces.
- The open floor plan. Having levels only a half a flight away makes the homes seem more open and connected. The open entry also adds to this feeling.

## WHAT DO YOU **DISLIKE** ABOUT YOUR SPLIT-LEVEL HOME?

- The front entry is too small. There is not enough room on the landing and the coat closet is often cramped.
- There is a lack of storage and closet space. The bedroom closets are too small and there is little general storage.
- There are heating problems and it's especially difficult keeping a common temperature on all levels.
- There are too many stairs. It's hard to bring in groceries and hard for the elderly to get around.
- The homes lack style and curb appeal. The fronts of the homes are often bland and the entries are subdued.

## 4 WHAT WOULD YOU **CHANGE** ABOUT YOUR SPLIT-LEVEL HOME?

- Enlarge the foyer/entry and make it easier to meet and greet guests.
- Increase the size of the kitchen and make it more open.
- Improve the exterior appearance of the house, especially the front entry and the flat front.
- Add windows and more natural light to the kitchen, dining room, entry, bathrooms, and basement.
- Create a master suite and a master bath.

"I GET THE FINISHED SPACE OF A TWO-STORY, MORE **HEIGHT** THAN A ONE-STORY, BUT A LESS IMPOSING LOOK THAN A FULL TWO-STORY HOUSE."

John from New Hope

## WHAT IF MY HOUSE IS DIFFERENT?

The photographs below show the three split-level and split-entry types we have chosen as models for this book, along with many of the common variations found within each type. As you can see, houses that might look very different on the outside can be structured very similarly on the inside. Two very different words are used to describe houses: *type* and *style*. *Type* describes the general structure of a house. A ranch house, for example, is a type of house in which all living is on one level. *Style* describes what the house looks like. A ranch house, for example, can be wrapped with Colonial- or Prairie-style detailing and still be a ranch. A split-entry or split-level is a house *type*, not a style. As you can see in the photographs below, the same house type can take on many different styles. So if you can find a house in the photographs below that looks like the type of house you're familiar with, then you should concentrate on that house type in reading this book, as the design ideas in that section will be most applicable to your house, usually with only minor changes.

### SPLIT-ENTRY SHORT-FACED VARIATIONS



**Mounds View**



**Burnsville**



**Brooklyn Park**



**Circle Pines**



**Apple Valley**



**Brooklyn Park**

### SPLIT-ENTRY LONG-FACED VARIATIONS



**Burnsville**



**Maplewood**



**Oakdale**



**Mounds View**



**Shoreview**



**Burnsville**

### SPLIT-LEVEL VARIATIONS



**Golden Valley**



**New Hope**



**Plymouth**



**Coon Rapids**



**Golden Valley**



**Roseville**

# SPLIT-ENTRY SHORT-FACED

This short-faced home is the most contemporary of the three homes chosen as models in this book. Homes like this one are still being constructed today because the design is so economical to build.

What makes this home type unique is that all social spaces—living, dining, and kitchen—are at the back of the house, while all the bedrooms face the street. This home has four bedrooms, two bathrooms, and a two-car garage.



FRONT ELEVATION "BEFORE"  
SCALE: 1/4"=1'-0" (24x36") OR 1/8"=1'-0" (12x7")



*The two roof forms come together in an awkward way.*



*The garage is set back from the front of the house, but the huge garage door still dominates the facade.*

*The front door is set back more deeply than the garage door, making it almost invisible.*

"Before" from the street

*The house has two simple but low-pitched gable roofs oriented perpendicularly to each other.*

*The windows on the upper and lower levels are stacked or aligned, with a problematic "gutter" (or empty vertical space) running down the middle.*

*The upper level cantilevers over the lower level, a trick to gain more square footage without building more foundation.*

*A brick veneer base extends across the front of the house.*

"THE ENTRYWAY IS THE **BIGGEST** PROBLEM. THIS IS THE PART OF THE HOUSE THAT EVERYONE SEES AND IS THE FIRST IMPRESSION."

Michael from Burnsville

## BUILDING GREEN

Sustainable or green architecture is a hot topic in the media today. But what does it mean to build green?

Building green means making a minimal impact on the earth's resources, and building in a way that is healthy for a house's inhabitants. While this sounds simple in theory, it's extraordinarily complex in practice.

For example, one approach is to specify all natural materials. Solid hardwood flooring instead of carpet, cabinets of solid wood instead of particle board, cedar rather than vinyl siding.

Another—and often contradictory—approach is to use renewable and sustainable materials. For example, hardwood flooring comes from ancient (and hard to replace) trees. Most cedar siding comes from old-growth forests. Sustainable proponents argue we should use simpler, more industrial products that protect natural resources. For example, instead of using cedar siding, try using fiber cement board, a mixture of sawdust and cement.

Green architecture also works to minimize energy use. New buildings are carefully sited to use the sun's heat in the winter and to keep it out in the summer, to take advantage of breezes for natural cooling, and to use daylighting instead of electric lights wherever possible. Renewable energy resources—geothermal, photovoltaic, and wind—are also important, but primarily used for new construction.

However green architecture is defined, its most important idea is to use and re-use existing buildings for as long as possible. Therefore, any remodeling project is inherently green, since it uses resources from the original construction. Nothing is more wasteful than tearing down an existing house and burying it in a landfill.

**The social spaces—living, dining, and kitchen—are located at the back of the house, away from the street.**

**The kitchen, dining, and living rooms are isolated from one another by the central bearing wall. Someone standing in the kitchen can't talk to someone in the living room.**

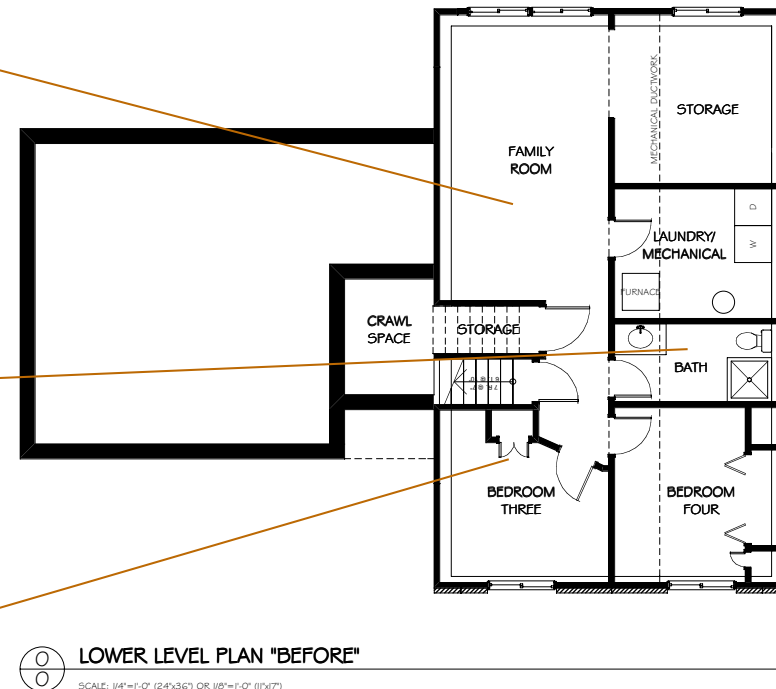
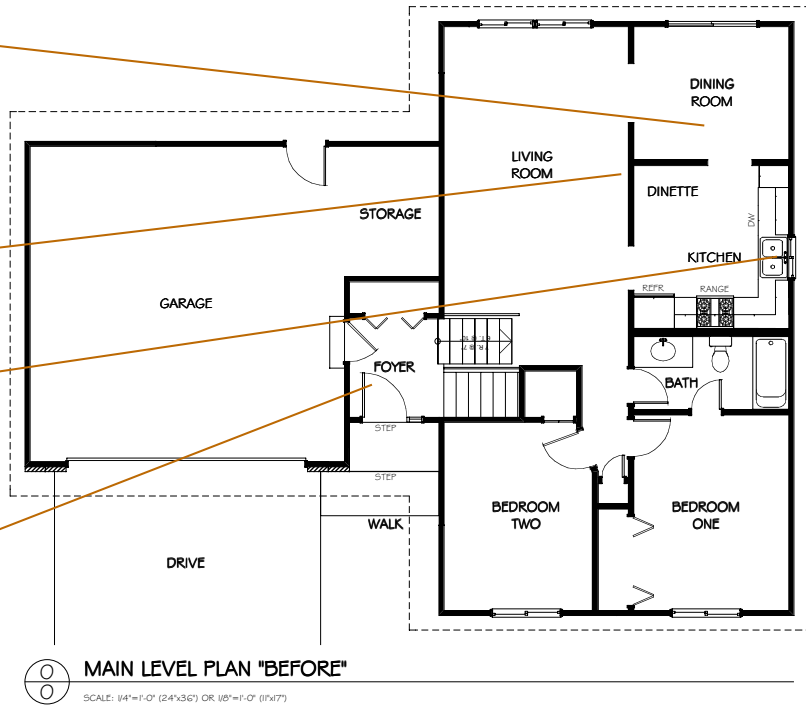
**There is only one window per level on the sides of the house. This makes the interior dark and leaves blank facades facing the neighbors.**

**The front door is so deeply recessed into the house it's almost hidden, hardly an inviting entry to the house.**

**The family room is long, narrow, and difficult to furnish or use.**

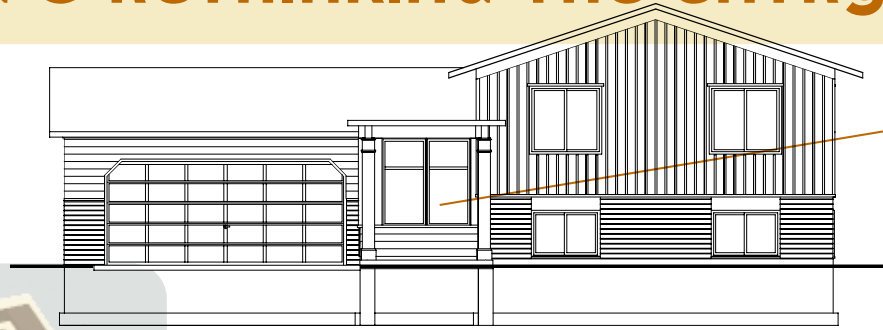
**The bathroom is laid out awkwardly, with lots of windowless wall space.**

**The angled walls and awkwardly placed closets make the bedrooms difficult to use.**





# IDEAS: EXPANDING & RETHINKING THE ENTRY

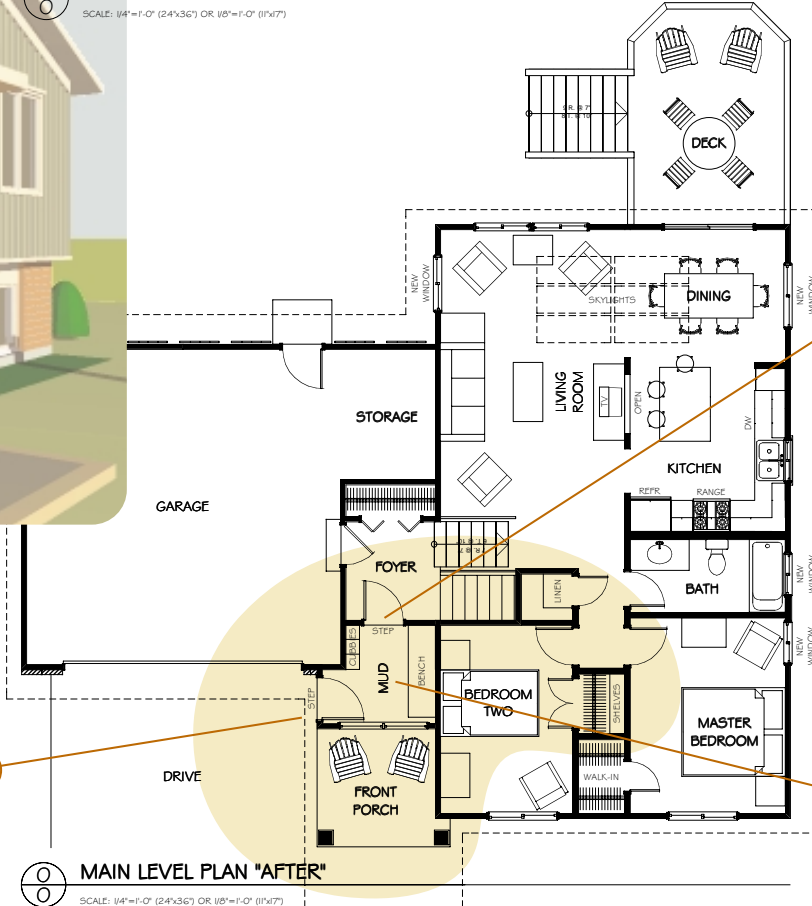


FRONT ELEVATION "AFTER"  
SCALE: 1/4"=1'-0" (24x36") OR 1/8"=1'-0" (11x17")

Placing columns in front of the existing house frames the new large entry window. Extending the roof provides shelter for some chairs and creates a welcoming front porch.



Extending a new front entry and a new front porch toward the street makes the front door, rather than the garage door, the focus from the street. Chairs add a welcome touch.



MAIN LEVEL PLAN "AFTER"  
SCALE: 1/4"=1'-0" (24x36") OR 1/8"=1'-0" (11x17")

Removing the existing front entry wall allows for a larger foyer and mudroom. Leaving the wall in place creates an airlock.

Adding a mudroom onto the existing entry creates space for a bench and storage cubbies, as well as more room for greeting guests.

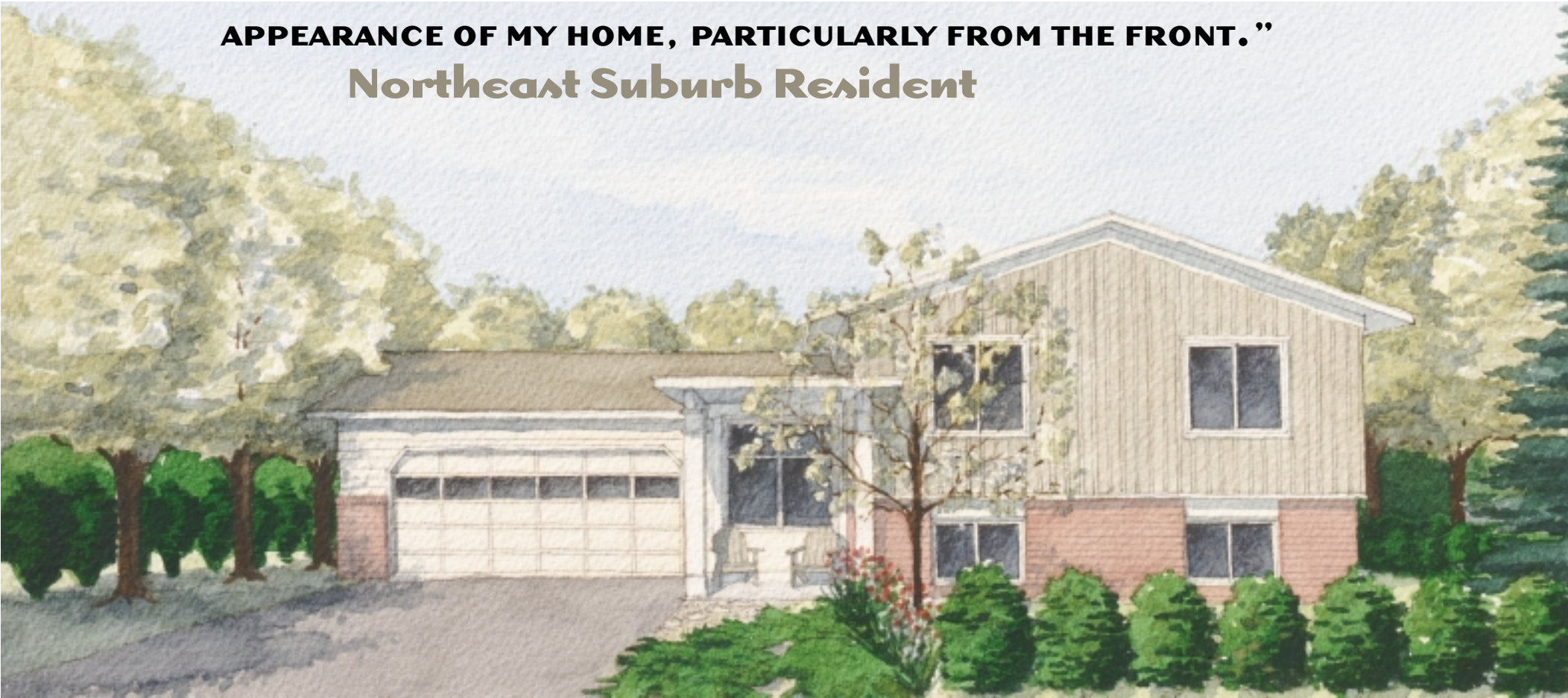
Placing the front door on the driveway side of the new entry creates space for a front porch and for a large front window, which allows more light into the new mudroom.

"I WOULD LIKE TO IMPROVE THE **OUTWARD**

SPLIT-ENTRY SHORT-FACED

APPEARANCE OF MY HOME, PARTICULARLY FROM THE FRONT."

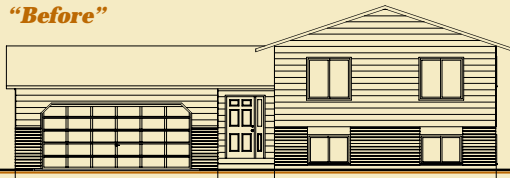
Northeast Suburb Resident



"After" from the street

## FACADE TREATMENTS

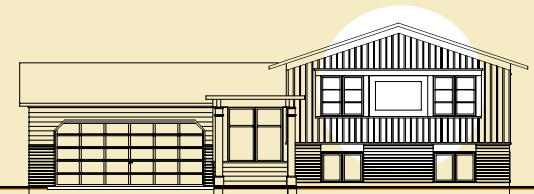
"Before"



The original facade has 8" horizontal siding over a brick base. There are no corner boards, little trim, and very little detail. Hardest to fix is the "gutter," the blank gap between the two sets of windows.

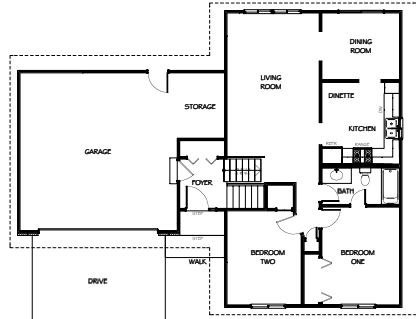


Adding a new entry and a front porch switches the focus from the garage door to the human door. Re-siding with vertical board-and-batten siding adds some visual excitement, while adding trim under the soffit creates character.



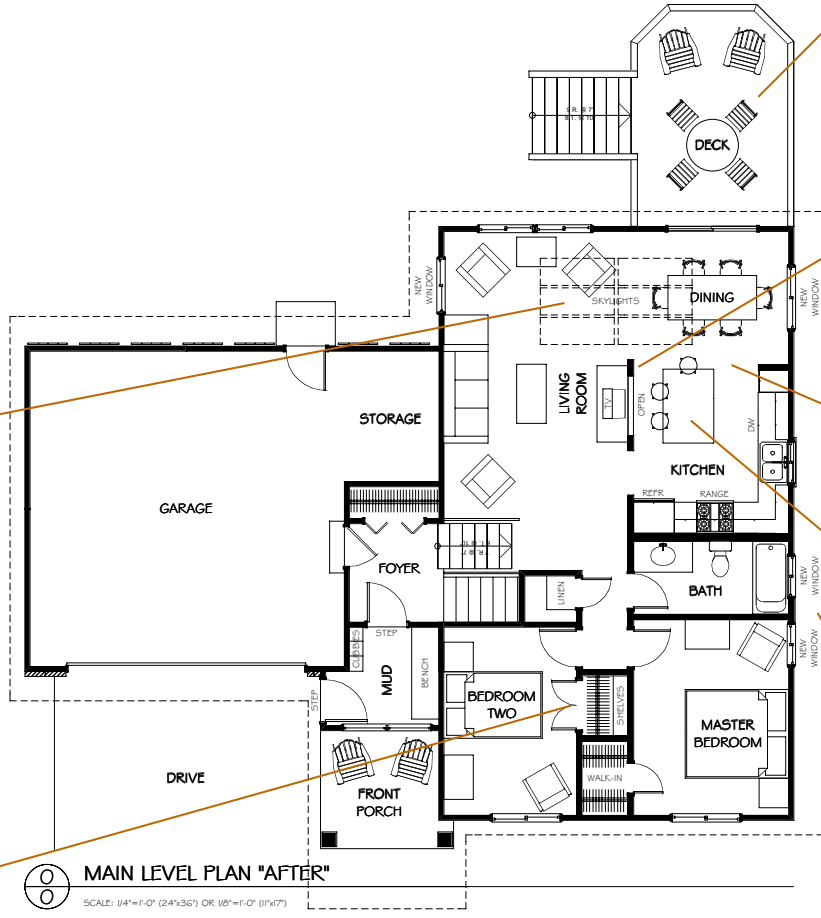
Adding a pattern to the bedroom windows and framing them with trim adds character and detail, and helps fix the "gutter" problem.

# IDEAS: OPENING UP THE PLAN



Adding skylights to the living and dining rooms greatly increases the amount of light in the back of the house.

Reconfiguring the closet space creates two larger bedroom closets (one a walk-in) and a large linen closet over the stairs.



MAIN LEVEL PLAN "AFTER"  
SCALE: 1/4"=1'-0" (24x36") OR 1/8"=1'-0" (11x17")

Rebuilding the deck off the dining room provides room for a table and chairs plus two lounge chairs. Widening the stairs creates a great place for hanging out and taking family photos.

Adding a beam and opening up the wall between the kitchen and living room connects the social spaces, allowing family members to talk with each other. The opening, or interior window, also allows light to filter through, making the house feel more spacious.

Opening up the wall between the dining room and kitchen allows people in the two rooms to talk, and gives kitchen users views of the backyard.

Adding a kitchen island creates a gathering space in the kitchen as well as more storage and counter space.

Adding windows on the sides of the house increases the amount of natural light inside. Adding a window on a second wall in a corner room also dramatically improves the quality of the space, since the light is no longer all coming from one direction.

"WE WOULD LIKE TO **REMODEL** THE KITCHEN AND DINING ROOM AND MAKE IT INTO ONE BIG KITCHEN WITH AN ISLAND AND A PATIO DOOR."

by anonymous

“THE HOUSE IS ***DARK***...WHY DIDN'T THEY  
PUT MORE THAN ONE WINDOW PER ROOM?”

Circle Pines Resident



## REBUILDING A ROTTED DECK

Many of the original decks built on splits need to be rebuilt today. Be aware that the building codes and standard construction practices have changed substantially since the 1960s.

Two of the most important building code changes concern guardrails. First, the top of the guardrail needs to be a minimum of 36" above the deck surface. Second, the individual balusters need to be close enough together so that a 4" diameter ball (roughly the size of a softball) cannot pass through the guardrail. This rule is designed to keep small children from sticking their heads through the rails and suffocating.

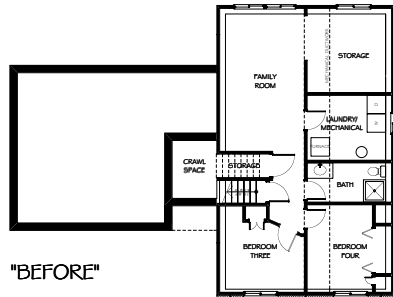
The materials used to build decks have also changed in recent years. Redwood, the traditional decking material, is rarely used anymore. Cedar is increasingly expensive, while pressure-treated lumber, the miracle material of the 1980s, is used less often today because of concerns about its leaching hazardous chemicals (such as arsenic) into the ground around the deck. New pressure-treated lumbers are now available that are less chemically toxic.

Today many decks are built from composites, often recycled plastic mixed with sawdust or other waste materials. These materials, like Trex, because of their recycled content, are environmentally green. However, since these materials are quite new, no one is sure how well they will weather or survive Minnesota's harsh freeze/thaw cycles.

Just as important as the deck's materials are its uses. Now is the time to make any design changes. A deck should be large enough to fit a good-sized table that seats 6 to 8 people, as well as some comfortable sitting chairs. Twelve feet by twelve feet is a basic size; twelve feet by sixteen feet is even better. Also, remember that the more direct the path between the deck and the refrigerator, the more often the deck will be used.

***Adding skylights and windows and opening up the wall between the kitchen and living room creates a bright, open, and exciting space that flows out toward the deck and backyard.***

# IDEAS: STORAGE, BASEMENT, LANDSCAPING



*Moving back the existing family room walls provides that room with enough space for an entertainment center and a sitting area overlooking the backyard.*

*Converting the existing storage space into a home office or hobby room is a quick way to gain an extra room.*

*Integrating into the design the dropped ceilings necessary for mechanical ductwork makes the room feel less arbitrary and more intentional.*

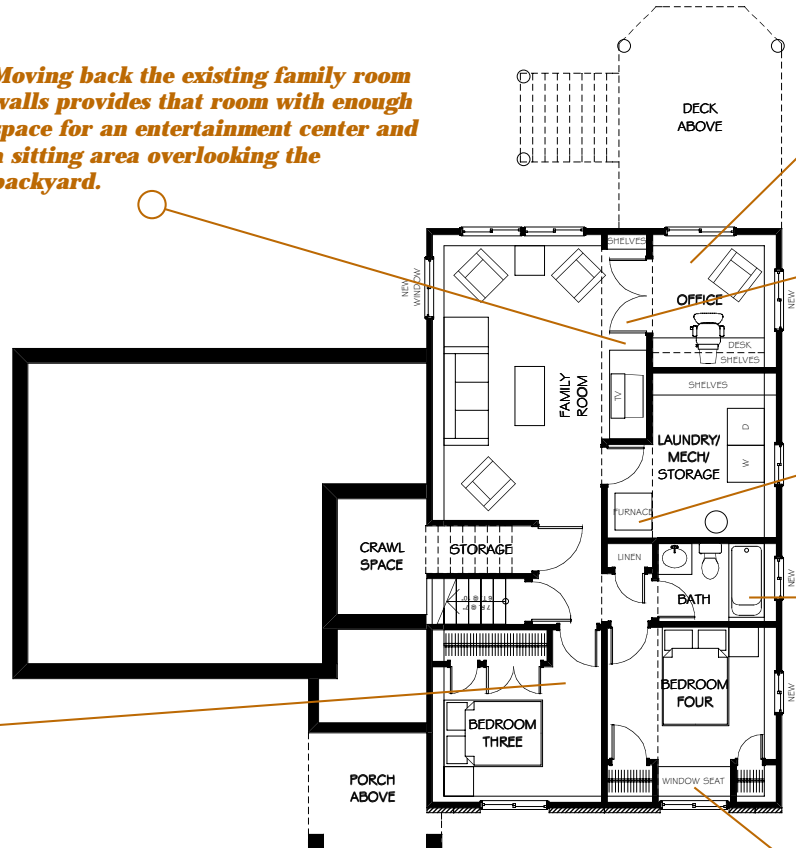
*Keeping the mechanical equipment and washer and dryer in the same spot minimizes plumbing changes.*

*Remodeling the bathroom provides space for a full bathtub and a linen closet.*

*Whenever possible, align new windows in the basement with existing windows above.*

*Moving the closets to the outside wall creates a great spot for a window seat. It also frees up the side wall for a new window.*

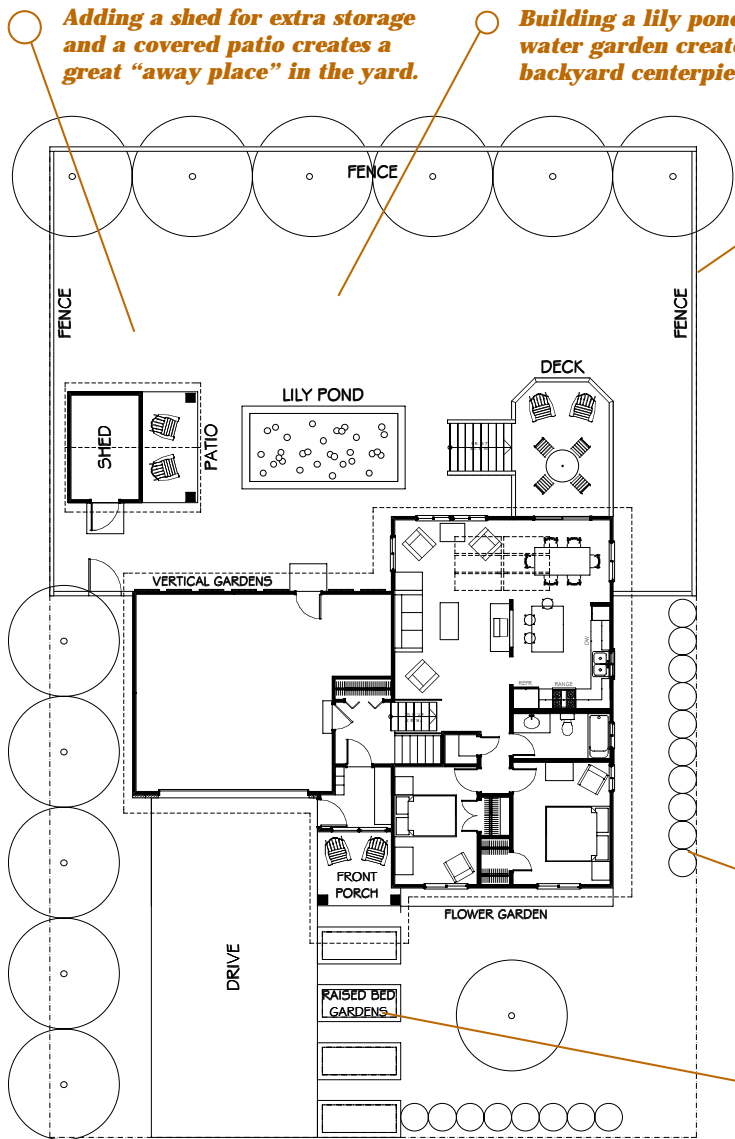
*Remodeling the bedrooms and hallway makes the bedrooms more usable and provides more closet space.*



**"THE *DOWNSTAIRS* FAMILY ROOM IS LONG AND NARROW AND DIFFICULT TO FURNISH."**  
*Lino Lakes Resident*

“SINCE OUR LIVING ROOM AND **DINING ROOM** ARE ORIENTED TOWARD THE BACKYARD, WE GET TO ENJOY WONDERFUL VIEWS.”

### Cottage Grove Resident



Adding a shed for extra storage and a covered patio creates a great “away place” in the yard.

Building a lily pond or other water garden creates a fanciful backyard centerpiece.

Enclosing the backyard with a fence makes it feel more like an extension of the house.

Varying the siding patterns and colors and adding details such as shutters makes for a much more interesting composition.



Coordinating the deck, lily pond, and the porch attached to the storage shed animates the entire backyard.

Planting shrubs along the property line defines the boundaries of the yard and creates privacy for the lower level windows.

Adding raised garden beds creates a visual link to the street and emphasizes the front door.

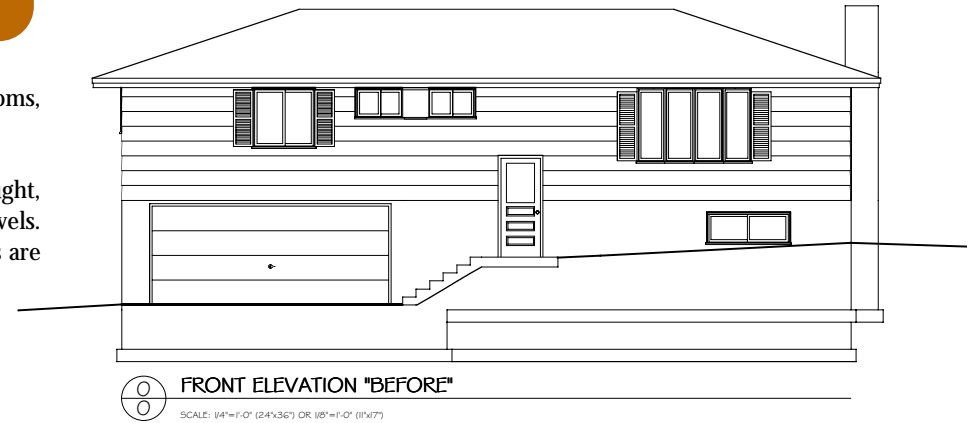
Adding trellises for vertical gardens is a simple way to put an interesting face on a blank garage wall and add some architectural detail to the yard.

SITE PLAN "AFTER"  
SCALE: 1/16"=1'-0"

# SPLIT-ENTRY LONG-FACED

This home is one of the larger of the split-entry types. This particular home has four bedrooms, three bathrooms (two are also common), and a two-car, tuck-under garage.

The front door, which is unprotected and stuck on the front of the house like an afterthought, leads directly to the stair landing, which is in turn halfway between the upper and lower levels. There is no space to turn around, greet guests, or sit to take off boots or shoes. Bedrooms are located on one side and public spaces (kitchen, living and dining) are located on the other.



"FROM THE ROAD THE HOUSE LOOKS *flat* AND PLAIN"

Martha from River Falls, WI

*The roof is often a straightforward single hip with no valleys or other complications. Gable roofs are also common on this type of split-entry.*

*The large window in the living room overlooks the front yard. While this house has a bow window, picture windows flanked by casements or double-hungs are more common.*

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*The horizontal siding, often as wide as 13", emphasizes the house's horizontal lines.*

*The front entry is on a separate level from the living and basement levels, and is unprotected.*

*The large two-car garage is tucked under the bedroom wing and the huge garage door dominates the front facade of the house. The front door is like an afterthought.*

*The site for this house type was typically graded to create an artificial slope.*

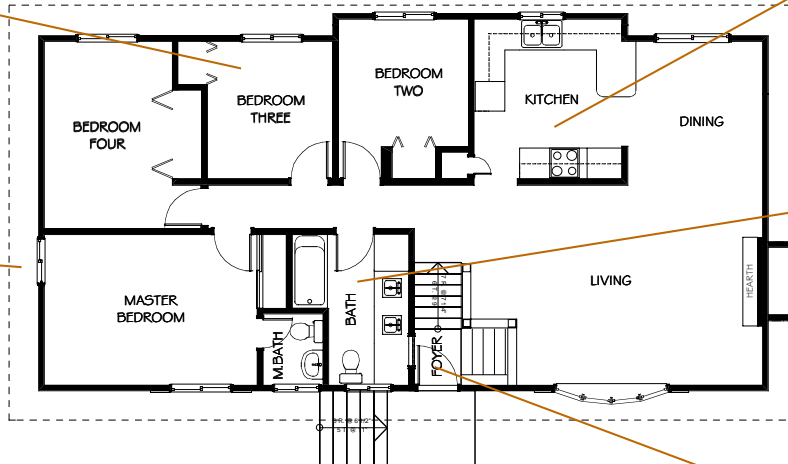
"Before" from the street

"I CAN'T TELL YOU HOW MANY TIMES THE **DOOR** HAS BEEN OPENED, ONLY TO SEND SOMEONE SAILING DOWN THE STAIRS!"

by anonymous

The bedrooms are often too small to fit more than a twin bed, and they have very little closet space.

The side walls are largely blank and featureless, with only a single window.



The kitchen, while compact, is awkwardly laid out, with the stove located far from the sink.

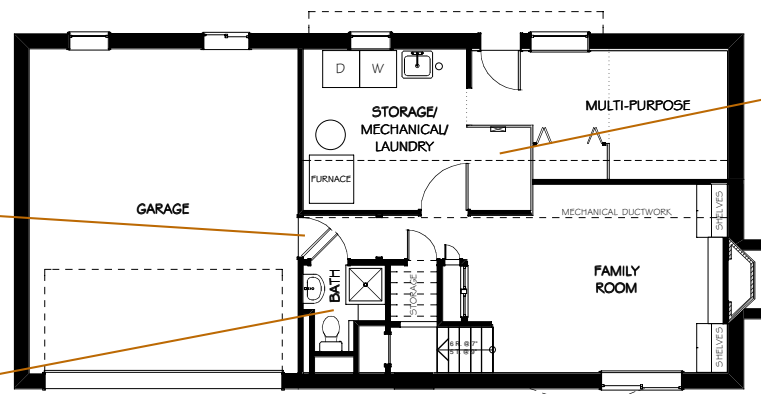
The children's bath is huge but inefficiently laid out, with lots of wasted space.

The foyer is just a stair landing, too tight even for two people standing side by side.

MAIN LEVEL PLAN "BEFORE"  
SCALE: 1/4"=1'-0" (24"x36") OR 1/8"=1'-0" (11"x17")

The entry from the garage into the basement, the most frequently used entry, is tight and narrow, with no place to set down a bag of groceries or a briefcase.

The bathroom is sandwiched between the garage and the stairs, leaving little room to expand.



LOWER LEVEL PLAN "BEFORE"  
SCALE: 1/4"=1'-0" (24"x36") OR 1/8"=1'-0" (11"x17")

The basement has a wonderful masonry fireplace, but otherwise is awkwardly laid out, with little thought given to the entry from the garage.

## LANDSCAPING

Landscaping is the least expensive way to spruce up a split, save energy, attract wildlife, and add color throughout the year.

Planting shade trees on the south and west sides of the house not only beautifies the lot, it also greatly reduces late afternoon heat gain during the summer, thus reducing air conditioning costs.

Planting windbreaks, or rows of coniferous trees, to the north and west of your house can shelter it from harsh winter winds, thus reducing heating costs.

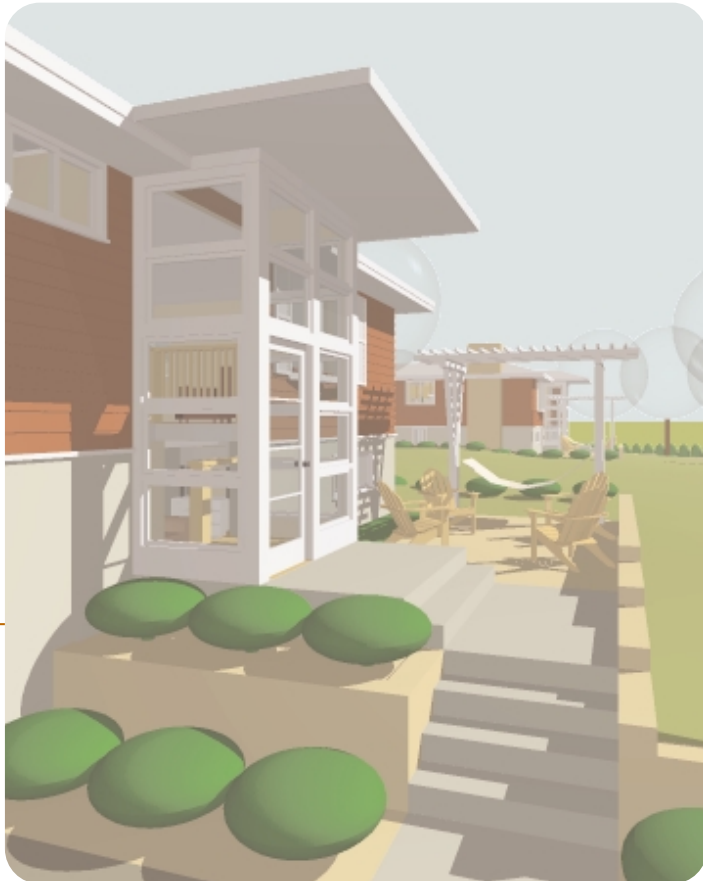
Specific plants attract specific animals. Planting such native prairie species as goldenrod and black-eyed susans helps attract butterflies, for example, while the bright red berries of the mountain ash tree will attract cedar waxwings during the winter.

The University of Minnesota Extension Service web site [www.extension.umn.edu](http://www.extension.umn.edu) has extensive information on shade trees, windbreaks, and various plant species.

Be bold! Talk to landscape architects, designers, and your local nursery. And be sure to think beyond a tidy lawn. Planting a wide variety of plant species will make your house more beautiful and colorful across the seasons.



# IDEAS: EXPANDING & RETHINKING THE ENTRY



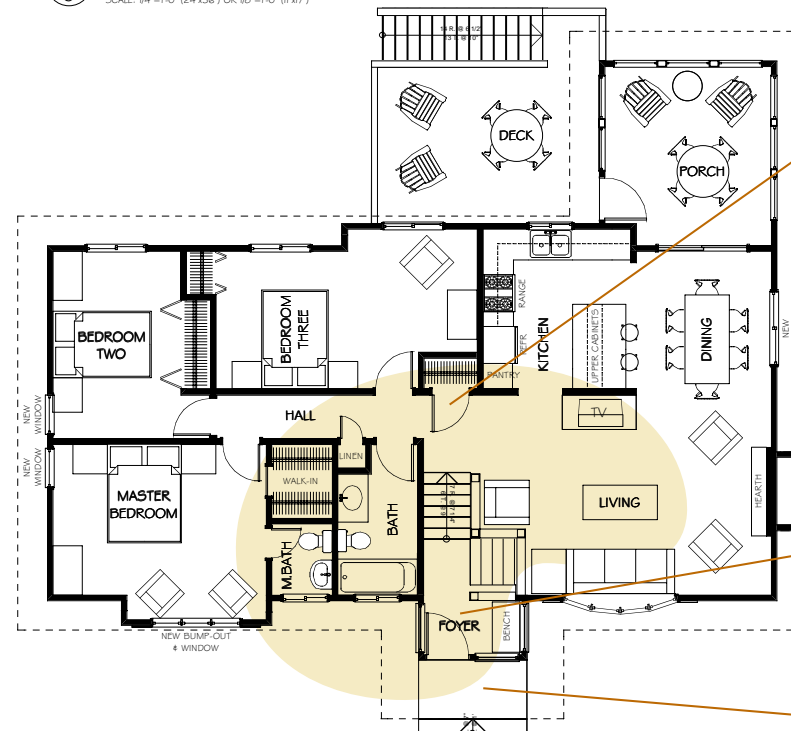
**Projecting a glassed-in front entry from the house's otherwise flat facade makes it much more inviting. At night with the lights on, the front entry becomes a "lantern" or beacon for the house, visible from the street and neighborhood.**



FRONT ELEVATION "AFTER"

SCALE: 1/4"=1'-0" (24x36") OR 1/8"=1'-0" (11x17")

**Adding a new front entry makes the front door more prominent than the garage door. It also gives the house an architectural focus.**



MAIN LEVEL PLAN "AFTER"

SCALE: 1/4"=1'-0" (24x36") OR 1/8"=1'-0" (11x17")

**Moving the coat closet from the foyer to the top of the stairs frees up space on the landing, and invites guests up to the social spaces.**

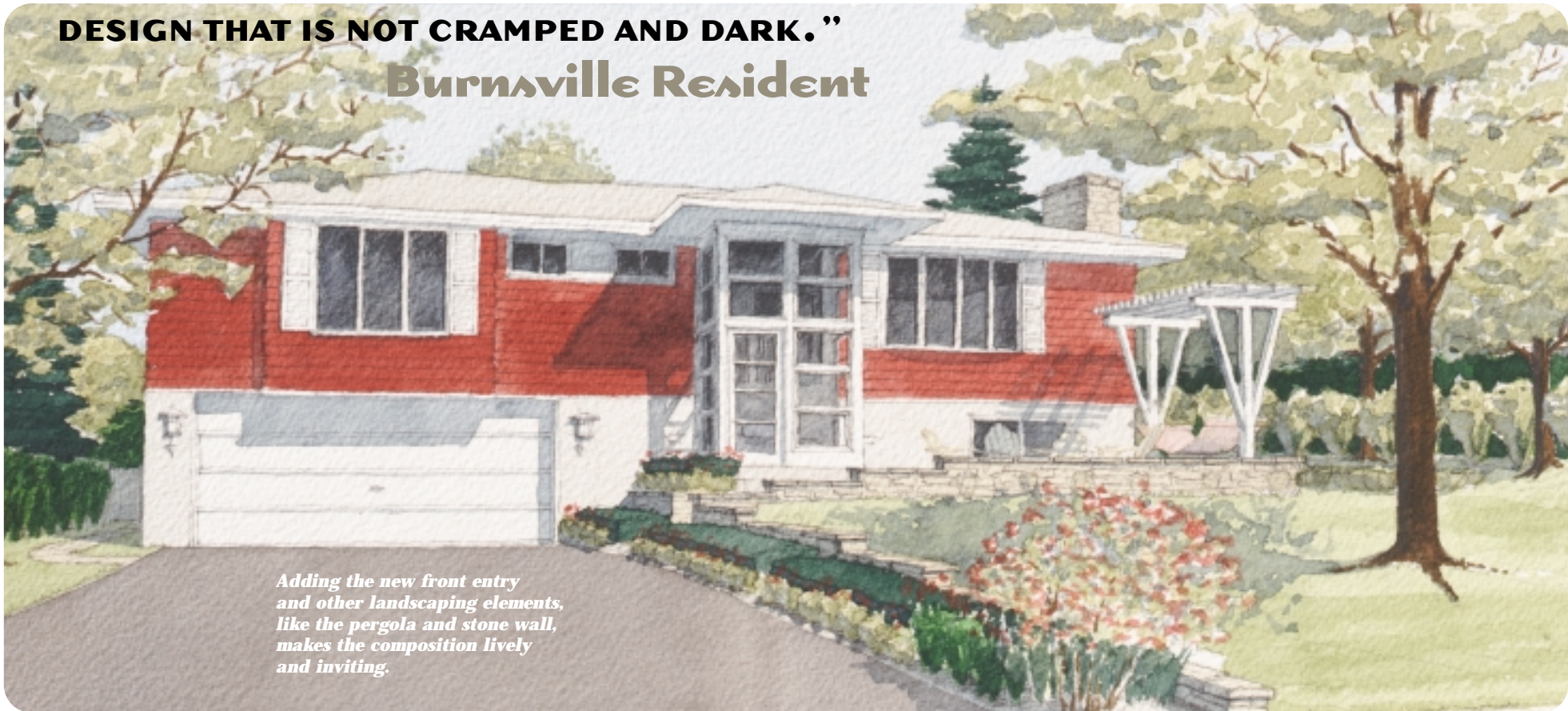
**Expanding the entry foyer provides enough space to greet guests.**

**Extending the canopy over the front stoop creates a sheltered entry or porch.**

"WE WOULD LIKE AN **ENTRYWAY** - A WELCOMING

DESIGN THAT IS NOT CRAMPED AND DARK."

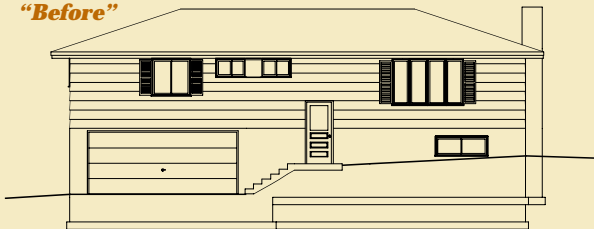
**Burnsville Resident**



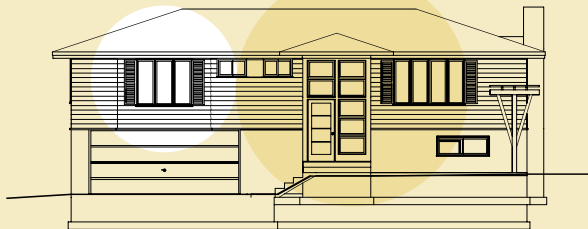
*Adding the new front entry and other landscaping elements, like the pergola and stone wall, makes the composition lively and inviting.*

## FACADE TREATMENTS

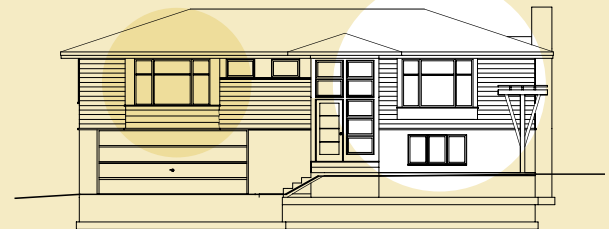
"Before"



*The flat, two-story facade, tiny front door, and massive garage door make the house look both bland and overbearing. Wide horizontal siding is on the upper level, and the base is stucco.*

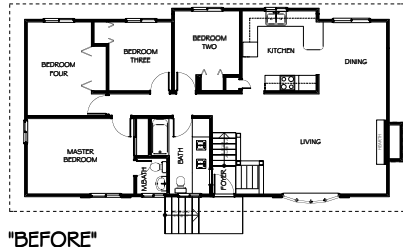


*Adding a new front entry and a bump-out over the garage breaks up the flat facade and roof line. Re-siding with narrower 6" siding and adding trim bands gives the house more texture and character.*



*Replacing the windows and adding trim dramatically changes the front of the house. Removing the shutters and making the windows more playful gives the house a more contemporary flair.*

# IDEAS: OPENING UP THE PLAN

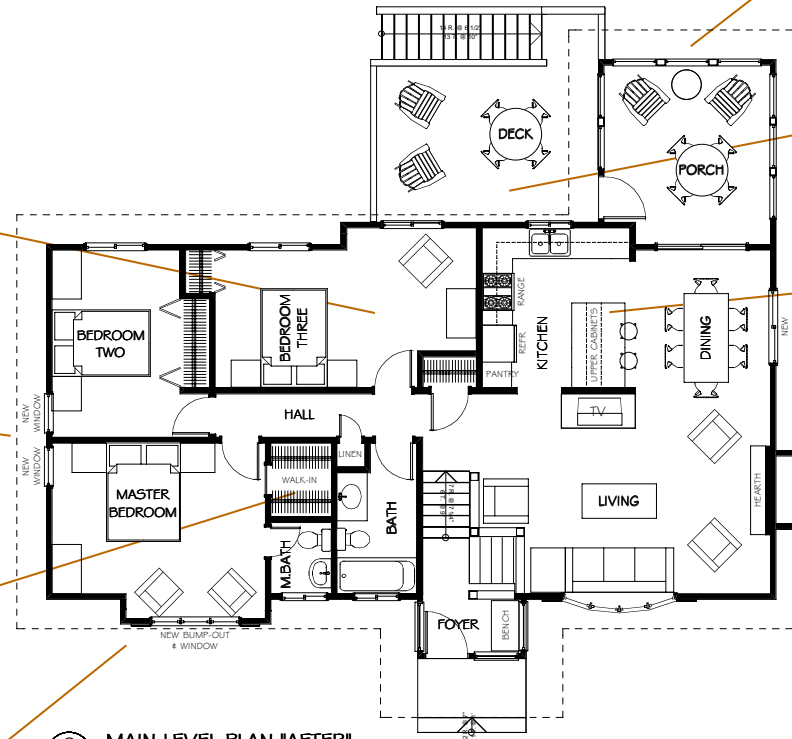


Combining two small bedrooms into one large bedroom allows room for a queen-size bed and a sitting area. This would also make a great home office/guest room combination.

Adding windows to the sides of the house will make the bedrooms feel larger by adding more natural light.

Reconfiguring the bath and closet arrangement creates a walk-in closet in the master bedroom and a linen closet in the hallway.

Adding a master bedroom sitting bay centered above the garage door creates a special focus for the bedroom, and helps relieve the flatness of the facade.



MAIN LEVEL PLAN "AFTER"  
SCALE: 1/4"=1'-0" (24"X36") OR 1/8"=1'-0" (11X17)

Adding a four-season porch off the dining room extends the house into the backyard.

Adding a deck off the four-season porch creates an outdoor space overlooking the backyard.

Remodeling the kitchen and adding a peninsula makes the work space more efficient, and also makes the kitchen more social by creating space for people to gather.

Adding a double window in the dining room allows more light into the kitchen.

"I WOULD LIKE TO **COMBINE** THE FORMAL DINING ROOM AND KITCHEN TO MAKE THE AREA A COMFORTABLE PLACE FOR EVERYONE TO GATHER."

*New Hope Resident*

"I WOULD LOVE TO HAVE A **LARGER** KITCHEN WITH A CENTER ISLAND OR BREAKFAST BAR."

Amy from Burnsville



**Removing part of the existing wall between the kitchen and the dining room and adding a peninsula with glass doors on the upper cabinets makes the two rooms feel larger, lighter, and more connected, while providing ample storage space. The dining room now flows onto the new four-season porch, connecting the house to the backyard.**

## ADDING A PORCH OFF THE BACK

Adding a porch off the back of your split is one of the easiest ways to make a house feel more spacious.

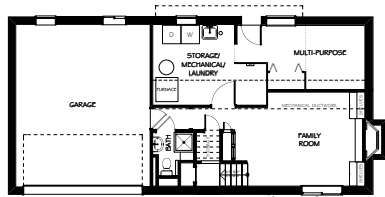
Porches come in three types: screen, three-season, and four-season. A screen porch has walls made of thin aluminum or fiberglass screens and is essentially a deck with a roof and screens. A three-season porch has windows, but no insulation or heat. A four-season porch has windows, insulation, and an optional heat source.

Although screen porches can only be used for a few months each year, during those months they're perfect: the roof keeps off the rain, and the screens keep out mosquitoes and other insects. Breezes pass uninterrupted through the screens, keeping the porch cool.

Three-season porches, because they're glassed in, can be used earlier in the spring and later in the fall than a screen porch. But the windows don't open as wide as a wall of screen, and thus trap in more heat, making three-season porches less comfortable during the hottest days of summer. A smart move is to insulate the porch ceiling, which helps minimize heat gain through the roof.

Four-season porches are really finished rooms with separate heating systems, allowing them to be shut off in winter. Most often the heat source is a supply grille from the forced air system that can be turned off with a damper. It is vital that the porch be separable. Otherwise, according to the Minnesota Energy Code, the porch and all its windows must be counted in any energy calculations for the house.

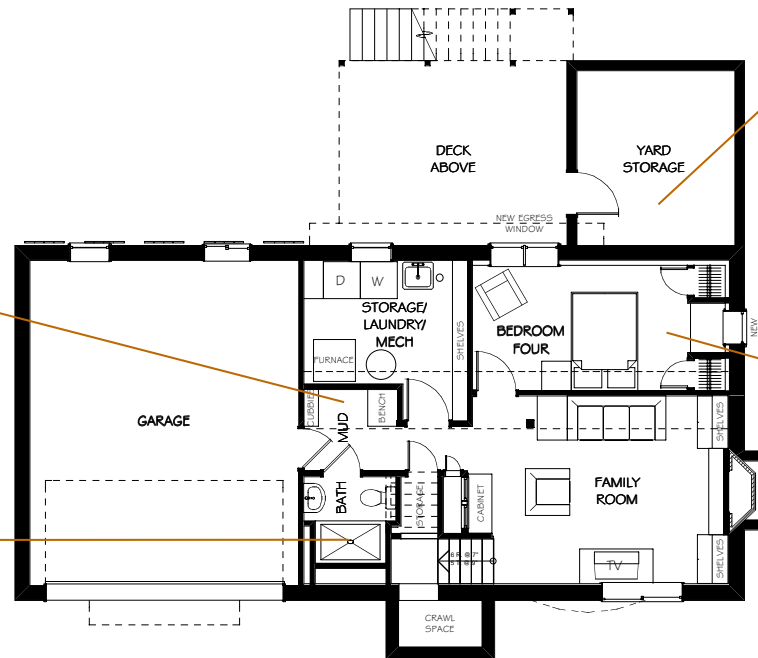
# IDEAS: STORAGE, BASEMENT, LANDSCAPING



"BEFORE"

*Adding a mudroom, however small, provides space for coat hooks, cubbies, and a bench to sit on while removing a pair of winter boots, or a place to set down a bag of groceries.*

*Remodeling the bathroom provides more toweling-off space. Removing the existing coat closet in the entry foyer gains more space for a larger shower.*



LOWER LEVEL PLAN "AFTER"  
SCALE: 1/4"=1'-0" (24"x36") OR 1/8"=1'-0" (18"x17")

*Building the base of the four-season porch out of concrete block and adding a secure door allows it to be used as a storage area for outdoor equipment—lawnmowers, bicycles, tools, etc.—taking pressure off the garage.*

*Creating a bedroom off the family room provides one more room for guests, teenagers, or a home office. Adding windows on a second side of the room increases the natural light in an otherwise dark room.*

**"THE ENTRYWAY FROM THE GARAGE IS VERY SMALL. IN THE WINTER WHEN YOU HAVE WET *FOOTWEAR*, IT IS DIFFICULT TO FIND THE SPACE TO TAKE OFF AND STORE YOUR SHOES AND COATS."**

**Prior Lake Resident**

**“THE ONE THING I WOULD *LOVE* TO CHANGE ABOUT OUR HOME WOULD BE TO ADD A FOUR-SEASON PORCH TO THE BACK.” Gerri from Burnsville**

*Adding a four-season porch, deck, and stairway connects the house to the backyard, and creates a series of different outdoor spaces where friends and family can gather.*

*Planting rows of shrubs and perennials along the side yard defines the property line and connects the front yard and backyard.*



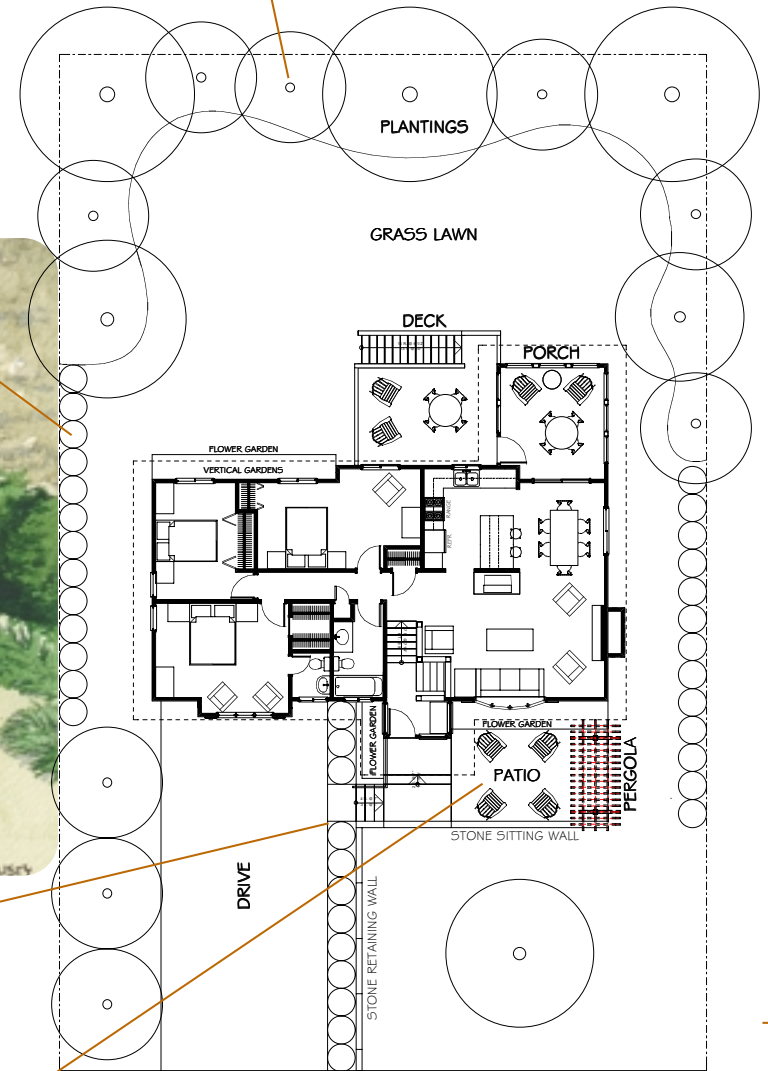
*Adding trellises or vines to the back of the garage wall camouflages an otherwise blank wall and adds a special place for growing vines.*

*Building a secure storage space beneath the porch creates a perfect spot for storing garden tools.*

*Adding a retaining wall and a row of plantings along the driveway creates a visual link between the street and the front entry.*

*Adding a front yard patio, defined by a pergola on one side and a stone wall just high enough for sitting on the other, creates a shady front porch, a perfect place from which to watch neighborhood life.*

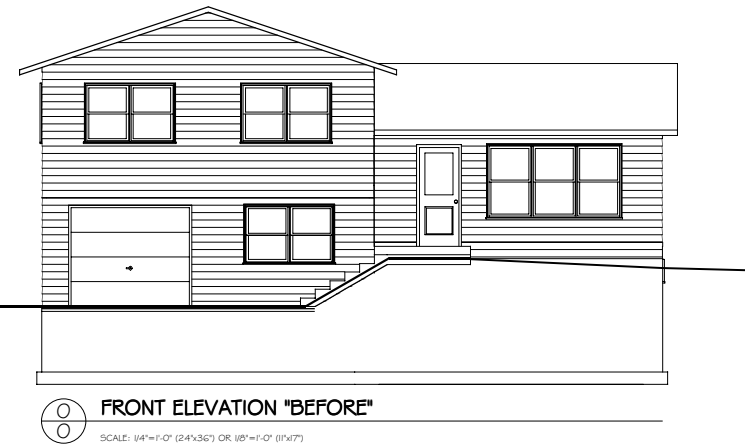
*Bordering the yard with trees, ornamental grasses, and plantings contrasts with and accentuates the manicured lawn.*



**SITE PLAN**  
SCALE: 1/16"=1'-0"

# SPLIT-LEVEL TRADITIONAL

This split-level home, dating back to the 1950s, is the oldest and most traditional of the house types featured in this book. The entry is on the same level as the social rooms, which makes it unique among the three types. This allows the stairs to be located in the middle of the house rather than near the front entry. This particular home has three bedrooms, one-and-a-half baths, and just a one-car, tuck-under garage. It also has a fourth level—a completely below-grade basement located directly beneath the main entry level.



**“IT DOESN’T LEND ITSELF WELL TO *CREATING* THAT WARM AND WELCOMING FIRST IMPRESSION THAT I WOULD LIKE FOR MY HOME.”**  
**Kathy from Brooklyn Park**

*The two low-pitched gable roofs are oriented perpendicularly to one another on this house. Many houses of this type have hip roofs and a more Prairie styling.*

*The bedroom level sits above the single-stall garage and cantilevers over the lower level toward the street.*

*The house has no sidewalk. People have to walk up the driveway to reach the front door.*

*The large window in the living room that faces the street is a triple-wide double-hung in this particular house, but most often is a huge picture window.*

*The entry is on the same level as the living, dining, and kitchen spaces. There is no protection from rain or sun at the front door.*

*The house can only be built on a sloped site.*

*“Before” from the street*



## REPLACING OLD WINDOWS

The original all-wood windows built into most splits have probably taken quite a beating through the years and probably need to be replaced. Each type of window commonly built into splits has its own problems:

Casements, windows that are hinged on the side and open out like a door, can warp if left open in the rain. Once warped, they won't seal well, thus letting in winter drafts.

Sliders, windows that slide sideways (like double-hungs on their sides) get tracks full of dirt and dust, and then won't slide well.

Double-hungs, windows that slide up and down, almost always had aluminum combination windows added that didn't drain (or "weep") well, thus rotting out the sills.

Plus, most splits were built with single-glazed windows that barely keep out the cold.

Newer windows take advantage of technological improvements, such as filling the cavity between two panes of glass with argon gas to greatly increase the window's R-value (a measure of insulating value). A single-glazed window will have an R-value of 0.80. A typical replacement window will have an R-value of 2.86.

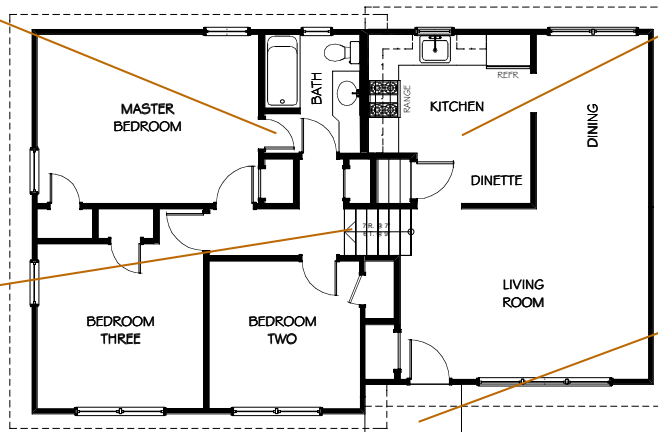
Also, most original windows were wood, and thus need to be painted frequently. Most replacement windows on the market today are wood on the interior, but aluminum or vinyl on the exterior, and thus require less maintenance.

*The two-door bath, while dysfunctional (someone always leaves a door locked), was a common attempt to make the master bedroom feel like it had a dedicated bath.*

*The kitchen and the cook are isolated from the rest of the main level.*

*The stairs are located in the center of the house, linking all three levels together—for better or worse.*

*The nondescript entry is unprotected and uncelebrated.*



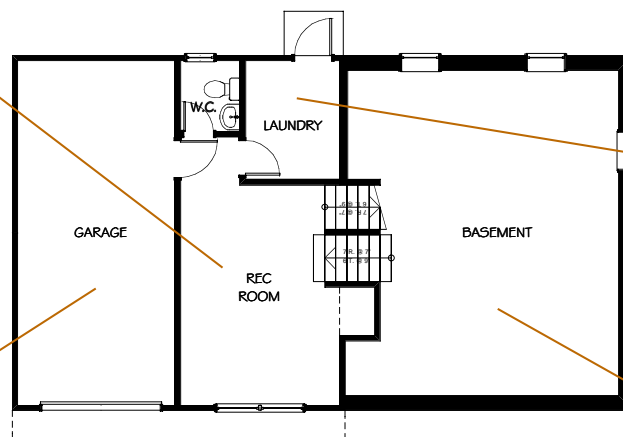
**MAIN LEVEL PLAN "BEFORE"**  
SCALE: 1/4"=1'-0" (24"x36") OR 1/8"=1'-0" (11"x17")

*The recreational room is small and, because it has so many doors and stairs, hard to furnish.*

*The only access to the backyard is through the laundry room.*

*The long, narrow, single-stall garage was fine when most families only had one car, but it's a huge stumbling block for today's buyers.*

*The basement level is fully below grade.*



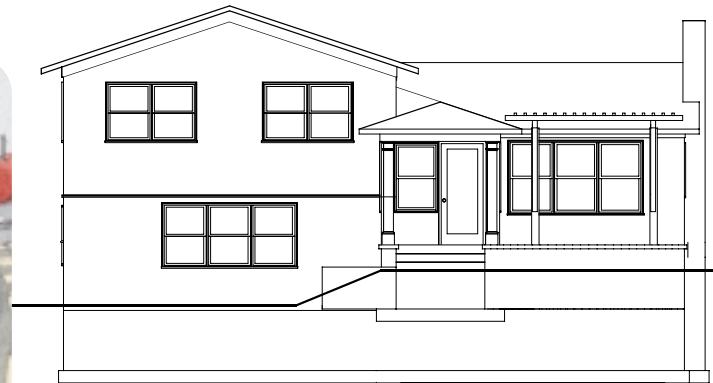
**LOWER LEVEL PLAN "BEFORE"**  
SCALE: 1/4"=1'-0" (24"x36") OR 1/8"=1'-0" (11"x17")



# IDEAS: EXPANDING & RETHINKING THE ENTRY

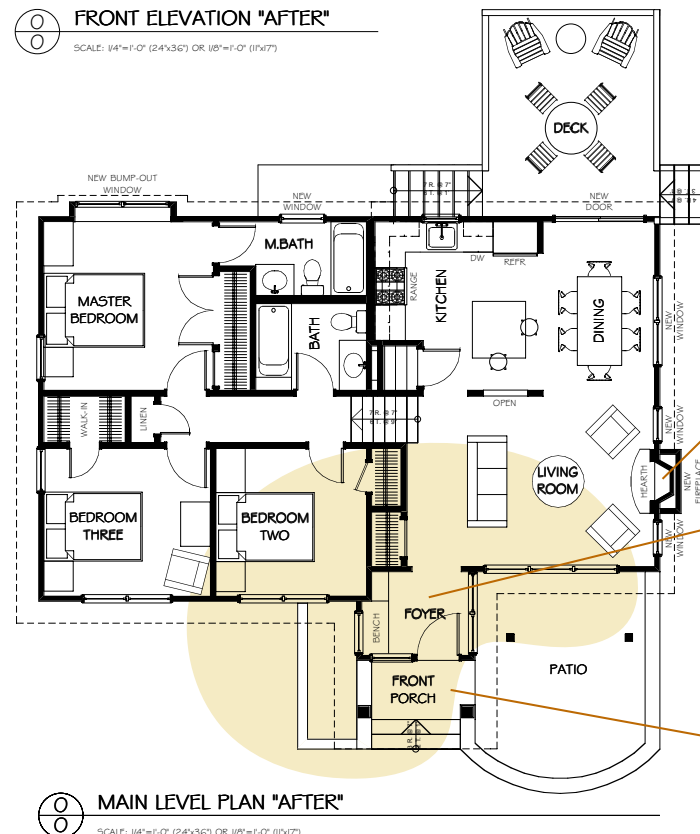


*The pergola and patio recreate the pleasures of a traditional front porch. The pergola shades the patio while still allowing natural light into the living room.*



FRONT ELEVATION "AFTER"  
SCALE: 1/4"=1'-0" (24"x36") OR 1/8"=1'-0" (11"x17")

*Adding a hip roof over the front entry and a pergola over a front patio creates a porch, a place to hang out with friends and family and watch the neighborhood roll by.*



MAIN LEVEL PLAN "AFTER"  
SCALE: 1/4"=1'-0" (24"x36") OR 1/8"=1'-0" (11"x17")

*Adding a gas fireplace provides a focal point for an otherwise bland room.*

*Adding an airlock, however small, separates the front entry from the living room.*

*Adding a small front porch with columns creates an inviting covered entry that reaches toward the street.*

“I WOULD LOVE TO PUT A **PORCH** ON THE FRONT OF THE HOUSE OR DO ANYTHING SO THAT MY SPLIT DOESN'T LOOK EXACTLY LIKE ALL THE OTHERS.”

Shari from Lino Lakes



*The remodeled house turns a warmer, more inviting face toward the street.*

## FACADE TREATMENTS

“Before”



*The existing facade has 6” siding from top to bottom with minimal trim or other architectural ornamentation. It’s a dull facade with little to spark the imagination.*

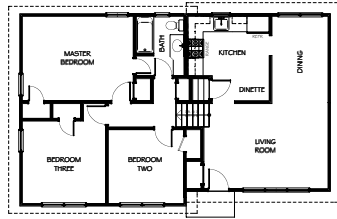


*Adding a new front entry, a pergola, and family room windows makes the facade more interesting. Adding stucco to the base of the house creates some material interest.*



*Adding a muntin pattern to the replacement windows adds another level of detail. Replacing the wider siding with a narrow 4” lap adds texture and detail.*

# IDEAS: OPENING UP THE PLAN

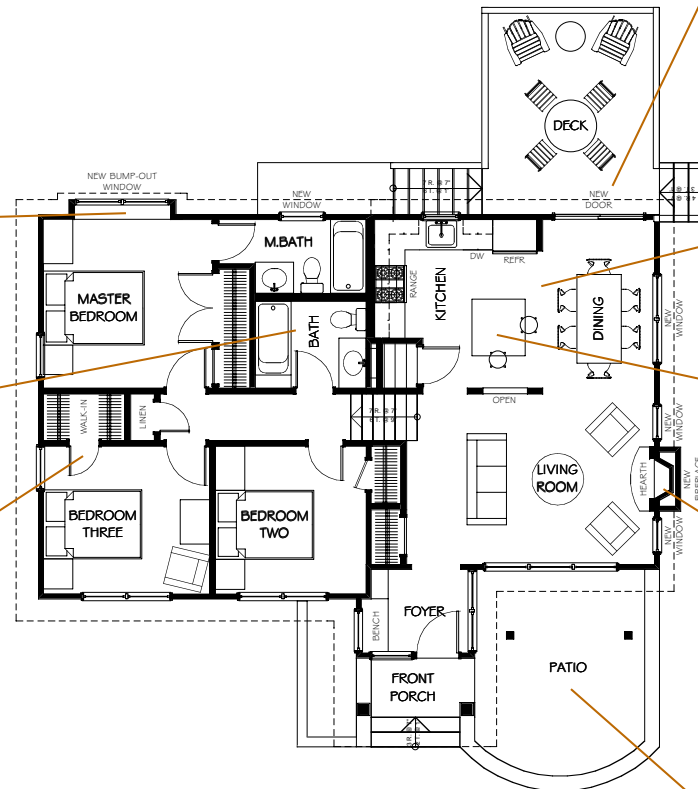


"BEFORE"

Adding a large bay window in the master bedroom is a simple way to give the room a focal point and make it feel more spacious.

Rearranging the plumbing provides two full bathrooms in the same space previously occupied by one. The master bedroom's closet is also larger now.

Making the closet as wide as the hallway allows for a small walk-in closet and a larger linen closet.



MAIN LEVEL PLAN "AFTER"  
SCALE: 1/4"=1'-0" (24x36") OR 1/8"=1'-0" (11x17")

Adding a new deck and a sliding glass door connects the house to the backyard.

Removing the wall between the kitchen and dining room and adding an interior opening between the kitchen and living room connects and transforms the spaces, while leaving the cabinetry and appliances intact.

Adding a small island in the kitchen provides more storage and a place for friends and family to gather.

Adding a gas fireplace transforms an otherwise bland living room with no focus into a great gathering space.

Adding a patio extends the living space of the house into the front yard.

"I WOULD LOVE TO HAVE A MASTER **BATHROOM** AND BEDROOM."

Cari from Maple Grove



## ADDING A FIREPLACE

Adding a fireplace is one of the few remodeling projects that pays for itself immediately. That is, the value of the house increases immediately, offsetting the cost of adding the fireplace.

And adding a fireplace is surprisingly painless. Units can either be added within the living room walls or built onto a platform cantilevered beyond the existing walls.

Gas units, complete with remote controls and surprisingly realistic logs and flames, dominate the market today. They are most often direct vented, meaning the gas fumes are vented horizontally through the wall, not even requiring a vertical chimney.

Wood-burning fireplaces, of course, do require a chimney. While wood-burning fireplaces are more romantic, they also create a great deal more pollution than gas fireplaces and are less environmentally friendly.

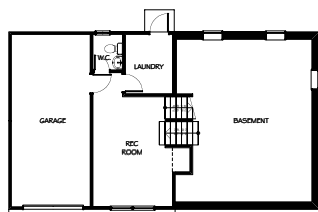
On the inside, make the fireplace surround both fun and beautiful. Use intricate mouldings and woodwork in the mantle. Explore the infinite world of ceramic tile in the surround. Add unique and detailed accent tiles. Add color and life. Make the fireplace surround a unique and wonderful design statement.

*Adding a gas fireplace provides a focus to the living room that was missing before. Opening up the walls between the kitchen and dining room allows the fireplace to be visible from throughout the main level.*

“THE SPACE REALLY WORKS WELL. IT’S **NICE** TO HAVE AREAS THAT ARE SEPARATE YET FLOW TOGETHER AND ARE NOT THAT FAR AWAY.”

**Frank from Ontario, Canada**

# IDEAS: STORAGE, BASEMENT, LANDSCAPING

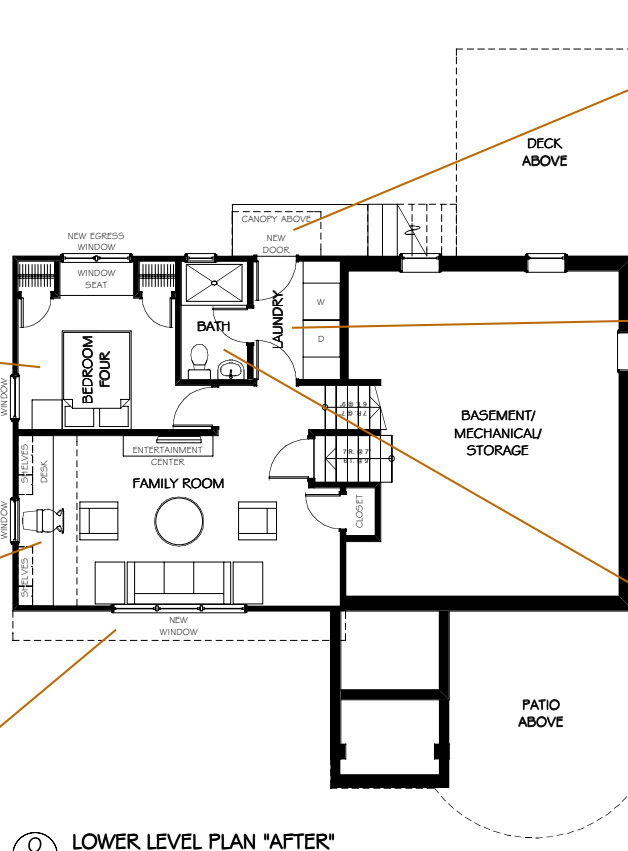


"BEFORE"

*Building a new two-stall garage on the rear of the site (see p. 29) allows you to convert the existing garage into an extra bedroom and an expanded family room.*

*Adding a built-in desk and shelves creates a small library or computer space.*

*Adding a large triple-wide window provides more light and echoes the living room window pattern.*



LOWER LEVEL PLAN "AFTER"  
SCALE: 1/4"=1'-0" (24x36") OR 1/8"=1'-0" (11x17")

*Building the new garage in the backyard means this will become the most commonly used entrance to the house. Adding a roof canopy and some mudroom storage makes it more inviting and functional.*

*Modifying the laundry room allows it to double as a mudroom. Aligning the doors creates a visual connection to the backyard.*

*Adding a shower converts the existing half-bath into a three-quarter bath, making the bedroom perfect for either teenagers or guests.*

"I LIKE THAT THE LOWER **LEVEL** DOESN'T FEEL LIKE THE BASEMENT."  
Kathy from Brooklyn Park

**"WE WOULD LIKE TO USE PART OF THE *CURRENT* GARAGE SPACE TO CREATE A GREAT ROOM."**

**Cottage Grove Resident**



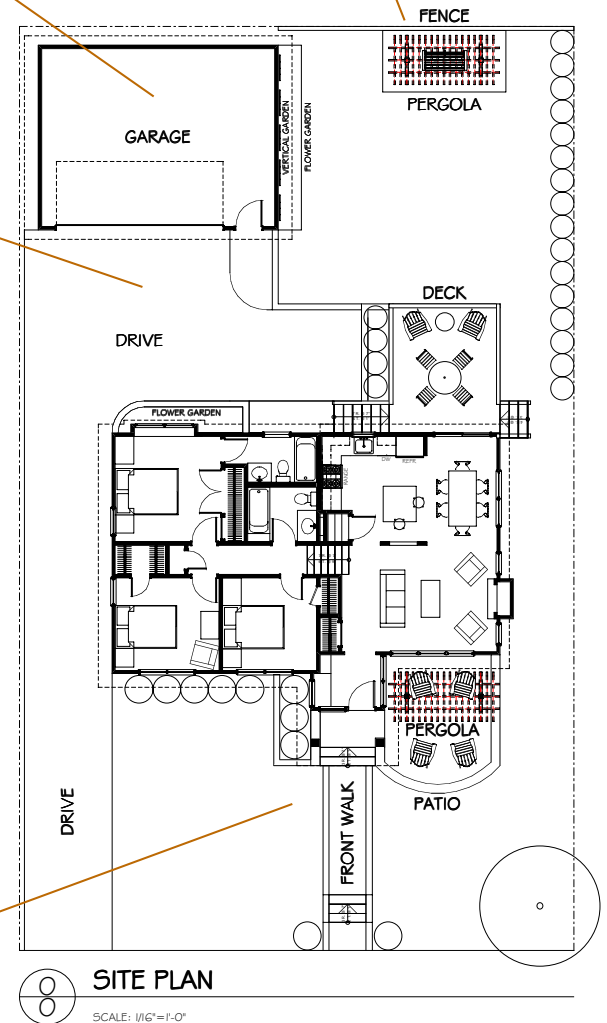
*Dividing the new family room space into two different areas creates a conversation circle with a TV and a study area focused on a computer. Lowering the ceiling over the study area makes it feel cozier.*

*Building a new detached two-stall garage provides plenty of extra storage space.*

*Adding a driveway turn-around allows the driveway to double as a patio and play space.*

*Adding a new front walk connects the house with the street, and provides a more inviting path for guests.*

*Adding a small pergola, patio, and bench in the backyard creates a great "away" space.*



**SITE PLAN**  
SCALE: 1/16" = 1'-0"

# OTHER SPLIT ISSUES

“HEATING AND COOLING ARE A **PROBLEM** WITH AN OPEN FLOOR PLAN THAT LETS HEAT RISE AND COOL AIR FALL.”

Burnsville Resident

## HEATING AND COOLING

The most common complaints registered on [www.split-level.com](http://www.split-level.com) were problems with heating and cooling.

Specifically, the open stairs that run between three or even four different levels make it almost impossible to keep the temperature even on any given level. This is caused by simple physics: warm air rises and cool air falls. In the winter, warm air rises from the basement to the bedroom level, making the bedrooms hot and the basement cold; in the summer, cool air sinks to the basement, leaving the bedrooms hot and the basement cool. There are three possible solutions to this problem.

The simplest solution is to run the furnace fan continuously at a low setting. This keeps air moving throughout the house, and evens out the temperature differentials between levels. While it's low-tech, running the fan consumes electricity and adds noise.

A second solution is to modify the forced air heating system to create separate heating and cooling zones, each with its own thermostat. In the winter, for example, the basement and bedroom level thermostats can be set at different temperatures, evening out the temperature differential between levels. This is a fairly expensive solution.

The third and most inconvenient solution is to add doors at the stairways, thus physically preventing air from flowing between levels. Doors between levels will also help limit the flow of unwelcome sound between levels. However, doors also make moving around the house more difficult.

## SMOKE ALARMS

Smoke alarms, until recently called smoke detectors, are the most valuable safety equipment in your home. Updating smoke alarms is required in even the most minor remodeling.

Specifically, a smoke alarm must be installed within each bedroom, and another installed in the halls outside the bedrooms. Houses with bedrooms on different levels require smoke alarms in the halls on each level.

In addition, one smoke alarm must be installed on each level, regardless of whether

there are bedrooms on that level. Also, common sense dictates that one smoke alarm should be located near the mechanical room, where many fires originate.

Smoke alarms must be hard-wired to the building's power source, but also have a battery back-up so they'll still work even if the power goes out. The smoke alarms also have to be wired in such a way that if one alarm goes off, they all do.

## CARBON MONOXIDE DETECTORS

Carbon monoxide, a colorless, odorless gas, is a byproduct of combustion. It is produced by such appliances as gas furnaces, gas water heaters, fireplaces, gas stoves, and gas space heaters.

Carbon monoxide displaces oxygen in the bloodstream, reducing the amount of oxygen reaching the brain and other vital organs. At low levels of exposure, carbon monoxide can cause such flu-like symptoms as fatigue, nausea, and headaches. At higher levels of exposure, carbon monoxide can cause loss of consciousness, brain damage, and death.

Not surprisingly, one of the most common sources of carbon monoxide within the home is from automobiles running in attached garages. The fumes can easily seep into the house and spill into the living space.

Carbon monoxide detectors, like smoke alarms, should be placed near the bedrooms in a house, as well as on every level. The best detectors have digital readouts that show just how much carbon monoxide is in the air.

If a carbon monoxide detector sounds an alarm, move outdoors immediately and dial 911. Emergency responders can check the air quality with gas meters and determine if there is a problem. Check with your municipal building or fire officials for further information.

*\*Information on carbon monoxide detectors is compiled from the City of Roseville fire department web site [www.ci.roseville.mn.us/fire](http://www.ci.roseville.mn.us/fire)*

“WE GOT MORE HOUSE FOR THE **MONEY** AND THE LIVING ROOM FEELS LARGER BECAUSE OF THE OPEN STAIRS.”

**Sally and Paul from Roseville**

## STAIRS

Splits are defined by their many different levels. Stairs are necessary to connect the levels together. While constantly running up and down these stairs can be frustrating, changing the stairs is both difficult and expensive. Part of living in a split is coming to terms with the stairs. On the positive side, anyone who lives in a split has a built-in exercise machine!

That said, the most important change to make is not to the stairs themselves, but to the transition spaces at the landings. Nothing is worse than that feeling of stepping into a split, and immediately lurching down the steps. In all three house types we've shown ways to add on mud-rooms and expand the front entries, creating places to greet guests and sit down to take off winter boots. This creates breathing room for the stairs.

## ACCESSIBILITY

Splits, because they are divided into so many different levels, and because stairs are so expensive and difficult to modify, are among the hardest house types to make accessible to people who are elderly, use walkers or wheelchairs, or have other mobility concerns.

For a house to work well for people with mobility problems, it must allow easy access to a car, a bathroom with a toilet and shower, a place to sleep, and a kitchen in which to prepare food.

In the two split-entry houses featured in this book, the garage is on a different level from the kitchen. In the split-level design, not only is the kitchen separated from the garage by a flight of stairs, but there's an additional flight of stairs to get to a bathroom or bedroom.

The stairs are inherent to the split's design, and really cannot be removed or altered without spending huge sums of money. One option is to add half-level chair elevators, the kind that attach to a stairway, between the levels.



*An image from the deck overlooking the lily pond and the garden shed beyond.*



# STARTING A REMODELING PROJECT

## HAVE A CLEAR GOAL

The key to any successful renovation project is knowing what you want to achieve, and focusing all your efforts toward achieving that goal. Whether you need to solve a storage problem, rebuild a deck, or add a bathroom, stay focused and on-task.

This may sound like simplistic advice, but remodeling projects often go awry when homeowners lose track of their original goal and try to do too much. It sounds reasonable to increase the scope of the project during construction. “As long as the builder is here, shouldn’t we replace all the windows?” But this kind of *scope creep* (as it’s called in the building professions) inflates the project budget, expands the construction schedule, and contributes to the project spiraling out of control.

In contrast, by limiting the scope of the work—just remodeling the kitchen, for example—you can confine the chaos of construction to one section of the house. Never forget that remodeling projects disrupt a family’s normal rhythms and routines. The more the remodeling work spreads throughout the house, the more disruptive it will be. Losing your kitchen is one thing; losing your kitchen and your bathroom is quite another. Staying focused on a single goal is the best way to preserve family and marital harmony, and minimize stress and conflict during construction.

## KNOW YOUR BUDGET & SCHEDULE

It seems obvious, but know how much money you have available for your project. Line up loans *before* construction starts. Know how much cash you have in savings. Convert stocks or other assets to cash *before* you begin construction, so you’re not vulnerable to swings in the market.

Lay out a preliminary budget, and be sure to include all potential expenses, even if they aren’t directly related to construction. Families tend to eat out a lot during kitchen remodelings. There are times when your house might be so full of fumes—for example, when refinishing floors—that it’s wise to spend the night in a motel. And allow for little upgrades along the way, for example selecting a kitchen faucet that’s more expensive than the allowance.

And always—*always!*—budget extra dollars for potential cost overruns. Some projects go smoothly from the moment construction starts, but even the best-laid plans can go awry during the fog of construction. Backordered materials can delay construction. Builders can wrench their backs. Inspection schedules can fall behind. Prices can come in higher than anticipated. Having a financial cushion will greatly reduce the stress during construction.

Scheduling is every builder’s nightmare. Builders and sub-contractors juggle multiple projects. The builder has dozens of sub-contractors to coordinate, and all the work is interrelated. For example, the new kitchen countertops can’t be installed until the cabinets are square and true; the cabinets can’t go in until the sheetrocking is complete; the sheetrocking can’t begin until the inspector signs off on the electrical and mechanical work. If one task is delayed, the consequences reverberate throughout everyone’s schedules. All of which means you need to remain flexible. Expect delays. Never, ever, lock yourself into completion by a particular date by scheduling a special event at your newly remodeled house, assuming the project will be completed on time.

## GET A HANDLE ON THE REAL COSTS

Estimating remodeling costs is a chicken-and-egg dilemma: You can’t know the real cost of your project until you’ve prepared final working drawings (also known as blueprints or construction documents) and obtained a detailed estimate from a builder, yet it doesn’t make sense to complete the working drawings if the project will cost too much. So where to begin?

The most accurate way to predict remodeling costs is to look at precedents: How much did projects of similar scope really cost? Talk to builders and architects who have recently built projects similar to yours. Talk with friends, relatives, and neighbors who have remodeled their kitchens or rebuilt their decks. Take the leap and ask them how much it all cost. But beware of understatement. Homeowners are often reluctant to admit how much they actually spent on a remodeling project, and thus frequently under-report project costs. This under-reporting perpetuates misunderstandings about real costs.

Also be aware that construction is more expensive in Minnesota than in other parts of the country. Our harsh winters require deep frost footings, thicker insulation, and careful attention to detail that drives costs up. And remember that Minnesota is a high-wage state. In other words, prices for projects built elsewhere in the country probably won’t be applicable here in Minnesota.

“IN TODAY’S STANDARD OF **HOUSING**, WE NEED IT TO BE  
BIGGER, ESPECIALLY THE KITCHEN AND MASTER BEDROOM.”

Ellie from New York

“I LIKE THE ***SPLIT-LEVEL*** STYLE BECAUSE IT IS PRACTICAL, PROVIDES USEFUL SPACE, ISN'T AN ENERGY HOG, AND IS AN ECONOMIC BARGAIN.”

Circle Pines Resident

## FIND THE MONEY

Home equity loans have radically changed the way money is lent for remodeling projects. In the past, construction loans were the most common tool for borrowing money for a remodeling project. In return for the loan, however, the bank would impose strict requirements about construction cost, payment schedules, etc. In the past decade home equity loans have largely replaced construction loans. Home values have escalated at an unprecedented pace, and many homeowners have thousands or tens of thousands of dollars of equity in their homes.

A home equity loan is a financial tool for converting that equity into cash. You borrow against the equity you have built up in your house, securing the loan with the house itself. The bank simply signs over the money, usually with few restrictions. Never forget, however, that you're securing the home equity loan with your stake in your house. Spending the money without improving the value of the house can easily lead to losing your house if catastrophe strikes. You also begin paying back the home equity loan immediately, not after the project is complete.

Be sure to check with your municipality to see if it has any special loan programs available.

## RESEARCH ZONING RESTRICTIONS

Before beginning any design work, take the time to research zoning restrictions on your lot. Call your municipality to find out the setbacks for the front, rear, and side yards. Ask how far roof overhangs can protrude into a setback. If you're planning a garage addition, ask for the different setback requirements for an attached versus a detached garage. Ask if your municipality has maximum lot coverage restrictions. Ask about maximum height, and how it's calculated. Describe your planned project and always, always ask *what else you need to know*.

If your project strays into a setback or violates any other restrictions, you have two options: one, rethink or redesign to stay within the legal limits, or two, apply for a variance. A variance is a legal term for a waiver to a zoning rule. Municipalities typically have a hand-out describing the variance process, but essentially you will need to write up a description of your project, include drawings or a survey if necessary to clearly communicate your proposed project, and fill out a form describing the hardship due to the unique nature of your lot that requires you to seek a variance. Each community has a slightly different process. Do not assume you will be granted a variance!

## HIRE AN ARCHITECT OR DESIGNER

Your next step is to hire an architect or designer. This individual will design your remodeling project and complete the working drawings necessary to get bids, pull a building permit, and start construction.

Architects bring a special set of skills to design. They are trained to think through the whole process and ask: How will the whole house look after the project is complete? How do all the parts work together? An architect also works for you, not the builder, and brings the knowledge and experience of having gone through the process many times before. A thorough list of architects specializing in residential remodeling and design is available through the American Institute of Architects (AIA) Minnesota office [www.aia-mn.org](http://www.aia-mn.org) or the directory published annually in *Architecture Minnesota* magazine.

Design/Build is another option. Design/Build is a process in which the builder either designs the project directly or has a designer on staff do so. Design/Build sells itself as one-stop shopping, with the builder and designer working together as a team. But be aware that the drawings typically remain the property of the builder, and you can't solicit competitive bids from their drawings.

For kitchen remodelings or other projects that are cabinetry-intensive, design services are often available through the cabinetry shop or cabinetmaker.

## HIRE A BUILDER

Begin researching builders early in the design process. Attend local remodeling shows. Get recommendations from neighbors who have remodeled. Look for job site signs in your neighborhood to see which builders are working on projects similar to yours. Ask architects and designers for recommendations. Ask sub-contractors which builders run the tightest, most efficient job sites. Check out the web site of the Minnesota Chapter of the National Association of Remodeling Industry (NARI) [www.narimmn.org](http://www.narimmn.org) or the web site of the Builder's Association of the Twin Cities (BATC) [www.batconline.org](http://www.batconline.org).

Educate yourself about the remodeling process. The Minnesota Department of Commerce offers a free, downloadable .pdf booklet called **What You Need to Know: Hiring a Residential Contractor**. Minnesota's Office of the Attorney General [www.ag.state.mn.us](http://www.ag.state.mn.us) offers an on-line **Citizen's Guide to Home Building and Remodeling** with extensive links.

Take your time and be careful who you choose. Check references. Ask questions. Confirm the builder is licensed and there are no outstanding complaints against the business. Your builder, his or her crew, and all the various sub-contractors will be in your life for months. Do you want to wake up every morning and see this person's face before your first cup of coffee? It may sound silly, but personal chemistry is almost as important as price.

Nevertheless, price remains key. Every article you will read about remodeling recommends competitive bidding by a narrow pool (a minimum of two to three) of builders who have prequalified through personal interviews. But be aware that when construction is booming, when too many projects are chasing too few builders, it's almost impossible to get competitive bids. Builders can choose among projects and negotiate contracts one-on-one. When the economy cools down, builders are typically more willing to bid again.

Review the bids carefully to compare apples to apples. Are allowances for carpet or lighting fixtures sufficient? What mark-up are the builders charging? Are all materials clearly called out? Are responsibilities clearly defined? Is the payment schedule clear? Is there a clear process for change orders? Once you've accepted a bid and signed a contract, it's time to apply for your building permit.

### **PULL A BUILDING PERMIT**

Typically the builder applies to the municipality for the building permit. A building permit is required for most construction. If there's any question, check with your municipality. Always allow at least two weeks for a permit to be issued.

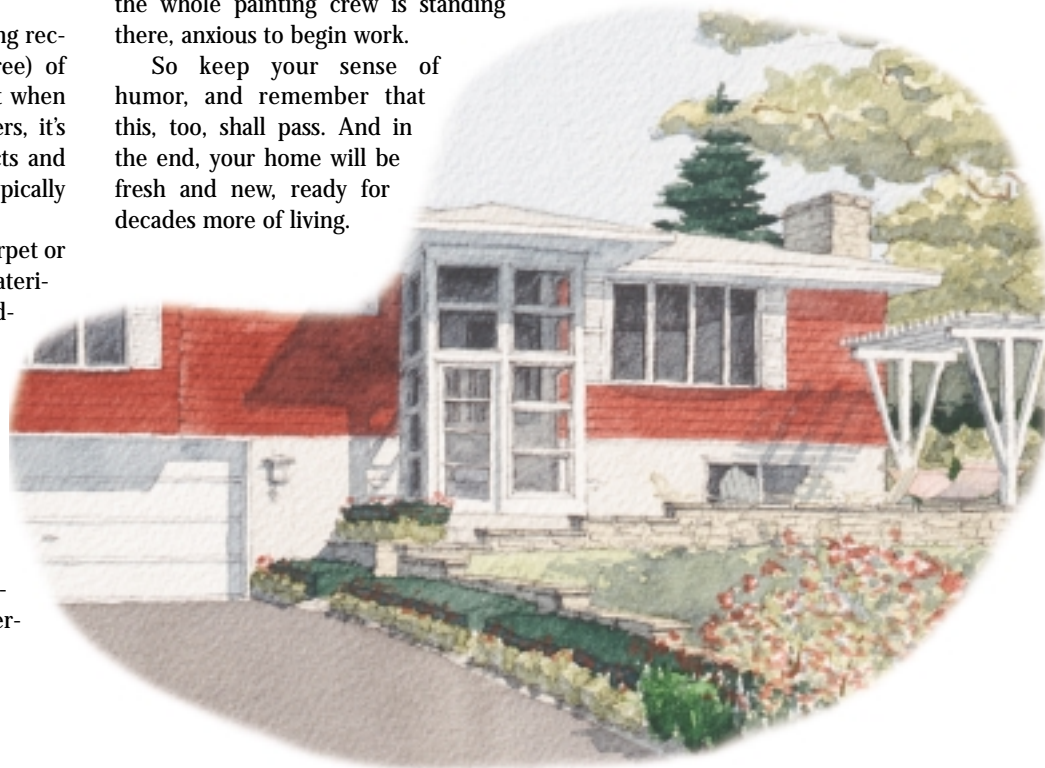
Note that do-it-yourselfers are required to follow the same steps as a professional remodeler. Do-it-yourselfers still need to file a building permit, submit energy calculations (if required), and submit to all required inspections.

### **KEEP YOUR SENSE OF HUMOR**

Remodeling is inherently stressful. It's noisy, messy, and disruptive. You'll wake up to pounding and hammering. Sheetrock dust will infiltrate your dresser drawers. Pick-up trucks will be parked in your driveway for months on end. You'll be washing dishes in your bathtub while the kitchen is torn up.

One way to minimize the length of time you have to undergo construction stress is to make all your consumer selections ahead of time. Paint colors, plumbing fixtures, doorknobs, and light fixtures are all best chosen before remodeling begins. The worst time to pick a paint color, for example, is when the whole painting crew is standing there, anxious to begin work.

So keep your sense of humor, and remember that this, too, shall pass. And in the end, your home will be fresh and new, ready for decades more of living.



**"WE HAVE A BEAUTIFUL *BACKYARD* AND HAVE THOUGHT ABOUT ADDING ON IN THAT DIRECTION. A FOUR-SEASON PORCH WOULD BE NICE."**

**Burnsville Resident**