

Why Remodel?

- Don't want to move-closing costs
- Improve family household
- Improve resale value
- Saving architectural style
- Can do it in stages while living in house
- Can be cheaper than building new
- Increase usage of area
- Improve appliances and efficiency
- Meet space to changing needs



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Why not to Remodel?

- Financing
- Time and inconvenience
- Avoiding family construction stress
- Upgrading utilities-low return
- Changing house will not fix a bad neighborhood, location, schools



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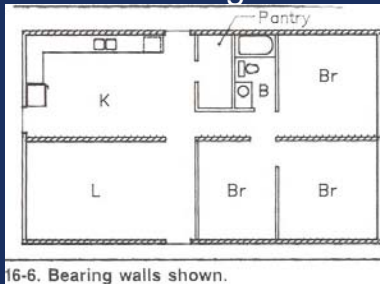
As-is House Plan

- Measure around outside of house
- Determine square footage of rooms
- Aid in cost estimation-know area and sizes
- Determine location of mechanical equipment
- Determine load bearing walls



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Load Bearing Walls



16-6. Bearing walls shown.



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As-is

- Extra plumbing capacity
 - Water line size and runs
 - Water softener
 - Septic Field
- Circuit Breakdown
 - Determine new loads
 - Wire size- 12 gauge for 20 A, 14 for 15 A
 - Panel size



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As-is

- Structural
 - Load bearing walls
 - Whirlpools, hot tubs, pool tables
- Gas-line capacity
- HVAC system
 - Heating/Cooling Capacity
 - Fan/Blower Capacity



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Areas To Remodel


- Kitchen
- Bathroom
- Interior Rooms
- Exterior
- Basement



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Kitchen

- Form follows function
 - How will kitchen be used?
 - Family, rental, college students



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Kitchen

- Adding appliances
 - Garbage disposer
 - Trash Compactor
 - Dishwasher



Sinks

- Enameled cast iron
 - Durable and heavy
- Porcelain on steel
 - Light, can chip
- Stainless Steel
 - Very light, last forever, easy to clean
 - Cost more
- Under Counter sinks
- Storage



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Other

- Cabinets
 - Many options-vary by price, quality & type
 - Under cabinet lighting
- Backsplash
 - Easily cleaned
 - Often overlooked in terms of style
- Venting Stove-try to incorporate



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Kitchen-Money Saving Tips

- Reface-not replace kitchen cabinets
- Avoid moving plumbing, vent, gas lines
- Keep on Same wall if moving rooms
- Watch storage space-use calcs
- Re-use appliances



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Bathrooms

- How will bathroom be used now?
 - Wash-up area
 - Care of infants and children
 - Several people at once
 - Assistance needed in bathroom
 - Dressing room



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Bathrooms

- Remodeling a tub
 - Tub liner
 - Liquid Steel
 - Shower Surround



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Sink Vanities

- Pedestal
 - Simple, clean
- Vanity
 - Functional



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Bathroom Accessories

- Towel Bars and Racks
- Paper Holders
- Grab Bars
- Soap Holders
- Clothes hooks
- Toothbrush and cup holders
- Dispensers
- Fancy Shower Heads



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Bathroom-Money Saving Tips

- Don't Move the toilet!
 - Main plumbing line
- Be careful routing plumbing in joists
- Re-use current tub
 - Re-face or add surround
- Don't skimp on faucets or accessories
 - Make bathroom more efficient and enjoyable to use
- Careful tying new plumbing to old
 - Dielectric fittings, rubber junctions



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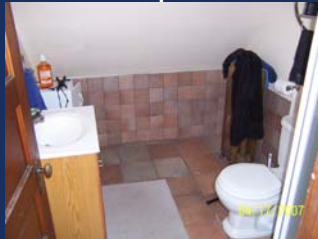
Kitchen/Bath flooring

- Ceramic tile
 - Under floor heat
- Linoleum
 - Easy quick and cheap
- Wood
 - Non water friendly
- Carpet



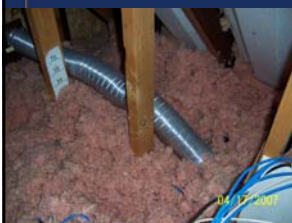
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Bathroom example



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Bathroom Example



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Interior rooms

- Look at structural plan
- Floor heights
- Adding Storage
- Functional Changes in bedroom
- Moveable room dividers-create options
- Closets storage
 - Overlooked yet functional







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Basement/attic Remodeling


- Easily add livable area
- First Steps
 - Remedy leaks and dampness
 - Insulate water and heating pipes
 - Repair and relocate electric
 - Check for sufficient light and ventilation
- May need extra entrance
- Separate apartment



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Basement

- Add Egress windows
- Cover ugly pipes but leave access
- Leave room to make turns for furniture or building supplies
- Furring strips
- Insulation on Walls



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Basement

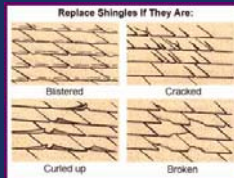
- Floor Covering
 - Assume water will be present
- Sump pumps-dual with battery backup
- Ceiling-drop or painting joist
- Structural columns
- Sound Insulation
- Bathrooms



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Attic

- Make sure to leave air space to allow warm air to exit vent
- Insulation
- Reflective insulation



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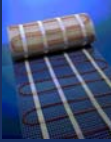
Exterior Remodeling

- Adding wings or ells
- 2nd stories
- New Siding
- Painting/staining
- Roofing
- Garages/driveways



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Operating Systems



- May need to add Unitary ventilation system for add on.



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Operating Systems

- Electric in floor heating systems
 - www.calorique.com
 - www.easyheat.com
 - www.heatizon.com
 - www.orbimfg.com
 - www.suntouch.net
 - www.warmlyyours.com



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Exterior Remodeling-example


- Building new garage and driveway
- Existing ½ car garage not suitable to park lawn mower
- Existing gravel driveway was muddy, and left trucks dirty
- Goal-have place for men to socialize and to increase property value



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Example

- Perform As-is drawings of exterior
- Decide best location
- Size of garage
 - My old truck 8x22 ft
 - Make 24x24
- Elevation of garage
 - Slightly higher than future driveway
- Time line-Fall 2005



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Problems

- Power Lines
- Property line disputes with Church

A hand-drawn diagram on a piece of paper, likely a map or a sketch, illustrating a property dispute. The diagram shows a rectangular area representing a property. A red line, representing a power line, runs diagonally across the property. The line is labeled 'Power Line' at both ends. The area to the left of the line is labeled 'Power Lines' and 'Cable Box'. The area to the right of the line is labeled 'Sally George'. The area below the line is labeled 'Sally vs. Property'. The area below the line is also labeled 'After, 1999'.

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Finding Solution

- Had to Talk with Electric Company about moving power line.
 - Find reason for power line.
- Get approval from city for construction.



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Finally

CITY OF URBANA
UTILITY PERMIT # 3291

Date: 08-13-2006
Applicant: Amy Rodriguez
Address: 207 N. High St.
C, S, Z: 000000
Phone: 219-244-0000

Type of Improvement: ☒ New ☐ Existing
Location of Work: 207 N. High St.
PI# 00-11-11-0000
Zoning District: 00 Yes ☒ No ☐
Remarks: Call 311-1111 for additional info. Description: New electrical work including a new meter and service entrance.

Area (ft. 2): Estimated Cost: Permit Fee:



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14586
ELECTRICAL PERMIT
OFFICE OF ELECTRICAL INSPECTOR
City of Urbana, Illinois

DATE: 08-13-2006
LOCATION: 207 N. High St.
REMARKS:
OWNER: Amy Rodriguez
CONTRACTOR: Amy Rodriguez
CONTRACTOR ADDRESS: 207 N. High St. Urbana, IL 61801

USE GROUP/TYPE OF STRUCTURE: ☒ NEW ☐ EXISTING
☒ Single Family ☐ Multi Family ☐ Business
☒ Residential ☐ Institutional ☐ Educational ☐ OTHER

CLASS OF WIRING: A () B () C () D () E () F () G () H () I () J () K () L () M () N () O () P () Q () R () S () T () U () V () W () X () Y () Z ()

TYPE OF WORK: ☒ New ☐ Alteration ☐ Pool ☐ Fire Alarm
☐ Repair ☐ Addition ☐ Sign ☐ Sump Service

OTHER:
SERVICE AMPS: 100 AMP
WIRE: 100 AMP
ADDITIONAL METERS:
WORK DESCRIPTION: New electrical work including a new meter and service entrance.

ESTIMATED COST OF WORK (Labor & Material): \$1000.00
TOTAL FEE: \$100.00
CASH () CHECK ()

ELECTRICAL INSPECTOR: [Signature]

Driveway



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Driveway



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Driveway



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Finished



Pitfalls of Doing It Yourself

- Poor planning
- Time
- Scope of project
 - Demolition
 - Structural Changes
 - New fixtures
 - New mechanicals
 - Finishing (drywall, paint, trim)



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Pitfalls of Doing It Yourself

- Construction Techniques
 - Improper usage
- Knowledge of home
 - How things are built
 - Where mechanical can be located
- Never finishing-leaving little things
- Family Stress



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Pitfalls of Doing It Yourself

- Current mechanical systems
 - Location
 - Capacity of system
 - Proper installation
- Knowledge of building codes



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Cost

- Labor
 - 1 to 1.5 times material cost
- Cost estimating
 - Buy 10% over required for waste and cutting
 - 30% for natural tile
- RSMeans



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Additions		Heating and Air Conditioning	
Build addition	\$70 to 120 per square foot	Replace warm air furnace	\$1,200 to 3,800
Reinforce porch	\$5,500 to 15,000	Replace electric heat pump	\$2,200 to 3,600
Prewall ceiling over plaster	\$1.50 to 2.00 per square foot	Replace central air conditioning system (electric)	\$1,500 to 3,000
Basement		Replace central air conditioning system (gas)	\$2,600 to 3,500
Convert basement to legal rental unit	\$35,000 to 55,000	Install humidifier	\$300 to 550
Bathrooms		Install electrostatic air cleaner	\$500 to 750
Remodel bathroom	\$10,000 to 12,000	Replace hot water boiler	\$2,500 to 3,500
Full half bathroom	\$2,500 to 5,000	Install attic ventilation	\$250 to 450
Full full bathroom	\$10,000 to 12,000		
Electrical Service		Insulation	
Housewide service to 200 amps	\$700 to 1,200	Insulate attic / basement	\$1.75 to 1.20 per square foot
Run separate electrical line	\$120 to 300	Kitchens	
Install consumers on outside (if aluminum wired house)	\$15 to 20 per connection/ \$2,000 to 3,000 (whole house)	Remodel kitchen	\$8,000 and up
Exterior		Plumbing	
Upgrade lawn	\$300 to 1,500	Hot water heater	\$400 to 650
New gutters and downspouts	\$1.50 to 3.50 per linear foot	(40-gallon capacity)	\$300 to 550
Fireplaces		Install new well	\$3,000 to 5,000
Build masonry fireplace	\$2,200 to 4,800	Install new septic system	\$3,000 to 5,000
Install prefabricated fireplace	\$1,800 to 2,200	Install sump pump	\$400 to 500
Polish chimney with terra cotta	\$1,000	Install French drain and sump pump	\$2,000 to 3,500
Floors		Roofs	
Install and finish wood floors	\$1.50 to 3.20 per square foot	Apply / fiberglass shingles	\$1 to 1.20 per square foot
Install ceramic tile floor	\$1.10 to 2.20 per square foot	Install over existing shingles	\$1.20 to 1.75 per square foot
Install vinyl tile floor	\$1.60 to 5.30 per square foot	Remove existing shingles and install new	
Install wall-to-wall carpet	\$2.00 to 6.00 per square foot	Windows	
Garage		Install storm windows	\$60 to 100 each
Build single car garage	\$4,000 to 6,500	Replace existing windows	\$250 to 500 each
Build double car garage	\$7,000 to 12,000		
Heating and Air Conditioning			
Replace warm air furnace	\$1,200 to 3,800		
Replace electric heat pump	\$2,200 to 3,600		
Replace central air conditioning system (electric)	\$1,500 to 3,000		
Replace central air conditioning system (gas)	\$2,600 to 3,500		

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Finished Products



Basement



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Basement



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