

# COUNTRY LIVING BY THE NUMBERS

By Ryan Booth



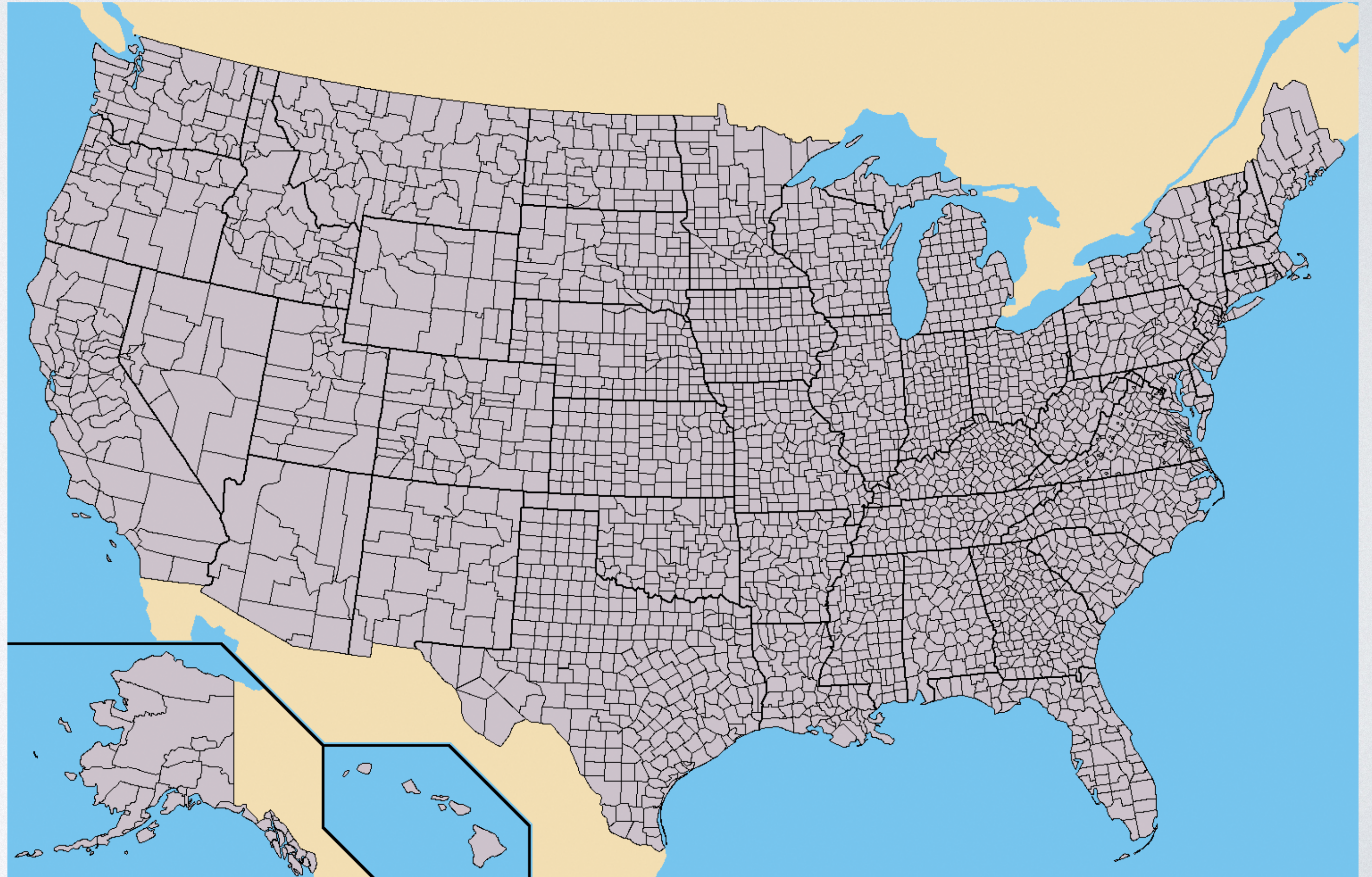
## 2 RULES

- #1 Do your own research
- #2 What is your time worth?
- I'm probably wrong



# LOCAL RULES

- 50 States
- 3,143 Counties
- 19,502 Incorporated Cities
- 29,705 Fire Departments
- 3,300 Utilities (200 major)
- 13,800 School Districts





- International Building Code 730 pages
- National Electric Code 1000 pages
- Mechanical Code 550 pages
- Plumbing Code 500 pages
- Zoning/Land Development Laws/Local jurisdiction rules



## Shasta County, CA “ShC”



## Anderson County, TX “AnC”





## **Developing the Land**

- Access (Legal and Practical)
- Water in (Well/City Water)
- Water out (Septic/Sewer)
- Power (Utility/Off-grid)

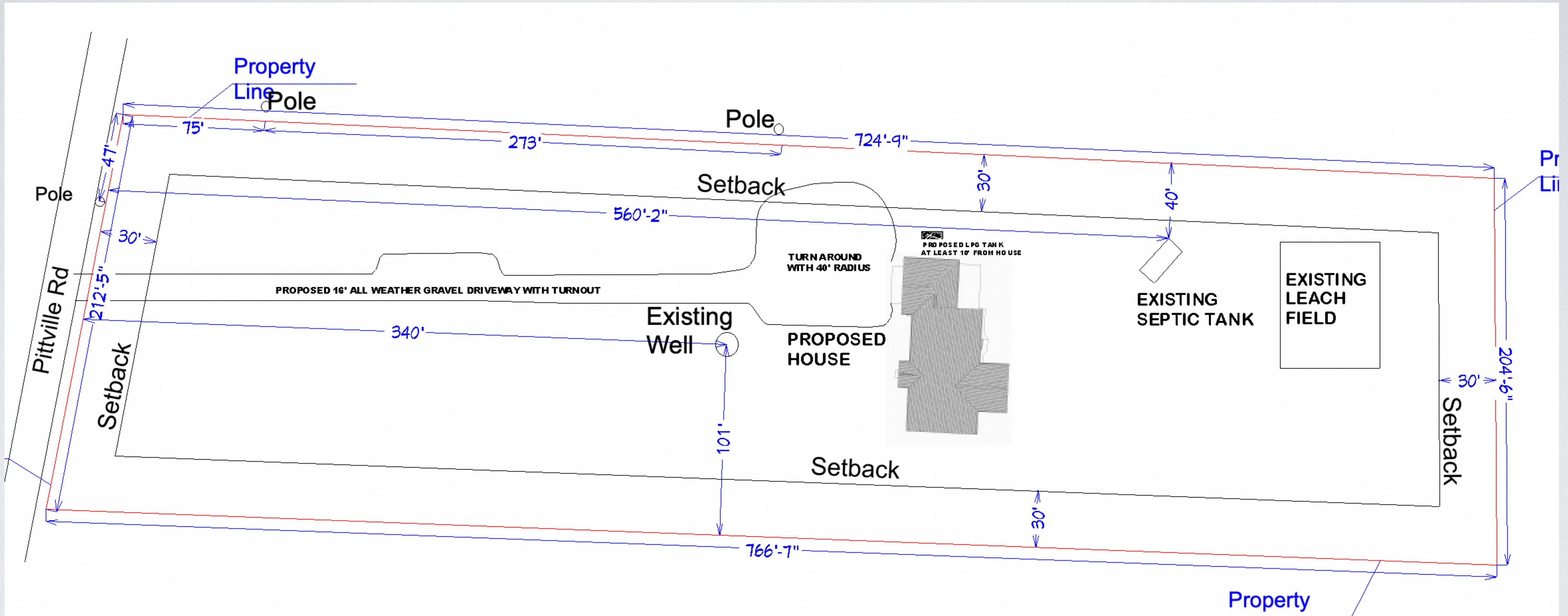


# Access... Practical?





# 10,000 sq ft of Gravel Driveway





**ShC 350 ft Driveway = \$12,000**

**AnC 350 ft driveway = \$800**

Gravel \$1.5-3 sq ft

Asphalt \$4-5 sq ft

Concrete \$6-7 sq ft

Culvert \$1500





# Water In





**ShC 150ft Well = \$9,700**

**AnC 50ft Well = \$5,000**

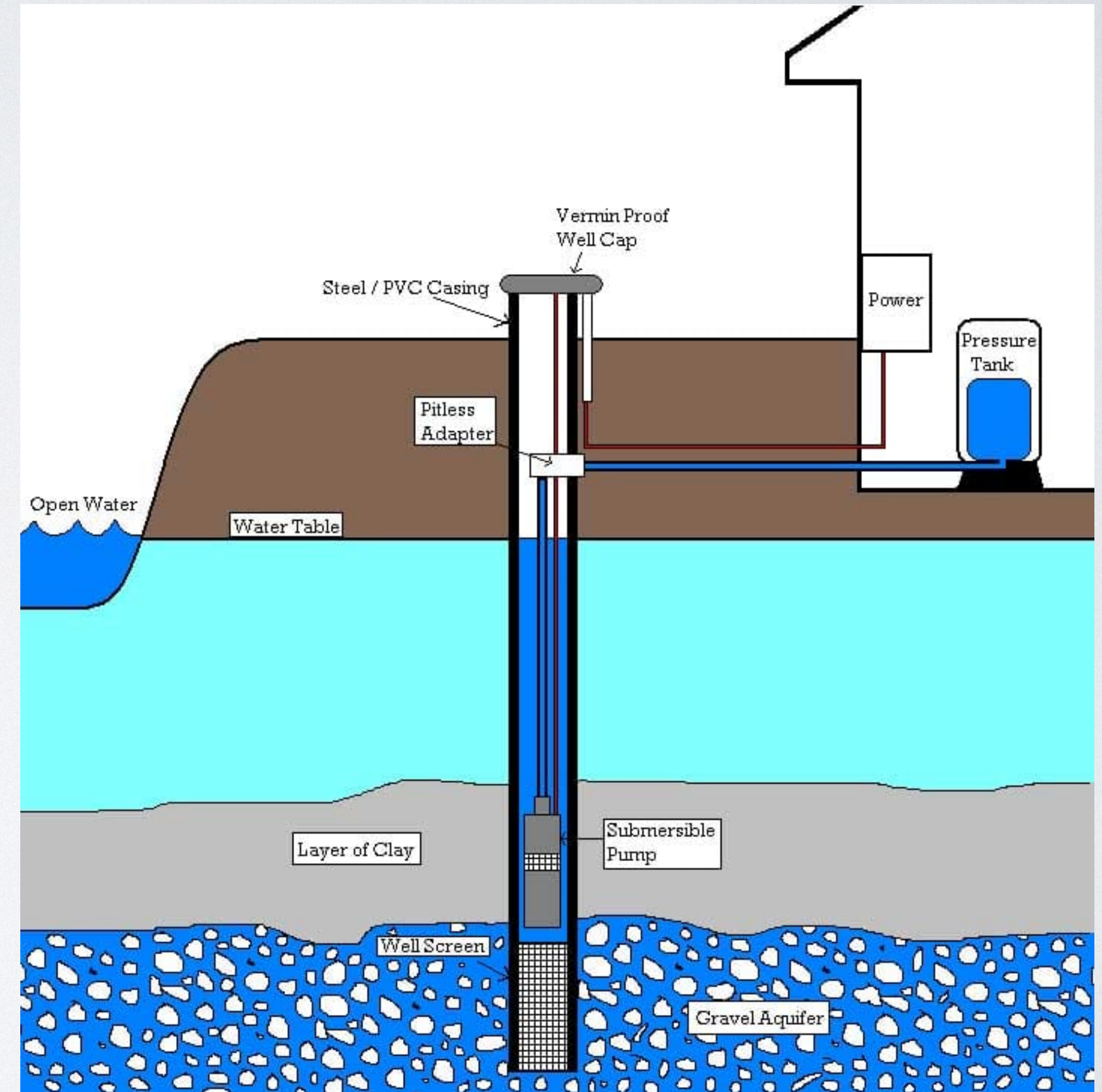
Well \$20 - \$60 per ft

Pump 1hp, \$1000 - \$1500

Pipe \$3 - \$5 per ft

Pump controller/saver \$400

Wire \$1.5 per ft



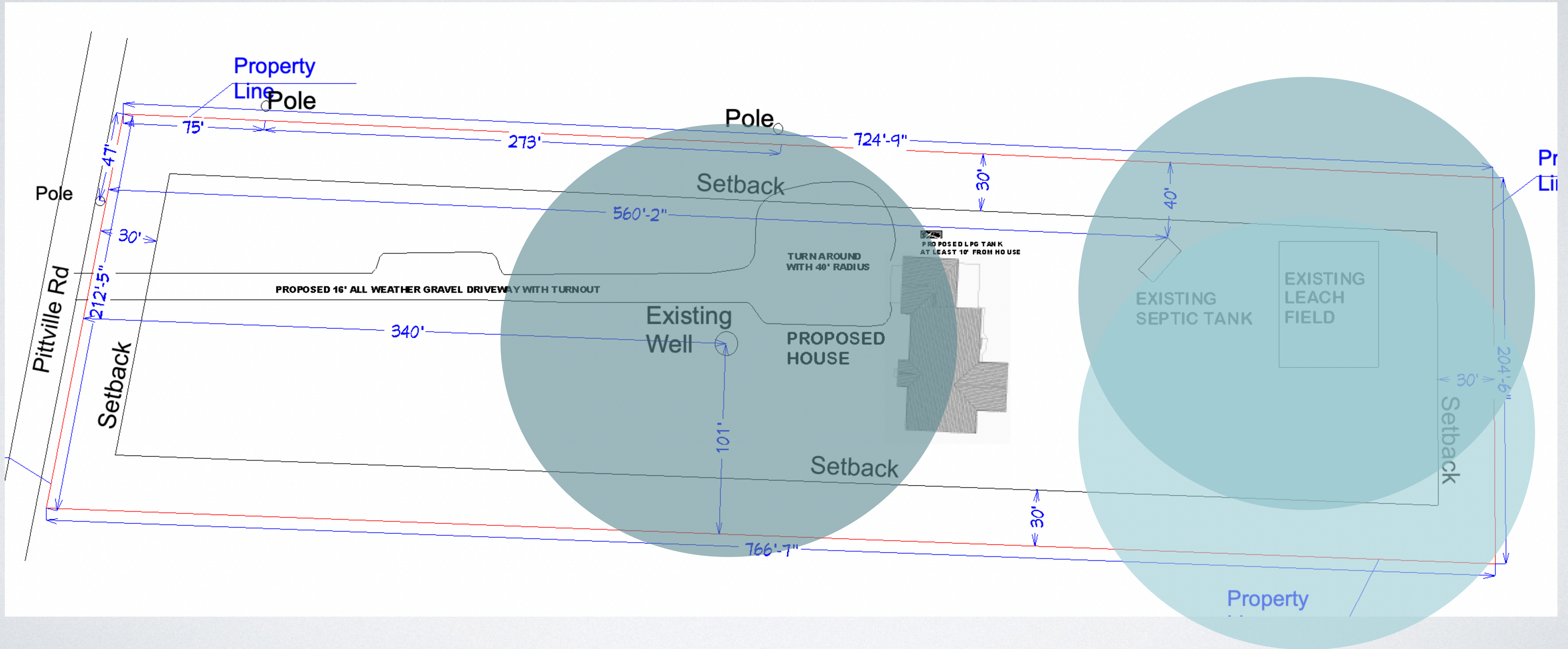


# Water Out





# Setbacks





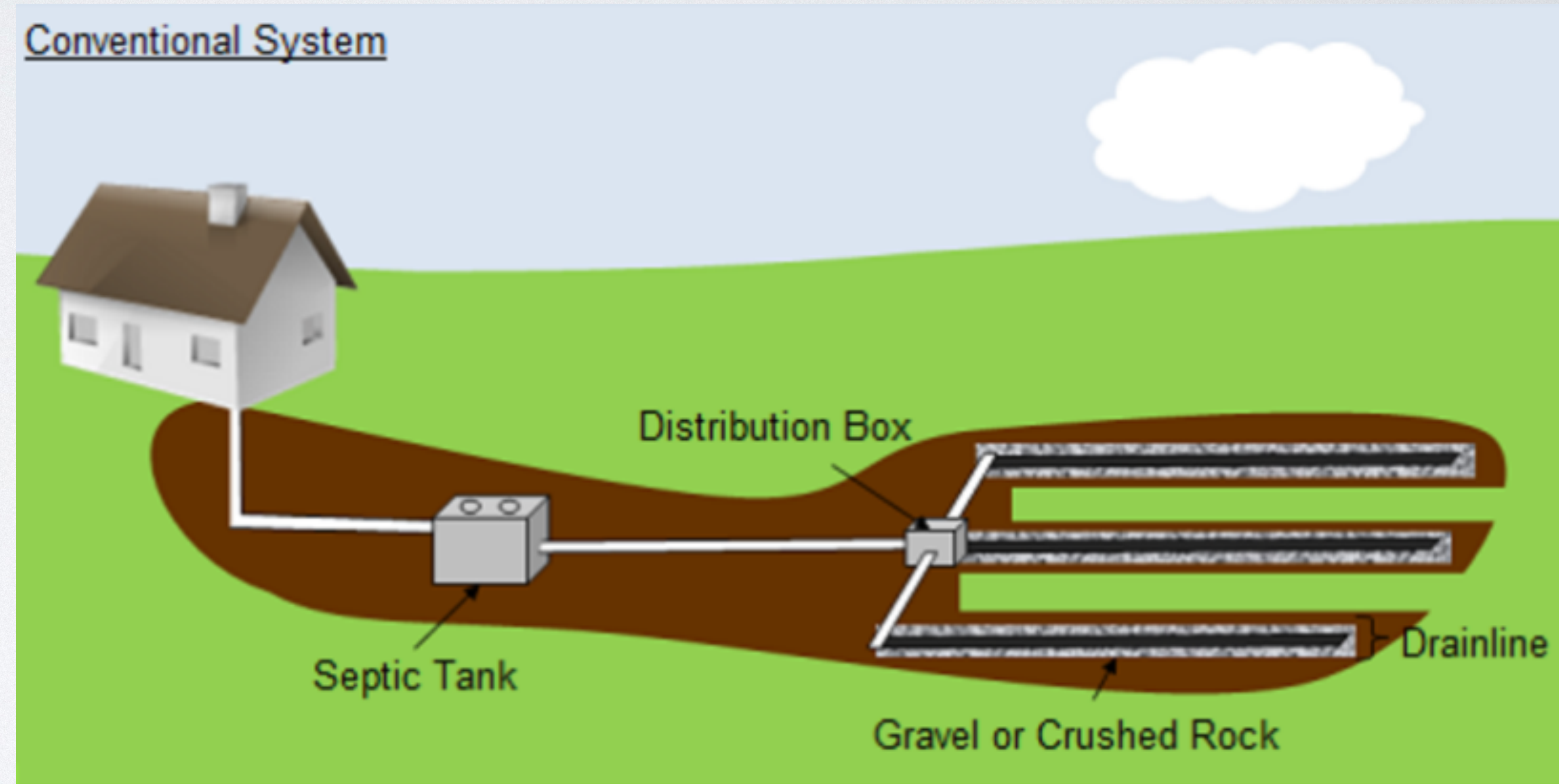
**ShC 300ft of lines \$6400**

**AnC 80ft of lines \$3600**

Septic Tank \$1800

Leach field \$8-\$10 per ft

Excavation \$1200





# Power





**ShC 2-Poles 350ft \$20,000+**

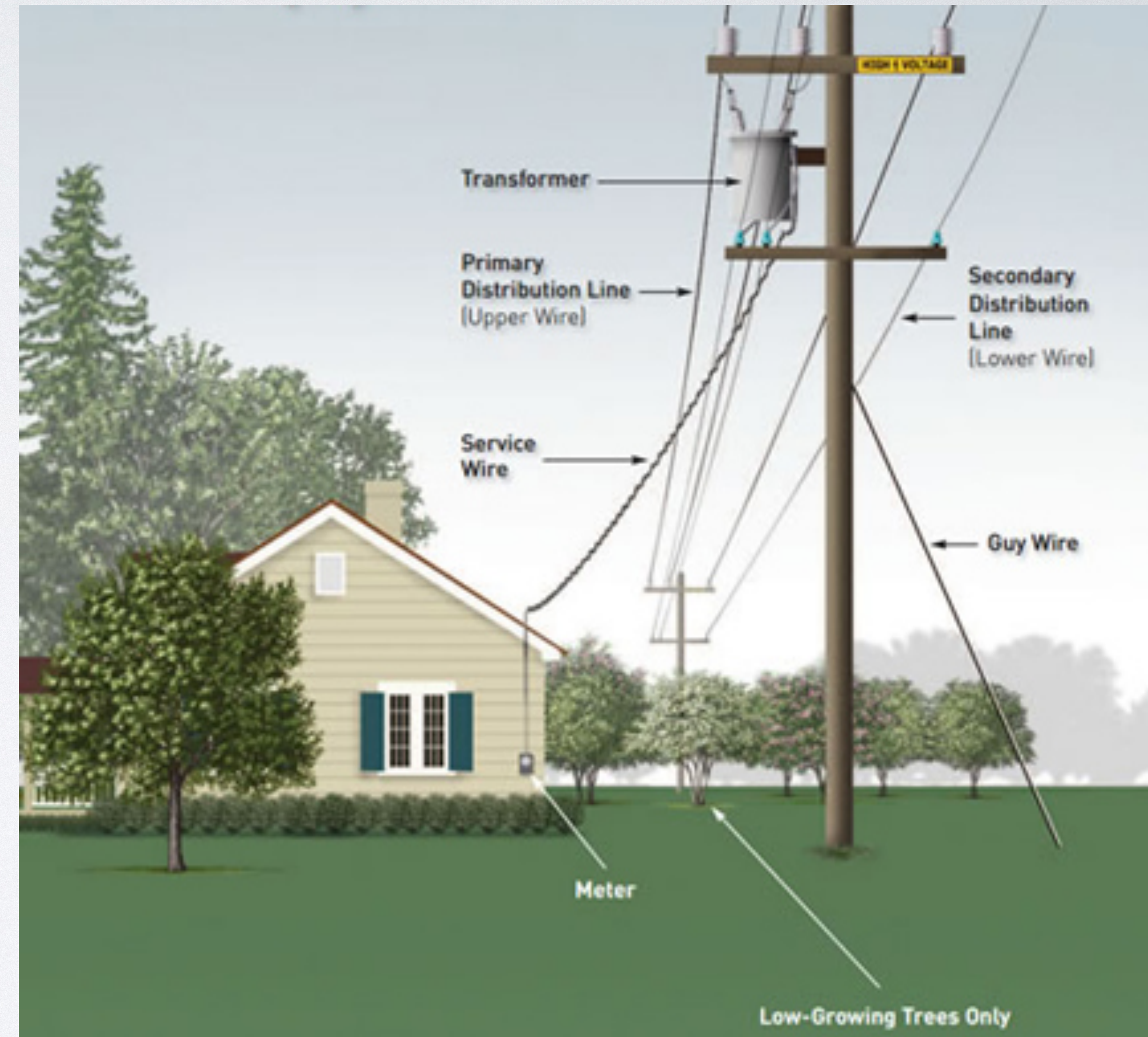
**AnC 2-Poles 350ft \$900**

Utility \$1k - \$15k per pole

Panel and Meter base \$500

Wire and conduit \$8-\$10 per ft

Off-grid Solar \$50,000





**ShC \$4,000**

**Grading**

**AnC \$2,000**





# LPG (Propane) Tank

**ShC Purchase Tank \$2900**

**AnC Rent Tank \$400 (lines)**





# Water Storage

**ShC Water Storage \$6000**

**AnC Water Storage \$0**

**2500 gal. Steel tank \$5000**

**High Pressure Booster Pump \$1000**

**Steel Tank and Booster pump needed  
for fire protection**





# Land Development Costs

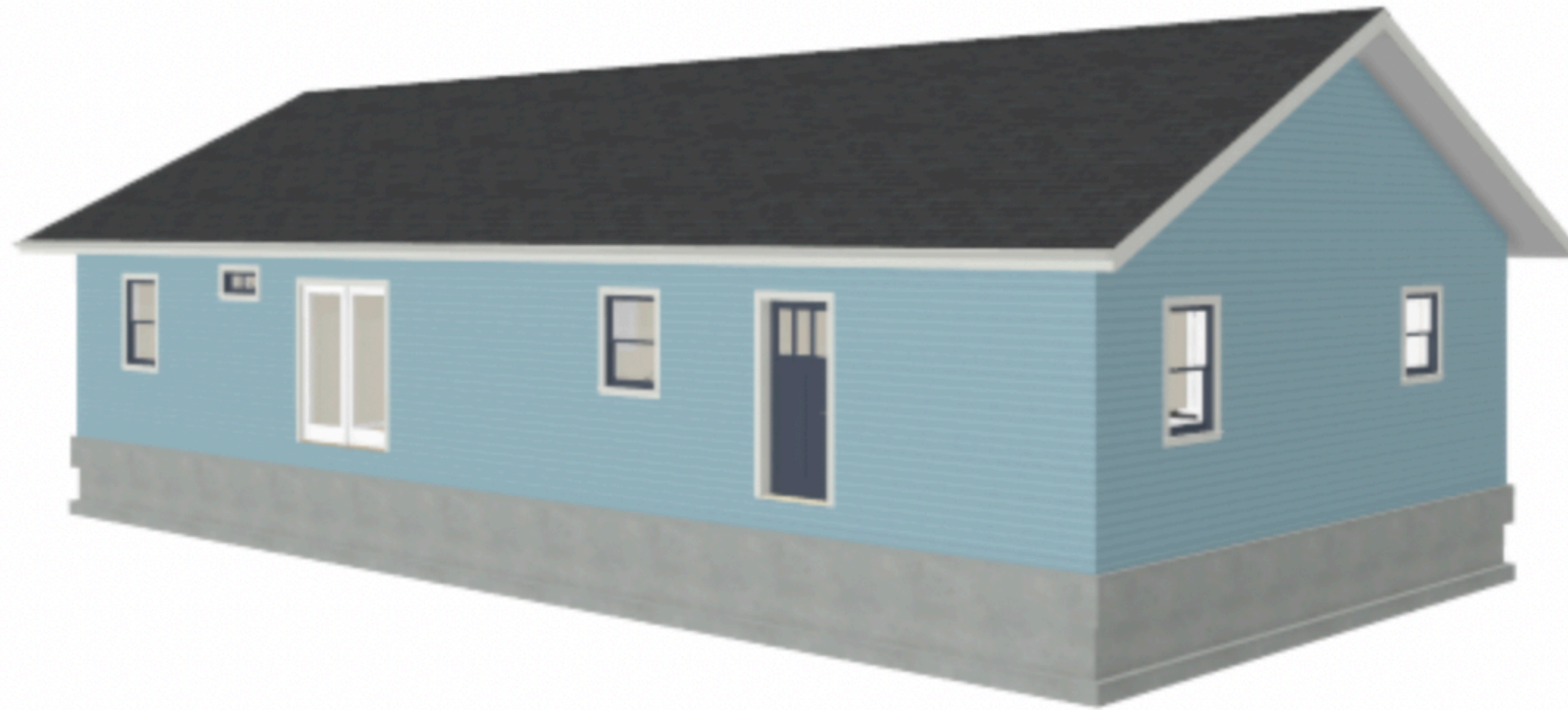
**ShC Total \$61,000**

**AnC Total \$12,700**





## Build the Structure



**1,700 sq ft**



# Foundation \$7,400





# Framing \$22,000





**Roofing \$5000**  
**Siding \$5500**  
**Doors and Windows \$6500**  
**Insulation \$4500**  
**Drywall \$3500**





## **“The Box”**

**Foundation \$7400**

**Framing \$22,000**

**Roofing \$5000**

**Siding \$5500**

**Doors and Windows \$6500**

**Insulation \$4500**

**Drywall \$3500**

**Total \$54,400**



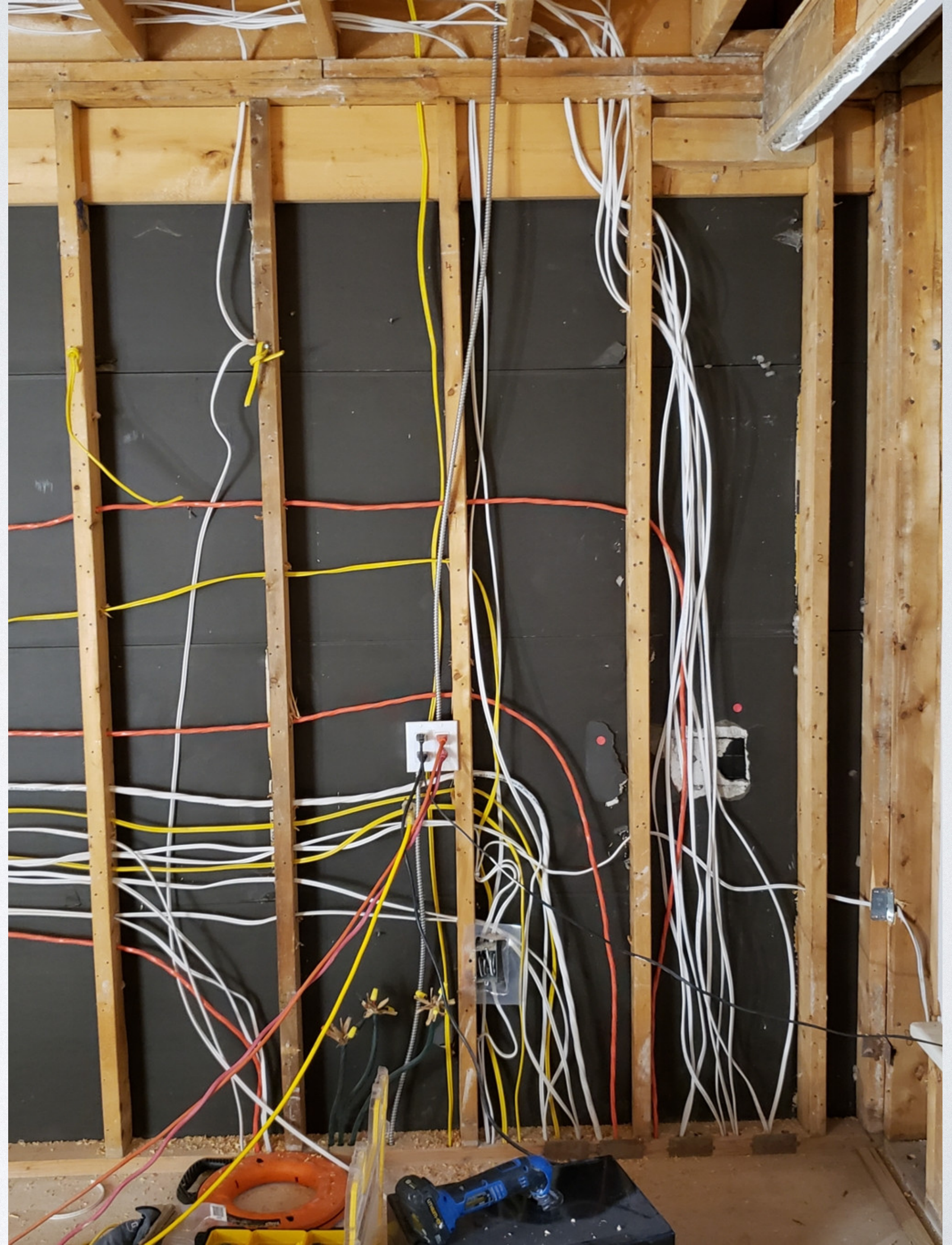


**Inside “The Box”**





**Electrical \$4500**





**Plumbing & Gas \$5000**





**Heat and A/C**  
**\$6,500**





**Fire Sprinklers \$7000**





## Cabinets and trim \$9,300





# Everything inside “The Box”

**Electrical \$4800**  
**Plumbing and Gas \$5000**  
**HVAC \$6500**  
**Sprinklers \$7000**  
**Paint \$2000**  
**Flooring \$5000**  
**Cabinets and trim \$9300**  
**Steps and stoops \$1000**  
**Appliances \$1000**

**Total \$39,100**





## **House Labor Cost**

**\$62,900**

**\$30 Per hour**

**15%-20% Worker Comp**

**7% Social Security**

**5% Unemployment**

**Real cost - \$38.50 per hour**



# Running Totals

## ShC

**Development \$61,000**  
**House \$93,500**

**Total \$154,500**

**Labor \$62,900 for house**

## AnC

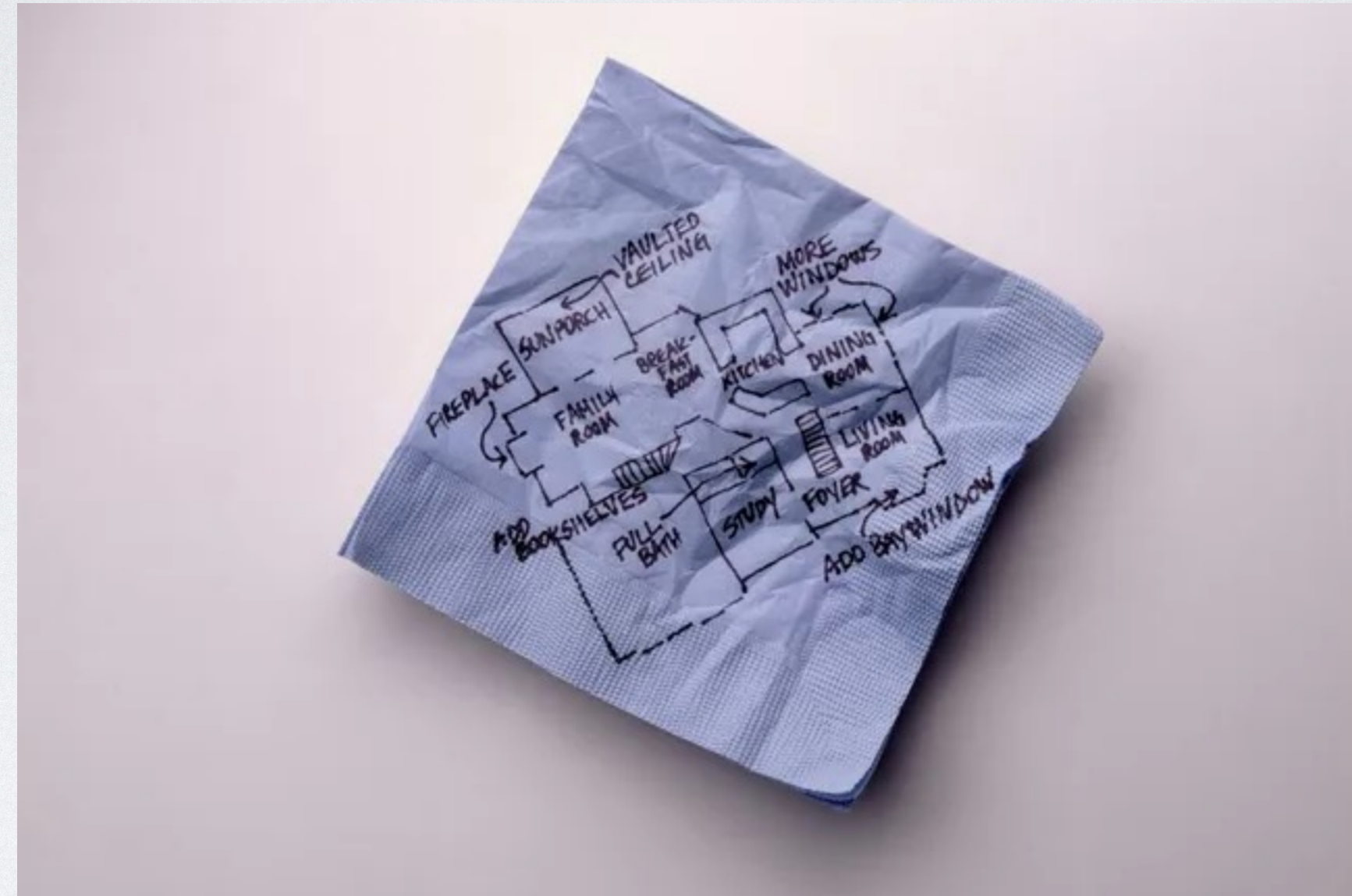
**Development \$12,700**  
**House \$84,500**

**Total \$97,200**

**Labor \$45,000 for house**



# Plans, Permits and Fees



**ShC**

**Plans**

**Engineering \$3000**

**Plans \$8400**

**Course of construction insurance \$2000**

**Subtotal \$13,400**

**AnC**

**Plans \$1500**

**Course of Construction insurance \$2000**

**Subtotal \$3,500**



## Permits and Fees

**ShC**

**AnC**

**Grading permit (might be needed) \$ 6000**

**\$0**

**Application Filling Fee \$1400**

**Building Fee \$2000**

**Processing Fees \$1200**

**School fees \$6800**

**Traffic & Environmental Impact fees \$4000**

**Parks Fee \$3000**

**Permits subtotal \$18,400**



## Final Totals

### ShC

**Development \$61,000**

**House \$93,500**

**Plans/Permits \$31,800**

**Total \$186,300 - \$110 sq ft**

**Labor \$62,900 for house**

**Grand total \$249,200**

**Contract price \$400,000**

### AnC

**Development \$12,700**

**House \$84,500**

**Plans \$3500**

**Total \$100,700 - \$60 sq ft**

**Labor \$45,000 for house**

**Total \$145,700**

**Contract Price \$250,000**



# Shop/Garage





## **Cost for 30x40 Shop**

**Foundation \$7500**

**Framing \$14,000**

**Siding \$3500**

**Roofing \$3500**

**Garage door \$2000**

**Insulation and drywall \$3500**

**Electrical \$1500**

**Paint \$800**

**Total Material cost \$36,300 = \$30 sq ft**

**Rough Labor Estimate \$12 sq ft = \$14,400**

**Shop total \$50,700 = \$42 sq ft**



**What is your time worth?**

**Managing a complete house project 2,000+ hours**

**Your time while working on the Project \$10 per hour**



# Remodel





**Remodel**

**Cost savings**

**Regulatory economics**

**Being able to finance the property**



# Mobile Homes





# Bad Ideas

## #1 Container Homes





## Bad Idea #2 Tiny Homes





## **Tiny Home vs Small House Cost**

### **Tiny Home**

**8x30 - 240 sq ft**

**\$25,000-\$35,000**

**Land Development \$13,000**

**Land Purchase Price \$30,000**

**Total \$ \$75,000**

### **Small House**

**26x30 - 780 sq ft**

**\$45,000-\$50,000**

**Land Development \$13,000**

**Land Purchase Price \$30,000**

**Total \$90,000**



## Bad Idea #3 “Alternative” Building technologies





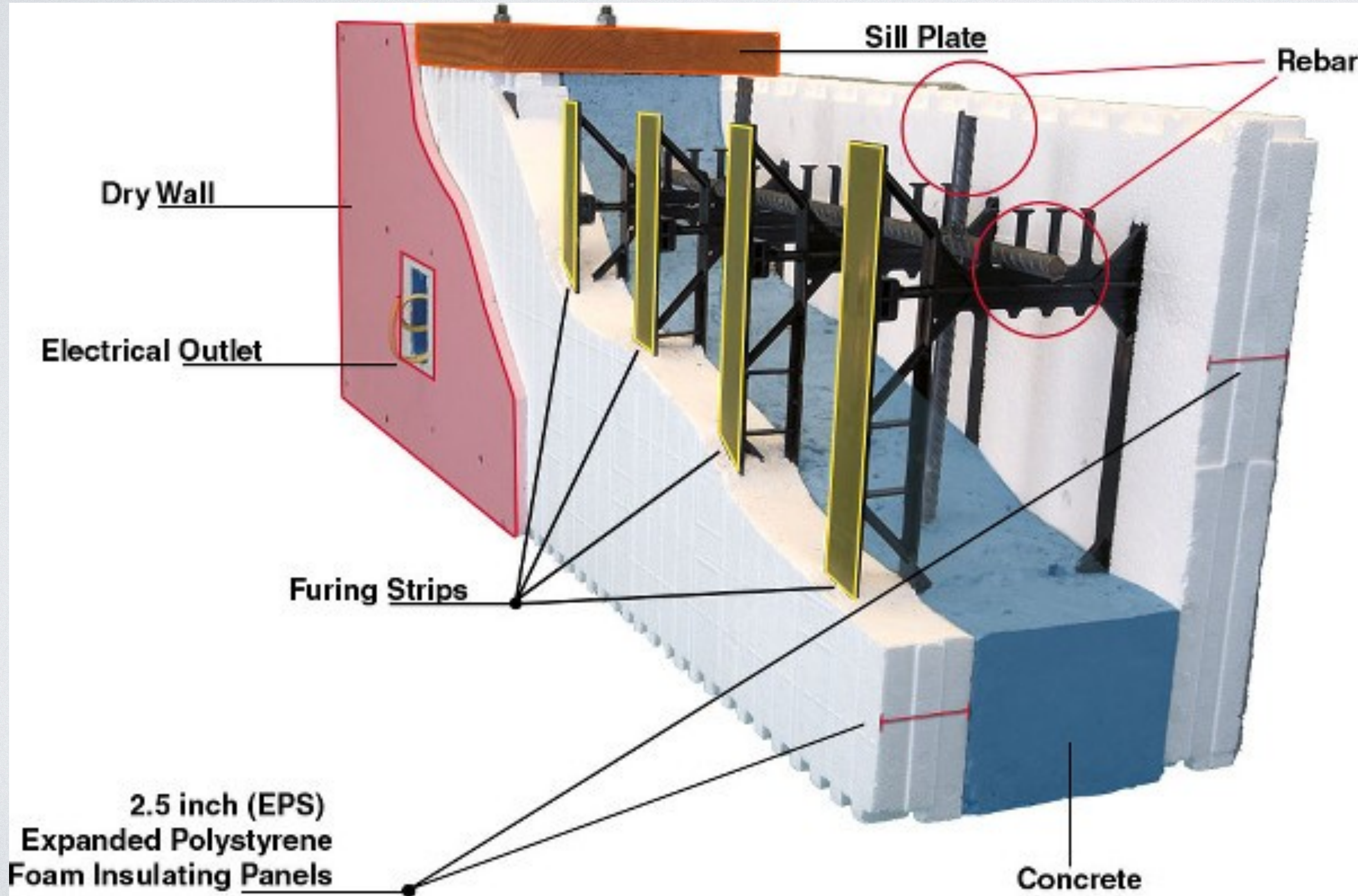
## **Bad idea #4 - Prefab/Kit Homes etc.**





**A Good Idea...**

# ICF - Insulated Concrete Forms





## **Good YouTube Channels**

**“The Essential Craftsman”**

Check out the Spec House playlist

**“Matt Risinger”**

High End Building Sciences

**Questions?**