**TASKS EXPECTED WHEN BUILDING A MODEST RESIDENCE**

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Let's now visit a residential construction project task list, and examine its typical components. These tasks will consume most of a builder’s time on a project. The rest of their time may be spent defending their decisions made to everyone else involved. Document everything.

Note that tasks listed here can be modified by each user and additional ones can be added, to tailor this list for use by any builder for any specific job. Once the entire list has been changed as desired, tasks for each subcontractor can be excerpted out and listed separately, to form a scope of work for each subcontractor.

Obtain Soil Borings (if needed) – This should be done before any site specific drawings are created, on land where no public sewer is available. The results of these will determine if the land will even support a private sewage system, and the probable cost to install one that works with the existing soils and slopes.

(Average time spent –1-3 weeks)

Obtain Permits – This may be the responsibility of the owner or the general contractor and may involve approval from zoning or planning commissions, obtaining a building permit, and getting permission for curb cuts from roads or streets from street departments. In addition, if there are no public utilities, a release may first be needed from a county health department that a septic system and well can be installed on that site.

(Average time spent if all docs ready – 4-8 hours)

Final Selections - This will be the responsibility of the owner. All material and appliance selections for the project should be finalized as soon as possible, but major components like flooring, cabinetry and plumbing fixtures may be difficult to finalize. Many builders just establish and include realistic allowances for such items, so creating an estimate is not delayed.

(Average time spent – These will be in stages as needed to order materials – 2-5 months)

Product Lead Times - Investigate product lead times for product deliveries, for use when determining a project schedule. Some can be estimated from recent experience.

(Based on experience and input from suppliers)

Estimates from Subcontractors – This will be the responsibility of the general contractor. They will need to obtain costs and contracts from any subcontractors to be used on the project. Often, these can be generated from formulas supplied to the general contractor by subcontractors. One example could be current costs to install roofing, based on the square footage involved.

(Average time spent – 1-3 weeks)

Establish Project Timeline - This will be the responsibility of the general contractor to include coordinating the work of subcontractors and the delivery of materials to the site. A project completion date may be established here, along with defining reasonable weather delays. If providing one, it is advisable to provide plenty of padding in the estimate of a completion date.

(After critical path task durations are determined)

Obtain Needed License Data – This will be the responsibility of the general contractor. Obtain a list of all subcontractors to be used on the project. Verify that they hold active insurance policies, including workman’s compensation, or a waiver of that. This is generally required by the insurance carrier issuing a policy to the general contractor. Verify subcontractors also have current licenses, when such are required by local governing bodies.

Tree Removal – This will be the responsibility of the general contractor or the owner. Remove trees and stumps of any existing trees that will interfere with the building site, the location of drive(s) and / or any utilities to be extended to or from the building. Coordinate with the owner before removing wood, but unless instructed otherwise, remove all trunks, branches, leaves etc. from the site, all debris that will be created as a result of any tree removal.

(Average time spent – Up to 3-4 days)

Locate Building – This will be the responsibility of the surveyor. Set stakes and / or pins to establish property boundaries. Use triangulation from at least two property corners to locate the corners of the proposed building. Stake out the perimeter of the proposed building.

(Average time spent –1 - 2 months, depending on surveyor availability and relationship)

Rough Excavation – This will be the responsibility of the excavation subcontractor, after calling available public services to locate and mark the locations of any buried lines or utilities. Remove any obstacles in place that will not remain, like sheds, stumps, boulders, old fences and so forth. Rough grade the site to provide positive drainage away from the building location after excavating for a crawl space or a basement, or leveling a pad for the building slab to rest upon.

(Average time spent – 1 day to clear, 1 day to excavate)

Soil Poisoning (if needed) – This can be the responsibility of either the excavator subcontractor, the general contractor or the owner. Supply the needed materials and poison the soil under and around the building location, to reduce the possibility of future termite infestations.

(Average time spent – 2-3 hours)

Driveway Base – The excavation subcontractor should place and compact a stone base under the locations of driveway(s), after removing any soil deemed unsuitable to support the drive(s)s and properly compacting any soil or stone brought in to replace it.

(Average time spent – 1 day)

Set Dumpster – This will be either the responsibility of the general contractor or the owner. A stone pad should be provided for this, near or on the driveway base, to allow for the pick-up and exchange of dumpsters, often enough to prevent the overflow of debris onto the site.

(Average time spent – 2-3 hours)

Form and Pour Footings - This will be the responsibility of the concrete subcontractor. Trench and / or form any required footings, and supply and place specified reinforcing in them. If reinforcing is to be extended into the walls above, verify this has been done before pouring concrete. Leave utility block-outs as needed to meet plan requirements. Then supply the concrete, pour and level all required footings for the project.

(Average time spent – 1 day)

Set Concrete Forms - This will be the responsibility of the concrete subcontractor. Supply, place and secure forms needed for any foundation or basement walls. Supply and place the specified reinforcing in them. Leave utility block-outs as needed to meet plan requirements. Place blocking in the forms for brick ledges, if they are being used in the project. Place and support required anchor bolts in place.

(Average time spent – 1-2 days)

Check Forms – The general contractor should check the forms after they are in place for dimensional accuracy. Verify they are square by measuring diagonals. Verify that all required reinforcing is in place in the forms, before allowing concrete to subsequently be poured.

(Average time spent – Included in the task above)

Pour Foundation Walls – This will be the responsibility of the concrete subcontractor. Caissons, pilings or other specialized foundation types may be needed, but typically this involves foundation walls. Pour foundation walls with concrete meeting the required specifications for psi strength. w/ reinforcing. Leave utility block-outs as needed to meet plan requirements. Strike off the top of walls to make them level. Verify that anchor bolts have remained vertical with the proper exposure and that excess concrete has been cleaned off anchor bolts. Clean up excess concrete and any debris from the foundation work to the dumpster.

(Average time spent – 2 days)

Sub-slab Preparation - This will be the responsibility of the concrete subcontractor. Supply, install and rough grade a 4" gravel base under slab areas.

(Average time spent – 1 day)

Radon Reduction Below (if needed) - This will be the responsibility of the plumbing subcontractor. If a radon reduction system will be put in place, supply and install a sub-slab collection system at this time, as well as stubbing a pipe up above the slab and supporting it for a future vent attachment.

(Average time spent – 1/2 day)

Sub-slab Plumbing - This will be the responsibility of the plumbing subcontractor. Rough in plumbing runs for water and waste lines per the plan, install gas lines and stub up above the slab, install any needed conduits for condensing unit connections and conduits for power. Clean up any generated debris to the dumpster.

(Average time spent – 1 day)

Concrete Slabs – This will be the responsibility of the concrete subcontractor. Supply all materials and needed components. Relevel the gravel below the slab(s), supply and place visqueen vapor barrier(s), supply and place any reinforcing required in the slab(s), pour and finish interior slabs with smooth troweled finish using 3500 psi concrete, except that concrete slabs in garage areas should have a broom finish. Trowel and finish all doorway edges, including in the garage and seal the garage floor. Sawcut slabs down the center and 12'-0" o.c. left to right. Clean up any excess concrete to dumpster.

(Average time spent – basement -1 day, porches and garage – 1 day)

Designate Staging - It will be the responsibility of the general contractor to designate the areas on the site where delivered materials should be set, to protect them from water damage, equipment damage and theft. If temporary security fencing must be provided, that will also be the responsibility of the general contractor.

Framing Material Delivery – This will be the responsibility of the framing subcontractor. They will supply all material including lumber, hangers, equipment, fasteners, etc. needed for the successful completion of the dried-in building shell.

(Average lead time – 1-2 days)

Framing – This will be the responsibility of the framing subcontractor. Frame the building using 2x4s at 16” o.c., PT plates, site fabricated headers, and trusses or rafters and ceiling joists per the project design. Fasten sole plates to foundations using preset anchor bolts. Supply all lumber components, proper fasteners and hangers necessary to complete the framing. Install blocking in all walls needed to later support upper and lower cabinets, counters, shelves and grab bars. Install diagonal bracing as needed for temporary supports. Install cross bracing on joists as required by code. Install subfloor sheathing per the plans. Install 7/16” O.S.B. board on all exterior walls. Install roof sheathing and cover with roofing felt, in preparation for roofing. Wrap all exterior walls with Tyvek wrap, extended and stapled into window and door openings. Clean up any generated debris to the dumpster.

(Average time spent – 14-16 good working days)

Roofing Material Delivery – This will be the responsibility of the framing subcontractor or the roofing subcontractor. They will supply all material including roofing materials, vents, equipment, fasteners, etc., needed for the complete installation of the roofing to accomplish a dried-in building shell.

(Average lead time – 1 week)

Roofing – This will be the responsibility of the framing subcontractor or the roofing subcontractor. Various covering materials may be called for by the project specifications, including shingles, metal, polycarbonate, tile or steel roofs. The roofer will supply and install ice and water shield, roof edging and specified roofing. Supply, install and flash ridge vents and bubble vents. Clean up any generated debris to dumpster.

(Average time spent – 25 squares / day – 3 days)

Temporary Power - Use generators until house is mostly framed. This will be the responsibility of utility services, coordinated with the general contractor, after they have filled out paperwork to establish an account under the name of the homeowner, who has applied for the account. The panel will be the responsibility of the electrical subcontractor, coordinated with the utility provider. Extend the power supply coming into the property and set the electric meter. Provide and set a power panel in the proper location in the home, as determined by the contract documents, once the receiving wall has been framed .

(Average time spent – 1 day)

Door / Window Delivery – This will be the responsibility of the framing subcontractor. They will supply all material including shims, caulking, equipment, fasteners, etc. needed for the successful installation of the doors, windows and skylights, and all their components, to result in a dried-in building shell.

(Average lead time - 2-5 weeks)

Doors and Windows – This will be the responsibility of the framing subcontractor. Supply and install doors and windows and all their ancillary components, including locks keyed to owner specifications. Window sizes, specific materials and types of glass will be as specified on the plans. Clean up debris to dumpster.

(Average time spent – average 15 windows and 3 doors - 2-3 days)

Well installation (if needed) – This will be the responsibility of the well subcontractor, after the home is under roof. If a private water supply is needed, supply and install a new well in the location specified on the plans. Supply and install all materials, pump, etc. as needed for a complete and working installation. Test the water for acceptable purity and extend the water supply line into the home with a shut-off valve and a pressure tank installed.

(Average time spent – 1 day to drill, 1 day to pipe in)

Septic system installation (if needed) – This will be the responsibility of the septic subcontractor. If a private sewage disposal system supply is needed, supply and install a complete new system in the location and to the specifications indicated on the plans. Supply and install all materials, pumps, etc. as needed for a complete and working installation. Test the system for proper operation and extend the sewer line into the home with a covered cleanout installed, just before entry into the home.

(Average time spent – 1-2 days for a standard trench system)

Garage Door - This will be the responsibility of the garage door subcontractor. They will supply and install all the components, hardware, fasteners, opener, etc. as needed for a complete garage door installation. Test operation when completed. Clean up any generated debris to dumpster.

(Average lead time – 3-4 weeks) (Average time spent – 3 hrs)

Site Plumbing - This will be the responsibility of utility services, coordinated with the general contractor, after they have filled out paperwork to establish an account under the name of the homeowner, who has applied for the account. Extend the gas line coming into the property, set the gas meter and prepare the connection to be accessed when the gas supply from the home is stubbed out from the building. Extend the water line coming from the utility (or from the well if one has been used), set the water meter if needed and prepare the connection to be accessed when the water supply from the home is stubbed out from the building. Extend the sewer line coming from the utility (or from the septic system if one has been used), and prepare the connection to be accessed when the sewer from the home is connected. Clean up debris to dumpster.

(Average time spent – 2-3 weeks)

Siding Delivery – This will be the responsibility of the siding subcontractor. They will supply all equipment, vinyl siding, molding, corners, shutters, trim, aluminum soffit and fascia wrap as needed, for a complete installation.

(Average lead time – 3-4 weeks)

Siding Installation – This will be the responsibility of the siding subcontractor. They will supply and install vinyl siding, molding, corners, shutters, trim, aluminum soffit and fascia wrap. Supply all the necessary fasteners. Clean up any generated debris to dumpster.

(Average time spent – 2 man crew – 5-7 days)

Rough Plumbing - This will be the responsibility of the plumbing subcontractor. They will supply and install all materials, valves, equipment, etc. as needed for a complete installation, including the gas piping. They will connect rough plumbing to the outside utility locations, install piping to all fixture locations, set valves and shut-offs, cap lines and pressure test all installed piping for leakage. Clean up any generated debris to dumpster.

(Average time spent – 2 man crew – 7-8 days)

Extend Radon Reduction (if needed) - This will be the responsibility of the plumbing subcontractor. Supply all needed components and fasteners to extend the vent piping for the radon reduction system up through the home, through the attic and out through the roof. Properly flash the penetration through the roof. Verify there will be at least a 4’ vertical length of straight pipe in the attic for future installation of a straight line fan if desired. Clean up any generated debris to dumpster.

(Average time spent – 3 hours)

(Preferred subcontractor?)

Rough Mechanical – This will be the responsibility of the mechanical subcontractor. They will supply and install all materials, valves, equipment, etc. as needed for a complete installation. They will install furnace(s), condenser unit(s), thermostat(s), thermostat wiring, main duct supplies, flexible duct runs and vent piping, including flashing. Clean up any generated debris to dumpster.

(Average time spent - 2 man crew – 3-5 days)

Rough Electrical – This will be the responsibility of the electrical subcontractor. They will supply and install all materials, panels, boxes, switches, equipment, etc., as needed for a complete installation of the building’s electric system. They will install the service panel(s) and connect to the outside meter, install a grounding system per the code, install wiring to switches, receptacles, fixture locations and appliances, They will install a service board and wiring to three TV jacks, as well as installing two cable service jacks with lines terminated at specified locations. Install a switched light in the attic with an unswitched circuit in a junction box within 5 feet of the future location of a radon reduction fan. Clean up any generated debris to dumpster.

(Average time spent – set panel – 4 hours, inspection – 2 days, 2 man crew – 4-5 days)

Insulation - This will be the responsibility of the insulation subcontractor. Supply and install all insulation as specified for the project, including baffle vents to allow air flow between soffits and attics. Materials may be stored inside the dried-in garage. Supply all needed fasteners. Install insulation in walls and ceilings as specified. Install any specified vapor barrier on the inside surfaces of walls and ceilings. Plan to install any blown-in insulation needed above ceilings, after the drywall has been installed on those ceilings. Clean up any generated debris to dumpster.

(Average time spent – 2-3 days)

Masonry Delivery – This will be the responsibility of the masonry subcontractor. They will supply all material including brick, stone, cultured stone, mortar and sand, etc., needed for the successful installation of masonry veneer as described on the plans.

(Average lead time – 1-3 weeks)

Install Masonry – This will be the responsibility of the masonry subcontractor. Supply and install brick, stone, cultured stone, mortar and sand per the plan. This may involve installing veneer materials in a variety of patterns. Supply and install flashing and weep holes as the work is progressing. Set masonry to the edge of siding trim and caulk all abutting edges. Wash excess mortar from brick, stone and surrounding materials. Caulk where masonry abuts doors and windows. Clean up any generated debris to dumpster.

(Average time spent – 2-3 days)

Drywall Delivery – This will be the responsibility of the drywall subcontractor. They will supply all equipment and material needed, including drywall, tape, fasteners, metal edging, etc., for a successful completion of the installation of drywall. Materials may be delivered and stored in the dried-in garage.

(Average lead time – 1 week)

Drywall Installation – This will be the responsibility of the drywall subcontractor. They will supply and install drywall, mud, bead and tape, using their own equipment and fasteners. There will be a minimum three coats of spackling compound applied on tape and fasteners. Nail perimeters and screw the interior of each board. Walls should be sanded and cleaned and made ready to paint. All ceilings should be textured. Garage(s) to be taped only. Clean up any generated debris to dumpster.

(Average time spent – 7-10 days)

Install Gutters - This will be the responsibility of the gutter subcontractor. Supply and install properly sloped aluminum gutters and downspouts at the base of each sloped roof. Supply all equipment and fasteners needed for a complete installation. Install concrete splash blocks below each downspout drainage point. Clean up any generated debris to dumpster.

(Average time spent – 1 day)

Ceiling Insulation - This will be the responsibility of the insulation subcontractor. Supply and install insulation above the ceilings below attics. Clean up any generated debris to dumpster.

(Average time spent - 4 hours)

Exterior Concrete - This will be the responsibility of the concrete subcontractor. Verify that the exterior grade that will be covered by concrete has been compacted and leveled. Supply and place a 3” gravel base below where slabs will be poured. Then supply the concrete and pour exterior slabs as specified for patio areas, walkways, garage aprons and stoops, driveways, etc. Use 3000 psi concrete with a medium broom finish. Seal the garage apron. Clean up any generated debris to dumpster.

(Average time spent - drive and walks – 1-2 days)

Initial Painting - This will be the responsibility of the painting subcontractor. Verify that surfaces are ready to receive paint. Supply all materials, equipment and needed accessories. Prime paint the entire house with a sprayer after covering floors, receptacles and switch boxes, doors and windows. Finish coat the ceiling with latex paint using a sprayer. Remove the applied masking and clean up any overspray. Paint exterior doors as needed. Clean up any generated debris to dumpster.

(Average time spent – 3-4 days)

Install Trim – This will be the responsibility of the finish carpentry subcontractor. Supply and install doors, supply and install base, door, and window trim, and supply and install door hardware, using own fasteners, glue, etc. All corners are to be mitered, filled and sanded as necessary for a clean installation. Clean up any generated debris to dumpster.

(Average time spent – 2 weeks)

Initial Staining – This will be the responsibility of the painting subcontractor. Supply all materials and equipment to paint or pre-stain and pre-finish doors and trim. Clean up any generated debris to dumpster.

(Average time spent – 4 days)

Deliver Cabinets – This will be the responsibility of the finish carpentry subcontractor. Arrange for the delivery of all counters and box cabinetry to the location. Materials may be stored in the garage until installed.

(Average lead time – 3-6 weeks)

Install Cabinets – This will be the responsibility of the finish carpentry subcontractor. Supply all materials and equipment needed and install box cabinetry and counters. Caulk around perimeters after countertop and cabinet installation. Supply and install back splashes and door and drawer hardware. Costs to repair damage to surrounding areas needing repairs, after cabinet and counter installation, will be deducted from the contract. Clean up any generated debris to dumpster.

(Average time spent – 2 man crew – 1-3 days)

Finish Painting - This will be the responsibility of the painting subcontractor. Supply all materials and equipment. Paint inside walls by roller with one coat of eggshell enamel. Fill all trim holes, sand and apply touch up to blemishes on doors and trim. Clean up any generated debris to dumpster.

(Average time spent – 2-3 days)

Final Excavation - This will be the responsibility of the excavation subcontractor. Final grade the exterior site to provide positive drainage from the building, to street and swales.

(Average time spent – 1 day)

Install Lawn – This will be the responsibility of the landscaping subcontractor. Supply the needed materials and hydroseed, or seed and straw, lawn areas with guaranteed results with the proper mix for the amount of sun exposure. Clean up any generated debris to dumpster.

(Average time spent – depending on equipment – 2-4 days)

Install Flooring – This will be the responsibility of the flooring subcontractor. Supply and install pad, carpet, vinyl flooring and transition strips at differing material abutments, per the plans. Costs to repair damage to surrounding areas needing repairs, after flooring installation, will be deducted from the contract. Clean up any generated debris to dumpster.

(Average time spent – 2 baths, showers, backsplashes, floors - 1-2 weeks)

Install Appliances - This will be the responsibility of the general contractor or the appliance supplier. Supply and install appliances previously selected by the owner. Costs to repair damage to surrounding areas needing repairs, after appliance installation, will be deducted from the contract. Clean up any generated debris to dumpster.

(Average lead time – 1-6 months) (Average time spent – 1 day)

Finish Mechanical - This will be the responsibility of the mechanical subcontractor. Supply, install and connect registers, grilles, thermostat, etc. Connect gas to furnace and stove, turn on appliances and equipment, test for leaks and test system for air delivery. Balance the system as needed for proper function. Costs to repair damage to surrounding areas needing repairs, after mechanical installation, will be deducted from the contract. Clean up any generated debris to dumpster.

(Average time spent – 1-2 days)

Finish Plumbing - This will be the responsibility of the plumbing contractor. Supply and install previously selected plumbing fixtures, faucets and dishwasher (if supplied), after flushing and disinfecting lines. Test all plumbing lines and valves for leaks. Costs to repair damage to surrounding areas needing repairs, after plumbing installation, will be deducted from the contract. Clean up any generated debris to dumpster.

(Average time spent – 1-2 days)

Finish Electrical – This will be the responsibility of the electrical subcontractor. Supply and install all lighting fixtures, ceiling fans, exhaust fans, etc., previously selected by the owner. Supply and install all materials and equipment needed to connect outlets, switches, phone jacks, TV outlets, and cover plates for all. Connect fans, furnace, and water heater and verify they are properly operating. Verify that all appliances requiring power have been supplied with power. Test and turn on power. Costs to repair damage to surrounding areas needing repairs, after flooring installation will be deducted from the contract. Clean up any generated debris to dumpster.

(Average time spent – 2 man crew - 4-5 days)

Install Landscaping - This will be the responsibility of the landscaping subcontractor. Supply the needed materials and install landscaping per the provided plan. Clean up any generated debris to dumpster.

(Average time spent – 3-4 days)

Bathroom Accessories - This will be the responsibility of the general contractor. Supply and install bathroom accessories previously selected by the owner. Clean up any generated debris to dumpster.

(Average time spent – 1-2 days)

Final Cleaning – This will be the responsibility of the general contractor. Have the finished home cleaned and made ready for occupancy.

(Average time spent – 2 man crew – 1-2 days)

Painting Touch-up - This will be the responsibility of the painting subcontractor. Touch up paint and stain as needed after other trades have completed their installations. Track the time needed to do so and present the bill for that to the general contractor as an extra.

(Average time spent – 2 man crew – 2-3 days)

Dumpster Removal - This will be the responsibility of the general contractor. Have the dumpster removed from the site. Rake and seed the area where it sat.

(Average time spent – 4 hours)

Punch List Generation – This will be the responsibility of the general contractor and the owner. Conduct a walk through and generate a punch list of any items needing correction..

(Average time spent – 2-3 days in several steps)

Punch List Corrections – This will be the responsibility of the general contractor. Get all punch list items corrected.

(Average time spent – 2 men – 1-5 days)

Project Closeout - This will be the responsibility of the general contractor. Collect any remaining lien releases, pay out any remaining retainage, assemble warranty documents and instruction manuals for appliances and equipment. Then present that information to the owner for their records.

(Average time spent – 2-3 days)

Project Closing – This will be the responsibility of the owner. Occupy the building or list it for sale.