

JOB STANDARDS AND SPECIFICATIONS

PROPERTY: _____

STANDARDS

Maine State Housing Authority (MSHA) has adopted the following required inspection and performance standards:

1. Hard-wired with battery backup smoke detectors must be installed on all floors including the basement.
2. Battery powered carbon monoxide detectors must be installed within 15 feet of all bedrooms.
3. Working ground-fault circuit-interrupter (GFCI) protection must be installed for all outlets in the following locations: bathrooms, outlets installed to serve countertops in kitchens, outdoors (must also be covered), crawl spaces at or below grade, garages and accessory buildings located at or below grade, sinks in areas other than the kitchen where receptacles are installed within 6 feet of the outside edge of the sink, in unfinished basements and boathouses.
4. Any building constructed after 1976 shall be required to comply with the requirement to provide 5.7 square feet of net clear opening with a minimum width of 20" and a minimum height of 24". The window shall also meet all other requirement for egress windows contained in NFPA 101 Life Safety Code. Any replacement windows installed in a building constructed after 1976 shall be required to meet the net clear opening of 5.7 square feet. This shall be measured with the window in its natural open position. Any building constructed before 1976 will be allowed to meet the following specifications. The net clear opening would be allowed to meet the minimum 20" in width and 24" in height with a total net clear opening of 3.3 square feet; if the window is constructed of wood or vinyl and the overall window sash size meets a minimum of 5.0 square feet. The window shall meet all other requirements for an egress window as specified in NFPA 101 Life Safety Code as adopted by the Office of State Fire Marshal. Any replacement window installed in a building constructed before 1976 shall meet the same requires as the existing windows and shall not reduce the existing net clear opening below the minimum requirements.

SECTION 1 – GENERAL

1.1 General Requirements for All Project Specifications

1. All measurements and approximated quantities listed in bid proposals are approximate and must be verified by the Contractor. No claim for additional funds due to discrepancies in measurements or quantities shall be honored if not submitted at the time of the initial proposal.
2. All Materials having color or pattern shall be selected by the owner from standard color/style chart. All colors, styles, and types of materials will be listed in the job specifications prior to contract signing.
3. Building permits, electrical permits, plumbing permits and other permits required by local or State authorities shall be obtained by the contractor and the costs shall be incorporated into the proposal amount submitted by contractor. Contractor must obtain permits prior to commencement of work and must provide copies of permits to the Owner and the CAA for documentation. Failure to obtain required permits will result in nonpayment of work until the necessary permits are obtained.
4. Workmanship and materials not covered by manufacturer's warranty shall be warranted by the Contractors for a period of at least one year from date of final payment to the contractor. All manufacturer warranties shall be delivered by the Contractor, to the homeowner along with the final billing. Manufacturer's installation instructions, as required by the 2009 ICC Code shall be available on the job site at the time of inspection.
5. Product information/labeling showing compliance, where required, with Energy Star Ratings shall be provided to the home owner and lender prior to installation.
6. All repair work shall conform to the Rehabilitation Standards herein, manufactures recommendations, and Local and State building codes. Where applicable, rehabilitation work shall also conform to the following

standards: HQS, NFPA 72, NFPA 101 Life Safety Code, 2009 International Residential Code for 1&2 Family Dwellings, National Electric Code, Maine State Plumbing Code, and the Maine Model Energy Code.

7. All work must be performed in accordance with both EPA RRP regulations and HUD Lead-Based Paint regulations as described in 24 CFR Part 35 et al, with the exception that certain contractors such as electrical, plumbing, roofing, weatherization and heating specialists may be exempt from using HUD lead safe practices so long as they do not disturb any more than two square feet of painted surfaces per room or a total of 20 square feet of painted surfaces on the exterior. Contractors performing work in accordance with HUD Lead-Based Paint regulations as described in 24 CFR Part 35 et al must have attended a Lead-Smart Renovator course taught by a Maine DEP certified training provider. Lead safe practices must be employed in all work that disturbs painted surfaces. After completion of all work, contractor must clean the work area(s) to meet HUD Lead Dust clearance standards as follows;

*Hard floors and Carpeted floors = 40 micrograms (ug) per square foot (ft²).

*Interior Window Sills = 250 ug/ ft²

*Window troughs = 400 ug/ ft² *Other nonporous surfaces = 40 ug/ ft²

If dust wipe samples do not pass the above standards, contractor must return to the job site, at his/her own expense, and clean until these standards are met. Final payment will be withheld until clearance standards are achieved. Costs incurred for an additional site visit and dust wipe sampling costs will be taken from monies due to the contractor. In homes where there are children under 6 years of age the Owners must, at their own expense, temporarily relocate these children from work areas where paint will be disturbed until the work has been completed and the dust wipe clearance standards shown above have been achieved.

8. "Install" means to purchase, set up, test, and warrant a new component. "Replace" means to remove and dispose of original material, purchase new material, deliver, install, test, and warrant. "Repair" means to return a building component to like new condition through replacement, adjustment, and recoating of parts. "Reinstall means to remove, clean, store, and install a component.
9. The contractor must inspect the property at the specified time and date as requested by the Homeowner and Rehab Technician. Submission of a bid is presumptive evidence that the bidder has thoroughly examined the site with the home owner and rehab technician and is conversant with the requirements of the local jurisdiction.
10. All materials used in conjunction with this work write-up are to be new, of first quality and without defects – unless stated otherwise written in the project bid specifications.
11. Final cleaning shall consist of removing all construction materials, tools, and debris from construction site. Sweep/rake and clean all exterior work areas. All paint chips must be properly removed. Vacuum all interior work areas, removing all visible dust, stains, labels, and tags. Clean all newly installed windows referenced in specifications.
12. Contractors shall not perform any work, substitute any specified materials, colors, patterns, quantities, or change specified material qualities or quantities listed in the job specifications without a written change order pre-approved by Maine State Housing Authority (MSHA) and/or Depart of Economic and Community Development (DECD).
13. All materials shall be installed in full accordance with the manufactures specifications for working conditions, surface preparation, methods, testing, and protection.
14. All repaired or newly installed non pressure treated exterior wood must be sealed, stained or otherwise protected from the elements following industry standards.
15. Walls and attached components shall be identified with the letters A, B, C, D. Wall A is always the wall that is closest to the address elevation or "street side" of the house. Moving clockwise, the walls are then B, C, and D...
16. Down payment or deposits to contractors are not authorized. No work or materials will be paid for

in advance.

17. Detailed invoices shall accompany each payment request. Invoiced dollar amounts must match those submitted by contractor in bid proposal/contract. In all cases ten percent of the contract amount shall be withheld until final inspection is performed, all work is completed / approved and achievement of HUD lead dust clearance criteria or RRP Final Rule for pre-1978 homes has been documented.

18. All products requiring Energy Star Ratings will be rated for the Northeast following Department of Energy standards.

SECTION 2 – ELECTRICAL

2.1 General Electrical Requirements

All work shall comply with all applicable codes including the Maine State Electrical Code and be performed by a Maine licensed electrician as required

All materials and equipment shall be new, of consistent quality throughout, and shall conform to the latest UL, ANSI and FS standards, as well as to all other applicable standards and local building codes. All materials and equipment shall be clearly marked to permit identification of manufacturer, model and type.

The contractor shall do all drilling, cutting and patching required for the installation of the work. All holes made by electrician must be patched and sanded with the same materials, workmanship and finish as the original work and shall match all surrounding work, including touch up painting. If more than 2 square feet of painted surfaces are disturbed in any one interior room or space, or 20 square feet total painted surface on the exterior, the contractor shall be LSR/EPA certified and clean floors, window sills and window troughs to meet HUD/EPA clearance criteria for lead dust.

2.2 Repair Doorbell System

Repair doorbell system by installing one non-lighted unit per pushbutton [Nutone or equal], one transformer per pushbutton [Nutone or equal], one buzzer per unit [Nutone or equal] and wiring to the current National Electric Code.

Quantity _____

Total \$ _____

2.3 Replace Exterior Electrical Service Entrance

Install new 100 Amp electric services. Work to include properly sized type S E cable, weather head and meter socket enclosure. Install new type SE cable to existing / new interior load center.

Quantity _____

Total \$ _____

2.4 Install New Interior Electrical Service Panel

1. Install new 100 Amp electrical panel in basement with 100 Amp main breaker and minimum 20 circuit panel board. All circuits shall be clearly labeled.
2. Connect all new and/or existing branch circuits into new panel with appropriately sized circuit breakers and wiring.

Quantity _____

Total \$ _____

2.5 Replace Ground Wire

Replace defective ground-wire.

Quantity _____

Total \$ _____

2.6 Replace /Install New GFCI Outlet in Kitchen /Bath

Install GFCI outlet and plate.

Quantity _____

Total \$ _____

2.7 Install Arc Fault Protected Outlet

Install new Arc Fault Protected outlet in Bedroom.

Quantity _____

Total \$ _____

2.8 Replace/Install New Duplex Outlets

Install grounded duplex outlet.

Quantity _____

Total \$ _____

2.9 Install New Range Outlet

Install new range outlet in kitchen using 50 Amp surface-mounted outlet.

Quantity _____

Total \$ _____

2.10 Install New Dryer Outlet

Install new dryer outlet using 30 Amp surface-mounted outlet.

Quantity _____

Total \$ _____

2.11 Replace/Install New Wall Switch

Install new [single pole/3-way] wall switch using silent wall switch.

Quantity _____

Total \$ _____

2.12 Repair Outlet/Switch Cover Plate

Repair defective cover plate/switch plate by install new cover plate. Match existing color & style.

Quantity _____

Total \$ _____

2.13 Replace/Install New Ceiling Light

Install new ceiling light [two bulb capacity] using fixture [with/without pull chain]. Include required number light bulbs. New light bulbs will be CFL. Selected fixtures must fall under a \$35.00 fixture allowance.

Quantity _____

Total \$ _____

2.14 Replace/Install New Wall Mounted Light

Install new wall mounted light using fixture [with/without pull chain]. Include required number light bulbs. New light bulbs will be CFL. Selected fixtures must fall under a \$35.00 fixture allowance.

Quantity _____

Total \$ _____

2.15 Replace/Install New Exterior Light

Install new single bulb exterior light fixture. New light bulb will be CFL type. Selected fixtures must fall under a \$35.00 fixture allowance.

Quantity_____

Total \$_____

2.16 Replace Missing Junction Box Cover

Repair defective junction box by installing new metal cover.

Quantity_____

Total \$_____

2.17 Install New Timer Switch

Install new 120 / 240 volt 24 hour timer switch.

Quantity_____

Total \$_____

2.18 Install Smoke Alarms

Hard-wired with battery backup smoke detectors must be installed on all floors including the basement.

Quantity_____

Total \$_____

2.19 Install CO Detector

Battery powered carbon monoxide detectors must be installed within 15 feet of all bedrooms.

Quantity_____

Total \$_____

2.20 Install Bathroom Vent

Install a mechanical Energy Star rated ventilation fan, with light [Broan model QTR 70I, Panasonic model FV - 05VFL2] or pre-approved equal connected to proper wall switch. Unit must be vented to the exterior of the structure and terminate through either the roof or gable end. Vent piping will be rigid aluminum or schedule 20 PVC. Fan will have a minimum mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous.

Quantity_____

Total \$_____

2.21 Install Kitchen Range Hood

General Requirement:

Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be air tight and shall be equipped with a back draft damper. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building. Single wall ducts serving range hoods shall be constructed of galvanized steel, stainless steel or copper. Ventilation rate shall be a minimum of 100 cfm intermittent or 25 cfm continuous.

Install an Energy Star rated Broan QDE series, lighted range hood or pre-approved equal.

Quantity_____

Total \$_____

2.22 Complete Home Re-Wire

Rewire home to current Maine State Electric Code including but not limited to: 100 Amp electrical panel with 100 Amp main breaker, 30 circuit panel board, 100 Amp electric service, weather head and meter socket enclosure. GFI outlets in bathroom and kitchen, arc fault breakers for all sleeping rooms, 15 amp grounded receptacles on all usable walls, switched lights in all halls, kitchens, bathrooms, and furnace area, hard wired smoke detectors, CO detectors, cover plates, counter receptacles, and circuits. Fish all wire and repair tear out.

Quantity_____

Total \$_____

SECTION 3 – FLOORING

3.1 Remove Existing Flooring

Remove existing floor covering. Work shall include removing the existing floor covering, replacing weak or damaged floor sheathing and any damaged or rotten sub floor materials as necessary.

Approx Sq/ft _____

Total \$ _____

3.2 Install Vinyl Floor: [Tiles/Inlaid]

1. Install manufacturers approved underlayment. Apply levelastic floor leveler (or pre-approved equal) to all seams and nail heads created by new underlayment to create smooth surface.
2. Install new 1/8" VCT floor tiles. Re-install existing baseboard edge trim and paint white as required for good appearance.

Color will be _____

3. Paint white as required for good appearance Materials to have 10 year warranty.

Color will be _____

Approx Sq/ft _____

Total \$ _____

4. Install [4" flexible vinyl cove base, Wooden] baseboard to match existing.

Color will be _____

Approx Sq/ft _____

Total \$ _____

3.3 Install New Wall to Wall Carpet with Pad

1. Install new FHA approved 26 oz. level loop carpet over 6# re-bond padding. Carpet to have minimum 10 year wear warranty.

Color will be _____

2. Install [4" flexible vinyl cove base,] [or wooden] baseboard to match existing.

Color will be _____

Approx Sq/ft _____

Total \$ _____

3.4 Refinish Hardwood Floor

1. Determine presence of Lead-based Paint or Lead-based Floor Varnish.
2. Inspect floor for protruding nails. Countersink all protruding nails and fill holes.
3. Wet sand entire floor down through all finishes to bare wood using Lead Safe Practices if needed. Avoid gouges, swirl marks and waves. Floor to be of a uniform even surface when sanding completed. Wipe with clean cloth.
4. Apply two coats water based polyurethane following manufacturers recommendations.

Approx Sq/ft _____

Total \$ _____

3.5 Install New Floating Pre-Finished Wood Floor

Install Armstrong, Pergo, Alloc, or pre-approved equal wood laminate flooring. Flooring to have 15 year warranty. Installation must follow manufacturer's installation standards.

Color/style/manufacturer will be _____

Approx Sq/ft _____

Total \$ _____

3.6 Re-Paint Wood Flooring

Repair wood floor by prepping and painting using lead safe practices. Scrape loose paint using Lead Smart Renovator requirements, set nails, and fill depression, sand smooth and spot prime. Apply one coat primer and one coat finish using [Sherwin Williams, Devco, California or pre-approved equal] interior floor paint. Follow manufacturers' recommendations. All finishes shall be applied evenly and free from sags, runs, drips, voids, holidays and brush marks.

Color/style/manufacturer will be _____

Approx Sq/ft _____

Total \$ _____

SECTION 4 – GUTTERS, FASCIA, SOFFIT, TRIM AND MOLDING

4.1 Remove and Replace Rotted Existing Gutters, Trim, Fascia Soffit and Molding

1. Remove and replace all rotted and damaged sections of gutters, trim, fascia, soffit and molding. Molding to match existing as close as possible. All pine to be #2 grade or better. Apply one coat of white, oil-based primer after sealing all knots with a shellac based sealer [Killz, B-I-N-S or pre-approved equal]. All finishes shall be evenly applied and free from sags, a run, drips, voids, holidays and brush marks.

Approx L/ft _____

Total \$ _____

2. Remove all rotted and damaged sections of gutters.

Approx L/ft _____

Total \$ _____

3. Remove and replace rotted damaged sections of trim and fascia. Molding to match existing as close as possible. All pine to be #2 grade or better. Apply one coat of white, oil-based primer after sealing all knots with a shellac based sealer [Killz, B-I-N-S or pre-approved equal]. All finishes shall be evenly applied and free from sags, a run, drips, voids, holidays and brush marks.

Approx L/ft _____

Total \$ _____

4. Remove and replace rotted and damaged sections of soffit. Soffit to match existing as close as possible. All pine to be #2 grade or better. Apply one coat of white, oil-based primer after sealing all knots with a shellac based sealer [Killz, B-I-N-S or pre-approved equal]. All finishes shall be evenly applied and free from sags, a run, drips, voids, holidays and brush marks.

Approx L/ft _____

Total \$ _____

4.2 Remove Gutter

Remove and dispose of existing gutters and hangers. Repair any damaged areas on roof /fascia due to gutter removal.

Approx L/ft _____

Total \$ _____

4.3 Replace/Install New Aluminum Gutter

Install all new 4" x 5" aluminum, .027 gauge gutter system [Alcoa, Alside or pre-approved equal], properly pitched, according to the manufacturer's specifications. Work to include all required hangers, clamps, connectors, downspouts, extensions and splash blocks. Downspout to be sized according to roof area being drained.

Color will be _____

Approx L/ft _____

Total \$ _____

4.4 Replace/Install New Vinyl Gutters

Install all new 4" vinyl [Plastmo, Rain-go or pre-approved equal] gutter, properly pitched, and installed according to manufacturer's specifications. Work to include all required hangers, clamps, connectors, downspout, extensions and splash blocks. Downspout to be sized according to roof area being drained.

Color will be _____

Approx L/ft _____

Total \$ _____

SECTION 5 – HEATING SYSTEMS

5.1 General Requirements

All heating systems must be installed by Maine licensed technicians and in accordance with regulations promulgated by the Maine Oil and Solid Fuel Board as well as NFPA 31, NFPA 211, and NFPA 70A. Contractor is responsible for obtaining and paying for permits necessary for installation of the new system and disposal of the old system including any hazardous wastes associated with the removal of the old system such as asbestos coating or insulation. Product information/labeling showing compliance with required efficiency ratings shall be provided to the home owner and lender prior to contract signing.

5.2 Removal of Existing Heating System

1. Remove defective heating system by dismantling, removing and disposing of the existing heating system from the premises. Contractor shall be responsible permits, fees and costs for the professional removal of any pipe or boiler insulation such as asbestos, which will require added safety measures, removal precautions and disposal fees.
2. Repair walls, floors, ceilings or any other home component damaged or left incomplete as a result of the removal of the heating system radiators, oil tank or any other part of the heating system.
3. Existing, permanently installed, functional electric heaters, floor furnaces or other types of automatic heating systems which will be supplemented by the installation of a new heating unit or system do not need to be removed except in the following instances: The system has asbestos or other hazardous materials on/in the unit or distribution system, or removal of the system will substantially improve the livability and/or comfort of the home.

Quantity _____

Total \$ _____

5.3 Install Forced Hot Air Heating System Gas

1. Supply and install one complete new gas-fired, forced hot air furnace of sufficient capacity to heat each habitable room to a minimum of 68 degrees Fahrenheit measured 36 inches off the floor when the outside temperature is -5 degrees Fahrenheit. Unit to be Arcoaire, Carrier Weather-maker or pre-approved equal. Installer is to supply heat loss calculations from system designer to rehab specialist. Furnace will be installed and leveled on 8" concrete blocks to protect the furnace from water damage. Furnace shall be 90% AFUE or better.

2. Install complete new smoke pipe in basement and reuse existing hot and cold air sheet metal ducts. Check duct sizing to ensure adequate heat delivery capacity to all rooms. Seal all duct joints with RDC #6 or equivalent.
3. Install all required safety switches, [round dial type thermostat /programmable thermostat /digital thermostat] and wiring to service unit.
4. Make all required gas connections to unit. All work to conform to local and state codes. All operations and maintenance manuals are to be given to the owner.

Quantity _____

Total \$ _____

5.4 Install Forced Hot Air Heating System/Oil

1. Supply and install one complete new oil-fired, forced hot air furnace of sufficient capacity to heat each habitable room to minimum 68 degrees Fahrenheit measured 36 inches off the floor when the outside temperature is -5 degrees Fahrenheit. Unit to be Thermo-pride, Olsen, or pre-approved equal. Unit to have flame retention burner. Installer to supply heat loss calculations [used to determine size of furnace] from system designer to rehab specialist. Furnace will be installed and leveled on 8" concrete blocks to protect the furnace from water damage. Furnace shall be 90% AFUE or better. Furnace will have a minimum life of 20 years.
2. Install complete new smoke pipe and barometric damper, reuse existing hot and cold air supply and return grills if they are properly sized and in good condition. Check duct sizing and install new rectangular metal supply trunk with proper transitions to ensure adequate heat delivery capacity to all rooms that are being served with heat now and all rooms that are used for living in the conditioned space that are not being served now. all branch supplies are to be rigid round or rectangular metal and not exceed 15 ft. Ensure that there is adequate dedicated return ducting based on the manufacturers recommendation. Remove all return panning if present and replace with adequate dedicated metal return ducting. Seal all duct joints with RDC #6 or equivalent
3. Install all required safety switches, [round dial type thermostat/digital thermostat/ programmable] and wiring to service unit.
4. Make all required oil supply connections to oil storage tank. Oil tank, oil line and all other heating system components are to be brought to code at this time.
5. Make any necessary repairs to registers to put into good working order. All work to conform to all local and state codes. All operations and maintenance manuals are to be given to the owner.

Quantity _____

Total \$ _____

5.5 Install Forced Hot Water Heating System/Gas

1. Supply and install one complete new cast iron gas-fired, forced hot water boiler of sufficient capacity to heat each habitable room to a minimum of 68 degrees Fahrenheit measured 36 inches off the floor when the outside temperature is -5 degrees Fahrenheit. Installer to supply heat loss calculations [used to determine size of boiler] from system designer to rehab specialist. Boiler will be installed and leveled on 8" concrete blocks to protect the boiler from water damage. Boiler shall be 90% AFUE or better.
2. Boiler to be Heat-maker, Carrier, Weil McLain or pre-approved equal.
3. Domestic hot water to be provided by tank less coil / super store tank
4. Install complete new flue pipe in basement.
5. Install all required safety valves, switches, new [round dial type thermostat / digital thermostat / programmable thermostat] and wiring to service unit.

6. Make any necessary repairs to radiators / baseboard radiation to put in good working order. New unit to be complete and operating according to the manufacturers' specifications.
7. Make all required gas connections to unit. All operations and maintenance manuals are to be given to the owner.

Quantity _____

Total \$ _____

5.6 Install Forced Hot Water Heating System/Oil

1. Supply and install one complete new oil-fired, forced hot water boiler of sufficient capacity to heat each habitable room to 68 degrees Fahrenheit measured 36 inches off the floor when the outside temperature is -5 degrees Fahrenheit. Installer to supply heat loss calculations from system designer to rehab specialist. Boiler will be installed and leveled on 8" concrete blocks to protect the boiler from water damage. Boiler should be 90% AFUE or better.
2. Boiler to be Carrier, Weil McLain, and Burnham, HB Smith or pre-approved equal with cast iron wet base boiler.
3. Domestic hot water to be provided by tank less coil/super store tank
4. Install complete new smoke pipe in basement.
5. Install all required safety valves, switches, [round dial type thermostat /digital thermostat / programmable thermostat] and wiring to service unit.
6. Make all required connections to oil storage tank. **Oil tank, oil line and all other heating system components are to be brought to code at this time.**
7. Make all necessary repairs to radiation to put it in good working order. All work to conform to local and state codes. All operations and maintenance manuals are to be given to the owner.

Quantity _____

Total \$ _____

5.7 Install New Steam Heating System/Oil-Fired

1. Supply and install one complete new oil-fired, steam boiler of sufficient capacity to heat each habitable room to a minimum of 68 degrees Fahrenheit measured 36 inches off the floor when the outside temperature is -5 degrees Fahrenheit. Installer to supply heat loss calculations from system designer to rehab specialist. Boiler will be installed and leveled on 8" concrete blocks to protect the boiler from water damage. Boiler shall be 82% AFUE or better.
2. Boiler to be HB Smith or approved equal with cast iron wet base boiler.
3. Install new smoke pipe in basement.
4. Install all required safety switches, valves, [round dial thermostat / digital thermostat / programmable thermostat] automatic feed, and wiring to service unit.
5. Make all required connections to oil storage tank. Oil tank, oil line and all other heating system components are to be brought to code at this time.
6. Make any necessary repairs to radiators to put in good working order. New unit to be complete and operating according to the manufacturers' specifications. All operations and maintenance manuals are to be given to the owner.

Quantity _____

Total \$ _____

5.8 Repair Incorrect Radiation Pitch

Repair defective radiator by correcting pitch, blocking legs, bleeding system to assure proper operation, and re-packing angle valves and/or new venting valves.

Quantity _____

Total \$ _____

5.9 Install New Free Standing Radiation

Repair defective/missing heat by installing new cast iron radiator of sufficient capacity to heat room to 68 degrees Fahrenheit.

Quantity _____

Total \$ _____

5.10 Install New Hot Water Baseboard Radiation

1. Remove defective heating components by removing all free standing radiation and supply lines and disposing.
2. Install new fin type hot water baseboard radiation of sufficient capacity to heat each habitable room to 68 degrees Fahrenheit. Installation must include all necessary valves and trim.

Quantity _____

Total \$ _____

5.11 Install New Electric Baseboard Radiation

1. Remove defective heating by removing all free standing radiation and disposing.
2. New baseboard shall be able to maintain a temperature of 70 degrees F. at a point of three feet above the floor in all habitable rooms when the outside temperature is -10 degrees F., without overloading or scorching the walls. New heaters shall be medium density type, limited to 250 watts per foot of baseboard. Each room or air circulation area shall have only one thermostat.
3. Installation to include all necessary wiring and trim. Installation to be done in accordance with manufacturer's specifications.
4. Thermostats [Honeywell, Robert Shaw or approved equal] to be wall mounted.
5. In bathrooms, baseboard heaters shall not be within reach of the bathtub. Wall or ceiling type heaters are acceptable substitutes.

Quantity _____

Total \$ _____

5.12 Install New Oil Storage Tank

1. Remove oil storage tank from the premises and dispose. Tank must be properly cleaned before disposal.
2. Install new 275 gallon oil storage tank complete with all necessary hook ups and safety devices.
3. Install complete new oil line to oil burners.

Quantity _____

Total \$ _____

5.13 Install New Oil Burner Gun Unit

1. Remove defective oil burner gun unit and dispose.
2. Install new oil burner gun with all necessary piping and wiring Burner must be a flame retention burner. Installation shall be in accordance with manufacturer's specifications. Unit to be complete and operational.

Quantity _____

Total \$ _____

5.14 Install New Heating Zone

1. Install [baseboard radiation/hot air duct work] and properly connect to the existing boiler or furnace. New zone is to be installed in accordance with manufacturer's specifications.
2. Install new circulator and all necessary controls and wiring including a new [round dial thermostat/digital thermostat/programmable thermostat]

Quantity _____

Total \$ _____

5.15 Install New Smoke Pipe

1. Remove existing smoke pipe and dispose.
2. Install new smoke pipe including barometric damper. Installation to be in accordance with manufacturer's specifications. Combustible materials within 18" of smoke pipe must be protected.

Quantity _____

Total \$ _____

5.16 Repair Ceiling Over heating System

Repair defective ceiling over heating unit by installing 5/8" fire code sheetrock or cement board to retard combustion in the area.

Quantity _____

Total \$ _____

5.17 Install New Direct Vent Heating System/Kerosene

Supply and install a complete new kerosene-fired Direct Vent heater sufficient to heat each habitable room to minimum 68 degrees Fahrenheit. Install all required safety switches, pump, thermostat and wiring to service unit. Make all required supply connections to kerosene storage tank. Include pump as needed.

Quantity _____

Total \$ _____

5.18 Install New Direct Vent Heating System/Gas-Fired

Supply and install a complete new gas-fired Direct Vent heater sufficient to heat each habitable room to minimum 68 degrees Fahrenheit. Install all required safety switches, thermostat and wiring to service unit. Make all required supply connections to gas source [Natural/Propane]

Quantity _____

Total \$ _____

5.19 Install New Space Heating System/Gas-Fired

Supply and install one complete new gas-fired heater [Empire or pre-approved equal] sufficient to heat each habitable room to minimum 68 degrees Fahrenheit measured 36” off the floor when the outside temperature is -5 degrees Fahrenheit. Install all required safety switches, thermostat and wiring to service unit. Make all required supply connections to gas source [Natural/Propane] according to all local and state codes. Make all required supply connections to chimney.

Quantity _____

Total \$ _____

5.20 Install New Hot Water Maker

Install new hot water maker of sufficient capacity for home, complete with circulating pump, piping, and controls, as required for complete installation. Connect to house supply system.

Quantity _____

Total \$ _____

SECTION 6 – INSULATION/WEATHERIZATION

6.1 General Weatherization Requirements

Work shall comply with all applicable codes and Maine State Housing 2011 Maine Weatherization Standards. Cellulose insulation shall be “borate” grade only. When loose fill insulation is being used in an attic, a “baffle” system may be required to keep insulation out of the soffit area.

NOTE: Link for 2011 Wx standards is <http://www.mainehousing.org/docs/default-source/energy/energy-meexstandards.pdf?sfvrsn=2>.

All areas requiring “dense packed” cellulose will be installed at a rate of 3.25 pounds per cubic foot. All vapor barriers will be installed facing the warm side of the area being insulated. The vapor barrier shall not be more than 1/3 of the R value away from the warm side surface. (1/3- 2/3 rule)

Where blown-in or sprayed insulation is applied in the roof-ceiling assembly, the installer shall provide a certification of the initial installed thickness, settled thickness, coverage area, and number of bags of insulating material installed. Markers shall be provided for every 300 Sq. Ft. of attic area, attached to trusses, rafters, or joists, and indicate in 1 inch high numbers the installed thickness of the insulation.

Attic ceiling access shall have an insulation dam, made of ¾” minimum boards, that exceeds the height of the installed insulation. Attic insulation shall be installed to the outside edge of the top plate on exterior walls. Attics shall be insulated to R -49, walls R -21 and floors R 21 where possible.

Un-faced fiberglass shall not be left exposed in a habitable area. Faced fiberglass shall be covered with an approved 15 minute fire barrier.

Roof leaks and all attic moisture problems shall be repaired prior to the installation of attic insulation. All combustion and exhausting appliances shall be vented through the roof or sidewalls.

Enclosed attics shall have total net free ventilating area of not less than 1 to 150 of the area of the ventilated space. This may be reduced to 1 to 300 of the area of the ventilated space when a vapor barrier is installed on the warm side of the building or when at least 50% and not more than 80% of the required ventilated area is provided by ventilators located in the upper portion of the space to be at least 3 feet above eave or cornice vents with the balance of the required ventilation provide by eave or cornice vents.

6.2 Attic Air Sealing

Inspect attic area for the location of all air leaks from the heated conditioned space to the unconditioned attic including but not limited to plumbing stacks, wiring penetrations, chimney chases, open-topped partition walls and light fixtures. Seal all attic penetrations using 20 year minimum silicon caulking. Backer rod will be used when cracks exceed 1/4".

Approx Sq/ft _____

Total \$ _____

6.3 Chimney By-Pass

Install 26 gauge sheet metal around chimney. Include any necessary wood blocking while maintaining 2" clearance space between chimney and combustible material. High temperature caulking shall be used to seal sheet metal to chimney.

Approx Sq/ft _____

Total \$ _____

6.4 Attic Insulation Cellulose

Inspect attic area for location of air leaks from conditioned space to the attic and the sustainability of the structure for receiving insulation. Correct all electrical problems such as unsafe wiring, open junction boxes, or other electrical code violations prior to installing insulation. All required electrical fixtures shall be blocked with rigid material to ensure a minimum insulation clearance of 3" and a maximum of 6". (Exceptions to this rule include Type IC recessed lights, light/fan combinations and closed junction boxes) Insulation must be dammed to maintain a 3" clearance from knob and tube wiring.

Install _____ inches of "borate grade" cellulose insulation to attic.

Approx Sq/ft _____

Total \$ _____

6.5 Attic Insulation- Fiberglass

Inspect attic area for location of air leaks from conditioned space to the attic and the sustainability of the structure for receiving insulation. Correct all electrical problems such as unsafe wiring, open junction boxes, or other electrical code violations prior to installing insulation. All required electrical fixtures shall be blocked with rigid material to ensure a minimum insulation clearance of 3" and a maximum of 6". (Exceptions to this rule include Type IC recessed lights, light/fan combinations and closed junction boxes) Insulation must be dammed to maintain a 3" clearance from knob and tube wiring. Any installed vapor barrier must be installed to the "warm" side of area.

Install _____ layer of [faced, un-faced] fiberglass insulation.

Approx Sq/ft _____

Total \$ _____

6.6 Wall Insulation Dense Packed Cellulose

Dense pack walls using "borate grade cellulose insulation. Installation shall be "tubing" method to a density of 3.25 pounds per cubic foot.

Approx Sq/ft _____

Total \$ _____

NOTE: When installing insulation from the exterior, all drilled holes must be plugged before installing/reinstalling new siding. If new siding is not to be installed, existing siding must be removed as needed to access sheathing.

Any siding damaged, broken, or cracked during removal or reinstallation must be replaced. After reinstallation, siding that has chipped paint must be primed and painted. Caulk as needed to ensure weather tight application. Asbestos siding may only be removed and reinstalled by homeowner or qualified asbestos worker.

6.7 Wall Insulation – Fiberglass

Insulate walls using [faced / un-faced] [3 1/2" / 6"] fiberglass insulation. Insulation shall be stapled in place where accessible.

Approx Sq/ft _____

Total \$ _____

6.8 Sloped Ceiling Insulation

Dense pack slopes using "borate "grade cellulose insulation. Installation shall be installed to a density of 3.25 pounds per cubic foot.

Approx Sq/ft _____

Total \$ _____

6.9 Knee Wall Insulation Fiberglass

Insulate knee walls using [faced / un-faced] [3 1/2" / 6"] fiberglass insulation. Insulation shall be stapled in place where accessible.

Approx Sq/ft _____

Total \$ _____

6.10 Band Joist Insulation

Install _____ [faced un-faced] fiberglass insulation in band joist area. All edges must be stapled and air sealed.

Approx Sq/ft _____

Total \$ _____

6.11 Floor Insulation

Install R-21 faced fiberglass insulation between floor joists. Vapor barrier to face heated side. Insulation must be in contact with floor sheathing.

Approx Sq/ft _____

Total \$ _____

6.12 Foundation Insulation

Install 3 1/2", double sided V-backed fiberglass perimeter wrap to foundation walls. Top and bottom of insulation shall be mechanically secured. Insulation shall be cut to fit around floor joist. All edges to be sealed.

Width will be _____ ft.

Approx Sq/ft _____

Total \$ _____

6.13 Crawl Space Insulation

1. Seal all direct air leaks into the crawls space. Seal all bypasses and chases into and through the conditioned space.
2. Route all exhaust vents to the outside.
3. Install 3 1/2" double V-Back fiberglass insulation. Install insulation from the top of the rim or band joist to a distance of 2' below grade. Mechanically fasten the insulation and tape/seal all joints.

Approx Sq/ft _____

Total \$ _____

6.14Attic Access New

Frame access opening to a minimum of 22" x 30" (rough opening min). New framing member shall match existing size. Access to include 1"x 3" ceiling trim, 1"x 1" hatch cover stops, 3/4" AC plywood hatch cover, weather stripping, one door pull, and two sets hook and eyes. Hatch cover shall be insulated to the same R-value as attic when possible. Access shall be located in a hallway or other readily accessible location.

Access to be located _____

Quantity _____

Total \$ _____

6.15Attic Access- Repair Existing.

Repair existing attic access

Measurement _____

Approx Sq/ft _____

Total \$ _____

6.16Knee Wall Access New

Install new knee wall access. Minimum opening shall be the width of the knee wall stud cavity and 24" in height, shall be weather stripped and insulated to same R value as the knee wall. At least one latch shall be installed to ensure air tightness.

Access to be located _____

Quantity _____

Total \$ _____

6.17Knee Wall Access Repair

Repair existing knee wall access.

Measurements _____

Approx Sq/ft _____

Total \$ _____

6.18Install Vent Kit

[Install / replace] vent kit to the outside. Screens shall not be installed at the duct termination. Exhaust ducts shall not be connected with sheet metal screws or fastening means which extend into the duct. Exhaust ducts shall be equipped with a back draft damper. Exhaust ducts shall be constructed of minimum 0.016-inch-thick rigid metal duct, having smooth interior surface with joints running in the direction of the air flow. Flexible transition ducts used to connect the dryer to the exhaust duct system shall be limited to single lengths, not to exceed 8 ft. in length and shall be UL listed. Transition ducts shall not be concealed in construction.

Quantity _____

Total \$ _____

6.19Install Vent Timer Switch

Install Tamarak Continuous Duty Timer switch or pre-approved equal. Timer to have option of low speed continuous setting and speed boost setting. Operating instructions to be left with home owner.

Quantity _____

Total \$ _____

6.20 Install Ridge Vent

Install ridge vent following manufacturer's recommendations. Vent to be Air Vent, Cobra Vent or pre-approved equal.

Quantity _____

Total \$ _____

6.21- Install Gable Vents

Install _____ x _____ gable vent. Vent to be [vinyl / wood / aluminum] Wood vents shall be primed and painted as required.

Quantity _____

Total \$ _____

6.22 Install Crawl Space Vents

Install _____ x _____ vent. Vent to be [vinyl / wood / aluminum] Wood vents shall be primed and painted as required.

Quantity _____

Total \$ _____

6.23 Install Polly Ground Cover

Remove and dispose of all wood debris in basement. Install 6 mill polyethylene moisture barrier. All joints shall overlap 6 inches minimum and extend up walls 6 inches.

Approx Sq/ft _____

Total \$ _____

SECTION 7 – INTERIOR PAINTING CEILING & WALL REPAIR

7.1 General Requirements

For all interior paint work that disturbs a lead paint surface, contractor shall employ the use of lead-safe practices. Interior finish paint to be Sherwin Williams Style Perfect, Harmony, Benjamin Moor Eco Craft, Super Craft or pre approved equal.

All work to be done in accordance with the manufacturer's specifications. All colors will be white unless otherwise written in the specifications.

7.2 Scrape and Paint Ceiling

1. Remove all loose and flaky paint using lead safe practices, apply bonding agent (Plaster weld or pre-approved equal) before patching crack. Fill depressions with joint compound and joint tape as necessary, Allow to thoroughly dry, sand smooth, and spot prime. All water stains shall be covered with one or more coats of Shellac based stain killer [B-I-N-S, Killz, Kilstain or pre-approved equal].
2. Apply two coats (1 primer coat and 1 finish coat) of washable latex flat ceiling paint All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks. Color to be white.

Approx Sq/ft _____

Total \$ _____

7.3 Replace Acoustical Ceiling Tile

1. Remove and dispose of defective ceiling.
2. Install 1 x 3 strapping, 12" O.C., Level new strapping to the greatest extent possible.
3. Apply 12" x 12" scored ceiling tiles [Armstrong #258 or pre-approved equal] according to the

manufacturer's specifications.

4. Install 2- 1/4" [paint grade or finger jointed] cove molding.
5. Apply two coats (1 primer coat and 1 finish coat) of washable latex semi-gloss paint to the cove molding. All finishes evenly applied and free from sags, runs, drips, voids, holidays and brush marks. Color to be white.

Approx Sq/ft _____

Total \$ _____

7.4 Install New Suspended Ceiling

1. Remove & stabilize structurally defective ceiling. Scrape/stabilize all peeling paint. Remove all loose plaster using lead safe practices.
2. Install T-bar suspension system [Chicago Metallic, Armstrong Custom Grid or pre-approved equal] with 2' x 4' acoustical panels [Armstrong #942 textured or pre-approved equal] according to the manufacturer's specifications. Replace existing ceiling lights with new 2' x 4' light fixture with translucent panel, Lithonia VC 240 or pre-approved equal, and lower to new ceiling height minimum 7'-6".

Approx Sq/ft _____

Total \$ _____

7.5 Repair, Patch and Paint or Paper Walls

1. Repair defective walls by removing wallpaper. Patch cracks and voids using lead safe practices. Cracks to be undercut prior to filling. Apply bonding agent before patching crack.
2. Sand and smooth all rough and patched areas.
3. Install textured, fabric backed, vinyl wall paper, Waltext, Borden or pre-approved equal, selected under a \$12.00 per single roll allowance by the owner.

Color/style to be _____.

4. Apply two coats [1 primer coat and 1 finish coat] of washable latex satin paint. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be white.

Approx Sq/ft _____

Total \$ _____

7.6 Wash and Paint Walls

1. Clean area to be painted by washing thoroughly with TSP (Trisodium Phosphate) and removing all smoke, grease, grime, dirt, etc. using lead safe practices.
2. Apply two coats [1 primer coat and 1 finish coat] of washable latex flat paint. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be white.

Approx Sq/ft _____

Total \$ _____

7.7 Paint Woodwork

1. Repair chipped woodwork by scraping and sanding smooth using lead-safe practices.
2. Remove loose and flaky paint, fill depressions with wood putty, sand smooth, and spot prime using lead safe practices.
3. Apply two coats (1 primer coat and 1 finish coat) of washable latex semi-gloss paint. All finishes shall be evenly applied and free from sags, a run, drips, voids, holidays and brush marks.

Color to be white.

Approx Sq/ft _____

Total \$ _____

SECTION 8 – DRYWALL

8.1 Install New Sheetrock (gypsum wallboard) Walls

1. Repair defective walls by removing deteriorated sections and disposing using lead safe practices.
2. Install new 1/2" sheetrock (gypsum wallboard) fastened to framing, using approved fasteners. Install electrical box extensions as needed to meet state electrical code.
3. Tape and seal all seams and nail heads using joint compound. Use three-coat method.
4. Sand smooth topcoat of joint compound and apply two coats (1 primer and 1 finish coat) of washable semi-gloss latex wall paint. All finishes shall be evenly applied and free from sags, a run, drips, voids, holidays and brush marks.

Color to be white.

Approx Sq/ft _____

Total \$ _____

8.2 Install New Sheetrock (gypsum wallboard) Ceilings

1. Repair structurally defective ceilings by removing deteriorated sections and disposing using lead safe practices.
2. Install 1 x 3 spruce strapping, 16" O.C. Level new strapping to the greatest extent possible.
3. Install 1/2" sheetrock (gypsum wallboard) fastened to framing using approved fasteners. Repair electrical boxes to meet Maine State electrical code.
4. Tape and seal all seams and nail heads using joint compound. Use three-coat method.
5. Sand smooth topcoat of joint compound and apply two coats (1 primer and 1 finish coat) of washable flat ceiling paint. All finishes shall be evenly applied and free from sags, runs, drips, void, holidays and brush marks.

Color to be white.

Approx Sq/ft _____

Total \$ _____

SECTION 9 – EXTERIOR PAINTING

9.1 General Standards

For all Exterior paint work that disturbs a lead paint surface, contractor shall employ the use of lead-safe practices. Exterior paint to be Sherwin Williams Weather Perfect, Dynasty, Benjamin Moor MoorGlo, MoorCraft or pre-approved equal. Apply two coats (1 primer and 1 finish coat) of latex exterior wall paint. All finishes shall be evenly applied and free from sags, runs, drips, void, holidays and brush marks. All work to be done in accordance with the manufacturer's specifications.

9.2 Paint Exterior Doors and Sashes

1. Repair exterior surfaces by preparing and painting all exterior windows (frames, sashes, and casing), and doors (jamb, door, and casing) to prevent deterioration due to weather.
2. Work to consist of all necessary removal of loose and flaky paint, sanding, caulking, putty, 1 prime coat and 1 finish coat of paint. All finishes shall be evenly applied and free from sags, runs, drips, void, holidays and brush marks.
3. Contractor will remove all storm window/door frames and inserts. Paint sashes and window trim. Caulk all voids and spaces.
4. Replace storm windows/doors using clear caulking.
5. Exterior painting will not be done in rainy, damp, or frosty weather unless surface has thoroughly dried after such conditions.

Color will be _____

Quantity _____ Total \$ _____

9.3 Paint Exterior Walls and Trim

1. Repair exterior walls by preparing and painting all exterior walls, porches (railings, columns, ceiling and decking), window frames, doors and frames and trim [fascia, soffit, rake, molding, frieze and water table] to prevent deterioration due to weather.
2. Work to consist of all necessary removal of loose and flaky paint, sanding, caulking, puttying, prime coat and 1 finish coat of paint. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.
3. Contractor will not paint window sashes.
4. Sidewalls will receive a latex exterior paint and all trim will receive a semi-gloss latex exterior paint. Porch decking to receive a latex floor and deck paint.
5. Exterior painting shall not be done in rainy, damp or frosty weather or unless surface has thoroughly dried after such conditions.

Color will be _____

Quantity _____ Total \$ _____

9.4 Paint Trim and Sashes

1. Repair exterior trim by preparing and painting all exterior porches, [railings, columns, ceiling and decking], windows, doors and trim [fascia, soffit, rake, molding, frieze and water table to prevent deterioration due to weather.
2. Work to consist of all necessary removal of loose and flaky paint, sanding, caulking, puttying, prime coat and 1 finish coat of paint. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.
3. All trim will receive a semi-gloss latex exterior paint. Porch decking to receive a latex floor and deck enamel. Caulk all voids and spaces.
4. Contractor will remove storm window frames and inserts.
5. Paint sashes and trims. Re-install storm windows.
6. Exterior painting will not be done during rainy, damp or frosty weather unless surface has thoroughly dried after such conditions.

Color will be _____

Quantity _____ Total \$ _____

9.5 Paint Exterior Trim

1. Repair exterior trim by preparing and painting all exterior porches (railings, columns, ceiling and decking), windows, doors and trim fascia, soffit, rake, molding, frieze and water table to prevent deterioration due to weather.
2. Work to consist of all necessary removal of loose and flaky paint, sanding, caulking, puttying, prime coat and 1 finish coat of paint. All finishes shall be evenly applied and free from sags, a run, drips, voids, holidays and brush marks.
3. All trim will receive a semi-gloss latex exterior paint. Porch decking to receive a latex floor and deck paint. Caulk all voids and spaces.
4. Contractor will not remove storm window inserts or screens or paint sashes.
5. Exterior painting will not be done in rainy, damp or frosty weather unless surface is thoroughly dried after such conditions.

Color will be _____

Quantity _____ Total \$ _____

SECTION 10 – PORCHES/LANDINGS

NOTE: Existing stairs, stairways and ramps require handrails on one side only. New construction requires handrails on both sides.

10.1 Replace Existing Porch

1. Remove and dispose of existing porch using lead safe practices.
2. Maintain existing roof rafters, sheathing and roofing.
3. Excavate hole to a depth below local frost- line. Fill with 8" minimum, with 3,000 psi concrete and allow to dry thoroughly. Install one galvanized post base anchor for each vertical member.

4. Install complete porch measuring ___ ft. x ___ ft. using properly sized standard grade pressure treated lumber for vertical columns and girts, include all required trim.
5. Install properly sized standard grade pressure treated floor joists at each level; include 8" aluminum cap flashing between joists and siding.
6. Install all decking using 1-1/4" x 6" standard grade pressure treated decking or similar, pre-approved, acceptable material. Contractor will repair any siding damaged during porch repair.
7. Install new guard rails on stairs and porch not less than 42" in height, using 2 x 4 standard grade pressure treated top and bottom rails, 2 x 2 standard grade pressure treated balusters and 4 x 4 standard grade pressure treated post. Guards shall not have openings from the walking surface to the required guard height which allow passage of a 4" sphere in diameter.
8. Install stairs using notched 2"x 12" standard grade pressure treated stringers set on a 3" thick concrete pad. Treads shall be solid, without perforations. The maximum riser height shall be 7 3/4". The minimum tread depth shall be 10".
9. New handrails will be installed on both of stairs. Handrails shall not be less than 34" or more than 38" above the surface of the tread, measured vertically to the top of the rail from the leading edge of the tread. Handrails shall be installed to provide a clearance of not less than 2 1/4" between the handrail and the wall to which it is fastened and be continuously graspable along their entire length. Handrails shall have a circular cross section with an outside dimension of not less than 1 1/4" and not more than 2". New handrail ends shall be returned to the wall or floor or shall terminate at newel posts.

Quantity _____

Total \$ _____

10.2 Install New Columns /Corner Posts/Girts

1. Remove and dispose of existing column(s), corner posts and girts using lead safe practices.
2. Excavate hole with allowance for footing, to a depth below local frost- line. Diameter of sono tube to be determined by code requirements. Fill son tube with 3,000 psi concrete and allow to dry thoroughly. Install one galvanized post base anchor for each vertical member.
3. Install standard grade pressure treated columns, corner posts or girts of the same approx. size as originals.

Quantity _____

Total \$ _____

10.3 Replace Deck/Landing

1. Replace deck/landing by removing and disposing of existing supports, decking and floor joists.
2. Install 1-1/4" x 6" standard grade pressure treated decking over new properly sized pressure treated floor joists [installed 16" O. C.] including 8" aluminum cap flashing between joists and siding.

Deck / landing to be _____ ft. x _____ ft.

3. Install new guard rails on deck and stairs not less than 42" in height, using 2 x 4 standard grade pressure treated top and bottom rails, 2 x 2 standard grade pressure treated balusters, and 4" x 4" standard grade pressure treated post. Guards shall not have openings from the walking surface to the required guard height which allow passage of a 4" sphere in diameter.
4. Install stairs using notched 2" x 12" standard grade pressure treated stringers set on a concrete pad. Treads shall be solid, without perforations. The maximum riser height shall be 7 3/4". The minimum tread depth shall be 10".
5. New handrails will be installed both sides of stairs. Handrails shall not be less than 34" or more than 38" above the surface of the tread, measured vertically to the top of the rail from the leading edge of the tread. Handrails shall be installed to provide a clearance of not less than 2 1/4" between the handrail and the wall to which it is fastened and be continuously graspable along their entire length. Handrails

shall have a circular cross section with an outside dimension of not less than 1 1/4" and not more than 2". New handrail ends shall be returned to the wall or floor or shall terminate at newel posts.

6. Replacement decks/ landings shall be structurally sound, reasonable level, with smooth and even surfaces. **NOTE:** Maximum deck/landing size shall be no larger than 6'x 4' without prior approval. Attached decks/landings must use sono tubes. Deck blocks are not allowed.

Quantity _____

Total \$ _____

10.4 Install New Decking Over Existing Joists

1. Repair decking by removing and disposing of existing decking.
2. Install 1-1/4" x 6" standard grade pressure treated decking over existing floor joists. Include 8" aluminum cap flashing between joists and siding.

Approx L/ft _____

Total \$ _____

10.5 Install New Handrails

New handrails will be installed on both sides of stairs. Handrails shall not be less than 34" or more than 38" above the surface of the tread, measured vertically to the top of the rail from the leading edge of the tread. Handrails shall be installed to provide a clearance of not less than 2 1/4" between the handrail and the wall to which it is fastened and be continuously graspable along their entire length. Handrails shall have a circular cross section with an outside dimension of not less than 1 1/4" and not more than 2". New handrail ends shall be returned to the wall or floor or shall terminate at newel posts.

Approx L/ft _____

Total \$ _____

10.6 Install New Guard Rails

Install new guard rails on deck/stairs not less than 42" in height, using 2" x 4" standard grade pressure treated top and bottom rails, 2 x 2 standard grade pressure treated balusters and 4 x 4 standard grade pressure treated post. Guards shall not have openings from the walking surface to the required guard height which allow passage of a 4" sphere in diameter.

Approx L/ft _____

Total \$ _____

10.7 Repair Lattice Work

1. Repair defective lattice work by removing broken/damaged portions and disposing.
2. Install new 2" x 4" standard grade pressure treated framing to prevent movement by new lattice.
3. Install standard grade pressure treated lattice work using 1" x 6" standard grade pressure treated lumber to conceal all ends of the lattice.

Approx Sq/ft _____

Total \$ _____

10.8 Install New Brick/Block Piers

1. Remove existing pier(s) and dispose.
2. Construct pier(s) using 16" x 16" x 8" concrete footings and 12" x 12" pier(s).
3. Use new brick or 12" concrete blocks to fit and support overhead structure.

Quantity _____

Total \$ _____

10.9 Install Deck Blocks

Install 11" square Deck Blocks following manufactures recommendations. Deck Blocks may only be used for free floating landings.

Quantity _____

Total \$ _____

10.10 Install New Sono Tubes

Excavate hole with allowance for footing, to a depth below local frost- line. Diameter and depth of sono tube to be determined by 2009 IRC code requirements. Fill son tube with 3,000 psi concrete and allow to dry thoroughly.

Install one galvanized post base anchor for each vertical.

Quantity _____

Total \$ _____

SECTION 11 – MASONRY

11.1 Masonry General Requirements

Mortar mixes shall be in accordance with building code requirements. Lay units when temperature is 40 degrees F. or more. Protect from exposure to precipitation, heat, freezing, and other harmful elements. Clean surface with scraper, wire brush, and cleaning compound. Flush with water and broom clean.

When repairing portions of any foundation wall/support system, ensure the entire wall/support system is in sufficient condition to perform as required.

11.2 Repair Masonry Foundation

1. Repair loose and broken foundation wall by removing loose bricks. Tuck point walls by raking joints to a depth of 3/4".
2. Replace brick in new mortar or patch holes with new mortar. Mortar shall be mixed to match existing as close as possible. Mortar shall conform to Brick Institute of America (B.I.A. standard specification for Portland cement-lime mortar for brick masonry (M1-88). Finish joints to match existing style.

NOTE: When repairing portions of any foundation wall/support system, ensure the entire wall/support system is in sufficient condition to perform as required.

Approx Sq/ft _____

Total \$ _____

11.3 Repair Concrete Walk

Repair existing concrete walk by removing defective sections, leveling earth... Pour in 3,000 psi concrete patches to meet existing level. Wood float/broom finish.

Approx Sq/ft _____

Total \$ _____

11.4 Rebuild Chimney

1. Remove all bricks down to roof line, save bricks for reuse. Rebuild chimney using new and or used bricks. Chimney must terminate 3 foot minimum from roof penetration and must be a minimum of 2 feet higher than any roof within 10 feet horizontally.
2. Install new lead flashing.
3. Finish all mortar joints to a concave surface. Mortar shall conform to Brick Institute of America (B.I.A) standard specification for Portland cement-lime mortar for brick masonry (M1-8).

4. Install chimney cap. Chimney cap shall be at least 4 inches thick at the inside edge and shall slope away from the flue.

Approx L/ft _____

Total \$ _____

11.5 Point Chimney

Repair chimney by raking joints to a 3/4" depth. Tuck-point bricks with mortar to match existing as close as possible. Mortar shall conform to Brick Institute of America (B.I.A) standard specification for Portland cement-lime mortar for brick masonry (M1-88). Finish joints to match existing style.

Quantity _____

Total \$ _____

11.6 Remove Chimney

1. Remove unused chimney to below roof line and dispose. Block remaining flue with mortar and brick.
2. Close in opening where chimney was removed with jack rafters sized to match existing, [1/2" CDX plywood sheathing/or 3/4" boards] to match existing. Install new roofing shingles. Match existing as close as possible.

Quantity _____

Total \$ _____

11.7 Install Stainless Steel Liner

Install Vertinox, Forever Flex, or pre-approved equal stainless steel chimney liner following manufacturers' recommendations for complete installation.

Approx L/ft _____

Total \$ _____

11.8 Repair Concrete Retaining Wall

General: New walls shall be structurally sound and durable. Walls shall be designed to resist the lateral pressure exerted by the earth behind the wall including the material above the top of the wall. Masonry walls shall be constructed in accordance with the recommendations of the National Concrete Masonry Association. They shall have a 6 inch wide layer of gravel, crushed rock or sand between the earth and the wall, extending the full height of the wall. Block shall be set in mortar beds with joints tooled smooth, except where the exposed surface is to be parged. Reinforce block laterally and vertically following industry standards. Fill cavities containing reinforcement with mortar. Place weep holes 10 feet on center, and at the lowest point possible above grade. All weep holes shall be screened. The top course shall contain a bond beam or be capped to provide a finished surface.

1. Repair defective retaining wall by removing deteriorated sections and disposing.
2. Excavate below frost line to undisturbed soil and pour new footings using new 3,000 psi concrete.
3. Form and pour concrete wall using new 3,000 psi concrete with weep holes and #6 [or size required by code] reinforcement rods [rebar].

Approx Sq/ft _____

Total \$ _____

11.9 Repair Concrete Block Retaining Wall

General: New walls shall be a minimum of 8 inches thick and shall have poured in place concrete footings no less than 6 inches thick that extend below finish grade as required by the particular installation. Block face shells shall provide a 1-1/2 inch wide mortar bed. The first course shall be set in a full mortar bed. Joints shall not exceed 3/4 inch and shall be tooled smooth, except those on an exterior face being parged. The joints between wall and footing shall be tight and have a cove of elastic caulking compound on the exterior side. Stack bond shall be laterally reinforced every second course. Provide other reinforcement where needed, or specified.

Location of control joints shall be determined by the height of the wall. The top course shall be filled or capped with at least 4 inches of solid masonry or wire mesh reinforced concrete, unless the sill plate board rests on both inner and outer face shells. Anchor bolts shall be placed no more than 6 feet on center and extend through sill and cap and two filled courses. Walls shall be bonded, keyed, or anchored to existing and intersecting walls.

Porch and entrance slabs and areaways shall be anchored to the wall. All openings in the wall shall be covered with at least one coat of Portland cement parging no less than 3/8 inch thick. Walls shall have at least one coat of bituminous damp proofing material from the footing to finish grade. Backfill material shall be an appropriate sand gravel mixture for proper soil drainage. The top 3 inches shall be topsoil suitable for plant growth. Replace sod or install new sod unless otherwise specified.

1. Repair defective retaining wall by removing deteriorated sections and disposing.
2. Excavate below frost line to undisturbed soil and pour new footings, using new 3,000 psi concrete.
3. Construct new wall using 8" x 8" x 16" concrete blocks set in new mortar; provide weep holes and cap for top of wall.

Approx Sq/ft _____

Total \$ _____

11.10 Install Monolithic Slab

Form, reinforce and finish a 6" thick, _____ ft. x _____ ft. monolithic slab. The specified compressive strength of concrete shall be as set forth in section R402.2 of the ICC Code. Excavate a 12" wide trench, 12" deep at the perimeter of a well-drained, graded and compacted to 85% sub grade. Install 6"x6" wire fabric, code required re-bar, 6 mil vapor barrier. Insulate with closed cell Styrofoam following the Maine State Energy Code. Slab to have power trowel finish.

Approx Sq/ft _____

Total \$ _____

11.11 Install Concrete Footings

All exterior walls shall be supported on continuous solid or fully grouted or concrete footings, crushed stone footings, wood foundations, or other approved structural systems which shall be of sufficient design to accommodate all loads according to Section R301 of the 2009 IRC for One and Two Family Dwellings. Concrete footings shall be designed and constructed in accordance with the provisions of Section R 403 of the 2009 IRC for One and Two Family Dwellings.

NOTE: When repairing portions of any foundation wall/support system, ensure the entire wall/support system is in sufficient condition to perform as required.

Approx L/ft _____

Total \$ _____

11.12 Install Concrete Walls

Concrete and masonry foundation walls shall be selected and constructed in accordance with the provisions of Section R 404 of the 2009 IRC for One and Two Family Dwellings.

NOTE: When repairing portions of any foundation wall/support system, ensure the entire wall/support system is in sufficient condition to perform as required.

Approx L/ft _____

Total \$ _____

SECTION 12 – PLUMBING

12.1 General

All work shall comply with the Maine State Internal Plumbing Code. All materials, piping, fittings, fixtures, etc., shall conform to the latest ANSI [American National Standards Institute], ASTM [American Society for Testing and Materials], CS [Commercial Standards] and FS [Federal Specifications] standards. All equipment and materials used shall be new and clearly marked to permit identification of manufacturer, model and type. The contractor shall furnish all permits, instruments, gauges and equipment required for testing and shall perform those tests required by the related authorities [local and state code]. Equipment, materials or work found to be defective during testing shall be replaced by new work and be retested until proven satisfactory.

All replacement sewer, water, or gas systems shall be installed complete and, if necessary, final connections shall be made to the sewer main, gas meter, or water meter.

All equipment and items installed shall operate safely, without leakage, undue noise, vibration, corrosion, or water hammer. All work, fixtures and materials shall be protected at all times. All service and supply lines installed in a location where freezing may occur shall be insulated with closed cell foam insulation or wrapped with fiberglass batt insulation without vapor barrier.

When a rough in for new equipment requires connections to the existing plumbing system, the contractor shall obtain necessary data on locations, sizes, connections, fittings and arrangements needed to ensure proper installation of that equipment.

All drilling, cutting and patching necessary for a proper installation of work shall be done by the contractor. All patching shall be of the same materials, workmanship and finish as the original work and shall accurately match all surrounding work. All work shall be done without damage to structural members

12.2 Repair Basement Water Supply Main

1. Remove all defective supply piping in basement and dispose.
2. Install complete water supply main from meter to _____ floor using code approved tubing complete with all required fittings, hangers and shut-offs

Approx L/ft _____

Total \$ _____

12.3 Replace Water Piping

1. Remove existing pipes and dispose
2. Install piping using [copper/PEX] tubing complete with all required fittings, hangers, and shut-offs.

Approx L/ft _____

Total \$ _____

12.4 Repair Drain/Waste/Vent System

1. Repair Drain, Waste, and Vent system by removing defective sections and disposing.
2. Install all necessary piping, fittings, valve for complete installation.

Approx L/ft _____

Total \$ _____

12.5 Install Washing Machine Hook-Up

- 1. Install separate drain and hot and cold water hook-ups for washing machine.
- 2. Drain to be properly sized, trapped, vented and tied to stack.
- 3. Water supply lines to be [copper/PEX] tubing with appropriate shut-offs.

Quantity _____ Total \$ _____

12.6 Repair Blocked Soil Pipe

Repair blocked soil pipe / storm drains by cleaning out blockage.

Approx L/ft _____ Total \$ _____

12.7 Install Sump Pump

- 1. Repair water condition in basement by constructing new barrel sump with 6" base of compacted gravel.
- 2. Install new [Ideal DB-3 SX or pre-approved equal] automatic sump pump complete with all required wiring, barrel cover and discharge hose. Locate sump for maximum effectiveness and make all necessary alterations for proper water discharge-water not to be directed into sanitary sewer lines.

Quantity _____ Total \$ _____

12.8 Replace Gas Piping

- 1. Repair defective and obsolete gas piping to entire structure by disconnecting and capping all obsolete gas lines.
- 2. Re-pipe all [existing/new] gas stoves using code approved gas piping. All piping to be concealed where possible.
- 3. Contractor will make all required repairs to walls, floor and/or ceilings to match existing

Approx L/ft _____ Total \$ _____

12.9 Install New Sink and Wood Base Unit

- 1. Remove existing kitchen sink, trap, and defective piping and dispose.
- 2. Install [single bowl/double bowl, Stainless Steel drop-in sink, 8" deep with complete metal basket strainer assembly.
- 3. Install metal chrome plated single lever faucet with spray hose.
- 4. Install trap, piping, shut-offs and associated trim.
- 5. Install _____ wood base unit [Merrillatt "Omni", York Towne or pre-approved equal with post-formed plastic laminate counter-top and backsplash. Owner to choose cabinets and countertop from manufacturer's standard selection. Unit to be plumb and level.

Color/style to be _____

Quantity _____ Total \$ _____

12.10 Replace Drain and Trap

1. Remove defective drainage piping, trap and dispose.
2. Install trap and metal tailpiece to put fixture in good operating and sanitary condition.

Quantity _____

Total \$ _____

12.11 Install Faucet- Kitchen

1. Remove existing faucet on kitchen sink and dispose.
2. Install metal chrome plated faucet [single lever / two lever] to match existing with metal connections under a \$95.00 fixture allowance.

Quantity _____

Total \$ _____

12.12 Install Faucet Bathroom

1. Remove existing faucet on bath lavatory and dispose.
2. Install metal chrome plated faucet [single lever/two lever] to match existing, with metal connections under an \$85.00 fixture allowance

Quantity _____

Total \$ _____

12.13 Install Shut Off Valves

Install shut off valves where listed.

Quantity _____

Total \$ _____

12.14 Install Shower Valve

1. Remove existing shower valve and dispose.
2. Install anti-scalding, chrome plated faucet, single lever/two lever or twins to match existing with metal connections under a \$110.00 fixture allowance. Work to include shower head and/or tub spout.

Quantity _____

Total \$ _____

12.15 Install Toilet

1. Remove existing toilet and dispose.
2. Install free standing low flow, vitreous china toilet complete with wax seal, insulated tank, new seat, shut-off valve and all required trim and piping. Color to be white.

Quantity _____

Total \$ _____

12.16 Install Wall Hung Lavatory

1. Remove existing lavatory unit and dispose.
2. Install wall hung lavatory with metal faucet [single lever/two lever] to match existing, chrome trap, two chrome shut-off valves and all associated trim. Color to be white.

Quantity _____

Total \$ _____

12.17 Install Vanity

1. Remove existing lavatory unit and dispose.
2. Install one piece cultured marble lavatory in 20" free standing vanity. Color to be white.
3. Installation to include metal faucet [single lever / two lever], trap, two shut-off valves and all associated trim.

Quantity _____

Total \$ _____

12.18 Install Bathtub/Shower Unit

1. Remove existing bathtub and dispose.
2. Install 5' recessed fiberglass tub with complete shower facilities. Color to be white.
3. Install chrome plated shower valve [single lever/two lever to match existing]. Work to include low flow shower head and tub spout, shower rod and all associated trim.

Quantity _____

Total \$ _____

12.19 Install Three-Piece Bathroom

1. Remove existing plumbing and fixtures and dispose, including floor, fixtures and piping throughout bathroom.
2. Install drain and waste lines and vent piping, complete with all fittings and traps.
3. Install [copper/PEX] water supply lines with shut-off valves at all fixtures.
4. Install freestanding low flow, insulated tank, and toilet complete with wax seal, seat, and shut-off valve and all required trim and piping.
5. Install one piece cultured marble lavatory in 20" free standing vanity.
6. Installation to include metal single lever chrome faucet, trap, two shut-off valves and all associated trim.
7. Install 5' recessed fiberglass tub with complete shower facilities. All colors to be white.
8. Install chrome plated single lever shower valve. Work to include low flow shower head and tub spout. Install shower rod and all associated trim.

Quantity _____

Total \$ _____

12.20 Install One Piece Shower Stall

1. Install new 36" x 36" fiberglass shower stall.
2. Install chrome plated single lever shower valve. Work to include low flow showerhead, shower rod and all associated trim.

Quantity _____

Total \$ _____

12.21 Install Built-up Shower Stall

1. Repair shower by constructing shower stall receptor. Size to be _____ x _____ using 2" x 4" studs [#2 or better] and 1/2" M-R sheetrock [Green board]. Frame opening for plywood access door to plumbing fixtures.
2. Tape and seal all seams and nail heads using joint compound -three coat method.

3. Finish walls following manufacturer's recommendations using 4-1/2" x 4-1/2" glazed ceramic tiles with all required trimmers using thin set method.
4. Installation to include metal, chrome, single lever, non-scald valve and connection to all supply lines and drains.

Quantity _____

Total \$ _____

12.22 Install Diverter

1. Remove existing diverter and dispose.
2. Install anti-scald type diverter with all associated trim. Contractor will repair any damage to walls to match existing.

Quantity _____

Total \$ _____

12.23 Convert Claw foot Bathtub to Bathtub/Shower.

Install Portofino add-a-shower [RX2300-RX2350 or pre-approved equal].

Quantity _____

Total \$ _____

If Construction or Retrofit Required for Tub or Shower Installation:

1. Frame in end of bathtub using 2" x 4" plates and studs [16" O. C.] and 1/2" M-R [Green board] sheetrock. Frame opening for plywood access door to plumbing fixtures.
2. Tape three coats and sand smooth between coats.
3. Apply two coats (1 primer and 1 finish coat) of washable latex wall paint (Sherwin Williams, Devoe, California or approved equal) according to the manufacturer's specifications... Primer coat to be Sherwin Williams Promar 200 latex primer, Devoe Wondertones latex primer or pre-approved equal. Finish coat to be Promar 200 latex wall, Devoe Wondertones latex or pre-approved equal. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks. Color to be white.

12.24 Install Electric Hot Water Heater

1. Remove existing hot water heater and dispose.
2. Install [30/40/50] gallon electric hot water heater. Unit to have all required cold water shut-off valves, vacuum relief valves, and self-closing temperature and pressure relief valves. Make all required electrical connections. New installations to have separate circuit breaker.

Quantity _____

Total \$ _____

12.25 Install Gas Hot Water Heater

1. Remove existing hot water heater and dispose.
2. Install [30/40/50] gallon gas hot water heater Unit to have all required cold water shut-off valves, vacuum relief valves, and self-closing temperature and pressure relief valves. Make all required connections to gas supply lines.

Quantity _____

Total \$ _____

12.26 Install Sprinkler Head Over Boiler/Furnace

Install sprinkler head over the existing boiler/furnace and connect to the nearest domestic water line.

Quantity _____

Total \$ _____

12.27 Install Water Treatment System

Work shall include installing a new water treatment system with sufficient design and capacity to fully treat water as described in attached lab report. System shall be installed with all plumbing and electrical connections for a complete installation. Work shall also include stock of consumable treatment additives, if required by system, sufficient to prior year.

Quantity _____

Total \$ _____

12.28 Install Well Pump

1. Remove and dispose of existing water pump from well/water system.
2. Install properly sized [submersible, shallow well, deep well, jet] water pump, minimum ½ H.P. Include all required electrical connections, piping, fittings and gauges for complete installation in accordance with State of Maine Well Drillers and Pump Installers Rules (144A CMR 232)

Quantity _____

Total \$ _____

12.29 Install Cold Water Pressure Tank

1. Remove existing pressure tank from water system.
2. Install properly sized bladder type pressure tank. Include all electrical connections, piping, fittings, switches and gauges for complete connection.

Quantity _____

Total \$ _____

SECTION 13 – ROOFING & SHEATHING

13.1 General Requirements Roofing

Roof coverings shall be applied in accordance with the applicable provisions of Section R 905, R 906 and R907 of the 2009 IRC One and Two Family Dwellings Code and the manufacturers’ installation instructions.

Prior to starting work, the contractor shall examine the roof to determine that all other repairs affecting roofing have been completed as scheduled.

When new metal chimney, vent stack, roof vent, etc., are scheduled to be installed, the contractor shall cooperate with other contractors in installing flashing and counter flashing. This contractor shall also install new flashing/boots in place of all damaged, deteriorated or missing flashing incidental to the repair or new installation. New flashing shall be installed in all valleys. The contractor shall seal all roof openings and exposed roof edges, chimneys, porch roofs, dormers, skylights and vents, with plastic asphalt cement as needed to insure water tight joints. Roofing shall be applied in accordance with the recommendations of the manufacturer. Once project has been started, the roof application shall not be delayed, except when absolutely necessary due to inclement weather. Each layer of roofing felt shall have been surfaced or glazed by the end of the working day. Should inclement weather arise it is the responsibility of the contractor to provide adequate protection of the structure and its contents.

When a new roof is installed, roof vents shall be installed to provide adequate ventilation in all attic areas. New roofing installation shall conform to the requirements for the Underwriter’s Laboratories, Inc. Class C label; a copy of the guaranteed fire classification shall be provided to the owner. New roofing material shall have a minimum 25 year manufacturer’s guarantee. When existing roofing is brittle, badly cupped, or rotted, new material shall not be placed over existing.

The quality of materials and workmanship for repairs shall meet the same standards as new installation. The contractor shall make repairs or replacements needed to roofing, flashing, drip edges, cant strips, gravel stops, etc., to provide a water proof installation. Replace asphalt-saturated felt when removing damaged sections of existing roof. Color, size and texture and type of new roofing material shall match existing as closely as possible. Roof shall be structurally sound and shall not cause leakage of roof or walls.

Other general repair standards include the use of fiberglass asphalt, 3 tab, Architectural, or Jet Class A shingles with a prorated 25 year warranty with continuous ridge vent.

13.2 Strip Off Existing Roofing/Install Strip Shingles

1. Remove and dispose of existing roofing down to sheathing.
2. Repair defective sheathing with [sheathing to match existing boards/CDX plywood]. Allow for replacement of 10% of total roof area.
3. Install 15# Felt. Install 8" aluminum drip edge at eave edge and rake. Install 3' wide 'Grace' ice and water shield (or pre-approved equal) at eave edge and all valleys. Use a 12" wide strip of ice and water shield under new chimney flashing to counter flash chimney flashing. Install [asphalt 3-tab strip shingle / Architectural / Jet] using roofing nails (staples are not to be used). Shingles to have a minimum 25 year warranty. Work to include all new metal/lead flashing/step flashing, vent boots. Shingles to carry National Underwriter's class 'C' label. All valleys shall have shingles weaved together. Work to include 8" aluminum drip edge, caulking with roof cement and replacement of all flashing/boots.

Color to be _____

Approx Sq/ft _____ Total \$ _____

13.3 Install Asphalt Shingles Over Existing Roof

Install asphalt [3-tab strip / Architectural / Jet] shingles over existing roofing using roofing nails (staples are not allowed). Shingles to have minimum 25 year warranty. Shingles to carry National Underwriter's class 'C' label. Work to include 8" aluminum drip edge on eaves and rake, caulking with roof cement and replacement of all flashing and boots.

Color to be _____

Approx Sq/ft _____ Total \$ _____

13.4 Install Rolled Roofing Over Existing Roofing

Repair pitched roof covered with rolled roofing by applying 90# double coverage rolled roofing over existing roofing using roofing nails (staples are not allowed). Work to include 8" aluminum drip edge on eaves and rake, caulking with roof cement and replacement of all flashing and boots.

Color to be _____

Approx Sq/ft _____ Total \$ _____

13.5 Strip Off Existing Roofing/Install Rolled Roofing

1. Remove existing roofing down to sheathing and dispose.
2. Replace any defective sheathing by match existing plywood or boards. Allow for replacement of 10 % of the total roof area.
3. Apply single layer of 15# Felt and 90# double coverage Rolled Roofing.
Color to be _____.
4. Work to include 8" aluminum drip edge on eaves and rake, caulking with roof cement and replacement of all flashing and boots.

Approx Sq/ft _____ Total \$ _____

13.6 Strip Off Existing Roofing/Install Membrane Roof

1. Repair defective flat roof by removing roofing down to base sheet and disposing.
2. Install a fully adhered elastomeric sheet with membrane underlay over existing substrate. Install flashing around vents, pipes and chimney. Install membrane to new roof drain. Replace broken pipes as necessary.
3. Roofing contractor shall be responsible for all work at roof area, including flexible sheet roofing system and new metal cap flashing. These systems shall be completely integrated and provide a water tight roof assembly.
4. Obtain primary flexible sheet roofing from a single manufacturer. Provide secondary materials as recommended by manufacturer of primary materials.
5. Install flexible sheet roofing in order to minimize seams and to accommodate contours of the roof deck and proper drainage across shingled laps of sheets.
6. Install flexible sheet roofing. Install mechanical fasteners, flashing and counter flashings and accessories. Provide tapered cants, crickets and other areas of tapered insulation for positive drainage.
7. Flexible sheet roofing material shall be not less than 60 mils and equal to Firestone "Rubber Guard" or pre- approved equal.
8. Warranty period shall be not less than 10 years after date of substantial completion to repair/replace defective materials and workmanship, 25 years for membrane. Roofing contractor shall provide owner with certificate that the warranty has been purchased and that the warranty seal has been installed on the roof by the manufacturer's representative, if available.

Approx Sq/ft _____

Total \$ _____

13.7 Repair Flashing and Valleys

Repair pitched roof by installing new lead sheet base flashing to chimneys.

Approx Sq/ft _____

Total \$ _____

13.8 Metal Roofing

1. Apply strapping over existing to roof following manufacturer's recommendations. Shim as need for good appearance.
2. Install exposed fastener metal roofing, 29 Gauge minimum [Metal Sales Manufacturing Corp BiRib, Ideal Pocket Rib or pre-approved equal] over existing roofing.
3. Metal roofing shall be installed following industry standards and manufacturers recommendations Panels shall be weather tight, without waves, buckles, fastening stress, or distortion, and allow for expansion and contraction. Eaves and ridge vents shall have foam fillers.
4. Roof eaves and rakes will be covered with matching aluminum coil stock as required for weather tightness and appearance.

Approx Sq/ft _____

Total \$ _____

SECTION 14 – SIDING

14.1 Install Wood Siding

1. Repair siding by covering all sidewalls with [1/2" x 6" R. C./Pine clapboards, W. C. Shingles or 5 / 8" T1-11] using existing siding as an underlayment. Clapboards will be installed at 4" exposure [or match existing] and shingles will be installed at 5" exposure [or match existing]. Siding to be installed using galvanized nails [aluminum or stainless steel for Red Cedar].
2. Apply one coat of exterior solid stain Sherwin Williams, Devoe, California or pre-approved equal. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Approx Sq/ft _____ Total \$ _____

14.2 Install Aluminum Siding

1. Repair siding by installing aluminum siding to entire structure.
2. Prepare walls by re-nailing existing siding to provide smooth surface.
3. Install all required Spruce laths.
4. Install new 1/4" minimum Amocor fanfold underlayment extruded Polystyrene insulation. All joints will be sealed with 3M contractor sheathing tape. All cuts at windows and doors will be cleanly cut and closely fitted.
5. Double four (8") or double five (10") aluminum siding shall be installed with all required trimmers. [ALCOA 4NA or D519, or approved equal]. Siding to be properly grounded.

Color to be _____

Approx Sq/ft _____ Total \$ _____

14.3 Install Vinyl Siding

1. Repair siding by installing vinyl siding to entire structure.
2. Prepare walls by re-nailing existing siding to provide smooth surface.
3. Install 1/4" minimum Amocor fanfold underlayment extruded Polystyrene, or pre-approved equal, insulation according to the manufacturer's specifications. All joints will be sealed with 3M contractor sheathing tape. All cuts at windows and doors will be cleanly cut and closely fitted.
4. Install all required laths following industry standards.
5. Install double four (8") vinyl siding with minimum thickness of 0.035 [Alcoa, Alside, Certainteed or pre- approved equal]. Work to include all starter strips, J molding, under sill and vinyl corners.

Color to be _____

Approx Sq/ft _____ Total \$ _____

14.4 Install Aluminum Coil Stock

Exterior window sills, jambs and header will be covered with aluminum coil stock using color coordinated finish nails. Caulk as needed to provide weather tight seal.

Color to be _____

Approx Sq/ft _____ Total \$ _____

14.5 Install Vinyl Soffit

Install [solid ventilated perforated] vinyl soffit, and aluminum coil stock to fascia and rake of entire roof line.

Color to be _____

Approx Sq/ft _____ Total \$ _____

14.6 Repair Wood Cornice & Moldings

1. Repair wood cornice by removing rotted/defective soffit boards, rake boards and molding and dispose.
2. Install 1 x _____ Pine members-select or better using common galvanized nails.
3. Apply 1 coat of Shellac based sealer to all knots.

Approx L/ft _____ Total \$ _____

SECTION 15 – STAIRS & RAILS

NOTE: Existing stairs, stairways and ramps require handrails on one side only. New construction requires handrails on two sides.

15.1 Install Complete Interior Stairs

1. Remove existing stairs and dispose.
2. Install stairs using notched 2 x 12 standard grade kiln dried stringers. Treads and risers shall be solid, hard pine. The maximum riser height shall be 7 ¾". The minimum tread depth shall be 10".
3. New handrails will be installed both sides of stairs. Handrails shall not be less than 34" or more than 38" above the surface of the tread, measured vertically to the top of the rail from the leading edge of the tread. Handrails shall be installed to provide a clearance of not less than 2 ¼" between the handrail and the wall to which it is fastened and be continuously graspable along their entire length. Handrails shall have a circular cross section with an outside dimension of not less than 1 ¼" and not more than 2". New handrail ends shall be returned to the wall or floor or shall terminate at newel post.

Approx L/ft _____ Total \$ _____

15.2 Replace Railings and Balusters

1. Replace defective/missing railings by installing all wood rails, balusters, and posts [Brosco or pre-approved equal] to provide a safe railing.
2. Apply one coat of interior solid stain Finish coat to be Sherwin Williams polyurethane gloss varnish, Devco Truglaze, WH gloss or approved equal. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Quantity _____ Total \$ _____

15.3 Install Railings and Balusters

1. Install all wood rails, balusters, and posts [Brosco or pre-approved equal] to provide a safe railing.
2. Apply one coat of interior solid stain Finish coat to be Sherwin Williams polyurethane gloss varnish, Devco Truglaze, WH gloss or approved equal. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Approx L/ft _____

Total \$ _____

15.4 Replace Defective/Missing Balusters

Repair defective/missing balusters by installing Pine or Birch balusters to match existing as close as possible.

Quantity _____

Total \$ _____

15.5 Secure Wall Hung Railing

Repair wall hung rail at stairs by blocking framing members to properly secure brackets or install clear pine backing secured to framing members and re-install rail to Pine. Apply Shellac based sealer (Killz, B-I-N-S or pre- approved equal) to all knots.

Quantity _____

Total \$ _____

15.6 Install Handrail

Install new wall mounted handrail in stairway. Handrail shall not be less than 34" or more than 38" above the surface of the tread, measured vertically to the top of the rail from the leading edge of the tread. Handrails shall be installed to provide a clearance of not less than 2 ¼" between the handrail and the wall to which it is fastened and be continuously graspable along their entire length. Handrails shall have a circular cross section with an outside dimension of not less than 1 ¼" and not more than 2". New handrail ends shall be returned to the wall or floor or shall terminate at newel post.

Quantity _____

Total \$ _____

15.7 Install Exterior Handrail

New handrails will be installed on both sides of stairs. Handrails shall not be less than 34" or more than 38" above the surface of the tread, measured vertically to the top of the rail from the leading edge of the tread. Handrails shall be installed to provide a clearance of not less than 2 ¼" between the handrail and the wall to which it is fastened and be continuously graspable along their entire length. Handrails shall have a circular cross section with an outside dimension of not less than 1 ¼" and not more than 2". New handrail ends shall be returned to the wall or floor or shall terminate at newel.

Quantity _____

Total \$ _____

15.8 Install Exterior Wood Steps/Stairs

1. Remove and dispose existing wood steps.
2. Install [box style / stringer style] wooden steps using standard grade pressure treated wood. Stair treads shall be solid, without perforations. The maximum riser height shall be 7 ¾". The minimum tread depth shall be 10
3. Install new guard rails, not less than 42" in height, using 2 x 4 standard grade pressure treated top and bottom rails, 2 x 2 standard grade pressure treated balusters spaced 5" O.C. and 4 x 4 standard grade pressure treated post. Guards shall not have openings from the walking surface to the required guard height which allow passage of a 4" sphere in diameter.

4. New handrails will be installed on both sides of stair guardrails. Handrails shall not be less than 34" or more than 38" above the surface of the tread, measured vertically to the top of the rail from the leading edge of the tread. Handrails shall be installed to provide a clearance of not less than 2 1/4" between the handrail and the wall to which it is fastened and be continuously graspable along their entire length. Handrails shall have a circular cross section with an outside dimension of not less than 1 1/4" and not more than 2". New handrail ends shall be returned to the wall or floor or shall terminate at newel

Quantity _____

Total \$ _____

15.9 Repair/ Concrete Steps

1. Remove and dispose existing defective concrete steps.
2. Excavate below frost line and pour new footings using new 3,000 psi concrete containing rebar of sufficient size [#6 minimum] to support new steps.
3. Construct plywood forms and pour concrete steps using 3,000 psi concrete. Broom finish. Quantity _____ Total \$ _____

15.10 Repair/Replace Brick Steps

1. Remove existing brick steps and dispose.
2. Install concrete brick steps, set on new footings using new 3,000 psi concrete containing rebar of sufficient size [#6 minimum] to support new steps and capped with new bricks.
3. Point bricks with new mortar to match existing as close as possible. Mortar shall conform to Brick Institute of America [B.I.A.] standard specification for Portland cement-lime mortar for brick masonry [M1-88].
4. Finish joints to have a concave surface [or match existing style].

Quantity _____

Total \$ _____

SECTION 16 – BATHROOM WALLS, CABINETS, & VENTS

16.1 Install Ceramic Wall Tile

1. Repair walls by installing first quality glazed ceramic wall tile to 4' around walls and 5' above top rim of tub over 1/2" M-R sheetrock [Green board], Durock cement with all necessary trimmers and ceramic accessories. Use thin set method.

Color/pattern will be _____

Approx Sq/ft _____

Total \$ _____

2. Walls above tile will be covered with pre-pasted fabric backed vinyl wallpaper [Walltex or pre-approved equal]. Owner to select wallpaper color/pattern under a \$12.00 per single roll allowance.

Color/pattern will be _____

Approx Sq/ft _____

Total \$ _____

16.2 Install Laminated Hardboard Walls

Repair walls by installing laminated hardboard (Marlite or pre-approved equal) with waterproof adhesive to a height of _____ around the room; and to a height of _____ above the top rim of the tub, include all required trim. Approx. Sq. Ft.

Approx Sq/ft _____ Total \$ _____

16.3 Install [Lighted/Unlighted] Medicine Cabinet

1. Remove existing medicine cabinet and dispose.
2. Install [surface mounted/recessed] medicine cabinet with integrated [incandescent/fluorescent] light/bar connected to a wall switch. Owner to have selection of cabinet up to \$125.00 allowance.
3. Install [surface mounted/recessed] non-lighted medicine cabinet. Owner to have selection of cabinet up to \$75.00 allowance.

Quantity _____ Total \$ _____

16.4 Install Mechanical Vent

Install 90 cfm, 1.5 sone, mechanical ventilation fan Broan model RVK 1A or pre-approved equal connected to proper wall switch. Ventilation to meet requirements of 2009 IRC for One and Two Family Dwellings building code. Unit must be vented to the exterior of the structure and terminate through either the roof or gable end. Vent piping will be rigid aluminum or schedule 20 PVC.

Quantity _____ Total \$ _____

SECTION 17 – DOORS

17.1-Install Exterior Door

1. Remove existing [front rear] door jamb and casing and dispose using lead safe practices if door components are painted.
2. Install Energy Star rated pre-hung 6 panel door with adjustable sill and casing both sides [1 x 4 select pine / clam shell/colonial] on the interior and [brick mold/ 1x4 select pine] on exterior. Door to be Therma True style 204, Brosco BE-70 or pre-approved equal. Product information/labeling showing compliance with Energy Star Ratings will be provided to the home owner and lender prior to installation.
3. Install Energy Star rated pre-hung 9-lite door with adjustable sill and casing both sides [1 x 4 select pine/ clam shell/colonial] on the interior and [brick mold/ 1x4 select pine] on exterior. Door to be Stanley K4, Brosco BE-89 or pre-approved equal. Product information/labeling showing compliance with Energy Star Ratings will be provided to the home owner and lender prior to installation.
4. Install low expanding foam sealant, silicone caulking or fiberglass as required between door jamb and framing. Apply exterior silicone latex caulking.
5. Work to include key-in-knob lockset Schlage F51 or pre-approved equal if more than one door is to be installed, all doors will be keyed alike.
6. All labels and tags must be removed.

Quantity _____ Total \$ _____

17.2 Install Interior Door

- 1. Remove existing interior door and dispose.
- 2. Install [6-panel Pine/6-panel Masonite /flush Luaun hollow core] pre-hung, split-jamb door.
- 3. [1 x 4 Pine/Colonial/Clamshell] casing to be installed on two sides.
- 4. Install passage set.

Quantity _____ Total \$ _____

17.3-Install Interior Door on Existing Jamb

- 1. Remove existing interior door.
- 2. Install wood door [hollow core luan / masonite 6 panel/ 6 panel solid pine] on new 4-1/2" x 4-1/2" hinges in existing frame.
- 3. Install passage set.

Quantity _____ Total \$ _____

17.4- Re-Hang Existing Door

Repair existing door by re-hanging door on 4-1/2" x 4-1/2" hinges. Fit and adjust door to operate properly.

Quantity _____ Total \$ _____

17.5 Install Hardware

Repair defective door by replacing all missing / defective hardware including [lockset/passage set/deadbolt].

Quantity _____ Total \$ _____

17.6 Install Storm Door

- 1. Remove existing storm door and dispose.
- 2. Install a white, Vinyl clad, wood core, or solid wood self-storing storm door [Waterville "Mainline Deluxe"], Larsen model 290-SS [Kwik Way Heritage series or pre-approved equal].

Quantity _____ Total \$ _____

17.7 Install Weather Stripping

Repair front/rear door by weather stripping with exterior, metal carrier, silicon bulb weather stripping.

Quantity _____ Total \$ _____

17.8 Repair Broken/Cracked Storm Door Glass

- 1. Remove broken panes on door and clean rabbet.
- 2. Install tempered safety glass with points and new putty or insert with rubber spline or gasket, or molding to match original. Putty to be as smooth and even as possible.

Quantity _____ Total \$ _____

SECTION 18 – WINDOWS

18.1 General Requirements:

All windows shall be installed following manufacturers recommendations and performed in accordance with HUD Lead Safe practices. All installations shall be plumb, true, and free of visual cracks. Windows shall operate smoothly. Windows shall be Energy star rated. All labels and tags will be removed. Window shades/curtains removed by contractor will be reinstalled by contractor. Product information/labeling showing compliance with DOE Energy Star Ratings for the North Eastern zone will be provided to the home owner and lender prior to installation.

All replacement windows must meet NFPA 101 Life Safety egress requirements. Egress windows shall have a clear opening of 5.7 square feet, minimum width of 20 inches, minimum height of 24 inches, and 44 inch maximum height from floor to bottom of window opening Casement style egress windows will have horizontal dividing bar to give effect of double hung window.

For all interior paint work that disturbs a lead paint surface, contractor shall employ the use of lead-safe practices. Interior finish paint to be Sherwin Williams Style Perfect, Harmony, Benjamin Moor Eco Craft, Super Craft or pre proved equal.

All work to be done in accordance with the manufacturer's specifications.

For all Exterior paint work that disturbs a lead paint surface, contractor shall employ the use of lead-safe practices. Exterior paint to be Sherwin Williams Weather Perfect, Dynasty, Benjamin Moor MoorGlo, MoorCraft or pre-approved equal. All work to be done in accordance with the manufacturer's specifications.

18.2 Install Complete Wood Window

1. Remove existing window and dispose.
2. Install complete Energy Star rated [vinyl clad/primed] [double hung/casement /awning] window, frame and casings. Window to have 1/2" insulated glass and full screen .Unit to be Andersen, Crestline, Weathershield or pre-approved equal. Product information/labeling showing compliance, with Energy Star Ratings will be provided to the home owner and lender prior to installation.
3. [1 x 4 Pine/Colonial/Clamshell] casing [finger jointed material allowed] to be installed on interior using appropriate size finish nails.
4. Apply low expanding foam sealant, silicone caulking, or fiberglass as required around window jamb and rough opening.
5. Apply two coats [1 primer and 1 finish coat] of exterior/interior semi-gloss paint. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____ Total \$ _____

18.3 Install Set Wood Sashes

1. Remove existing window sashes and dispose.
2. Install two wood sashes with 1/2" insulated glass on [aluminum/vinyl] sash runs. Fit and adjust sash for easy operation.
3. Apply two coats [1 primer and 1 finish coat] of exterior/interior semi-gloss paint. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____ Total \$ _____

18.4 Install Metal Window

- 1. Remove existing metal window and dispose.
- 2. Install aluminum replacement window [New England, Nu-Sash or pre-approved equal]. Contractor will be responsible for replacement of all trim inside and out as needed.

Quantity _____

Total \$ _____

18.5 Install Vinyl [Double / Single] Hung Window

- 1. Remove existing window sashes and dispose.
- 2. Install Energy Star rated vinyl replacement window [Alside Geneva, Certainteed Devon, Paradigm Society, or pre-approved equal]. Insulate window weight cavities and apply low expanding foam sealant, silicone caulk or fiberglass as required around window jamb and rough opening. Windows will be double hung, with tilt out sashes, 3/4" insulated glass and full screen. Product information/labeling showing compliance, where required, with Energy Star Ratings will be provided to the home owner and lender prior to installation.

OR

- 3. Install vinyl replacement window [Alside Excalibur, Certainteed Bryn Mawr II, Paradigm Traditions or pre-approved equal]. Insulate window weight cavities. Apply low expanding foam sealant, silicone caulking or fiberglass as required around window jamb and rough opening. Windows will be single hung, with a fixed upper sash, with tilt out bottom sash, 3/4" insulated glass and full screen. Product information/labeling showing compliance, where required, with Energy Star Ratings will be provided to the home owner and lender prior to installation.
- 4. Any trim or molding broken by the contractor during removal of said trim/ molding will be replaced and painted to match existing trim/molding.
- 5. Apply two coats [1 primer and 1 finish coat] of exterior / interior semi-gloss paint to all replaced interior and or exterior trim. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____

Total \$ _____

18.6 Install Vinyl Casement Window

- 1. Remove existing window sashes and dispose.
- 2. Install Energy Star rated vinyl replacement window [Alside Geneva, Certainteed Devon, Paradigm Society, or pre-approved equal]. Insulate window weight cavities and apply low expanding foam sealant, silicone caulk or fiberglass as required around window jamb and rough opening. Windows will be casement style, 3/4" insulated glass and full screen. Product information/labeling showing compliance, where required, with Energy Star Ratings will be provided to the home owner and lender prior to installation.
- 3. Any trim or molding broken by the contractor during removal of said trim/ molding will be replaced and painted to match existing trim/molding.
- 4. Apply two coats [1 primer and 1 finish coat] of exterior / interior semi-gloss paint to all new interior and or exterior trim. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____

Total \$ _____

18.7 Install Vinyl Basement Hopper Window

1. Remove existing windows and defective wood window frame.
2. Install new pressure treated wood frame in rough opening of foundation. New frame will be mechanically fastened to foundation. New frame to be properly sealed to assure weather tightness. Gaps between foundation and new frame will be mechanically fastened. Gaps larger than 3/8" will be filled with mortar.
3. Install Energy Star rated vinyl replacement window [Aside Geneva, Certaineed Devon, Paradigm Society, or pre-approved equal]. Insulate window weight cavities and apply low expanding foam sealant, silicone caulking or fiberglass as required around window jamb and rough opening. Windows will be awning style, 3/4" insulated glass and full screen. Product information/labeling showing compliance with Energy Star Ratings will be provided to the home owner and lender prior to installation.
4. Any trim or molding broken by the contractor during removal of said trim/ molding will be replaced and painted to match existing trim/molding.
5. Apply two coats [1 primer and 1 finish coat] of exterior / interior semi-gloss paint to all new interior and or exterior trim. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____ Total \$ _____

18.8 Install One Sash

1. Remove existing sash and dispose.
2. Install one wood sash with 1/2"[insulated glass/single strength] glass. Fit and adjust sash for easy operation.
3. Apply two coats [1 primer and 1 finish coat] of exterior/interior semi-gloss paint. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____ Total \$ _____

18.9 Install Sash Cords

Repair defective window(s) by installing sash cord on [left/right/both side(s)].

Quantity _____ Total \$ _____

18.10 Install Parting Bead(s)

Install parting bead(s) on [left/right/both side(s)] of window.

Quantity _____ Total \$ _____

18.11 Adjust Side Stops (Window Bands)

Repair defective window(s) by adjusting stops and fitting sash to allow easy operation.

Quantity _____ Total \$ _____

18.12 Install Sash Runs

Repair defective window(s) by installing complete new vinyl sash runs. Fit and adjust sash for easy, smooth operations.

Quantity _____

Total \$ _____

18.13 Install Storm/Combination Window(s)

1. Remove existing storm windows and dispose.
2. Install [white/brown/mill finish] triple track aluminum combination storm/screen units [Harvey Carefree, Waterville Mainliner or pre-approved equal].

Quantity _____

Total \$ _____

18.14 Replace Broken Pane

1. Repair broken window light by removing sash from opening and dispose of broken glass.
2. Install glass, after cleaning rabbet, using putty / glazing compound on both sides of new glass and glazing points. Putty shall be installed for a smooth uniform appearance.
3. Apply two coats [1 primer and 1 finish coat] of exterior / interior semi-gloss paint. Primer coat to be Sherwin Williams A100 / Promar 200 alkyd enamel undercoated, Devoe alkyd undercoat, or pre-approved equal. Finish coat to be Sherwin Williams A100 / Promar 200 latex semi-gloss, Devoe Wondertones latex semi-gloss or pre-approved equal. All finishes shall be evenly applied and free from runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____

Total \$ _____

SECTION 19 – MISCELLANEOUS

19.1 Install Post

1. Remove defective or temporary post(s).
2. Excavate and install 12" x 12" x 8" concrete footing(s).
3. Install 3-1/2" concrete filled lally columns with all necessary steel plates.

Quantity _____

Total \$ _____

19.2 Replace Sill(s)

1. Repair existing sill(s) by shoring area and remove rotted / broken members. Approx L/ft _____
2. Install _____ x _____ standard grade pressure treated sill(s).
3. Repair defective center girder by shoring area and removing rotting / broken sections. Approx L/ft _____.
4. Install _____ x _____ [spruce/standard grade pressure treated lumber]. Joists shall bear on a minimum of 3-1/2" on new work.

Quantity _____

Total \$ _____

19.3 Install Ceiling Supports

1. Repair ceiling framing by installing two permanent 3-1/2" lally columns with all necessary steel plates on new 12" x 12" x 8" concrete footings.
2. Install one 4" x 8" header using construction grade lumber.

Quantity _____ Total \$ _____

19.4 Install Wood Bulkhead

1. Repair defective bulkhead by rebuilding doors and frame with pressure treated lumber and galvanized hardware. New bulkhead will be weather tight.
2. Apply two coats [1 primer and 1 finish coat] of exterior semi-gloss paint Primer coat to be Sherwin Williams Promar 200 alkyd enamel undercoated, Devoe alkyd undercoat, or pre-approved equal. Finish coat to be Sherwin Williams Promar 200 latex semi-gloss, Devoe Wondertones latex semi-gloss or pre-approved equal. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____ Total \$ _____

19.5 Install Metal Bulkhead

1. Remove existing bulkhead doors, frame and curb.
2. Install concrete curb at top of existing to fit and install new metal bulkhead [Bilco, Gilmore or pre-approved equal]
3. Apply two coats, 1 primer and 1 finish coat, of exterior flat paint. Primer coat to be Sherwin Williams Promar 200 alkyd enamel undercoated, Devoe alkyd undercoat, or pre-approved equal. Finish coat to be Sherwin Williams Promar 200 latex semi-gloss, Devoe Wondertones latex semi-gloss or pre-approved equal. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____ Total \$ _____

19.6 Repair Water in Foundation/Basement-Interior

1. Excavate 12" x 8" trench on the inside perimeter of the foundation.
2. Install 4" perforated pipe tied into the floor drain.
3. Fill trench with crushed rock level to floor surface.

Quantity _____ Total \$ _____

19.7 Repair Water Leak in Foundation/Basement-Exterior

1. Excavate trench on the outside perimeter wall down to the footing.
2. Apply one coat of asphalt foundation coating to entire foundation wall.
3. Install one layer of 6 mil black polyethylene over the new foundation coating.
4. Backfill trench with excavated material, compact with portable plate compactor. Additional backfill material will be compatible with existing soil conditions.

5. Cover with 3" of loam and rake level.
6. Apply grass seed at a rate specified by the seed manufacturer. Cover with hay.

Approx L/ft _____

Total \$ _____

19.8 Repair Driveway

1. Excavate driveway area to a depth 9" below existing grade, as determined by grade stake along the perimeter of the driveway.
2. Backfill excavated area with 6" [compacted depth] of 3/4" gravel. Compact gravel with portable vibrating plate compactor or 10 ton roller. Entire drive way shall be crowned and pitched for positive drainage.
3. Apply an even layer of 3/4" crushed stone.
4. Apply 2" base coat of bituminous asphalt. Roll smooth with roller.
5. Apply 1" top coat of bituminous asphalt. Roll smooth with roller.
6. Approx. ly 4 weeks after application of finish coat, apply a coat of jet sealer to entire new driveway.

Quantity _____

Total \$ _____

19.9 Asbestos

A. Asbestos Removal-Basement

1. Pre-clean entire basement.
2. Remove all asbestos insulation from heating pipes and boilers.
3. Remove all asbestos contaminated rubbish and debris and dispose at a legal disposal site.
4. Work to be performed by a licensed asbestos abatement contractor. A copy the final air quality report will be turned over to the rehab specialist.
5. Existing steam boilers to be removed by asbestos contractor. Units to be drained of water, all electrical disconnected and fuel oil line disconnected by plumbing contractor, prior to removal by asbestos contractor.
6. Asbestos contractor to nail strap hanger [provided by plumbing contractor] in place after removal of pipe covering for any or all steam pipes.

Quantity _____

Total \$ _____

B. Air quality Testing-Asbestos Abatement

1. A visual inspection and air quality samples shall be taken according to current state law by an independent testing facility.
2. Testing facility shall coordinate testing with the asbestos contractor to minimize delays.
3. Testing facility shall report its results to the asbestos contractor immediately upon completion of the testing, whether the tests are positive or negative. The owner of the building will be furnished with a copy of the test results.

Quantity _____

Total \$ _____

19.10 Construct Interior Non-Bearing Wall

Construct interior non-load bearing wall using 2" x 4", #2 or better studs and plates. Stud spacing to be 16" on center.

Quantity _____

Total \$ _____

19.11 Repair Existing Fence

1. Repair existing fence by removing defective portion and disposing.
2. Install _____ linear feet of _____ feet high, _____ type fencing.
3. Work to include all necessary rails, posts and gates.
4. All posts to be set in concrete. Post to be set 1/3 of their height deep in the ground; fill base with crushed rock for drainage and fill with 3,000 psi concrete.
5. Apply one coat of exterior solid stain [Sherwin Williams, Devoe, California or pre-approved equal]. All finishes shall be evenly applied and free from sags, runs, drips, voids, holidays and brush marks.

Color to be _____

Quantity _____

Total \$ _____

19.12 Kitchen Cabinets

NOTE: When cabinets are being installed, a sketch will be provide with bid to show placement, size and style of all cabinets.

A. Install base cabinets

1. Remove existing base cabinets and dispose.
2. Install wood base cabinets, as shown on drawing. Cabinets are to be installed as plumb and level as existing conditions allow. Scribe kickboard to allow level installation. Cabinets to be Merillatt, Yorktowne, Tri-Pac, American Woodmark or pre-approved equal. Cabinets to have a solid wood front and particle board sides. All cabinets must bear a National Kitchen Cabinet Association certification label.

Style to be _____

Color to be _____

Approx L/ft _____

Total \$ _____

3. Install post formed countertop with 4" backsplash according to manufacturer's specifications. Apply silicone caulking at wall/countertop seam.

Color to be _____

Approx L/ft _____

Total \$ _____

B. Install wall cabinets

1. Remove existing wall cabinets and dispose.

Install new wood wall cabinets as shown on drawing. Cabinets are to be installed as plumb and level as existing conditions allow. Cabinets to be Merillatt, Yorktowne, Tri-Pac, American Woodmark or pre-approved equal. Cabinets to have a solid wood front and particle board sides. All cabinets must bear a National Kitchen Cabinet Association certification label.

Style to be _____

Color to be _____

Approx L/ft _____ Total \$ _____

19.13 Install Kitchen Counter Top

1. Remove existing countertop and dispose.
2. Install post formed countertop with 4" backsplash according to manufacturer's specifications. Install color coordinated end caps, if required. Re-install sink and faucet using silicone caulking.

Color to be _____

Approx L/ft _____ Total \$ _____

19.14 Install

1. *Well General Requirements:* All work shall conform to 1994 Maine State Well Drillers and Pump Installers Rules 144A CMR 232, the 101 Life safety codes, the National Electric Code, the Maine State Plumbing Code and any other applicable state or local codes or ordinances. All necessary permits, licenses and code inspections, either final or in progress, are the responsibility of each contractor.
2. Permits must be displayed on site.
3. The site is to be kept clear of all construction waste and debris. Debris removal is the responsibility of each contractor.
4. Site storage of material will be by agreement between property owner and the contractors.
5. All salvage items are the property of the owner.
6. Any changes of the scope of work must be documented by use of a change order.
7. The well will be installed in accordance to the State of Maine Well Drillers and Pump Installers Rules (144A CMR 232).
8. Pump Installers Rules (144A CMR 232).
9. The bid price will include a submersible pump (sized for proper water flow, 1/2 HP minimum) pressure tank, all lines, fittings, hardware, trench and plumbing from the well to the house, and electrical hook-up.

10. Minimum water flow standards:

75'	-	5 gal. min
110'	-	4 gal. min.
160'	-	3 gal. min.
250'	-	2 gal. min.
320'	-	1 gal. min.
420'	-	1/2 gal min.

11. The waterline shall be a minimum of 4' underground with 1" Styrofoam installed if danger of freezing exists. (Driveways, walkway, etc.)

12. All groundwork will be graded. Lawn areas will be seeded and covered with layer of hay. Approx L/ft _____ Total \$ _____

19.15 Install Driven Point

1. All work shall conform to 1994 Maine State Well Drillers and Pump Installers Rules 144A CMR 232, the 101 Life safety codes, the National Electric Code, the Maine State Plumbing Code and any other applicable state or local codes or ordinances
2. All necessary permits, licenses and code inspections, either final or in progress, are the responsibility of each contractor.
3. Permits must be displayed on site.
4. The site is to be kept clear of all construction waste and debris. Debris removal is the responsibility of each contractor.
5. All salvage items are the property of the owner.
6. Any changes of the scope of work must be documented by use of a change order.
7. The bid price will include a Stainless steel well point, riser pipe, all lines, fittings, gauges, hardware, trench and plumbing from the well to the house. Include electrical hook-up.
8. The waterline shall be a minimum of 4' underground with 1" Styrofoam installed if danger of freezing exists. (Driveways, walkway, etc.)
9. All groundwork will be graded. Lawn areas will be seeded and covered with layer of hay.

Quantity _____ Total \$ _____

19.16 Install Septic System

General Requirements: Install complete septic system in accordance with the septic design plans and Maine Subsurface Waste Water Disposals Rules, 144CMR 241, Dated August 1, 2005. Cost to include all material and labor to pump and dispose of existing system as required and connect new system to house.

1. No work may begin until a permit has been issued by the local jurisdiction and attached to the Subsurface Waste Disposal System Application. {Form HHE-200}
2. The installer of the system shall make certain that the system and all component parts are installed in conformance with the requirements of State Code, the permitted designed prepared by the site evaluator, and with any special engineering design requirements approved or required by the Department of Health & Humane Services under chapter 19.

Quantity _____ Total \$ _____

19.17 Install Mobile Home Tie-downs

- 1. Install anchored tie-downs to mobile home main frame following industry standards. Required number of tie downs to be determined in accordance with Maine Manufactured Home Installation Standards Wind Zone Standards Table. When installing tie downs on homes on existing concrete slabs, install 5/8" minimum shield with 1/2"x3 1/2" bolt and double headed tension device. Torque bolt per shield manufacturer's instructions.

- a. Ground Anchors;

Ground anchors must be installed in accordance with their listing or certification, be installed to their full depth, and be provided with protection against weather deterioration and corrosion at least equivalent to that provided by a coating of zinc on steel of not less than 0.30 oz. /ft² of surface

coated, and be capable of resisting a minimum ultimate load of 4,725 lbs, and a working load of 3,150 lbs, as installed.

- b. Tie-Down Straps;

A 1 1/4 inch x 0.035 inch or larger steel strapping conforming to ASTM D 3953-97, Standard Specification for Strapping, Flat Steel and Seals (incorporated by reference), Type 1, Grade 1, Finish B, with a minimum total capacity of 4,725 lbs and a working capacity of 3,150 lbs must be used. The tie-down straps must be provided with protection against weather deterioration and

corrosion at least equivalent to that provided by a coating of zinc on steel of not less than 0.30 oz./ft² of surface coated. Slit or cut edges of coating strapping need not be zinc coated.

- 2. Axles must detached from mobile home once repairs are completed.

Quantity _____

Total \$ _____

SECTION 20 – ADA GUIDELINES (HANDICAP ACCESSIBLE)

20.1 Grab Bars General Requirements

Grab bars might not be replaced by towel bars. The grab bar hand rail must be fully anchored with a smooth surface that can be easily grabbed. The diameter of the pipe used for this kind of purpose must be between 1-1/4 to 1-1/2 inches. ADA grabbed bars hand rail must be installed between 34 and 38 inches off the ground. Furthermore, keep in mind that there must be a separation between the grab bar and the surface where it is located of at least 1-1/2 inches. That space will provide room for proper grab and allow the hand to firmly grab it. As a matter of security **the bars must contain round** edges and the handrail must be returned to the connection to posts or walls. This will prevent someone to get hurt by a sharp pointing object. **Note:** The source for the information below is the 2010 ADA Standards for Accessible Design.

20.2 Grab Bars in Toilet Stall Requirements

Side Wall: The side wall grab bar shall be 42 inches (1065 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) minimum from the rear wall.

Rear Wall: The rear wall grab bar shall be 36 inches (915 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side.

EXCEPTIONS: 1. The rear grab bar shall be permitted to be 24 inches (610 mm) long minimum, centered on the water closet, where wall space does not permit a length of 36 inches (915 mm) minimum due to the location of a recessed fixture adjacent to the water closet.

Quantity _____

Total \$ _____

20.3 Grab Bars in Shower Stall Requirements

Transfer Type Shower Compartments: Transfer type shower compartments shall be 36 inches (915 mm) by 36 inches (915 mm) clear inside dimensions measured at the center points of opposing sides and shall have a 36 inch (915 mm) wide minimum entry on the face of the shower compartment. Clearance of 36 inches (915 mm) wide minimum by 48 inches (1220 mm) long minimum measured from the control wall shall be provided.

Alternate Roll-In Type Shower Compartments: Alternate roll-in type shower compartments shall be 36 inches (915 mm) wide and 60 inches (1525 mm) deep minimum clear inside dimensions measured at center points of opposing sides. A 36 inch (915 mm) wide minimum entry shall be provided at one end of the long side of the compartment.

Standard Roll-In Type Shower Compartments: Where a seat is provided in standard roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall opposite the seat. Grab bars shall not be provided above the seat. Where a seat is not provided in standard roll-in type shower compartments, grab bars shall be provided on three walls. Grab bars shall be installed 6 inches (150 mm) maximum from adjacent walls.

Alternate Roll-In Type Shower Compartments: - In alternate roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall farthest from the compartment entry. Grab bars shall not be provided above the seat. Grab bars shall be installed 6 inches (150 mm) maximum from adjacent walls.

608.4 Seats. A folding or non-folding seat shall be provided in transfer type shower compartments. A folding seat shall be provided in roll-in type showers required in transient lodging guest rooms with mobility features complying with 806.2. Seats shall comply with 610.

Quantity _____

Total \$ _____

20.4 Bathtubs With Permanent Seats

Back Wall. Two grab bars shall be installed on the back wall, one located in accordance with 609.4 and the other located 8 inches (205 mm) minimum and 10 inches (255 mm) maximum above the rim of the bathtub. Each grab bar shall be installed 15 inches (380 mm) maximum from the head end wall and 12 inches (305 mm) maximum from the control end wall.

Control End Wall. A grab bar 24 inches (610 mm) long minimum shall be installed on the control end wall at the front edge of the bathtub.

Quantity _____

Total \$ _____

20.5 Bathtubs Without Permanent Seats

Back Wall. Two grab bars shall be installed on the back wall, one located in accordance with 609.4 and other located 8 inches (205 mm) minimum and 10 inches (255 mm) maximum above the rim of the bathtub. Each grab bar shall be 24 inches (610 mm) long minimum and shall be installed 24 inches (610 mm) maximum from the head end wall and 12 inches (305 mm) maximum from the control end wall.

Control End Wall. A grab bar 24 inches (610 mm) long minimum shall be installed on the control end wall at the front edge of the bathtub.

Head End Wall. A grab bar 12 inches (305 mm) long minimum shall be installed on the head end wall at the front edge of the bathtub.

Controls. Controls, other than drain stoppers, shall be located on an end wall. Controls shall be between the bathtub rim and grab bar, and between the open side of the bathtub and the centerline of the width of the bathtub. Controls shall comply with 309.4.

Quantity _____

Total \$ _____

20.6 Install Handicapped Toilet

1. Remove existing toilet and dispose.
2. Install free standing 18" low flow vitreous china toilet complete with wax seal, insulated tank, handicap seat, shut-off valve and all required trim and piping. Installation will follow ADA clearance requirements. Color to be white.

Quantity _____

Total \$ _____

20.7 Install Handicapped Wall Hung Lavatory

1. Remove existing lavatory unit and dispose.
2. Install wall hung vitreous china lavatory [Universal-Rundle Model 4682] [8" O.C] 4683 [4" O.C.] or pre- approved equal. Installation will follow ADA clearance requirements. Install faucet with wrist paddles and goose neck riser or equal. Work to include handicapped chrome trap, two chrome shut-off valves and concealed arm carrier. Color to be white

Quantity _____

Total \$ _____

20.8 Install Handicapped Bathtub

1. Remove existing bathtub and dispose.
2. Install 60" fiberglass tub with complete shower facilities [Universal-Rundle Summit 60 TS, Aqua glass Model SC6183 or approved equal]. Color to be white.
3. Install pressure balanced chrome plated shower valve. Work to include shower head, tub spout, hand held shower head, shower rod, grab bars and all associated trim. Installation to follow ADA requirements.

Quantity _____

Total \$ _____

20.9 Install Handicapped Shower Unit

1. Remove existing [bathtub / shower] unit and dispose.
2. Install 48" fiberglass shower [Universal-Rundle Summit Series 60S, Aqua glass Model SC4983 or pre- approved equal]. With shower door. Color to be white.
3. Install pressure balanced chrome plated shower valve. Work to include low flow shower head, hand held shower head and all associated trim. Installation to follow ADA requirements.

Quantity _____

Total \$ _____

20.10 Install Wheel Chair Ramp

1. Wheel chair ramp must be installed in accordance with the American National Standards Institute (ANSI) ICC/ANSI A117.1-98 which addresses Accessible and Usable Buildings and Facilities.
2. Ramps secured to buildings shall have appropriate foundation. Excavate hole, with allowance for footing, to a depth below local frost- line. Diameter of sono tube to be determined by code requirements. Fill son tube with 3,000 psi concrete and allow to dry thoroughly. Install one galvanized post base anchor for each vertical.
3. Ramp runs shall have a running slope not steeper that 1:12. Exception: Ramps in or on existing buildings or facilities shall be permitted to have slopes steeper than 1:12 complying with the table below where such slopes are necessitated by space limitations.

Slope	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10	6 inches (150 mm)
A slope steeper than 1:8 shall not be permitted.	

4. Cross slopes of ramp runs shall not be steeper than 1:48. The clear width of a ramp run shall be 36 inches (915 mm) minimum. [Between handrails]
5. The rise for any ramp run shall be 30 inches (760 mm) maximum.
6. Ramps shall have landings at bottom and top of each run. Landings shall have a slope not steeper than 1:48 and clear width of landings shall be at least as wide as the widest ramp run leading to the landing.
7. Landing length shall be 60 inches (1525 mm) minimum clear. Ramps that change direction at landings shall have a 60 inch (1525 mm) minimum by 60 inch (1525 mm) minimum landing.
8. Ramps with a rise greater than 6 inches (150mm) shall have handrails complying with Section 505 of ICC/ANSI A117.1-98. Handrails shall not reduce the required clearances of a ramp run or landing.
9. Edge protection shall be provided on each side of ramp runs and at each side of ramp landings.

Approx L/ft _____

Total \$ _____

JOB COST SUMMARY

SECTION 1 – GENERAL	\$
SECTION 2 – ELECTRICAL	\$
SECTION 3 – FLOORING	\$
SECTION 4 – GUTTERS, FASCIA, SOFFIT, TRIM AND MOLDING	\$
SECTION 5 – HEATING SYSTEMS	\$
SECTION 6 – INSULATION/WEATHERIZATION	\$
SECTION 7 – INTERIOR PAINTING CEILING & WALL REPAIR	\$
SECTION 8 – DRYWALL	\$
SECTION 9 – EXTERIOR PAINTING	\$
SECTION 10 – PORCHES/LANDINGS	\$
SECTION 11 – MASONRY	\$
SECTION 12 – PLUMBING	\$
SECTION 13 – ROOFING & SHEATHING	\$
SECTION 14 – SIDING	\$
SECTION 15 – STAIRS & RAILS	\$
SECTION 16 – BATHROOM WALLS, CABINETS, & VENTS	\$
SECTION 17 – DOORS	\$
SECTION 18 – WINDOWS	\$
SECTION 19 – MISCELLANEOUS	\$
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TOTAL CONTRACT COST:	\$

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