Request for Proposals for Residential HVAC Services
May 16th, 2018

Project Description:
The Cabarrus County Planning and Development Services Department may be awarded funding to administer the Weatherization Program, the Heating and Air Repair and Replacement Program, and the Housing and Home Improvement Program for 2018-2019 for Cabarrus County. As part of that program, heating and air systems are evaluated for efficiency and working condition

Scope:
Cabarrus County is accepting proposals from HVAC contractors for potential work under the Weatherization Program. The Weatherization Program requires special paperwork in addition to typical hvac services. The contractor cannot be disbarred from performing work with federal funds and must have a valid North Carolina HVAC license. Cabarrus County may or may not award bids or enter into contracts for hvac services for the Weatherization Program. All HUD, DOE, and Heating and Air Repair and Replacement Program regulations apply. All contractors are required to carry liability, auto, and if applicable, workman's compensation at approved levels by the County. Count insurance requirements are attached at the end of this document.

All contractors submitting proposals must include background checks for any employees that would be going to homes to perform work. You may go to the website https://www.tclogiq.com/ in order to get background checks that are nationwide.

E-Verify:
As required by N.C.G.S. §143-48.5 (Session Law 2013-418), the Subgrantee certifies that it, and each of its subcontractors for any contract awarded as a result of this solicitation, complies with the requirements of Article 2 of Chapter 64 of the NC General Statutes, including the requirement for each employer with more than 25 employees in North Carolina to verify the work authorization of its employees through the federal E Verify system. Proof of participation must be presented for companies larger than 25 employees.

The contractor may not solicit or provide additional services outside the contract with Cabarrus County to low-income clients who have received NC WAP services or HHI services due to their contact with the client through Cabarrus County programs.

Must follow North Carolina Weatherization Program's Standard Work Specifications

Proposals:
All proposals must be submitted by Tuesday, May 29th, at 5:00 p.m. to Kelly Sifford of the Cabarrus County Planning and Development Department. For more information or clarification call 704-920-2142 or email: kfsifford@cabarruscounty.us.

Proposals should be submitted to:

Mailing address:

Cabarrus County Planning and Development Services Department
Kelly Sifford
P.O. Box 707
Concord, NC 28026

Physical address:

Cabarrus County Planning and Development Services Department
Kelly Sifford
65 Church St. SE Suite 280
Concord, NC 28025

Please submit estimates for the following typical hvac activities and/or repairs on the chart that follows:

- See Schedule A & B for scope and pricing submission.

1. Evaluate, Clean, and Tune. This price should include pricing for tune ups **to include filling out the attached document for each job**. This should be submitted in the form of an hourly rate and projected amount of time for a typical job. **Combustion testing is required. Any company wishing to participate must have their own combustion analyzer that is calibrated on a regular schedule.**

2. System Recharging. Cost per pound.

3. Cost of system replacements. The following information should be included: The system should be a minimum of 13 SEER. Prices for 2 ton, 2.5 ton, 3 ton, and 3.5 ton gas

and electric hvac units. Please include names of brands being priced. All typical material and labor costs should be included.

4. Basic installation of exhaust fans with and without venting. It is understood that each job is different. A range will be sufficient.

***It is understood that this pricing is an estimate on a typical job and that there are no sit factors included.**

** To use lead safe weatherization in all homes older than 1978 where the possibility of generating dust, both indoors and outdoors, exists. There is no de minimus level recognized, however; the preparation area and clean up area should be sized appropriately for the job. Pictures of the lead safe set up must be taken and included with the invoice or emailed to the agency where this may apply. Lead safe weatherization does not need to be followed in homes older than 1978 that have been certified as lead safe by third party verification.

*****Must comply with regulations of OSHA 29 CFR Standard 1910.146 – Permit-Required Confined Spaces. Expired permits must be submitted with invoices.**

Any protests regarding contract awards should be addressed to the Finance Director in writing within 5 working days of notification of the award at:

US Mail:
Cabarrus County Finance
Susan Fearrington, Finance Director
P.O. Box 707
Concord, NC 28026

Physical address:
Cabarrus County Finance
Susan Fearrington, Finance Director
65 Church St. SE Suite 288
Concord, NC 28025

CABARRUS COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER AND SERVICE PROVIDER AND ENCOURAGES SMALL, FEMALE, AND/OR MINORITY FIRMS TO SUBMIT PROPOSALS.

SCHEDULE A

Scope of Services

The Subcontractor agrees to provide the services and/or materials described in detail below:

1. **Evaluate, clean and tune (ECT)** heating/cooling equipment per ANSI/ACCA Standard 4 (Maintenance of Residential HVAC Systems) and North Carolina Weatherization Assistance Program Guidelines, providing full documentation of tests performed, conditions observed and recommended actions.
    a. Evaluation should include a visual inspection of existing ductwork, and, if applicable, notifying the Contractor of any deficiencies noted.
    b. Evaluation should include combustion and safety testing, if applicable.
    c. Conduct minor repairs to the heating/cooling system as determined by the ECT. For the purposes of this agreement, minor repairs are defined those repairs that and may be performed by Subcontractor performing the ECT service at the time of the initial service at no additional cost.
    d. Specify any additional work needed by electrician and/or plumber to achieve efficient, safe and code compliant operation of the unit. Any electrical and/or plumbing services must be separately contracted with by the Contractor; if the Subcontractor has a preference for a specific electrical or plumbing service provider, he/she may submit that request to the Contractor.
    e. Follow procedures for servicing, repairing, and disposing of any and all refrigerant-containing devices, units, and systems as outlined by federal, state, and local laws and regulations now in effect or hereinafter enacted which pertain to the Federal Clean Air Act of 1990.
    f. Remove any and all non-functioning equipment and parts associated with system, including obsolete ductwork, unless otherwise specified by the Contractor.
2. Replace non-functioning HVAC equipment with equipment of comparable size and type according to Manual J calculations and having an efficiency rating meeting or exceeding Section 7610 of the NC Weatherization Installation Standards. New System must use the same fuel type (oil, propane, electric, etc) as the existing system unless prior approval is granted by Contractor to convert fuel type. If provided, the air filters for the new system shall be rated at MERV 6. Installation must meet ANSI/ACCA Standard 5 (Installation of Residential HVAC Systems) and North Carolina Weatherization Assistance Program Guidelines.
    a. Specify any additional work needed by electrician and/or plumber to achieve efficient, safe and code compliant operation of the unit. Any electrical and/or plumbing services must be separately contracted with by the Contractor; if the Subcontractor has a preference for a specific electrical or plumbing service provider, he/she may submit that request to the Contractor.
    b. Remove any and all non-functioning HVAC equipment and parts associated with system, including obsolete ductwork.
    c. Follow procedures for servicing, repairing, and disposing of any and all refrigerant-containing devices, units, and systems as outlined by federal, state, and local laws and regulations now in effect or hereinafter enacted which pertain to the Federal Clean Air Act of 1990.
    d. Provide original documentation of the Manual J calculation, new HVAC system operation manual and warranty information to the Contractor with the invoice.

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SCHEDULE B
Subcontractor Compensation

All labor rates quoted must include all overhead cost including travel, worker compensation, equipment, maintenance, administrative costs, and worker pay. These price categories should be adequate for installing insulation in most weatherization situations. If a particular category will not apply, indicate by stating (N/A) "not applicable" in the price sections. Please avoid adding unnecessary price categories.

TASK 1: Evaluate, clean and tune (ECT) heating/cooling equipment per ACCA/ANSI Standard 4 and North Carolina standards, providing full documentation of tests performed and recommendations.

Set Price per unit	

TASK 2: Diagnose heating/cooling equipment with repairs and/or parts replacement, as necessary. Task 2 is only to evaluate an inoperable system, not to clean and tune it.

Set Price per unit	

TASK 3: Replace existing non-functioning heating/cooling equipment with new HVAC equipment. The cost should include labor for sizing central systems using ACCA Manual J. Ensure that efficiency meets or exceeds the requirements in section 7610 of the North Carolina Weatherization Installation SWS. Repair work in which only an air handler or condenser shall be replaced, shall not be required to meet the efficiency requirements.

		Option 1*	Option 2*	Option 3*
Electric Heat Pump (split)	Make/Model			
	Size/Rating			
	Efficiency (HSPF)			
	Material Cost			
	Labor Cost			
Natural Gas Furnace	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			
	AC included?			
Natural Gas Package	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			
Packaged Heat Pump	Make/Model			
	Size/Rating			
	Efficiency (HSPF)			
	Material Cost			
	Labor Cost			
Natural Gas Vented Space Heater	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			

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Fuel Oil Furnace	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			
	AC included?			
Propane Vented Space Heater	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			
Fuel Oil Vented Space Heater	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			
Electric Mini Split	Make/Model			
	Size/Rating			
	Efficiency (HSPF)			
	Material Cost			
	Labor Cost			
Central AC	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			
Propane Furnace	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			
	AC included?			
Vented Solid Fuel Oven (Wood/Coal)	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			
Unit Natural Gas Boiler	Make/Model			
	Size/Rating			
	Efficiency			
	Material Cost			
	Labor Cost			

* Please consider options for variously sized site-built vs. manufactured homes. Note that the Weatherization Assistance Program **does not** install electric furnaces and the heating efficiencies requirements are often **greater** than the mechanical code.

Cabarrus County Minimum Insurance Coverage Requirements

Coverage	Low Risk Profile	Medium Risk Profile (County's Standard Requirement)	High Risk Profile	Specialty	Encroachment	Premises Lease
Commercial General Liability Products/Completed Operation Explosion, Collapse & Underground (XCU)	$1,000,000 Combined Single Limit (CSL) per occurrence for bodily injury and/or property damage As above	$1,000,000/$2,000,000 * As above If any, limit To Be Determined	$1,000,000/$2,000,000* As above If any, TBD	$1,000,000* As Above If any, TBD	$1,000,000	$1,000,000
Automobile Liability (hired & non-owned or Any Auto on the COI)	$1,000,000 CSL per occurrence	$1,000,000*	$1,000,000*	$1,000,000*	n/a	n/a
****Workers' Compensation**	Statutory	Statutory	Statutory	Statutory	n/a	Statutory
****Employers Liability**	100/500/100	500/500/500*	500/500/500*	500/500/500*	n/a	100/500/100
****Waiver of Subrogation on WC**	Required if available	Required if available	Required	Required	n/a	n/a
Umbrella Liability	n/a	n/a	$2,000,000+	$9,000,000+	n/a	n/a
Professional Liability *may be required on a risk profile* depending on nature of services provided by contract. Coverage required for professional service such as accountant, attorney, architect, design, engineering and most consultants	$1,000,000 per occurrence	$1,000,000	TBD	TBD	n/a	n/a
Environmental/Pollution Liability required if demolition, use of hazardous materials or environmentally sensitive	n/a	$1,000,000*	$1,000,000+*	$1,000,000+*	n/a	n/a
Fidelity Bond (loss of money or other property due to dishonest acts). Only for Contracts such as Banking, Janitorial, Fund Raising, TPA's and similar	TBD	Amount depends on exposure to loss	TBD	TBD	n/a	n/a
Other Coverage As Required	TBD	TBD	TBD	TBD	n/a	n/a
Bid, Performance & Payment Bonds	TBD	TBD	TBD	TBD	n/a	n/a

* A combination of Umbrella/Excess and primary limit may be used to provide coverage for the amount shown.
** Workers Compensation is required if the contractor/vendor has employees. Owner Waiver is acceptable for a Sole Proprietor, Partners or LLC that has no employees. Corporation owner/officers are employees under NC Workers' Compensation Act

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	Low Risk Exposure	Standard Risk	High Risk Exposure	Specialty
Common Service for Risk Profile includes but is not necessarily limited to service shown.	Desk Top Publishing Mail Sorting Word Processing Copying Landscaping (minor, no trees, no electrical or excavation) Microfilm services Small low risk repair or service jobs (usually those jobs <30 days duration **and** <$500) Tennis Instructor Yoga Instructor	Appliance Repair Asbestos Removal (small project) Carpentry Carpet Cleaners Concrete Work Drywall Contractor Excavation (minor) Fence Installation Fire Extinguisher Testing Fork Lift Repair Electrical Repair Elevator Maintenance HVAC Janitorial Landscaping (minor excavation) Medical/Psychology, Counseling, Etc. Painting Paving Contractors Parks & Recreation renovation Pest Control Plumbing Pool Cleaning Purchase of Goods or Service Refrigeration Roofing (1 story small project) Tree Maintenance Trade Contractors	Charters Excavation (large) Fireworks Displays Hi Tech equipment installation. Landscaping (major excavation, large equipment) Large Construction Painting above 1 story Road Contractor Roofing (large project) Power Lines Sewer Contractor Welding (large project)	Asbestos Removal Crane Service Demolition Environmental Hazard Heavy Construction Sensitive Equipment

Personal & Professional Service includes but is not necessarily limited to service shown.	Appraiser (Comm Dev) Disc Jockey Discussion Leader Proofreader Landscape Design (small project) Title Search Firm (Comm Dev)	Accountant Advertising Agencies Other Appraisers Architect (small project) Attorney Consultants (most projects) Designer (most projects) EAP Insurance Brokers Instructor (physical activity) Landscape Design (other) Lobbyists Programmers Researcher Temporary Services	Architect (large project) Consultants (large project) Medical Services	Project or contract determined to require higher limits

Certificates of Insurance should include the following:

1. Cabarrus County
2. Contract must represent Cabarrus County which includes its officers, officials, agents and employees. If not then the Certificate must reflect its officers, officials, agents and employees as an additional insured
3. Disclose any self-insured retention (allowed only if pre-approved by County).
4. Designate the Cabarrus County Attn: Risk Management Department, PO Box 707, Concord, NC 28026 as certificate holder.
5. Provide that the County shall be notified by the agent or insurer. The vendor is responsible notifying the County of any cancellations.
6. Certificate should be forwarded directly from the insurance agent or insurance carrier
7. Contractors or vendors insurance shall be primary over any other insurance available to the County.
8. Contractors agent or insurer shall provide the County with the additional insured language. The additional insured endorsement form to be requested is CG20 10 11 85 (if not available please notify Risk Management)
   -other acceptable forms CG2010 0704 and CG 2037 0704 combined

Contract insurance requirements must be met. Receipt of a non-compliant certificate, other documentation of insurance or policies by the County or any of its representatives does **NOT** constitute a waiver of the vendor/contractor's obligation to fulfill the insurance requirements of the County.

It is recognized that a purchase order for the routine procurement of goods may not explicitly state insurance requirements. However, departments should review each acquisition to identify potential risks that may require the imposition of insurance requirements. The County's failure to request or demand evidence of insurance shall not constitute a waiver of any insurance requirement.

Those parties who do not meet the minimum requirements for insurance coverage may ask for an exception through the User department. A

* A combination of Umbrella/Excess and primary limit may be used to provide coverage for the amount shown.
** Workers Compensation is required if the contractor/vendor has employees. Owner Waiver is acceptable for a Sole Proprietor, Partners or LLC that has no employees. Corporation owner/officers are employees under NC Workers' Compensation Act

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certificate of insurance for the maximum limits of coverage that are carried by the vendor must be submitted to the Cabarrus County, Risk Manager along with a detailed explanation of services and/or products to be provided to the County by the vendor. The User Department should be prepared to answer the following questions when requesting an exception:

1. What activities will take place?
2. Who could be harmed?
3. What property could be damaged and how severely?
4. What is the maximum exposure (worst case scenario) for the activity?
5. What is the maximum likely loss for the activity?
6. Is there a possible pollution exposure?
7. Are crowds or bystanders/passersby likely to be involved?
8. Will inherently dangerous activities be involved?
9. How likely is the County to be a defendant in the event of a loss?
10. Are other contractors/vendors available to do the work that have the County minimum limits?
11. What are the cost of the work (bid, contract or PO price) and the duration of the work?
12. What is the cost to the vendor to increase coverage to the County's requirement?

The request will be reviewed by the County's Risk Manager for a determination as to whether an exception will be made. Failure to obtain an exception will eliminate the requesting party as a vendor.

Insurance requirements subject to change without notice.

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North Carolina Weatherization Assistance Program
Heating, Ventilation, and Air Conditioning System Evaluation Report

Every Weatherized dwelling in NC shall have all HVAC systems evaluated by a licensed HVAC technician (limitations apply). HVAC evaluations and related services provided under the NCWAP, shall comply with the American National Standards Institute/Air Conditioning Contractors of America (ACCA) Standard-4 (2008) and the NC Weatherization Installation Standards. An NCWAP HVAC Evaluation Report shall be completed by a technician in conjunction with every evaluation performed and shall accompany any request for payment. NCWAP shall define an Evaluation as incorporating all Inspection, Maintenance, and Testing procedures mandated by ACCA Standard-4, as applicable per system type.

North Carolina **Weatherization Assistance Program**

I. Job Information: All fields required. Shaded fields to be completed by the Weatherization Service Provider (WSP).

Client Name: _____ Job Number: _____

Street Address: _____ Date Assigned: _____

City, ST Zip: _____ Assigned By: _____

Company Name: _____ Target Completion Date: _____

Technician Name: _____ Actual Completion Date: _____

Returned Completed Report To: _____ via fax/email Actual Time of Service Appt: _____ am/pm

II. System Identification: All fields required. Use additional sheets as needed where five or more systems are present.

No. of Primary Systems Present▲ _____ No. of Unvented Space Heaters Present _____

No. of Supplemental Systems Present+ _____ Are Unvented Space Heaters the Primary Heat Source?● ☐Yes ☐No

System 1 *(Check all that apply)*		**System 2** *(Check all that apply)*	
☐ Electric	☐ Forced Air	☐ Electric	☐ Forced Air
☐ Natural Gas	☐ Gravity	☐ Natural Gas	☐ Gravity
☐ Propane	☐ Boiler	☐ Propane	☐ Boiler
☐ Oil (No. _____)	☐ Space Heater	☐ Oil (No. _____)	☐ Space Heater
☐ Kerosene	☐ Unvented Space Heater	☐ Kerosene	☐ Unvented Space Heater
☐ Solid Fuel (Wood, Coal, Pellet)	☐ Water Heater	☐ Solid Fuel (Wood, Coal, Pellet)	☐ Water Heater
Brand/Trade Name _____		Brand/Trade Name _____	
Model No. _____		Model No. _____	
Serial No. _____		Serial No. _____	
Date Manufactured _____		Date Manufactured _____	
System Size _____ btu/ton/other		System Size _____ btu/ton/other	
Location _____		Location _____	

System 3 *(Check all that apply)*		**System 4** *(Check all that apply)*	
☐ Electric	☐ Forced Air	☐ Electric	☐ Forced Air
☐ Natural Gas	☐ Gravity	☐ Natural Gas	☐ Gravity
☐ Propane	☐ Boiler	☐ Propane	☐ Boiler
☐ Oil (No. _____)	☐ Space Heater	☐ Oil (No. _____)	☐ Space Heater
☐ Kerosene	☐ Unvented Space Heater	☐ Kerosene	☐ Unvented Space Heater
☐ Solid Fuel (Wood, Coal, Pellet)	☐ Water Heater	☐ Solid Fuel (Wood, Coal, Pellet)	☐ Water Heater
Brand/Trade Name _____		Brand/Trade Name _____	
Model No. _____		Model No. _____	
Serial No. _____		Serial No. _____	
Date Manufactured _____		Date Manufactured _____	
System Size _____ btu/ton/other		System Size _____ btu/ton/other	
Location _____		Location _____	

▲ *Refer to the North Carolina Weatherization Installation Standards (NCWIS) for guidance on allowable system types that may contribute to a Primary Heat Source.*

\+ *Refer to the NCWIS for guidance on allowable system types that may contribute to a compliant Supplemental Heat Source.*

● *Presence of an Unvented Space Heater(s) as the Primary Heat Source in a Weatherized dwelling shall be strictly prohibited. Refer to the NCWIS for guidance on allowable Unvented Space Heater usage. Evaluations that identify prohibited usage shall cease immediately, and the Weatherization Service Provider shall be immediately notified.*

III. System Evaluation: Record results of Inspection, Maintenance, and Testing completed on each system type/component.

FP = Functioning Properly NR = Needs Repair RR = Replacement Recommended CP = Cleaning Performed

COMPLETE FOR ALL SYSTEMS AS APPLICABLE

Description	Condition/Action Taken FP	NR	RR	CP	Description	Condition/Action Taken FP	NR	RR	CP
Controls and thermostat	☐	☐	☐	☐	Zone controls and dampers	☐	☐	☐	☐
Electrical disconnect	☐	☐	☐	☐	Main trunk line	☐	☐	☐	☐
Electrical connections	☐	☐	☐	☐	Duct insulation	☐	☐	☐	☐
Cabinet/fasteners/panels	☐	☐	☐	☐	Fan belt tension	☐	☐	☐	☐
Temperature rise _____ °F	☐	☐	☐	☐	Blower assembly	☐	☐	☐	☐
Filter(s)	☐	☐	☐	☐	Contacts/relays /capacitors	☐	☐	☐	☐
Registers and duct boots	☐	☐	☐	☐	Fan on/off temperatures _____ °F | _____ °F				

COMPLETE FOR CENTRAL ELECTRIC SYSTEMS

Description	Condition/Action Taken FP	NR	RR	CP	Description	Condition/Action Taken FP	NR	RR	CP
Variable frequency drive	☐	☐	☐	☐	Air handler	☐	☐	☐	☐
Airflow across element(s)	☐	☐	☐	☐	Element(s)	☐	☐	☐	☐

COMPLETE FOR HEAT PUMPS / CENTRAL AIR CONDITIONING SYSTEMS

Description	Condition/Action Taken FP	NR	RR	CP	Description	Condition/Action Taken FP	NR	RR	CP
Condenser unit	☐	☐	☐	☐	Refrigerant line insulation	☐	☐	☐	☐
Condenser fan motor	☐	☐	☐	☐	Airflow across coil	☐	☐	☐	☐
Condenser coil & fins*	☐	☐	☐	☐	Evaporator coils & fins*	☐	☐	☐	☐
Condensate drain	☐	☐	☐	☐	Reversing valve operation	☐	☐	☐	☐
Drain pans	☐	☐	☐	☐	Superheat/subcool results	☐	☐	☐	☐
Condensate ports—indoor	☐	☐	☐	☐	Fan speed _____ RPM				
Defrost cycle settings	☐	☐	☐	☐	Pressure drop across coils _____ psi				
Refrigerant lines	☐	☐	☐	☐	Temperature drop across coils _____ °F				

* Straighten fins as needed.

COMPLETE FOR NATURAL GAS AND PROPANE FURNACES

Description	Condition/Action Taken FP	NR	RR	CP	Description	Condition/Action Taken FP	NR	RR	CP
Gas leaks	☐	☐	☐	☐	Condition of chimney	☐	☐	☐	☐
Burner (corrosion, etc)	☐	☐	☐	☐	Condensate piping/drain	☐	☐	☐	☐
Burner test	☐	☐	☐	☐	Combustion air intake	☐	☐	☐	☐
Burner blow wheel	☐	☐	☐	☐	Vent connectors	☐	☐	☐	☐
Main burner ignition	☐	☐	☐	☐	90+ unit pipe condition	☐	☐	☐	☐
Heat exchanger	☐	☐	☐	☐	Evidence of flame rollout?	☐Yes ☐No			
Hot surface igniter	☐	☐	☐	☐	Chimney lined?	☐Yes ☐No			
Combustion chamber	☐	☐	☐	☐	Distance from combustibles	☐Pass ☐Fail			
Burner gaskets	☐	☐	☐	☐	Vent system code compliant?	☐Yes ☐No			
Inlet gas pressure	☐	☐	☐	☐	Fuel usage (clock meter) _____ therms/h				
Manifold pressure	☐	☐	☐	☐	Is usage within 10% of nameplate?	☐Yes ☐No			

COMPLETE FOR SOLID FUEL FURNACES (WOOD/COAL/PELLET)

Description	Condition/Action Taken FP	NR	RR	CP	Description	Condition/Action Taken FP	NR	RR	CP
Condition of chimney	☐	☐	☐	☐	Fuel type	☐Wood ☐Coal ☐Pellet			
Condition of liner	☐	☐	☐	☐	Heat exchanger cracked*	☐Yes ☐No			
Vent connectors	☐	☐	☐	☐	Heat resistant shielding	☐Pass ☐Fail			
Correct vent type?	☐Yes ☐No				Gaskets	☐Pass ☐Fail			
Vent meets code (1/4" rise per foot)	☐Yes ☐No				Circulating fan	☐Pass ☐Fail			

III. System Evaluation Continued:

FP = Functioning Properly NR = Needs Repair RR = Replacement Recommended CP = Cleaning Performed

COMPLETE FOR OIL FURNACES

Description	Condition/Action Taken FP	NR	RR	CP
Combustion chamber	☐	☐	☐	☐
Burner gaskets	☐	☐	☐	☐
Retention head	☐	☐	☐	☐
Ceramic insulation	☐	☐	☐	☐
Electrode positioning	☐	☐	☐	☐
Clean combustion air inlet	☐	☐	☐	☐
Burner head/nozzle	☐	☐	☐	☐
Vent connectors	☐	☐	☐	☐
Heat exchanger	☐	☐	☐	☐
Test inducer fan motor	☐	☐	☐	☐
Test blower assembly	☐	☐	☐	☐
Oil pressure (measure/adjust)	☐	☐	☐	☐
Oil pump pressure	☐	☐	☐	☐
Fuel pump pressure cutoff	☐	☐	☐	☐
Primary burner safety control	☐	☐	☐	☐

Description	Condition/Action Taken FP	NR	RR	CP
Combustion air intake	☐	☐	☐	☐
Condition of liner	☐	☐	☐	☐
Photocell resistance _____ __ Ω	☐Pass	☐Fail		
Replace oil burner nozzle*	☐Yes	☐No		
Replace fuel filter*	☐Yes	☐No		
Chimney lined?	☐Yes	☐No		
Oil residue in chamber?	☐Yes	☐No		
Bleed oil line*	☐Yes	☐No		
Evidence of flame rollout?	☐Yes	☐No		
Ignition transformer voltage __ V	☐Yes	☐No		
Distance from combustibles	☐Pass	☐Fail		
Vent type correct for furnace?	☐Yes	☐No		
Vent meets code (1/4" rise per foot)	☐Yes	☐No		

* Required maintenance items

COMPLETE FOR ALL VENTED SPACE HEATERS

System 1 Description	Condition/Action Taken FP	NR	RR	CP
Burners	☐	☐	☐	☐
Vent connectors	☐	☐	☐	☐
Condition of liner	☐	☐	☐	☐
Gas leak(s)?	☐Yes	☐No		
Evidence of flame rollout?	☐Yes	☐No		
Clearance from combustibles?	☐Pass	☐Fail		
Vent type correct for furnace?	☐Yes	☐No		
Vent meets code (1/4" rise per foot)?	☐Yes	☐No		
Chimney lined?	☐Yes	☐No		
Number of elbows in vent system? _____				

System 2 Description	Condition/Action Taken FP	NR	RR	CP
Burners	☐	☐	☐	☐
Vent connectors	☐	☐	☐	☐
Condition of liner	☐	☐	☐	☐
Gas leak(s)?	☐Yes	☐No		
Evidence of flame rollout?	☐Yes	☐No		
Clearance from combustibles?	☐Pass	☐Fail		
Vent type correct for furnace?	☐Yes	☐No		
Vent meets code (1/4" rise per foot)?	☐Yes	☐No		
Chimney lined?	☐Yes	☐No		
Number of elbows in vent system? _____				

COMPLETE FOR HYDRONIC LOOP BOILERS

Description	Condition/Action Taken FP	NR	RR	CP
Reducing valve screen	☐	☐	☐	☐
Pressure reducing valve	☐	☐	☐	☐
Bladder expansion tank	☐	☐	☐	☐
Water pump	☐	☐	☐	☐

Description	Condition/Action Taken FP	NR	RR	CP
Condition of plumbing	☐	☐	☐	☐
Water temperature change _____	°F			
Water loop pressure change _____	psi			

COMPLETE FOR ALL VENTED FUEL-FIRED SYSTEMS*

Ambient CO _____ ppm

Spillage test ☐Pass ☐Fail ☐Not applicable

Worst case CAZ _____ Pa

Draft (at worst case) _____ Pa

Ambient temperature _____ °F

CAZ volume (if applicable) _____ ft^3

Additional venting needed _____ in^2

Pressure switch _____ ☐Pass ☐Fail ☐Not applicable

PORT 1	PORT 2	PORT 3	PORT 4
Steady state efficiency_____%	Steady state efficiency_____%	Steady state efficiency_____%	Steady state efficiency_____%
CO_____ ppm	CO_____ ppm	CO_____ ppm	CO_____ ppm
O_2_____ %	O_2_____ %	O_2_____ %	O_2_____ %
CO_2_____ %	CO_2_____ %	CO_2_____ %	CO_2_____ %
Stack temperature_____ °F	Stack temperature_____ °F	Stack temperature_____ °F	Stack temperature_____ °F

* Refer to the NCWIS for guidance on compliant combustion testing standards and methods.

IV. Declaration of System Compliance: Official summary of conditions post-Evaluation (Inspection, Maintenance, and Testing).

System No. 1		System No. 2		System No. 3		System No. 4	
Passes	Fails	Passes	Fails	Passes	Fails	Passes	Fails
Provide a detailed description of deficiencies identified in each failed system *(continue on back if additional space is needed)*:							

VIII. MINOR Repairs Completed: ***Authorized repairs completed at time of Evaluation, beyond the mandated scope of services.***✦

Detailed Description of Minor Repairs Completed:	Materials Installed			
	Material Description	QTY	Unit	Total Cost
	Actual Labor Hours			
Comments:	Total Materials:			
	Total Labor:			
	Total Actual Cost:			

✦ Refer to NCWAP guidance for limitations on allowable Minor Repairs that may be performed in conjunction with standard HVAC Evaluations.

V. MAJOR Repair/Replacement Recommended: ***Must be fully justified by the description of the failure written above.***■

Detailed Description of Major Repair/Replacement Recommended:	Estimated Material Costs			
	Material Description	QTY	Unit	Total Cost
	Estimated Labor Hours			
Comments:	Total Estimated Materials:			
	Total Estimated Labor:			
	Total Estimated Cost:			

■ Refer to NCWAP guidance for limitations on allowable Major Repairs or Replacements performed, which are subject to competitive bidding requirements.

VI. Certification of Compliant Evaluation:

Technician Certification:

As an HVAC technician licensed by the State of North Carolina, and as an employee/proprietor of _____,
I certify that I have personally evaluated all HVAC systems present in the subject dwelling, including all inspection, maintenance, and testing mandated under ACCA Standard-4. I understand that any subsequent services, for which the property owner/client may be eligible, shall be determined at the sole discretion of the WSP, and neither I nor any representative of my firm, shall be at liberty to state or imply that additional services can, should, or will be provided.
I further attest that the evaluation, report, and repairs performed (if any) are complete, accurate, and of good quality, in accordance with NCWAP guidelines.

Technician Printed Name: _____ Date: _____

Technician Signature: _____ Date: _____

Property Owner Certification:

As owner of the property referenced herein, I understand and agree that I previously authorized the local Weatherization Service Provider to enlist the services of a licensed HVAC technician to evaluate and service the HVAC systems present in my dwelling on my behalf, as a requirement of the Weatherization Assistance Program services for which I may eligible. I understand that no warranty either expressed or implied shall accompany this evaluation, nor any repairs made hereunder, and that any subsequent services for which I may be eligible shall be determined at the sole discretion of the WSP, in compliance with NCWAP standards and guidelines. I further certify that to the best of my knowledge, the evaluation as recorded in this report is now complete, and I agree and attest that the nature and quality of all work performed is acceptable to me.

Property Owner Printed Name: _____ Date: _____

Property Owner Signature: _____ Date: _____