

BIDDERS COMPANY NAME

REQUEST FOR PROPOSAL

6612

HVAC AND DUCT SYSTEM CLEANING

At

MERI LOU MURRAY REC-CENTER

**WASHTENAW COUNTY PARKS AND
RECREATION COMMISSION**

Prepared By:

Washtenaw County Purchasing
Administration Building
220 N. Main, B-35
Ann Arbor, MI 48104

Crystal A. Wake, C.P.M., CPPB
Senior Buyer
(734) 222-6760





WASHTENAW COUNTY

Finance Department

Purchasing Division

220 N. Main, Ann Arbor, MI 48104
Phone (734) 222-6760, Fax (734) 222-6764

REQUEST FOR PROPOSAL #6612

April 18, 2011

Washtenaw County Purchasing Division on behalf of the Parks and Recreation Commission is issuing a Request for Proposal (RFP) #6612 for interested vendors to submit proposals for HVAC and Duct System Cleaning at the Meri Lou Murray Rec-Center located at 2960 Washtenaw Ave. Ann Arbor, MI 48104.

Sealed Proposals: Vendor will deliver **one (1) original** and **three (3) copies** to the following address:

Washtenaw County
Administration Building
Purchasing Division
220 N. Main St. Room B-35
Ann Arbor, MI 48104

By 4:00 PM ON THURSDAY, MAY 12, 2011

Proposals received after the above-cited time will be considered a late quote and are not acceptable unless waived by the Purchasing Manager.

A Mandatory Walk Through will be held on:

**TUESDAY, APRIL 26, 2011 AT 3:00PM
2230 Platt Rd. Ann Arbor MI 48104**

ATTENDANCE WILL BE TAKEN. Any vendor not represented and signed in will be excluded from the bidding process.

- The envelope must be clearly marked "**SEALED RFP #6612**".
- Please direct purchasing and procedural questions regarding this RFP to Crystal Wake, C.P.M., CPPB at 734-222-6761 or wakec@ewashtenaw.org
- Please direct technical questions regarding this RFP to Ed Holley 734-971-6337, ext. 316 or email at holleye@ewashtenaw.org.

Thank you for your interest.

RFP # 6612 HVAC and Duct System Cleaning

I. PROPOSAL

- Definitions:**
- “**County**” is Washtenaw County in Michigan.
- “**Bidder**” an individual or business submitting a bid to Washtenaw County.
- “**Contractor**” One who contracts to perform services in accordance with a contract.
- “**WCPARC**” Washtenaw County Parks and Recreation Commission.

Purpose of Proposal: Washtenaw County Parks and Recreation Commission has a need for HVAC and Duct System Cleaning Services for the Meri Lou Murray Rec-Center located at 2960 Washtenaw Ave, Ann Arbor, MI 48104.

Proposal Terms:

- A. Washtenaw County reserves the right to reject any and all proposals received as a result of this RFP. If a proposal is selected, it will be the most advantageous regarding price, quality of service, the Vendor’s qualifications and capabilities to provide the specified service, and other factors which Washtenaw County may consider. The County does not intend to award a Bid fully on the basis of any response made to the proposal; the County reserves the right to consider proposals for modifications at any time before a Bid would be awarded, and negotiations would be undertaken with that provider whose proposal is deemed to best meet the County’s specifications and needs.
- B. The County reserves the right to reject any or all bids, to waive or not waive informalities or irregularities in bids or bidding procedures, and to accept or further negotiate cost, terms, or conditions of any bid determined by the County to be in the best interests of the County even though not the lowest bid.
- D. Proposals must be signed by an official authorized to bind the provider to its provisions for at least a period of 90 days. Failure of the successful bidder to accept the obligation of the Bid may result in the cancellation of any award.
- E. In the event it becomes necessary to revise any part of the RFP, addenda will be provided. Deadlines for submission of the RFP’s may be adjusted to allow for revisions. To be considered, **four (4) copies, one (1) original proposal and three (3) copies** must be at the County Purchasing Division on or before the date and time specified.

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- F. Proposals should be prepared simply and economically providing a straightforward, concise description of the vendor's ability to meet the requirements of the RFP. Proposals shall be written in ink or typewritten. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed in ink by the person **signing** the proposal.
- G. A standard Washtenaw County Service Contract will be executed between Washtenaw County and the awarded vendor.
- H. In the event, the County receives two or more bids from responsive, responsible bidders, on or more of whom are Washtenaw County vendors and the bids are substantially equal in price, quality and service, the County shall award the contract to the most responsive and responsible Washtenaw County vendor. For purposes of this section, Washtenaw County vendor means a company which has maintained its principal office in Washtenaw County for at least six (6) months. Maintaining a Washtenaw County P.O. Box is not, in and of itself, sufficient to discretion under this section to determine if a company qualifies as a Washtenaw County vendor and if two of more bids are substantially equal.

II. PROPOSAL SPECIFICATIONS

The proposal shall include all of the following information. Failure to include all of the required information may result in disqualification of a Bidder.

- A) Contractor's Qualifications, years in business, experience in providing the level and type of services specified in the proposal.
- B) Bank References with name and phone number of contact person.
- C) At least three (3) current references using similar services listed in the proposal. Include company name, contact name and phone number.

IV. CONTRACT PROVISIONS

If a contract is awarded, the selected vendor will be required to adhere to a set of general contract provisions which will become a part of any formal agreement. These provisions are general principles which apply to all contractors of service to Washtenaw County such as the following:

ARTICLE III - REPORTING OF CONTRACTOR

Section 1 - The Contractor is to report to Director of Support Services Technology & Operations and/or designee and will cooperate and confer with him/her as necessary to insure satisfactory work progress.

Section 2 - All reports, estimates, memoranda and documents submitted by the Contractor must be dated and bear the Contractor's name.

Section 3 - All reports made in connection with these services are subject to review and final approval by the County Administrator.

Section 4 - The County may review and inspect the Contractor's activities during the term of this contract.

Section 5 - When applicable, the Contractor will submit a final, written report to the County Administrator.

Section 6 - After reasonable notice to the Contractor, the County may review any of the Contractor's internal records, reports, or insurance policies.

ARTICLE V - PERSONNEL

Section 1 - The contractor will provide the required services and will not subcontract or assign the services without the County's written approval.

Section 2 - The Contractor will not hire any County employee for any of the required services without the County's written approval.

Section 3 - The parties agree that the Contractor is neither an employee nor an agent of the County for any purpose.

Section 4 - The parties agree that all work done under this contract shall be completed in the United States and that none of the work will be partially or fully completed by either an offshore subcontractor or offshore business interest either owned or affiliated with the contractor. For purposes of this contract, the term, "offshore" refers to any area outside the contiguous United States, Alaska or Hawaii.

ARTICLE VI - INDEMNIFICATION AGREEMENT

The contractor will protect, defend and indemnify Washtenaw County, its officers, agents, servants, volunteers and employees from any and all liabilities, claims, liens, fines, demands and costs, including legal fees, of whatsoever kind and nature which

may result in injury or death to any persons, including the Contractor's own employees, and for loss or damage to any property, including property owned or in the care, custody or control of Washtenaw County in connection with or in any way incident to or arising out of the occupancy, use, service, operations, performance or non-performance of work in connection with this contract resulting in whole or in part from negligent acts or omissions of contractor, any sub-contractor, or any employee, agent or representative of the contractor or any sub-contractor.

ARTICLE VII - INSURANCE REQUIREMENTS

The Contractor will maintain at its own expense during the term of this Contract, the following insurance:

1. Workers' Compensation Insurance with Michigan statutory limits and Employers Liability Insurance with a minimum limit of \$100,000 each accident for any employee.
2. Commercial General Liability Insurance with a combined single limit of \$1,000,000 each occurrence for bodily injury and property damage. The County shall be added as "additional insured" on general liability policy with respect to the services provided under this contract.
3. Automobile Liability Insurance covering all owned, hired and nonowned vehicles with Personal Protection Insurance and Property Protection Insurance to comply with the provisions of the Michigan No Fault Insurance Law, including residual liability insurance with a minimum combined single limit of \$1,000,000 each accident for bodily injury and property damage.

Insurance companies, named insureds and policy forms may be subject to the approval of the Washtenaw County Administrator, if requested by the County Administrator. Such approval shall not be unreasonably withheld. Insurance policies shall not contain endorsements or policy conditions which reduce coverage provided to Washtenaw County. Contractor shall be responsible to Washtenaw County or insurance companies insuring Washtenaw County for all costs resulting from both financially unsound insurance companies selected by Contractor and their inadequate insurance coverage. Contractor shall furnish the Washtenaw County Administrator with satisfactory certificates of insurance or a certified copy of the policy, if requested by the County Administrator.

No payments will be made to the Contractor until the current certificates of insurance have been received and approved by the Administrator. If the insurance as evidenced by the certificates furnished by the Contractor expires or is canceled during the term of the contract, services and related payments will be suspended. Contractor shall furnish the County Administrator's Office with certification of insurance evidencing such coverage and endorsements at least ten (10) working days prior to commencement of services under this contract. Certificates shall be addressed to the County Administrator, P. O. Box 8645, Ann Arbor, MI, 48107, and shall provide for 30 day written notice to the Certificate holder of cancellation of coverage.

ARTICLE VIII - COMPLIANCE WITH LAWS AND REGULATIONS

The Contractor will comply with all federal, state and local regulations, including but not limited to all applicable OSHA/MIOSHA requirements and the Americans with Disabilities Act.

ARTICLE IX - INTEREST OF CONTRACTOR AND COUNTY

The Contractor promises that it has no interest which would conflict with the performance of services required by this contract. The Contractor also promises that, in the performance of this contract, no officer, agent, employee of the County of Washtenaw, or member of its governing bodies, may participate in any decision relating to this contract which affects his/her personal interest or the interest of any corporation, partnership or association in which he/she is directly or indirectly interested or has any personal or pecuniary interest. However, this paragraph does not apply if there has been compliance with the provisions of Section 3 of Act No. 317 of the Public Acts of 1968 and/or Section 30 of Act No. 156 of Public Acts of 1851, as amended by Act No. 51 of the Public Acts of 1978, whichever is applicable.

ARTICLE X - CONTINGENT FEES

The Contractor promises that it has not employed or retained any company or person, other than bona fide employees working solely for the Contractor, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person, other than bona fide employees working solely for the Contractor, any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award or making of this contract. For breach of this promise, the County may cancel this contract without liability or, at its discretion, deduct the full amount of the fee, commission, percentage, brokerage fee, gift or contingent fee from the compensation due the Contractor.

ARTICLE XI - EQUAL EMPLOYMENT OPPORTUNITY

The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, sexual orientation, national origin, physical handicap, age, height, weight, marital status, veteran status, religion and political belief (except as it relates to a bona fide occupational qualification reasonably necessary to the normal operation of the business).

The Contractor will take affirmative action to eliminate discrimination based on sex, race, or a handicap in the hiring of applicant and the treatment of employees. Affirmative action will include, but not be limited to: Employment; upgrading, demotion or transfer; recruitment advertisement; layoff or termination; rates of pay or other forms of compensation; selection for training, including apprenticeship.

The Contractor agrees to post notices containing this policy against discrimination in conspicuous places available to applicants for employment and employees. All solicitations or advertisements for employees, placed by or on the behalf of the Contractor, will state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, sexual orientation, national origin, physical handicap, age, height, weight, marital status, veteran status, religion and political belief.

ARTICLE XII - PREVAILING WAGE RATES AND CUB AGREEMENT

The Contractor agrees that all craftsmen, mechanics and laborers it employs to work on this project shall, at a minimum, receive the prevailing wages and fringe benefits of the Building Trade Department for corresponding classes of craftsmen, mechanics and laborers for the Washtenaw County area, as determined and published by the Davis-Bacon Division of the United States Department of Labor. Contractor agrees that all subcontracts entered into by the Contractor shall contain a similar provision covering any sub-contractor's employees who perform work on this project. Contractor further agrees to sign a project labor agreement as provided by the Construction Unity Board ("CUB Agreement"). A copy of the CUB Agreement is attached as an appendix to this Contract.

ARTICLE XIII - EQUAL ACCESS

The Contractor shall provide the services set forth in Article I without discrimination on the basis of race, color, religion, national origin, sex, sexual orientation, marital status, physical handicap, or age.

ARTICLE XIV - OWNERSHIP OF DOCUMENTS AND PUBLICATION

All documents developed as a result of this contract will be freely available to the public. None may be copyrighted by the Contractor. During the performance of the services, the Contractor will be responsible for any loss of or damage to the documents while they are in its possession and must restore the loss or damage at its expense. Any use of the information and results of this contract by the Contractor must reference the project sponsorship by the County. Any publication of the information or results must be co-authored by the County.

ARTICLE XV - ASSIGNS AND SUCCESSORS

This contract is binding on the County and the Contractor, their successors and assigns. Neither the County nor the Contractor will assign or transfer its interest in this contract without the written consent of the other.

ARTICLE XVI - TERMINATION OF CONTRACT

Section 1 - Termination without cause. Either party may terminate the contract by giving thirty (30) days written notice to the other party.

ARTICLE XVII - PAYROLL TAXES

The Contractor is responsible for all applicable state and federal social security benefits and unemployment taxes and agrees to indemnify and protect the County against such liability.

ARTICLE XVIII - PRACTICE AND ETHICS

The parties will conform to the code of ethics of their respective national professional associations.

ARTICLE XIX- CHANGES IN SCOPE OR SCHEDULE OF SERVICES

Changes mutually agreed upon by the County and the Contractor, will be incorporated into this contract by written amendments signed by both parties.

ARTICLE XX - CHOICE OF LAW AND FORUM

This contract is to be interpreted by the laws of Michigan. The parties agree that the proper forum for litigation arising out of this contract is in Washtenaw County, Michigan.

**CONTRACT APPENDIX
CUB MEMORANDUM OF UNDERSTANDING**

I. WORK DISPUTES

In return for the promise made in paragraph three (III) below, the parties agree that there will be no strike, work stoppage or lock-out for the duration of this Memorandum. Any jurisdictional dispute shall be resolved through normal procedures.

There will be a job conference with all contractors and sub-contractors prior to starting work.

II. COFFEE BREAKS

There shall be no organized coffee breaks.

III. PAYMENT OF FRINGES

Any Union having a claim against a contractor or subcontractor for unpaid wages and/or fringe benefits for work performed on the project shall give written notice of such claim to such contractor or subcontractor (With a copy of the notice to the Construction Manager or General Contractor) within three (3) business days after such claim has become known. Upon receipt of such written notice, the Construction Manager or General Contractor involved shall withhold an amount equal to the claim from the next disbursement payable to the contractor, pending resolution of the dispute satisfactory to the Construction manager or general Contractor. In the event of any such dispute, the Union agrees to use its best efforts to pursue any legal remedies available, including litigation by Fund Trustees. It is understood that the intent to this section is to accomplish prompt and effective resolution of any disputes between the Union and any contractor or subcontractor over payment of wages and fringes.

IV. UNION WORK

The parties understand and agree that each contractor and subcontractor at all tiers of this project shall, prior to beginning work on the project, become signatory parties to the respective current collective bargaining agreements of the appropriate Local Unions of the Washtenaw County Skilled Building Trades Council.

(Contractor, Owner or Construction Manager)

(Representative of Washtenaw County
Skilled Building Trades Council)

(Project Description)

(DATE)

THIS MEMORANDUM APPLIES ONLY TO THE PROJECT AND/OR CONSTRUCTION ABOVE DESCRIBED.

- WHITE-Union Copy
- GREEN – Contractor or Construction Manager Copy
- CANARY – OWNER COPY
- PINK – CUB Copy
- GOLD – PROJECT Copy

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IV. TERMS AND CONDITIONS

Award:

Washtenaw County reserves the right to reject any and all proposals received as a result of this RFP. If a proposal is selected it will be the most advantageous regarding price (See: "Low Bidder" following), quality of service, the Vendors' qualifications and capabilities to provide the specified service, and other factors which the County may consider. The County does not intend to award a Bid fully on the basis of any response made to the proposal; the County reserves the right to consider proposals for modifications at any time before a Bid would be awarded, and negotiations would be undertaken with that Vendor whose proposal is deemed to best meet the County's specifications and needs.

Low Bidder:

A low bidder will be determined by the response given on the Bid Sheet to the most responsive and responsible bidder.

Term of Bid:

The Bid is for a one year period from the date of award.

V. GENERAL SPECIFICATIONS

Meri Lou Murray Rec-Center

Part 1 -- Special Provisions

1.01 Qualification of the HVAC System Cleaning Contractor

(A) Membership: The HVAC system cleaning contractor shall be a certified member of the National Air Duct Cleaners Association (NADCA), or shall maintain membership in a nationally recognized non-profit industry organization dedicated to the cleaning of HVAC systems.

(B) Certification: The HVAC system cleaning contractor shall have a minimum of one (1) Air System Cleaning Specialist (ASCS) certified by NADCA on a full time basis, or shall have staff certified by a nationally recognized certification program and organization dedicated to the cleaning of HVAC systems.

(C) Supervisor Qualifications: A person certified as an ASCS by NADCA, or maintaining an equivalent certification by a nationally recognized program and organization, shall be responsible for the total work herein specified.

(D) Experience: The HVAC system cleaning contractor shall submit records of experience in the field of HVAC system cleaning as requested by WCPARC. Bids shall only be considered from firms which are regularly engaged in HVAC system maintenance with an emphasis on HVAC system cleaning and decontamination.

(E) Equipment, Materials and Labor: The HVAC system cleaning contractor shall possess and furnish all necessary equipment, materials and labor to adequately perform the specified services.

1. The contractor shall assure that its employees have received safety equipment training, medical surveillance programs, individual health protection measures, and manufacturer's product and material safety data sheets (MSDS) as required for the work by the U.S. Occupational Safety and Health Administration, and as described by this specification. For work performed in countries outside of the U.S.A., contractors should comply with applicable national safety codes and standards.

2. The contractor shall maintain a copy of all current MSDS documentation and safety certifications at the site at all times, as well as comply with all other site documentation requirements of applicable OSHA programs and this specification

3. Contractor shall submit to WCPARC all Material Safety Data Sheets (MSDS) for all chemical products proposed to be used in the cleaning process.

(F) Licensing: The HVAC system cleaning contractor shall provide proof of maintaining the proper license(s), if any, as required to do work in this state. Contractor shall comply with all Federal, state and local rules, regulations, and licensing requirements.

1.02 Standards

(A) NADCA Standards: The HVAC system cleaning contractor shall perform the services specified here in accordance with the current published standards of the National Air Duct Cleaners Association (NADCA).

1. All terms in this specification shall have their meaning defined as stated in the NADCA Standards.
2. NADCA Standards must be followed with no modifications or deviations being allowed.

1.03 Documents

(A) Mechanical Drawings: WCPARC shall provide the HVAC system cleaning contractor with one copy of the following documents:

1. Project drawings and specifications.
2. Approved construction revisions pertaining to the HVAC system.
3. Any existing indoor air quality (IAQ) assessments or environmental reports prepared for the facility.

Part 2 -- HVAC System Cleaning Specifications and Requirements

2.01 Scope of Work

(A) Scope: This section defines the minimum requirements necessary to render HVAC components clean, and to verify the cleanliness through inspection and/or testing in accordance with items specified herein and applicable NADCA Standards.

The Contractor shall be responsible for the removal of visible surface contaminants and deposits from within the HVAC system in strict accordance with these specifications.

The HVAC system includes any interior surface of the facility's air distribution system for conditioned spaces and/or occupied zones. This includes the entire heating, air-conditioning and ventilation system from the points where the air enters the system to the points where the air is discharged from the system. The return air grilles, return air ducts to the air handling unit (AHU), the interior surfaces of the AHU, mixing box, coil compartment, condensate drain pans, humidifiers and dehumidifiers, supply air ducts, fans, fan housing, fan blades, air wash systems, spray eliminators, turning vanes, filters, filter housings, reheat coils, and supply diffusers are all considered part of the HVAC system. The HVAC system may also include other components such as dedicated exhaust and ventilation components and make-up air systems.

(B) Schedules: The contractor shall provide WCPARC an agreed upon project schedule prior to commencement of work. All work will be conducted while building is un-occupied.

1. Hours of Operation:

Monday- Friday	6:00 am – 10:00 pm
Saturday	8:00 am – 6:00 pm
Sunday	12:00 pm – 10:00 pm

2. Annual Shutdown

August 22, 2011 – September 5, 2011

2.02 HVAC System Component Inspections and Site Preparations

(A) HVAC System Component Inspections: Prior to the commencement of any cleaning work, the HVAC system cleaning contractor shall perform a visual inspection of the HVAC system to determine appropriate methods, tools, and equipment required to satisfactorily complete this project. The cleanliness inspection should include air handling units and representative areas of the HVAC system components and ductwork. In HVAC systems that include multiple air handling units, a representative sample of the units should be inspected.

The cleanliness inspection shall be conducted without negatively impacting the indoor environment through excessive disruption of settled dust, microbial amplification or other debris. In cases where contamination is suspected, and/or in sensitive environments where even small amounts of contaminant may be of concern, environmental engineering control measures should be implemented

1. Damaged system components found during the inspection shall be documented and brought to the attention of the WCPARC.

(B) Site Evaluation and Preparations: Contractor shall conduct a site evaluation, and establish a specific, coordinated plan which details how each area of the building will be protected during the various phases of the project.

(C) Inspector Qualifications: Qualified personnel should perform the HVAC cleanliness inspection to determine the need for cleaning. At minimum, such personnel should have an understanding of HVAC system design, and experience in utilizing accepted indoor environmental sampling practices, current industry HVAC cleaning procedures, and applicable industry standards.

2.03 General HVAC System Cleaning Requirements

(A) Containment: Debris removed during cleaning shall be collected and precautions must be taken to ensure that Debris is not otherwise dispersed outside the HVAC system during the cleaning process.

(B) Particulate Collection: Where the Particulate Collection Equipment is exhausting inside the building, HEPA filtration with 99.97% collection efficiency for 0.3-micron size (or greater) particles shall be used. When the Particulate Collection Equipment is exhausting outside the building, Mechanical Cleaning operations shall be undertaken only with Particulate

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Collection Equipment in place, including adequate filtration to contain Debris removed from the HVAC system. When the Particulate Collection Equipment is exhausting outside the building, precautions shall be taken to locate the equipment down wind and away from all air intakes and other points of entry into the building.

(C) Controlling Odors: Measures shall be employed to control odors and/or mist vapors during the cleaning process.

(D) Component Cleaning: Cleaning methods shall be employed such that all HVAC system components must be Visibly Clean as defined in applicable standards (see NADCA Standards). Upon completion, all components must be returned to those settings recorded just prior to cleaning operations.

(E) Air-Volume Control Devices: Dampers and any air-directional mechanical devices inside the HVAC system must have their position marked prior to cleaning and, upon completion, must be restored to their marked position.

(F) Service Openings: The contractor shall utilize service openings, as required for proper cleaning, at various points of the HVAC system for physical and mechanical entry, and inspection.

1. Contractor shall utilize the existing service openings already installed in the HVAC system where possible.
2. Other openings shall be created where needed and they must be created so they can be sealed in accordance with industry codes and standards.
3. Closures must not significantly hinder, restrict, or alter the airflow within the system.
4. Closures must be properly insulated to prevent heat loss/gain or condensation on surfaces within the system.
5. Openings must not compromise the structural integrity of the system.
6. Construction techniques used in the creation of openings should conform to requirements of applicable building and fire codes, and applicable NFPA, SMACNA and NADCA Standards.
7. Cutting service openings into flexible duct is not permitted. Flexible duct shall be disconnected at the ends as needed for proper cleaning and inspection.

8. Rigid fiber glass duct systems shall be resealed in accordance with NAIMA recommended practices. Only closure techniques that comply with UL Standard 181 or UL Standard 181a are suitable for fiber glass duct system closures.

9. All service openings capable of being re-opened for future inspection or remediation shall be clearly marked and shall have their location reported to WCPARC in project report documents.

(G) Ceiling sections (tile): The contractor may remove and reinstall ceiling sections to gain access to HVAC systems during the cleaning process.

(H) Air distribution devices (registers, grilles & diffusers): The contractor shall clean all air distribution devices.

(I) Air handling units, terminal units (VAV, Dual duct boxes, etc.), blowers and exhaust fans: The contractor shall insure that supply, return, and exhaust fans and blowers are thoroughly cleaned. Areas to be cleaned include blowers, fan housings, plenums (except ceiling supply and return plenums), scrolls, blades, or vanes, shafts, baffles, dampers and drive assemblies. All visible surface contamination deposits shall be removed in accordance with NADCA Standards. Contractor shall:

1. Clean all air handling units (AHU) internal surfaces, components and condensate collectors and drains.
2. Assure that a suitable operative drainage system is in place prior to beginning wash down procedures.
3. Clean all coils and related components, including evaporator fins.

(J) Duct Systems. Contractor shall:

1. Create service openings in the system as necessary in order to accommodate cleaning of otherwise inaccessible areas.
2. Mechanically clean all duct systems to remove all visible contaminants, such that the systems are capable of passing Cleaning Verification Tests (see NADCA Standards).

2.04 Health and Safety

(A) Safety Standards: Cleaning contractors shall comply with applicable federal, state, and local requirements for protecting the safety of the contractor's employees, building occupants, and the environment. In particular, all applicable standards of the Occupational Safety and Health

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Administration (OSHA) and Michigan Occupational Safety and Health Administration (MIOSHA) shall be followed when working in accordance with this specification.

(B) Occupant Safety: No processes or materials shall be employed in such a manner that they will introduce additional hazards into occupied spaces.

(C) Disposal of Debris: All Debris removed from the HVAC System shall be disposed of in accordance with applicable federal, state and local requirements.

2.05 Mechanical Cleaning Methodology

(A) Source Removal Cleaning Methods: The HVAC system shall be cleaned using Source Removal mechanical cleaning methods designed to extract contaminants from within the HVAC system and safely remove contaminants from the facility. It is the contractor's responsibility to select Source Removal methods that will render the HVAC system Visibly Clean and capable of passing cleaning verification methods (See applicable NADCA Standards) and other specified tests, in accordance with all general requirements. No cleaning method, or combination of methods, shall be used which could potentially damage components of the HVAC system or negatively alter the integrity of the system.

1. All methods used shall incorporate the use of vacuum collection devices that are operated continuously during cleaning. A vacuum device shall be connected to the downstream end of the section being cleaned through a predetermined opening. The vacuum collection device must be of sufficient power to render all areas being cleaned under negative pressure, such that containment of debris and the protection of the indoor environment are assured.
2. All vacuum devices exhausting air inside the building shall be equipped with HEPA filters (minimum efficiency), including hand-held vacuums and wet-vacuums.
3. All vacuum devices exhausting air outside the facility shall be equipped with Particulate Collection including adequate filtration to contain Debris removed from the HVAC system. Such devices shall exhaust in a manner that will not allow contaminants to re-enter the facility. Release of debris outdoors must not violate any outdoor environmental standards, codes or regulations.
4. All methods require mechanical agitation devices to dislodge debris adhered to interior HVAC system surfaces, such that debris may be safely conveyed to vacuum collection devices. Acceptable methods

will include those, which will not potentially damage the integrity of the ductwork, nor damage porous surface materials such as liners inside the ductwork or system components.

(B) Methods of Cleaning Fibrous Glass Insulated Components

1. Fibrous glass thermal or acoustical insulation elements present in any equipment or ductwork shall be thoroughly cleaned with HEPA vacuuming equipment, while the HVAC system is under constant negative pressure, and not permitted to get wet in accordance with applicable NADCA and NAIMA standards and recommendations.

2. Cleaning methods used shall not cause damage to fibrous glass components and will render the system capable of passing Cleaning Verification Tests (see NADCA Standards).

(C) Damaged Fibrous Glass Material

1. Evidence of damage: If there is any evidence of damage, deterioration, delaminating, friable material, mold or fungus growth, or moisture such that fibrous glass materials cannot be restored by cleaning or resurfacing with an acceptable insulation repair coating, they shall be identified for replacement.

2. Replacement: When requested or specified, Contractor must be capable of remediating exposed damaged insulation in air handlers and/or ductwork requiring replacement.

3. Replacement material: In the event fiber glass materials must be replaced, all materials shall conform to applicable industry codes and standards, including those of UL and SMACNA.

Replacement of damaged insulation is not covered by this specification.

(D) Cleaning of coils

1. Any cleaning method may be used which will render the Coil Visibly Clean and capable of passing Coil Cleaning Verification (see applicable NADCA Standards). Coil drain pans shall be subject to Non-Porous Surfaces Cleaning Verification. The drain for the condensate drain pan shall be operational. Cleaning methods shall not cause any appreciable damage to, displacement of, inhibit heat transfer, or erosion of the coil surface or fins, and shall conform to coil manufacturer recommendations when available. Coils shall be thoroughly rinsed with clean water to remove any latent residues.

(E) Antimicrobial Agents and Coatings

1. Antimicrobial agents shall only be applied if active fungal growth is reasonably suspected, or where unacceptable levels of fungal contamination have been verified through testing.
2. Application of any antimicrobial agents used to control the growth of fungal or bacteriological contaminants shall be performed after the removal of surface deposits and debris.
3. When used, antimicrobial treatments and coatings shall be applied in strict accordance with the manufacturer's written recommendations and EPA registration listing.
4. Antimicrobial coatings shall be applied according to the manufacturer's written instructions. Coatings shall be sprayed directly onto interior ductwork surfaces, rather than "fogged" downstream onto surfaces.

2.06 Cleanliness Verification

(A) General: Verification of HVAC System cleanliness will be determined after mechanical cleaning and before the application of any treatment or introduction of any treatment-related substance to the HVAC system, including biocidal agents and coatings.

(B) Visual Inspection: The HVAC system shall be inspected visually to ensure that no visible contaminants are present.

1. If no contaminants are evident through visual inspection, the HVAC system shall be considered clean; however, WCPARC reserves the right to further verify system cleanliness through Surface Comparison Testing or the NADCA vacuum test specified in the NADCA standards.
2. If visible contaminants are evident through visual inspection, those portions of the system where contaminants are visible shall be re-cleaned and subjected to re-inspection for cleanliness.
3. NADCA vacuum test analysis should be performed by a qualified third party experienced in testing of this nature.

(C) Verification of Coil Cleaning

1. Cleaning must restore the coil pressure drop to within 10 percent of the pressure drop measured when the coil was first installed. If the original pressure drop is not known, the coil will be considered clean only if the coil is free of foreign matter and chemical residue, based on a thorough visual inspection (see NADCA Standards).

2.07 Pre-existing System Damage

- (A) Contractor is not responsible for problems resulting from prior inappropriate or careless cleaning techniques of others.

2.08 Post-project Report

- (A) At the conclusion of the project, the Contractor shall provide a report to WCPARC indicating the following:

1. Success of the cleaning project, as verified through visual inspection and/or gravimetric analysis.
2. Areas of the system found to be damaged and/or in need of repair.

2.09 Applicable Standards and Publications: The following current standards and publications of the issues currently in effect form a part of this specification to the extent indicated by any reference thereto:

- (A) National Air Duct Cleaners Association (NADCA): "Assessment, Cleaning & Restoration of HVAC Systems (ACR 2005)," 2004.
- (B) National Air Duct Cleaners Association (NADCA): "Understanding Microbial Contamination in HVAC Systems," 1996.
- (C) National Air Duct Cleaners Association (NADCA): "Introduction to HVAC System Cleaning Services," 2004.
- (D) National Air Duct Cleaners Association (NADCA): Standard 05 "Requirements for the Installation of Service Openings in HVAC Systems," 2004.
- (E) Underwriters' Laboratories (UL): UL Standard 181.
- (F) American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE): Standard 62-89, "Ventilation for Acceptable Indoor Air Quality".

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(G) Environmental Protection Agency (EPA): "Building Air Quality," December 1991.

(H) Sheet Metal and Air Conditioning Contractors' National Association (SMACNA): "HVAC Duct Construction Standards - Metal and Flexible," 1985.

(I) North American Insulation Manufacturers Association (NAIMA):
"Cleaning Fibrous Glass Insulated Air Duct Sys

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VI. SIGNATURE PAGE

The undersigned agrees to enter into an agreement with WCPARC to provide and furnish all labor, materials, necessary tools, fees, permits and equipment including transportation to complete the services required to clean the HVAC and Duct work system located at the Meri Lou Murray Recreation Center.

TOTAL BID PRICE \$ _____

ABOVE AMOUNT IN WORDS _____
dollars

Signature Date

Company Name

Print Name

Company Address

Title

City St. Zip

Telephone # Fax #

Purchase Order Email Address

Federal Tax ID #

By checking this box we hereby certify that we are a Washtenaw County company as defined in Section I., H. above. If proven otherwise you may be subject to Disbarment and/or Suspension of doing business with Washtenaw County.

The above individual is authorized to sign on behalf of the company submitting proposal. This bid is valid for 60 days from the date of the above signature. Include this signed sheet in your proposal.