

**Owner's Manual  
For  
Ohio Onsite Wastewater  
Systems**

*Drip Irrigation  
Wastewater Treatment and Disposal  
System*

*An authorized/licensed service  
provider of  
CDK Structures, Inc.,*

*Ohio Onsite Wastewater Systems, Inc.  
Delaware. Ohio  
www.ohionsite.com*

Dear Home owner:

Congratulations on the purchase of a residential onsite wastewater treatment system using drip irrigation (System). Enclosed you will find an owner's manual and a copy of our standard maintenance schedule. The owner's manual is designed to communicate a complete understanding of the System, its operation, maintenance, and functions. Even though the System is maintained by a service provider, Ohio Onsite recommends you review and become familiar with this manual. If you have any further questions with regards to this manual, please contact Ohio Onsite Wastewater Systems, Inc. at 740-972-8646 or [service@ohioonsite.com](mailto:service@ohioonsite.com).

We would like to remind you that residential onsite waste water treatment and disposal systems using drip irrigation are required to maintain a maintenance contract with an authorized service provider for the life of the System. This is true for all new installations with alternative wastewater treatment equipment. You must also provide the Local Health Department or ODH, whoever has jurisdiction, with the following:

1. Name, address, and telephone number of the company contracted to perform the maintenance;
2. A copy of the maintenance contract;
3. Scheduled inspection and maintenance as required in the Owner's Manual; and
4. Receipts for all scheduled inspection and maintenance within two months of the date required for inspection and maintenance.

The standard inspection agreement basically covers a twice annual inspection of the System and routine maintenance. Repairs or replacement of defective parts and pumping of the septic tank will be an additional cost. Please refer to the enclosed agreement for a complete description of services.

Once again, we would like to thank you for purchasing the onsite wastewater treatment system.

Very truly yours,  
***Ohio Onsite Wastewater Systems, Inc.***

# TABLE OF CONTENTS

<b>1.0 Information Summary</b> .....	<b>3</b>
<b>2.0 System Description</b> .....	<b>5</b>
<b>3.0 Operation and Maintenance</b> .....	<b>8</b>
3.1 System Do's and Don'ts.....	8
3.2 "Trouble Shooting" Possible Operational Problems .....	9
3.3 Answers to Common Questions about the System.....	10
<b>4.0 Maintenance Agreement</b> .....	<b>11</b>
4.1 Scheduled Inspection and Maintenance .....	11
4.2 Contact Information .....	12
4.3 Standard Service Agreement.....	13

## Appendix

Pretreatment Unit Operation, Maintenance, and Warranty Information

Geoflow Incorporated Operation, Maintenance, and Warranty Information

## 1.0 Information Summary

**Pretreatment Unit Manufacturer:** Jet Inc.      Quanics, Inc.  
(circle one)

**Model Name:** Jet 1500 Series Bat Media Plant **or**  
Quanics SCAT Unit  
(circle one)

**Model Number:** \_\_\_\_\_  
*(To be provided by OOWS prior to delivery to homeowner)*

**Service Provider:** Ohio Onsite Wastewater Systems, Inc  
740-369-8613

**Design Flow:** \_\_\_\_\_  
*(To be provided by OOWS prior to delivery to homeowner)*

**Organic Loading:** \_\_\_\_\_  
*(To be provided by OOWS prior to delivery to homeowner)*

**Voltage:** \_\_\_\_\_  
*(To be provided by OOWS prior to delivery to homeowner)*

**Amperage:** \_\_\_\_\_  
*(To be provided by OOWS prior to delivery to homeowner)*

### LIMITED WARRANTY POLICY

Ohio Onsite Wastewater Systems, Inc. warrants to the Owner that the System will be free from defects in material and workmanship under normal use for a period of one(1) year after installation; provided that such warranty shall only apply if (i) the Unit was properly installed by an authorized installer, (ii) the Unit is serviced during that period by an authorized Ohio Onsite service provider, and (iii) the wastewater influent flows and loadings are within the design limitations of the Unit as

determined by Ohio Onsite. All warranty claims must be submitted in writing by the Owner to Ohio Onsite within the warranty period and within ten (10) days of discovery of any defect, or the claim may be waived. The obligation of Ohio Onsite is limited to the repair or replacement of any part that Ohio Onsite determines is defective in material or workmanship under normal use. During the said warranty period, Ohio Onsite shall bear the cost of repair or replacement of said part, including shipping and installation. This warranty applies only to the initial Owner of the Unit and covers only the System, and does not apply to other items included as part of the wastewater system or to failures or defects of the System due to neglect, accident, erroneous soil conditions, improper installation or operation (including but not limited to overload or operation under abnormal conditions), or modification not authorized in writing by Ohio Onsite (including but not limited to use of unauthorized parts or attachments). The exclusive remedy of the customer under this warranty or otherwise in connection with the System is the repair or replacement of defective parts in accordance with this paragraph. Ohio Onsite shall not be liable for any direct, indirect, or consequential or incidental damages in connection with the System or this warranty. **EXCEPT AS PROVIDED ABOVE, Ohio Onsite Wastewater Systems, Inc. DISCLAIMS ANY AND ALL EXPRESS AND IMPLIED WARRANTIES IN ANY WAY RELATING TO THE SYSTEM, WHETHER BASED ON BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which may vary from state to state.

**PLEASE NOTE THAT THIS MANUAL CONTAINS NO REPRESENTATIONS AND WARRANTIES OF OHIO ONSITE OTHER THAN NOTED ABOVE. YOU SHOULD REFER TO THE APPLICABLE AGREEMENT WITH OHIO ONSITE AS TO YOUR OBLIGATIONS IN CONNECTION WITH THE SYSTEM. YOU MUST USE AND MAINTAIN THE SYSTEM IN ACCORDANCE WITH THIS MANUAL AND ANY AGREEMENT WITH OHIO ONSITE. IF YOU HAVE ANY QUESTIONS ABOUT THE SYSTEM AFTER CONSULTING WITH THIS MANUAL, YOU SHOULD CONTACT OHIO ONSITE IMMEDIATELY. OHIO ONSITE RESERVES THE RIGHT TO CHANGE ANY PORTION OF THIS MANUAL BY PROVIDING AN UPDATE TO YOU.**

## 2.0 Ohio Onsite Wastewater Systems Process Description

The System is a modular, pre-packaged, pre-engineered set of components for residential users. Depending on the components chosen, the System is designed to treat wastewater at an average flow rate of 200 to 1,000 gallons per day. Please note that disposal of the wastewater through drip irrigation is specifically designed for the soils present on your lot and the number of in bedrooms your house.

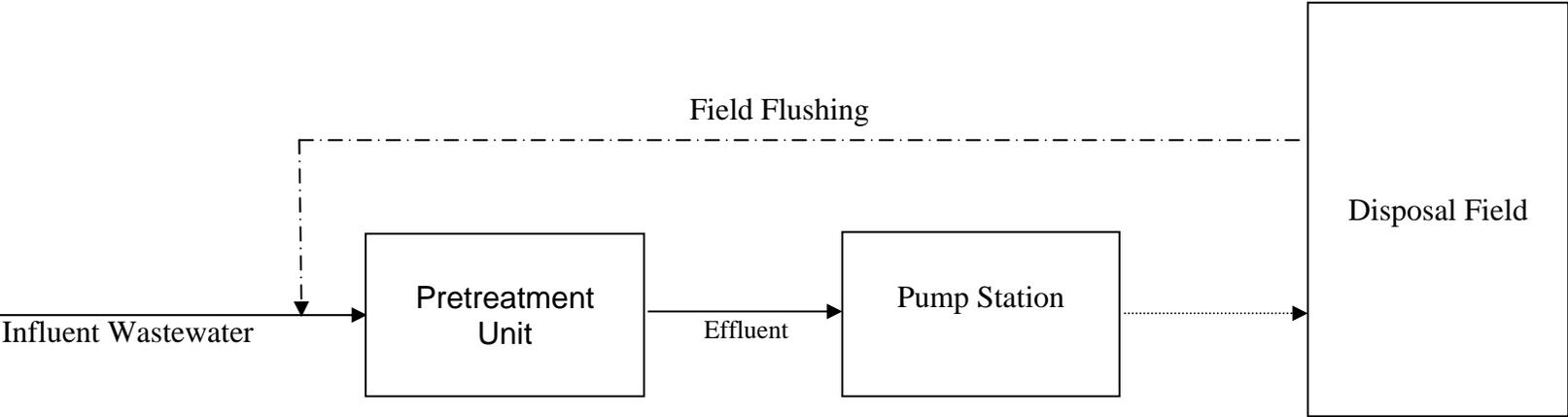
The System includes a pretreatment unit, (To be provided by OOWS prior to delivery to homeowner), a pump station, and a digital microprocessor control and monitoring system, and of course the drip field where the wastewater is dispersed. Treated wastewater effluent from the pretreatment unit enters the pump station where it is pumped out to the drip irrigation field for final disposal.

The digital microprocessor control system controls and monitors the pump and the water levels in the pump station. The System disperses the effluent from the pretreatment unit into the drip field via the pump station. The dosing of the effluent is programmed to be performed every two hours under normal usage. In the event of higher than normal water usage, the system will dose the effluent every hour until normal water usage returns. It should be noted by the homeowner that prolonged higher than normal water usage can and may cause an overloading of the drip field. If water rises in the pump station faster than it is programmed to be dosed to the drip field, the controller is designed with level control overrides to start a pump if high levels are encountered. The controller is also designed to provide an alarm if water levels in the basin becomes too high. Both an audible and visual alarm is provided to warn the homeowner of an alarm condition. Alarm conditions may occur if greater than designed water usage occurs, power outages prevent the pump from operating, and or,

there is a mechanical failure in the operating system. **IF an alarm event occurs, depress the alarm on the outside of the control panel to silence the alarm and call your authorized service provider. Until service is provided to analyze the alarm condition, the home owner should take care to minimize their use of water.**

Typically, once per 24 hour cycle, the system will flush the supply, drip and return lines to minimize the build up of scum in the system. The flushed water is returned to the pretreatment unit for treatment. Flushing of the system is also operated automatically by the controller.

Schematic of the Ohio Onsite System



LEGEND	
—————	Influent Flow
.....	Effluent Flow

### **3.0 Operation and Maintenance**

Operation and maintenance of the System shall be performed by an Ohio Onsite Wastewater Systems, Inc. authorized service provider. There is no owner maintenance required with this system. If you notice any unusual situation (odors, noises, etc) concerning the System, please contact the service provider, immediately.

#### **3.1 System Do's and Don'ts**

Part of our maintenance program is to let the System owner know the basic do's and don'ts of the System. Below is a list of do's and don'ts.

- Do not put grease, fats, and oils into the System.
- Do not run pesticides, herbicides, paints, household chemicals, automotive fluids, or other toxins down the drain.
- Do not discard mop water into the System.
- Do not flush items such as cigarette butts, disposable diapers, feminine hygiene products, hair, coffee grounds, rags, paper towels, bandages, or condoms that could clog the System.
- Do spread out wash loads over the week.
- Do not dispose of citrus products (e.g. oranges, lemons, grapefruit).
- Do not use additives for septic systems – they do more harm than good.
- Do not connect other water sources to the System.
- Do not dispose of home brewery waste, strong medicines, or antibiotics.
- Do avoid using anti-bacterial soaps, strong disinfectants, or bleaches.
- Do not route discharge from water softeners into the System.
- Do use cleaning products that are chlorine-free, biodegradable, non-toxic, and non-corrosive.
- Do use detergents that are low sudsing, low in phosphates, and biodegradable.
- Do use fabric softener dryer sheets rather than liquids.
- Do conserve water use to ensure that the wastewater flow and loading to the System is not greater than what it is designed for.
- Do mow the disposal field and protect it from development, heavy equipment, and excavation.

### 3.2 “Trouble Shooting” Possible Operational Problems

Problem	Possible Causes	Remedy
Sewage backs up into building and/or plumbing fixtures do not drain or are sluggish	<ol style="list-style-type: none"> <li>1. Improper plumbing</li> <li>2. Blockage in plumbing</li> <li>3. Power failure</li> <li>4. Pump failure</li> <li>5. Clogged pump station vault filter</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair plumbing or disconnect improper connections</li> <li>2. Rod/flush piping</li> <li>3. Restore power or contact service provider</li> <li>4. Contact service provider</li> <li>5. Contact service provider</li> </ol>
Sewage odors - outdoors	<ol style="list-style-type: none"> <li>1. Source other than owner’s system</li> <li>2. Tanks covers leaking</li> <li>3. Cleanouts or manhole covers damaged or removed</li> <li>4. Broken sewer line</li> <li>5. Overloaded treatment system/improper discharge</li> </ol>	<ol style="list-style-type: none"> <li>1. Report to Health Department</li> <li>2. Contact service provider</li> <li>3. Contact service provider</li> <li>4. Contact service provider</li> <li>5. Reduce loading to design conditions/prohibit improper discharge</li> </ol>
Sewage odors - indoors	<ol style="list-style-type: none"> <li>1. Improper plumbing/dry trap</li> <li>2. Sewage backup in house</li> <li>3. Roof vent pipe blocked</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair plumbing/fill traps</li> <li>2. See remedies listed above</li> <li>3. Open vent pipe</li> </ol>
Controller alarm <ul style="list-style-type: none"> <li>• Pump Station high level alarm</li> </ul>	<ol style="list-style-type: none"> <li>1. Treatment unit needs to be serviced</li> <li>2. System hydraulically overloaded</li> <li>3. Pump failure</li> <li>4. Circuit breaker tripped</li> <li>5. Pump plugged</li> <li>6. Controls malfunctioning</li> </ol>	Contact service provider

### 3.3 Answers to Common Questions about your onsite wastewater treatment system

- Do I have to turn the System off when I go on vacation or close?

*No, the System is not dependent on low water usage*

- What will happen during a power outage?

*Like any electrical unit, the System will not function during a power outage. However, the Pump Station basin will continue to store and receive treatment unit tank effluent (similar to septic tank effluent, when electricity is not supplied to the pretreatment unit). Water usage must be limited during power outages.*

- How clean is the water coming out of the Pretreatment Unit and into the drip field?

*Testing shows that the effluent has, on average, a Biochemical Oxygen Demand (BOD<sub>5</sub>) of < 30 mg/L and Total Suspended Solids (TSS) of <30 mg/L. Please be aware that the treated wastewater does contain harmful pathogens even after treatment. One should take care to not ingest any liquids from the system. Always wash your hands after working around the System.*

- Can the System treat all types of wastewater?

*The System is designed to treat wastewater generated from regular domestic activities such as toilets, food preparation, showering, laundry, etc. Do not dispose acids, bases, or other chemicals into the system or anything other substance which may affect the biological treatment performance of the unit.*

- Will the water in System freeze during the winter?

*Since the water in the treatment unit and pump station is stored well below ground level, the water should stay warm enough to prevent freezing during the winter. The system is designed to allow the supply and return piping to drain back to the pump station and or the pretreatment unit after the pump is shut off. The drip tubing also drains by gravity after the pump has been turned off.*

## **4.0 Maintenance Agreement**

By State Statute, ODH requires that a maintenance agreement be maintained between the owner and a certified service provider. Ohio Onsite Wastewater Systems, Inc. offers operation and maintenance agreements for the System and will operate, maintain and service the System and perform reporting required by the Local Board of Health. A copy of a standard service agreement is included with this manual.

### **4.1 Scheduled Inspection and Maintenance**

In accordance with its standard inspection or service agreement, OOWS will perform the following scheduled operation and maintenance every six months after start-up:

1. Measure and record scum and sludge levels in the Pretreatment Unit and Pump Station. Pump, or notify the owner to pump septic tank as required.
2. Check and clean the Pump Station influent filter as required.
3. Inspect the System and check pump and alarms for proper operation.
4. Inspect and service soil absorption system per manufacturer's recommendations.
5. Provide an inspection report to the LHD.
6. Provide an annual inspection and service report to owner.

## 4.2 Contact Information

Ohio Onsite Wastewater System, Inc  
Delaware, Ohio 43015  
740-369-8613

[Service@Ohioonsite.com](mailto:Service@Ohioonsite.com)

LHD:

## 4.3 Standard Service Agreement

### SERVICE AGREEMENT

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, between Ohio Onsite Wastewater Systems (OOWS) Inc., (service provider) and home owner.

The scheduled daily and annual services to be provided, the fees, and certain other information pertaining to this Agreement are as follows:

Tanks, Units and Field: The Services will be for the scheduled maintenance of the pretreatment unit ("Tank"), Pump Station ("Unit"), and soil absorption field ("Field") located on the Property.

Services: Scheduled daily service shall be on call in the event of alarm conditions. A service provider will be on site within 24 hours of the notification of the alarm event. The scheduled services to be provided by OOWS (the "Services") shall include the following:

1. Annually measure the sludge and scum levels in each Tank to determine whether the Tank(s) should be pumped. Notify Owner to pump the Tank when required. Owner will pay septic contractor to pump Tank.
2. Semi-annually inspect the Tank.
3. Semi-annually inspect and clean the treated effluent filter in the Unit.
4. Semi-annually inspect each Unit and check pumps and controller for proper operation.
5. Semi-annually inspect the Field and flush applicable piping.
6. Prepare and deliver to Owner a report (after each scheduled service visit) summarizing the scheduled services performed.

Term: The term of this Agreement (the "Term") shall be one calendar year beginning \_\_\_\_\_ and ending \_\_\_\_\_. Either party may terminate this Agreement upon written notice to the other party delivered at least sixty (60) days prior to the effective date of said termination.

Fee: The fee for the Services during the Term shall be four hundred fifty dollars (\$450.00), payable in advance upon execution of this Agreement.

*Unscheduled Services: OOWS shall provide additional services and materials upon notification of any condition, which in the opinion of OOWS significantly affects the proper operation of the Tank, Unit or Field. OOWS may be notified of such a condition by the Owner, or by personnel from any appropriate regulatory agency. Information about the current charges for such services are included in the "Terms and Conditions" attached herein.*

*The undersigned Owner acknowledges and agrees that the information above is correct and complete, and agrees that Owner will pay all charges under the Agreement when due. The undersigned has read and understands the Terms and Conditions of this Agreement, and agrees that such Terms and Conditions, including but not limited to the limitations of OOWS's liability, disclaimer of warranties and limitation of remedies, are an integral part of this Agreement.*

*Ohio Onsite Wastewater Systems, Inc*

*OWNER*

\_\_\_\_\_  
*Dale Davis - Partner*

\_\_\_\_\_  
*(Signature)*

\_\_\_\_\_  
*(Printed Name)*

## TERMS AND CONDITIONS

1. **CONFIRMATION.** Owner and OOWS agree that the Services are intended to fulfill the Owner's responsibility to inspect, maintain and operate the Tanks, Units and Field in accordance with ODH & LHD requirements, all of which the parties acknowledge may change from time to time and may require the modification of the Services provided pursuant to this Agreement.

2. **OWNER OBLIGATIONS; UNSCHEDULED SERVICES.** Owner shall promptly notify OOWS or of any known defects, problems, or complaints concerning the Tanks, Units, Field or any associated equipment or facilities on the Property. Furthermore, if any circumstances, problems, or defects pose a hazard to the public health, threaten or could damage the public health or property, or compromise the integrity and operation of the wastewater disposal system in any material fashion as determined by OOWS ("Unscheduled Services"), OOWS shall be entitled to perform such repair services (including installing replacement parts and other materials) as is reasonably determined by OOWS, and Owner shall be responsible for paying OOWS the applicable charges for such services and materials as then charged by OOWS. Furthermore, and notwithstanding anything herein to the contrary, OOWS shall have no liability or obligation whatsoever in connection with any damage resulting from electrical outage, storms, flooding, lightning, earthquakes, or any act of God, and Owner will be responsible for all costs incurred in connection with correcting any such damage.

3. **UNSCHEDULED SERVICES; CHARGES.** The current rates and related charges for Unscheduled Services are:

	Monday Friday, <u>Holidays</u>	-	Saturdays, Sundays, <u>and Holidays</u>
Service Technician	\$60/hour		\$90/hour
Travel Time	\$30/hour		\$45/hour

Note: Billing times are based on 15 minute increments.

Parts, equipment and other items required in connection with the services shall be billed at the cost to OOWS plus twenty percent (20%). OOWS may also contract with other individuals to perform unscheduled services on behalf of the Owner. Such services shall be billed to Owner at the cost to OOWS plus twenty percent (20%). OOWS may change any of these

charges upon written notice to Owner, provided that any such increase may not occur more than once every six (6) months.

4. **RIGHT OF ENTRY.** The Owner shall provide for OOWS the right to enter the Owner's Property to fulfill the services included hereunder.

5. **TERMS OF PAYMENT.** Owner shall pay OOWS within ten (10) days from date of each invoice, and without any setoff or deduction, the total amount stated on the invoice. In addition, Owner is responsible for the ultimate payment of all taxes, including without limitation sales and use taxes, which may be assessed or levied on or on account of the services and any materials provided. Any amount unpaid after thirty (30) days from the date of the invoice shall accrue interest at a rate of three per cent (3%) per month or the maximum rate permitted by law. Owner shall pay all attorneys' fees and expenses, court costs, and all other costs incurred by OOWS or authorized service provider in collecting any overdue amounts, including interest. Furthermore, OOWS or may terminate the Term and this Agreement without notice and shall have no further obligation hereunder if any amount remains unpaid after sixty (60) days from the date of the invoice.

6. **SYSTEM WARRANTY.** OOWS warrants to the Owner that the System will be free from defects in material and workmanship under normal use for a period of one (1) years after installation; provided that such warranty shall only apply if (i) the Unit was properly installed by an authorized OOWS installer, (ii) the Unit is serviced during that period by an authorized OOWS service provider, and (iii) the wastewater influent flows and loadings are within the design limitations of the Unit as determined by OOWS. All warranty claims must be submitted in writing by the Owner to OOWS within the warranty period and within ten (10) days of discovery of any defect, or the claim may be waived. The obligation of OOWS is limited to the repair or replacement of any part that OOWS determines is defective in material or workmanship under normal use. During the said warranty period, OOWS shall bear the cost of repair or replacement of said part, including shipping and installation. This warranty applies only to the initial Owner of the Unit and covers only the System and does not include failures or defects of the System due to neglect, accident, improper installation or operation (including but not limited to overload or operation under abnormal conditions), or modification not authorized in writing by OOWS (including but not limited to use of unauthorized parts or attachments). The exclusive remedy of the customer under this warranty or otherwise in connection with the Unit is the repair or replacement of defective parts in accordance with this paragraph. OOWS shall not be liable for any direct, indirect, or consequential or incidental damages in connection with the Unit or this warranty. **EXCEPT AS PROVIDED ABOVE, OOWS DISCLAIMS ANY AND ALL EXPRESS AND IMPLIED WARRANTIES IN ANY WAY RELATING TO THE SYSTEM, WHETHER BASED ON BREACH OF**

**WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

7. **OOWS LIABILITY.** OOWS's liability (and the exclusive remedy of Owner) under this Agreement for any alleged defect or failure of any Unit (whether resulting from defects, failures or errors in design, materials or workmanship, or otherwise) is limited to return of the net amount paid for such service or material. No claim of any kind shall exceed the net amount paid for the service or material for which such damages are claimed. In no event shall OOWS be liable for lost profits or incidental or consequential damages. OOWS neither assumes nor authorizes any person to assume for OOWS any other liability in connection herewith.

8. **NON-WAIVER.** OOWS's failure to exercise any right or take any action permitted hereunder, or to insist upon strict performance of any provision hereof, shall not be deemed a waiver thereof or of other rights, remedies, breaches or subsequent defaults by Owner in the performance of or compliance with any of the terms contained herein.

9. **DELAY IN PERFORMANCE.** OOWS shall not be liable for delay in performance or non-performance caused by circumstances beyond the control of OOWS, including without limitation storm, flood, act of God, fire, war, riot, government action, labor strike or lockout or other labor trouble or shortage, or inability to obtain materials, equipment or transportation.

10. **ASSIGNMENT.** This Agreement and any of the rights and obligations hereunder may not be assigned, delegated, or otherwise assigned by Owner to any party without the prior written consent of OOWS. This Agreement and the rights and obligations hereunder may be assigned by OOWS without the consent of Owner.

11. **SEVERABILITY.** If any term or provision of this Agreement shall be deemed to be invalid or unenforceable, such a determination shall not affect any of the remaining terms and provisions, and all such remaining terms and provisions shall remain in full force and effect.

12. **GOVERNING LAW.** This Agreement shall be construed and interpreted according to the laws of the State of Ohio, without regard to the conflicts of law rules thereof.

13. **DISPUTE RESOLUTION.** The parties agree that any disputes or questions arising hereunder, including the construction or application of this Agreement shall be submitted to mediation between OOWS and Owner. Any mediation settlement by the parties shall be documented in writing. If such mediation settlement modifies the language of this Agreement, the modification shall be set to writing, signed by both parties and added to this Agreement as an attachment. If the mediation between the parties does not result in a mutual settlement within one year after submission to mediation, then each party will have the right to

enforce the obligations of this Agreement in a court of law with all reasonable attorney fees, court costs and expenses incurred by the prevailing party in such litigation to be paid by the other party as allowed by applicable law.

14. **NATURE OF RELATIONSHIP BETWEEN PARTIES.** Nothing herein shall be construed to make either party the agent or legal representative of the other for any purpose whatsoever. The parties further agree that no representations shall be made by the parties that would create an apparent agency, employment, partnership or joint venture. Neither party shall have the power, express or implied, to obligated or bind the other in any manner whatsoever, except to the extent provided herein. Neither party shall be responsible for any act or omission of the other or any officer, employee, agent and the like of the other.

15. **MODIFICATIONS.** The terms of this Agreement may be modified only by subsequent written agreement of the parties.