



August 30, 2018

Mr. Travis McGarvey, P.E., P.S.
Paulding County Engineer's Office
801 West Wayne Street
Paulding, Ohio 45879

Re: Water Improvement Project
OPWC Application
Oakwood, Ohio
PDG Opportunity No.: 210000-00023

Dear Mr. McGarvey:

Enclosed is one original, three copies and a CD of the above-referenced OPWC application, submitted on behalf of the Village. The Village would like this application to be considered for OPWC funding.

If there are any questions, please do not hesitate to contact this office.

Sincerely,

POGGEMEYER DESIGN GROUP, INC.

Michelle Hister
Project Administration Assistant

Cc: Brian Ripke, Mayor



State of Ohio
Public Works Commission
Application for Financial Assistance

IMPORTANT: Please consult "Instructions for Financial Assistance for Capital Infrastructure Projects" for guidance in completion of this form.

Applicant

Applicant: Village of Oakwood Subdivision Code: 125-57792
 District Number: 5 County: Paulding Date: 07/31/2018
 Contact: Brian Ripke, Mayor Phone: (419) 594-3352
(The individual who will be available during business hours and who can best answer or coordinate the response to questions)
 Email: brmayor@yahoo.com FAX: (419) 594-2322

Project

Project Name: Water Improvement Project Zip Code: 45873

Subdivision Type <small>(Select one)</small>	Project Type <small>(Select single largest component by \$)</small>	Funding Request Summary <small>(Automatically populates from page 2)</small>
<input type="checkbox"/> 1. County	<input type="checkbox"/> 1. Road	Total Project Cost: <u>215,750 .00</u>
<input type="checkbox"/> 2. City	<input type="checkbox"/> 2. Bridge/Culvert	1. Grant: <u>78,913 .00</u>
<input type="checkbox"/> 3. Township	<input checked="" type="checkbox"/> 3. Water Supply	2. Loan: <u>78,912 .00</u>
<input checked="" type="checkbox"/> 4. Village	<input type="checkbox"/> 4. Wastewater	3. Loan Assistance/ Credit Enhancement: <u>0 .00</u>
<input type="checkbox"/> 5. Water (6119 Water District)	<input type="checkbox"/> 5. Solid Waste	Funding Requested: <u>157,825 .00</u>
	<input type="checkbox"/> 6. Stormwater	

District Recommendation (To be completed by the District Committee)

Funding Type Requested <small>(Select one)</small>	SCIP Loan - Rate: _____ % Term: _____ Yrs	Amount: _____ .00
<input type="checkbox"/> State Capital Improvement Program	RLP Loan - Rate: _____ % Term: _____ Yrs	Amount: _____ .00
<input type="checkbox"/> Local Transportation Improvement Program	Grant:	Amount: _____ .00
<input type="checkbox"/> Revolving Loan Program	LTIP:	Amount: _____ .00
<input type="checkbox"/> Small Government Program	Loan Assistance / Credit Enhancement:	Amount: _____ .00
District SG Priority: _____		

For OPWC Use Only

STATUS: _____	Grant Amount: _____ .00	Loan Type: <input type="checkbox"/> SCIP <input type="checkbox"/> RLP
Project Number: _____	Loan Amount: _____ .00	Date Construction End: _____
	Total Funding: _____ .00	Date Maturity: _____
Release Date: _____	Local Participation: _____ %	Rate: _____ %
OPWC Approval: _____	OPWC Participation: _____ %	Term: _____ Yrs

1.0 Project Financial Information (All Costs Rounded to Nearest Dollar)

1.1 Project Estimated Costs

Engineering Services

Preliminary Design:	_____ 10,000 .00		
Final Design:	_____ 5,000 .00		
Construction Administration:	_____ 8,500 .00		
Total Engineering Services:		a.) _____ 23,500 .00	_____ 14 %
Right of Way:		b.) _____ .00	
Construction:		c.) _____ 172,500 .00	
Materials Purchased Directly:		d.) _____ .00	
Permits, Advertising, Legal:		e.) _____ 2,500 .00	
Construction Contingencies:		f.) _____ 17,250 .00	_____ 10 %
Total Estimated Costs:		g.) _____ 215,750 .00	

1.2 Project Financial Resources

Local Resources

Local In-Kind or Force Account:		a.) _____ .00	
Local Revenues:		b.) _____ 23,500 .00	
Other Public Revenues:		c.) _____ .00	
ODOT / FHWA PID:	_____	d.) _____ .00	
USDA Rural Development:		e.) _____ .00	
OEPA / OWDA:		f.) _____ .00	
CDBG:		g.) _____ 34,425 .00	
<input checked="" type="checkbox"/> County Entitlement or Community Dev. "Formula"			
<input type="checkbox"/> Department of Development			
Other:	_____	h.) _____ .00	
Subtotal Local Resources:		i.) _____ 57,925 .00	_____ 27 %

OPWC Funds (Check all requested and enter Amount)

Grant:	_____ 50 % of OPWC Funds	j.) _____ 78,913 .00	
Loan:	_____ 50 % of OPWC Funds	k.) _____ 78,912 .00	
Loan Assistance / Credit Enhancement:		l.) _____ 0 .00	
Subtotal OPWC Funds:		m.) _____ 157,825 .00	_____ 73 %
Total Financial Resources:		n.) _____ 215,750 .00	_____ 100 %

1.3 Availability of Local Funds

Attach a statement signed by the Chief Financial Officer listed in section 5.2 certifying all local resources required for the project will be available on or before the earliest date listed in the Project Schedule section. The OPWC Agreement will not be released until the local resources are certified. Failure to meet local share may result in termination of the project. Applicant needs to provide written confirmation for funds coming from other funding sources.

2.0 Repair / Replacement or New / Expansion

2.1 Total Portion of Project Repair / Replacement:	_____ 215,750 .00	_____ 100 %	A Farmland Preservation letter is required for any impact to farmland
2.2 Total Portion of Project New / Expansion:	_____ 0 .00	_____ 0 %	
2.3 Total Project:	_____ 215,750 .00	_____ 100 %	

3.0 Project Schedule

3.1 Engineering / Design / Right of Way	Begin Date: <u>08/01/2019</u>	End Date: <u>04/01/2020</u>
3.2 Bid Advertisement and Award	Begin Date: <u>06/15/2020</u>	End Date: <u>07/15/2020</u>
3.3 Construction	Begin Date: <u>08/15/2020</u>	End Date: <u>12/15/2020</u>

Construction cannot begin prior to release of executed Project Agreement and issuance of Notice to Proceed.

Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be requested in writing by project official of record and approved by the Commission once the Project Agreement has been executed.

4.0 Project Information

If the project is multi-jurisdictional, information must be consolidated in this section.

4.1 Useful Life / Cost Estimate / Age of Infrastructure

Project Useful Life: 20 Years Age: 1955 (Year built or year of last major improvement)

Attach Registered Professional Engineer's statement, with seal or stamp and signature confirming the project's useful life indicated above and detailed cost estimate.

4.2 User Information

Road or Bridge: Current ADT _____ Year _____ Projected ADT _____ Year _____

Water / Wastewater: Based on monthly usage of 4,500 gallons per household; attach current ordinances.

Residential Water Rate Current \$ 43.90 Proposed \$ _____

Number of households served: 228

Residential Wastewater Rate Current \$ 43.90 Proposed \$ _____

Number of households served: 228

Stormwater: Number of households served: 0

4.3 Project Description

- A: SPECIFIC LOCATION** (Supply a written location description that includes the project termini; a map does not replace this requirement.) 500 character limit.

The proposed project is located at the Water Treatment Plant at the east end of Harmon Street, 601 East Harmon Street, Oakwood, Ohio.

Filters are located in the treatment plant. The proposed well will be located approximately 600 feet northwest of the treatment plant.

- B: PROJECT COMPONENTS** (Describe the specific work to be completed; the engineer's estimate does not replace this requirement) 1,000 character limit.

Replace the filter media and distribution piping in the filter. The new filter media will remove the radon that is contaminating well #3.

Well #4 will include approximately 250 foot deep well, pumps, pitless adaptors, approximately 300 feet of 6 inch waterline and 700 feet of 12 foot wide x 8 inches deep aggregate drive.

- C: PHYSICAL DIMENSIONS** (Describe the physical dimensions of the existing facility and the proposed facility. Include length, width, quantity and sizes, mgd capacity, etc in detail.) 500 character limit.

4 EA Pressure Filter Improvements
1 EA Well
1 LS Pumps
1 LS Electrical
350 LF Waterline
900 CY Drive (by Village)

5.0 Project Officials

Changes in Project Officials must be submitted in writing from an officer of record.

5.1 Chief Executive Officer (Person authorized in legislation to sign project agreements)

Name: Brian Ripke
Title: Mayor
Address: 228 North First Street
PO Box 457
City: Oakwood State: OH Zip: 45873
Phone: (419) 594-3352
FAX: (419) 594-2322
E-Mail: brmayor@yahoo.com

5.2 Chief Financial Officer (Can not also serve as CEO)

Name: Susan Barron
Title: Fiscal Officer
Address: 228 North First Street
PO Box 457
City: Oakwood State: OH Zip: 45873
Phone: (419) 594-3352
FAX: (419) 594-2322
E-Mail: _____

5.3 Project Manager

Name: John Keyes
Title: Administrator
Address: 228 North First Street
PO Box 457
City: Oakwood State: OH Zip: 45873
Phone: (419) 594-3352
FAX: (419) 594-2322
E-Mail: ovillage@bright.net

6.0 Attachments / Completeness review

Confirm in the boxes below that each item listed is attached (Check each box)

- A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.
- A certification signed by the applicant's chief financial officer stating the amount of all local share funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (RLP or SCIP), a certification signed by the CFO which identifies a specific revenue source for repaying the loan also must be attached. Both certifications can be accomplished in the same letter.
- A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's seal or stamp and signature.
- A cooperative agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.
- Farmland Preservation Review - The Governor's Executive Order 98-IV, "Ohio Farmland Protection Policy" requires the Commission to establish guidelines on how it will take protection of productive agricultural and grazing land into account in its funding decision making process. Please include a Farm Land Preservation statement for projects that have an impact on farmland.
- Capital Improvements Report. CIR Required by O.R.C. Chapter 164.06 on standard form.
- Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements which may be required by your local District Public Works Integrating Committee.

7.0 Applicant Certification

The undersigned certifies: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission as identified in the attached legislation; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement for this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding from the project.

Brian Ripke Mayor

Certifying Representative (Printed form, Type or Print Name and Title)
Brian Ripke 8-14-18

Original Signature / Date Signed

RESOLUTION NO. 17-R-05

"AUTHORIZING LEGISLATION"

A RESOLUTION AUTHORIZING _____ MAYOR _____ TO PREPARE AND SUBMIT AN APPLICATION TO PARTICIPATE IN THE OHIO PUBLIC WORKS COMMISSION STATE CAPITAL IMPROVEMENT AND/OR LOCAL TRANSPORTATION IMPROVEMENT PROGRAM(S) AND TO EXECUTE CONTRACTS AS REQUIRED

WHEREAS, the State Capital Improvement Program and the Local Transportation Improvement Program both provide financial assistance to political subdivisions for capital improvements to public infrastructure, and

WHEREAS, the Village of Oakwood is planning to make capital improvements to 2018 Water Improvements, and

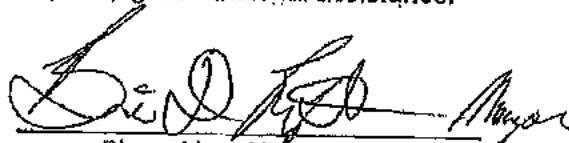
WHEREAS, the infrastructure improvement herein above described is considered to be a priority need for the community and is a qualified project under the OPWC programs,

NOW THEREFORE, BE IT RESOLVED by Village of Oakwood :

Section 1: The Mayor is hereby authorized to apply to the OPWC for funds as described above.

Section 2: The Mayor is further authorized to enter into any agreements as may be necessary and appropriate for obtaining this financial assistance.

Passed: 8/28/17
Date


Signed by: Name/Title

Susan Bann Fiscal Officer



Village of Oakwood

P.O. Box 457
228 North First Street
OAKWOOD Paulding Co., OHIO 45873
(419) 594-3352
(419) 594-2322 FAX

Mayor
Brian Ripke

Fiscal Officer
Susan Barron

“CHIEF FINANCIAL OFFICER’S CERTIFICATION OF LOCAL FUNDS/LOAN REPAYMENT LETTER”

August 14th, 2018

I, **Fiscal Officer** of the **Village of Oakwood**, hereby certify that the Village of Oakwood has the amount of **\$ 23,500** in the **Water Fund** and that this amount will be used to pay the local for the **Oakwood Water Improvement** when it is required.

August 14th, 2018

I, **Fiscal Officer** of the **Village of Oakwood**, hereby certify that Village of Oakwood has / will have / will collect the amount of **\$ 78,912.00** in the **Water Fund** and that this amount will be used to repay the Ohio Public Works Commission SCIP or RLP loan requested for the Oakwood Water Improvement over a **20 year term** .

Susan Barron
Fiscal Officer

Detailed Engineer's Estimate / Useful Life Statement

Client	Village of Oakwood	3-Aug-18
Project	Oakwood Water Improvements	
PDG No.	210000 00023	

<i>Item No.</i>	<i>Item</i>	<i>Units</i>	<i>Total Quantity</i>	<i>Unit Price</i>	<i>Total Price</i>
1	Pressure Filter Improvements	4	each	\$12,500.00	\$50,000.00
2	Well	1	each	\$50,000.00	\$50,000.00
3	Pumps	1	lump sum	\$15,000.00	\$15,000.00
4	Electrical	1	lump sum	\$20,000.00	\$20,000.00
5	Waterline	350	l.f.	\$30.00	\$10,500.00
3	Drive (by Village)	900	c.y.	\$30.00	<u>\$27,000.00</u>
					\$172,500.00
			10% Contingency		<u>\$17,250.00</u>
	SUB-TOTAL				\$189,750.00
	Permits, Advertising, Legal:				<u>\$2,500.00</u>
					\$192,250.00
	Related Costs: Engineering				
			Preliminary Design		\$10,000.00
			Final Design/Bidding		\$5,000.00
			Construction Administration		\$3,500.00
			Construction Observation		<u>\$5,000.00</u>
					\$23,500.00
	TOTAL CONSTRUCTION COSTS				\$215,750.00

The estimated useful life of the Oakwood Water Improvements is 25 years.



 Engineer's Signature and Stamp/Seal

Date: 7/30/18



VILLAGE OF OAKWOOD WELL FIELD



SCALE 1" = 100'



POGEMEYER DESIGN GROUP, INC.
 ARCHITECTS + ENGINEERS + PLANNERS
 996 CLEVELAND AVENUE DEFIANCE, OHIO 43512

DRAWN BY : MEK

DATE: 8-16-17

CHECKED BY: KAM

JOB NO. 210000-00023



John R. Kasch, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

June 13, 2018

Re: Oakwood Village
Notice of Violation (NOV)
Related Correspondence
Drinking Water
Paulding County
PWS ID OH6300312

Mr. John Keyes
Village Administrator
Village of Oakwood
228 North First Street
P.O. Box 457
Oakwood, Ohio 45873

Subject: Partial Resolution of Violation- Facility ID# 6357098, Comm

Dear Mr. Keyes:

Thank you for your email responses on April 4, April 5, April 6, April 17, June 30, December 21, and December 28, 2017, June 6, and June 7, 2018, to my March 31, 2017, Notice of Violation (NOV) letter regarding the sanitary survey conducted on March 8, 2017. I have reviewed this documentation and determined that the Village of Oakwood (village) has adequately resolved the following violations discovered during the March 8, 2017, sanitary survey. The Village of Oakwood's response and their status with respect to each of the violations are listed below.

Partial Resolution of Violation

1. Letter citation #1 and OAC Rule 3745-9-04(A)(6), "Potential sources of contamination shall not be constructed or placed within the sanitary isolation radius of the public water system well."

On April 5, 2017, Ohio EPA received the village's response of "if with an easement, the farmer could still use Roundup on the farm land." Ohio EPA responded that it is not possible for the farmer to still use any pesticide or herbicide on the farmland within the isolation radius. The village is still working with the farmer to get an easement for the land around Wells #1 and #2. The village will provide an update on receiving an easement of the land by June 30, 2017.

On June 30, 2017, Ohio EPA received the village's response of "In regards to the easement for well #1 and #2, the village is in negotiations with the farmer who owns the land. The village has made an offer to him on the amount to pay for this easement. The council is trying to get all parties together to finalize this offer. The council very sure he will sign this agreement. They are pretty sure he will be at the next council meeting to finalize it." The farmer has been difficult to deal with. The village plans to have the easement to Ohio EPA no later than December 30, 2017.

Mr. John Keyes
June 13, 2018
Page 2

On December 21, 2017, Ohio EPA received the village's response of the farmer wants to meet with Ohio EPA regarding the easement. Ohio EPA does not meet negotiate easements and the village will need to work with the farmer and the village solicitor regarding the easement.

On June 6 and June 7, 2018, Ohio EPA received the village's response which stated the village has been awarded \$34,425.00 CDBG Grant for a new well and to replace the media in the pressure filters. The village is also applying for a OWPC Grant at the end of the summer to supplement the CDBG Grant for the rest of the needed funds to complete both projects. The village plans to have the well drilled and approved by December 31, 2019.

An easement is unattainable by the village for the land from the adjacent property owner. The village has tried numerous times to negotiate an easement and has failed. The village's plan of action to resolve this violation is to drill a new well (Well #4). The village plans to use the new well in conjunction with Wells #1 and #2, by using Well #4 as part of the rotation of the wells. Well #4 will also be used to blend the water from Well #3, as required by Ohio EPA, to dilute the radium from Well #3 to below the required limit.

The village understands, plan approval by the director of Ohio EPA must be obtained before the well is drilled and before the well can be used as a new water source.

Therefore, this violation has not been resolved.

2. Letter citation #2 and OAC Rule 3745-9-05(11), "Well casing height above finished grade shall be at least twelve inches, ... (b) The finished grade shall be sloped for surface water runoff, away from the well."

On April 17, 2017, Ohio EPA received the village's photos showing all the wells have been landscaped.

Therefore, this violation has been resolved.

3. Letter citation #3 and OAC Rule 3745-95-03(A), "The supplier of water shall conduct or cause to be conducted ... periodic surveys or investigations of water use practices within a consumer's premises to determine whether there are actual or potential cross-connections to the consumer's water system through which contaminants or pollutants could backflow into the public water system or determine where in the judgment of the supplier of water, a pollutional system, health or severe health hazard to the public water system exists.

To meet this requirement, the supplier of water shall conduct or cause to be conducted an on-site investigation of all premises at least every five years to identify changes in water use practices at the consumer's property so that new or increased hazards to the water supply are identified and mitigated."

Mr. John Keyes
June 13, 2018
Page 3

On April 6, 2017, Ohio EPA received the village's response of asking for a copy of the Ohio EPA Backflow Pamphlet. The village plans to provide a copy of this pamphlet to all home owners in the village annually. The village will evaluate all commercial service connection and then will provide an update to the Ohio EPA of which commercial service connections will be required a backflow device by December 31, 2017.

On December 28, 2017, Ohio EPA received the village's response of a letter the village mailed to all commercial service connections in the village requiring a backflow device be installed. Also, a list of all commercial service connections was attached. Copies of backflow devices which were tested in the last 12 months was also attached. The Ohio EPA Backflow Pamphlet was being handed out in the village by community service volunteers.

Therefore, this violation has been resolved.

4. Letter citation #4 and OAC Rule 3745-85-01: Contingency Plans.

On April 4, 2017, Ohio EPA received a copy of the village's contingency plan.

Therefore, this violation has been resolved.

5. Letter citation #5 and OAC Rule 3745-91 and Recommend Standards for Water Works (RSWW), 2012 edition, Section 5.4.1.h, Both full and empty gaseous chlorine cylinders are to be housed in the gaseous chlorine room.

On April 4, 2017 Ohio EPA received the village's photos of the chlorine tanks being housed in the gaseous chlorine room. The empty tanks have a red ring placed on them.

Therefore, this violation has been resolved.

Outstanding Notice of Violation

1. OAC Rule 3745-9-04(A)(6), "Potential sources of contamination shall not be constructed or placed within the sanitary isolation radius of the public water system well."
 - a) The information provided by village states the village is working to resolve the violation. Therefore, this violation has not been resolved.
 - b) The village will be required to submit a New Well Site Application (see enclosure) before an on-site wellsite can be performed. The village plans to have Well #4 approved by December 31, 2019.

Please submit documentation to this office demonstrating the outstanding violations documented above have been resolved by the dates listed above.

Mr. John Keyes
June 13, 2018
Page 4

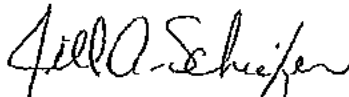
Note: The village plans to use the awarded funding to replace the media in the pressure filters. Plan approval by the director of the Ohio EPA is required, if the media is not alike kind replacement. A sieve analysis is required before the media can be installed.

Conclusion

Please be advised that violations cited above will continue until the violations have been properly resolved. Failure to comply with Chapter 6109 of the Ohio Revised Code and rules promulgated thereunder may result in an administrative or civil penalty of up to \$25,000 per day for each violation. It is imperative that you return to compliance. If circumstances delay the resolution of violations, the Village of Oakwood is requested to submit written correspondence of the steps that will be taken by date certain to attain compliance.

Should you have any questions, please feel free to contact me by phone at (419) 373-3089 or via email at jill.schiefer@epa.ohio.gov.

Sincerely,



Jill A. Schiefer, MPA
Environmental Specialist II
Division of Drinking and Ground Waters

Enclosure: New Well Site Application

/wla

pc: Brian Ripke, Mayor
Village Council
Paulding County Health Department
DDAGW-NWDO file

ec: Tim Phillips, ORC
Roberta Streiffert, Sr Rural Development Specialist, Ohio RCAP
Paul G. Brock, PE, Engineering Supervisor, DDAGW-NWDO



DIVISION OF DRINKING and GROUND WATERS

WELL SITE APPLICATION

for New Public Water System Well

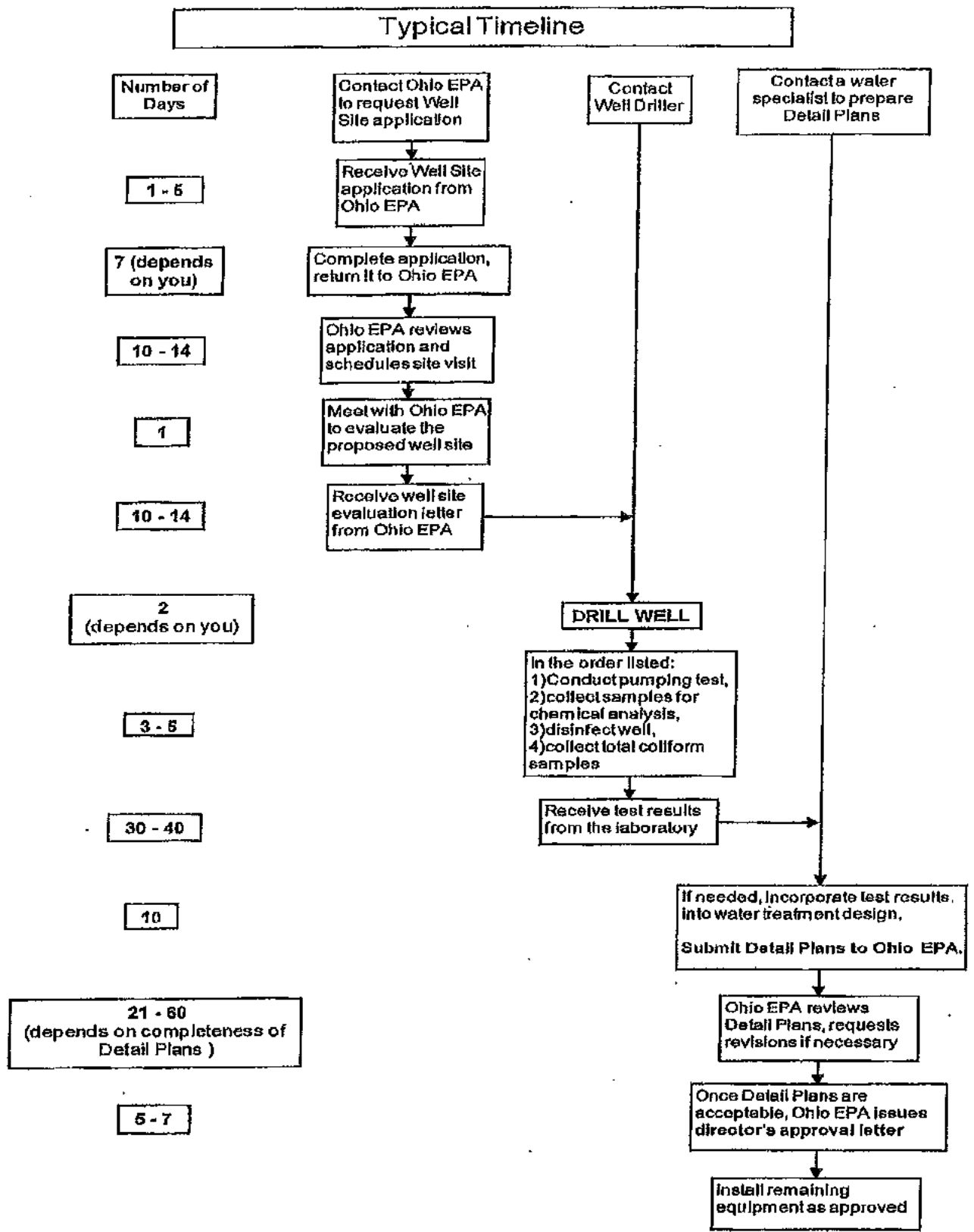
Complete this application as accurately and thoroughly as possible. Ohio EPA will use the information the owner provides to evaluate the proposed site to determine if the site meets applicable requirements for siting a public water system well and to provide information regarding site susceptibility to contamination and actions you can take to protect the well.

Submittal of this document to Ohio EPA does NOT constitute approval to use the well once it has been drilled. Approval to use the well is not granted until after an acceptable set of design drawings has been submitted to and approved by the director of Ohio EPA.

The owner is also responsible for obtaining all other local and state permits for the proposed well as may be required by law. In addition, if the proposed water system will include treatment devices that generate a waste stream (filter backwash, etc.), it is your responsibility to contact the Division of Surface Water at the Ohio EPA District Office covering the county where the water system is located for additional waste treatment requirements.

A source water approved capacity determination will be required for well fields associated with a new municipal or similar public water system's well. Also, a source water approved capacity determination will be required when well field improvements are part of a project proposed to increase the approved capacity established for existing water treatment systems or a request to increase the approved capacity of your source water (well field) is proposed. These approved capacity determinations are determined in accordance with "Planning and Design Criteria for Establishing Approved Capacity for: 1) Surface Water and Ground Water Supply Sources, 2) Drinking Water Treatment Plants (WTPs), and 3) Source/WTP Systems" (Approved Capacity document) and are available online at <http://epa.ohio.gov/ddagw/engineering.aspx>. Approved capacity determinations for systems not addressed above will be determined in accordance with the Ohio EPA's "Guidelines for Design of Small Public Water Systems" (Greenbook).

- Keep a copy of the well site application for your records and return the application with a site map and any other drawings to the Ohio EPA District Office serving the county where the public water system is (or will be) located. Addresses and phone numbers for the District Offices are provided on the last page of the application.
- Questions about completing the application, should be directed to the Ohio EPA District Office serving the county where the public water system is (or will be) located and to the Drinking Water Program county representative.
- An Ohio EPA representative will contact you once we have reviewed the application. If you have not been contacted within 10 – 14 days after you sent in the application call your District Office.
- An average timeline for the entire new well approval process is shown on the next page. The amount of time required to obtain new well approval is site specific and can vary significantly from the average. Please discuss any specific time constraints you may have with Ohio EPA District Office Drinking Water Program staff.



PART ONE – CONTACT INFORMATION

Owning Organization (OW)				
Organization Name:				
Street:				
City:		State:		Zip:
Office Phone:				

Administrative Contact (AC)				
Name:				
Street:				
City:		State:		Zip:
Office Phone:		Mobile Phone:		
e-mail:				

Operating Organization (LE) (Organization responsible for the facility's operation if different from ow/ls)				
Organization Name:				
Street:				
City:		State:		Zip:
Office Phone:				
Operators Name:				
Operator's Office Phone:		Operator's Mobile Phone:		

Water Treatment Plant				
Treatment Plant Name:				
Treatment Plant Physical Address				
Street:				
City:		State:		Zip:
If no address assigned, provide a description of the plant's location:				

Well Driller/Engineer (if known):				
Name:				
Street:				
City:		State:		Zip:
Office Phone:		Mobile Phone:		
e-mail:				

Applicant:				
Name:				
Title:				
Street:				
City:		State:		Zip:
Office Phone:		Mobile Phone:		
e-mail:				
Applicant Signature:				Date:

PART TWO – WELL INFORMATION

1. a. Is the water system New Existing
- b. For existing facilities, how many wells are already located at the site? (Both in use and *not* in use) _____
2. How many wells are proposed at this time?^ _____
3. Is the proposed well:
- a. a replacement for an existing water source? Yes No
- If yes, do you have metered documentation of water usage for the well being replaced? Yes No
- b. a supplement to an existing source? Yes No
- If yes, how many wells are currently in use at the facility? _____
- c. an existing well not previously used for a public water system? Yes No
- If yes, when was the well drilled? _____
- If yes, well log number? (attach a copy of the well log) _____
- d. an existing well approved by the local health department for private use? Yes No
- If yes, when was the well approved by the health department? _____
- e. Is the well easily accessible for testing, repair, cleaning, treatment, etc.? Yes No
4. Are additional wells under consideration in the future? Yes No
- If yes, when? _____

*If more than one well is proposed at this time, answer question 3a-e for each proposed well. You may wish to make additional copies of this page.

PART TWO – WELL INFORMATION (continued)

If more than one well is proposed at this time, answer questions 5 a-k for each proposed well. You may wish to make additional copies of this page.

5. Provide the following information about the construction of the proposed well:

- (a) Well name / designation _____
- (b) What is the drilling method the well driller anticipates using to installing the well?
- (c) Will a dry driven grouting method be used on this well? Yes No
- (d) What is the proposed casing material? Steel Plastic / PVC
- (e) What is the anticipated well casing diameter? _____ inches
- (f) What is the anticipated well casing depth? Between _____ and _____ feet
- (g) What is the anticipated total well depth? Between _____ and _____ feet
- (h) Will a well screen be installed in this well? Yes No Not Sure
- (i) What is the anticipated permanent pump design rate? _____ gpm
- (j) What is the anticipated constant rate pumping test rate and duration?
_____ gpm for _____ hours
- (k) What grout will be used to seal the annular space?
 Cement Bentonite Cement w/ 5% Bentonite
- (l) Well installer: _____
- (m) Ohio Department of Health Registration Number _____

Well Driller _____

Title _____

Signature _____

Date _____

PART TWO -- WELL INFORMATION (continued)
For existing Community water systems only

6. If multiple wells are already in use at the site:

a. List the quantity in gallons per minute each existing well pumps

Well Name	GPM
_____	_____
_____	_____
_____	_____
_____	_____

b. Please describe the operation of the existing wells. Are they pumped simultaneously or alternately?

c. Are the existing wells listed above all in the same aquifer? Yes No

-- If no, please describe the aquifer each well draws water from:

d. Will the new well be pumped simultaneously with the existing wells? Yes No

e. Will the new well be located in the same aquifer as any of the existing wells? Yes No

PART THREE – FACILITY DESCRIPTION

Ohio EPA will use the information on this page to determine the type of population your facility will serve, to estimate how much water your facility will need, and to determine the isolation radius for your well.

SCHOOL/DAY CARE*

No. of employees _____
 Avg. no. employees/day _____
 Max. enrollment _____
 No. Days Open/Wk. _____
 Kitchen Y N

CHURCH/SYNAGOGUE/MOSQUE*

No. of employees _____
 Avg. no. of employees/day _____
 Seating capacity _____
 Other functions during the week Y N
 If yes, describe: _____
 Kitchen use during the week Y N

*For churches and schools that also function as day care centers, provide information for both the day care center and the church/school.

RESTAURANT/TAVERN

Hrs. of operation _____
 No. of employees _____
 Avg. no. employees/day _____
 No. of employees working 4 days/wk _____
 Seating Capacity _____
 Avg. no. of customers/day _____

RETAIL/COMMERCIAL/INDUSTRIAL

(Circle One)

Hrs. of operation _____
 No. of employees _____
 No. of employees working 4 days/wk _____
 Food Service Y N
 Shopping Center Y N
 Showers Y N

NURSING HOME/HOSPITAL/INSTITUTION

Max. No. of Beds _____
 No. of employees _____
 Resident _____
 Non-Resident _____
 Avg. No. Employees/Day _____

CLUBS/MEETING HALLS

Max. Occupancy _____
 Food Service Y N
 No. Days/Yr Operating _____

CAMPGROUNDS/VACATION COTTAGES

Length of Season _____
 Max. No. of Units _____
 trailer/tent spaces _____
 persons (cottages) _____

Describe any additional amenities: _____

MOBILE HOME PARKS

No. of spaces/lots _____

ALLOTMENT/SUBDIVISION

No. of Single-Family Homes _____
 No. of Multi-Family Homes _____

APARTMENT COMPLEX

No. of one-unit apts. _____
 No. of two-unit apts. _____
 No. of three-unit apts. _____

OTHER (Describe Facility)

Hrs of operation _____
 No. of visitors/customers _____
 No. of employees _____
 Avg. no. employees/day _____
 No. of employees working 4 days/wk _____
 Seating capacity/service connections, etc: _____

PART FOUR – SITE MAP & DRAWINGS WORKSHEET

A. Site Map

A site map must be provided in all cases. Without it, Ohio EPA will consider the application incomplete and will contact you to complete this information.

All site maps must be to scale, including a north arrow and the scale used, and show all of the features listed below that exist within 400 feet of where you intend to drill your well(s). Possible sources for maps include tax maps, plat maps, and county maps.

Indicate the proposed location of your well(s) as accurately as possible. If any other wells exist on your property, show their locations and label them as "currently in use" or "not in use."

1. Property lines.
2. Location of any easements needed for access to well(s).
3. Existing or proposed water bodies (streams, ponds, waterways or ditches).
4. Roads and railroads.
5. Buildings.
6. Potential contaminant sources. These include, but are not limited to:
 - a. wastewater treatment systems and septic tanks, including their discharge locations
 - b. oil and gas production wells (active or capped)
 - c. mining operations
 - d. waste or product storage tanks (above or below ground)
 - e. landfills, old or new refuse disposal areas and demolition fill areas
 - f. pipe lines (sewer mains, gas mains, oil mains, etc.)
 - g. manufacturing facilities
 - h. fields subject to application of manure, treated wastewater, pesticides or fertilizer

B. Other Drawings

If you already have drawings, blueprints, or maps of your facility, particularly those showing how water will be used within the building and where pressure tanks and other treatment units will be placed, please include one copy of those drawings with this application. Such drawings are *not* required at this time, but will be required as part of the detail plan package you will need to submit and have approved after the new well has been drilled.

Return completed application, site map, and other drawings (if applicable) to Ohio EPA --
 Division of Drinking and Ground Waters at your local District Office:

Northwest District Office
 347 North Dunbridge Road
 Bowling Green, Ohio 43402-9398
 (419) 354-8461

Central District Office
 P.O. Box 1049
 Columbus, Ohio 43216-1049
 (614) 728-3778

Northeast District Office
 2110 East Aurora Road
 Twinsburg, Ohio 44087
 (330) 963-1200



Southwest District Office
 401 East Fifth Street
 Dayton, Ohio 45402
 (937) 265-6357

Southeast District Office
 2195 Front Street
 Logan, Ohio 43138
 (740) 385-8501

Kenneth Maag

From: John Keyes <jkoawood@gmail.com>
Sent: Monday, August 21, 2017 8:39 AM
To: Kenneth Maag
Subject: Fwd: RE: Radium

----- Forwarded message -----

From: "Jill.Schiefer@epa.ohio.gov" <Jill.Schiefer@epa.ohio.gov>
Date: Apr 18, 2017 4:28 PM
Subject: RE: Radium
To: "John Keyes" <jkoawood@gmail.com>
Cc: "Paul.Brock@epa.ohio.gov" <Paul.Brock@epa.ohio.gov>

A sample taken 2/23/2004 from Well #3:

The results for Gross Alpha was 6.73 pCi/L

For Radium-226 6.34 pCi/L

For Radium- 228 1.23 pCi/L

For gross Beta particle activity <4.0 pCi/L

From: John Keyes [mailto:jkoawood@gmail.com]
Sent: Tuesday, April 18, 2017 9:44 AM
To: Schiefer, Jill <Jill.Schiefer@epa.ohio.gov>
Subject: Radium

Jill

I was wondering if you had anything on hand that would tell me how much Radium 226 & 228 is in well 3. I have been in touch with Artesian and they need to know how much Radium is in the water to run the numbers for the green sand. We had council last night and talked about the 300 ft radius for wells 1&2. Council president and me are going to talk to the farmer in the next week or so about leasing land.

Thanks

John Keyes

Kenneth Maag

From: Susan Yarger <syarger@tlassoc.com>
Sent: Friday, June 22, 2018 2:32 PM
To: Kenneth Maag
Cc: Chett Siefring; Tim Pedro
Subject: Proposal for Services- Mingo Drive
Attachments: 1721101-3 Mingo Dr Poggemeyer.pdf

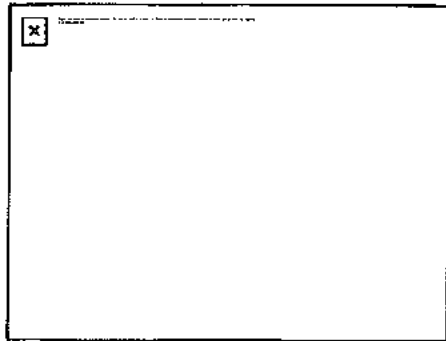
Hi Ken-

Attached is the proposal you requested to conduct a Phase I ESA, Wetlands Determination/Delineation and a Geotechnical Investigation at the property on Mingo Drive. If you have any questions on the geotechnical portion of the proposal, please contact Chett Siefring at 419-214-5006 (also copied on this e-mail) and if you have any questions on the Phase I ESA or Wetlands please contact me at 419-214-5060.

Thank you for the opportunity,
Susan

Susan Yarger, CPG, VAP CP
Manager, Environmental Services
TTL Associates, Inc.

1915 North 12th Street | Toledo, OH 43604-5305 | tlassoc.com
Direct: (419) 214-5060 | Cell: (419) 308-4499 | Fax: (419) 214-5061



EAGON & ASSOCIATES, INC.
Consulting Geologists

100 Old Wilson Bridge Road, Suite 115 / Worthington, Ohio 43085 / (614) 888-5760 / FAX (614) 888-5763

October 24, 2011

The Honorable Erhard Henke
Village of Oakwood
228 North 1st Street
Oakwood, OH 45873

**RE: Well-Field Performance Evaluation
Village of Oakwood
Paulding County, Ohio**

Dear Mayor Henke:

The purpose of this letter is to summarize the results of our well-field performance evaluation completed for the Village of Oakwood. The work was performed in accordance with our May 2011 scope of work and focused on evaluating the status of the Village's three ground-water supply wells – Wells 1, 2 and 3 (Figure 1). One goal of the proposed scope of work was to compare present performance to available information on past performance at each well; however, no reliable data regarding past performance was available in Village records. We have instead estimated historic well capacities based upon limited information available from driller's logs of the Village's existing wells and/or similar wells installed for the Village in the past, since well identifiers are lacking on the available logs. We have also evaluated options for rehabilitating the existing wells and installing a least one new supply well.

Recent Supply, Demand, Plant Operation, & Well Equipment

It is our understanding that the Village has an average potable water demand of approximately 70,000 gallons per day (gpd) with a peak demand of up to 120,000 gpd. Well operation and treatment is automated over a 24-hour operational "day." The Village uses Wells 1 and 2 as their primary supply wells during normal conditions. Of the Village's three wells, Well 3 has historically been considered the strongest, although the well has the least desirable water quality, with high H₂S concentrations and reports of elevated radium concentrations. Therefore, Well 3 is typically blended with water from the other wells during normal operating conditions.

Well 2 was serviced by Dave's Pump Service over the summer after its pump failed and disconnected from its riser pipe. A new 5 horsepower pump and PVC pump riser were installed to a depth of 160 feet. No rehabilitation work was performed at that time. The new pump is too strong for the well's present capacity and is valved back to prevent the pump from breaking suction. Pat Parsons of Dave's Pump Service indicated that the new pump is capable of producing 60 gpm against a total dynamic head (TDH) of 225 feet.

Details about the pumps or installation depths were not available for Wells 1 and 3. It is assumed that Well 1's pump is similar to Well 2; i.e., a 5 HP pump. Based on observed pumping levels in both Wells 1 and 3, their pumps are installed to depths of at least 126 feet and 200 feet, respectively.

In general, each well has steel casing installed into the top of carbonate bedrock, which is encountered at depths of between 39 to 41 feet in the well-field area. Well 1 is either a 6 or 8-inch diameter well, Well 2 is 6 inches in diameter and Well 3 is a 10-inch well. Well one has 8-inch surface casing but is believed to be a 6-inch well below grade, which could not be confirmed during our site visit. The depth of Well 1 is not known, but is believed to be less than 250 feet – similar to Well 2. Well 2 had a measured total depth of 243 feet during the summer and the log for Well 3 reports a total depth of 480 feet. It is noted that the 1983 log for "Well 3" indicates the well is "Well 4", which suggests at least one well has been decommissioned in the past. Construction details, including uncertainties, are presented on Table 1.

September 2011 Performance Testing

Performance testing of the Village's three wells was completed on September 8, 2011. The goal was to determine the capacity and operating conditions for each well. Short-term pumping tests were performed using the production pumps already installed. Pumping rates during the tests were determined by measuring the rate of fill in the Village's clear well (two in-ground tanks manifolded together) measured to the nearest 0.01 foot. The estimated graduated volume of the combined 90,000 gallon clear well system is 10,250 gallons per foot of water, or 102.5 gallons per 0.01 foot. The high-service pump to the water tower was "off" during the tests. The forced-air, cascading aeration system (air stripper) was operating. The aeration system is used for the removal of hydrogen sulfide (H₂S) ahead of the clear well. The chlorine injection feed into the clear well operates when the aerator is on and has an estimated flow rate of 4 gpm, which is supplied by a dedicated one-inch line connected to the water tower. The calculated flow rate for the test of each well was adjusted to account for the chlorine feed.

Prior to beginning the performance testing at the first well (Well 2), all wells had been offline and allowed to recover for at least one hour. All other wells were offline during the test at each well. Each well was pumped for approximately one hour. The actual test duration for each well is shown on Table 1.

The individual well performance estimates determined from the September 2011 testing are considered to be reasonable and are summarized below. Based on conversations with Village personnel, the results are in general agreement with anecdotal descriptions of well and plant performance during recent production periods.

Well 1

Results from the pumping test completed at Well 1 indicate that, after 59 minutes of operation, the well was pumping to the system at a rate of approximately 27 gpm with a pumping level of 125.28 feet from the top of the well casing (ft-TOC). The static water level prior to the test was 54.95 ft-TOC; therefore a total of 70.33 feet of drawdown was observed. The pumping rate and drawdown relationship can be expressed in terms of "specific capacity," which is the pumping rate divided by drawdown. For Well 1, 27 gpm divided by 70.33 feet of drawdown

equals a specific capacity of 0.38 gpm/ft. Comparison of a well's present specific capacity to past values is an excellent tool to evaluate well deterioration and to identify when well rehabilitation (cleaning) should be performed.

There is no available information on file at the Village regarding past performance of Well 1. Well logs for wells installed on Village property were available from the Ohio Department of Natural Resources' (ODNR) online database; however, with the exception of Well 3, it is not clear which wells the logs are for or if the wells still exist. Regardless, we have used information from those logs to develop estimates of initial performance. Based on that review, we estimate that original specific capacities were as much as 3.0 gpm/ft for both Well 1 and Well 2. Based on that assumption, compared to the present specific capacity of 0.38 gpm/ft for Well 1, the well is operating at a specific capacity of as little as 13 percent of its original performance, which indicates that the well has lost as much as 87 percent of its original capacity.

There is no information available regarding the pump setting for Well 1, so it is not known how much available drawdown there is at the observed pumping level of 125.28 feet. If the pump is set at 160 feet like at Well 2, there is adequate available drawdown remaining when the well is operated at 27 gpm as presently configured.

Rehabilitation can be expected to recover some of the lost capacity observed at Well 1. Without rehabilitation, the present capacity of the well is estimated to be no more than its September production rate of 27 gpm under normal operating conditions. Maintaining as much water in the bedrock borehole as possible helps to prevent excessive deterioration due to scale formation and bio-fouling. It is noted that if Well 1 is equipped with a 5 horsepower pump similar to Well 2, the pump is not performing to specification. A new pump similar to Well 2's pump would be too strong for Well 1 at its present safe capacity of 27 gpm.

Well 2

Results from the pumping test completed at Well 2 indicate that the well was pumping to the system at a rate of approximately 44 gpm with a pumping level of 143.66 ft-TOC after 73 minutes of operation. As noted previously, the pumping rate is controlled by the valve on the raw water line from the well. The pump breaks suction if the valve is left wide open. The static water level prior to the test was 48.43 ft-TOC; therefore a total of 95.23 feet of drawdown was observed. The specific capacity for Well 2 in September was 0.46 gpm/ft (44 gpm / 95.23 feet).

As discussed for Well 1 above, there is no available information on file at the Village regarding past performance of Well 2. Based on our review of available logs on file at ODNR, we estimate that the original specific capacity for Well 2 was as much as 3.0 gpm/ft. Compared to the present specific capacity of 0.46 gpm/ft, the well is operating at a specific capacity of as little as 15 percent of its estimated original performance, which indicates that the well has lost up to 85 percent of its original capacity.

It is important to note that Well 2's short-term pumping level of 143.66 feet is within 17 feet of the pump, which is set at 160 feet. This provides little room for additional well deterioration and suggests that the current pumping rate of 44 gpm should be throttled back somewhat. Over pumping promotes additional well deterioration over time caused by mineralization (scaling) and bio-fouling of producing zones in the well bore.

Rehabilitation can be expected to recover some of the lost capacity observed at Well 2. Without rehabilitation, the present safe capacity of the well is estimated to be no more than 40 gpm under normal operating conditions.

Well 3

Results from the pumping test completed at Well 3 indicate that the well was pumping to the system at a rate of approximately 50 gpm with a pumping level of at least 199 ft-TOC after 61 minutes of operation. The static water level prior to the test was 38.00 ft-TOC; therefore a total of 161 feet of drawdown was observed. Note that the pumping level was difficult to measure due to cascading water conditions in the well and is estimated to have been at least 199.0 feet. At that pumping level, the resulting specific capacity for Well 3 is ≤ 0.31 gpm/ft (50 gpm / ≥ 161 feet of drawdown).

According to the driller's well log for Well 3 (note the log says "Well 4"), the well was installed in 1983 and was initially tested at a constant rate of 128 gpm for 24 hours. Total drawdown of 204 feet was reported, which results in a calculated original specific capacity of 0.61 gpm/ft (128 gpm / 204 feet). The present specific capacity of 0.31 gpm/ft for Well 3 indicates that the well is operating at approximately 51 percent, or less, of its original performance, which means at least 49 percent of its capacity has been lost since the well was installed. Again, uncertainties in this estimate are the result of the difficulty in measuring accurate pumping levels in the well in September.

As discussed for Wells 1 and 2 above, rehabilitation can be expected to recover some part of the lost capacity observed at Well 3; however, without upgraded treatment, the undesirable water quality from Well 3 may limit the value of utilizing the Village's resources on that well. Without rehabilitation, the present safe capacity of the well is estimated to be no more than 50 gpm under normal operating conditions, and could be less if pumping levels are significantly deeper than the 199 foot estimate discussed above.

Present Well-Field Capacity

The Village's existing wells are capable of supplying up to 168,400 gpd over 24-hours as presently equipped. Without Well 3, which has unfavorable water quality, Wells 1 and 2 are capable of supplying up to 96,500 gpd. Wells 1 and 2 can satisfy most common demand scenarios considering average demand is on the order of 70,000 gpd. Considering the Village's preference to not use Well 3, they will continue to run the risk of not being able to meet demand with acceptable quality water if either Well 1 or Well 2 is out of service. Well 1 is capable of supplying up to 38,900 gpd at 27 gpm and Well 2 can provide up to 57,600 gpd at 40 gpm.

Options and Potential Costs for Augmenting the Ground-Water Supply

Options for augmenting the Village of Oakwood's ground-water supply system include well rehabilitation, new well installation, or a combination of both. Well rehabilitation is the most economical option; however, it carries greater risk due to the potential that it will not be successful or could only be marginally successful. In situations like Oakwood's, wells that have not been properly maintained are more likely to be permanently impacted by deterioration caused by scale formation and bio-fouling in and around the well bore. That is not to say the

Village's wells have not been properly maintained, only that there are no records available that document past maintenance activities.

An additional consideration for evaluating the merits of rehabilitating Well 1 or Well 2 relates to Ohio EPA oversight and whether the agency will allow alterations (for example, installation of a different size pump) to be made to wells that do not satisfy current regulations for well siting – particularly the 300-foot required setbacks from property lines and known or potential sources of contamination. We recommend discussing any planned well rehabilitation activities with the agency prior to performing the work.

The installation of a new well(s) to augment or replace existing wells also carries risk since there is no guarantee the aquifer is productive in all areas in the vicinity of the Village's well field. It is noted, however, that similar performance characteristics are observed at both Wells 1 and 2, which suggests that aquifer characteristics down to depths of as much as 250 feet are fairly uniform in the area.

To help the Village evaluate options we have solicited estimates from drilling and well-service contractors for rehabilitating one well. We also asked the prospective contractors to present their preferred method of well rehabilitation. Methods that have been proposed include mechanical redevelopment, acidization, liquid carbon dioxide injection ("Aqua-Freed"), and mechanical redevelopment with Sonar-Jet charges (controlled explosive charges). Estimated costs range from \$3,600 (mechanical only) to approximately \$16,000 (Aqua-Freed; including separate drilling contractor). Copies of the estimates are attached and are summarized as follows:

Watson Well Drilling	(mechanical only)	\$3,600.00
	(mechanical + acidization)	\$8,378.00
Jamison Well Drilling	(mechanical + acidization)	\$11,500.00
Jackson Well Services	(mechanical + Sonar-Jet)	\$11,881.00
Subsurface Tech., Inc.	(mechanical + liquid carbon dioxide)	\$10,950.00
	(drilling subcontractor – required)	\$5,000.00 (est)

We recommend that rehabilitation methods should include a combination of mechanical and chemical (acid or carbon dioxide) techniques. We have seen successful application of the Sonar-Jet technology in bedrock wells similar to Oakwood's, as well.

We also requested cost estimates for installing and testing one new 10-inch supply well to a depth of 250 feet. One contractor responded – Jamison Well Drilling with an estimate of \$27,975.00. The low end of potential drilling costs is anticipated to be in the range of \$20,000.00 per well, with a high range of up to \$35,000.00. Additional costs associated with new well installation include hydrogeologic consulting services related to well siting, design, testing and analysis of the results (~\$10,000), engineering consulting services for system design and plan approval (TBD), and water line construction, electrical service drops, etc. (all costs TBD). Other potential costs include property acquisition, if necessary.

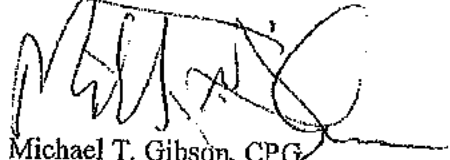
CONCLUSIONS

- The average sustained total output from the Village of Oakwood's three operating wells was 121 gpm in September 2011. With Well 3 offline, the estimated output of Wells 1 and 2 in September was 71 gpm.
- The estimated safe capacity of Well 1 is presently 27 gpm.
- The September pumping rate of 44 gpm at Well 2 should be adjusted downward to 40 gpm.
- Well 2's pump is oversized for the well's present safe capacity. Although inefficient and hard on the pump, the Village should continue maintaining the pumping rate using the valve on the well's raw water line.
- The safe capacity of Well 3 could not be definitively determined due to cascading water conditions in the well. The well was operating at a sustained pumping rate of approximately 50 gpm in September.
- Well 1 has lost as much as 87 percent of its original capacity. Well 2 has lost as much as 85 percent and Well 3 has lost as much as 49 percent, or more, of its original capacity.
- Well 3 is only used when necessary because of unfavorable water quality in the well (hydrogen sulfide and radium).
- Wells 1 and 2 are capable of meeting most recent, routine water-demand scenarios; however, neither well alone is capable of satisfying average daily demands of approximately 70,000 gpd when the other well is out of service.
- The peak demand for the Village is approximately 120,000 gpd and cannot be met with only Wells 1 and 2 online. Pumping configurations that can meet peak demand include: Wells 1, 2, and 3; or Wells 2 & 3.
- Options for augmenting the Village's ground-water supply system include well rehabilitation, installation of a new well(s), or a combination of both. Rehabilitation costs will range between \$3,600.00 and \$16,000.00, depending on the method chosen. Well installation costs are to-be-determined and will start at between \$20,000.00 and \$35,000.00 for well installation alone.
- Ohio EPA should be involved with any decisions related to rehabilitating existing wells or installing new wells.

The Honorable Erhard Henke
October 24, 2011
Page 7

I am available to meet with you and Village personnel to discuss these results further.
Please call me at (614) 888-5760 if you have any questions or comments in the mean time.

Sincerely,



Michael T. Gibson, CPG
Hydrogeologist

MTG/kj

encl.

cc: Mr. John Keyes, Village Administrator, w/encl.
Mr. Richard Weaver, Poggemeyer Design Group, w/encl.

TABLE 1.
SEPTEMBER 2011 WELL-FIELD PERFORMANCE SUMMARY
VILLAGE OF OAKWOOD, OHIO

Well	Well Construction				Well Performance							Comments		
	Date Installed	Reported Well Depth (ft)	Reported Casing Depth (ft)	Reported Pump Setting (ft)	Casing Diameter (in)	At Installation		September 2011						
						Original Capacity (gpm)	Specific Capacity (gpm/ft)	Static Water Level ² (ft-FWC)	Pumping Level ³ (ft-FWC)	Duration of Test (minutes)	Pumping Rate ⁴ (gpm)		Specific Capacity ⁵ (gpm/ft)	% of Original Spec. Cap. at Time of Inst.
Well 1	8/2/1955(?)	202 (?)	41 (?)	Unk	6 or 8 ⁶	≥ 40	3.0 (est)	54.95	125.28	59	27	0.38	13	Closest well to plant Eastern-most well; Pump valved back Log says "Well 4"
Well 2	4/1/1949(?)	245 (meas)	43 (?)	160	6	≥ 40	3.0 (est)	48.43	143.66	73	44	0.46	15	
Well 3	6/22/1983	480	43	Unk	10	< 128	0.61	38.00	> 199.0 ⁷	61	50	≤ 0.31	≤ 51	

¹ Test rate reported on the well log for each well or similar wells (well ID's unclear on possible logs for Wells 1 & 2)

² Static water levels measured after water system had been off for at least 1 hour

³ Pumping level with only pumping well online - September 8, 2011

⁴ Pumping rate at end of test determined using the fill rate of the two clear wells, minus ~4 gpm est. flow from chlorine feed; est. 10,250 gals/ft in clear well system

⁵ Specific capacity calculated during individual performance testing at each well with all other wells off-line

⁶ 8" Casing for stick up. Well is believed to be 6" dia., but not confirmed.

⁷ Difficult to collect accurate water-level measurements due to cascading water conditions in the well; Stilling tube not functional

Unk = Unknown

? = Value from unidentified driller's log; uncertain which well log is for
meas = measured summer 2011

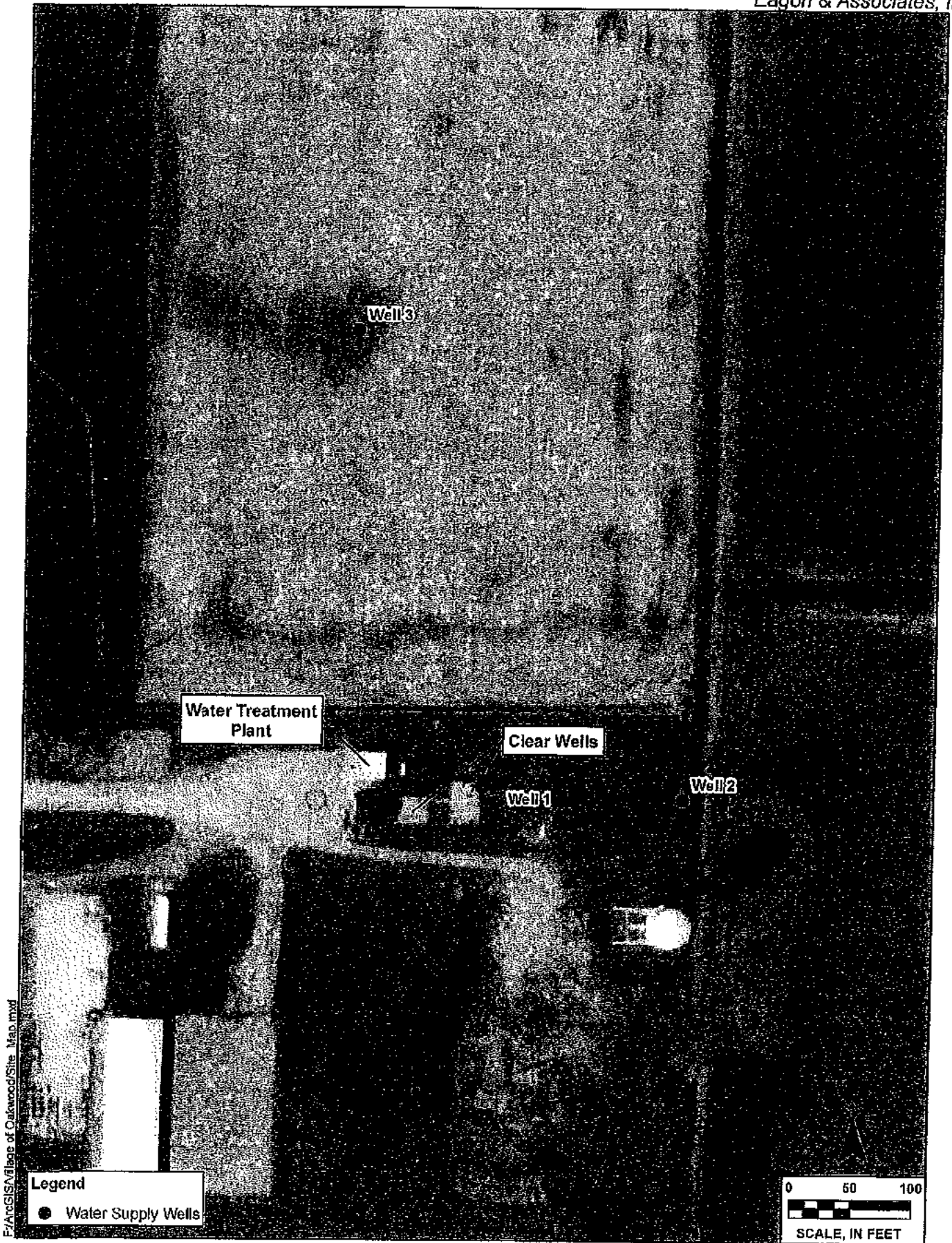


Figure 1. Village of Oakwood Well Field

District 5
 Capital Improvement Project
 Priority Rating Sheet, Round 33

Revised 04/17/18
 PROJECT NUMBER

COUNTY: Paulding																
PROJECT: Water Improvement Project																
EST. COST: 215,750																
No.	"A" WEIGHT FACTOR	CRITERIA TO BE CONSIDERED	"B" PRIORITY FACTORS					"A"x"B"	Priority Factors						No.	
			0	2	4	6	8		10	0	2	4	6	8		10
1	1	(Repair or Replace) vs. (New or Expansion)	0	2	4	6	8	10	10	0% + Repair or Replacement	20% + Repair or Replacement	40% + Repair or Replacement	60% Repair or Replacement	80% + Repair or Replacement	100% + Repair or Replacement	1
2	1.5	Existing Physical Condition: Must submit substantiating documentation and CIR (100% New or Expansion = 0 Points)	0	2	4	6	8	10	12	Excellent	Good	Fair	Poor	Critical	Closed or Not Operating	2
3	2	Public Health and/or Public Safety Concerns Submittals without supporting documentation will receive 0 points for this question	0	2	4	6	8	10	16	No Impact	Minimal	Moderate	Major	Critical	Extremely Critical	3
4	2	Percentage of Local Share (Local funds are funds derived from the applicant budget or a loan to be paid back through the applicant budget assessments, rates or tax revenues)*	0	2	4	6	8	10	16	0%+	10%+	20%+	30%+	40%+	50%+	4
5	1	OTHER FUNDING SOURCES (Excluding Issue II Funds) (Grants and other revenues not contributed or collected through taxes by the applicant, including Gifts, Contributions, etc. - must submit copy of award or status letter)	0	2	4	6	8	10	16	0%+	10%+	20%+	30%+	40%+	50%+	5
No.	"A" WEIGHT FACTOR	CRITERIA TO BE CONSIDERED	"B" PRIORITY FACTORS					"A"x"B"	Priority Factors						No.	
										-9	-8	0	8	9	10	
										Grant or Loan Only						
6	2	OPWC Grant and Loan Funding Requested; Please refer to Item 6 on Questionnaire for Clarification	-9	-8	0	8	9	10		\$500,001 or more	\$400,001 to \$500,000	\$325,001 to \$400,000	\$275,001 to \$325,000	\$175,001 to \$275,000	\$175,000 or less	6
	2		-9	-8	0	8	9	10	20	Grant/Loan Combination						
										\$750,000 or more	\$600,001 to \$750,000	\$487,501 to \$600,000	\$412,501 to \$487,500	\$262,501 to \$412,500	\$262,500 or less	
When scoring a project that is only grant or only loan. Please use the chart labeled "Grant or Loan Only". When scoring a grant/loan combination, score the project for the grant in the first chart, then use the second chart labeled "Grant/Loan Combination" to score the total (grant and loan combined). Use the lower of the two as the score.																
No.	"A" WEIGHT FACTOR	CRITERIA TO BE CONSIDERED	"B" PRIORITY FACTORS					"A"x"B"	Priority Factors						No.	
			0	2	4	6	8		10	0	2	4	6	8		10
7	1	Will the Proposed Project Create Permanent jobs or retain jobs that would otherwise be permanently lost (Written Documentation Required)	0	2	4	6	8	10	0	0+ jobs	7+ jobs	15+ jobs	25+ jobs	50+ jobs	100+ jobs	8
8	1	Benefits to Existing User such as households, (Equivalent dwelling units), traffic Counts, etc.	0	2	4	6	8	10	2	0+	100+	350+	500+	750+	1000+	9
9		SUBTOTAL RANKING POINTS (MAX. = 115)						76	Other Info: Does this project have a significant impact on productive farmland? YES X NO Attach impact statement if yes. Is the Applicant ready to proceed to bids after State Approval within 6 months? X YES NO							
10		COUNTY PRIORITY POINTS (25-20 -15)						25								
11		DISCRETIONARY POINTS (BY DISTRICT ONLY) (MAX=12)														
12		GRAND TOTAL RANKING POINTS						101								

* Applicants must certify local share contribution. Specify, all funding sources to be utilized as local share at the time of application submittal.

**DISTRICT 5
CAPITAL IMPROVEMENT PROJECTS
QUESTIONNAIRE
ROUND 33**

Name of Applicant: Village of Oakwood
Project Title: Water Improvement Project

The following questions are to be answered for each application submitted for State Issue II SCIP, LTIP and Loan Projects. Please provide specific information using the best documentation available to you. Justification of your responses to these questions will be required if your project is selected for funding, so please provide correct and accurate responses. **Communities and Townships under 5,000 in population should also complete Small Government Criteria.**

1. What percentage of the project in repair A= 100 %, replacement B= __%, expansion C= __%, and new D= __%? (Use dollar amounts of project to figure percentages and make sure the total equals one hundred (100) percent) A+B= __% C+D= __%

Repair/Replacement = Repair or Replacement of public facilities owned by the government (any subdivision of the state).

New/Expansion = Replacement of privately owned wells, septic systems, private water or wastewater systems, etc.

2. Give the physical condition rating : Critical

Closed or Not Operating: The condition is unusable, dangerous and unsafe. The primary components have failed. The infrastructure is not functioning at all.

Critical: The condition is causing or contributing to a serious non-compliance situation and is threatening the intended design level of service. The infrastructure is functioning at seriously diminished capacity. Imminent failure is anticipated within 18 months. Repair and/or replacement is required to eliminate the critical condition and meet current design standards. **(For Road Projects structural repair items would represent a minimum of 25% of the total Project Cost).**

Poor: The condition is substandard and requires repair/replacement in order to return to the intended level of service and comply with current design standards. Infrastructure contains a major deficiency and is functioning at a diminished capacity.

Fair: The condition is average, not good or poor. The infrastructure is still functioning as originally intended. Minor deficiencies exist requiring repair to continue to function as originally intended and/or to meet current design standards.

Good: The condition is safe and suitable to purpose. Infrastructure is functioning as originally intended, but requires minor repairs and/or upgrades to meet current design standards.

Excellent: The condition is new, or requires no repair. Or, no supporting documentation has been submitted.

- **In order to receive points provide supporting documentation (e.g. photos, a narrative, maintenance history, or third party findings) to justify the rating.**

3. If the proposed project is not approved what category would best represent the impact on the general health and/or public safety?

ROADS

Extremely Critical:	Resurfacing, Restoration, Rehabilitation and Reconstruction (4R) of a Major Access Road.*
Critical:	Resurfacing, Restoration and Rehabilitation (3R) of a Major Access Road.*
Major:	Resurfacing, Restoration, Rehabilitation and Reconstruction (4R) of a Minor Access Road.*
Moderate:	Resurfacing, Restoration and Rehabilitation (3R) of a Minor Access Road.*
Minimal:	Preventative Maintenance of a Major Access Road.
No Impact:	Preventative Maintenance of a Minor Access Road.

Projects that have a variety of work will be scored in the LOWEST category of work contained in the Construction Estimate.

Road/Street Classifications:

<i>Major Access Road:</i>	<i>Roads or streets that have a dual function of providing access to adjacent properties and providing through or connecting service between other roads.</i>
<i>Minor Access Road:</i>	<i>Roads or streets that primarily provide access to adjacent properties without through continuity, such as cul-de-sacs or loop roads or streets.</i>
<i>Preventative Maintenance:</i>	<i>Non Structural Pavement work such as chip sealing, cape sealing, microsurfacing, crack sealing, etc.</i>

*(3R) Resurfacing, Restoration and Rehabilitation - Improvements to existing roadways, which have as their main purpose, the restoration of the physical features (pavement, curb, guardrail, etc.) without altering the original design elements.

*(4R) Resurfacing, Restoration, Rehabilitation and Reconstruction - Much like 3R, except that 4R allows for the complete reconstruction of the roadway and alteration of certain design elements (i.e., lane widths, shoulder width, SSD, etc.).

BRIDGES SUFFICIENCY RATING

Extremely Critical:	0-25, or a General Appraisal rating of 3 or less.
Critical:	27-50, or a General Appraisal rating of 4.
Major:	51-65 or a General Appraisal rating of 5 or 6.
Moderate:	66-80 or a General Appraisal rating of 7.
Minimal:	81-100 or a General Appraisal rating of more than 7.
No Impact:	Bridge on a new roadway.

WASTEWATER TREATMENT PLANTS

Extremely Critical:	Environmental Protection Agency (EPA) orders in the form of a consent decree, findings and orders or court order. Health Department Construction Ban.
Critical:	Improvements ordered by the Environmental Protection Agency (EPA) in the form of NPDES Orders.
Major:	Replace deficient appurtenances. Update existing processes due to EPA recommendations.
Moderate:	Increase capacity to meet current needs or update processes to improve effluent quality.
Minimal:	New/Expansion project to meet a specific development proposal.
No Impact:	New/Expansion to meet future or projected needs.

WATER TREATMENT PLANT

Extremely Critical:	EPA orders in the form of a consent decree, findings and orders or court order.
Critical:	Improvements to meet Environmental Protection Agency (EPA) Safe Drinking Water Regulations and/or NPDES Orders.
Major:	Replace deficient appurtenances. Update existing processes due to EPA recommendations.
Moderate:	Increase capacity to meet current needs or update processes to improve water quality.
Minimal:	New/Expansion project to meet a specific development proposal.
No Impact:	New/Expansion to meet future or projected needs.

COMBINED SEWER SEPARATIONS (May be construction of either new storm or sanitary sewer as long as the result is two separate sewer systems.)

- Extremely Critical: EPA orders in the form of a consent decree, findings and orders or court order. Health Department Construction Ban.
- Critical: Separate, due to chronic backup or flooding in basements.
- Major: Separate, due to documented water quality impairment, or due to EPA recommendations.
- Moderate: Separate, due to specific development proposal within or upstream of the combined system area.
- Minimal: Separate, to conform to current design standards.
- No Impact: No positive health effect.

STORM SEWERS

- Extremely Critical: EPA orders in the form of a consent decree, findings and orders or court order.
- Critical: Chronic flooding (structure damage).
- Major: Inadequate capacity (land damage).
- Moderate: Inadequate capacity with no associated damage.
- Minimal: New/Expansion to meet current needs.
- No Impact: New/Expansion to meet future or project needs.

CULVERTS

- Extremely Critical: Structurally deficient or functionally obsolete. Deterioration has already caused a safety Critical: hazard to the public.
- Critical: Inadequate capacity with land damage and the existing or high probability of property damage.
- Major: Inadequate capacity (land damage).
- Moderate: Inadequate capacity with no associated damage.
- Minimal: New/Expansion to meet current needs.
- No Impact: New/Expansion to meet future or projected needs.

SANITARY SEWERS

- Extremely Critical:** EPA orders in the form of a consent decree, findings and orders or court order. Health Department Construction Ban.
- Critical:** Replace, due to chronic pipe failure, chronic backup or flooding in basements. Improvements ordered by the Environmental Protection Agency (EPA) in the form of NPDES Orders.
- Major:** Replace, due to inadequate capacity or infiltration, or due to EPA recommendations.
- Moderate:** Rehabilitate to increase capacity to meet current needs or to reduce inflow and infiltration.
- Minimal:** New/Expansion project to meet a specific development proposal.
- No Impact:** New/Expansion to meet future or projected needs.

SANITARY LIFT STATIONS AND FORCE MAINS

- Extremely Critical:** Structurally deficient. Deterioration has already caused a safety/health hazard to the public, or, EPA orders in the form of a consent decree, findings and orders or court order.
- Critical:** Inadequate capacity with actual or a high probability of property damage. Improvements ordered by the Environmental Protection Agency (EPA) in the form of NPDES Orders.
- Major:** EPA recommendations, or, reduces a probable health and/or safety problem.
- Moderate:** Rehabilitate to increase capacity to meet current needs.
- Minimal:** New/Expansion to meet a specific development proposal.
- No Impact:** New/Expansion to meet future or projected needs.

WATER PUMP STATIONS

- Extremely Critical:** Structurally deficient. Deterioration has already caused a safety hazard to the public, or, EPA orders in the form of a consent decree, findings and orders or court order.
- Critical:** Inadequate capacity with the inability to maintain pressure required for fire flows.
- Major:** Replace due to inadequate capacity or EPA recommendations.
- Moderate:** Rehabilitate to increase capacity to meet current needs.
- Minimal:** New/Expansion to meet a specific development proposal.
- No Impact:** New/Expansion to meet future or projected needs.

WATER LINES/WATER TOWERS

- Extremely Critical: Solve low water pressure or excessive incidents of main breaks in project area.
- Critical: Replace, due to deficiency such as excessive corrosion, etc.
- Major: Replace undersized water lines as upgrading process.
- Moderate: Increase capacity to meet current needs.
- Minimal: New/Expansion project to meet a specific development proposal.
- No Impact: New/Expansion to meet future or projected needs.

OTHER

- Extremely Critical: There is a present health and/or safety threat.
- Critical: The project will provide immediate health and/or safety benefit.
- Major: The project will reduce a probable health and/or safety problem.
- Moderate: The project will delay a health and/or safety problem.
- Minimal: A possible future health and/or safety problem mitigation.
- No Impact: No health and/or safety effect.

NOTE: Combined projects that can be rated in more than one subset may be rated in the other category at the discretion of the District 5 Executive Committee. In general, the majority of the cost or scope of the project shall determine the category under which the project will be scored.

(Submittals without supporting documentation will receive 0 Points for this question.)

Extremely Critical ____, Critical X , Major ____, Moderate ____, Minimal ____, No Impact ____. Explain your answer. Violation per EPA

(Additional narrative, charts and/or pictures should be attached to questionnaire)

4. Identify the amount of local funds that will be used on the project as a percentage of the total project cost.

A.) Amount of Local Funds = \$ 136,837

B.) Total Project Cost = \$ 215,750

RATIO OF LOCAL FUNDS DIVIDED by TOTAL PROJECT COSTS (A/B)= 63 %

Note: Local funds should be considered funds derived from the applicant budget or loans funds to be paid back through local budget, assessments, rates or tax revenues collected by the applicant.

5. Identify the amount of other funding sources to be used on the project, excluding State Issue II or LTIP Funds, as a percentage of the total project cost.

Grants ___% Gifts ___%, Contributions ___%

Other ___% (explain) _____ , Total ___%

Note: Grant funds and other revenues not contributed or collected through taxes by the applicant should be considered other funds. The Scope of Work for each Funding Source must be the same.

6. Total Amount of SCIP and Loan Funding Requested- An Applicant can request a grant per the categories below for points as indicated on the Priority Rating Sheet. If the Applicant is including a loan request equal to, but not exceeding 50% of the OPWC funding amounts listed below, there will be no point penalty. If loan funds requested are more than 50%, points as listed in the Priority Rating Sheet will apply.

- _____ \$500,001 or More
- _____ \$400,001-\$500,000
- _____ \$325,001-\$400,000
- _____ \$275,001-\$325,000
- _____ \$175,001-\$275,000
- X \$175,000 or Less

There are times when the District spends all of the grant money and has loan money remaining. When this happens, the district makes a loan offer in the amount of the requested grant to the communities that were not funded. The offers are made in the order of scoring. We need to know if you are not successful in obtaining grant dollars for your project if you would be interested in loan money:

YES X NO _____

(This will only be considered if you are not funded with grant money and there is remaining loan money.) Please note: if you answer "no" you will not be contacted, only if you answer "yes" will an offer be made in the event that there is loan money remaining.

7. If the proposed project is funded, will its completion directly result in the creation of permanent full-time equivalent (FTE) jobs (FTE jobs shall be defined as 35 hours/week) ? Yes ___ No X . If yes, how many jobs within eighteen months? ___ Will the completed project retain jobs that would otherwise be permanently lost? Yes ___ No X . If yes, how many jobs _____ will be created/retrained within 18

months following the completion of the improvements?

(Supporting documentation in the form of letter from affected industrial or commercial enterprises that specify full time equivalent jobs that will be retained or created directly by the installation or improvement of Public infrastructure. Additional items such as; 1) newspaper articles or other media news accounts, 2) public meeting minutes, and/or 3) a letter from the County Economic Development Director or State of Ohio Economic Development Professional that alludes to the requirement for the infrastructure improvement to support the business. Submittals without supporting documentation will receive 0 points for this question.)

8. What is the total number of existing users that will directly benefit from the proposed project if completed? 228 (Use households served, traffic counts, etc. and explain the basis by which you arrived at your number.)

9. Is subdivision's population less than 5,000 Yes X No

If yes, continue. You may want to design your project per Small Government Project Evaluation Criteria, released for the current OPWC Round to assist in evaluating your project for potential Small Government Funding. The Small Government Criteria is available on the OPWC website at <http://www.pwc.state.oh.us/Meth.SG.PDF> If No, skip to Question 11.

10. **OHIO PUBLIC WORKS COMMISSION SMALL GOVERNMENT PROGRAM GUIDELINES**

All projects that are sponsored by a subdivision with a population of 5,000 or less, and not earning enough points for District Funding from SCIP or LTIP Funds, are then rated using the Small Government Program Rating Criteria for the corresponding funding round. In order to be rated the entity must submit the Small Government Supplement and their required budgets with their application.

Only infrastructure that is village- or township- owned is eligible for assistance. The following policies have been adopted by the Small Government Commission:

- District Integrating Committees may submit up to seven (7) applications for consideration by the Commission. All 7 must be ranked, however, only the top five (5) will be scored. The remaining two (2) will be held as contingency projects should an application be withdrawn.

- Grants are limited to \$500,000. Any assistance above that amount must be in the form of a loan.

- Grants for new or expanded infrastructure cannot exceed 50% of the project estimate.

- The Commission may deny funding for water and sewer systems that are deemed to be more cost-effective if regionalized.

- If a water or sewer project is determined to be affordable, the project will be offered a loan rather than a grant. Pay special attention to the **Water & Wastewater Affordability Supplemental and the Small**

Government Water & Wastewater Affordability Calculation Worksheet. Both are available on the Small Government Program Tab at <http://www.pwc.state.oh.us/SmallGovernment.html>

- Should there be more projects that meet the “annual score” than there is funding, the tie breaker is those projects which scored highest under Health & Safety, with the second tie breaker being Condition. If multiple projects have equivalent Health & Safety and Condition scores they are arranged according to the amount of assistance from low to high. Once the funded projects are announced, “contingency projects” may be funded from project under-runs by continuing down the approved project list.
- Supplemental assistance is not provided to projects previously funded by the Commission.
- Applicants have 30 days from receipt of application by OPWC without exception to provide additional documentation to make the application more competitive under the Small Government criteria. Applications will be scored after the 30-day period has expired. The applicants for each District's two (2) contingency projects will have the same 30-day period to submit supplemental information but these applications will not be scored unless necessary to do so. **It is each applicant’s responsibility for determining the need for supplemental material. The applicant will not be asked for or notified of missing information unless the Commission has changed the project type and it affects the documentation required. Important information may include, but is not limited to: age of infrastructure, traffic counts or utility users, median income information, user rates ordinances, and the Auditor’s Certificate of Estimated Revenues or documentation from the Auditor of State that subdivision is in a state of fiscal emergency.**

If you desire to have your Round 33 project considered for Small Government Funding please download the Small Government Evaluation Criteria applicable to Round 33 by accessing the OPWC Website at <http://www.pwc.state.oh.us/Meth.SG.PDF>. Please complete the Small Government Evaluation Criteria and attach all required supporting documentation and attach it to the District 5 Questionnaire for Round 32.

11. MANDATORY INFORMATION, DISTRICT 5, DISCRETIONARY RANKING POINTS

List all specific user fees: Amount or
ROAD & BRIDGE PROJECTS: (OHIO REVISED CODE) Percentage

Permissive license fee	4504.02 or 4504.06 _____
	4504.15 or 4504.17 _____
	4504.16 or 4504.171 _____
	4504.172 _____
	4504.18 _____

Special property taxes	5555.48 _____
	5555.49 _____

Municipal Income Tax _____

County Sales Tax _____

Others _____

(DO NOT INCLUDE SCHOOL TAXES)

SPECIFIC PROJECT AREA INFORMATION.

Median household income _____

Monthly utility rate: Water _____

 Sewer _____

 Other _____


List any special user fees or assessment (be specific)

POLITICAL SUBDIVISION= Oakwood

COUNTY= Paulding

DISCRETIONARY POINTS (BY DISTRICT COMMITTEE ONLY)= _____

(25-20-15)

Date: 8/30/18
Signature: 
Title: Project Administration Assistant
Address: 1168 North Main Street, Bowling Green, Ohio 43402
Phone: 419-352-7537
FAX: 419-353-0187
Email: histerm@poggemeyer.com

Small Government Commission Application Checklist

Use of the following checklist with the Applicants Manual will help ensure that your application is scored at its best competitive advantage. It will also assist with the timely release of the Project Agreement should your project be funded. This form is for your use and not a required submission. Various templates and forms are in this manual, on the Small Government webpage, and on the OPWC Application webpage.

- [X] Compliant certified authorizing legislation by applicant's governing body (OPWC Application webpage)
 - [N/A] Cooperative agreement if multi-jurisdictional (OPWC Application webpage)
 - [X] Compliant Chief Financial Officer's Certification and Loan Letter (OPWC Application webpage)
 - [X] Funding commitment letters and or documentation for all non-OPWC matching funds
 - [X] Signed/stamped registered professional engineer's detailed cost estimate including in-kind costs (OPWC Application webpage)
 - [X] Signed/stamped professional engineer's weighted useful life statement if not submitted with original application (cannot be modified)
 - [X] Small Government Engineer's Plan Status Certification form (in this manual and on SG webpage)
 - [X] Clear description of problem and scope of work with appropriate documentation
 - [X] Source documentation for proof of age with year clearly visible or compliant letter from eligible public official (letter template in this manual)
 - [N/A] Project site photos, if appropriate
 - [X] Map showing project location/site
 - [N/A] Farmland Preservation Review Letter if any impact to farmland (OPWC Application webpage)
 - [X] ADT report for Road, Bridge & Culvert Projects
OR
Number of households/EDUs (with calculation) for Water, Wastewater, Storm Water Collection, Solid Waste Projects who directly benefit
- Roads, Bridges/Culverts, Storm Water, Solid Waste Projects Only:
- [N/A] Auditor's Certificate of Estimated Resources with line item detail unless applicant in State of Fiscal Emergency; also If Storm Water or Solid Waste project, the fund(s) typically used are identified (examples in back of this manual)
- Water and Wastewater Projects Only:
- [X] "Current" water and wastewater rate ordinances/resolutions for all entities providing services unless applicant in State of Fiscal Emergency
 - [X] Small Government Water & Wastewater Ability & Effort Supplemental form (in this manual and on SG webpage)

Small Government Self-Score

(Input Score in box for each criterion; will total automatically)

Applicant: Village of Oakwood

		SCORE
1	Ability & Effort (Use A or B according to project type)	
A.	<i>Roads, Bridges/Culverts, Storm Water, Solid Waste Projects ONLY</i> 0 2 4 6 8 10	<input type="text" value="N/A"/>
B.	<i>Water & Wastewater Projects ONLY</i> Cannot be self-scored; uses blind factor based on all project applications	<input type="text" value="N/A"/>
2	Health & Safety (Use A or B according to project type)	
A.	<i>Road, Bridge, Culvert</i> 0 2 4 6 8 10	<input type="text" value="N/A"/>
B.	<i>Water, Wastewater, Storm Water, Solid Waste</i> 0 2 4 6 8 10	<input type="text" value="6"/>
3	Age & Condition	
i.	<i>Age</i> 0 1 2 3 4 5	<input type="text" value="5"/>
ii.	<i>Condition</i> 1 3 5	<input type="text" value="3"/>
4	Leveraging Ratio 0 1 2 3 4 5 6 7 8 9 10	<input type="text" value="4"/>
5	Population Benefit 0 1 2 3 4 5	<input type="text" value="5"/>
6	District Priority Ranking - Completed by Administrator	<input type="text" value="N/A"/>
7	OPWC Funds Requested 0 2 4 6 8 10	<input type="text" value="8"/>
8	Loan Request (Default 0 points if no loan requested) 1 5 10	<input type="text" value="10"/>
9	Useful Life 1 2 3 4 5	<input type="text" value="5"/>
10	Median Household Income 2 4 6 8 10	<input type="text" value="8"/>
11	Readiness to Proceed	
i.	<i>Status of Plans</i> 0 2 5	<input type="text" value="0"/>
ii.	<i>Status of Funding</i> 0 3 5	<input type="text" value="5"/>
TOTAL		<input type="text" value="59"/>

OHIO
PUBLIC WORKS
FOR YOU

OHIO PUBLIC WORKS COMMISSION
SMALL GOVERNMENT PROGRAM

PY 33 METHODOLOGY

May 2018

EVALUATION CRITERIA

Complete and appropriate support documentation must be provided for a criterion in order to be awarded points. See Applicants Manual for guidance, forms and checklist.

1. Ability and Effort of the Applicant to Finance the Project (Maximum 10 points)

A. Road, Bridges/Culverts, Storm Water, Solid Waste Projects Only – “Auditor’s Certificate of Estimated Resources” showing fund detail, as provided in ORC sections 5705.35 and 5705.36 is used to determine potential financial resources available for the project. Score is based on the project’s total cost as a percentage of financial resources.

- _____ 0 Total project cost represents 0 to 20% of subdivision's total combined funds legally eligible for infrastructure type
- _____ 2 Total project cost represents 21 to 40% of subdivision's total combined funds legally eligible for infrastructure type
- _____ 4 Total project cost represents 41 to 60% of subdivision's total combined funds legally eligible for infrastructure type
- _____ 6 Total project cost represents 61 to 80% of subdivision's total combined funds legally eligible for infrastructure type
- _____ 8 Total project cost represents 81 to 100% of subdivision's total combined funds legally eligible for infrastructure type
- _____ 10 Total project cost exceeds 100% of subdivision’s total combined funds legally eligible for infrastructure type, or subdivision is in fiscal emergency

B. Water and Wastewater Projects Only – Determined by SG Administrator according to the Water & Wastewater Ability & Effort Calculation described in Applicants Manual. Information is obtained from both water and wastewater rate ordinances and the Small Government Water & Wastewater Ability & Effort Supplemental.

- _____ 0 +2 or more standard deviations above Average Variance
- _____ 2 +1 to +2 standard deviations above Average Variance
- _____ 4 0 to +1 standard deviations above Average Variance
- X 6 0 to -1 standard deviations below Average Variance
- _____ 8 -1 to -2 standard deviations below Average Variance
- _____ 10 -2 or more standard deviations below Average Variance, or subdivision is in fiscal emergency

2. Importance of Project to Health and Safety of Citizens - Score is assigned according to the application project description and any pertinent supplemental documentation. (Maximum 10 points)

A. Road, Bridge, Culvert

- 0 New infrastructure to meet future or projected needs
- 2 New infrastructure to meet current needs; Roadway surface paving less than 2 inches; Bridges with General Appraisal of 6 or above or with a Sufficiency Rating of 81-100
- 4 Roadway resurfacing paving equal to or greater than 2 inches with/without milling; Replace or install signal where warranted; Bridges with a General Appraisal of 5 or Sufficiency Rating of 66-80; Culvert replacement with no associated damage
- 6 Road widening to add paved shoulders or for safe passage, and/or roadway paving with full-depth base repair equal to or greater than 5% of roadway surface area; Intersection improvement to add turn lanes or realignment; Bridges with a General Appraisal of 4 or Sufficiency Rating of 51-65; Culverts with inadequate flow capacity
- 8 Complete roadway full-depth reconstruction (includes removal/replacement of base) or reclamation with/without drainage; Widening to add travel lanes; Intersection improvements to address excessive accident rate and/or inadequate level of service with a Crash Reduction Factor ($0.0 < CRF < 0.2$); Bridges with a General Appraisal of 3 or Sufficiency Rating of 26-50, or posted load reduction; Culverts with inadequate flow capacity and property damage (i.e. flooding)
- 10 Complete roadway reconstruction or reclamation with/without drainage with widening to add travel lanes; Intersection improvement to address excessive accident rate and/or inadequate level of service with Crash Reduction Factor ($CRF \geq 0.2$); Bridges with General Appraisal of 2 or less, or Sufficiency Rating of less than 26; Culverts that are structurally deficient

B. Water, Wastewater, Storm Water, Solid Waste

- 0 Infrastructure to meet future or projected needs
- 2 Expanded infrastructure to meet specific development proposal
- 4 Infrastructure to meet current needs; Update processes to improve effluent or water quality; To remain in compliance with permit due to increased standards; Increase storm sewer capacity in which there is no associated land damage; Increase sanitary sewer capacity; Replace water meters as part of an upgrade
- 6 OEPA recommendations; District health board recommendations; Increase storm sewer capacity that has associated land damage; Replace undersized waterlines as part of upgrade; Install new meters or replace meters that have exceeded useful life
- 8 Replacement of storm or sanitary sewers due to chronic flooding, back-up, or property damage; Inflow and/or Infiltration; Inadequate capacity to maintain pressure required for fire flows; Replacement of waterlines or towers due to excessive corrosion
- 10 OEPA Findings & Orders, OEPA orders contained in permit, Consent Decree or Court Order; Structural separations (CSOs)

3. Age and Condition of System to be repaired or replaced. This is a two-part criterion. (Maximum 10 points)

Part I – Age: This uses provided documentation for existing infrastructure. Documentation pertains to source documentation or from a compliant letter written by an eligible local official who can vouch for the time period during his/her term in office. If no documentation the default score is 1 point. (Maximum 5 points)

Life	20	30	50
Project Type	Road	Wastewater	Bridge/Culvert, Sanitary Sewer, Water, Storm Water, Solid Waste
Points			
0	New/ Expansion	New/ Expansion	New/ Expansion
1	2013-2018	2010-2018	2004-2018
2	2008-2012	2003-2009	1992-2003
3	2003-2007	1995-2002	1980-1991
4	1998-2002	1988-1994	1968-1979
5	Before 1998 or closed	Before 1988 or out of service	Before 1968 or closed

Part II - Condition (Maximum 5 points)

- 1 New/Expansion: New or expansion project components represent at least 50% of improvements
- 3 Poor: Infrastructure requires repair to continue functioning as originally intended and/or upgrade to meet current design standards.
- 5 Failed: Not functioning

4. Leveraging Ratio – Local and all non-OPWC funding sources as a percentage of total funding. (Maximum 10 points)

	Repair/Replacement	New/Expansion
<input type="checkbox"/> 0	10 or less	50 or less
<input type="checkbox"/> 1	11-15	51-55
<input type="checkbox"/> 2	16-20	56-60
<input type="checkbox"/> 3	21-25	61-65
<input checked="" type="checkbox"/> 4	26-30	66-70
<input type="checkbox"/> 5	31-35	71-75
<input type="checkbox"/> 6	36-40	76-80
<input type="checkbox"/> 7	41-45	81-85
<input type="checkbox"/> 8	46-50	86-90
<input type="checkbox"/> 9	51-55	91-95
<input type="checkbox"/> 10	56 or more	96 or more

5. Population Benefit – Number of those to benefit directly from the improvement as a percentage of applicant’s total population. (Maximum 5 points)

- 0 10% or less
- 1 25% - 11%
- 2 35% - 26%
- 3 45% - 36%
- 4 55% - 46%
- 5 56% or more

6. District Priority Ranking as provided by District (Maximum 10 points)

- 6 5th ranked district project
- 7 4th ranked district project
- 8 3rd ranked district project
- 9 2nd ranked district project
- 10 1st ranked district project

7. Amount of OPWC grant and loan funds requested (Maximum 10 points)

- 0 \$500,000 or more
- 2 \$400,000 - \$499,999
- 4 \$300,000 - \$399,999
- 6 \$200,000 - \$299,999
- 8 \$100,000 - \$199,999
- 10 \$99,999 or less

8. Loan request – Amount of loan funds as a percentage of OPWC assistance. (Maximum 10 points)

- 1 15 - 29% of OPWC assistance
- 5 30 - 49% of OPWC assistance
- 10 50 - 100% of OPWC assistance

9. Useful Life of Project – Taken from engineer’s useful life statement. (Maximum 5 points)

- 1 7 - 9 years
- 2 10 - 14 years
- 3 15 - 19 years
- 4 20 - 24 years
- 5 25 years or more

10. Median Household Income – Applicant’s MHI as a percentage of the statewide MHI. Information derived from the most recent 5-year American Community Survey as published by the Ohio Development Services Agency. (Maximum 10 points)

- 2 110% or more
- 4 100% - 109%
- 6 90% - 99%
- 8 80% – 89%
- 10 79% or less

11. Readiness to proceed. This is a two-part criterion. (Maximum 5 points)

Part I - Status of Plans – This uses the Small Government Commission’s Engineer’s Plan Status Certification. (Maximum 5 points)

- 0 Plans not yet begun
- 2 Surveying through Preliminary Design Completed (Items A-C)
- 5 Surveying through final construction plans, and secured permits and right-of-way as appropriate (Items A-H)

Part II - Status of Funding Sources – This uses source documentation including compliant CFO certifications and loan letters. (Maximum 5 points)

- 0 All funds not yet committed
- 3 Applications submitted to funding entities
- 5 All funding committed

**Small Government Commission
 Engineer's Plan Status Certification
 Required for Criterion No. 11, Part I**

Applicant: Village of Oakwood


District No.: 5

Project Name: Water Improvement Project

Item	Necessary for project?	Status	Completion Date
Met Completion dates for Items A - C (2 points)			
A	Surveying	Y <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	7/31/19
B	R/W Acquisition Identified	Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
C	Preliminary Design	Y <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	8/31/19
Met Completion dates for Items A - H (5 points)			
D	Final Construction Plans	Y <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	9/31/19
E	Permit to Install Issued	Y <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/>	12/31/19
F	NPDES Issued	Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
G	Other Permits Issued	Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
H	Executed Right of Way Option or Agreement	Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	

I hereby certify that the information above is true and correct to the best of my knowledge and belief.

Kenneth A. Maag
 Engineer's Printed Name


 Engineer's Signature

8-7-18
 Date



Engineer's Stamp/Seal

**Small Government Commission
Water & Wastewater Ability & Effort Supplemental**

(This form must be completed and submitted for all Water and Wastewater applications)

Applicant: Village of Oakwood

System Users – The Small Government Commission will use households from the most recent decennial Census of Population and Housing unless a system-generated user report for inside users is provided or Equivalent Dwelling Units (provide calculation if using EDUs).

608

Usage – The Small Government Commission will assume 4,500 gallons per month unless a system-generated usage report is provided proving higher consumption.

4500

Rates – Provide both water and wastewater rates, and any surcharges. Attach all relevant ordinances/resolutions showing the effective dates and rate tables. If service is supplied by a different entity the applicant must provide the same information as if it were supplying the service. Calculation of rates must be clear as supported by ordinance or resolution. Calculation must be for rates in effect and in active billing by December 2016; approved rates for a future date will not be accepted (see exception for new systems in Applicants Manual).

WATER

Billing Period:	Monthly	<u>X</u>	Quarterly	_____	Other	_____
Unit of Measurement:	Gallons	_____	Cubic Feet	_____	Flat Rate	<u>X</u>
Base Charge		\$ <u>43.90</u>				
Second Increment		\$ _____		\$ per unit from X to Y		
Additional Increments		\$ _____		\$ per unit from Y to Z		
Additional Increments		\$ _____				
Surcharges		\$ _____				
TOTAL		\$ <u>43.90</u>				

WASTEWATER

Billing Period:	Monthly	<u>X</u>	Quarterly	_____	Other	_____
Unit of Measurement:	Gallons	_____	Cubic Feet	_____	Flat Rate	<u>X</u>
Base Charge		\$ <u>43.90</u>				
Second Increment		\$ _____		\$ per unit from X to Y		
Additional Increments		\$ _____		\$ per unit from Y to Z		
Additional Increments		\$ _____				
Surcharges		\$ _____				
TOTAL		\$ <u>43.90</u>				

SMALL GOVERNMENT COMMMISION USE ONLY	
Water	_____
Wastewater	_____
Determination	_____

This is a copy of the last ordinance that was passed for water/sewer rates. Per the Ordinance the rates have increased by 3% per year. (for the next 3 years beginning Jan 1, 2015). The Following are the current rates for 2017.

No. of Persons	water charge	sewer charge	total	Deposit
1	24.04	39.34	63.38	126.76
2	38.24	40.43	78.67	157.34
3	42.62	42.62	85.24	170.48
4	45.90	44.81	90.71	181.42
5	49.17	45.90	95.07	190.14
6	54.64	49.17	103.81	207.62
7	55.73	53.54	109.27	218.54
8	56.83	56.83	113.66	227.32
9	60.10	59.01	119.11	238.22
10	62.28	64.47	126.75	253.50

Each additional person add \$2.00 per person for water and \$2.00 per person for sewer

Metered water users flat fee 49.17 plus 3.83 per 1,000 gallons above 5,000 gal minimum. Metered sewer charges 44.81 per business per month plus a rate of 3.83 per 1,000 gal above the 5,000 minimum per billing period.

Non metered commercial users are charged at the rate specified for 4 persons

VILLAGE OF OAKWOOD

ORDINANCE NO. 13-07

AN ORDINANCE ESTABLISHING WATER RATES AND SHUTOFF PROCEDURES FOR RESIDENTS OF THE VILLAGE OF OAKWOOD, PAULDING COUNTY, OHIO AND DECLARING AN EMERGENCY.

Whereas, it is necessary for the Village of Oakwood, Paulding County, Ohio to provide for the efficient operation of its water and sewer utilities, and

Whereas, it is necessary for the preservation of the public health, safety, and welfare of the Village's residents, by reason of the need for the orderly continuation of Village business and the necessity for the prompt collection and maintenance of adequate funds for the operation of Village water and sewer services, and

Whereas, it is necessary that new provisions pertaining to the prompt collection and maintenance of adequate funds for the operation of Village water and sewer services be implemented immediately,

NOW, THEREFORE, be it hereby ordained by the Council of the Village of Oakwood, Paulding County, Ohio:

SECTION 1. WATER DEPOSITS

A water deposit shall be required from all Village residents who are renting or purchasing their residence premises by installment Land Contract. Said deposit shall be in an amount equal to twice (2 times) the combined current monthly water and sewer rates based upon the number of persons in residence in the serviced dwelling. A resident is defined as a person of any age, being at the residence. The following monthly rate schedule shall be in effect for the number of persons in the residence in the serviced dwelling and the rate basis for all such water and sewer service deposits. Said schedule is as follows:

<u>No. of Persons</u>	<u>Water Charge</u>	<u>Sewer Charge</u>	<u>Total</u>	<u>Deposit</u>
1	\$22.00	\$36.00	\$58.00	\$119.00
2	\$35.00	\$37.00	\$72.00	\$144.00
3	\$39.00	\$39.00	\$78.00	\$156.00
4	\$42.00	\$41.00	\$83.00	\$166.00
5	\$45.00	\$42.00	\$87.00	\$174.00
6	\$50.00	\$45.00	\$95.00	\$190.00
7	\$51.00	\$49.00	\$100.00	\$200.00
8	\$52.00	\$52.00	\$104.00	\$204.00 ⁵⁰ 206.00
9	\$55.00	\$54.00	\$109.00	\$212.00 ⁵⁰ 218.00
10	\$57.00	\$59.00	\$116.00	\$228.00 ⁵⁰ 232.00

For each additional person, add \$2.00 per person for water and \$2.00 per person for sewer.

VILLAGE OF OAKWOOD

ORDINANCE 13-07

SECTION 2. WATER RATES

Metered water users shall be charged a flat fee of \$45.00, plus a rate of \$3.50 per 1,000 gallons above the 5000-gallon minimum. Metered sewer charges shall be based on the following: The sewer rate will be a charge of \$41.00 per business per month, plus a rate of \$3.50 per 1,000 gallons above the 5,000 gallon minimum per billing period. Water and sewer rates will be subject to a yearly increase of 3% per year for 3 years beginning on January 1, 2015.

Non-metered residential water users shall be charged at the rate set forth herein above in Section 1 based upon the number of persons in residence in the serviced dwelling.

Non-metered commercial users shall be charged for water service at the rate established herein above in Section 1 for four (4) persons.

SECTION 3. WATER TAP FEE

A. The water tap fee within the Village corporation limits shall be as follows:

Diameter/size of tap and service line

¾ inch	\$575.00
1 inch	\$625.00
2 inch	\$850.00
4 inch	\$2000.00
6 inch	\$5000.00

- B. The above rates shall apply only where a water main of adequate size exists in front of the property for which the tap is sought. Any extension or enlargement of water mains or other facilities required to furnish service shall be subject to the Utilities Lines Extension Policy and shall be paid for by the water user(s) involved.
- C. If actual cost exceeds the tap fee, the user/applicant shall pay the additional cost to the Village before water will be turned on by the Village.
- D. The Water Utility Department shall have the right to install the meter inside of the building and connect it to a remote outside dial or indicator.
- E. For service outside the Village Corporation limits, the total cost of all charges in SECTION 3 herein above, shall be increased by 50%.

VILLAGE OF OAKWOOD

ORDINANCE 13-07

SECTION 4 MISCELLANEOUS PROVISIONS

- A. The Village will charge a penalty of ten percent (10%) on all delinquent balances, outstanding after the stated due date. Water and Sewer bills shall be sent out on the first of the month. Said bills are due in full on or before the 19th day of such month. If said bills are not paid in full by the 19th day of such month the 10% penalty will be applied. The service will be shut off automatically if not paid by the 25th of each month by 2pm, unless previous arrangements have been made with the fiscal officer. Charge for reconnecting service shall be \$100.00.
- B. The repair of water leak, which stops when water service is turned off at the curb stop, is the responsibility of the customer/property owner. Utility department retains the right to inspect any and all repairs before any and all excavations are filled. Service will be restored only when repairs have been inspected and approved by Village. A turn on fee will be charged when service is restored at \$50.00.
- C. All sewer taps will have to pay a sewer fee based on occupancy, if the home is not occupied, it will be charged a monthly fee of \$18.03.
- D. Complaints of low water pressure:
1. When it is required to have curb stop excavated due to customer complaints and sufficient water pressure is flowing through curb stop, excavation will be filled and customer will be charged for all labor and materials used. The Village charge to customer for excavation shall be limited to \$50.00 if problem is on customer property and payment may be made in 5 installments.
 2. If insufficient pressure is observed, Utility, at its expense will resolve the problem.
- E. TAMPERING with water or sewer will be considered a minor misdemeanor with the appropriate fine assessed.

SECTION 5, REPEAL OF INCONSISTENT ORDINANCE

This ordinance repeals and supersedes Village Ordinance No. 07-02.

VILLAGE OF OAKWOOD

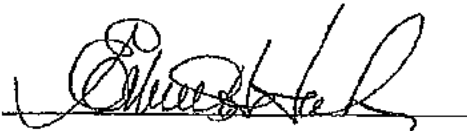
ORDINANCE 13-07

SECTION 6. EFFECTIVE DATE

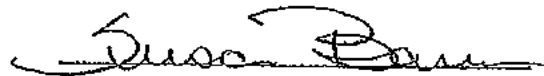
This Ordinance is hereby declared to be an emergency measure necessary for the preservation of the public health, safety, and welfare of the Village's residents, by reason of the need for the orderly continuation of Village business and necessity for the prompt collection and maintenance of adequate funds for the operation of Village water and sewer services; wherefore, this Ordinance shall be in full force and effect from and immediately after its passage.

PASSED: 12/23/13

ATTEST:



Erhard H. Henke - Mayor



Susan Barron - Fiscal Officer

Well 2?

OHIO WATER RESOURCES BOARD

Well Record No. 35 *JLS*

63
 Co. Paulding Twp. Brown Sec. 26
 Well Location 250' E. of NW plant Size 6" x 43'
 Map Continental

Owner City of Oakwood Address _____
 Driller Perry Lybarger Date 4-1-49

Well Head Elev. or M. P. _____
 Elev. of Ground at Well _____

Pumping Test: 40 gal. for 2 hrs.; 11' D.D.

Static Level 28' Date 4-1-49

Normal Pumpage _____

Quality _____ Use _____

Adequacy of supply _____
Chemical analysis on file.

Owner's Well No. or Other Designation _____

Source of Data Driller
 Collected by ms Date 1949

STRATA	DEPTH	
	From	To
Top soil	0	10
Yellow clay		20
Blue clay		30
Blue clay		43
Light blue lime	43	53
Light blue lime		63
Dark blue lime		73
" " "		83
" " "		93
" " "		103
" " "		113
" " "		123
" " "		133
" " "		143
" " "		153
" " "		163
" " "		200
" " "		206
Dark brown line /		
Pomona pump set at 115'		
Capacity - 40 gal.		
<i>Slight sulfur</i>		
<i>X = 1,484,200</i>		
<i>Y = 526,100N</i>		

* Chief Aquifer

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Columbus, Ohio

No 131343

County Paulding Township (Brown) Section of Township
or Lot Number.....
Owner Oakwood Corp. Address Oakwood, Ohio
Location of property 100 feet east of water-works

CONSTRUCTION DETAILS	PUMPING TEST
Casing diameter <u>6"</u> Length of casing <u>41</u>	Pumping rate <u>50</u> G.P.M. Duration of test <u>6</u> hrs.
Type of screen..... Length of screen.....	Drawdown <u>18</u> ft. Date <u>Aug 2 1953</u>
Type of pump <u>Hand</u>	Developed capacity <u>60 gal per minute</u>
Capacity of pump.....	Static level—depth to water..... <u>29</u> ft.
Depth of pump setting.....	Pump installed by.....

WELL LOG	SKETCH SHOWING LOCATION
----------	-------------------------

Formations Sandstone, shale, limestone, gravel and clay	From	To
	0 FeetFt.
<u>Black top soil</u>	<u>0</u>	<u>1</u>
<u>Yellow Clay</u>	<u>1</u>	<u>16</u>
<u>Gray Hard pan</u>	<u>16</u>	<u>39</u>
<u>Gray limestone</u>	<u>39</u>	<u>100</u>
<u>Brown "</u>	<u>100</u>	<u>130</u>
<u>Light Brown "</u>	<u>130</u>	<u>202</u>

Locate in reference to numbered
State Highways, St. Intersections, County roads, etc.

N.

100ft east of
W. Oakwood E.
waterworks

Do not refer to...

S.
See reverse side for instructions

WELL LOG AND DRILLING REPORT

29a

NO CARBON PAPER
NECESSARY -
SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

618575 ✓

COUNTY Paulding TOWNSHIP Brown SECTION OF TOWNSHIP 26
OWNER Village of Oakwood ADDRESS Oakwood, Ohio
LOCATION OF PROPERTY Oakwood well field Well No. 4

CONSTRUCTION DETAILS		BAILING OR PUMPING TEST <small>(specify one by circling)</small>	
Casing diameter <u>10"</u>	Length of casing <u>43'</u>	Test rate <u>128</u> gpm	Duration of test <u>24</u> hrs
Type of screen _____	Length of screen _____	Drawdown <u>204</u> ft	Date <u>6/21/83 - 6/22/83</u>
Type of pump _____		Static level (depth to water) <u>41'</u> ft	
Capacity of pump _____		Quality (clear, cloudy, taste, odor) <u>Sulphur</u>	
Depth of pump setting _____		Pump installed by <u>Sever Well Drilling</u>	
Date of completion <u>6/22/83</u>			

WELL LOG*			SKETCH SHOWING LOCATION	
Formations: sandstone, shale, limestone, gravel, clay	From	To	Locate in reference to numbered state highways, street intersections, county roads, etc.	
Brown Clay	0 ft	12 ft	<div style="text-align: center;">N</div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>at 84' 39gpm</p> <p>at 158' 20gpm</p> <p>at 219' 40gpm</p> <p>at 433' 80gpm</p> <p>at 450' 130gpm</p> <p>at 465' 145gpm</p> <p>at 480' 165gpm</p> </div> <div style="width: 45%; text-align: right;"> <p>W</p> <p>E</p> </div> </div>	
Blue Clay	12'	41'		
Lt. Brown Limestone	50'	83'		
Dk. Brown Limestone	83'	170'		
Lt Gray Limestone	170'	184'		
Dk Brown Limestone	184'	290'		
Dk Gray Limestone	290'	390'		
Brown Limestone	390'	410'		
White Limestone	410'	475'		
Gray Limestone (Hrd)	475'	480'		
			S	

DRILLING FIRM Sever Well Drilling
ADDRESS 228 State Delphos Ohio

DATE 6/22/83
SIGNED Daniel J. Sever

*if additional space is needed to complete well log, use next consecutive numbered form.