

**MINUTES
PUBLIC WORK'S COMMITTEE MEETING
Wednesday, January 10, 2018
5:30 P.M., Allouez Village Hall**

Present: Jim Genrich, Jim Rafter, Rick King, Curt Beyler, Craig Berndt, Jeff Piette
Excused: Lynn Green
Also present: Jim O'Rourke, Becky Nyberg

1. MODIFY/ADOPT AGENDA
Motion to approve the agenda as presented by Rafter, second by King. Motion carried.
2. APPROVE MINUTES from the October 11, 2017 meeting.
Motion to approve the minutes of October 11, 2017, as presented by Rafter, second by Beyler. Motion carried.

OLD BUSINESS:

NONE

NEW BUSINESS:

3. DISCUSSION/ACTION: REVIEW/RECOMMENDATION OF BIDS FOR WEBSTER SRTS PROJECT (DPW Berndt).
The bid summary memo was reviewed (attached). The low bid by Vinton Construction is 4% higher than the plan, and all bids are very close together. However, the local share (Allouez cost) of the project construction plus construction staking costs remain the same as the original estimated cost at approximately \$88,000.

At this time is it recommended that the contract be awarded by the village board subject to WisDOT approval of the contract, and authorize the Village President to sign the contract once it is approved by WisDOT. The contract is not to be signed by the village at this time.

Motion by Beyler, second by King to **Recommend to the Village Board to "Approve the Award of Construction Contract to Vinton Construction in the amount of \$396,503.90 subject to approval of the contract by the Wisconsin Department of Transportation."**

4. DISCUSSION/ACTION: REVIEW/RECOMMENDATION OF DOTY SCHOOL SRTS PROJECT APPLICATION for WisDOT FUNDING (DPW Berndt).
Staff has prepared a draft application for the Transportation Alternatives Program (TAP), which is an alternate year WisDOT program for Safe Routes to

School (SRTS) projects and other programs. This application is for pedestrian sidewalks and street crossings. This was a recommended project in the 2012 Village SRTS Study for the Doty School area. The sidewalks include from Doty School to East River Drive, and East River Drive from Hoffman Road to LeBrun Street. The project construction funded by DOT (if this project is selected) is approximately \$400,000, and the local share cost of the entire project is approximately \$200,000. This is an opportunity to construct sidewalks in the village pedestrian plan on streets not scheduled for reconstruction.

Motion by Rafter, second by Beyler to **Recommend to the Village Board to submit the Doty School SRTS application to WisDOT and include the design engineering cost in the funding application.** Motion carried.

5. DISCUSSION/ACTION: LIBAL STREET TRAFFIC INFORMATION
(Village President Rafter).

The Libal Street traffic and speed information was reviewed, and the data shows traffic speeds are within or near the posted speed limit of 30 mph. As a result, further investigation of speed limit change at this time does not appear warranted.

The following measures were discussed and the consensus was to proceed with the following: Review the current speed data for time of day and vehicle counts to further evaluate the results. Conduct another speed check in 2018 to continue to accumulate data. Evaluate the feasibility of installing bike lane striping and vehicle parking areas on Libal Street as a way to possibly phase into the future street plan.

6. DISCUSSION/ACTION: DESIGNATED SIGNATURE AUTHORITY FOR
STORMWATER ANNUAL REPORT (DPW Berndt).

The WDNR is implementing a new stormwater annual reporting procedure which is an electronic submittal with an electronic signature. To proceed with the annual report it is necessary to re-approve the Public Works Director as the authorized signature for the annual report. The village president remains as the authorized signature for any grants, contracts, or legal documents—same as in the past. The stormwater annual report will be brought to the Public Works Committee and Village Board for review and approval before submitting to the WDNR.

Motion by Genrich, second by King to **Recommend to the Village Board to that the Director of Public Works (C. Berndt) be approved as the authorized municipal contact for submittal of the MS4 stormwater annual report.** Motion carried.

7. DISCUSSION/ACTION: UPDATED CIP PLAN (DPW Berndt).

The Public Works Capital Improvement Plan (CIP) has been updated to include the Parks Department street and parking lot projects so that these projects are

funded and constructed as part of the major projects and bond issue. The CIP will be updated in the next two months to finalize the paving projects for 2019 to 2021. If the Webster Avenue project develops it will be added to the CIP. The current Public Works CIP is attached.

8. DISCUSSION/ACTION: COMPLIANCE MANAGEMENT OPERATIONS and MAINTENANCE (CMOM) REPORT DISCUSSION (DPW Berndt).
The CMOM report was completed last year. A summary of the plan recommendations are attached. The recommendations include continuing old sanitary sewer replacements as part of the street reconstruction program, continue the alternate year sewer televising and spot repair program for multi-block areas of the collection system, and revise the village ordinances to require defective sewer lateral replacements on reconstructed streets as part of the large projects. This information is for reference.

9. DISCUSSION/ACTION: WATER UTILITY LONG-RANGE PLAN (DPW Berndt).
The Water Utility long-range plan summary (attached) was discussed. The plan recommends continuing old water main replacements as part of the street reconstruction projects, continue the annual leak detection project to reduce water losses, and replacement of the Station 3 storage tanks in about 2035. There are other improvements identified as well. This is for reference.

DISCUSSION:

10. ADJOURNMENT

Motion to adjourn at 6:30 pm by King, second by Beyler. Motion carried.

Minutes by C. Berndt, January 11, 2018

VILLAGE OF ALLOUEZ

Allouez Village Hall • 1900 Libal Street • Green Bay, Wisconsin 54301-2453
Phone No.: (920) 448-2800 • Fax No.: (920) 448-2850

Department of Public Works

WEBSTER SCHOOL SAFE ROUTES TO SCHOOL PROJECT CONTRACT AWARD

The SRTS project has been bid. The results are as follows:

Vinton Construction	\$396,503.90
Sommers Construction	\$399,862.50
Peters Concrete	\$401,500.65

It is recommended that the contract be awarded to Vinton Construction, subject to the note below.

The bid is higher than the current allocated funds of \$386,615 for construction. See the attached tables of data.

A construction contingency of 3% should be added to the bid construction cost as there may be some variation in the total cost due to variation in the bid quantities. This results in a total construction cost estimated at \$408,504.

To fund this increase in construction cost, funds will be reallocated from the construction review cost of \$41,401 to construction. The total funded cost is \$350,693 which is the maximum funds available to the village. The proposed changes in this project will still be about \$20,000 below the maximum funds available.

The net cost to the village is projected to increase from the original \$77,323 to \$88,798. This increase in local share cost includes retaining Cedar Corp (engineering) to provide the construction staking. This cost is proposed to not be included in the funded project cost because if funded we need to go thru the entire procurement process for a small reimbursement, and we feel it is important to have the design firm provide the construction staking.

We have \$125,000 budgeted for construction and engineering. So adequate funds are available to complete the local share cost of the project

It is recommended that the PWC "Recommend to the village board to approve the Award of Contract to Vinton Construction in the amount of \$396,503.90 subject to approval of the contract by the Wisconsin Department of Transportation".

The contract will actually be signed by the village president after we receive formal contract approval by WisDOT.

C. Berndt, DPW, January 5, 2018

SUMMARY OF COSTS - Webster School SRTS Project

Summary of Costs from WisDOT Agreement and Project Construction Bid

	Total Cost	Federal Funds at 80%	Local Funds at 20%
WisDOT Participating Construction Cost	\$386,615	\$309,292	\$77,323
WisDOT Participating Construction Review	\$51,752	\$41,401	\$10,351
Total Cost Distribution	^A \$627,117	\$350,693*	\$176,424
		*(Max funds to village)	
<u>Actual Costs based on Project Construction Bid</u>			
WisDOT Actual Participating Construction Bid	\$396,504	\$309,292	\$87,212
3% Construction Contingency	\$12,000	\$22,000**	\$10,000
Total	\$408,504	\$331,292	\$77,212
		**Transfer of Funds	
WisDOT Participating Construction Review @ 2%	\$7,930	\$6,344	\$1,586
(Reduced by transfer of \$22K to Construction)			
Village Construction Eng Cost (staking)	\$10,000	\$10,000	\$0
(Federal funds not used for staking)			
Total Cost			\$88,798

Date: January 4, 2018 based on construction bid plus contingency.

A -- Construction cost increase due to bid and added contingency of 3%.

B -- Increase construction funds by transfer of \$22K within Federal funds allocation.

C -- Revised funds still less than the available \$350K Federal funds allocated to village.

*100% of \$77,323 = \$77,323
Applied*

*100% of \$88,798 = \$88,798
Estimated*

Cost Summary from WisDOT/Village Agreement

SUMMARY OF COSTS					
PHASE	Total Est. Cost	Federal Funds	%	Project Sponsor Funds	%
ID 4517-05-00					
Design	\$65,300		0%	\$65,300	100%
Design Review #	\$23,450		0%	\$23,450	100%
ID 4517-05-71					
Participating Construction	\$386,615	\$309,292	80%*	\$77,323	BAL*
Participating Construction Review #	\$51,752	\$41,401	80%*	\$10,351	BAL*
Total Est. Cost Distribution	\$527,117	\$350,693	MAX	\$176,424	N/A

*This project has a TAP federal funding maximum of \$350,693. This maximum is cumulative for all federally funded project phases.
 # Review costs are administered and paid for by WisDOT. The Project Sponsor will be billed for any required local match and for costs beyond the cumulative federal or state funding.

This request is subject to the terms and conditions that follow (pages 3-10) and is made by the undersigned under proper authority to make such request for the designated Project Sponsor and upon signature by the State shall constitute agreement between the Project Sponsor and the State. No term or provision of neither this State/Municipal Agreement nor any of its attachments may be changed, waived or terminated orally but only by an instrument in writing duly executed by both parties to this State/Municipal Agreement.

Signed for and in behalf of: **Village of Allouez** (please sign in blue ink.)

Name	Title	Date
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Signed for and in behalf of the State:

Name	Title	Date
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GENERAL TERMS AND CONDITIONS:

1. All projects must be in an approved Transportation Improvement Program (TIP) or State Transportation Improvement Program (STIP) prior to requesting authorization.
2. Work prior to federal authorization is ineligible for federal funding. The Project Sponsor will be notified by the State when each project phase or ID is authorized and available for charging.
3. The initiation and accomplishment of the project will be subject to the applicable federal and state regulations, as referenced in the document *A Sponsor's Guide to Non-Traditional Project Implementation*. The Project Sponsor, throughout the entire project, commits to comply with and promote all applicable federal and state laws and regulations that include, but are not limited to, the following:
 - a. Environmental requirements, including but not limited to those set forth in 23 U.S.C. 139 and the National Environmental Policy Act (42 U.S.C. 4321 et seq.).
 - b. Equal protection guaranteed under the U.S. Constitution, WI Constitution, Title VI of the Civil Rights Act and Wis. Stat. 16.765. The Project Sponsor agrees to comply with and promote applicable Federal and State laws, Executive Orders, regulations, and implementing requirements intended to provide for the fair and equitable treatment of individuals and the fair and equitable delivery of

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Department of Public Works

DELEGATION OF SIGNATURE AUTHORITY FOR MS4 ANNUAL REPORT

The WDNR is implementing a new electronic reporting process for the annual MS4 stormwater reporting. In past years the report was submitted via mail. Beginning with the 2017 annual report (submitted in March 2018) the report must be prepared on-line and submitted electronically.

The new report submittal requires a new authorization form for submittal by the Public Works Director, which form is attached. This submittal form should be approved by the village.

In the past the same form was required (but submitted by mail) and was approved by the village board.

This approval does not include authorization for any submittals that include contracts or grants. Any contracts must be approved by the village board and signed by the village president.

It is requested that this signature authority form be approved by the village.

C. Berndt, December 5, 2017

Delegation of Signature Authority for Electronic Submittal of WPDES Municipal Separate Storm Sewer System (MS4) Permit Documents

Form 3500-123 (R 09/17)

Page 1 of 2

Notice: This Delegation of Signature Authority (DSA) form is authorized by s. NR 205.07(1)(g), Wis. Adm. Code, to delegate electronic signature authority for the submittal of electronic MS4 Annual Reports or other MS4 permit compliance documents. To delegate electronic signature authority, submittal of a completed DSA form to the Department of Natural Resources (Department) is mandatory for any municipality regulated under 40 CFR Part 122, s. 283.33, Wis. Stats., and subch. III of ch. NR 216, Wis. Adm. Code. Failure to complete this form correctly will result in rejection of the submittal by the Department. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

Please read all instructions before completing and type or clearly print the information. Submission of this DSA constitutes notice that the authorized municipal contact identified in Section I has authorized the person identified in Section II to electronically sign the MS4 permit document for the permitted municipality. The completed DSA form shall be submitted electronically as an attachment to the MS4 permit document. Mailed copies will not be accepted.

Note: Submission of a DSA form is not required when the authorized municipal contact electronically signs the MS4 permit document via the online water permit application system.

Section I: Municipal Information			
Name of Municipality	Authorized Municipal Contact (first and last name)		
Village of Allouez	Craig Berndt, Public Works Director		
Mailing Address	City	State	ZIP Code
1900 Libal Street	Green Bay	WI	54301
E-mail Address	Phone Number (include area code)	Alternate Phone Number	
Craig@villageofallouez.com	(920) 480-2800		

Section II: Delegated Signatory Information			
Name (individual, company, organization, or entity)	Signatory Name (first and last name)		
Craig Berndt, Public Works Director	Craig Berndt		
Mailing Address	City	State	ZIP Code
1900 Libal Street	Green Bay	WI	54301
E-mail Address	Phone Number (include area code)	Alternate Phone Number	
Craig@villageofallouez.com	(920) 448-2800		

Certification

This is to notify the Department that as the authorized municipal contact, I delegate signature authority to the person identified in Section II for electronic signature of the MS4 permit document pursuant to ch. NR 216, Wis. Adm. Code. I authorize the person identified in Section II pursuant to the delegation of signature authority process set forth in s. NR 205.07(1)(g), Wis. Adm. Code.

As required by NR 205.07(1)(g)2, Wis. Adm. Code, this form will be submitted to the Department with the MS4 permit document. I understand that if there are any changes to this authorization, a new complete DSA form shall be submitted to the Department. I understand that the municipality is the permittee under ch. NR 216, Wis. Adm. Code, and as such, I am responsible for compliance with the contents of the MS4 permit document associated with the WPDES Municipal Separate Storm Sewer System (MS4) Permit. I understand that I have the opportunity to create a Wisconsin Management System (WAMS) ID to electronically sign the MS4 permit document, but without a WAMS ID, I do not have access to the online water permit application system. I am entrusting the person identified in Section II to electronically sign the MS4 permit document on my behalf and submit all required information and attachments.

For this DSA form, the MS4 permit document and all required information and attachments, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NOTE: The person signing below must be a representative of the municipality as described in the instructions. Failure to properly complete and sign this form will result in its rejection.

Signature of Authorized Municipal Contact	Date Signed
Printed Name of Authorized Municipal Contact Craig Berndt, P.E.	Title Director, Public Works

**Delegation of Signature Authority for Electronic Submittal
of WPDES Municipal Separate Storm Sewer System
(MS4) Permit Documents**

Form 3500-123 (R 09/17)

Page 2 of 2

Instructions

Section I: Municipal Information

Provide the legal name of the Authorized Municipal Contact for the permitted municipality. The mailing address and phone number given should be for the authorized contact. "Authorized Municipal Contact" includes the municipal official charged with compliance and oversight of the permit conditions, and signature authority for submitting permit documents to the Department (i.e., Administrator, Director of Public Works, Engineer, Mayor).

Section II: Delegated Signatory Information

Provide the legal name of the person, company, organization, or any other entity and the legal name of the person who is the delegated signatory. The mailing address and phone number given should be for the delegated signatory.

Section III: Certification

The DSA form shall be signed by the Authorized Municipal Contact, which may include the permitted municipality's Administrator, Director of Public Works, Engineer, Mayor or other duly authorized representative.

The completed DSA form must be submitted electronically as an attachment with the MS4 permit document. Mailed copies will not be accepted. The online water permit application system can be accessed at the Department's website at: dnr.wi.gov/permits/water/.

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Department of Public Works

LONG RANGE CAPITAL IMPROVEMENT PLAN UPDATE

January 2018

The following comments apply to the update to the Public Works Long Range CIP Plan. This is an on-going plan and will have future updates as needed.

Summary:

1. The Street Maintenance Projects (paving) are finalized for 2018. The total work will increase to \$500,000 because direct bill of the fire protection charge is fully implemented.
2. The Street Maintenance Projects beginning in 2019 will be further evaluated and the street list updated later this year. The street list and schedule is preliminary at this time and should not be used for planning.
3. The Street and Utility Reconstruction Projects funding level is proposed at a project bid level (actual expenditure) of approximately \$2.75 million and slightly more in alternate years. This increase is because projects need to be completed sooner due to the extensive backlog of street and utility work. The intent is to complete the largest portion of the village total reconstruction needs by 2029.
4. The Street and Utility Reconstruction projects proposed for 2019 includes the remaining section of Longview, all of Oakwood Avenue, and two side streets (Oakhill, Summit) that connect into Oakwood. Oakwood Avenue is the next highest priority street for reconstruction. The actual cost of these projects is likely to be in the range of \$2.5-2.7 million.
5. Parks paving improvements to parking lots and roadways are included in the alternate project years beginning in 2019. These are included because they are part of a bond borrowing and the costs should be lower when included in the street projects.
6. The Allouez portion of the sewer and water replacement on Riverside Drive in 2020 is the best estimate at this time. The construction cost will be estimated as the current cost is a placeholder only.
7. The stormwater treatment projects are shown in 2019 and 2021. These must be submitted to the WDNR in 2018 to qualify for loan/grant funding and approval. The proposed construction schedule is a result of the funding schedule and the need to construct during the Riverside Drive reconstruction project.

8. The Libal Street resurfacing project will be funded by WisDOT. The design schedule is likely to move to 2021 by the MPO with construction in 2024.
9. A possible Webster Avenue commercial development project, or the repair of Webster Avenue if a separate project, are not included in the CIP at this time. It will be added if the project moves forward.

Conclusions:

1. Funding for reconstruction projects increased to expedite completion of the projects in most need. It is recommended that this higher funding level be established for the next (2019) and future projects.
2. The 2019 reconstruction project should begin design in the near future. There is the possibility that a federal stimulus program for infrastructure will be approved in 2018. This project could qualify for this program but the design must be completed and the project ready for construction.
3. Parks paving projects are included in this CIP.
4. The street maintenance projects for 2019 and after will be developed in early 2018. At this time do not use the street list for planning.

C. Berndt, DPW
December 5, 2017

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Department of Public Works

ALLOUEZ SANITARY COLLECTION SYSTEM GOALS AND OBJECTIVES

Key goals and objectives of the Allouez Compliance Maintenance Operations and Management program are, in the approximate order of priority, as follows:

1. Continue the capital projects program for removal and replacement of aging sanitary sewers and sanitary laterals that are in poor condition. This program is planned for the next 8 years to 2026. The objective is to replace failing sewers and reduce infiltration flow.
2. Replace selected high priority sanitary sewer segments in areas of suspected or known significant sewer defects. An example is the sewer on the south village boundary near Andalusia Court.
3. Continue the annual televising and sewer repair work in segments of the collection system under the sanitary utility operating budget. This is a 2-4 block area annually.
4. Continue the annual sanitary sewer flushing and manhole inspection program based on completing one-third of the collection system annually. This program is well established and will be continued.
5. Upgrade the sanitary sewer lateral replacement ordinance to require lateral replacement when street reconstruction occurs. This applies to non-PVC laterals.
6. Procure a more advanced and capable sanitary sewer televising camera to increase flexibility and use of the system.
7. Develop a somewhat more comprehensive sanitary sewer televising program to identify problem areas for repair or replacement. Because the capital projects program is well established, televising work has been a lower priority. There are enough sewers in known poor condition for an extensive capital program for sewer replacement.
8. Implement a cross-connection reduction program to replace the previous inspection on sale program. This would be an area approach to inspections.
9. Enhance the sanitary sewer grease control program, which entails more inspections of businesses and other commercial facilities, to ensure adequate grease traps are in place. This is more of a data management program for tracking grease trap cleaning.

10. Evaluate the collection system for bottlenecks (possible East River location) and for inflow sources. Many inflow sources have been removed but it is likely more exist.

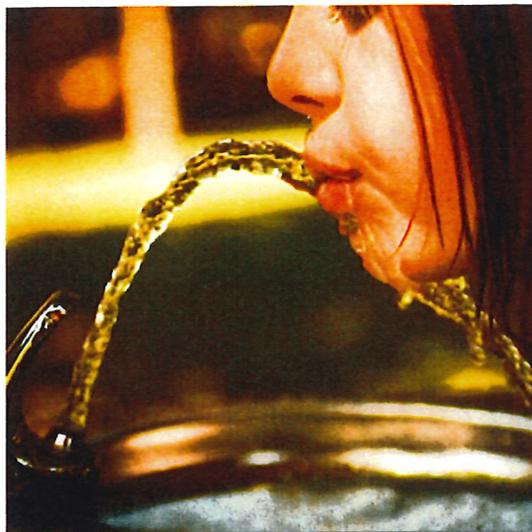
Engineering Report 2017 Update

Water System Evaluation & Improvement Plan Update

Prepared For The



VILLAGE OF ALLOUEZ
BROWN COUNTY, WISCONSIN



UPDATED: FEBRUARY 22, 2017
UPDATED: DECEMBER 2016
UPDATED: OCTOBER 14, 2013
OCTOBER 13, 2009

McM. No. A0012-9-15-00684.00
(McM. No. A0012-980833)

Prepared By:

AMY J. VACLAVIK, P.E., BCEE
GARY L. ROSENBECK, P.E., BCEE

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ENGINEERS ARCHITECTS

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There is a large volume of water (approximately 560,000-gallons) maintained below elevation 745.0 in the 1.0 MG standpipe that cannot be readily used in the event of an emergency. A booster Pump Station could be utilized to pump water out of the standpipe in the event of an emergency and maintain pressures in the distribution system. By adding a booster Pump Station to pump water from the tank, while isolating the tank from the distribution system, would have the tank essentially serve as a ground reservoir. The existing distribution system has sufficient capacity to convey a high rate of flow away from the standpipe. While this additional storage volume is not warranted at this time, this pumping option could serve to replace existing storage capacity at the Well #3, Well #4 or Well #7 reservoir sites in the future.

- M. The Village has two (2) potential options for interconnection of the water distribution system with a neighboring community to use in the future as a replacement option of the existing two (2) wells. A connection to the Village of Bellevue would require a crossing of the East River, but is of limited capacity due to the size of water main piping in both the Bellevue and Allouez systems. A connection to the City of Green Bay would provide sufficient capacity, but would require a negotiated Agreement for use as an emergency supply. The annual cost of maintaining the existing wells for emergency use is estimated at \$27,000/year.¹

VIII. RECOMMENDATIONS

The following are the recommendations for future improvements for the Allouez water supply and distribution system:

- A. The water distribution system Leak Detection Program should be continued until such time the annual water loss reduction cost savings is less than the cost of the Water Loss Detection Study and water main leak repairs.
- B. The Village should continue the current, aggressive water main and water service replacement program (Street & Utility Reconstruction Program) because of the large amount of old cast iron water mains that are in poor condition, and replacing water services that are experiencing leaks. A replacement schedule should be implemented to replace as much as 50% of the remaining cast iron mains within the next 12 to 15-years.
- C. The Village should implement an aggressive residential water services replacement program to reduce that significant source of water losses. This should be part of the Village framework lateral replacement program. Lead laterals, and any laterals requiring repair, should be strong candidates for replacement.

¹The Opinion Of Probable Cost was prepared for use by the Owner in planning for future costs of the project. In providing Opinions Of Probable Cost, the Owner understands that the Design Professional has no control over costs or the price of labor, equipment or materials, or over Construction Professionals' method of pricing, and that the Opinions Of Probable Cost provided herewith are made on the basis of the Design Professional's qualifications and experience. It is not intended to reflect actual costs, and is subject to change with the normal rise and fall of the local area's economy. This Opinion must be revised after every change made to the project or after every 30-day lapse in time from the original submittal by the Design Professional.

- D. Reservoir #6 should be removed from service because of the limited storage volume and for Wisconsin Code non-compliance issues at the reservoir. Well #6 has already been removed from service. The *Storage Capacity Analysis* indicates the system can meet the future needs of the community without Reservoir #6.
- E. The emergency backup power systems for Well #7 should be upgraded to provide an on-site emergency generator. The auxiliary power natural gas engine at Well #4 should be modified to provide a larger cooling system to sustain extended operation to address the current overheating issues.
- F. **Well #4 and Well #7 should continue to be maintained**, as well as the booster pumps and reservoirs at Well #3, Well #4 and Well #7 sites to provide a reliable emergency supply and provide the storage necessary to provide system storage to meet several criteria:
1. CBCWA contract requirements for storage volume.
 2. Continue to meet a fire flow demand of 3,500 gpm for 3-hours under a MDD condition.
 3. Meet supply demands of the MDD.
- G. **The reservoirs at Stations #3, #4 and #7 should be maintained, as long as the repair and maintenance costs do not become excessive.** The condition of the reservoirs is observed every 5-years, as required by Wisconsin DNR Administrative Code. The 2014 Observation Report of the round, 300,000-gallon reservoir at Station #3 identified that, to prevent further corrosion of exposed reinforcing steel in the reservoir roof, the exposed steel should be power-cleaned and coated with an NSF 61 approved coating. This work has since been completed. The rectangular, 800,000-gallon reservoir is in good condition and no repairs were recommended.

The reservoir at Station #4 was last observed in 2013, and was found to be in good condition. No repair recommendations were made in the observation report.

Reservoir #7 was found to be in good condition when last observed in 2014. It was recommended that, during a future scheduled emptying of the reservoir, the exposed reinforcing steel in the ceiling should be cleaned, coated and covered to prevent further corrosion of the steel and spalling of the concrete.

The concrete reservoirs will eventually reach the end of their useful life and need to be replaced. **The Village should develop a long-range plan to replace the reservoirs, especially Reservoir #3, with either elevated storage or the addition of a booster Pump Station at the standpipe**, as described in the next paragraph, to access 100% of the storage volume in the standpipe. Special attention should be given to any future reservoir inspection to confirm the integrity of the membrane provided as part of the roofing system.

H. The operational control of the water system could be modified to allow for the use of water stored in the Allouez 1.0 MG standpipe below the current low water elevation 779.0 and elevation 745.0 in an emergency condition, where the CBCWA supply or the water supplied from booster pumps are inadequate or unable to meet an emergency flow condition. Such an event would result in a pressure condition of less than 35 psi near the Allouez standpipe, but should not permit pressures to fall below 20 psi. A more efficient and effective use of this storage, however, can be implemented with the addition of a booster Pump Station, provided with emergency power, to access 100% of the storage volume in the standpipe, while maintaining the minimum water pressure conditions of 35 psi in the water system.

The need for providing this additional storage capacity to the system can only be justified under an operational scenario where the supply systems are operating on emergency power with an interrupted CBCWA supply system.

I. The Village should develop a long-range plan for an interconnection with an adjacent community, whether it be the Village of Bellevue or the City of Green Bay or a combination of the two. The importance of this effort should be to either identify a more effective plan for providing an emergency supply or to replace the existing groundwater supply, should the continued use of the wells be further restricted by the DNR due to water quality conditions.

J. The November 16, 2016 DNR Allouez *Waterworks 2016 Sanitary Survey* identified six (6) recommendations that were to be considered for addressing non-Code issues. Four (4) non-conforming issues were identified that represented water system features that currently exist, but do not conform to recent changes to Administrative Code. These recommendations and non-conforming features are listed in the *Allouez Waterworks 2016 Sanitary Survey* provided in Appendix A.

IX. CAPITAL IMPROVEMENTS PLAN SCHEDULE

The following long-range schedule may be used for implementation planning of the Capital Improvement Plan. This Plan incorporates the various recommendations made in this system evaluation.

Years	Action Plan
2017 - 2025	<ul style="list-style-type: none"> ▪ Continue cast iron water main replacement projects (alternate years, replace 50% of current cast iron mains)
2018	<ul style="list-style-type: none"> ▪ Provide internal repairs to the water standpipe to address ice damage to overflow and painter's ring ▪ Modify the chlorination system at AZ-2 to provide for residual monitoring and chlorine feed

Years	Action Plan
2020	<ul style="list-style-type: none"> ▪ Install standby power supply at Well / Reservoir #7 ▪ Modify SCADA to allow water standpipe operational drawdown for emergency water demands ▪ Implement an emergency backup water supply with interconnection to adjacent communities ▪ Evaluate the need for continued use of the well supply currently used for the emergency supply
2025	<ul style="list-style-type: none"> ▪ Remove Reservoir #6 and associated facilities from service ▪ Abandon the site for re-sale or other Village use
2030	<ul style="list-style-type: none"> ▪ Repaint standpipe / repair tank floor
2035	<ul style="list-style-type: none"> ▪ Replace Reservoir #3 (remove two old concrete tanks) with above-grade ground storage as an alternative, or provide elevated storage in a new elevated tower and provide a booster Pump Station at the existing standpipe using the standpipe as ground storage to replace the storage at the Well #3 reservoir, or Pump Station to utilize standpipe as ground reservoir