City Commission Meeting Agenda

Tuesday, December 17, 2024 at 6:00 PM

The Tom Hardin Room – 100 Public Square, Mount Pleasant, TN

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1. **Call to Order**
2. **Pledge of Allegiance / Invocation**
3. **Roll Call**
4. **Approval / Correction of Minutes from Prior Meetings**
   - **A.** Study Session - November 14, 2024
   - **B.** Regular Session - November 19, 2024
5. **Awards/Presentations/Appointments**
   - **A.** Oath of Office for new term City Commissioners
   - **B.** Nominate and appoint a new Mayor
   - **C.** Nominate and appoint a new Vice-Mayor
   - **D.** Recognize Vice Mayor Grandberry
6. **Completion / Review of Unfinished Business from prior meeting**
7. **Monthly report from Mayor**
8. **Monthly Financial / Budget report**
9. **Monthly report from City Manager**
10. **Special reports from other City Departments or Committees if applicable**
    - **A.** Wastewater Liaison Report - Barge Design Update
    - **B.** Mount Pleasant Gas System Report
11. **New Business**

    (Comments from citizens may or may not be included, dependent on the issues.)
    - **A.** Resolution 2024-42 - A Resolution of the City of Mount Pleasant, Tennessee to authorize the City to enter into a Professional Services Agreement with Barge Design Solutions, Inc. for a Sewer System Analysis. Infrastructure Planning Grant
    - **B.** Resolution 2024-43- A Resolution updating the City of Mount Pleasant Cross Connection Plan
    - **C.** Resolution 2024-44- A Resolution of the City of Mount Pleasant to enter into a Professional Services Agreement with Barge Design Inc. for Wastewater Treatment Plant Checklist.
    - **D.** Accept or Deny CDBG Grant Water Meter Replacement Bid
12. **General comments from citizens (May be limited in time and/or number of comments.)**
13. **Board / Staff Comments / Adjournment**

City Commission Meeting Study Session Minutes

Thursday, November 14, 2024 at 6:00 PM

The Tom Hardin Room – 100 Public Square, Mount Pleasant, TN

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1. Call to Order

Mayor White called the meeting to order.

2. Roll Call

Those in attendance were:

PRESENT
Mayor Bill White
Vice Mayor Jacqueline Grandberry
Commissioner Pam Johnston
Commissioner Mike Davis
Commissioner Willie Alderson

3. Awards/Presentations/Appointments

4. Monthly report from City Manager

Mr. Grooms stated we may have an agenda item added. They have already passed the resolution where we received a grant for the Community Center. They sent it today and it needs some different wording. He will get with Kori to see if we update the resolution or do another one.

Kori stated she hasn't seen it yet.

Mr. Grooms wanted them to know this may be in their packets tomorrow. The resolution where we received the $1,980,012 grant for the Community Center with matching funds. This may be in the packets to reflect that.

Mr. Grooms stated Michael or Jack would give an update on what they are trying to do at the bypass.

Mr. Jack Burgett stated they have been in talks with TDOT as late as yesterday and spoke with them about lowering the speed limit on the bypass from First Avenue to the Airport Exit to reduce the likelihood of a sever crash. Also, we have some additional messaging boards coming out there to alleviate the confusion of what is going on. The Police Department has been posting an officer out there during the peak traffic times. That is a work in progress, because we don't know what we are dealing with until we get out there. This morning an officer was out there and stopped the north bound traffic a couple times, maybe three, to allow that south bound turn lane that is turning onto Greenwood to allow those cars to empty out onto Greenwood and South Cross Bridges. It is a work in progress we really don't know what we are dealing with on most days. Some days traffic flow coming north is heavier than others, but we are out there.

Commissioner discussed. No action taken. For more details refer to the audio/video recording attached to the agenda.

5. Special reports from other City Departments or Committees if applicable

A. Wastewater Liaison Report - Barge Design

Mr. Grooms stated on the agenda number F. with the Barge engineering agreement for the wastewater treatment plan. Matthew is here to talk about that.

Mr. Matthew Johnson stated this item is an amendment to their contract. Basically, this a continuation of their services as the contractor continues their work to finally finish hopefully sooner or later. He continued his discussion of this item.

Commissioner discussed. No action taken. For more details refer to the audio/video recording attached to the agenda.

B. Mount Pleasant Gas System Report

Mr. Grooms stated

6. New Business

(Comments from citizens may or may not be included, dependent on the issues.)

A. Resolution 2024-38 - Hazard Mitigation Plan - (State approved in coordination with Maury County.)

Mrs. Jones stated the purpose of this resolution is to adopt an updated Maury County Hazard Mitigation Plan. The plan has already been approved by FEMA. Maury County has asked each city to adopt the plan to make the approval formal and allow Maury County to be eligible for pre and post disaster mitigation funding. She doesn't have a copy of the plan yet, but she has asked for it and it will be in the packet.

Mr. Grooms stated we have stayed in this program for many, many years. Like a piggyback so it opens it up for us to be able to apply for those fundings as well when we have a need for it.

B. Resolution 2024-39 - Sugar Creek Developer's Agreement - (On Planning Commission Agenda tonight.)

Mrs. Jones stated the purpose of this resolution is to authorize the City to enter into a development agreement. Alan Blevins is developing property on Sugar Creek Road known as Sugar Creek Townhomes. This development has already been approved by the Planning Commission. As part of the development the developer has agreed to provide for the installation of certain private and public infrastructure improvements. One such improvement - the reason for this development agreement - is the installation of a 16" water line. The City's engineers, CEC, determined that the development could be serviced by an 8-inch water line. However, the City asked the developer to construct a 16-inch water line instead. The developer agreed. The City is responsible for the difference in cost between the 8-inch line and the upgraded 16-inch line. We call this "betterment". The betterment is $120,000. To repay the betterment cost the City will waive the water access fee ($3,500 x 16 = $56,000). We are also going to waive the water tap/meter fees which are ($2,000 x 16 = $32,000) and then we would have to pay the remainder to the Developer which is $32,000 upon completion of the project. We outlined all of that in the development agreement. It has been allocated by the Planning Commission and recommended to this Board. Mr. Blevins is here.

Commissioner discussed. No action taken. For more details refer to the audio/video recording attached to the agenda.

C. Possible bid for East Merchant Street paving. (Bid Opening Wednesday)

Mr. Grooms stated they opened bids this week. They had two bids. He is not sure they are going to make a recommendation to them after further evaluation and talking with Dale. We probably need to do something with the sewer line. The camera showed it is in pretty bad shape.

Commissioner discussed. No action taken. For more details refer to the audio/video recording attached to the agenda.

D. John Deere lawnmower surplus reversal from Resolution 2024-16.

Mrs. Jones stated Public Works wants to keep the John Deere mower that was declared surplus by Resolution 2024-16. You all authorized the sale of this mower and to reverse it, we will ask for a motion to remove this item from the surplus sale.

E. CT Form Vac Truck

Mrs. Cox stated this is just an FYI item. Every time we have debt the State requires that once we have closed on the borrowing and presented everything to them, they sent us, we fill out the forms they send us by an approved copy and that copy just has to be presented to the elected body at the next meeting after the bond is done. We closed on the bond last month. This was something that was in the works to get the USDA grant to buy the vac truck. We have been using it since July. The bond closed last month, and it is $450,000. Not a voting item just an FYI item.

F. Barge Engineering Agreement - (Wastewater Treatment Plant Extension)

This was covered at the first of the meeting.

G. Possible Election Certification

Mrs. Jones stated the election will be certified on November 20th. Which is the day after our meeting. The new Commissioners will be sworn in at the beginning of the December meeting. Then the Commission will elect the Mayor and Vice Mayor. In 2020, you passed a resolution establishing a procedure from our election office, we will make sure to put that in the packets before the next meeting.

No action taken. For more details refer to the audio/video recording attached to the agenda.

7. General comments from citizens (May be limited in time and/or number of comments.)

Ms. Jolita Ellis, 107 E. Merchant Street, asked about the East Merchant Street paving project.

Mr. Grooms explained some of what would be done regarding that project.

Mrs. Jones stated this is for her to tell the Commission things, but they are going to direct her to Dale, and you can talk to him after the meeting he is the Public Works Director.

Commissioner discussed. No action taken. For more details refer to the audio/video recording attached to the agenda.

Mr. Larry Henderson, 719 Larry Circle, asked for clarification on the Sugar Creek water line addition, they are talking about it going to go to townhouses and that is not in Brookside?

Mr. Grooms stated it is behind the funeral home.

8. Board / Staff Comments / Adjournment

Mr. Grooms stated tomorrow at 11:00 am at the Community Center the City will have their Thanksgiving dinner and they are all invited.

Commissioner Davis congratulated Mayor White and Commissioner Alderson and also congratulate everybody that was running, it was a good clean election. Has had several calls on regarding the business losing quite a bit of money because of the construction and he doesn't know if there is anyway the City could maybe, on an honor system, if maybe the City could help them out on their taxes or something.

Mrs. Cox stated we do not calculate the property taxes the State and the Assessor's Office at the County does that. We do not have anyway to rebate taxes, everything comes from the State of Tennessee and the Assessor's Office at the County. Meeting adjourned.

City Commission Meeting Minutes

Tuesday, November 19, 2024 at 6:00 PM

The Tom Hardin Room – 100 Public Square, Mount Pleasant, TN

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1. Call to Order

Mayor White called the meeting to order.

2. Pledge of Allegiance / Invocation

Commissioner Alderson led the pledge of allegiance. Commissioner Johnston gave the invocation.

3. Roll Call

PRESENT

Mayor Bill White
Vice Mayor Jacqueline Grandberry
Commissioner Pam Johnston
Commissioner Mike Davis
Commissioner Willie Alderson

4. Approval / Correction of Minutes from Prior Meetings

Mayor White asked for approval and corrections to the minutes from the prior Study Session meeting on October 10, 2024.

Motion made by Commissioner Johnston to approve the Study Session minutes from October 10, 2024. Seconded by Commissioner Alderson.

Voting Yea: Mayor White, Vice Mayor Grandberry, Commissioner Johnston, Commissioner Davis, Commissioner Alderson. Motion Passed.

A. Study Session - October 10, 2024

Mayor White asked for approval and corrections to the Study Session on October 10th, Regular Meeting on October 15th and Special Called Meeting on October 30th.

Commissioner Johnston made a motion to the meeting minutes from October 10th, October 15th and October 30th as presented. Commissioner Alderson seconded the motion. All were in favor. Motion passed.

B. Regular Session - October 15, 2024

Mayor White asked for approval and corrections to the Study Session on October 10th, Regular Meeting on October 15th and Special Called Meeting on October 30th.

Commissioner Johnston made a motion to the meeting minutes from October 10th, October 15th and October 30th as presented. Commissioner Alderson seconded the motion. All were in favor. Motion passed.

C. Special Called Meeting - October 30, 2024

Mayor White asked for approval and corrections to the Study Session on October 10th, Regular Meeting on October 15th and Special Called Meeting on October 30th.

Commissioner Johnston made a motion to the meeting minutes from October 10th, October 15th and October 30th as presented. Commissioner Alderson seconded the motion. All were in favor. Motion passed.

5. Awards/Presentations/Appointments

Mr. Grooms stated there were none.

6. Completion / Review of Unfinished Business from prior meeting

Mr. Grooms stated there was none.

7. Monthly report from Mayor

Mayor White stated Mt. Pleasant High School received a five in the TVA AC Academic Growth and that is three years in a row. That is awesome. They are the only school in Maury County to ever do it. He had a Mayor's breakfast this morning where it was the County Mayor, Spring Hill, Columbia and himself. He thought it went well, there was a great crowd not a seat left in the Memorial Building. He would also like to thank the staff and the folks that put on the Thanksgiving lunch. It was great and he appreciates everybody that had a hand in it. Phillip, Shiphrah thank y'all for sticking around here, he knows there are a lot of phone calls coming in regarding the lead in the water. He appreciates them do that.

8. Monthly Financial / Budget report

Mrs. Cox presented the monthly financial and budget report. She stated we are nearing the end of the audit. She has already received her adjusting entries. She emailed out all the financials as usually on Friday.

For more details refer to the audio/video recording attached to the agenda.

Motion made by Commissioner Davis to approve the monthly financial budget report as presented, seconded by Commissioner Alderson.
Voting Yea: Mayor White, Vice Mayor Grandberry, Commissioner Johnston, Commissioner Davis, Commissioner Alderson. All were in favor. Motion passed.

9. Monthly report from City Manager

Mr. Grooms stated the long-standing tradition for the monthly report the department heads help create. So please look at it. One thing new that we have added is to point out a featured employee of the month. Mr. Charles Webster has forty-three years of service. He just wanted to point that out. The department heads are here if they have any questions.

He had a couple of highlights; the bridge project is underway, and we are working with TDOT and Mount Pleasant Police Department to make sure that we reduce the risk out there. One of the things proposed is to drop the speed limit from 55 to 45 in a stretch. They are also committed to having an officer out there during peak hours. It is an ongoing thing, and we are trying to reduce that the best we can from our standpoint. He stated the Downtown Project, as they know the square is shut down and they are trying to put posts out there, anything we can to relay that City Hall is open. If anyone gets here and needs any accommodations call us and we will do whatever we can to assist that person or people that need those accommodations.

He stated transitioning to Rotary Park the roof has been replaced. It has been done as a partnership between the City and Rotary it was 75% City and 25% Rotary. It is one of the best shelters that we have and one of the biggest. Now we can keep it from falling in since the roof has been replaced. Arrow Mines bathroom is in the final designs of the construction plans. He is hoping to have that bid out and on the agenda in December.

The last thing he has is just a reminder that City Hall is closed next Thursday and Friday for Thanksgiving. He also stated the tree lighting at the library is November 30th at 6:00 pm.

Mayor White stated there is a lot going on that day over there. They are going to have food trucks it is going to be a big deal.

10. Special reports from other City Departments or Committees if applicable

A. Wastewater Liaison Report - Barge Design

Mr. Grooms reported on the monthly report for the Wastewater System.

Commissioners discussed. For more details refer to the audio/video recording attached to the agenda.

B. Mount Pleasant Gas System Report

Mr. Grooms gave a report on the Mount Pleasant Gas System.

11. New Business

(Comments from citizens may or may not be included, dependent on the issues.)

A. Resolution 2024-38 - A Resolution of the City of Mount Pleasant, Tennessee to adopt the 2024 Maury County Natural Hazard Mitigation Plan.

Mayor White presented this Resolution 2024-38 to adopt the 2024 Maury County Natural Hazard Mitigation Plan.

Mayor White stated we have been doing this for seven years.

Mrs. Jones stated the purpose of this resolution is to adopt the updated Maury County Hazard Mitigation Plan.

The plan has already been approved by FEMA.

Maury County has asked each city to adopt the plan to make the approval formal and allow Maury County to be eligible for pre and post disaster mitigation funding. She stated at the Study Session that the plan would be in their packets, that is not true, the plan is not included because it contains sensitive information that doesn't need to be published on our website.

Commissioners discussed. For more details refer to the audio/video recording attached to the agenda.

Motion made by Commissioner Alderson to accept Resolution 2024-38 as presented, seconded by Commissioner Johnston.

Voting Yea: Mayor White, Vice Mayor Grandberry, Commissioner Johnston, Commissioner Davis, Commissioner Alderson. All were in favor. Motion passed.

B. Resolution 2024-39 - A Resolution of the City of Mount Pleasant, Tennessee to authorize the City to enter into the Sugar Creek Townhomes Development Agreement.

Mrs. Jones stated the purpose of this resolution is to authorize the City to enter into this development agreement.

Alan Blevins is developing property on Sugar Creek Road known as Sugar Creek Road known as Sugar Creek Townhomes. This development has already been approved by the planning commission. As part of the development, the Developer has agreed to provide for the installation of certain private and public infrastructure improvements. One of those

improvements and the reason for this Development Agreement is the installation of a 16-inch water line.

The City's engineers, CEC, determined that the Development could could be serviced by an 8-inch water line. However, the City asked the Developer to construct a 16-inch water line instead. The Developer agreed when we asked him to upgrade that 8-inch water line to a 16-inch water line, because it goes with the City's master plan. The City is responsible for the difference in cost between the 8-inch line and the upgraded 16-inch line. We call this "betterment". The betterment for this project is $120,000. To repay the betterment cost, the city will:

*Waive the water access fee ($3,500 x 16 = $56,000)

*Waive the water tap/meter fees ($2,000 x 16 = $32,000)

*That will leave a difference of $32,000 that we will pay to the Developer upon the completion of the project.

All of this is outlined in detail in the Development Agreement, which is attached to the Resolution as an Exhibit.

Commissioners discussed. For more details refer to the audio/video recording attached to the agenda.

Motion made by Commissioner Johnston to approve Resolution 2024-39 as presented, seconded by Commissioner Alderson.

Voting Yea: Mayor White, Vice Mayor Grandberry, Commissioner Johnston, Commissioner Davis, Commissioner Alderson

C. Resolution 2024-40 - A Resolution authorizing the City of Mount Pleasant, Tennessee, to execute and enter into a Second Amendment to its Engineering Contract with Barge Design Solutions, Inc. to provide preliminary and final design, bidding, construction administration, and construction field representation for the construction of Wastewater Treatment Plant Improvements. 6th Amendment to Barge Engineering Contract.

Mrs. Jones stated the purpose of this resolution is to consider two amendments to the City's contract with Barge, the engineer on the WWTP project. That is the $13 million project. The Contractor for the WWTP improvements project has exceeded its contract time to complete the project. They had a date for substantial completion. They have already passed that and have still not reached substantial completion. The City is required to have engineering oversight on the construction of the WWTP improvements. So, Barge has to be onsite additional time to oversee the work, and we have to pay Barge for the additional time. As we discussed last meeting, there is also liquidated damages provision in the contractor's contract that says the City can charge $1,000 a day for the time that the Contractor exceeds its deadline for substantial completion. We hope that liquidated damages assessment will equal the additional amount that we pay Barge as a result of the delay.

So, this is actually Amendment No. 6 to the contract. It modifies the services of the engineer, payment to the engineer, and times for rendering engineering services. The additional cost is estimated to be $212,500. Barge will have to do another amendment if they were to exceed this amount and time. The new proposal final completion date is 3/7/25. As Phillip said that is date that the contractor gave Barge to estimate when they would be completed. Barge is keeping very detailed bills; we do have to pay them and then we would get reimbursed from anything we subtracted from what was due to the contractor.

Commissioners discussed. For more details refer to the audio/video recording attached to the agenda.

Motion made by Commissioner Alderson to accept Resolution 2024-40 as presented, seconded by Commissioner Johnston.

Voting Yea: Mayor White, Vice Mayor Grandberry, Commissioner Johnston, Commissioner Davis, Commissioner Alderson. All were in favor. Motion passed.

D. Resolution 2024-41 - A Resolution of the City of Mount Pleasant, Tennessee to amend Resolution 2024-14 related to the State of Tennessee Community Development connected Community Facilities Grant Program.

Mrs. Jones stated we added this one late. There was a miscalculation on the amount of the match. We are increasing the match that the City is going to match if we get this grant. It is $220,000 instead of $200,000.

Commissioners discussed. For more details refer to the audio/video recording attached to the agenda.

Motion made by Commissioner Alderson to accept Resolution 2024-41 to amend Resolution 2024-14 as presented, seconded by Commissioner Johnston.

Voting Yea: Mayor White, Vice Mayor Grandberry, Commissioner Johnston, Commissioner Davis, Commissioner Alderson. All were in favor. Motion passed.

E. John Deere Z830A lawnmower surplus reversal from Resolution 2024-16.

Mrs. Jones stated the John Deere mower that was declared surplus by Resolution 2024-16. You all authorized the sale of this mower and to reverse we would ask for a motion to remove this item from the surplus sale.

Commissioners discussed. For more details refer to the audio/video recording attached to the agenda.

Motion made by Commissioner Alderson to remove the John Deere lawn mower from the surplus sale in Resolution 2024-16, seconded by Commissioner Johnston.

Voting Yea: Mayor White, Vice Mayor Grandberry, Commissioner Johnston, Commissioner Davis, Commissioner Alderson. All were in favor. Motion passed.

F. Bid approval/rejection for East Merchant Street paving and stormwater work.

Mr. Grooms stated it was our recommendation to reject both of the bids and he really does not like that, but after talking with Dale and Ted he agrees per evaluation of the aging infrastructure of the sewer part of it. We will review this once they have that plan and hopefully can turn it around pretty quick, but our recommendation is to reject both bids.

Commissioners discussed. For more details refer to the audio/video recording attached to the agenda.

Motion made by Commissioner Johnston to reject the two bids for the East Merchants paving and stormwater work, seconded by Commissioner Alderson.

Voting Yea: Mayor White, Vice Mayor Grandberry, Commissioner Johnston, Commissioner Davis, Commissioner Alderson. All were in favor. Motion passed.

G. CT Form Vac Truck

Mrs. Cox stated this is just an FYI item the borrowing was done. Everything as far as the resolutions were done it just procedurally, we have to show the form was already sent to the Comptroller's office and has been accepted by them. The receipt number for the Comptroller's date is on there so we just have to present it back to our Commission. No voting just in our

minutes it needs to show that we presented it to the Commission that it is all done.

12. General comments from citizens (May be limited in time and/or number of comments.)

There were no citizen comments.

13. Board / Staff Comments / Adjournment

Commissioner Grandberry stated regarding Merchant Street she does hope for the safety of the kids that we move forth on this as soon as possible because they do have to cross and come up the street to catch the bus. That should be our concern about the citizens of Mount Pleasant. Certification of Comp Control her last one the Certification of Municipal Leadership. She congratulated to the Mayor and Willie on their re-election. She has enjoyed being up here and hope she has done what she was supposed to. She will be here Tuesday, but she does not want to take away from her friend.

Commissioner Johnston stated she is really proud of Mount Pleasant and congratulations to Willie and Bill and to Loree and she thanked Mrs. Grandberry. She is actually the person that first invited me. She was walking her dog one night and she said you need to start coming to the meetings, and she appreciated her inviting her that first time.

Commissioner Alderson stated she would like to thank Mrs. Jackie as well coming to these meetings and we keep her straight. She congratulated Bill.

Mayor White stated it has been a pleasure. They didn't always agree, but we always agreed that if we did agree all the time, it wouldn't be the best thing.

Motion made by Commissioner Alderson to adjourn, seconded by Mayor White.

Voting Yea: Mayor White, Vice Mayor Grandberry, Commissioner Johnston, Commissioner Davis, Commissioner Alderson. All were in favor. Motion passed.

RESOLUTION 2020-33

A RESOLUTION ESTABLISHING A PROCEDURE FOR ELECTING A MAYOR AND VICE MAYOR

WHEREAS, Tennessee Code Annotated § 6-20-201(a) requires the Board of Commissioners to elect one member of the Board of Commissioners to serve as Mayor for a two-year term; and,

WHEREAS, Tennessee Code Annotated § 6-20-202 requires the Board of Commissioners to elect one member of the Board of Commissioners to serve as Vice Mayor for a two-year term; and

WHERAS, the Board of Commissioners of the City of Mount Pleasant, Tennessee desires to establish a written procedure for electing a Mayor and Vice Mayor of the City of Mount Pleasant.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF MOUNT PLEASANT, TENNESSEE, AS FOLLOWS:

Section 1. That the City of Mount Pleasant, Tennessee adopts the following procedure for electing a Mayor and Vice Mayor from amongst the duly elected Commissioners:

NOMINATIONS

- Any commissioner can make a nomination for Mayor/Vice-Mayor.
- Nominations do not have to be seconded.
- A commissioner may nominate him/herself.
- A commissioner nominated to serve as Mayor/Vice-Mayor may decline a nomination but must do so during the nomination process.
- The nomination process continues until no commissioner wants to make further nominations; a motion to close nominations is not necessary.

VOTE

- Once there are no more nominations, the vote is taken on each nominee **in the order in which they were nominated**
- The voting is over when someone gets a majority vote for the elected position.
- In the event of a tie, the Board of Commissioners repeats the process until one candidate receives a majority

Section 2. If any one or more of the provisions of this Resolution, or any exhibit or attachment thereof, shall be held invalid, illegal, or unenforceable in any respect, by final decree of any court of lawful jurisdiction, such invalidity, illegality, or unenforceability shall not affect any other provision hereof, or of any exhibit or attachment thereto, but this Resolution, and the exhibits and attachments thereof, shall be construed the same as if such invalid, illegal, or unenforceable provision had never been contained herein, or therein, as the case may be.

Section 3. This Resolution shall take effect immediately.

Approved and adopted this 20th day of October, 2020.

MAYOR

ATTEST:

LORETTA GARNER, RECORDER

LEGAL FORM APPROVED:

KORI BLEDSOE JONES, ATTORNEY

Mount Pleasant Wastewater System Improvements
Status Update 12/11/24

Wastewater Treatment Plant Improvements

- Funded solely by USDA.
- Continued installation of MBR piping and instrumentation.
- Continued finishing of the MBR building.
- Preparing for MBR system startup.
- Completed rehabilitation of existing aeration basins and associated yard piping.
- Completed installation of overhead crane.

Wastewater System Model

- Funded solely be the City.
- Led model report workshop for 11/1/24.
- Addressed and incorporated comments provided by the City and resubmitted report for acceptance.
- Waiting on the City to finalize CAT via a training workshop.

Sewer Trunkline Rehabilitation

- Scope includes rehab of approximately 4,300 linear feet of sewer pipeline.
- Funded by CDBG (2018 Mount Pleasant CDBG) and USDA.
- Completed project closeout.
- Line to be inspected once new wastewater treatment plant influent pumps are operational.

Rainey Street Sewer Improvements

- Funded solely by USDA.
- Scope includes construction of new pump station and force main across Sugar Creek.
- Completed project closeout.

3RD AVENUE SOUTH // SUITE 700 // NASHVILLE // TENNESSEE // 37210 // 615-254-1500 // BARGEDESIGN.COM

RESOLUTION 2024-42

A RESOLUTION OF THE CITY OF MOUNT PLEASANT, TENNESSEE TO AUTHORIZE THE CITY TO ENTER INTO A PROFESSIONAL SERVICES AGREEMENT WITH BARGE DESIGN SOLUTIONS, INC. FOR A SEWER SYSTEM ANALYSIS

WHEREAS, The City of Mount Pleasant applied for and received award for a Fiscal Year 2024 Infrastructure Planning Grant (IPG);

WHEREAS, utilizing these funds, the Client has requested Barge Design Solutions, Inc. ("Barge") help to develop a sewer system analysis;

WHEREAS, the proposed sewer system analysis will provide the City with a planning tool to determine rehabilitation needs in the inspected areas and budget for future construction improvements to the wastewater collection system;

WHEREAS, Barge Design Solutions, Inc. will provide engineering services for the sewer system analysis and has provided a **Professional Services Agreement** attached hereto as **Exhibit A**; and,

WHEREAS, the City has solicited and evaluated the qualifications of professional engineering firms to provide this service; and

WHEREAS, the Commission has determined that Barge Design Solutions, Inc. has the most appropriate experience, background and qualifications to provide such engineering services.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF MOUNT PLEASANT, TENNESSEE, AS FOLLOWS:

Section 1. That the Commission of City of Mount Pleasant hereby selects Barge Design Solutions, Inc. will provide engineering services to facilitate the sewer system analysis pursuant to the **Professional Services Agreement** attached hereto as **Exhibit A**.

Section 2. That the **Professional Services Agreement** between the City of Mount Pleasant, Tennessee and Barge Design Solutions, Inc. attached hereto and incorporated as **Exhibit A** is approved and the City of Mount Pleasant, Tennessee is hereby authorized to execute same.

Section 3**.** If any one or more of the provisions of this Resolution, or any exhibit or attachment thereof, shall be held invalid, illegal, or unenforceable in any respect, by final decree of any court of lawful jurisdiction, such invalidity, illegality, or unenforceability shall not affect any other provision hereof, or of any exhibit or attachment thereto, but this Resolution, and the exhibits and attachments thereof, shall be construed the same as if such invalid, illegal, or unenforceable provision had never been contained herein, or therein, as the case may be.

Section 4. This Resolution shall take effect immediately.

Approved and adopted this _____ day of _____, 2024.

_____

WILLIAM F. WHITE, JR., MAYOR

ATTEST:

_____

SHIPHRAH COX, RECORDER

LEGAL FORM APPROVED:

_____

KORI BLEDSOE JONES, ATTORNEY

BARGE DESIGN SOLUTIONS, INC.

PROFESSIONAL SERVICES AGREEMENT

This agreement is made as of the date last signed below by and between the City of Mt. Pleasant (**Client**) and Barge Design Solutions, Inc. (**BARGE**) for professional services for the assignment described as follows:

Project: Infrastructure Planning Grant Sanitary Sewer Analysis

Location: Mt. Pleasant, Tennessee

Description of Project:
The Client applied for and received award for a Fiscal Year 2024 Infrastructure Planning Grant (IPG). Utilizing these funds, the Client has requested Barge help to develop a sewer system analysis.

I. **PROFESSIONAL SERVICES: BARGE** agrees to perform the following Basic Services under this contract:

As shown in Exhibit A

II. **COMPENSATION: Client** shall compensate BARGE for the Basic Services as follows:

As shown in Exhibit A

III. **PAYMENTS:** Invoices for services rendered will be issued monthly, and payment is due upon receipt of each invoice. Unless special arrangements are made, a finance charge of 1.5% per month will be added to unpaid balances more than thirty (30) days old. In the event legal action is necessary to enforce the payment terms of this agreement, **BARGE** shall be entitled to a judgment for its attorneys' fees, court costs, and other collection expenses.

IV. **TIME:** Unless agreed otherwise in writing, **BARGE** will commence its services within a reasonable time after receipt of an executed copy of this Agreement. **BARGE** will perform its services in a timely manner commensurate with the exercise of due professional care. Time for performance shall be extended as necessary for delays or suspensions due to circumstances beyond **BARGE**'s control. If such delay or suspension extends more than six months (cumulatively), **BARGE**'s compensation shall be equitably adjusted.

V. **SUSPENSION OF SERVICES:** If **Client** fails to pay any invoice when due or otherwise is in material breach of this Agreement, **BARGE** may at its sole discretion suspend performance of services upon five (5) days' written notice to **Client**. **BARGE** shall have no liability to **Client**, and **Client** agrees to make no claim for any delay or damage as a result of such suspension. Upon cure of the cause of the suspension, **BARGE** shall resume services within a reasonable time, and there shall be an equitable adjustment of the project schedule and fees to reflect the effects of such suspension.

VI. **STANDARD OF CARE:** Notwithstanding any other provision of this Agreement or any other document describing the services, **BARGE** shall perform its services in accordance with the standard of professional care ordinarily exercised under similar circumstances by reputable members of its profession in the same locality at the time the services are provided. No warranty,

expressed or implied, is made or intended by **BARGE**. The parties further agree that **BARGE** is not a fiduciary of **Client**.

VII. TERMINATION: The obligation to provide further services under this Agreement may be terminated without cause by either party upon ten (10) days' written notice to the other party. On termination by either the **Client** or **BARGE**, **Client** shall pay **BARGE** all amounts due for any services performed to the date of termination (plus all reimbursable expenses incurred). Upon such termination by **Client**, it shall immediately return to **BARGE** all drawings, reports, documents, and other instruments of professional services prepared by **BARGE**, and **Client** shall make no further use thereof.

VIII. OWNERSHIP AND REUSE OF DOCUMENTS: All documents, including without limitation, drawings, specifications, and reports prepared by **BARGE** pursuant to this Agreement are instruments of professional service. **BARGE** shall own all legal and equitable rights therein, including copyrights. Such instruments are not intended or represented to be suitable for reuse by **Client** or others for additions or modifications of the Project or on any other project. Any reuse without written consent of **BARGE** shall be at **Client's** sole risk and without liability to **BARGE**; and to the fullest extent permitted by law, **Client** shall indemnify, defend, and hold harmless **BARGE** from and against any and all claims, damages, losses, and expenses, including reasonable attorneys' fees and costs of defense arising out of or resulting therefrom. **BARGE** shall be entitled to further compensation for services it is requested to perform in connection with any reuse of its instruments of professional service.

IX. ACCESS TO THE SITE/JOBSITE SAFETY: Unless otherwise stated, **BARGE** will have access to the site for activities necessary for the performance of its services. **Client** agrees that **BARGE** shall have no responsibility for the means, methods, sequences, procedures, techniques, and scheduling of construction, as these decisions are solely the responsibility of the contractors. **BARGE** further shall have no authority or duty to supervise the construction workforce and shall not be responsible for jobsite safety or for any losses or injuries that occur at the Project site.

X. **INSURANCE: BARGE** shall endeavor to secure and maintain insurance in such amounts as it deems necessary to protect **BARGE** from claims of professional negligence arising from the performance of services under this Agreement.

XI. **RISK ALLOCATION:** In recognition of the relative risks, rewards, and benefits of the Project to both **Client** and **BARGE**, to the fullest extent permitted by law, the parties agree to allocate the risks such that **BARGE's** total liability to **Client** for any and all injuries, claims, losses, expenses, damages, and/or claim expenses arising out of **BARGE's** services under this Agreement from any cause or causes shall not exceed the amount of **BARGE's** fee or **One Hundred Thousand Dollars ($100,000)**, whichever is greater. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

XII. **DISPUTE RESOLUTION:** It is agreed that all claims, disputes, or other matters in question arising out of or related to this Agreement shall be submitted to nonbinding mediation before any legal proceeding is commenced. The parties shall equally bear the fees and expenses charged by the mediator.

XIII. **OPINIONS OF CONSTRUCTION COST:** Any opinion of probable construction cost prepared by **BARGE** represents the judgment of one or more **BARGE** design professionals and is supplied for general guidance of **Client**. Since **BARGE** has no control over the construction marketplace and does not use the same pricing methods used by contractors, **BARGE** does not guarantee the accuracy of such opinions.

XIV. **GOVERNING LAW:** Unless otherwise specified within this Agreement, this Agreement shall be governed by the laws of the State of Tennessee.

City of Mt. Pleasant	Barge Design Solutions, Inc.
By:	By:
Printed Name: Bill White	Printed Name:
Title: Mayor	Title:
Address: 100 Public Square Mount Pleasant, TN 38474	Address: 615 Third Avenue S, Suite 700 Nashville, TN 37210
Date Signed:	Date Signed:

Exhibit A, Scope of Work
2024 Infrastructure Planning Grant (IPG)
Sanitary Sewer Analysis
City of Mt. Pleasant
November 13, 2024

Barge Design Solutions, Inc. (Barge) will provide the following scope of services for the City of Mt. Pleasant (Client) including design services for the 2024 Infrastructure Planning Grant (IPG) project, in accordance with the Professional Services Agreement (Agreement) dated _____. The scope of work is presented in the following elements:

I. Project Description
II. Scope of Services
III. Project Schedule
IV. Compensation

I. Project Description

The Client applied for and received award for a Fiscal Year 2024 Infrastructure Planning Grant (IPG). Utilizing these funds, the Client has requested Barge help to develop a sewer system analysis.

Utilizing recently collected wastewater collection system flow monitoring data, the Client and Barge have identified areas of the system with elevated inflow/infiltration (I/I). This project will consist of conducting a sanitary system evaluation survey (SSES) in some of the areas identified from the recent flow monitoring and Wastewater System Model Report. The investigative work will provide the Client with a planning tool to determine rehabilitation needs in the inspected areas and budget for future construction improvements to the wastewater collection system.

II. Scope of Services

The scope of services will consist of a Sewer System Analysis.

The following sections provide a description of the purpose, activities, deliverables, and assumptions anticipated for each of the tasks. Throughout the following tasks, Barge will manage the activities of our staff and subconsultants, coordinate with Client staff, and submit monthly invoices with updated schedules and budgets as applicable.

Sewer System Analysis

The following elements will be completed under this task.

- SSES work will include up to 115 manhole inspections, up to 22,000 linear feet (LF) of smoke testing, up to 12,500 LF of closed circuit television (CCTV) inspections and light cleaning of 8-inch to 12-inch diameter pipe, and up to 5,000 LF of light cleaning and CCTV inspection of 18-inch sewer line.

- Manhole inspections will be performed according to the National Association of Sewer Service Companies (NASSCO) manhole level 2 inspection standards.
- Pipe cleaning will be performed according to the NASSCO standards, including high pressure jetting and debris removal.
- CCTV tasks will be conducted using industry standard equipment to view defects, observations, and connections in the pipeline.
- Smoke testing will be performed using non-toxic smoke injected into the sewer by high-capacity blowers. Defects will be documented with a photograph, GPS coordinates, address, and the expected level of infiltration.
- A Geographic Information System (GIS) database which documents the SSES results will be created.
- Upon completion of the investigative work, a characterization report summarizing the results of the SSES work will be prepared. The report will include rehabilitation and/or replacement recommendations for defects found through the investigation work.
- Included in the SSES characterization report, an opinion of probable construction cost (OPCC) will be prepared for the defects identified during the course of the SSES work.
- A review meeting will be conducted with the Client to obtain comments on the SSES characterization report.
- Comments received in the review meeting will be incorporated into the report, and a final report will be provided to the Client.

Deliverables:

The following deliverables will be provided as part of this task:

- SSES Inspection Reports and Videos
- SSES Characterization Report (PDF) with OPCC
- GIS database with SSES results

Assumptions:

The following assumptions are applicable to the above scope of services:

- Heavy cleaning is not required. Heavy cleaning is considered to be pipe cleaning efforts requiring more than three passes with a nozzle to clean a pipeline or a tap needs to be cut.

- Disposal of waste materials collected will be provided by Client at no cost at the City wastewater treatment plant.
- Water for cleaning will be provided by Client at no cost. Client will provide meter, if required, for water obtained.
- Bypass pumping is not necessary.
- Limited traffic control will be provided where Barge's subcontractor is conducting SSES field work, but no traffic plans are included in the scope.
- The Client will provide access to manholes as needed to conduct the work.
- The Client will provide assistance in locating manholes that are buried or difficult to locate. Client will uncover buried manholes to allow for inspections.

III. Project Schedule

The preliminary project duration to complete the SSES work and provide project deliverables is 5 months.

IV. Compensation

Client agrees to pay Barge a Lump Sum Fee of $208,000, to complete the scope of work as defined in the tasks above. Barge will submit monthly invoices based on percent of work completed to date. The project status will be summarized monthly in our progress report and invoice submittal.

RESOLUTION 2024-43

A RESOLUTION UPDATING THE CITY OF MOUNT PLEASANT
CROSS CONNECTION PLAN

WHEREAS, the City of Mount Pleasant wishes to update the cross connection plan previously adopted by Resolution 2019-39.

WHEREAS, the revised Cross Connection Control Plan updated on November 7, 2024, attached hereto and incorporated as Exhibit A will replace the previous plan in its entirety.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF MOUNT PLEASANT, TENNESSEE, as follows:

Section 1. That the City of Mount Pleasant, Tennessee hereby adopts the revised City of Mount Pleasant Cross Connection Plan, which is fully incorporated into this resolution and attached hereto as Exhibit A.

Section 2. If any one or more of the provisions of this Resolution, or any exhibit or attachment thereof, shall be held invalid, illegal, or unenforceable in any respect, by final decree of any court of lawful jurisdiction, such invalidity, illegality, or unenforceability shall not affect any other provision hereof, or of any exhibit or attachment thereto, but this Resolution, and the exhibits and attachments thereof, shall be construed the same as if such invalid, illegal, or unenforceable provision had never been contained herein, or therein, as the case may be.

Section 4. This Resolution shall take effect upon passage.

Approved and adopted this _____ day of _____, 2024.

_____
WILLIAM F. WHITE, JR., MAYOR

ATTEST:

_____
SHIPHRAH COX, RECORDER

LEGAL FORM APPROVED:

_____
KORI BLEDSOE JONES, ATTORNEY

CITY OF MT. PLEASANT

CITY HALL; 100 PUBLIC SQUARE
MT. PLEASANT, TN 38474
PH 931.379.7717 FAX 931.379.5418

Cross Connection Control plan

Updated by:

Dale Brown

11/7/2024

Mount Pleasant
Cross-Connection Control Plan

I. Introduction

A. Goal

The goal of the Mount Pleasant water system is to supply safe water to each and every customer under all foreseeable circumstances. Each instance where water is used improperly so as to create the possibility of backflow due to cross connections threatens the health and safety of customers and chances of realizing this goal. The possibility of backflow due to improper use of water within the customer's premises is especially significant because such cross connections may easily result in the contamination of our water supply mains. Such situations may result in the public water system becoming a transmitter of diseased organisms, toxic materials, or other hazardous substances that may adversely affect large numbers of people. The only protection against such occurrences is the elimination of such cross connections or the isolation of such hazards from the water supply lines by properly installed approved backflow prevention assemblies. The Mount Pleasant water system must continue maintenance of a continuing program of cross connection control to systematically and effectively prevent the contamination or pollution of all potable water systems.

B. Plan of Action

The Mount Pleasant water system is determined to take every reasonable precaution to ensure that cross connections are not allowed to contaminate the water being distributed to its customers. This cross-connection plan outlines a course of action designed to control cross connection within the area served by the utility. This plan is intended to be a practical guide for safeguarding the quality of water distributed from becoming contaminated or polluted through backflow. By following the plan of action, the water provider will ensure that all aspects and guidelines of the Cross-Connection Control are being followed by customer.

II. Authority for Cross Connection Control

A copy of the Ordinance NO. 87-682, adopted April 21st 1987\, by the Utility Board is attached to this plan as Appendix 1. This Ordinance prohibits cross connections within water systems, authorizes the water system to make inspections of the customer's premises, requires that cross-connection hazards be corrected and provides for enforcement. This ordinance expresses clear determination on the part of the Board that the water system is to be operated free of cross-connections that endanger the health and safety of those depending upon the public water supply. This ordinance is considered to be a sound basis for the control of cross-connection hazards by the operating staff and management of the Mount Pleasant water system. The provisions, contained within this Ordinance, are in keeping with the requirements set forth in Section 68-221-711 (6) of Tennessee Code Annotated and Section 1200-5-1-.17(6) of Tennessee Department of Environment and Conservation Rules governing Public Water Systems.

III. Program To Be Pursued

The Mount Pleasant water system will establish an active on-going cross-connection control program. This program is to be a continuing effort to locate and correct all existing cross-connection hazards and to discourage the creation of new problems. Safeguarding the quality of water being distributed to our customers is a high priority concern of the management of the Mount Pleasant water system.

A. Staffing

The Mount Pleasant water system has designated an individual to see that the program to control cross-connections is pursued in an aggressive and effective manner. It is proposed that ample time will be devoted to the program to ensure its effectiveness. Additional personnel will be added as is deemed necessary.

Dale Brown- Cross-Connection Control Coordinator
David Whitwell- Certified Tester

B. Cross-Connection Control Surveys/Inspections

A representative of the water system will survey the distribution for all customers, both residential and nonresidential, for possible cross-connections. If it is determined from the surveys that possible cross-connections may exist, the premise will be inspected. The need for backflow protection will be determined based on the results from the inspection. Notification of the type of backflow prevention assembly required and a date of compliance will be sent to the customer.

Non-Residential:

All new installation nonresidential and commercial establishments are required to have an approved backflow preventer installed, if needed, that is in agreement to the hazard present or be inspected every 5 years**.** The inspections will be performed on all new establishments before water service is established or within 90 days of connection. If there are existing establishments that have not been inspected, a list agreed upon by the State (based on risk and public safety) and time line for inspection by the water provider will be generated. All non-residential establishments not requiring an assembly will be inspected (every 5 years maximum). If establishment changes ownership (name listed on water bill), if plumbing permits are issued or irrigation systems installed, then an inspection will need to be performed (no later than 90 days). The need for backflow protection will be determined based on the results from the inspection. Notification of the type of backflow prevention assembly required and a date of compliance will be sent to the customer. (Attached is a list of criteria for requiring assemblies-Appendix A)

Residential:

For new residential customers, a written questionnaire will be given upon request for water service. If the survey reveals that a potential cross-connection may be present, an inspection is to be performed. The need for backflow protection will be determined based on the results from the inspection. Notification of the type of backflow prevention

assembly required and a date of compliance will be sent to the customer. Each new residential customer will agree to not create cross-connections and a brochure is given to each new customer describing cross-connections and the responsibility of the customer in not creating one.

If the written questionnaire reveals that the new customer may have any of the following, an inspection will be required:

1. Lawn irrigation systems
2. Residential fire protection systems (closed loop systems will require a double check valve minimum)
3. Pools, Saunas, Hot Tubs, Fountains
4. Auxiliary Intakes and Supplies-wells, cistern, ponds, streams, etc.
5. Home water treatment systems
6. Hobbies that require extensive amounts of toxic chemicals (taxidermy, metal plating, biodiesel, ethanol production, etc.)
7. Any other situations or conditions listed in the manual or conditions deemed a threat by the water system.

Written questionnaires will be sent to existing residential customers to determine if potential cross-connections exist. The distribution system will be entirely surveyed within five years. The distribution system will continue to be surveyed in this manner. Questionnaires that reveal potential cross-connections based on the criteria above will be inspected and a determination if backflow prevention assemblies are needed.

The system will be surveyed for residential lawn irrigation systems through questionnaires received and by secondary meters. All residential lawn irrigation systems will require a reduced pressure principle assembly. Residential customers with pools, saunas, hot tubs not filled by a hard pipe directly or indirectly connected may be allowed to use an air gap (and may be requested to use an atmospheric vacuum breaker at the hose bibb). However, if the pool or vessels is connected directly or indirectly by a hard line, a reduced pressure principle assembly is required at minimum.

Residential customers required to have backflow prevention assemblies will be informed of possible thermal expansion problems within the establishment and correction of the condition.

Well System Inspections:

Wells drilled on properties that are supplied by a public water system, particularly those designed for chemigation and fertigation, will need to be inspected to ensure separation or the premises will require an approved assembly.

Wells that are drilled within the area of the distribution system within the last calendar year are inspected and a well user agreement is signed between the Community Water System and the customer. A list of existing wells that do not have a well user's agreement within the distribution area will be generated and ten (10) wells per year will be inspected until the entire list has been completed. Any well system that is connected directly or indirectly to the water system is required to disconnect or install a reduced pressure principle assembly. The customer will be required to sign a well user agreement if no assembly is

required. It is recommended that inspections be performed on new listings within the year, and then perform inspections on existing, un-inspected wells. The list is updated at the local environmental field office and is available to the water system.

New lines that are constructed in areas where residential areas have been mainly supplied by well systems are surveyed and inspected.

C. Public Education and Awareness Efforts

The Mount Pleasant water system recognizes that it is important to inform its customers of the health hazards associated with cross-connections and to acquaint them with the program being pursued to safeguard the quality of water being distributed. The water system will seek to use every practical means available to acquaint the customers with the health hazards associated with cross-connections in an effort to get cooperation. Use of customer surveys and annual newspaper notices will be incorporated into the notification plan.

Information will be provided to all customers about cross-connection control and backflow prevention by individual pamphlets or through a notice in the local newspaper at least once per year. A brochure will be given to all new customers requesting water service describing cross-connections and prevention of backflow.

The following measures may also be used to inform customers about the need to control cross-connections:

1. Posters at the counter where the water bills are paid displayed one month out of the year
2. a. Personal visits to commercial, industrial, institutional, and agricultural customers to explain the need for controlling cross-connections.
   b. Whenever possible, any such potential customer will be informed of needed cross-connection measures in the design or construction stage.

D. Customer's Responsibility

Cross-connections, created and maintained by the customer for his convenience endanger the health and safety of all who depend upon the public water supply. Therefore, the customer who creates a cross-connection problem shall bear the expense of providing necessary backflow protection and for keeping the protective measures in good working order. This includes repair, testing, installation, etc.

E. Enforcement

Where cross-connections are found to exist, the Mount Pleasant water system will require the problem to be eliminated or isolated by a properly installed, approved backflow prevention assembly to prevent the possibility of backflow into the distribution system. Such protective measures will include a backflow prevention assembly on the customer's water service line ahead of any water outlets. Every effort will be made to secure the voluntary cooperation of the customer in correcting cross-connection hazards. If voluntary

action cannot be obtained with time set forth by written notice (90 days maximum for high and low hazard, 14 days maximum for high risk high hazards) to the customer, water service will be discontinued until conditions are in line with the water provider's cross connection plan for the protection of the health and safety of the water distribution system.

After surveys or inspections have been completed, the establishments will contacted by written correspondence outlining any correction (adding or repairing backflow prevention devices) needed and the time schedule allowed for correction of conditions. If the conditions have not been corrected by the time allotment (90 days maximum for high and low hazard, 14 days maximum for high risk high hazards), the water service will be discontinued to the establishment, along with any fines or other penalties deemed necessary by the Mount Pleasant water system.

The Mount Pleasant water system may give additional warnings of discontinuance and/or bring about penalties before the water service is discontinued. The time period for correction will be determined by the water provider, based on the seriousness of the hazard and risk of contamination, ranging from immediate correction or time period of up to 90 days. The maximum allowable time for correction will be no more than 90 days. Those sites deemed high risk high hazard are corrected within a maximum limit of 14 business days, preferably immediate correction. If the conditions do not satisfy the ordinance or plan within 90 days, water service will be discontinued. In the case of backflow prevention devices on fire systems, it is recommended that the fire marshal be contacted before water service is discontinued, to prevent harm to anyone in case a fire occurred in a public building. The fire marshal can condemn the building, thus not allowing anyone to enter.

Water service will not be allowed to the establishment until all corrections have been made and all conditions of the plan have been satisfied. Any person responsible for a violation of this policy/ordinance may be subject to a civil penalty of not less than $10 and no more than $100. Each day a violation occurs shall constitute a separate offense.

IV. Procedures for Inspections:

The Mount Pleasant water system hopes that its efforts to acquaint its customers with the hazards of cross-connections will be successful to the point that the customer will try to maintain their internal water delivery system free of cross-connections. It is recognized that many customers may not recognize that they have a situation that would permit backflow into the water supply lines. Therefore, a thorough investigation will be made of all premises considered likely to have cross-connections. Such inspections will involve the customer's entire water using equipment, and other system components in an effort to locate all actual and potential cross-connections. The findings will be reported to the owner or occupant in writing along with a request for needed corrective action necessary to properly protect the public water system.

A. Field Visit Procedures:

During the inspection, a field sheet will be completed showing details of significant findings. The hazards which cross-connections pose will be explained fully to the persons assisting the inspection. The customer will be informed that the information gathered during the inspection will be reviewed by the Water System's Cross Connection Control

Coordinator and that a written report containing any recommendations and requirements will be mailed to them as soon as possible.

B. Reports to Customers:

The findings of the investigation will be summarized and a written report will be sent to the person assisting in the investigation, or the ranking management official of the establishment. Cross-connections found will be described briefly along with recommended method of correction. An effort will made to keep the description of the findings and recommendations clear, concise and as brief as possible. The correspondence will indicate a willingness to assist with questions. The customer will be given a time limit for making the needed corrections depending (maximum of 90 days) upon the seriousness of the cross-connections involved and upon the complexity and difficulty of correcting the problems.

C. Follow-up Visits and Re-inspections

Follow-up visits will be made as needed to assist the customer and to assure that satisfactory progress has been made. Such visits will continue until all corrective actions have been completed to the satisfaction of the water system.

D. Installation of Backflow Prevention Devices:

Where the customer is asked to install a backflow prevention assembly, the customer will be supplied with a list of acceptable and approved assemblies. In addition, minimum acceptable installation criteria will be supplied. It will be pointed out that a unit cannot be accepted until the water system has verified that the installation fully meets the installation criteria and has been tested to verify that the assembly has a status of Passed. Such backflow prevention assemblies must have a make, model, and orientation currently listed as acceptable by the both the water system and Tennessee Department of Environment and Conservation.

E. Technical Assistance:

The customer will be urged to notify the water system when they are ready to begin installing either a reduced pressure or double check valve type backflow preventer assembly. The Water system cross-connection representative will visit the site to detail how the units must be installed to achieve the desired protection and to minimize maintenance and testing problems.

F. Testing Fees:

There is a $25.00 initial test and inspection fee for all newly installed cross connection devices. For every yearly test there will be a $50.00 fee for the test and inspection of these devices. In the event of a device that fails to pass the inspection or test then there will be an additional $25.00 test fee for each additional test.

V. Premises Requiring Reduced Pressure Principle Assemblies or Air Gap Separation

A. High Risk High Hazards

Establishments which pose significant risk of contamination or may create conditions which pose an extreme hazard of immediate concern (High Risk High Hazards), the cross-connection control inspector shall require immediate or a short amount of time (14 days maximum), depending on conditions, for corrective action to be taken. In such cases, if corrections have not been made within the time limits set forth, water service will be discontinued.

High Risk High Hazards require a reduced pressure principle (or detector) assembly. The following list is establishments deemed high risk high hazard and require a reduced pressure principle assembly:

High Risk High Hazards:

1. Mortuaries, morgues, autopsy facilities
2. Hospitals, medical buildings, animal hospitals and control centers, doctor and dental offices
3. Sewage treatment facilities, water treatment, sewage and water treatment pump stations
4. Premises with auxiliary water supplies or industrial piping systems
5. Chemical plants (manufacturing, processing, compounding, or treatment)
6. Laboratories (industrial, commercial, medical research, school)
7. Packing and rendering houses
8. Manufacturing plants
9. Food and beverage processing plants
10. Automated car wash facilities
11. Extermination companies
12. Airports, railroads, bus terminals, piers, boat docks
13. Bulk distributors and users of pesticides, herbicides, liquid fertilizer, etc.
14. Metal plating, pickling, and anodizing operations
15. Greenhouses and nurseries
16. Commercial laundries and dry cleaners
17. Film Laboratories
18. Petroleum processes and storage plants
19. Restricted establishments
20. Schools and Educational Facilities
21. Animal feedlots, chicken houses, and CAFOs
22. Taxidermy facilities
23. Establishments which handle, process, or have extremely toxic or large amounts of toxic chemicals or use water of unknown or unsafe quality extensively.

B. High Hazard

In cases where there is less risk of contamination, or less likelihood of cross-connections contaminating the system, a time period of (90 days maximum) will be allowed for corrections. High Hazard is a cross-connection or potential cross-connection involving any substance that could, if introduced in the public water supply, cause death, illness, and spread disease. (See Appendix A)

VI. Premises Allowing Double Check Valve Assemblies

Low Hazard

Low hazard is a cross-connection or potential cross-connection involving any substance that would not be a health hazard but would constitute a nuisance or be aesthetically objectionable if introduced into the public water supply. Low Hazards are protected by double check valve assemblies at minimum. Double check valve (and detector) assemblies used for main line protection are allowed only on Classes 1-3 fire protection systems (AWWA Classifications for Fire Systems).

VII. Inspection and Testing of Backflow Prevention Assemblies

A. Approval of New Installations

The Water System will not consider the installation of assemblies to be complete until:

1. The installation has been inspected, and approved by the water system based on installation criteria; and
2. Assembly is tested initially and has a status of Passed.

B. Routine Inspection and Testing of Assemblies

To assure that all assemblies are functioning properly, assemblies will be tested within a 12 month (365 days from last test) period by backflow prevention assembly testers with a Certificate of Competency. If assembly is not tested within the 12 month period, enforcement action will be started. In conjunction with testing the assembly, the water system representative or approved tester will investigate to determine:

1. That cross-connections, actual or potential, have not been added ahead of the protective assemblies,
2. The assembly meets all installation criteria; and
3. The assembly has not been bypassed or altered in some other way to compromise the backflow protection.

All reduced pressure and double check valve backflow prevention assemblies, including detector assemblies, utilized for the protection of the water system will be tested by a person possessing a valid Certificate of Competency from the State and approved by the water system in keeping with the following criteria:

1. Immediately following installation;
2. At least every 12 months;
3. Any time assemblies have been partially disassembled for cleaning and/or repair and;
4. Where there is indication that the unit may not be functioning properly (i.e. excessive or continuous discharges from relief valve, chatter, or vibration of internal parts).

C. Accepted Test Procedure

Tests of assemblies will be made using a 3 or 5 valve test kit that has valid annual certification in accordance to the latest approved testing procedure from the Division of Water Supply.

D. Official Tests

Only tests performed by persons possessing a valid Certificate of Competency will be considered official tests by the water systems. All test reports submitted must be of the type approved by the Division of Water Supply. All parts of testing procedure are recorded accurately on the test report with a determination of status (Passed or Failed). Certificates of Competency are not transferrable.

E. Prior Arrangements for Testing

Prior arrangements will be made for a mutually agreeable time for testing the assemblies prior to performing the test. In all cases, the time which water services are interrupted will be held to a minimum in order to minimize the inconvenience to the customer. The customer, upon notification by the water system, has an obligation to work out a mutually agreeable time for testing assemblies within time allotted by the water system.

F. Repairs

Should a protective assembly not be tested within the 12 month time frame be found defective or have a status of Failed, the water system will require the assembly to be repaired promptly with manufacturer's specified parts, in accordance to manufacturer's suggested procedure, and placed in proper operating condition within a (specified) time limit (maximum 90 days, 14 days for high risk high hazards). Following repairs, the assembly is to be tested again to verify that it is meeting performance standards and have a status of Passed. The owner will be held responsible for maintaining protective measures in a good state of repairs. The owner of an assembly needing repairs or maintenance will be permitted to do the work, if such owner is properly qualified or the owner may elect to secure the services of someone else experienced in the repair of the assemblies.

VIII. Parallel Units

The water system may require the installation of parallel assemblies if the customer cannot readily accommodate interruptions of water service for periodic testing and repairs of the assemblies or is unwilling to cooperate in scheduling a shutdown promptly for testing during normal hours worked by water system personnel.

IX. Records

Good records are invaluable in the water system's efforts to safeguard the quality of water being distributed against degradation from backflow through cross-connections. Adequate records will be maintained as a part of the Water System's permanent files to:

A. Document the overall effort of the water system to properly discharge its responsibility to see that each customer receives a safe water under all foreseeable circumstances;
B. Give a complete picture as to the current status and history of the individual premises regarding the potential for backflow, corrections made, etc.;

C. To support enforcement action, whenever necessary, to obtain backflow protection; and
D. Document that assemblies have been properly installed, maintained, and tested routinely.

Records to be maintained by the Water System will include, but not necessarily be limited to the following;

A. Master List of all Establishments with assemblies used for premise isolation, including location, assembly used, make, model, size, serial number etc.;
B. Correspondence between water system and its customers
C. Copy of Approved Plan
D. Copy of Approved ordinance
E. Test reports for each assembly
F. Copies of Certificates of Competency for each tester
G. Copies of test kit certifications
H. Site Inspection Reports
I. Residential written surveys
J. Backflow incident reports
K. Records on initial surveys, recommendations, follow-up, corrective action, routine re-inspections, etc.
L. A file system designed to call to the attention of the cross-connection control personnel when testing and re-inspections of premises are needed.
M. Public education pamphlets and information.

X. Backflow Contamination Procedures:

If contamination is caused by backflow, the Mount Pleasant water system will take the following actions to protect the health of the customer:

A. Isolate the lines containing any contaminant from the distribution system;
B. Inform customers with contaminated lines not to consume or use the water;
C. Report contamination to the local environmental field office;
D. Determine and separate the cross-connection allowing the backflow and contamination;
E. Remove contamination from lines;
F. Test and ensure that lines meet Division of Water Supply regulations for safe water;
G. Return service to affected customers once water is safe;
H. Document the details of the incident including cause, isolation, and correction, and send report to the local environmental field office;
I. Continue to survey and inspect system for similar situations that may allow backflow.

XI. Modifications to Plan

This plan may be modified from time to time to meet the needs of the utility and to meet the states requirements. The plan and ordinance will be reviewed by the water system every five (5) years to determine if the existing plan meets requirements set forth by the Division of Water Supply and that it promotes an ongoing program. The manager shall be authorized to modify, as needed, this plan without the approval of the water system's governing body. The manager shall report any modifications to this plan to the board for their information, in a timely manner. The manager shall also advise the local environmental field office of any changes to this plan for their review and comments.

XII. Approval Signatures

_____ **Date:** _____
City Manager

_____ **Date:** _____
Mayor or Board President Signature

_____ **Date:** _____
Utility Director Signature

Newspaper Notice
(Spring Version)

NOTICE

Over the next few months, the warm weather will bring people outdoors to work in their yards and gardens and begin getting swimming pools ready. The Mount Pleasant water system would like to ensure that our customers are aware of the dangers associated with these activities. A garden hose submersed in any liquid or attached to certain devices used to spray pesticides or herbicides forms a cross connection. A cross connection is a situation where a possible source of contamination is directly linked to our public water system. If the end of your hose is connected to a chemical container, swimming pool or other contaminant during a water main break or fire, the substance can be siphoned back into the water system. This condition, known as back siphonage, could cause a public health hazard. Devices are available to prevent this problem; however the best solution is to always be careful how you use your hose.

Please help us provide a safe supply of water to all of our customers. Remember; never stick your hose in anything you would not want to drink. For more information on cross connections and how to protect against them, call Mount Pleasant water system at 931-379-7717.

Newspaper Notice
(Fall Version)

NOTICE

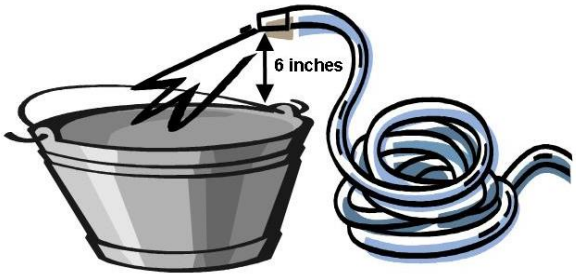
Over the next few weeks, the cooler temperatures will bring people outdoors to work in their yards, finish gardening and begin getting swimming pools ready for winter. The Mount Pleasant water system would like to ensure that our customers are aware of the dangers associated with these activities. A garden hose submersed in any liquid or attached to certain devices used to spray pesticides or herbicides forms a cross connection. A cross connection is a situation where a possible source of contamination is directly linked to our public water system. If the end of your hose is connected to a chemical container, swimming pool or other contaminant during a water main break or fire, the substance can be siphoned back into the water system. This condition, known as back siphonage, could cause a public health hazard. Devices are available to prevent this problem; however the best solution is to always be careful how you use your hose.

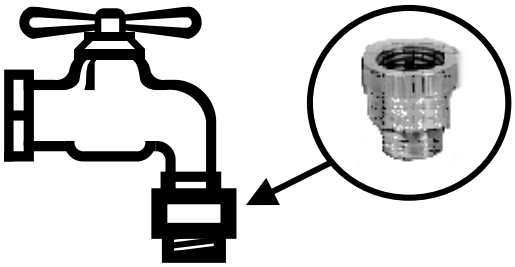
Please help us provide a safe supply of water to all of our customers. Remember; never stick your hose in anything you would not want to drink. For more information on cross connections and how to protect against them, call Mount Pleasant water system at 931-379-7717.

The Mount Pleasant water system makes every effort to ensure that our customers enjoy a continuous supply of safe drinking water. We appreciate the help of our customers to maintain the quality of our water supply.

Cross Connections can cause the water system to become contaminated. A cross connection is a link with the public water supply and a possible source of contamination. An example of a cross connection would be a garden hose submerged in a source of contamination such as a swimming pool, car radiator or other liquid. If a water main break should occur or if a fire pumper used a fire hydrant while the hose was submerged in a source of contamination, the contaminant could be pulled back into the public water supply. This occurrence, known as backflow, can be prevented.

One simple way to stop backflow is by using an air gap. An air gap can be created by arranging your hose so that the end is at least six inches above the top rim of the container it is being used to fill. This air gap will prevent the contaminant from being siphoned into the water supply.





Another method of preventing backflow with a garden hose is using a device known as a vacuum breaker. Vacuum breakers are inexpensive devices that can be screwed onto your outside faucet. These devices will prevent contaminants from being siphoned back into your plumbing and the public water system.

More hazardous cross connections or cross connections created with permanently installed plumbing may require more sophisticated devices known as reduced pressure backflow preventers. These devices are much more complicated and must be tested annually by certified testers.

For more information on preventing cross connections and protecting our water supply, contact the Mount Pleasant water System at 931-379-7717

REMEMBER: Never submerge your garden hose in anything you would not want to drink!

INSTALLATION CRITERIA FOR REDUCED PRESSURE PRINCIPLE AND DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLIES

MINIMUM INSTALLATION REQUIREMENTS are underlined; all others are suggestions or items to consider:

A. The RP assemblies should never be subject to flooding; therefore should:

1. Never be located in a pit or other area subject to flooding

2. Avoid piped drains for enclosures housing the units. Provision should be made for discharging water (maximum design discharge) directly through the wall of the enclosure housing the unit at a slightly higher elevation than surrounding ground level or maximum flood level.

3. The lowest part of the relief valve discharge port should be a minimum of 12 inches above either:

    1. The ground

    2. Top of the opening(s) in enclosure wall

    3. Maximum flood level

    Whichever is highest, in order to prevent any part of the assembly from becoming submerged.

B. All new backflow prevention assemblies being installed in Tennessee for the protection of a public water system should be included on the latest listing of "Approved Backflow Prevention Assemblies" maintained by the Division of Water Supply.

C. The assemblies should be installed where the units can be easily tested and repaired.

1. Installation of assemblies 2" and less there must be a minimum of six inch clearance from all walls. Assemblies over 2" must be a minimum of twelve inches from all walls.

2. Assemblies installed in stationery enclosures should have at least a 2 ft. clearance on each side of the assembly to facilitate testing and servicing. Adequate drainage must be provided.

3. Assemblies should not be installed higher than 5 ft. from the floor/ground to the center line of the assembly unless safe permanent access is provided for testing and servicing

D. The pipelines should be thoroughly flushed to remove foreign material and debris. A strainer should be added on the inlet side of the assembly before installation except for fire protection service lines.

E. Installation of backflow prevention assemblies will not allow any unprotected or uninspected connections in front of the backflow prevention assembly.

F. Backflow preventers should be installed with unions and isolation valves on both ends of the assembly to allow removal of the assembly for repair or replacement.

G. Provisions should be made to protect the assemblies from freezing. Insulating materials should not restrict the relief valve discharge or accessibility to test cocks or name plate of the unit. All enclosures should be designed to provide for adequate draining for the relief valve.

H. The relief valve of an RP should never be plugged, restricted, or solidly piped to a drain, ditch or pump. Rigidly secured air-gap funnels may be used to direct discharges away from the unit provided an approved air-gap separation is provided at the relief valve discharge and again at the discharge end of the drainpipe. An adequate area drain is recommended to handle the maximum relief valve flow to prevent flooding.

I. The test cocks, valve stems, or name plates should not be painted and their accessibility, operation of legibility should not be hampered nor the relief valve discharge passage be restricted by insulation or other coverings.

J. The assemblies should be installed in an approved position as listed in the Latest Approved List and special supports added if needed.

K. For applications where water temperatures exceed 110°F (43°C) only approved hot water devices are to be used.

L. Prior to completing the installation, temperature pressure relief valves on heating vessels should be properly installed and in good working condition. If needed, thermal expansion tanks should be installed.

M. No unprotected bypasses or connections are made between the assembly and meter.

Existing assemblies not meeting the minimum requirements above, with the exception of being installed in an area that may allow flooding of the assembly, may be allowed variances by the water system. However, no variance may be allowed that will compromise the protection of the assembly or that will allow contaminants in the distribution system. All variances should be documented and kept on file for the life of the assembly. Please review the document entitled: Approved Backflow Prevention Assemblies

APPENDIX A

TYPICAL CROSS CONNECTION HAZARDS

Actual or potential cross connection hazards may be present within almost every premises using water. To better understand and become aware of these hazards, the following examples are provided.

A. Common Facilities and Systems Likely to have Cross Connection Hazards:

1. Auxiliary Water Systems
   Any premises or facility with an alternate water supply on or available to the premises. Water stored in reservoirs that are not properly protected or circulated is considered an auxiliary supply.

2. Food Processing
   Pressure cookers, autoclaves, retorts, and other steam connected facilities.

3. Cooling Systems Single Pass
   Compressors, heat exchangers, air-conditioning equipment, and other water-cooled equipment that may be sewer connected

4. Farming Operations
   Poultry houses, chicken houses with automatic proportioning pumps or feeder barrels for supplying water with live virus or other medication, livestock watering troughs with below the rim filling outlet, diluting and mixing of pesticides and insecticides, mixing and spray equipment, greenhouses, dilution of liquid fertilizers, dairies, unprotected hose bibbs.

5. Fire Protection Systems
   Piping systems and storage reservoirs that may be treated for prevention of scale formation, corrosion, algae, or slime.

   Piping systems that contain non-potable plumbing materials.

   Booster pumps without suction pressure sustaining valves or low suction pressure cutoff switches.

   Sprinkler systems filled with antifreeze solutions piping systems filled with chemical compounds used in fighting fires.

   Fire systems with an auxiliary source of supply or which are located within 1700 ft. of streams, lakes, ponds, reservoirs, or other non-potable waters that could be utilized in emergencies.

6. Film Processing
   Automatic film processing machines, tanks, vats, and other facilities used in processing film.

7. Hydraulic Test Facilities
   Hydraulic test equipment using pumps, rams, pressure cylinders, or other hydraulic principles, which may force liquids back into the public water system.

Piping systems, tanks, and other equipment where the public water system pressure is used directly and which may be subject to backpressure.

8. Industrial Piping Systems
   Industrial piping systems containing chemicals, gases, cutting or hydraulic fluids, coolants, antifreeze, hydrocarbon products, glycerin, paraffin, caustic or acid solutions and other substances.

9. Industrial Systems – Chemical Contamination
   Tanks, can and bottle washing machines, and piping systems where caustics, acids detergents, and other compounds are used in cleaning, sterilizing, and flushing.

10. Residential or Commercial lawn irrigation systems.
    Irrigation systems equipped with pumps, injectors, pressurized tanks, or other facilities for injecting agricultural chemicals, such as, fungicides, pesticides, herbicides, and other toxic or objectionable substances, require immediate protection.

11. Laundry and Dyeing Facilities
    Laundry machines having under rim or bottom inlets, dry cleaning equipment, and solvent reclaim facilities.

    Wash water storage tanks equipped with re-circulating pumps.

    Dye vats in which toxic chemicals and dyes are used.

    Shrinking, bluing, and dyeing machines directly connected to re-circulating systems.

    Boilers, steam lines, and heat exchangers.

12. Paper Processing
    Pulp, bleaching, dyeing, and processing facilities that may be contaminated with toxic chemicals.

13. Petroleum Processing
    Steam boilers, steam lines, mud pumps and mud tanks, oil well casing used for dampening gas pressures, dehydration tanks, oil and gas tanks in which hydraulic pressures are used to raise oil and gas levels, gas and oil lines used for testing, excavating, and slugging.

14. Plating Facilities
    Plating facilities using highly toxic cyanides, heavy metals, such as, copper, cadmium, chrome, acids, and caustic solutions.

    Plating solution filtering equipment with pumps and circulating lines.

    Tanks, vats, or other vessels used in painting, descaling, anodizing, cleaning, stripping, oxidizing, etching, pickling, dipping, and rinsing operations and lines used for transferring fluids.

15. Storage Tanks, Cooling Towers, and Circulating Systems

Storage tanks, cooling towers, reservoirs, and circulatory systems contaminated with bird droppings, algae, slimes, or with water treatment compounds, such as copper, chromate, phenols, and mercury.

16. Sewerage Systems
    Cross connections to sewage pumps for priming, water seal lubrication, cleaning, flushing, or unclogging.

    Water-operated sewage pumps ejectors.

    Sewer lines used for disposing of filter or softener backwash, water from cooling systems, or for providing a quick drain for building lines and lines used for flushing or blowing out obstructions in sewer lines.

17. Steam Generation Facilities
    Steam generating facilities and lines which may be contaminated with boiler compounds, heat exchangers, single wall steam heated water heating equipment.

18. Hospital-Medical Facilities
    Unprotected connections to bedpan washers, hydrotherapy tubs, toilets, urinals, autopsy and mortuary equipment, aspirators, x-ray and photo processing equipment, vacuum pump seals.

    Unprotected connections to laboratory equipment which may be chemically or bacteriological contaminated, such as, steam sterilizes, autoclaves, specimen tanks, and pipette washers.

B. Equipment posing significant risk of creating cross-connections.

Establishments with equipment list will normally require premise isolation with a Reduced Pressure Principle Assembly or Double Check Valve Assembly depending on hazard unless otherwise found to have an appropriate air gap.

Many devices or equipment below may be designed and constructed with approved air gaps that would adequately protect the water system. However, the cross-connection control inspector should consider and make judgments on the amount risk that the establishment poses to the distribution and not solely on the presence or absence of the devices, situations, or equipment listed below.

The following is an incomplete list of equipment normally requiring backflow prevention assemblies, it is to be noted that any connection with piping, equipment, or devices that contain or may contain substances that are pollutants or contaminants will require premises isolation.

Air-conditioning systems (using water for processing)
Aspirators
Air lines
Autoclaves and sterilizers
Auxiliary systems
Baptismal tanks
Bathtubs (Hard Piped)
Bedpan washers
Bidets
Booster pumps
Brine tanks, softeners
Boilers
Car wash equipment

Chemical feeders
Chillers
Chlorination equipment
Coffee urns
Commercial cookers
Condensers
Compressors
Cooling systems
Cooling towers
Culture vats
Cuspidor, dental
Developing equipment
Dishwashers
Display fountains
Drinking fountains
Ejectors, steam or water
Extractors
Fire protection systems, standpipes, sprinkler systems and drain lines
Fish tanks, ponds
Floor drains
Food mixing tanks
Frost-free toilets, hydrants, and fountains
Garbage grinders
Garbage can washers
Garden sprayers
Heat exchangers
Humidity controls
Hydraulic equipment
Hydraulic insecticide or fertilizer applicators
Hydraulic lifts
Ice makers
Irrigation systems, lawn sprinklers
Kitchen equipment
Laboratory equipment
Laundry equipment
Lavatories
Lawn sprinklers
Liquid handling systems
Lubrication, pump bearings
Medical equipment
Pest control equipment
Photo laboratory sinks
Potato peelers
Pressure cookers
Process water circulation systems
Pump, priming systems
Sewer flush tanks
Shampoo sinks, basins
Showers, telephone type shower heads
Sinks, slop sinks
Soda fountains
Solar water and space heating equipment
Steam boilers
Steam tables
Stop and waste vales
Swimming pools, ponds, fountains
Tank and vats
Therapeutic tanks, spas, and hot tubs
Threaded hose bibs
Toilets, flushometer, flush tank, ballcock, flush valve siphon jet
Vegetable peelers
Vacuum systems
Urinals (siphon set blowout)
Vacuum systems (water operated with water seals)
Water treatment devices
Water troughs
Water-using mechanical equipment
Water Jacketed tanks, vats, cookers

C. **<u>Premises, facilities or establishments that pose a significant risk of cross-connection</u>** –

Reduced Pressure Backflow Prevention Assemblies required for premises isolation

Agricultural processing facilities
Aircraft and missile plants
Amusement parks
Animal hospitals and clinics
Automotive plants
Auxiliary water systems
Autopsy facilities
Beverage bottling plants

Breweries
Buildings (multistory) – hotels, apartment houses, public and private buildings, or structures having unprotected cross connections
Campgrounds
Canneries
Car washes
Chemical plants – manufacturing, processing, compounding, treatment, packing, storage
Chemically contaminated water systems
Civil works
Clinics
Cold storage plants
Dairies, creameries
Dry cleaners
Dental buildings
Dye works
Extermination Companies
Fertilizer plants
Fertilizer (liquid) and spray distributors
Film laboratories
Fire sprinkler systems
Funeral homes
Hospitals
Laboratories
Laundries and dye works
Lawn irrigation systems
Medical buildings
Metal manufacturing, cleaning, processing, and fabricating plant
Mortuaries
Morgues
Motion picture studio
Nursing home or convalescent homes
Greenhouses, plant nurseries
Oil and gas production, storage, or transmission facilities
Oil refineries
Packing houses
Paper and paper product plants
Plating plants
Power plants
Private Wells
Radioactive materials or substances – plants or facilities that process or use radioactive materials
Reduction plants
Restricted, classified, or other closed facilities
Rubber plants
Sand and gravel plants
Schools and colleges
Sewage pumping stations
Storm water pumping stations
Hard plumbed swimming pools, ponds, and fountains
Tanneries of all kinds
Therapeutic tanks, spas, and hot tubs
Vegetable and food processing facilities
Waterfront facilities and industries
Water treatment plants
Wastewater treatment plants
Water using recreational facilities (swimming pools, water slides)

D. **<u>Other situations or conditions that pose a significant risk of contamination:</u>**

1. The degree of hazard involved.

2. The likelihood of frequent and/or unapproved plumbing changes.

3. The probability of frequent modification of water using equipment.

4. The complexity of the internal piping system.

5. The difficulty in making frequent inspections to verify that the internal protection provided is being adequately maintained.

6. The likelihood of protective assemblies being rendered ineffective.

7. The ease of access to premises.

8. The time necessary to inspect all water outlets not protected by a backflow prevention assembly.

9. The time needed to inspect the facility at least annually to determine if new cross connections have been created.

Water System
Cross-Connection Survey
Residential

Occupant Name_____

Occupant Address_____

Meter serves: Homes How Many?____ Buildings How Many?____

1. Do you have? (Please Check all that apply):

☐ Hot Tub	☐ Swimming Pool	☐ Jacuzzi
☐ Waterbed	☐ Solar System	☐ Green House
☐ Underground Sprinkler System	☐ Darkroom Equipment	☐ Drip/Soaker/Irrigation System
☐ Portable Dialysis Machine	☐ Insecticide Sprayers (That attach to garden hose also)	☐ Utility sink w/threaded faucet
☐ Wood burning hot water heater	☐ Ghost pipes (unidentified)	

2. Do you have bathtub that fills from the bottom? ☐Yes ☐No
3. Do you have a water softener or any extra water treatment system? ☐Yes ☐No
4. Do you have an auxiliary water supply on your premises? ☐Yes ☐No
5. Do you have livestock and use a water trough or water system connected to by public water? ☐Yes ☐No
6. Is your home or building elevated above your water meter? ☐Yes ☐No
7. Does a creek, river, or spring water run near or on your property? ☐Yes ☐No
8. Do you have a booster pump, well pump, or any other type water pump? ☐Yes ☐No
9. Do you receive irrigation water from a different source? ☐Yes ☐No
10. Do you have a backflow protection device on your property now? ☐Yes ☐No
11. Do you have any situation that you are aware of that could create a cross-connection? ☐Yes ☐No
12. Do you have any other water-using equipment on your property not mentioned above? ☐Yes ☐No

If yes, please list below:

_____

_____ _____
Print Name Phone # (include area code)

_____ _____
Signature Date

Please notify this office if any of the above conditions change.

State Guidance for Approved Backflow Prevention Assemblies

All assemblies, used to protect the public water supply, must be approved by the Division of Water Supply. New installation and replacement assemblies required by a public water system must be included on the latest listing of the Approved List maintained by the Division of Water Supply. A backflow prevention device will qualify as an assembly, if it is consistent with the following definitions:

DOUBLE CHECK-DETECTOR CHECK VALVE ASSEMBLY (DCDA)
A specially designed unit composed of a line size approved double check valve assembly with a specific bypass line equipped with a small water meter and a ¾ inch approved double check valve assembly. The meter shall register accurately for only very low rates of flow and shall show a registration for all rates of flow. The meter will detect small leakage or theft of water for un-metered fire lines. This assembly is designed for fire service lines and is recommended for un-metered fire lines. This assembly is designed to protect against a low hazard or pollutant.

DOUBLE CHECK VALVE ASSEMBLY (DCVA)
An assembly composed of two independently acting, approved check valves, including tightly closing shutoff valves located at each end of the assembly and fitted with properly located test cocks. This assembly is designed to protect against a low hazard or pollutant.

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY (RPBP)
An assembly containing two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The unit shall include properly located test cocks and tightly closing shutoff valves at each end of the assembly. This assembly is designed to protect against a health hazard (i.e. contaminant).

REDUCED PRESSURE PRINCIPLE-DETECTOR BACKFLOW PREVENTION ASSEMBLY (RPDA)
A specially designed assembly composed of a line-size approved pressure principle backflow prevention assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for only very low rates of flow up to 3 gpm and shall show a registration for all rates of flow. This assembly shall be used to protect against a non-health hazard or a health hazard. The RPDA is primarily used on fire sprinkler systems. This assembly is designed to protect against a health hazard (i.e. contaminant).

The following assemblies will meet recommendations and requirement for protection of the water system:

1. **Reduced Pressure Principle Assembly**
2. **Reduced Pressure Principle Detector Assembly**
3. **Double Check Valve Assembly***
4. **Double Check Valve Detector Assembly***

* Double Check Valve Assemblies and Double Check Valve Detector Assemblies are permissible on non-chemical fire lines Class 1-3 only. Use of these assemblies is at discretion of the water purveyor.

Atmospheric Vacuum Breakers, Pressure Vacuum Breakers, and Spill-Resistant Pressure Vacuum Breakers are not approved by the Division of Water Supply for premise isolation.

Existing Assemblies not on Approved List

Assemblies not listed on the Approved List may be accepted by the Division of Water Supply as an approved assembly under very strict guidelines. The water purveyor may elect, at their discretion, to accept only assemblies listed on the Approved List in order to establish the utmost confidence in backflow protection and prevention.

The Division of Water Supply highly recommends the use of assemblies listed only on the Approved List. Approval of assemblies not listed on the Approved List will be considered on a case-by case basis by the water system with fulfillment of these requirements:

1. Approved plan and policy/ordinance of water purveyor at the time of installation did not address or require assemblies from Approved List. Plan or policy/ordinance must be amended and approved, if needed, to allow unapproved existing assemblies that meet the following requirements.
2. Assembly must meet all installation criteria required by the water provider.
3. Must meet the definition of assembly and is annually tested. The assembly must be deemed **Passed** to remain as an acceptable and approved backflow prevention assembly for the protection of the water system.
4. Installation, operation, and maintenance of the assembly will provide adequate protection against backflow.
5. Assembly must be repaired using manufacturer-specified parts in accordance to procedures outlined by manufacturer.
6. A written plan must be reported by the water provider concerning the assembly not shown on the latest Approved List. The plan will specify all conditions and information concerning the assembly including manufacturer, model, serial number, installation, repair information (if available), time line of replacement (depending on type of hazard and risk of contamination) if assembly cannot be repaired in accordance with manufacturer procedures. All plans and worksheets must be completed and kept on file by the water system.
7. If assembly cannot be repaired according to the manufacturer-specified procedures, it must be replaced with an assembly listed on the latest Approved List. The replacement assembly will be installed, operated, and maintained in accordance to the approved plan/policy/ordinance of the water purveyor.

State Guidance for Backflow Prevention Assembly Performance Evaluations

Performance evaluations are needed to demonstrate that all parts of the assemblies are performing as designed and as approved.

1. Performance evaluations must be performed on every assembly at least annually.

2. Each backflow prevention assembly must be deemed **Passed** to remain approved and acceptable protection for the public water system.

   Passed: The status of a backflow prevention assembly determined by a performance evaluation in which the assembly meets all minimum standards set forth by the approved testing procedure.

   Reduced Pressure Principle Assembly:
   a. Relief Valve must be have an opening point of 2.0 psid or greater
   b. Backpressure on Check Valve #2 must hold tight.
   c. Static Pressure Drop across Check Valve #1 must be 3.0 psid or greater than relief valve opening point.
   d. Shutoff Valve #2 must hold tight.
   e. Static Pressure Drop across Check Valve #2 must be 1.0 psid or greater.

   Double Check Valve Assembly:
   a. Static Pressure Drop across Check Valve #1 must be 1.0 psid or greater.
   b. Backpressure on Check Valve #2 must hold tight.
   c. Shutoff Valve #2 must hold tight.
   d. Static Pressure Drop across Check Valve #2 must be 1.0 psid or greater.

3. The Backflow Prevention Assembly Tester must have, at minimum, a valid Certificate of Competency in Testing and Evaluation Backflow Prevention Assemblies and a valid test kit certification by a manufacturer-approved entity.

4. Backflow Prevention Assembly Testers must test and evaluate according to the latest Division of Water Supply's approved procedures.

5. Test kits must be certified annually and the water provider and tester must show proof of certification from manufacturer-approved entities.

6. Proof of annual test kit certification and Certificate of Competency must be current and kept on file for each tester by water provider for five years.

7. Test reports must be completely and accurately documented and the appropriate evaluation determined from testing procedure.

8. All correspondence and documentation pertaining to each backflow prevention assembly will be kept on file by the water provider for at least five years. This includes, but not limited to, test reports, repair reports and installation records.

9. Each location requiring an assembly will have a documented backflow prevention assembly, if the assembly at the address cannot be identified or is not the correct assembly, the water provider will be notified.

10. Every assembly must pass each part of the Performance Evaluation. If any test does not meet the minimum requirements set forth in the testing procedure, the assembly is deemed **Failed**. If conditions around the assembly do not allow the assembly to be tested, the assembly fails the assembly performance evaluation. (Examples would include assembly is submerged, test cocks missing or plugged, relief valve continually discharging)

    Failed: The status of a backflow prevention assembly determined by a performance evaluation based on the failure to meet all minimum standards set forth by the approved testing procedure.

11. Assemblies must be tested when installed and after every repair. Backflow prevention assemblies on lawn irrigation systems must be tested when assemblies are placed in service. If lawn irrigation backflow assemblies are taken out of service to winterize the system, upon startup of the system, the assemblies must be retested.

12. Water systems may elect to place additional requirements on assembly testers as long as there is no conflict with State statute or regulation.

State Guidance for Certificate of Competency for Testing and Evaluating Backflow Prevention Assemblies

The information listed below is guidance concerning Certificate of Competencies:

- Anyone testing backflow prevention assemblies for the purposes outlined in the water system's Cross-Connection Control Ordinance or Policy/ordinance must have a **valid** Certificate of Competency in Testing and Evaluation of Backflow Prevention Assemblies issued by the Division of Water Supply.

- A valid certificate is defined as a Certificate (Basic or Renewal) issued by the state of Tennessee that has not surpassed the three-year time limit from issuance. After certificates have been granted by the State of Tennessee, a Certificate No. is assigned to the applicant. Certificates are valid for three (3) years after certificates are granted. All Certificates are no longer valid, if the Renewal Certificate is not attained within three (3) years from the date the certificate was issued. A 1 year grace period is allowed to attend the renewal class however, the person must not be allowed to test after the 3 year expiration.

- The applicant must complete and satisfy all requirements set forth by the Division of Water Supply to attain and renew the Certificate of Competency.

- Applicant must successfully complete a State-approved Basic Cross-Connection Control training session, written exam, and practical exam to attain an initial Certificate of Competency. The student must successfully complete a State-approved Renewal Cross-Connection Control training session and practical exam to renew the Certificate of Competency.

- Certificate of Competency must be valid in order to perform assembly evaluations.

- In order to renew the Certificate of Competency, a Renewal Course and Exam must be taken within three years after the issuance date to remain valid.

- If the Certificate of Competency is not renewed three years after issuance, the certificate is no longer valid, but does not expire.

- A one year grace period to renew the Certificate of Competency is allowed once the three year time limit has passed.

- Water providers will not accept a test report from a tester whose certificate is in the grace period or has expired.

- If the tester does not renew during the one year grace period, the certificate expires and the tester must take the Basic Course and Basic Exam in order to attain the Certificate of Competency.

- The Certificate of Competency is not transferable and no one may work "under" the certificate.

- A Plumber Certificate in Testing and Evaluating Backflow Prevention Devices issued by Division of Water Supply cannot be substituted and will not be accepted in place of the Certificate of Competency.

- Certificates of Competency in Testing and Evaluation of Backflow Prevention Assemblies from other states or entities will only be accepted if approved by the Division of Water Supply. No entities or states presently have an approved Certificate of Competency.

- Water providers may elect to impose additional restrictions on testers within their systems, as long as the State's statutes, regulations, and policies are met.

Minimum Requirements in Plan and Ordinance/Policy:

Anyone testing backflow prevention assemblies for the purposes outlined in the water system's Cross-Connection Control Ordinance or Policy/ordinance must possess a **valid** Certificate of Competency in Testing and Evaluation of Backflow Prevention Assemblies issued only by the Division of Water Supply.

State Guidance Concerning Lawn Irrigation Systems

Lawn irrigation systems, both commercial and residential, are recognized by the State of Tennessee, Division of Water Supply as an actual and potential cross-connection to a public water system. The contact between the sprinkler heads and the soil or submergence of sprinkler heads allows a connection between the potable water system and water of unknown or unsafe quality.
Soil and standing water in contact with the sprinkler heads poses a significant risk of containing E.coli, Cryptosporidium, Giardia, other pathogens, and hazardous chemicals used for lawn care. Many lawn irrigation system use toxic chemicals injected in the piping to fertilize and eliminate undesired plants.

Required Protection for Lawn Irrigation Systems by Public Water Systems:

- For public water systems to protect their distribution lines, lawn irrigation systems are protected by a **Reduced Pressure Principle Assembly** or **Reduced Pressure Principle Detector Assembly**.
- Double Check Valves cannot be used for premise isolation on lawn irrigation systems. Double Check Valves may be used for non-health hazards only. Water which contains or may contain pathogens or harmful chemicals is considered a health hazard and must be protected by a **Reduced Pressure Principle Assembly** or **Reduced Pressure Principle Detector Assembly** only.
- Pressure vacuum breakers, Spill-resistant vacuum breaker, and atmospheric vacuum breakers may not be used to protect the public water system's main-line piping or distribution system. These devices are point-of-use devices and may not be used for premise isolation.
- Assemblies must be tested annually.
- Assemblies on lawn irrigation systems must be tested during the start-up period (typical maximum time limit is within 90 days). Annual testing just prior to winterization or seasonal shutdown is not acceptable. Testing may also be initially staggered in order to reduce problems with scheduling tests.

Backflow Incident Report Form

Reporting Agency: _____ Report Date: _____

Reported By: _____ Title: _____

Mail Address: _____ City: _____

State: _____ Zip Code: _____ Telephone: _____

Date of Incident: _____ Time of Occurrence: _____

General Location (Street, etc.): _____

Backflow Originated From:

Name of Premises: _____

Street Address: _____ City: _____

Contact Person: _____ Telephone: _____

Type of Business: _____

Description of Contaminants:
(Attach Chemical Analysis or MSDS if available)
_____

_____

Distribution of Contaminants:

Contained within customer's premises: Yes: _____ No: _____

Number of persons affected: _____

Effect of Contamination:

Illness Reported: _____

Physical irritation reported: _____

_____

Backflow Incident Report Form

Cross-Connection Source of Contaminant (boiler, chemical pump, irrigation system, etc.):

_____

_____

Cause of Backflow (main break, fire flow, etc.):

_____

_____

Corrective Action Taken to Restore Water Quality (main flushing, disinfection, etc.):

_____

_____

Corrective Action Ordered to Eliminate or Protect from Cross Connection (type of backflow preventer, location, etc.)

_____

_____

Previous Cross-Connection Survey of Premises:

Date: _____ By: _____

Types of Backflow Preventer Isolating Premises:

RPBA: _____ RPDA: _____ DCVA: _____ DCDA: _____

Air Gap: _____ None: _____ Other Type: _____

Date of Latest Test of Assembly: _____

_____

Backflow Incident Report Form
Page 3 of 3

Notification of Division of Water Supply:

Date: _____ Time: _____ Person Notified: _____

Attach sheets with additional information, sketches, and/or media information, and mail to Local Environmental Field Office

WELL USER AGREEMENT
OF NON-USE OR CONNECTION TO THE PUBLIC WATER SUPPLY

In accordance with Water System's Cross Connection Control program and state law, a private well or auxiliary water source may not be connected in any manner to the public water supply unless proper protection against cross connection is provided. Only a Reduced Pressure Backflow Preventer or an approved air gap (complete separation from public water supply) may be used for protection. These devices must have prior approval by Water System. Customers using the public water supply and not in compliance with this rule will have their water service discontinued.

Check appropriate box:

- ☐ *This serves as notification that a well is located on the property at the following address:*
- ☐ *This serves as notification that a well is not located on the property at the following address:*

_____
Please type or print

_____

_____

I (we) understand and agree that this system is, and shall remain totally segregated from the public water supply, and no unapproved or unauthorized cross connections, auxiliary intakes, bypasses, or interconnections with any type of irrigation systems or otherwise will be permitted without the proper cross connection control device and approval of the Water System.

I (we) further understand and agree that should an auxiliary water supply be connected to the public water system at the above address, maximum cross connection control equipment in the form of an approved air gap or reduced pressure backflow prevention device shall be installed to protect the public water supply.

Date: _____

Name: _____ Notary: _____

Signature: _____ Commission Expires: _____

INSPECTION CHECK LIST

Name of Firm _____

Mailing Address _____

Time _____ Date _____ Water Pressure _____ pH _____ Chlorine Residual _____

- ❑ Air Conditioning
- ❑ Air Washers
- ❑ Air Conditioned Chillwater
- ❑ Air Conditioned Condenser Water
- ❑ Air Conditioned Cooling Towers
- ❑ Air Compressors
- ❑ Autopsy Tables
- ❑ Aspirator, Medical
- ❑ Aspirator, Weedicide and Root Feeders
- ❑ Autoclave & Sterilizer
- ❑ Boiler Feed Line
- ❑ Baptismal Fount
- ❑ Bathtub Below Rim Filler
- ❑ Bedpan Washer, flushing Rim
- ❑ Bidet
- ❑ Brine Tank
- ❑ Bottle Washer
- ❑ Chemical Feeder Tanks
- ❑ Chlorinator
- ❑ Coffee Urn
- ❑ Cuspidor, Dental
- ❑ Chiller Tanks
- ❑ Cooking Kettles
- ❑ Condensate Tanks
- ❑ Demineralized System
- ❑ Digesters, Hospital
- ❑ Dishwater
- ❑ Drinking Fountain
- ❑ Degreasing Equipment
- ❑ Dye Vats and Tanks
- ❑ Developing Tanks
- ❑ Dairy Barn Equipment
- ❑ Etching Tanks
- ❑ Stills
- ❑ Starch Tanks
- ❑ Sitz Bath
- ❑ Sprinkler System, Fire Protection
- ❑ Shampoo Basin Hose Rinse, Beauty Shop
- ❑ Sinks, Wash-up
- ❑ Serrated Faucets
- ❑ Sizing Vats and Boxes
- ❑ Solution Tanks
- ❑ Urinal, Siphon Jet Blow-out
- ❑ Urinal, Trough
- ❑ Fountain, Ornamental
- ❑ Detergent Dispenser
- ❑ Floor Drains Flushing
- ❑ Garbage Can Washer
- ❑ Garbage Disposals
- ❑ Hydro-Therapy Baths
- ❑ Humidifier Tank & Boxes
- ❑ Hose Faucets
- ❑ Hot Water Heater & Tanks
- ❑ Ice Maker
- ❑ Janitor Closets
- ❑ Lab Equipment
- ❑ Laundry Machine
- ❑ Lavatory
- ❑ Lawn Sprinkler
- ❑ Boat, Marina
- ❑ Make-up Tank
- ❑ Pump, Prime Lines
- ❑ Pump, Water Oper Eject
- ❑ Photo Lab Sinks
- ❑ Photostat Equipment
- ❑ Pump Pneumatic Eject
- ❑ Pipette Washer
- ❑ Potato Peeler
- ❑ Processing Tanks
- ❑ Re-circulated Water
- ❑ Sewer, Sanitary
- ❑ Sewer, Storm
- ❑ Swimming Pool
- ❑ Sewer, Flushing Manhole
- ❑ Steam Cleaner
- ❑ Steam Table
- ❑ Ultrasonic Baths
- ❑ Vats
- ❑ Telephone, Showers
- ❑ Water Closets, Tank
- ❑ Water Closets, Flush
- ❑ Water Oper Equipment
- ❑ Water Treatment Tanks
- ❑ Water Well Secondary System
- ❑ Wash Tanks

Remarks: _____

BACKFLOW DEVICE TEST REPORT

Service Address _____

Name of Premises _____ **Location of device** _____

Device _____ (Manufacturer) _____ (Model) _____ (Size) _____ (Serial Number)

Test kit _____ (Manufacturer) _____ (Serial Number) _____ (Date Certified)

RP ☐
DC ☐
PVB ☐
SPVB ☐
DCDA ☐
RPDA ☐

Reduced Pressure Principle Assembly

Double Check Valve Assembly

Check Valve #1	Check Valve #2	Relief Valve	PVB/SPVB
Held at ____ PSID	**Backpressure test** Closed tight ☐ Leaked ☐	Opened at ____ PSID	Air Inlet opened at ____ PSID Did not open ☐
Leaked ☐	**In direction of flow** Closed tight ☐ _____ PSID Leaked ☐	Did not open ☐	Check valve held at ____ PSID Leaked ☐

Line Pressure _____ PSI	**No. 2 Shutoff Valve:** Closed tight ☐ Leaked ☐	**Backflow Device:** Passed ☐ Failed ☐

Date _____ Time _____ Certified Tester # _____

Tested by (Signature) _____ Print Name _____

Your signature certifies that all information provided on this section is correct.

Comments: _____

BACKFLOW DEVICE REPAIR REPORT

REPAIRS	
	Cleaned ☐ **Replaced:** (List all parts replaced) **List any additional repair items not previously addressed:**

Date_____ Time_____ Certified Tester #_____

Repair by (Signature)_____ Print Name_____

Your signature certifies that all information provided on this section is correct.

AFTER REPAIR TEST REPORT

Reduced Pressure Principle Assembly

Double Check Valve Assembly

Check Valve #1	Check Valve #2	Relief Valve	PVB/SPVB
Held at _____ PSID	**Backpressure test** Closed tight ☐ Leaked ☐	Opened at ____ PSID	**Air inlet** opened at ____ PSID Did not open ☐
Leaked ☐	**In direction of flow** Closed tight ☐ _____ PSID Leaked ☐	Did not open ☐	**Check valve** held at ___ PSID Leaked ☐

Line Pressure _____ PSI	**No. 2 Shutoff Valve:** Closed tight ☐ Leaked ☐	**Backflow Device:** Passed ☐ Failed ☐

Date_____ Time_____ Certified Tester #_____

Test by (Signature)_____ Print Name_____

Your signature certifies that all information provided on this section is correct.

Comments: _____

_____

_____

_____

RESOLUTION 2024-44

A RESOLUTION OF THE CITY OF MOUNT PLEASANT, TENNESSEE TO AUTHORIZE THE CITY TO ENTER INTO A PROFESSIONAL SERVICES AGREEMENT WITH BARGE DESIGN SOLUTIONS, INC. FOR A **WASTEWATER TREATMENT PLANT MAINTENANCE CHECKLIST**

WHEREAS, The City's Wastewater Treatment Plant ("WWTP") Improvements project which will include modified and new treatment process areas is set to be completed in March 2025;

WHEREAS, Barge Design Solutions, Inc. is the engineer for the WWTP Improvements project;

WHEREAS, the City has requested that Barge create a Wastewater Treatment Plant Maintenance Checklist to assist the WWTP staff to upkeep with the modified and new plant maintenance activities; and.

WHEREAS, the proposed Wastewater Treatment Plant Maintenance Checklist will help the City process equipment maintenance; and,

WHEREAS, Barge Design Solutions, Inc. will provide engineering services for the Wastewater Treatment Plant Maintenance Checklist and has provided a **Professional Services Agreement** attached hereto as **Exhibit A**; and,

WHEREAS, the Commission has determined that Barge Design Solutions, Inc. has the appropriate experience, background and qualifications to provide such engineering services.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF MOUNT PLEASANT, TENNESSEE, AS FOLLOWS:

Section 1. That the Commission of City of Mount Pleasant hereby selects Barge Design Solutions, Inc. will provide engineering services to create the Wastewater Treatment Plant Maintenance Checklist pursuant to the **Professional Services Agreement** attached hereto as **Exhibit A**.

Section 2. That the **Professional Services Agreement** between the City of Mount Pleasant, Tennessee and Barge Design Solutions, Inc. attached hereto and incorporated as **Exhibit A** is approved and the City of Mount Pleasant, Tennessee is hereby authorized to execute same.

Section 3**.** If any one or more of the provisions of this Resolution, or any exhibit or attachment thereof, shall be held invalid, illegal, or unenforceable in any respect, by final decree of any court of lawful jurisdiction, such invalidity, illegality, or unenforceability shall not affect any other provision hereof, or of any exhibit or attachment thereto, but this Resolution, and the exhibits and attachments thereof, shall be construed the same as if such invalid, illegal, or unenforceable provision had never been contained herein, or therein, as the case may be.

Section 4. This Resolution shall take effect immediately.

Approved and adopted this _____ day of _____, 2024.

_____

WILLIAM F. WHITE, JR., MAYOR

ATTEST:

_____

SHIPHRAH COX, RECORDER

LEGAL FORM APPROVED:

_____

KORI BLEDSOE JONES, ATTORNEY

BARGE DESIGN SOLUTIONS, INC.

PROFESSIONAL SERVICES AGREEMENT

This agreement is made as of the date last signed below by and between the City of Mt. Pleasant (**Client**) and Barge Design Solutions, Inc. (**BARGE**) for professional services for the assignment described as follows:

Project: WWTP Maintenance Checklist
Location: Mt. Pleasant, Tennessee

Description of Project:
The WWTP Improvements project is set to be completed in March 2025 that will include modified and new treatment process areas. In order to assist the WWTP staff to upkeep with the modified and new plant maintenance activities, Barge will provide the WWTP staff checklists to help with process equipment maintenance.

I. PROFESSIONAL SERVICES: BARGE agrees to perform the following Basic Services under this contract:

As shown in Exhibit A

II. COMPENSATION: Client shall compensate BARGE for the Basic Services as follows:

As shown in Exhibit A

III. PAYMENTS: Invoices for services rendered will be issued monthly, and payment is due upon receipt of each invoice. Unless special arrangements are made, a finance charge of 1.5% per month will be added to unpaid balances more than thirty (30) days old. In the event legal action is necessary to enforce the payment terms of this agreement, **BARGE** shall be entitled to a judgment for its attorneys' fees, court costs, and other collection expenses.

IV. TIME: Unless agreed otherwise in writing, **BARGE** will commence its services within a reasonable time after receipt of an executed copy of this Agreement. **BARGE** will perform its services in a timely manner commensurate with the exercise of due professional care. Time for performance shall be extended as necessary for delays or suspensions due to circumstances beyond **BARGE**'s control. If such delay or suspension extends more than six months (cumulatively), **BARGE**'s compensation shall be equitably adjusted.

V. SUSPENSION OF SERVICES: If **Client** fails to pay any invoice when due or otherwise is in material breach of this Agreement, **BARGE** may at its sole discretion suspend performance of services upon five (5) days' written notice to **Client**. **BARGE** shall have no liability to **Client**, and **Client** agrees to make no claim for any delay or damage as a result of such suspension. Upon cure of the cause of the suspension, **BARGE** shall resume services within a reasonable time, and there shall be an equitable adjustment of the project schedule and fees to reflect the effects of such suspension.

VI. STANDARD OF CARE: Notwithstanding any other provision of this Agreement or any other document describing the services, **BARGE** shall perform its services in accordance with the standard of professional care ordinarily exercised under similar circumstances by reputable members of its profession in the same locality at the time the services are provided. No warranty,

expressed or implied, is made or intended by **BARGE**. The parties further agree that **BARGE** is not a fiduciary of **Client**.

VII. TERMINATION: The obligation to provide further services under this Agreement may be terminated without cause by either party upon ten (10) days' written notice to the other party. On termination by either the **Client** or **BARGE**, **Client** shall pay **BARGE** all amounts due for any services performed to the date of termination (plus all reimbursable expenses incurred). Upon such termination by **Client**, it shall immediately return to **BARGE** all drawings, reports, documents, and other instruments of professional services prepared by **BARGE**, and **Client** shall make no further use thereof.

VIII. OWNERSHIP AND REUSE OF DOCUMENTS: All documents, including without limitation, drawings, specifications, and reports prepared by **BARGE** pursuant to this Agreement are instruments of professional service. **BARGE** shall own all legal and equitable rights therein, including copyrights. Such instruments are not intended or represented to be suitable for reuse by **Client** or others for additions or modifications of the Project or on any other project. Any reuse without written consent of **BARGE** shall be at **Client's** sole risk and without liability to **BARGE**; and to the fullest extent permitted by law, **Client** shall indemnify, defend, and hold harmless **BARGE** from and against any and all claims, damages, losses, and expenses, including reasonable attorneys' fees and costs of defense arising out of or resulting therefrom. **BARGE** shall be entitled to further compensation for services it is requested to perform in connection with any reuse of its instruments of professional service.

IX. ACCESS TO THE SITE/JOBSITE SAFETY: Unless otherwise stated, **BARGE** will have access to the site for activities necessary for the performance of its services. **Client** agrees that **BARGE** shall have no responsibility for the means, methods, sequences, procedures, techniques, and scheduling of construction, as these decisions are solely the responsibility of the contractors. **BARGE** further shall have no authority or duty to supervise the construction workforce and shall not be responsible for jobsite safety or for any losses or injuries that occur at the Project site.

X. **INSURANCE: BARGE** shall endeavor to secure and maintain insurance in such amounts as it deems necessary to protect **BARGE** from claims of professional negligence arising from the performance of services under this Agreement.

XI. **RISK ALLOCATION:** In recognition of the relative risks, rewards, and benefits of the Project to both **Client** and **BARGE**, to the fullest extent permitted by law, the parties agree to allocate the risks such that **BARGE's** total liability to **Client** for any and all injuries, claims, losses, expenses, damages, and/or claim expenses arising out of **BARGE's** services under this Agreement from any cause or causes shall not exceed the amount of **BARGE's** fee or **One Hundred Thousand Dollars ($100,000)**, whichever is greater. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

XII. **DISPUTE RESOLUTION:** It is agreed that all claims, disputes, or other matters in question arising out of or related to this Agreement shall be submitted to nonbinding mediation before any legal proceeding is commenced. The parties shall equally bear the fees and expenses charged by the mediator.

XIII. **OPINIONS OF CONSTRUCTION COST:** Any opinion of probable construction cost prepared by **BARGE** represents the judgment of one or more **BARGE** design professionals and is supplied for general guidance of **Client**. Since **BARGE** has no control over the construction marketplace and does not use the same pricing methods used by contractors, **BARGE** does not guarantee the accuracy of such opinions.

XIV. **GOVERNING LAW:** Unless otherwise specified within this Agreement, this Agreement shall be governed by the laws of the State of Tennessee.

City of Mt. Pleasant	Barge Design Solutions, Inc.
By:	By:
Printed Name: Bill White	Printed Name:
Title: Mayor	Title:
Address: 100 Public Square Mount Pleasant, TN 38474	Address: 615 Third Avenue S, Suite 700 Nashville, TN 37210
Date Signed:	Date Signed:

Barge Design Solutions, Inc. (Barge) will provide the following scope of services for City of Mt. Pleasant (Client) for the WWTP Maintenance Checklists, in accordance with the Master Professional Services Agreement (Agreement) dated _____. The scope of work is presented in the following elements:

I. Project Description
II. Scope of Services
III. Project Schedule
IV. Compensation
V. Additional Services

I. Project Description

The WWTP Improvements project is set to be completed in March 2025 that will include modified and new treatment process areas. In order to assist the WWTP staff to upkeep with the modified and new plant maintenance activities, Barge will provide the WWTP staff checklists to help with process equipment maintenance.

II. Scope of Services

The scope of services is summarized into the following major tasks:

Task 1 – Project Management
Task 2 – Overall WWTP Operation Description and Depiction
Task 3 – Maintenance Checklists

The following sections provide a description of the purpose, activities, and deliverables anticipated for each of the tasks.

Task 1 – Project Management and Meetings

Barge will plan, manage, and execute the work in accordance with the schedule and budget established herein. The project management task will generally include the following activities:

- Facilitate project kickoff meeting with Client to identify key project stakeholders for distribution of project information, discuss pertinent data, project staffing, and organization, and present project work plan, initial schedule, and project deliverables.
- Perform general project management duties including supervising and coordinating the project team and monitoring of project progress, costs, schedule, and work to complete.

- Prepare and submit monthly invoices and project status reports. Communicate potential scope changes, schedule impacts, and cost risks to allow for timely guidance from client staff to manage change.
- A workshop to discuss the draft electronic version of the overall document that includes Task 2 and 3 with the Client to incorporate comments and finalize the document for the WWTP staff eventual use.

Deliverables:

The following deliverables will be provided as part of this task:

- Project Kickoff Meeting Agenda and Summary
- Monthly Progress Reports and Invoices
- Workshop Meeting Agenda and Summary

Assumptions:

The following assumptions are applicable to the above scope of services:

- Progress meetings are not included due to the nature of the project.

Task 2 - Overall WWTP Operation Description and Depiction

This task will include the development of a narrative summary description of new overall WWTP normal operations including unit process design flow rates, loadings, and sequencing as applicable. Figures will be produced as needed to help illustrate the existing, modified, and new process areas. It will also include a list of the equipment (description, tagging, serial and model numbers) for the new equipment to be maintained as part of the WWTP Improvements project. This operation description document will reference and/or attach detailed operations descriptions provided by equipment vendors. This document will be combined with the maintenance checklist in Task 3 and serve as introduction to overall WWTP checklist document.

Deliverables:

The following deliverables will be provided as part of this task:

- Summary and introductory document that will include be combined with the checklists and include the following:
    - Description of WWTP operations with accompanying graphics as needed delivered electronically.

- List of new equipment including description/naming convention of process area, tagging, serial, and model numbers delivered electronically.

Assumptions:

The following assumptions are applicable to the above scope of services:

- Existing equipment will not be included in list of equipment, but the process areas will be described for the overall plant operation purposes.

Task 3 – Maintenance Checklists

This task will include the development of the maintenance checklists that will be compiled from manufacturer recommended maintenance intervals as well as best practices for operating each of the modified and new major systems installed as part of the WWTP Improvements project. Barge will provide maintenance checklists broken down by time interval (weekly, monthly, semi-annually, and annually). The process areas are denoted below which checklists for maintenance of the equipment in that area will encompass:

- Influent Pump Station
- Headworks
- Treatment Basins 1 and 2
- Internal Recycle Pump Station
- Membrane Bioreactors (MBR)
- Digester
- Lagoon modifications to WWTP Equalization Basins
- Backup Power System (Generator and ATS)

Deliverables:

The following deliverables will be provided as part of this task:

- Electronic Checklists separated out by time interval and process area.

Assumptions:

The following assumptions are applicable to the above scope of services:

- The checklists will be limited to regular equipment maintenance.
- The checklists will not include lab operations or permit requirements.
- The checklists will be targeted to be a length of 1 to 3 pages each.

III. Project Schedule

After receiving the Notice to Proceed (NTP), the overall document development and finalization is estimated to take up to 3 months.

IV. Compensation

Client agrees to pay Barge a Lump Sum Fee of $57,000 to complete the scope of work as defined in the tasks above. Barge will submit monthly invoices based on percent of work completed to date. The project status will be summarized monthly in our progress report and invoice submittal.

V. Additional Services

Additional engineering support services, including but not limited to the items listed below, can be provided upon request and approval of detailed scope and fee by the Client.

- Updating the checklist document to include the new ultraviolet (UV) disinfection system and sludge dewatering improvements.
- Revisit document annually as needed with WWTP staff input.

City of Mount Pleasant
2024 CDBG Water Meter Replacement
H&D Project # 1053-26
Bid Date: Wednesday, 11:00 AM CST, December 4, 2024

BASE BID

Contracting Services
2267 Baptist Church Rd
Culleoka, TN 38451
TN Lic #45857

tem	Description	QTY	UNIT	Unit Price	Total
1	Meter #1 Replacement: New 2" AMR Meter, Stacked Meter Box and Lid, Gravel Base	1	LS	$ 13,000.00	$ 13,000.00
2	Meter #2 Replacement: New 2" AMR Meter, Gravel Base, Pavement Repair	1	LS	$ 4,500.00	$ 4,500.00
3	Meter #3 Replacement: New 1-1/2" AMR Meter, Meter Box and Meter Box Lid, Gravel Base, Pavement Repair	1	LS	$ 12,500.00	$ 12,500.00
4	Meter #4 Replacement: New 4" AMR Meter, Stacked Meter Box and Lid, Gravel Base	1	LS	$ 23,000.00	$ 23,000.00
5	Meter #5 Replacement: New 4" AMR Meter, Gravel Base	1	LS	$ 12,000.00	$ 12,000.00
6	Meter #6 Replacement: New 4" AMR Meter, Meter Box Lid, Gravel Base	1	LS	$ 13,500.00	$ 13,500.00
7	Meter #7 Replacement: New 2" AMR Meter, Stacked Meter Box and Lid, Gravel Base	1	LS	$ 14,000.00	$ 14,000.00
8	Meter #8 Replacement: New 2" AMR Meter, Gravel Base	1	LS	$ 4,500.00	$ 4,500.00
9	Meter #9 Replacement: New 2" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 14,000.00	$ 14,000.00
10	Meter #10 Replacement: New 3/4" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 3,000.00	$ 3,000.00
11	Meter #11 Replacement: New 4" AMR Meter	1	LS	$ 11,500.00	$ 11,500.00
12	Meter #12 Replacement: New 1" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 3,000.00	$ 3,000.00
13	Meter #13 Replacement: New 3/4" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 2,500.00	$ 2,500.00
14	Meter #14 Replacement: New 3" AMR Meter	1	LS	$ 9,500.00	$ 9,500.00
15	Meter #15 Replacement: New 4" AMR Meter	1	LS	$ 11,500.00	$ 11,500.00
16	Meter #16 Replacement: New 2" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 14,200.00	$ 14,200.00
17	Meter #17 Replacement: New 3/4" AMR Meter, Meter Box and Meter Box Lid, Gravel Base, Pavement Repair	1	LS	$ 3,000.00	$ 3,000.00
18	Meter #18 Replacement: New 2" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 14,000.00	$ 14,000.00
19	Meter #19 Replacement: New 2" AMR Meter, Meter Box Lid, Gravel Base	1	LS	$ 7,000.00	$ 7,000.00
20	Meter #20 Replacement: New 2" AMR Meter, Meter Box Lid, Gravel Base	1	LS	$ 7,000.00	$ 7,000.00
21	Meter #21 Replacement: New 1" AMR Meter, Meter Box Lid	1	LS	$ 2,000.00	$ 2,000.00
22	Meter #22 Replacement: New 2" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 14,000.00	$ 14,000.00
23	Meter #23 Replacement: New 2" AMR Meter, Meter Box Lid, Gravel Base	1	LS	$ 7,000.00	$ 7,000.00
24	Meter #24 Replacement: New 2" AMR Meter, Meter Box Lid, Gravel Base	1	LS	$ 7,000.00	$ 7,000.00
25	Meter #25 Replacement: New 1" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 2,000.00	$ 2,000.00
26	Meter #26 Replacement: New 3" AMR Meter	1	LS	$ 18,500.00	$ 18,500.00
27	Meter #27 Replacement: New 4" AMR Meter, Heavy Duty Traffic Lid	1	LS	$ 15,000.00	$ 15,000.00
28	Meter #28 Replacement: New 2" AMR Meter, Heavy Duty Traffic Lid	1	LS	$ 7,400.00	$ 7,400.00
29	Meter #29 Replacement: New 2" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 13,000.00	$ 13,000.00
30	Meter #30 Replacement: New 4" AMR Meter	1	LS	$ 11,300.00	$ 11,300.00
31	Meter #31 Replacement: New 6" AMR Meter, Meter Box Lid	1	LS	$ 25,000.00	$ 25,000.00
32	Meter #32 Replacement: New 2" AMR Meter, Meter Box and Meter Box Lid	1	LS	$ 14,000.00	$ 14,000.00
33	Meter #33 Replacement: New 1" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 2,200.00	$ 2,200.00
34	Meter #34 Replacement: New 2" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 14,000.00	$ 14,000.00
35	Meter #35 Replacement: New 2" AMR Meter, Meter Box Lid	1	LS	$ 6,500.00	$ 6,500.00
36	Meter #36 Replacement: New 3" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 19,000.00	$ 19,000.00
37	Meter #37 Replacement: New 2" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 14,000.00	$ 14,000.00
38	Meter #38 Replacement: New 1" AMR Meter, Meter Box and Meter Box Lid, Gravel Base, Pavement Repair	1	LS	$ 2,000.00	$ 2,000.00
39	Meter #39 Replacement: New 2" AMR Meter, Meter Box and Meter Box Lid, Gravel Base	1	LS	$ 14,000.00	$ 14,000.00
40	Meter #40 Replacement: New 2" AMR Meter, Meter Box Lid, Gravel Base	1	LS	$ 6,500.00	$ 6,500.00
41	Meter #41 Replacement: New 2" AMR Meter, Gravel Base	1	LS	$ 5,000.00	$ 5,000.00
42	Open Cut install 3/4" PEXa Service Line Outside Roadway	50	LF	$ 16.00	$ 800.00
43	Open Cut install 1" PEXa Service Line Outside Roadway	100	LF	$ 16.50	$ 1,650.00
44	3" SCH40 PVC casing pipe w/ 1" PEXa service line (under roadway)	20	LF	$ 180.00	$ 3,600.00
45	Open Cut install 1-1/2" PEXa Service Line Outside Roadway	20	LF	$ 21.00	$ 420.00
46	Open Cut install 2" PEXa Service Line Outside Roadway	1000	LF	$ 30.00	$ 30,000.00
47	4" SCH40 PVC casing pipe w/ 2" PEXa service line (under roadway)	400	LF	$ 80.00	$ 32,000.00
48	Open Cut install 3" PEXa Service Line Outside Roadway	150	LF	$ 24.00	$ 3,600.00
49	Open Cut install 4" SDR21 PVC Service Line Outside Roadway	210	LF	$ 25.00	$ 5,250.00
50	Open Cut install 6" SDR21 PVC Service Line Outside Roadway	50	LF	$ 35.00	$ 1,750.00
51	12" steel casing pipe w/ 6" SDR21 PVC service line (under roadway)	50	LF	$ 600.00	$ 30,000.00
52	Connection of New 3/4" Service to Existing Water Line	3	EA	$ 500.00	$ 1,500.00
53	Connection of New 1" Service to Existing Water Line	5	EA	$ 500.00	$ 2,500.00
54	Connection of New 1-1/2" Service to Existing Water Line	1	EA	$ 800.00	$ 800.00
55	Connection of New 2" Service to Existing Water Line	21	EA	$ 1,200.00	$ 25,200.00
56	Connection of New 3" Service to Existing Water Line	3	EA	$ 2,000.00	$ 6,000.00
57	Connection of New 4" Service to Existing Water Line	7	EA	$ 2,500.00	$ 17,500.00
58	Connection of New 6" Service to Existing Water Line	1	EA	$ 3,000.00	$ 3,000.00
59	Meter Storage and Exchange	1	LS	$ 1,000.00	$ 1,000.00
60	Site Restoration	1	LS	$ 12,000.00	$ 12,000.00
61	Mobilization/Bonds/Insurance (5% Max)	1	LS	$ 13,000.00	$ 13,000.00
			Total Base Bid		**$ 608,170.00**

I do hereby certify this to be a true and correct representation of the bids.

Alton Hethcoat, P.E.

L. ALTON HETHCOAT
REGISTERED ENGINEER
NO. 17685
STATE OF TENNESSEE

12-4-2024

HETHCOAT DAVIS

December 5, 2024 File 1053-26

Phillip Grooms, City Manager
City of Mount Pleasant
100 Public Square
Mount Pleasant, TN 38474

Re: Recommendation of Award – 2024 CDBG Water Meter Replacement

Dear Mr. Grooms:

On Wednesday, December 4, 2024 at 11:00AM, separate sealed bids were received for the subject project. The single Contractor submitting a bid for the proposed improvements appears to have complied with the Tennessee Board for Licensing Requirements for submission of a competitively bid project. One (1) competitive bid was received and is summarized as follows. A detailed tabulation of Bids is attached.

1. Contracting Services
   2267 Baptist Church Rd.
   Culleoka, TN 38451
   TN License No.: 45857

   Total Base Bid: $608,170.00

We have reviewed the bid received for the subject project and found it to be representative of the scope of work identified. The apparent low bidder is Contracting Services. There were no math errors on the bid form.

Individuals within H&D have worked with Contracting Services and we feel they are capable of completing the work as intended. Therefore, Hethcoat & Davis, Inc. recommends award of the project to Contracting Services for the total amount of $608,170.00, as they have previously demonstrated on similar jobs that they are capable of performing the work and the bid price is deemed fair and reasonable. Please contact me if you have any questions.

Sincerely,

Alton Hethcoat, P.E.
Enclosures: Bid Tabulation