Charter Township of East China
OFFICES AT 5111 RIVER ROAD ♦ EAST CHINA, MI 48054 ♦ 810-765-8879 ♦ FAX 810-765-1408

September 9, 2020

Michigan Department of Treasury

Municipal Stability Board

Re: Corrective Action Plan: MERS Defined Benefit Retirement System

Dear Members of the Municipal Stability Board:

Enclosed please find the Corrective Action Plan with supporting documentation for the St. Clair River Water & Sewer Authority. If you have any follow up questions or concerns, please do not hesitate to contact me.

Sincerely,

Cynthia Paparelli

Township Manager

manager@eastchinatownship.org

Enclosures

Charter Township of East China
OFFICES AT 5111 RIVER ROAD ♦ EAST CHINA, MI 48054 ♦ 810-765-8879 ♦ FAX 810-765-1408

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STATE OF MICHIGAN
DEPARTMENT OF TREASURY
LANSING

GRETCHEN WHITMER
GOVERNOR

RACHAEL EUBANKS
STATE TREASURER

October 22, 2019

Waiver Application Results:
Determination of Underfunded Status and
Need for a Corrective Action Plan
Fiscal Year: 2018
Municipality Code: 747520

Sent Via Email
St. Clair River Sewer & Water Authority
supervisor@eastchinatownship.org

Dear Administrative Officer or Designee:

Thank you for submitting your retirement waiver application(s) pursuant to Public Act 202 of 2017 (the Act). **Based upon review, the following waiver application(s) has been disapproved for the following reason(s)**:

Plan name and reason for disapproval:

MERS
- The fiscal year listed in Section 5 of the waiver application is significantly into the future or is to be determined, indicating prospective information will need to be monitored through a corrective action plan.
- Your municipality's unfunded liability represents a significant portion of annual revenues and/or the outstanding unfunded liability remains significant.

As a result, your local government is determined to be in underfunded status as defined by Section 3 of the Act.

How to Apply for a Corrective Action Plan

In accordance with the Act, you must create a corrective action plan **for each underfunded system**. The attached corrective action plan form has detailed instructions on how to complete the corrective action plan. The completed corrective action plan is due back to the Department of Treasury (Treasury) **within 180 days of this notification** via email to LocalRetirementReporting@Michigan.gov.

- ❖ If applicable, prior actions listed within your waiver application(s) may also be included in your corrective action plan.

The Board has approved their Best Practices and Corrective Action Plan Criteria, which includes detailed corrective action plan approval criteria regarding funding ratios, underfunded status, affordability, and legality. Please review the Board's criteria and complete a corrective action plan(s).

If you have multiple underfunded retirement systems, you are required to complete a separate corrective action plan application for each system and send a separate email for each system. Please attach each application as a separate PDF document in addition to all applicable supporting documentation. The subject line of the email should be in the following format: **Corrective Action Plan-20XX, Local Government Name** (e.g. Corrective Action Plan-2018, City of Lansing). Treasury will send an automatic reply acknowledging receipt of the email. Treasury will also provide the corrective action plan to the Municipal Stability Board (the Board) for their review.

Next Steps:

- Once your corrective action plan(s) is submitted, the Board will officially receive your plan at their next scheduled meeting;
- The Board shall then approve or disapprove a corrective action plan(s) within 45 days after it is received.

Thank you for your commitment to fiscal stability and compliance with the requirements of the Act. If you have any questions, please visit Michigan.gov/LocalRetirementReporting for step-by-step reporting instructions and helpful FAQs, or email our office at LocalRetirementReporting@michigan.gov. If you would prefer to speak with a member of our team, please schedule a phone call appointment using the Local Retirement Calendar. A team member will contact you via the phone number you provide at your scheduled time.

Sincerely,

Michigan Department of Treasury
Local Retirement Reporting Team

Michigan Department of Treasury
5598 (Rev. 10-19)

Reset Form

Protecting Local Government Retirement and Benefits Act Corrective Action Plan: Defined Benefit Pension Retirement Systems

Issued under authority of Public Act 202 of 2017 (The Act).

1. LOCAL GOVERNMENT INFORMATION

Local Government Name: St. Clair River Water & Sewer Authority (SCRWSA) Six-Digit Muni Code: 747520

Defined Benefit Pension System Name: MERS Defined Benefit Pension System

Contact Name (Administrative Officer): Cynthia Paparelli

Title if not Administrative Officer: Township Manager Telephone: (810) 765-8879

Email (Communication will be sent here): manager@eastchinatownship.org

Fiscal Year System was Determined to be Underfunded: 2018

2. GENERAL INFORMATION

Corrective Action Plan: An underfunded local government shall develop and submit for approval a corrective action plan for the local government. The local government shall determine the components of the corrective action plan. This corrective action plan shall be submitted by any local government with at least one defined benefit pension retirement system that has been determined to have an underfunded status. Underfunded status for a defined benefit pension system is defined as being less than 60% funded according to the most recent audited financial statements, and, if the local government is a city, village, township, or county, the actuarially determined contribution (ADC) for all of the defined benefit pension retirement systems of the local government is greater than 10% of the local government's annual governmental fund revenues, based on the most recent fiscal year.

Due Date: The local government has **180 days from the date of notification** to submit a corrective action plan to the Municipal Stability Board (the Board). The Board may extend the 180-day deadline by up to an additional 45 days if the local government submits a reasonable draft of a corrective action plan and requests an extension.

Filing: Per Sec. 10(1) of PA 202 of 2017 (the Act), this corrective action plan must be approved by the local government's administrative officer and its governing body. ***You must provide proof of your governing body approving this corrective action plan and attach the documentation as a separate PDF document.*** Failure to provide documentation that demonstrates approval from your governing body will automatically result in a disapproval of the corrective action plan.

The submitted plan must demonstrate through distinct supporting documentation how and when the local government will reach the 60% funded ratio. Or, if the local government is a city, village, township, or county, the submitted plan may demonstrate how and when the ADC for all defined benefit pension systems will be less than 10% of annual governmental fund revenues, as defined by the Act. Supporting documentation for the funding ratio and/or ADC must include an actuarial projection, an actuarial valuation, or an internally developed analysis. The local government must project governmental fund revenues using a reasonable forecast based on historical trends and projected rates of inflation.

The completed plan must be submitted via email to Treasury at LocalRetirementReporting@michigan.gov for review by the Board. **If you have multiple underfunded retirement systems, you are required to**

complete separate plans and send a separate email for each underfunded system. Please attach each plan as a separate PDF document in addition to all applicable supporting documentation.

The subject line of the email(s) should be in the following format: **Corrective Action Plan-20XX, Local Government Name, Retirement System Name** (e.g. Corrective Action Plan-2017, City of Lansing, Employees' Retirement System Pension Plan). Treasury will send an automatic reply acknowledging receipt of the email. Your individual email settings must allow for receipt of Treasury's automatic reply. This will be the only notification confirming receipt of the application(s).

Municipal Stability Board: The Board shall review and vote on the approval of a corrective action plan submitted by a local government. If a corrective action plan is approved, the Board will monitor the corrective action plan and report on the local government's compliance with the Act not less than every two years.

Review Process: Following receipt of the email by Treasury, the Board will receive the corrective action plan submission at the Board's next scheduled meeting. The Board shall then approve or reject the corrective action plan within 45 days from the date of the meeting.

Considerations for Approval: A successful corrective action plan will demonstrate the actions for correcting underfunded status as set forth in Sec. 10(7) of the Act (listed below), as well as any additional solutions to address the underfunded status. Please also include steps already taken to address your underfunded status as well as the date prospective actions will be taken. A local government may also include in its corrective action plan a review of the local government's budget and finances to determine any alternative methods available to address its underfunded status. A corrective action plan under this section may include the development and implementation of corrective options for the local government to address its underfunded status. The corrective options as described in Sec. 10(7) may include, but are not limited to, any of the following:

(i) Closing the current defined benefit plan;

(ii) Implementing a multiplier limit;

(iii) Reducing or eliminating new accrued benefits;

(iv) Implementing final average compensation standards.

Implementation: The local government has up to 180 days after the approval of a corrective action plan to begin to implement the corrective action plan to address its underfunded status. The Board shall monitor each underfunded local government's compliance with this Act and any corrective action plan. The Board shall adopt a schedule, not less than every 2 years, to certify that the underfunded local government is in substantial compliance with the Act. If the Board determines that an underfunded local government is not in substantial compliance under this subsection, the Board shall within 15 days provide notification and report to the local government detailing the reasons for the determination of noncompliance with the corrective action plan. The local government has 60 days from the date of the notification to address the determination of noncompliance.

3. DESCRIPTIONS OF PRIOR ACTIONS

Prior actions are separated into three categories below: System Design Changes, Additional Funding, and Other Considerations. Please provide a brief description of the prior actions implemented by the local government to address the retirement system's underfunded status within the appropriate category section. Within each category are sample statements that you may choose to use to indicate the changes to your system that will positively affect your funded status. For retirement systems that have multiple divisions, departments, or plans within the same retirement system, please indicate how these changes impact the retirement system as a whole.

- If applicable, prior actions listed within your waiver application(s) may also be included in your corrective action plan.

Please indicate where in the attached supporting documentation these changes are described and the impact of those changes (i.e. what has the local government done to improve its underfunded status, and which attachment(s) supports your actions).

- Please provide the name of the system impacted, the date you made the change, the relevant page number(s) within the supporting documentation, and the resulting change to the system's funded ratio.

Category of Prior Actions:

☒ **System Design Changes -** System design changes may include the following: lower tier of benefits for new hires, final average compensation limitations, freeze future benefit accruals for active employees in the defined benefit system, defined contribution system for new hires, hybrid system for new hires, bridged multiplier for active employees, etc.

Sample Statement: *The system's multiplier for current employees was lowered from 2.5X to 2X for the* ***General Employees' Retirement System*** *on* ***January 1, 2019****. On page* ***8*** *of the attached actuarial supplemental valuation, it shows our funded ratio will be* ***60%*** *by fiscal year* ***2022.***

See attached at 1b.

☐ **Additional Funding –** Additional funding may include the following: voluntary contributions above the ADC, bonding, millage increases, restricted funds, etc.

Sample Statement: *The local government provided a lump sum payment of* ***$1 million*** *to the* ***General Employees' Retirement System*** *on* ***January 1, 2019****. This lump sum payment was in addition to the ADC of the system. The additional contribution will increase the retirement system's funded ratio to* ***61% by 2027****. Please see page* ***10*** *of the attached enacted budget, which highlights this contribution of* ***$1 million****.*

☐ **Other Considerations** – Other considerations may include the following: outdated Form 5572 information, actuarial assumption changes, amortization policy changes, etc.

Sample Statement: *The information provided on the Form 5572 from the audit used actuarial data from* ***2017****. Attached is an updated actuarial valuation from* ***2019*** *that shows our funded ratio has improved to* ***62%*** *as indicated on page* ***13****.*

4. DESCRIPTION OF PROSPECTIVE ACTIONS

The corrective action plan allows you to submit a plan of prospective actions which are separated into three categories below: System Design Changes, Additional Funding, and Other Considerations. Please provide a brief description of the additional actions the local government is planning to implement to address the retirement system's underfunded status within the appropriate category section. Within each category are sample statements that you may choose to use to indicate the changes to your system that will positively affect your funding status. For retirement systems that have multiple divisions, departments, or plans within the same retirement system, please indicate how these changes impact the retirement system as a whole.

Please indicate where in the attached supporting documentation these changes are described and the impact of those changes (i.e. what will the local government do to improve its underfunded status, and which attachment(s) supports your actions).

Category of Prospective Actions:

☒ **System Design Changes -** System design changes may include the following: Lower tier of benefits for new hires, final average compensation limitations, freeze future benefit accruals for active employees in the defined benefit system, defined contribution system for new hires, hybrid system for new hires, bridged multiplier for active employees, etc.

Sample Statement: *Beginning with **summer 2019** contract negotiations, the local government will seek to lower the system's multiplier for current employees from 2.5X to 2X for the **General Employees' Retirement System**. On page **8** of the attached actuarial supplemental valuation, it shows our funded ratio would be **60%** funded by **fiscal year 2021** if these changes were adopted and implemented by **fiscal year 2020.***

See attached at 1b.

☒ **Additional Funding –** Additional funding may include the following: voluntary contributions above the ADC, bonding, millage increases, restricted funds, etc.

Sample Statement: Beginning in **fiscal year 2020,** t*he local government will provide a lump sum payment of **$1 million** to the **General Employees' Retirement System**. This lump sum payment will be in addition to the ADC of the system. The additional contribution will increase the retirement system's funded ratio to **61% by 2026**. Please see page **10** of the attached enacted budget, which highlights this contribution of **$1 million**. Please see page **12** of the attached supplemental actuarial valuation showing the projected change to the system's funded ratio with this additional contribution.*

See attached at 1b.

☐ **Other Considerations** – Other considerations may include the following: outdated Form 5572 information, actuarial assumption changes, amortization policy changes, etc.

Sample Statement: *Beginning in **fiscal year 2020**, the local government will begin amortizing the unfunded portion of the pension liability using a **level-dollar amortization method over a closed period of 10 years**. This will allow the retirement system to reach a funded status of **62%** by **2023** as shown in the attached actuarial analysis on page **13**.*

5. CONFIRMATION OF FUNDING

Please check the applicable answer:

Do the corrective actions listed in this plan allow for your local government to make, at a minimum, the ADC payment for the defined benefit pension system according to your long-term budget forecast?

☒ **Yes**

☐ **No, Explain:**

6. DOCUMENTATION ATTACHED TO THIS CORRECTIVE ACTION PLAN

Documentation should be attached as a PDF to this corrective action plan. The documentation should detail the corrective action plan that would be implemented to adequately address the local government's underfunded status. Please check all documents that are included as part of this plan and attach in successive order as provided below:

Naming Convention: When attaching documents, please use the naming convention shown below. If there is more than one document in a specific category that needs to be submitted, include a, b, or c for each document. For example, if you are submitting two supplemental valuations, you would name the first document "Attachment 2a" and the second document "Attachment 2b".

Naming Convention:	**Type of Document:**
☒ Attachment – 1	**This corrective action plan form (required);**
☒ Attachment – 1a	**Documentation from the governing body approving this corrective action plan (required);**
☒ Attachment – 2a	**An actuarial projection, an actuarial valuation, or an internally developed analysis (in accordance with GASB and/or actuarial standards of practice), which illustrates how and when the local government will reach the 60% funded ratio. Or, if the local government is a city, village, township, or county, how and when the ADC will be less than 10% of governmental fund revenues, as defined by the Act (required);**
☐ Attachment – 3a	Documentation of additional payments in past years that are not reflected in your audited financial statements (e.g. enacted budget, system provided information);
☒ Attachment – 4a	Documentation of commitment to additional payments in future years (e.g. resolution, ordinance);
☐ Attachment – 5a	A separate corrective action plan that the local government has approved to address its underfunded status, which includes documentation of prior actions, prospective actions, and the positive impact on the system's funded ratio;
☒ Attachment – 6a	Other documentation not categorized above.

7. CORRECTIVE ACTION PLAN CRITERIA

Please confirm that each of the three corrective action plan criteria listed below have been satisfied when submitting this document. Specific detail on corrective action plan criteria can be found in the Corrective Action Plan Development: Best Practices and Strategies document.

Corrective Action Plan Criteria:	Description:
☒ Underfunded Status	Is there a description and adequate supporting documentation of how and when the retirement system will reach the 60% funded ratio? Or, if your local government is a city, village, township, or county, how and when the ADC of all pension systems will be less than 10% of governmental fund revenues? Do the corrective actions address the underfunded status in a reasonable timeframe?
☒ Legality	Does the corrective action plan follow all applicable laws? Are all required administrative certifications and governing body approvals included?
☒ Affordability	Do the corrective action(s) listed allow the local government to make the ADC payment for the pension system now and into the future without additional changes to this corrective action plan?

8. LOCAL GOVERNMENT'S ADMINISTRATIVE OFFICER APPROVAL OF CORRECTIVE ACTION PLAN

I, Cynthia Paparelli, as the government's administrative officer (Ex. City/Township Manager, Executive Director, Chief Executive Officer, etc.) **(insert title)** Township Manager approve this corrective action plan and will implement the prospective actions contained in this corrective action plan.

I confirm to the best of my knowledge that because of the changes listed above, one of the following statements will occur:

☒ The MERS Defined Benefit Pension System ***(insert retirement pension system name)*** will achieve a funded status of at least 60% by fiscal year 2020 as demonstrated by required supporting documentation listed in Section 6.

OR, if the local government is a city, village, township, or county:

☐ The ADC for all the defined benefit pension retirement systems of the local government will be less than 10% of the local government's annual governmental fund revenues by fiscal year ____________ as demonstrated by required supporting documentation listed in Section 6.

Signature: **<insert signature>** Date: 04/07/2020

RESOLUTION 01-2020
P.A. 202 APPROVAL OF UNDERFUNDED MERS CORRECTIVE ACTION PLAN

St. Clair River Sewer & Water Authority
County of St. Clair, Michigan

Minutes of a special meeting of the St. Clair River Sewer & Water Authority, County of St. Clair, Michigan, held in the East China Township Hall on the **8th** day of **September 2020,** at 4:00 p.m.

PRESENT: Knotts, Beaudua, Rust, and Freehan

ABSENT: Grabski

The following Resolution was offer by Knotts and supported by Beaudua

WHEREAS, the State of Michigan passed a law in December 2017 titled the "Protecting Local Government Retirement and Benefits Act", known as P.A. 202 of 2017; and

WHEREAS, P.A. 202 of 2017 is intended to reflect the July 2017 Report of Findings and Recommendations for Action of the Responsible Retirement Reform for Local Government Task Force; and

WHEREAS, the St. Clair River Sewer and Water Authority has been deemed underfunded in respect to the retirement benefit system and is required to submit a Correction Action Plan under section 5 of P.A. 202 of 2017; and

WHEREAS, the local unit of government's administrative officer and governing body must approve a plan demonstrating the underfunded status is being addressed.

NOW, THEREFORE, BE IT RESOLVED, that the St. Clair River Sewer and Water Authority hereby approves of the plan to address the underfunded status in the retirement benefit system and authorizes the submission of said plan to be in compliance with P.A. 202 of 2017 .

AYES: Knotts, Rust, Beaudua, and Freehan
NAYS: None
ABSENT: Grabski

RESOLUTION DECLARED ADOPTED.

CERTIFICATION

I hereby certify that the foregoing constitutes a true and complete copy of a resolution adopted by the Board of Trustees of the St. Clair River Sewer & Water Authority, St. Clair County, Michigan, at a special meeting held on **September 8, 2020** and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act No. 267, Public Acts of Michigan, 1976, and that the minutes of said meeting were kept and will be or have been made available as required by said Act.

Knotts

____

Ralph Knotts, Chairman
St. Clair River Sewer & Water Authority

Addendum to Form 5598

Part 3 – Descriptions of Prior Actions

System Design Changes

Historically, employees of the Township (SCRWSA) had a defined benefit pension plan with a 2.5 multiplier. To decrease future pension costs, the Township decreased this multiplier to 2.25 for all current employees during the 2016-2019 collective bargaining session.

Further, for Clerical employees, the Township has increased the employees' contribution to the pension plan from 4.7% to 5.5%.

Part 4 – Description of Prospective Actions

System Design Changes

According to the most recent Annual Actuarial Valuation Report (December 31, 2018), the Township's funded ratio is 61%. Attached at 2a. MERS has decreased its Investment Return Assumption, so using the 12/31/2018 Valuation Results and the new 2019 Assumptions is anticipated to cause the funded ratio to decrease to 59%. Nevertheless, the Township's MERS Plan is presently more than 60% funded. To increase the funded ratio the Township will be making the following changes:

- The Township has closed the defined benefit pension plan for all new hires of the Township. By closing the defined benefit pension plan, the Township will cease creating any new unfunded accrued liability.
- Moreover, the Township is bridging the Cost-of-Living-Adjustment benefit for all current employees who are eligible for a defined benefit pension plan. According to the supplemental actuarial valuation this will cause Division 1 to increase its percent funded ratio from 61.1% to 61.4%. According to the supplemental actuarial valuation this will cause Division 10 to increase its percent funded ratio from 62.6% to 65.5%. The supplemental actuarial valuation is attached at 2b.
- Further, the Township is increasing the employee contribution for both Divisions 1 and 10 to 6.2% by July 1, 2021.

These system design changes are evidenced in the three ratified tentative agreements listed at 4a, 4b, and 4c. Please direct your attention to item "4. Retirement" in each of these tentative agreements.

Additional Funding

In an effort to improve funding levels the Township will make three lump sum payments. These payments are in addition to the normal actuarially determined contributions (ADC). The first contribution in the amount of $75,000 was made on June 9, 2020.

after it ratifies the three collective bargaining agreements with the labor organization that represents the Township employees. The second contribution will also be in an amount of $75,000. The second payment will be made on or before December 31, 2020. The third contribution will also be in an amount of $75,000. The third payment will be made on or before December 31, 2021. Evidence of the Township's commitment to the additional payments in future years is attached at 4a, 4b, and 4c, which is the ratified tentative agreements with each of the Township's three bargaining units. Please direct your attention to Item 4, Retirement Subsection D, Voluntary Employer Contribution to Pension Plan.

During collective bargaining, the Township requested from MERS an estimated Funding Level calculation for a single lump sum contribution of $150,000. The MERS additional funding estimate is attached at 6a. Under the MERS estimate, if the Township makes a one-time $150,000 lump sum payment, then its funding percentage would increase from 61.2% to about 62.9%.

Of course, as demonstrated in the ratified tentative agreements, the Township will make additional funding in an amount *greater than $150,000*. The Township's total contribution under the tentative agreements is $225,000 over the term of the agreement. At this time, the Township does not know what effect the three $75,000 payments ($225,000 total) will have on the funding levels, but it is anticipated that it will exceed the $150,000 contribution amount. Upon request, the Township can request from MERS an updated Funding Level estimate.

<u>Proportionate Share Net Pension Liability:</u>
See attachment 6b indicating that the SCRSWA carries a proportionate share of the net pension liability for East China Township estimated to be 64.12% at December 31, 2019. East China Township has submitted a Corrective Action Plan.

Municipal Employees' Retirement System of Michigan

Annual Actuarial Valuation Report
December 31, 2018 - East China Chtr Twp (7701)

Spring, 2019

East China Chtr Twp

In care of:
Municipal Employees' Retirement System of Michigan
1134 Municipal Way
Lansing, Michigan 48917

This report presents the results of the Annual Actuarial Valuation, prepared for East China Chtr Twp (7701) as of December 31, 2018. The report includes the determination of liabilities and contribution rates resulting from the participation in the Municipal Employees' Retirement System of Michigan ("MERS"). This report contains the minimum actuarially determined contribution requirement, in alignment with the MERS Plan Document, Actuarial Policy, and the Michigan Constitution and governing statutes. East China Chtr Twp is responsible for the employer contributions needed to provide MERS benefits for its employees and former employees.

The purposes of this valuation are to:

- Measure funding progress as of December 31, 2018,
- Establish contribution requirements for the fiscal year beginning April 1, 2020,
- Provide information regarding the identification and assessment of risk,
- Provide actuarial information in connection with applicable Governmental Accounting Standards Board (GASB) statements, and
- Provide information to assist the local unit of government with state reporting requirements.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The findings in this report are based on data and other information through December 31, 2018. The valuation was based upon information furnished by MERS concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by MERS.

The Municipal Employees' Retirement Act, PA 427 of 1984 and the MERS' Plan Document Article VI sec. 71 (1)(d), provides the MERS Board with the authority to set actuarial assumptions and methods after consultation with the actuary. As the fiduciary of the plan, MERS Retirement Board sets certain assumptions for funding and GASB purposes. These assumptions are checked regularly through a comprehensive study, called an Experience Study. The most recent study was completed in 2015, as prepared by the prior actuary, and is the basis of the assumptions and methods currently in place. **At the February 28, 2019 board meeting, the MERS Retirement Board adopted new economic assumptions effective with the December 31, 2019 annual actuarial valuation, which will impact contributions beginning in 2021.** An illustration of the potential impact is found in this report.

The Michigan Department of Treasury provides required assumptions to be used for purposes of Public Act 202 reporting. These assumptions are for reporting purposes only and do not impact required contributions. Please refer to the State Reporting page found at the end of this report for information for this filing.

For a full list of all the assumptions used, please refer to the division-specific assumptions described in table(s) in this report, and to the Appendix on the MERS website at:
http://www.mersofmich.com/Portals/0/Assets/Resources/AAV-Appendix/MERS-2018AnnualActuarialValuation-Appendix.pdf.

The actuarial assumptions used for this valuation are reasonable for purposes of the measurement.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of East China Chtr Twp as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

David T. Kausch, Rebecca L. Stouffer, and Mark Buis are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor. GRS maintains independent consulting agreements with certain local units of government for services unrelated to the actuarial consulting services provided in this report.

The Retirement Board of the Municipal Employees' Retirement System of Michigan confirms that the System provides for payment of the required employer contribution as described in Section 20m of Act No. 314 of 1965 (MCL 38.1140m).

This information is purely actuarial in nature. It is not intended to serve as a substitute for legal, accounting or investment advice.

This report was prepared at the request of the MERS Retirement Board and may be provided only in its entirety by the municipality to other interested parties (MERS customarily provides the full report on request to associated third parties such as the auditor for the municipality). GRS is not responsible for the consequences of any unauthorized use. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

If you have reason to believe that the plan provisions are incorrectly described, that important plan provisions relevant to this valuation are not described, that conditions have changed since the calculations were made, that the information provided in this report is inaccurate or is in anyway incomplete, or if you need further information in order to make an informed decision on the subject matter in this report, please contact your Regional Manager at 1.800.767.MERS (6377).

Sincerely,

David T Kausch

David T. Kausch, FSA, FCA, EA, MAAA

Rebecca L. Stouffer

Rebecca L. Stouffer, ASA, FCA, MAAA

Mark Buis

Mark Buis, FSA, FCA, EA, MAAA

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Executive Summary

Funded Ratio

The funded ratio of a plan is the percentage of the dollar value of the actuarial accrued liability that is covered by the actuarial value of assets. While funding ratio may be a useful plan measurement, understanding a plan's funding trend may be more important than a particular point in time. Refer to Table 7 to find a history of this information.

	12/31/2018	12/31/2017
Funded Ratio*	61%	62%

* Reflects assets from Surplus divisions, if any.

There has been a change in actuary and actuarial software since the December 31, 2017 valuation. Throughout this report are references to valuation results generated prior to the 2018 valuation date. Results prior to 2018 were received directly from the prior actuary or extracted from the previous valuation system by MERS's technology service provider.

Required Employer Contributions:

Your required employer contributions are shown in the following table. Employee contributions, if any, are in addition to the employer contributions. Changes to the actuarial assumptions and methods based on the 2015 Experience Study are phased-in over a 5-year period. This valuation reflects the fourth year of the phase-in.

Your minimum required contribution is the amount in the “Phase-in” columns. By default, MERS will invoice you the phased-in contribution amount, but strongly encourages you to contribute more than the minimum required contribution. If you requested and have been billed using No Phase-in rates, your 2019 rates will continue to use the No Phase-in method. If you have been billed using the Phased-in rates and wish to change to rates based on No Phase-in, please contact MERS.

	Percentage of Payroll				Monthly $ Based on Projected Payroll			
	Phase-in	No Phase-in	Phase-in	No Phase-in	Phase-in	No Phase-in	Phase-in	No Phase-in
Valuation Date:	12/31/2018	12/31/2018	12/31/2017	12/31/2017	12/31/2018	12/31/2018	12/31/2017	12/31/2017
Fiscal Year Beginning:	April 1, 2020	April 1, 2020	April 1, 2019	April 1, 2019	April 1, 2020	April 1, 2020	April 1, 2019	April 1, 2019
Division								
01 - Gnrl	34.17%	34.99%	31.49%	33.29%	$ 26,535	$ 27,169	$ 25,932	$ 27,414
Municipality Total					**$ 26,535**	**$ 27,169**	**$ 25,932**	**$ 27,414**

Employee contribution rates:

	Employee Contribution Rate	
Valuation Date:	12/31/2018	12/31/2017
Division		
01 - Gnrl	4.70%	4.70%

The employer may contribute more than the minimum required contributions, as these additional contributions will earn investment income and may result in lower future contribution requirements. Employers making contributions in excess of the minimum requirements may elect to apply the excess contribution immediately to a particular division, or segregate the excess into one or more of what MERS calls "Surplus" divisions. An election in the first case would immediately reduce any unfunded accrued liability and lower the amortization payments throughout the remaining amortization period. An election to set up Surplus divisions would not immediately lower future contributions, however the assets from the Surplus division could be transferred to an unfunded division in the future to reduce the unfunded liability in future years, or to be used to pay all or a portion of the minimum required contribution in a future year. For purposes of this report, the assets in any Surplus division have been included in the municipality's total assets, unfunded accrued liability and funded status, however, these assets are not used in calculating the minimum required contribution.

MERS strongly encourages employers to contribute more than the minimum contribution shown above.

Assuming that experience of the plan meets actuarial assumptions:

• To accelerate to a 100% funding ratio in 10 years, estimated monthly employer contributions for the fiscal year beginning in 2020 for the entire employer would be $41,589, instead of $27,169.

How and Why Do These Numbers Change?

In a defined benefit plan contributions vary from one annual actuarial valuation to the next as a result of the following:

- Changes in benefit provisions (see Table 2)
- Changes in actuarial assumptions and methods (see the Appendix)
- Experience of the plan (investment experience and demographic experience); this is the difference between actual experience of the plan and the actuarial assumptions.

Comments on Investment Rate of Return Assumption

A defined benefit plan is funded by employer contributions, participant contributions, and investment earnings. Investment earnings have historically provided **more than half** of the funding. The larger the share of benefits being provided from investment returns, the smaller the required contributions, and vice versa. Determining the contributions required to prefund the promised retirement benefits requires an assumption of what investment earnings are expected to add to the fund over a long period of time. This is called the **Investment Return Assumption**.

The MERS Investment Return Assumption is **7.75%** per year. This, along with all of our other actuarial assumptions, is reviewed at least every five years in an Experience Study that compares the assumptions used against actual experience and recommends adjustments if necessary. If your municipality would like to explore contributions at lower assumed investment return assumptions, please review the "what if" projection scenarios later in this report.

Assumption Change in 2019

At the February 28, 2019 board meeting, the MERS Retirement Board adjusted key economic assumptions. These assumptions, in particular the investment return assumption, have a significant effect on a plan's required contribution and funding level. Historically low interest rates, along with high equity market valuations, have led to reductions in projected returns for most asset classes. This has resulted in a Board adopted reduction in the investment rate of return assumption to 7.35%, effective with the December 31, 2019 valuation first impacting 2021 contributions. The Board also changed the assumed rate of wage inflation from 3.75% to 3.00%, with the same effective date. This report includes a "What If" scenario of 7.35%/3.00% in order to show the potential impact of this assumption change.

Comments on Asset Smoothing

To avoid dramatic spikes and dips in annual contribution requirements due to short term fluctuations in asset markets, MERS applies a technique called **asset smoothing**. This spreads out each year's investment gains or losses over the prior year and the following four years. This smoothing method is used to determine your actuarial value of assets (valuation assets), which is then used to determine both your funded ratio and your required contributions. The (smoothed) **actuarial rate of return for 2018 was 3.80%, while the actual market rate of return was (4.12)%.** To see historical details of the market rate of return, compared to the smoothed actuarial rate of return, refer to this report's Appendix, or view the "How Smoothing Works" video on the Defined Benefit resource page of the MERS website.

As of December 31, 2018 the actuarial value of assets is 110% of market value due to asset smoothing. This means that meeting the actuarial assumption in the next few years will require average annual market returns that exceed the 7.75% investment return assumption, or contribution requirements will continue to increase.

If the December 31, 2018 valuation results were based on market value instead of actuarial value:

- The funded percent of your entire municipality would be 56% (instead of 61%); and
- Your total employer contribution requirement for the fiscal year starting April 1, 2020 would be $363,744 (instead of $326,028)

Alternate Scenarios to Estimate the Potential Volatility of Results ("What If Scenarios")

The calculations in this report are based on assumptions about long-term economic and demographic behavior. These assumptions will never materialize in a given year, except by coincidence. Therefore the results will vary from one year to the next. The volatility of the results depends upon the characteristics of the plan. For example:

- Open divisions that have substantial assets compared to their active employee payroll will have more volatile employer contribution rates due to investment return fluctuations.
- Open divisions that have substantial accrued liability compared to their active employee payroll will have more volatile employer contribution rates due to demographic experience fluctuations.
- Small divisions will have more volatile contribution patterns than larger divisions because statistical fluctuations are relatively larger among small populations.
- Shorter amortization periods result in more volatile contribution patterns.

Many assumptions are important in determining the required employer contributions. In the following table, we show the impact of varying the Investment Return assumption and the Wage Inflation assumption. Lower investment returns would result in higher required employer contributions, and vice-versa. Lower wage inflation generally results in lower required employer contributions as a dollar amount in the long run, and vice versa.

The relative impact of each economic scenario below will vary from year to year, as the participant demographics change. The impact of each scenario should be analyzed for a given year, not from year to year. The results in the table are based on the December 31, 2018 valuation, and are for the municipality in total, not by division. These results do not reflect a 5-year phase in of the impact of the new actuarial assumptions.

It is important to note that calculations in this report are mathematical estimates based upon assumptions regarding future events, which may or may not materialize. Actuarial calculations can and do vary from one valuation to the next, sometimes significantly depending on the group's size. Projections are not predictions. Future valuations will be based on actual future experience.

The Retirement Board has adopted a change to the Investment Return Assumption from 7.75% to 7.35%, and the wage inflation from 3.75% to 3.00%. This change will be effective in the December 31, 2019 valuation which will impact the Fiscal Year 2021 contribution. The scenario shown using these assumptions as of December 31, 2018 is illustrative only. The actual impact of this change when reflected in the 2019 valuation will be different.

	Assumed Future Annual Smoothed Rate of Investment Return		
12/31/2018 Valuation Results	**Lower Future Annual Returns**	**Adopted 2019 Assumption**	**Valuation Assumptions**
Investment Return Assumption	**5.75%**	**7.35%**	**7.75%**
Wage Increase Assumption	**3.75%**	**3.00%**	**3.75%**
Accrued Liability	$ 10,927,967	$ 9,236,150	$ 8,887,284
Valuation Assets[1]	$ 5,434,627	$ 5,434,627	$ 5,434,627
Unfunded Accrued Liability	$ 5,493,340	$ 3,801,523	$ 3,452,657
Funded Ratio	50%	59%	61%
Monthly Normal Cost	$ 12,083	$ 6,119	$ 6,119
Monthly Amortization Payment	$ 28,510	$ 23,895	$ 21,050
Total Employer Contribution[2]	$ 40,593	$ 30,014	$ 27,169

[1] The Valuation Assets include assets from Surplus divisions, if any.

[2] If assets exceed accrued liabilities for a division, the division may have an overfunding credit to reduce the division's employer contribution requirement. If the overfunding credit is larger than the normal cost, the division's full credit is included in the municipality's amortization payment above but the division's total contribution requirement is zero. This can cause the displayed normal cost and amortization payment to not add up to the displayed total employer contribution.

Projection Scenarios

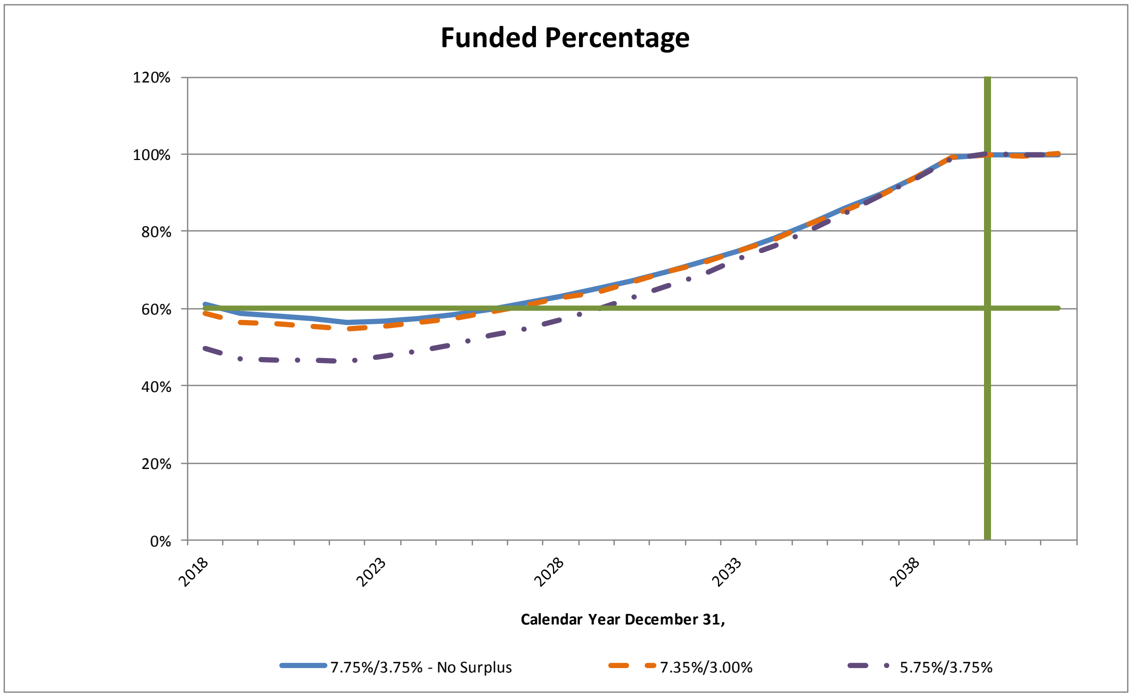
The next two pages show projections of the plan's funded ratio and computed employer contributions under the actuarial assumptions used in the valuation and alternate economic scenarios. All three projections take into account the past investment losses that will continue to affect the actuarial rate of return in the short term.

The 7.75%/3.75% scenario provides an estimate of computed employer contributions based on current actuarial assumptions, and a projected 7.75% market return. The other two scenarios may be useful if the municipality chooses to budget more conservatively, and make contributions in addition to the minimum requirements. The 7.35%/3.00% and 5.75%/3.75% projections provide an indication of the potential required employer contribution if these assumptions were met over the long-term.

Valuation Year Ending 12/31	Fiscal Year Beginning 4/1	Actuarial Accrued Liability	Valuation Assets[2]	Funded Percentage	Computed Annual Employer Contribution
7.75%[1]/3.75%					
NO 5-YEAR PHASE-IN					
2018	2020	$ 8,887,284	$ 5,434,627	61%	$ 326,028
2019	2021	$ 8,990,000	$ 5,280,000	59%	$ 358,000
2020	2022	$ 9,100,000	$ 5,290,000	58%	$ 378,000
2021	2023	$ 9,190,000	$ 5,270,000	57%	$ 400,000
2022	2024	$ 9,290,000	$ 5,240,000	56%	$ 426,000
2023	2025	$ 9,390,000	$ 5,320,000	57%	$ 446,000
7.35%[1]/3.00%					
NO 5-YEAR PHASE-IN					
2018	2020	$ 9,236,150	$ 5,434,627	59%	$ 360,168
2019	2021	$ 9,330,000	$ 5,260,000	56%	$ 391,000
2020	2022	$ 9,430,000	$ 5,270,000	56%	$ 409,000
2021	2023	$ 9,510,000	$ 5,270,000	55%	$ 430,000
2022	2024	$ 9,590,000	$ 5,260,000	55%	$ 454,000
2023	2025	$ 9,680,000	$ 5,350,000	55%	$ 471,000
5.75%[1]/3.75%					
NO 5-YEAR PHASE-IN					
2018	2020	$ 10,927,967	$ 5,434,627	50%	$ 487,116
2019	2021	$ 11,000,000	$ 5,180,000	47%	$ 526,000
2020	2022	$ 11,200,000	$ 5,210,000	47%	$ 552,000
2021	2023	$ 11,300,000	$ 5,270,000	47%	$ 579,000
2022	2024	$ 11,400,000	$ 5,290,000	46%	$ 613,000
2023	2025	$ 11,500,000	$ 5,500,000	48%	$ 636,000

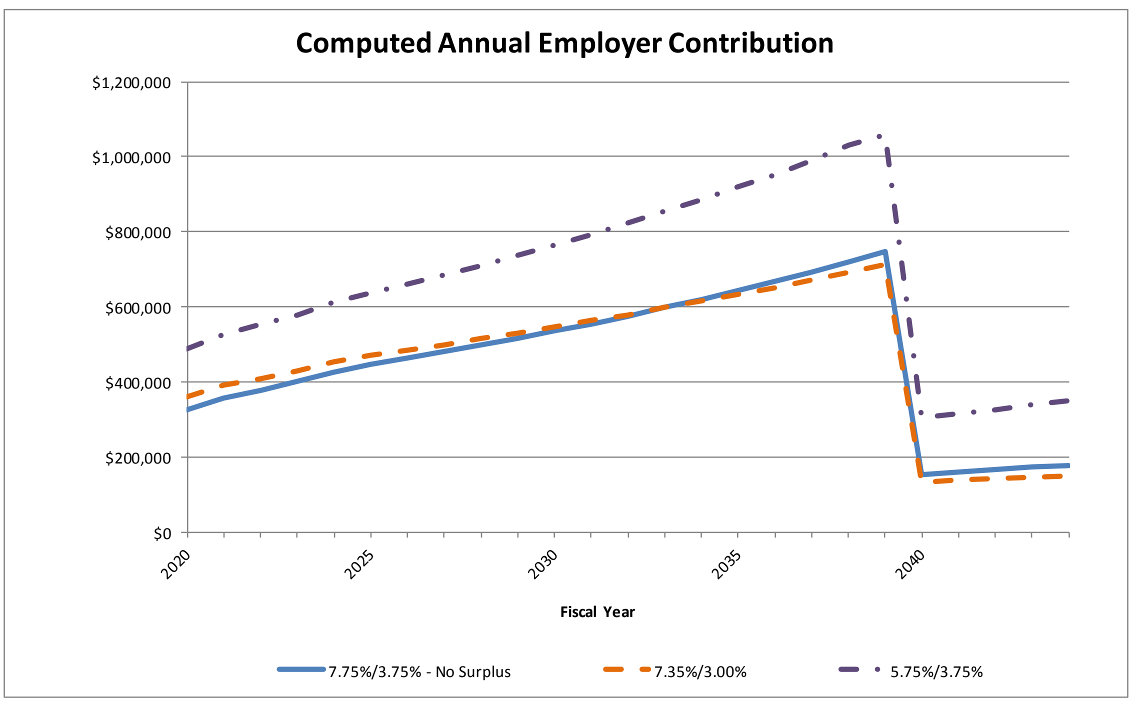
[1] Represents both the interest rate for discounting liabilities and the future investment return assumption on the Market Value of assets.

[2] Valuation Assets do not include assets from Surplus divisions, if any.



Notes:
All projected funded percentages are shown with no phase-in.

The green indicator lines have been added at 60% funded and 22 years following the valuation date for PA 202 purposes.



Notes:
All projected contributions are shown with no phase-in.

Table 1: Employer Contribution Details For the Fiscal Year Beginning April 1, 2020

Division	Total Normal Cost	Employee Contribut. Rate	Employer Contributions[1]: Employer Normal Cost	Employer Contributions[1]: Payment of the Unfunded Accrued Liability[4]	Employer Contributions[1]: Computed Employer Contribut. No Phase-In	Computed Employer Contribut. With Phase-In	Blended ER Rate No Phase-In[5]	Blended ER Rate With Phase-In[5]	Employee Contribut. Conversion Factor[2]
Percentage of Payroll									
01 - Gnrl	12.58%	4.70%	7.88%	27.11%	34.99%	34.17%			0.88%
Estimated Monthly Contribution[3]									
01 - Gnrl			$ 6,119	$ 21,050	$ 27,169	$ 26,535			
Total Municipality			**$ 6,119**	**$ 21,050**	**$ 27,169**	**$ 26,535**			
Estimated Annual Contribution[3]			**$ 73,428**	**$ 252,600**	**$ 326,028**	**$ 318,420**			

1 The above employer contribution requirements are in addition to the employee contributions, if any.

2 If employee contributions are increased/decreased by 1.00% of pay, the employer contribution requirement will decrease/increase by the Employee Contribution Conversion Factor. The conversion factor is usually under 1%, because employee contributions may be refunded at termination of employment, and not used to fund retirement pensions. Employer contributions will all be used to fund pensions.

3 For divisions that are open to new hires, estimated contributions are based on projected fiscal year payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts. For divisions that will have no new hires (i.e., closed divisions), invoices will be based on the above dollar amounts which are based on projected fiscal year payroll. See description of Open Divisions and Closed Divisions in the Appendix.

4 Note that if the overfunding credit is larger than the normal cost, the full credit is shown above but the total contribution requirement is zero. This will cause the displayed normal cost and unfunded accrued liability contributions to not add across.

5 For linked divisions, the employer will be invoiced the Computed Employer Contribution with Phase-in rate shown above for each linked division (a contribution rate for the open division; a contribution dollar for the closed-but-linked division), unless the employer elects to contribute the Blended Employer Contribution rate shown above, by contacting MERS at 800-767-MERS (6377).

Please see the Comments on Asset Smoothing in the Executive Summary of this report.

Table 2: Benefit Provisions

01 - Gnrl: Open Division

	2018 Valuation	2017 Valuation
Benefit Multiplier:	Bridged Benefit:2.50% Multiplier (80% max) Frozen FAC;2.25% Multiplier (80% max)	2.50% Multiplier (80% max)
Bridged Benefit Date:	1/31/2018	
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/25	55/25
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
COLA for Current Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	4.70%	4.70%
Act 88:	Yes (Adopted 5/3/1966)	Yes (Adopted 5/3/1966)

Table 3: Participant Summary

Division	2018 Valuation Number	2018 Valuation Annual Payroll[1]	2017 Valuation Number	2017 Valuation Annual Payroll[1]	2018 Valuation Average Age	2018 Valuation Average Benefit Service[2]	2018 Valuation Average Eligibility Service[2]
01 - Gnrl							
Active Employees	14	$ 857,648	16	$ 909,435	41.6	6.7	7.1
Vested Former Employees	3	65,977	2	49,591	49.2	15.1	15.1
Retirees and Beneficiaries	18	659,999	16	586,214	68.3		
Total Municipality							
Active Employees	**14**	**$ 857,648**	**16**	**$ 909,435**	**41.6**	**6.7**	**7.1**
Vested Former Employees	**3**	**65,977**	**2**	**49,591**	**49.2**	**15.1**	**15.1**
Retirees and Beneficiaries	**18**	**659,999**	**16**	**586,214**	**68.3**		
Total Participants	**35**		**34**				

1 Annual payroll for active employees; annual deferred benefits payable for vested former employees; annual benefits being paid for retirees and beneficiaries.

2 Descriptions can be found under Miscellaneous and Technical Assumptions in the Appendix.

Table 4: Reported Assets (Market Value)

Division	2018 Valuation		2017 Valuation	
	Employer and Retiree[1]	Employee[2]	Employer and Retiree[1]	Employee[2]
01 - Gnrl	$ 4,563,117	$ 398,463	$ 5,030,445	$ 442,673
Municipality Total[3]	**$ 4,563,117**	**$ 398,463**	**$ 5,030,445**	**$ 442,673**
Combined Assets[3]	**$4,961,580**		**$5,473,118**	

1 Reserve for Employer Contributions and Benefit Payments.
2 Reserve for Employee Contributions.
3 Totals may not add due to rounding.

The December 31, 2018 valuation assets (actuarial value of assets) are equal to 1.095342 times the reported market value of assets (compared to 1.011321 as of December 31, 2017). Refer to the Appendix for a description of the valuation asset derivation and a detailed calculation of valuation assets.

Table 5: Flow of Valuation Assets

Year Ended 12/31	Employer Contributions Required	Employer Contributions Additional	Employee Contributions	Investment Income (Valuation Assets)	Benefit Payments	Employee Contribution Refunds	Net Transfers	Valuation Asset Balance
2008	$ 129,649		$ 44,240	$ 199,210	$ (226,796)	$ (17,548)	$ 0	$ 4,628,481
2009	125,487		43,336	219,924	(231,425)	0	0	4,785,803
2010	133,513		43,328	262,815	(260,058)	0	0	4,965,401
2011	140,021	$ 0	42,968	249,814	(310,463)	0	0	5,087,741
2012	150,474	0	42,842	228,749	(327,512)	0	0	5,182,294
2013	170,637	0	44,322	306,531	(349,026)	0	0	5,354,758
2014	185,173	0	43,474	305,569	(367,163)	0	0	5,521,811
2015	186,715	0	42,194	265,034	(432,578)	0	0	5,583,176
2016	191,639	0	41,594	264,260	(560,131)	0	0	5,520,538
2017	230,708	0	42,703	318,616	(577,486)	0	0	5,535,079
2018	228,039	51,109	42,301	194,956	(611,952)	(4,905)	0	5,434,627

Notes:

Transfers in and out are usually related to the transfer of participants between municipalities, and to employer and employee payments for service credit purchases (if any) that the governing body has approved.

Additional employer contributions, if any, are shown separately starting in 2011. Prior to 2011, additional contributions are combined with the required employer contributions.

The investment income column reflects the recognized investment income based on Valuation Assets. It does not reflect the market value investment return in any given year.

The Valuation Asset balance includes assets from Surplus divisions, if any.

Years where historical information is not available, will be displayed with zero values.

Table 6: Actuarial Accrued Liabilities and Valuation Assets as of December 31, 2018

Division	Actuarial Accrued Liability: Active Employees	Vested Former Employees	Retirees and Beneficiaries	Pending Refunds	Total	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
01 - Gnrl	$ 898,981	$ 546,007	$ 7,431,495	$ 10,801	$ 8,887,284	$ 5,434,627	61.2%	$ 3,452,657
Total	**$ 898,981**	**$ 546,007**	**$ 7,431,495**	**$ 10,801**	**$ 8,887,284**	**$ 5,434,627**	**61.2%**	**$ 3,452,657**

Please see the Comments on Asset Smoothing in the Executive Summary of this report.

Table 7: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2004	$ 4,681,740	$ 3,797,803	81%	$ 883,937
2005	5,040,166	3,962,839	79%	1,077,327
2006	5,213,769	4,209,488	81%	1,004,281
2007	5,546,708	4,499,726	81%	1,046,982
2008	5,789,300	4,628,481	80%	1,160,819
2009	6,048,677	4,785,803	79%	1,262,874
2010	6,423,044	4,965,401	77%	1,457,643
2011	6,799,457	5,087,741	75%	1,711,716
2012	7,065,193	5,182,294	73%	1,882,899
2013	7,358,327	5,354,758	73%	2,003,569
2014	7,566,102	5,521,811	73%	2,044,291
2015	8,578,146	5,583,176	65%	2,994,970
2016	8,784,225	5,520,538	63%	3,263,687
2017	8,903,226	5,535,079	62%	3,368,147
2018	8,887,284	5,434,627	61%	3,452,657

Notes: Actuarial assumptions were revised for the 2004, 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

The Valuation Assets include assets from Surplus divisions, if any.

Years where historical information is not available will be displayed with zero values.

Tables 8 and 9: Division-Based Comparative Schedules

Division 01 - Gnrl

Table 8-01: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2008	$ 5,789,300	$ 4,628,481	80%	$ 1,160,819
2009	6,048,677	4,785,803	79%	1,262,874
2010	6,423,044	4,965,401	77%	1,457,643
2011	6,799,457	5,087,741	75%	1,711,716
2012	7,065,193	5,182,294	73%	1,882,899
2013	7,358,327	5,354,758	73%	2,003,569
2014	7,566,102	5,521,811	73%	2,044,291
2015	8,578,146	5,583,176	65%	2,994,970
2016	8,784,225	5,520,538	63%	3,263,687
2017	8,903,226	5,535,079	62%	3,368,147
2018	8,887,284	5,434,627	61%	3,452,657

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

Table 9-01: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution[1]	Employee Contribution Rate[2]
	Number	Annual Payroll		
2008	16	$ 892,197	14.78%	4.70%
2009	16	922,039	15.52%	4.70%
2010	16	903,878	16.83%	4.70%
2011	16	900,141	18.50%	4.70%
2012	16	911,554	20.50%	4.70%
2013	16	943,060	20.89%	4.70%
2014	15	890,104	21.91%	4.70%
2015	16	888,860	30.27%	4.70%
2016	16	887,979	32.42%	4.70%
2017	16	909,435	33.29%	4.70%
2018	14	857,648	34.99%	4.70%

1 For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

2 For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contributon will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 2.

See the Benefit Provision History, later in this report, for past benefit provision changes.

Years where historical information is not available, will be displayed with zero values.

Table 10: Division-Based Layered Amortization Schedule

Division 01 - Gnrl

Table 10-01: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance[1]	Original Amortization Period[2]	Amounts for Fiscal Year Beginning 4/1/2020: Outstanding UAL Balance[3]	Remaining Amortization Period[2]	Annual Amortization Payment
Initial	12/31/2015	$ 2,994,970	23	$ 3,194,863	20	$ 231,912
(Gain)/Loss	12/31/2016	161,243	22	178,999	20	12,996
(Gain)/Loss	12/31/2017	43,842	21	48,347	20	3,504
(Gain)/Loss	12/31/2018	452,027	20	496,233	20	36,024
Amendment	12/31/2018	(399,479)	20	(438,546)	20	(31,836)
Total				**$ 3,479,896**		**$ 252,600**

[1] For each type of UAL (layer), this is the original balance as of the date the layer was established.

[2] According to the MERS amortization policy, each type of UAL (layer) is amortized over a specific period (see Appendix on MERS website).

[3] This is the remaining balance as of the valuation date, projected to the beginning of the fiscal year shown above.

The unfunded accrued liability (UAL) as of December 31, 2018 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2018 valuation to take into account the expected future contributions that are based on past valuations. Each type of UAL (layer) is amortized over the appropriate period. Please see the Appendix on the MERS website for a detailed description of the amortization policy.

Note: The original balance and original amortization periods prior to 12/31/2018 were received from the prior actuary.

GASB 68 Information

The following information has been prepared to provide some of the information necessary to complete GASB Statement No. 68 disclosures. Statement 68 is effective for fiscal years beginning after June 15, 2014. Additional resources, including an Implementation Guide, are available at http://www.mersofmich.com/.

Actuarial Valuation Date:		12/31/2018
Measurement Date of the Total Pension Liability (TPL):		12/31/2018
At 12/31/2018, the following employees were covered by the benefit terms:		
Inactive employees or beneficiaries currently receiving benefits:		18
Inactive employees entitled to but not yet receiving benefits (including refunds):		7
Active employees:		14
		39
Total Pension Liability as of 12/31/2017 measurement date:	$	8,679,027
Total Pension Liability as of 12/31/2018 measurement date:	$	8,678,782
Service Cost for the year ending on the 12/31/2018 measurement date:	$	111,237
Change in the Total Pension Liability due to:		
- Benefit changes[1]:	$	(377,634)
- Differences between expected and actual experience[2]:	$	208,912
- Changes in assumptions[2]:	$	0

[1] A change in liability due to benefit changes is immediately recognized when calculating pension expense for the year.

[2] Changes in liability due to differences between actual and expected experience, and changes in assumptions, are recognized in pension expense over the average remaining service lives of all employees.

Average expected remaining service lives of all employees (active and inactive):		4
Covered employee payroll: (Needed for Required Supplementary Information)	$	857,648

Sensitivity of the Net Pension Liability to changes in the discount rate:

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Change in Net Pension Liability as of 12/31/2018:	$ 894,357	$ -	$ (752,969)

Note: The current discount rate shown for GASB 68 purposes is higher than the MERS assumed rate of return. This is because for GASB 68 purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes it is net of administrative expenses.

GASB 68 Information

This page is for those municipalities who need to "roll-forward" their total pension liability due to the timing of completion of the actuarial valuation in relation to their fiscal year-end.

The following information has been prepared to provide some of the information necessary to complete GASB Statement No. 68 disclosures. Statement 68 is effective for fiscal years beginning after June 15, 2014. Additional resources, including an Implementation Guide, are available at www.mersofmich.com.

Actuarial Valuation Date:	12/31/2018
Measurement Date of the Total Pension Liability (TPL):	12/31/2019

At 12/31/2018, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits:	18
Inactive employees entitled to but not yet receiving benefits (including refunds):	7
Active employees:	14
	39

Total Pension Liability as of 12/31/2018 measurement date:	$	8,878,819
Total Pension Liability as of 12/31/2019 measurement date:	$	8,778,286
Service Cost for the year ending on the 12/31/2019 measurement date:	$	116,921

Change in the Total Pension Liability due to:

- Benefit changes[1]:	$	(419,412)
- Differences between expected and actual experience[2]:	$	191,804
- Changes in assumptions[2]:	$	0

[1] A change in liability due to benefit changes is immediately recognized when calculating pension expense for the year.

[2] Changes in liability due to differences between actual and expected experience, and changes in assumptions, are recognized in pension expense over the average remaining service lives of all employees.

Average expected remaining service lives of all employees (active and inactive):		4
Covered employee payroll: (Needed for Required Supplementary Information)	$	857,648

Sensitivity of the Net Pension Liability to changes in the discount rate:

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Change in Net Pension Liability as of 12/31/2019:	$ 901,400	$ -	$ (758,380)

Note: The current discount rate shown for GASB 68 purposes is higher than the MERS assumed rate of return. This is because for GASB 68 purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes it is net of administrative expenses.

Benefit Provision History

The following benefit provision history is provided by MERS. Any corrections to this history or discrepancies between this information and information displayed elsewhere in the valuation report should be reported to MERS. All provisions are listed by date of adoption.

01 - Gnrl

2/1/2018	Benefit B-3 (80% max)
1/31/2018	Frozen FAC
12/1/2016	Service Credit Purchase Estimates - Yes
7/1/2001	Benefit F55 (With 25 Years of Service)
7/1/2001	Member Contribution Rate 4.70%
7/1/1998	Benefit B-4 (80% max)
3/31/1997	Day of work defined as 8 Hours a Day for All employees.
3/4/1996	Exclude Temporary Employees
7/1/1989	Benefit B-2
1/1/1989	E2 2.5% COLA for future retirees (01/01/1989)
1/1/1988	E1 2.5% COLA for past retirees (01/01/1988)
1/1/1987	Flexible E 2% COLA Adopted (01/01/1987)
1/1/1983	Flexible E 2% COLA Adopted (01/01/1983)
9/1/1966	Benefit C-1 (Old)
5/3/1966	Covered by Act 88
4/1/1966	Benefit FAC-5 (5 Year Final Average Compensation)
4/1/1966	10 Year Vesting
4/1/1966	Benefit C (Old)
4/1/1966	Member Contribution Rate 3.00% Under $4,200.00 - Then 5.00%
4/1/1966	Fiscal Month - April
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the Appendix. Some actuarial assumptions are specific to this municipality and its divisions. These are listed below.

Increase in Final Average Compensation

Division	FAC Increase Assumption
All Divisions	1.00%

Withdrawal Rate Scaling Factor

Division	Withdrawal Rate Scaling Factor
All Divisions	100%

Miscellaneous and Technical Assumptions

Loads – None.

Risk Commentary

Determination of the accrued liability, the employer contribution, and the funded ratio requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability, the actuarially determined contribution and the funded ratio that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- **Investment Risk** – actual investment returns may differ from the expected returns;
- **Asset/Liability Mismatch** – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
- **Salary and Payroll Risk** – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
- **Longevity Risk** – members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
- **Other Demographic Risks –** members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

  The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

1.	Ratio of the market value of assets to total payroll	5.8
2.	Ratio of actuarial accrued liability to payroll	10.4
3.	Ratio of actives to retirees and beneficiaries	0.8
4.	Ratio of market value of assets to benefit payments	8.0
5.	Ratio of net cash flow to market value of assets (boy)	-5.4%

RATIO OF MARKET VALUE OF ASSETS TO TOTAL PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

RATIO OF MARKET VALUE OF ASSETS TO BENEFIT PAYMENTS

The MERS' Actuarial Policy requires a total minimum contribution equal to the excess (if any) of three times the expected annual benefit payments over the projected market value of assets as of the participating municipality or court's Fiscal Year for which the contribution applies. The ratio of market value of assets to benefit payments as of the valuation date provides an indication of whether the division is at risk for triggering the minimum contribution rule in the near term. If the division triggers this minimum contribution rule, the required employer contributions could increase dramatically relative to previous valuations.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

State Reporting

The following information has been prepared to provide some of the information necessary to complete the pension reporting requirements for the State of Michigan's Local Government Retirement System Annual Report (Form No. 5572). Additional resources are available at www.mersofmich.com and on the State website.

Form 5572 Line Reference	Description	Result
10	**Membership as of December 31, 2018**	
11	Indicate number of active members	14
12	Indicate number of inactive members	3
13	Indicate number of retirees and beneficiaries	18
14	**Investment Performance for Calendar Year Ending December 31, 2018**[1]	
15	Enter actual rate of return - prior 1-year period	-3.64%
16	Enter actual rate of return - prior 5-year period	4.94%
17	Enter actual rate of return - prior 10-year period	8.25%
18	**Actuarial Assumptions**	
19	Actuarial assumed rate of investment return[2]	7.75%
20	Amortization method utilized for funding the system's unfunded actuarial accrued liability, if any	Level Percent
21	Amortization period utilized for funding the system's unfunded actuarial accrued liability, if any[3]	20
22	Is each division within the system closed to new employees?[4]	No
23	**Uniform Assumptions**	
24	Enter retirement pension system's actuarial value of assets using uniform assumptions	$5,434,627
25	Enter retirement pension system's actuarial accrued liabilities using uniform assumptions	$9,573,139
27	Actuarially Determined Contribution (ADC) using uniform assumptions, Fiscal Year Ending March 31,2019	$355,272

1. The Municipal Employees' Retirement System's investment performance has been provided to GRS from MERS Investment Staff and included here for reporting purposes. This investment performance figures reported are net of fees on a rolling calendar-year basis for the previous 1-, 5-, and 10-year periods as required under PA 530.
2. Net of administrative and investment expenses.
3. Populated with the longest amortization period remaining in the amortization schedule, across all divisions in the plan. This is when each division and the plan in total is expected to reach 100% funded if all assumptions are met.
4. If all divisions within the employer are closed, "yes." If at least one division is open (including shadow divisions) indicate "no."

Attachment 2b

Municipal Employees' Retirement System of Michigan

East China Chtr Twp (7701) - Divisions 01 and 10 Retirement Plan Options

GRS

GRS Retirement Consulting

800.521.0498 | P: 248.799.9000 | F: 248.799.9020 | www.grsconsulting.com

October 14, 2019

In care of:
Municipal Employees' Retirement System of Michigan
1134 Municipal Way
Lansing, Michigan 48917

The purpose of this report is to show the financial implications to the employer of different retirement plan design options for East China Chtr Twp (7701) – Divisions 01 and 10. The report consists of separate sections that correspond to the different plan options under consideration. Each section contains the following additional detail:

- An executive summary that describes the plan provisions and provides a brief explanation of the results.
- Exhibits showing the short-term impact of the proposed benefit change – that is, the net impact on the applicable fiscal year's contribution.

This report was prepared at the request of MERS on behalf of the municipality and is intended for use by the municipality and those designated or approved by the municipality. **The report may be provided to parties other than the municipality only in its entirety.** GRS is not responsible for unauthorized use of this report.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The valuation was based upon information furnished by MERS staff, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the municipality and MERS staff.

The Plan Document Article VI sec. 71 (1)(d), provides the MERS Board with the authority to set actuarial assumptions and methods after consultation with the actuary. This report was prepared using certain assumptions approved by the Board. The MERS Board adopted the actuarial assumptions based on the recommendations of the prior actuary. A description of these assumptions and methods can be found as follows:

- Plan Document, v03152018,
- Actuarial Policy, DOC 8062 (2019-04-25), and
- 2018 Appendix.

On February 28, 2019, the Board adopted new economic assumptions for use beginning with the December 31, 2019 annual valuation report. These assumptions are a 7.35% investment rate of return and a 3.00% wage inflation assumption. The Board has a review of the demographic assumptions scheduled during 2019-2020. Changes resulting from these studies will have an impact on the level of calculated employer contributions, which are not reflected in this report.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the municipality as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices and in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

David T. Kausch and Shana M. Neeson are Members of the American Academy of Actuaries (MAAA) and meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

Sincerely,

David T Kausch

David T. Kausch, FSA, EA, FCA, MAAA

Shana M Neeson

Shana M. Neeson, ASA, FCA, MAAA

Table of Contents

Title	Pages

Executive Summary

Executive Summary

The purpose of this report is to show the impact on the liabilities and contributions of the proposed benefit changes for East China Chtr Twp (7701) – Divisions 01 and 10. The following proposed benefit changes have been considered:

Option	Division	Proposed Change in Benefit	
Modified Baseline	Gnrl (01)	Bridged Benefit:	
		Bridge Date:	June 1, 2017
		Frozen FAC:	Updated
		Carve-Out	
	New (10)	Carve-To (from 01)	
		Bridge Date:	March 1, 2018
		Member Contribution Rate:	5.50%
1	Gnrl (01)	Modified Baseline, plus:	
		Bridged Multiplier:	
		COLA for Future Retirees To Bridge Date:	2.50% (Non-Compound)
		COLA for Future Retirees On/After Bridge Date:	0.00%
		COLA Bridge Date:	September 1, 2020
	New (10)	Modified Baseline, plus:	
		Bridged Multiplier:	
		COLA for Future Retirees To Bridge Date:	2.50% (Non-Compound)
		COLA for Future Retirees On/After Bridge Date:	0.00%
		COLA Bridge Date:	September 1, 2020

The results of our calculations are shown as follows:

- The exhibits on pages 2 and 3 show the short-term impact of the proposed benefit change (i.e., the change in the Actuarial Accrued Liability [AAL] as of December 31, 2018 and the change in the employer contribution for the fiscal year beginning April 1, 2020).

Please note the following regarding these calculations:

- The modified baseline reflects the changes as described above and detailed in the report dated September 24, 2019, including a carve-out of division 01.
- The option would change both the AAL and the Normal Cost. The change in AAL will be recognized over 20 years. The Normal Cost is the cost to provide benefits accrued each year. In the long run, the employer contribution is expected to converge to the employer's share of Normal Cost, if all the actuarial assumptions are met in the future.
- Under Option 1 there is an immediate impact on the Unfunded Accrued Liability (UAL) because the COLA for future retirees members is frozen. This may result in a significant part of the decrease in the employer contribution.
- The proposed change may affect the risk profile of the Plan. At this time we do not believe additional risk assessment is necessary.

Supplemental Valuation Results – Division 01

East China Chtr Twp (7701) – Gnrl (Division 01)
Employer Computed Contributions
Based on the 12/31/2018 Annual Actuarial Valuation

	Modified Baseline		Proposed Option 1		Difference	
Benefits						
a) Benefit Multiplier	Bridged Benefit (See below)		Bridged Benefit (See below)			
b) Normal Retirement Age	60		60			
c) Vesting	10 years		10 years			
d) Early Retirement (Unreduced)	55/25		55/25			
e) Early Retirement (Unreduced)	-		-			
f) Early Retirement (Reduced)	50/25		50/25			
g) Early Retirement (Reduced)	55/15		55/15			
h) Final Average Compensation	5 years		5 years			
i) COLA for Future Retirees	2.50% (Non-Compound)		Bridged Multiplier (See below)		Bridged Multiplier (See below)	
j) COLA for Current Retirees	2.50% (Non-Compound)		2.50% (Non-Compound)			
k) Normal Form of Payment	-		-			
l) Death and Disability (D-2)	-		-			
m) Member Contribution Rate	4.70%		4.70%			
n) Other	-		-			
Participant Summary						
a) Active		12		12		0
b) Vested Former Members		3		3		0
c) Retired		18		18		0
d) Total		33		33		0
e) Annual Payroll		$766,258		$766,258		$0
Results						
1. Determination of Unfunded Accrued Liabilities and Funded Percent						
a. Present Value of Future Benefits (Active)[1]		$1,852,785		$1,636,382		($216,403)
b. Present Value of Future Normal Costs (Active)[2]		$948,391		$786,445		(161,946)
c. Accrued Liability[3]						
i. Active Employees [1.a. - 1.b.]		$904,394		$849,937		($54,457)
ii. Vested Former Employees		546,007		546,007		0
iii. Retirees and Beneficiaries		7,431,495		7,431,495		0
iv. Pending Refunds		10,801		10,801		0
v. Total		$8,892,697		$8,838,240		($54,457)
d. Actuarial Value of Assets		$5,430,539		$5,430,539		$0
e. Unfunded Accrued Liability (UAL) [1.c.v. - 1.d.]		$3,462,158		$3,407,701		($54,457)
f. Division Percent Funded [1.d. / 1.c.v.]		61.1%		61.4%		0.3%
2. Employer Contribution Development[4]	As an Annual $	As a % of payroll	As an Annual $	As a % of payroll	As an Annual $	As a % of payroll
a. Total Normal Cost[5]	$104,988	12.61%	$87,336	10.49%	($17,652)	(2.12%)
b. Employee Contribution Rate	39,132	4.70%	39,132	4.70%	0	0.00%
c. Employer Normal Cost [2.a - 2.b.]	65,856	7.91%	48,204	5.79%	(17,652)	(2.12%)
d. Amortization of UAL[6]	253,368	30.43%	249,036	29.91%	(4,332)	(0.52%)
e. Employer Contribution[7] [2.c. + 2.d., not less than 0]	$319,224	38.34%	$297,240	35.70%	($21,984)	(2.64%)
Miscellaneous and Technical Assumptions						
1. Increase in Final Compensation	1.00 %		1.00 %			
2. Withdrawal Rate Scaling Factor	100 %		100 %			

1 *The total value, in today's dollars, of benefits expected to be earned by the current active population and paid in the future.*
2 *The portion of the present value of future benefits for current active members, expected to be earned after the valuation date.*
3 *The portion of the present value of future benefits earned through the valuation date.*
4 *Percentages of pay are not developed for a closed division.*
5 *The total normal cost is the ongoing cost of the plan under the applicable benefit structure.*
6 *Refer to the valuation Appendix, on the MERS website, for a description of the amortization policy.*
7 *Note that the results shown are based on the December 31, 2018 assumptions without any phase-in.*

Bridged Benefit Description:

Benefit Multiplier To Bridge Date:	2.50% Multiplier (80% max)
Benefit Multiplier On/After Bridge Date:	2.25% Multiplier (80% max)
Bridge Date:	June 1, 2017
FAC Type:	Frozen FAC
Bridge Benefit Max:	80% of FAC at Termination of Employment

Bridged Multiplier Description:

COLA for Future Retirees To Bridge Date:	2.50% (Non-Compound)
COLA for Future Retirees On/After Bridge Date:	0.00%
COLA Bridge Date:	September 1, 2020

This report may be provided to parties other than the municipality only in its entirety.

Supplemental Valuation Results – Division 10

Attachment 2b

East China Chtr Twp (7701) – New (Division 10)
Employer Computed Contributions
Based on the 12/31/2018 Annual Actuarial Valuation

	Modified Baseline		Proposed Option 1		Difference	
Benefits						
a) Benefit Multiplier	Bridged Benefit (See below)		Bridged Benefit (See below)			
b) Normal Retirement Age	60		60			
c) Vesting	10 years		10 years			
d) Early Retirement (Unreduced)	55/25		55/25			
e) Early Retirement (Unreduced)	-		-			
f) Early Retirement (Reduced)	50/25		50/25			
g) Early Retirement (Reduced)	55/15		55/15			
h) Final Average Compensation	5 years		5 years			
i) COLA for Future Retirees	2.50% (Non-Compound)		Bridged Multiplier (See below)		Bridged Multiplier (See below)	
j) COLA for Current Retirees	-		-			
k) Normal Form of Payment	-		-			
l) Death and Disability (D-2)	-		-			
m) Member Contribution Rate	5.50%		5.50%			
n) Other	-		-			
Participant Summary						
a) Active		2		2		0
b) Vested Former Members		0		0		0
c) Retired		0		0		0
d) Total		2		2		0
e) Annual Payroll		$91,390		$91,390		$0
Results						
1. Determination of Unfunded Accrued Liabilities and Funded Percent						
a. Present Value of Future Benefits (Active)[1]		$87,624		$74,898		($12,726)
b. Present Value of Future Normal Costs (Active)[2]		$81,088		$68,661		(12,427)
c. Accrued Liability[3]						
i. Active Employees [1.a. - 1.b.]		$6,536		$6,237		($299)
ii. Vested Former Employees		0		0		0
iii. Retirees and Beneficiaries		0		0		0
iv. Pending Refunds		0		0		0
v. Total		$6,536		$6,237		($299)
d. Actuarial Value of Assets		$4,088		$4,088		($0)
e. Unfunded Accrued Liability (UAL) [1.c.v. - 1.d.]		$2,448		$2,149		($299)
f. Division Percent Funded [1.d. / 1.c.v.]		62.6%		65.5%		2.9%
2. Employer Contribution Development[4]	As an Annual $	As a % of payroll	As an Annual $	As a % of payroll	As an Annual $	As a % of payroll
a. Total Normal Cost[5]	$12,504	12.59%	$10,608	10.69%	($1,896)	(1.90%)
b. Employee Contribution Rate	5,460	5.50%	5,460	5.50%	0	0.00%
c. Employer Normal Cost [2.a - 2.b.]	7,044	7.09%	5,148	5.19%	(1,896)	(1.90%)
d. Amortization of UAL[6]	180	0.18%	156	0.16%	(24)	(0.02%)
e. Employer Contribution[7] [2.c. + 2.d., not less than 0]	$7,224	7.27%	$5,304	5.35%	($1,920)	(1.92%)
Miscellaneous and Technical Assumptions						
1. Increase in Final Compensation	1.00 %		1.00 %			
2. Withdrawal Rate Scaling Factor	100 %		100 %			

1 *The total value, in today's dollars, of benefits expected to be earned by the current active population and paid in the future.*
2 *The portion of the present value of future benefits for current active members, expected to be earned after the valuation date.*
3 *The portion of the present value of future benefits earned through the valuation date.*
4 *Percentages of pay are not developed for a closed division.*
5 *The total normal cost is the ongoing cost of the plan under the applicable benefit structure.*
6 *Refer to the valuation Appendix, on the MERS website, for a description of the amortization policy.*
7 *Note that the results shown are based on the December 31, 2018 assumptions without any phase-in.*

Bridged Benefit Description:

Benefit Multiplier To Bridge Date:	2.50% Multiplier (80% max)
Benefit Multiplier On/After Bridge Date:	2.25% Multiplier (80% max)
Bridge Date:	March 1, 2018
FAC Type:	Frozen FAC
Bridge Benefit Max:	80% of FAC at Termination of Employment

Bridged Multiplier Description:

COLA for Future Retirees To Bridge Date:	2.50% (Non-Compound)
COLA for Future Retirees On/After Bridge Date:	0.00%
COLA Bridge Date:	September 1, 2020

This report may be provided to parties other than the municipality only in its entirety

Important Comments

Important Comments

1. The liabilities were calculated using the actuarial assumptions and methods adopted by the MERS Retirement Board and do not assume 100% retirement when first eligible. Actuarial assumptions and methods do not determine the cost of the benefits provided; they only impact the pattern of employer contributions. If future experience is unfavorable compared to the assumptions used, employer contribution rates will increase in future years, and vice versa. For example, if members retire when first eligible, the actual liabilities would be higher than calculated resulting in higher employer contributions.

2. The actuarial value of assets used to determine both the funded ratio and the required employer contribution is based on a smoothed value of assets. Only a portion of each year's investment market gain or loss is recognized in the current actuarial value of assets; the remaining portions of gains and losses will be reflected in future years' actuarial value of assets. This reduces the asset volatility impact on the determined required employer contribution and funded ratio. The smoothed actuarial rate of return for 2018 was 3.80%.

   As of December 31, 2018, the actuarial value of assets is 110% of market value. This means that there is a net outstanding asset loss that is not yet recognized in the actuarial value of assets. Absent future asset gains offsetting the net outstanding asset loss, the net outstanding asset loss will be recognized in future actuarial valuations and is expected to decrease funded ratios and increase employer contribution requirements.

3. Unless otherwise indicated, a funded status measurement is based upon the actuarial accrued liability and the actuarial value of assets. The measurement is:

   a. Inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.
   b. Inappropriate for assessing benefit security for the membership.
   c. Dependent upon the actuarial cost method which, in combination with the amortization policy and asset valuation method, affects the timing and amounts of future contributions. The amounts of future contributions will differ from those assumed due to future actual experience differing from assumed.

   A funded status measurement of 100% is not synonymous with no required future contributions. If the funded status were 100%, the Plan would still require future normal cost contributions (i.e., the cost of the active membership accruing an additional year of service credit).

4. This report describes the financial effect of the proposed benefit plan. No statement contained within is a recommendation in favor of or in opposition to the proposed benefit plan.

5. The funded status shows the relationship of the assets to the amount needed to fund past service benefits, the actuarial accrued liability, under valuation assumptions.

Important Comments (Concluded)

6. Contribution requirements take into consideration prior service with other MERS entities (for eligibility service only), reflected in the difference between benefit and vesting service. If members have service not reflected on the results page (e.g., prior MERS or Act 88 service), the unfunded liabilities and employer contributions may be understated.

7. The actuaries' understanding of the default invoicing procedure is that a percent of pay employer contribution is applied for open divisions and a dollar amount is applied for closed divisions.

8. Employer contributions are based on a percentage of members' reported pay for open divisions. If actual reported payroll is substantially lower than the payroll used in this report, the actuaries recommend a minimum contribution of the dollar developed in the "Results," item 2.e.

9. The results do not show the potential impact on other post-employment benefits (such as retiree health care insurance) or ancillary benefits (such as life insurance).

10. The results of separate actuarial valuations generally cannot be added together to produce a correct estimate of the employer contributions. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions and assumptions used.

11. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. The scope of this supplemental actuarial valuation does not include an analysis of the potential range of such future measurements.

12. The calculations are based upon assumptions regarding future events, which may or may not materialize and proposed plan provisions. The actual impact of the proposed plan change(s) will change over time as actual experience emerges. Contact your MERS representative at 800-767-MERS if you believe that:

    a. The assumptions are unreasonable,
    b. The plan provisions are missing or incorrectly described,
    c. Conditions have changed since the calculations were made,
    d. The information provided in this report is inaccurate or is in any way incomplete, or
    e. You need further information to make an informed decision.

Charter Township of East China
&
Operating Engineers, Local 324

Operators

February 26, 2020

Confidential Tentative Agreement Through the Mediator

This Confidential Tentative Agreement Through the Mediator is resented as a package settlement designed to resolve the terms of a new agreement. This proposal may not be submitted as evidence to any fact finding panel, as it is proffered off-the-record and confidential through the mediator per Michigan law. This tentative agreement is the result of good faith negotiations of both parties and remains subject to their internal ratification procedures.

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1. **Duration.** Three Years. July 1, 2019 – June 30, 2022.

2. **Drug Testing Language.** Clean up so all three contracts match. (Housekeeping).

3. **Wages.**

   Effective Upon Ratification: **2.5%** wage increase
   Effective Upon July 1, 2020: **2%** wage increase
   Effective Upon July 1, 2021: **2.5%** wage increase

   Effective upon ratification: $250 Lump Sum Bonus
   *Bonus is not included in FAC for pension purposes.

   <u>On August 21, members of the bargaining team received overtime for union negotiations, which was contrary to the agreement of the parties. Members of the bargaining team shall have the amount of wages already paid to them deducted from the lump sum check. (Mike Schneider 2.75 hours deducted).</u>

4. Retirement.

A. ***Defined Contribution Plan for New Hires.***

Close Defined Benefit Retirement Plan to new hires and establish Defined Contribution Retirement Plan for new hires as set forth below.

<u>Employees hired on or after the ratification of the 2019-2022 collective bargaining agreement:</u>

<u>The Township will establish a MERS 401(a) Defined Contribution plan and a MERS 457 Deferred Compensation Plan for employees who were hired on or after the ratification of the 2019-2022 collective bargaining agreement. The Township shall contribute an amount equal to 6% of the employee's base wages per pay period into the 401(a) defined contribution plan for the employee. The Employee shall contribute 4% of his or her base wages per pay period into the 401(a) Plan. The Township will report and transfer all contributions to MERS on no less than a monthly basis. Employees shall have the ability to contribute as much as they wish up to the IRS limit to the 457 Plan. For each payroll period in which the employee contributes into the 457 Plan, the Township will match dollar-for-dollar to the Employee's 401(a) up to the first 1% of the employee's base wages of that pay period. In no event will the Township's matching contribution made on behalf of an employee exceed 1% of the employee's base wages per pay period. The Township shall not contribute more than 7% of employee's base wages for its total contributions. Employees shall not be vested in the Township's contributions until they have worked 36 complete months. This section is subject to state and federal tax law and changes in IRS rules and regulations.</u>

B. *COLA.*

Bridge COLA benefits effective upon date of ratification for employees hired on or before ratification.

Amend Article 28 Section II as follows:

SECTION II PENSION BENEFITS

The Township will contribute to the Michigan Municipal Employees Retirement System according to the provisions of the B-4 Plan with an E-2 rider. The Parties adopt the Bridge Benefit Program, as generally described in the MERS Plan Document, Section 26. Effective upon the first day of the first month after the ratification of the 2016-2019 collective bargaining agreement, the pension multiplier shall be reduced to 2.25% (B-3). The bridged benefit amount is the combined sum of (1) the accrued benefit amount based on the employee's credited service under the 2.5% (B-4) multiplier as of the effective date of the change in coverage; and (2) the benefit amount that accrues for the employee's credited service under the 2.25% (B-3) multiplier acquired after the effective date of the change in coverage. In calculating the accrued benefit amount based on the employee's credited service under the 2.5% (B-4) multiplier, the final average compensation is frozen, and to be determined as of the effective date of the change in coverage using the highest 60 consecutive months of earnings, divided by 5. In calculating the accrued benefit amount based on the employee's credited service under the 2.25% (B-3) multiplier, the final average compensation is to be determined for all credited service as of the date of termination of employment using the highest 60 consecutive months of earnings, divided by 5. The Township will deduct from the employees' pay the employee's portion of the contribution rate under the prior Plan. The Employer will also fully fund the F-55 rider for employees with twenty-five (25) years of service.

Effective May 1, 2020, the parties adopt a Bridged COLA Program (as generally described in Section 26 of the "MERS Plan Document Effective June 27, 2019") as specifically described below:

Effective May 1, 2020, post-retirement benefits for affected members for each year shall be the sum of the following:

(i) The additional retirement allowance representing the COLA amount equal to a maximum of 2.5% multiplied by the amount of retirement allowance accrued as of April 30, 2020, using a frozen final average compensation (which shall mean that the final average compensation used for the portion of the retirement benefit is that determined as of April 30, 2020), including all adjustments for early retirement and form of payment, with no prior adjustments under the provisions of COLA included (i.e. non-compounding); and

(ii) The retirement benefit accrued on or after May 1, 2020, which shall not be subject to any COLA Benefit Program or COLA adjustment (including, but not limited to, the E-2 rider), using a termination final average compensation, such that the final average compensation used for the portion of the retirement benefit is that determined upon termination of employment.

C. *Employee Contributions.*

i. Increase Employee Contribution to 5.5% effective upon ratification.

ii. Effective July 1, 2020, Employee Contribution increases to 6.0%.

iii. Effective July 1, 2021, Employee contribution increases to 6.2%.

D. *Voluntary Employer Contribution to Pension Plan.*

Effective a reasonable period of time after ratification, the Township shall make a one-time, extra contribution of $75,000 to pay down unfunded accrued liability.

Effective on or before December 31, 2020, the Township shall make a one-time, extra contribution of $75,000 to pay down the unfunded accrued liability.

Effective on or before December 31, 2021, the Township shall make a one-time, extra contribution of $75,000 to pay down the unfunded accrued liability.

Notwithstanding the fact that the Township makes similar promises in other collective bargaining agreements, the maximum amount the Township is bound to pay is $225,000 over the course of the three payments listed above. (In other words, the promises made to the Supervisors, Operators, and Clerical employees are combined. $225,000 will be paid; and not $675,000).

E. ***Section 457 Deferred Compensation Plan for Employees hired before Ratification.***

Employees hired before the ratification of the 2019-2022 collective bargaining agreement:

The Township shall establish a 457 Deferred Compensation plan provided by the Municipal Employees Retirement System (MERS) for employees hired before the ratification of the 2019-2022 collective bargaining agreement. Employees who are hired after the ratification of the 2019-2022 CBA are not eligible for the 457 Plan under this section. All eligible employees shall have the ability to contribute as much as they wish up to the IRS limit to the 457 Plan. The employer match program shall become effective the first full pay period following May 1, 2020. The parties understand that the Township shall not match on any contribution made before the first full pay period following May 1, 2020. For each payroll period in which the employee contributes into the 457 Plan, the Township will match dollar-for-dollar up to the first 2% of the employee's base wages of that pay period. In no event will the Township's matching contributions made on behalf of an employee exceed 2% of the employee's base wages per pay period. The Township will report and transfer all contributions to MERS on no less than a monthly basis. The Township's contribution to an employee's 457 shall not be included in final average compensation for pension purposes. This section is subject to state and federal tax law and changes in IRS rules and regulations.

5. **Pay Date.** Change payday from Tuesday to Wednesday.

6. **Healthcare Rate.**

   Effective 07/01/2019 – $1,143.80/Month
   Effective 07/01/2020 – $1,167.60/Month
   Effective 07/01/2021 – TBD

7. **A. Healthcare Reimbursement.**

b. The Township shall provide hospitalization insurance for all employees, their dependents, and the family continuation riders pursuant to the IUOE Local 324 Health Care Plan. Office visit co-pays and emergency room co-pay shall be the responsibility of the employee. The Township shall reimburse all other out-of-pocket cost excluding co-pays, as set forth in paragraph (c) below. Retirees retiring prior to June 30, 2001, upon agreement by the individual to pay monthly premium, shall be enrolled in the Union's Plan.

The employer shall make a flat monthly contribution payment for each employee working under the terms of this Agreement. Payment shall be due no later than the last day of the month, two months prior to the month for which coverage applies. (In most cases, 31 days prior to the coverage month).

The monthly contribution payment must be sent to: **Operating Engineers' Local 324 Health Care Plan ~~500 Hulet Drive, Bloomfield Township, MI 48302~~. 550 Hulet Drive, Suite 104 Bloomfield Township, MI 48302.**

Should an employee, on whose behalf payment is made, leave the company for any reason before the first day of the next month, the employer shall notify the Health Care Plan Office within three (3) business days (unless there are not three (3) business days left in the month, then the employer must notify the Health Care Plan Office immediately). The employer would then receive a full refund of the payment, and coverage for the employee would be terminated.

The employer shall report and pay the monthly contribution payment for all new hires or employees recalled from layoff within three (3) business days. Coverage will commence on the first day of the month as long as the employer has paid the required monthly contribution.

The Trust Agreement establishing such Plan. Together with any insurance or related agreements approved by the majority of the Trustees, shall become part of this Agreement by reference. The Company shall be bound by the Trust Agreement and any amendments, rules, regulations and other requirements relating to the Health Care Plan, not in conflict with the terms of this Collective Bargaining Agreement, established by the Trustees of such Plan.

Full monthly contribution payments must be made regardless of the amount of time the employee works. Partial payments or prorated payments are not permitted.

a. The payment rate schedule is as follows:

Effective the first month following ratification:	$1,052.80
July 1, 2017–June 30, 2018:	$1,082.20
July 1, 2018–June 30, 2019:	$1,115.80

The above aggregate premium rates plus employer reimbursements shall be utilized for purposes of employee premium liability calculation pursuant to Public Act 152 of 2011. The hard caps as set forth under PA 152 are to be utilized for the duration of the contract.

(c) ~~The Township shall reimburse employees for all deductibles and co-insurance associated with the plan on an annual basis.~~

Employees will be eligible for reimbursement for all deductibles and co-insurance, subject to PA 152, associated with the plan on an annual basis under the following conditions. The Township, may in its sole discretion, engage a third-party administrator to administer the reimbursement program. Eligible employees must submit proof of receipt of payment to said third-party administrator or Township designee. Employees who do not follow the procedures established by the Township or third-party administrator forfeit their right to reimbursement. If the total amount of reimbursement employees requested is greater amount than the total amount of reimbursement available under the PA 152 hard-cap, then each employee who is eligible for reimbursement will receive a prorated share.

8. **Sick Leave Increments.**

Rather than "increments" use "minimums." The minimum time an employee may use as sick time is one-hour.

9. **Work Jacket.** Effective within a reasonable time after ratification, the Township shall provide a work jackct to all employees. The jacket will be replaced with the approval of the Township Manager.

10. **Probationary Period.** Change to 120 Days.

11. **Discipline and Discharge.**

ARTICLE XIII
DISCIPLINE AND DISCHARGE

Dismissal, suspension, and/or other disciplinary action shall be for just cause. In the event an employee is discharged, the Employer will provide the employee and the Union written copies of the reasons for the termination decision.

When the Employer determines that disciplinary action is warranted, the disciplinary action must be initiated within a reasonable period of time ~~not to exceed twenty (20) work days~~.

~~Progressive discipline will be issued as follows:~~

~~First Offense~~	~~Documented verbal warning~~
~~Second Offense~~	~~Written reprimand~~
~~Third Offense~~	~~Three (3) day suspension, without pay~~
~~Fourth Offense~~	~~Dismissal from employment~~

Minor offenses will not be applicable for purposes of progressive discipline after a twelve (12) month period. Just cause includes progressive discipline for minor offenses.

Major offenses such as theft, illegal drug use or being under the influence of alcohol on the job may result in immediate suspension or termination, based on the seriousness of the offense.

12. On-Call Pay.

Add Section III to Article XX:

"SECTION III On-Call Pay

When a supervisor is on a leave of absence or on vacation and the Township requires an employee to be available on-call, the employee shall receive two hours of alternate supervisor straight-time pay (i.e. 1.15 straight time pay) for every 24 hours on-call. The Township shall select employees to be on-call from a voluntary rotation list. If no one volunteers to be on the voluntary rotation list, then the Township has the right to designate any qualified employee it sees fit to be on-call. Employees who are on-call must respond to Township phone calls and must be readily accessible for work if needed. The employee on-call must be no more than one-hour away from the nearest Township border."

13. Operator Licenses.

Replace the Licenses and Wage section with the classifications as described below. This proposal is distinct from the wage proposal as it relates only to licenses.

~~**Effective July 1, 2018: 2% Increase**~~

~~Job Description~~	~~Pay Grade~~	~~New Hire Rate~~	~~1 Year~~
~~Laborer~~	~~50~~	~~$23.34~~	~~$25.66~~

Attachment 4a

~~DPW Light Equipment Operator~~	~~51~~	~~$24.35~~	~~$26.68~~
~~DPW Light Equipment Operator (Backhoe Qualified)~~	~~52~~	~~$24.72~~	~~$27.12~~
~~DPW Light Equipment Operator (With Considerable Mechanical Experience and Welding Expertise)~~	~~53~~	~~$25.07~~	~~$27.51~~
~~Maintenance (Water, Sewer, Pump Station)~~	~~53~~	~~$25.07~~	~~$27.51~~
~~Plant Operator – No License (In Training)~~	~~54~~	~~$25.53~~	~~$27.98~~
~~Plant Operator – One (1) License~~	~~55~~	~~$25.86~~	~~$28.45~~
~~Plant Operator – Two (2) Licenses~~	~~56~~	~~$26.29~~	~~$28.93~~
~~Plant Operator – Three (3) Licenses~~	~~57~~	~~$26.68~~	~~$29.36~~
~~Plant Operator – Four (4) Licenses~~	~~58~~	~~$27.12~~	~~$29.87~~
~~Plant Operator – Five (5) Licenses~~	~~59~~	~~$27.56~~	~~$30.35~~

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~~Rates subject to correction for mathematical errors.~~

~~D.P.W. Operators obtaining an S-4 License Water Transmission Distribution License shall receive ten cents ($.10) per hour additional and twenty cents ($.20) per hour additional for an S-3 License.~~

~~Wastewater Treatment Plant Operators shall receive wages for any licenses through and including a "B" License. Water Treatment Plant Operators shall receive wages for any licenses through and including an "F-2" license.~~

~~Both Water and Sewer Plant Operators can obtain and be paid for up to three (3) licenses for their own plant. Employees hired prior to June 30, 2005, and currently holding up to five (5) licenses, will continue to be paid at Grade 58 for four (4) licenses, and Grade 59 for five (5) licenses. No new Water or Sewer Plant employee can be paid for more than three (3) licenses. Employees hired before June 30, 2005, may obtain and be paid for additional licenses obtained that apply to the Department in which they are currently employed (up to a maximum of five [5] total licenses)~~

PROPOSED (NO RATE CHANGES)

New Hire Rate:

POSITION	NEW HIRE BASE RATE	+ F4 OR S4, D	+ F3 OR S3, C	+ F2 OR S2, B	+ F1 OR S1, A
LABORER	23.34	23.44	23.64	N/A	N/A
DPW EQUIPMENT OPERATOR LEVEL I	24.35	24.45	24.65	N/A	N/A
DPW EQUIPMENT OPERATOR LEVEL II	24.72	24.82	25.02	N/A	N/A
DPW EQUIPMENT OPERATOR LEVEL III	25.07	25.17	25.37	25.75	26.14
PLANT OPERATOR	25.53	25.86	26.29	26.68	N/A

After One Year Rate:

POSITION	>ONE YEAR BASE RATE	+ F4 OR S4, D	+ F3 OR S3, C	+ F2 OR S2, B	+ F1 OR S1, A

LABORER	25.66	25.76	25.96	N/A	N/A
DPW EQUIPMENT OPERATOR LEVEL I	26.68	26.78	26.98	N/A	N/A
DPW EQUIPMENT OPERATOR LEVEL II	27.12	27.22	27.42	N/A	N/A
DPW EQUIPMENT OPERATOR LEVEL III	27.51	27.61	27.81	28.23	28.65
PLANT OPERATOR	27.98	28.45	28.93	29.36	29.87

14. **Status quo on the Remaining, Unmodified Provisions.** The parties agree that the status quo shall prevail for the remaining, unmodified provisions of the collective bargaining agreement which will have full force and effect.

The parties understand that the Tentative Agreement is subject to ratification of both parties. Following ratification, the parties will in good faith and in a reasonable period incorporate the terms of the Tentative Agreement into a complete, written collective bargaining agreement. Both parties shall have the opportunity to review and correct the draft for errors and omissions.

IN WITNESS WHEREOF the parties have executed this Tentative Agreement on the day and year first above written.

Charter Township of East China

Larry Simons

Larry Simons
Township Supervisor

Angelo Patsalis

Angelo Patsalis
Township Trustee

International Union of Operating Engineers, Local 324

Mike Schneider

Mike Schneider
Chief Steward

Brian Berg

Brian Berg
IUOE Business Representative

Charter Township of East China
&
Operating Engineers, Local 324

Supervisors

February 26, 2020

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   Effective upon Ratification: $250 Lump Sum Bonus
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4. **Retirement.**

A. ***Defined Contribution Plan for New Hires.***

Close Defined Benefit Retirement Plan to new hires and establish Defined Contribution Retirement Plan for new hires as set forth below.

Employees hired on or after the ratification of the 2019-2022 collective bargaining agreement:

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Employees promoted (not hired) from the non-supervisory bargaining unit to the supervisory bargaining unit after the ratification of the 2019-2022 collective bargaining agreement will carry over the same pension program he or she had in the non-supervisory bargaining unit.

B. ***COLA.***

Bridge COLA benefits effective upon date of ratification for employees hired on or before ratification.

Amend ARTICLE XXIV Section II as follows:

The Township will contribute to the Michigan Municipal Employees Retirement System according to the provisions of the B-4 Plan with an E-2 rider. The Parties adopt the Bridge Benefit Program, as generally described in the MERS Plan Document, Section 26. Effective upon the first day of the first month after the ratification of the 2016-2019 collective bargaining agreement, the pension multiplier shall be reduced to 2.25% (B-3). The bridged benefit amount is the combined sum of

(1) the accrued benefit amount based on the employee's credited service under the 2.5% (B-4) multiplier as of the effective date of the change in coverage; and (2) the benefit amount that accrues for the employee's credited service under the 2.25% (B-3) multiplier acquired after the effective date of the change in coverage. In calculating the accrued benefit amount based on the employee's credited service under the 2.5% (B-4) multiplier, the final average compensation is frozen, and to be determined as of the effective date of the change in coverage using the highest 60 consecutive months of earnings, divided by 5. In calculating the accrued benefit amount based on the employee's credited service under the 2.25% (B-3) multiplier, the final average compensation is to be determined for all credited service as of the date of termination of employment using the highest 60 consecutive months of earnings, divided by 5. The Township will deduct from the employees' pay the employee's portion of the contribution rate under the prior Plan. The Employer will also fully fund the F-55 rider for employees with twenty-five (25) years of service.

<u>Effective May 1, 2020, the parties adopt a Bridged COLA Program (as generally described in Section 26 of the "MERS Plan Document Effective June 27, 2019") as specifically described below:</u>

<u>Effective May 1, 2020, post-retirement benefits for affected members for each year shall be the sum of the following:</u>

(i) <u>The additional retirement allowance representing the COLA amount equal to a maximum of 2.5% multiplied by the amount of retirement allowance accrued as of April 30, 2020, using a frozen final average compensation (which shall mean that the final average compensation used for the portion of the retirement benefit is that determined as of April 30, 2020), including all adjustments for early retirement and form of payment, with no prior adjustments under the provisions of COLA included (i.e. non-compounding); and</u>

(ii) <u>The retirement benefit accrued on or after May 1, 2020, which shall not be subject to any COLA Benefit Program or COLA adjustment (including, but not limited to, the E-2 rider), using a termination final average compensation, such that the final average compensation used for the portion of the retirement benefit is that determined upon termination of employment.</u>

C. ***Employee Contributions.***

i. Increase Employee Contribution to 5.5% effective upon ratification.

ii. Effective July 1, 2020, Employee Contribution increases to 6.0%.

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Notwithstanding the fact that the Township makes similar promises in other collective bargaining agreements, the maximum amount the Township is bound to pay is $225,000 over the course of the three payments listed above. (In other words, the promises made to the Supervisors, Operators, and Clerical employees are combined. $225,000 will be paid; and not $675,000).

E. ***Section 457 Deferred Compensation Plan for Employees hired before Ratification.***

Employees hired before the ratification of the 2019-2022 collective bargaining agreement:

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6. **Healthcare Rate.**

Effective 07/01/2019 – $1,143.80/Month
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The employer shall make a flat monthly contribution payment for each employee working under the terms of this Agreement. Payment shall be due no later than the last day of the month, two months prior to the month for which coverage applies. (In most cases, 31 days prior to the coverage month).

The monthly contribution payment must be sent to: Operating Engineers' Local 324 Health Care Plan ~~500 Hulet Drive, Bloomfield Township, MI 48302~~ 550 Hulet Drive, Suite 104, Bloomfield Township, MI, 48302.

Should an employee, on whose behalf payment is made, leave the company for any reason before the first day of the next month, the employer shall notify the Health Care Plan Office within three (3) business days (unless there are not three (3) business days left in the month, then the employer must notify the Health Care Plan Office immediately). The employer would then receive a full refund of the payment, and coverage for the employee would be terminated.

The employer shall report and pay the monthly contribution payment for all new hires or employees recalled from layoff within three (3) business days. Coverage will commence on the first day of the month as long as the employer has paid the required monthly contribution.

The Trust Agreement establishing such Plan. Together with any insurance or related agreements approved by the majority of the Trustees, shall become part of this Agreement by reference. The Company shall be bound by the Trust Agreement and any amendments, rules, regulations and other requirements relating to the Health Care Plan, not in conflict with the terms of this Collective Bargaining Agreement, established by the Trustees of such Plan.

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Effective the first month following ratification:	$1,052.80
July 1, 2017–June 30, 2018:	$1,082.20
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8. Sick Leave Increments.

Rather than "increments" use "minimums." The minimum time an employee may use as sick time is one-hour.

9. **Work Jacket.** Effective within a reasonable time after ratification, the Township shall provide a work jacket to all employees. The jacket will be replaced with the approval of the Township Manager.

10. **On Call.** <u>If a supervisor is on a leave of absence or vacation, the supervisor must inform the Township Manager as soon as possible which qualified non-supervisory employee will be "on call." Under special circumstances, a supervisor may request that the Township Manager authorize a non-supervisory employee (selected by the terms of the non-supervisory collective bargaining agreement)to be "on-call" during the supervisor's scheduled day off. The Township Manager has the sole discretion to grant or deny the request.</u>

11. **Status quo on the Remaining, Unmodified Provisions.** The parties agree that the status quo shall prevail for the remaining, unmodified provisions of the collective bargaining agreement which will have full force and effect.

The parties understand that the Tentative Agreement is subject to ratification of both parties. Following ratification, the parties will in good faith and in a reasonable period incorporate the terms of the Tentative Agreement into a complete, written collective bargaining agreement. Both parties shall have the opportunity to review and correct the draft for errors and omissions.

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Charter Township of East China

Larry Simons

Larry Simons
Township Supervisor

Angelo Patsalis
Township Trustee

International Union of Operating Engineers, Local 324

Dwayne Loper
Chief Steward

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Brian Berg
IUOE Business Representative

Charter Township of East China
&
Operating Engineers, Local 324

Clerical

February 26, 2020

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2. **Drug Testing Language**. Clean up so all three contracts match. (Housekeeping).

3. **Wages.**

   (The wage increases will be added to the amounts listed in withdrawn proposal 10.)

Effective upon ratification:	**2.5%** wage increase
Effective July 1, 2020:	**2%** wage increase
Effective July 1, 2021:	**2.5%** wage increase

   Effective upon ratification: $250 Lump Sum Bonus
   *Bonus is not included in FAC for pension purposes.

   On August 21, members of the bargaining team received overtime for union negotiations, which was contrary to the agreement of the parties. Members of the bargaining team shall have the amount of wages already paid to them deducted from the lump sum check. (Koryn Garwood 1.75 hours deducted).

4. Retirement.

A. *Defined Contribution Plan for New Hires.*

Close Defined Benefit Retirement Plan to new hires and establish Defined Contribution Retirement Plan for new hires as set forth below.

Employees hired on or after the ratification of the 2019-2022 collective bargaining agreement:

The Township will establish a MERS 401(a) Defined Contribution plan and a MERS 457 Deferred Compensation Plan for employees who were hired on or after the ratification of the 2019-2022 collective bargaining agreement. The Township shall contribute an amount equal to 6% of the employee's base wages per pay period into the 401(a) defined contribution plan for the employee. The Employee shall contribute 4% of his or her base wages per pay period into the 401(a) Plan. The Township will report and transfer all contributions to MERS on no less than a monthly basis. Employees shall have the ability to contribute as much as they wish up to the IRS limit to the 457 Plan. For each payroll period in which the employee contributes into the 457 Plan, the Township will match dollar-for-dollar to the Employee's 401(a) up to the first 1% of the employee's base wages of that pay period. In no event will the Township's matching contribution made on behalf of an employee exceed 1% of the employee's base wages per pay period. The Township shall not contribute more than 7% of employee's base wages for its total contributions. Employees shall not be vested in the Township's contributions until they have worked 36 complete months. This section is subject to state and federal tax law and changes in IRS rules and regulations.

B. *COLA.*

Bridge COLA benefits effective upon date of ratification for employees hired on or before ratification.

ARTICLE XXIV. RETIREMENT

The Township will contribute to the Michigan Municipal Employees Retirement System according to the provisions of the B-4 Plan with an E-2 rider. The Parties adopt the Bridge Benefit Program, as generally described in the MERS Plan Document, Section 26. Effective upon the first day of the first month after the ratification of the 2017 collective bargaining agreement, the pension multiplier shall be reduced to 2.25% (B-3). The bridged benefit amount is the combined sum of (1) the accrued benefit amount based on the employee's credited service under the 2.5% (B-4) multiplier as of the effective date of the change in coverage; and (2) the benefit amount that accrues for the employee's credited service under the 2.25% (B-3) multiplier acquired after the effective date of the change in coverage. In calculating the accrued benefit amount based on the employee's credited service under the 2.5% (B-4) multiplier, the final average compensation is frozen, and to be determined as of the effective date of the change in coverage using the highest 60 consecutive months of earnings, divided by 5. In calculating the accrued benefit amount based on the employee's credited service under the 2.25% (B-3) multiplier, the final average compensation is to be determined for all credited service as of the date of termination of employment using the highest 60 consecutive months of earnings, divided by 5. The Township will deduct from the employees' pay the employee's portion of the contribution rate. The employee contribution rate shall increase from 4.70% to 5.5% on June 30, 2019. The Employer will also fully fund the F-55 rider for employees with twenty-five (25) years of service.

Effective May 1, 2020, the parties adopt a Bridged COLA Program (as generally described in Section 26 of the "MERS Plan Document Effective June 27, 2019") as specifically described below:

> Effective May 1, 2020, post-retirement benefits for affected members for each year shall be the sum of the following:
>
> (i) The additional retirement allowance representing the COLA amount equal to a maximum of 2.5% multiplied by the amount of retirement allowance accrued as of April 30, 2020, using a frozen final average compensation (which shall mean that the final average compensation used for the portion of the retirement benefit is that determined as of April 30, 2020), including all adjustments for early retirement and form of payment, with no prior adjustments under the provisions of COLA included (i.e. non-compounding); and
>
> (ii) The retirement benefit accrued on or after May 1, 2020, which shall not be subject to any COLA Benefit Program or COLA adjustment (including, but not limited to, the E-2 rider), using a termination final average compensation, such that the final average compensation used for the portion of the retirement benefit is that determined upon termination of employment.

C. *Employee Contributions.*

- i. Effective upon ratification, Employee Contribution maintains 5.5%.
- ii. Effective July 1, 2020, Employee Contribution increases to 6.0%.
- iii. Effective July 1, 2021, Employee contribution increases to 6.2%.

D. *Voluntary Employer Contribution to Pension Plan.*

Effective a reasonable period of time after ratification, the Township shall make a one-time, extra contribution of $75,000 to pay down unfunded accrued liability.

Effective on or before December 31, 2020, the Township shall make a one-time, extra contribution of $75,000 to pay down the unfunded accrued liability.

Effective on or before December 31, 2021, the Township shall make a one-time, extra contribution of $75,000 to pay down the unfunded accrued liability.

Notwithstanding the fact that the Township makes similar promises in other collective bargaining agreements, the maximum amount the Township is bound to pay is $225,000 over the course of the three payments listed above. (In other words, the promises made to the Supervisors, Operators, and Clerical employees are combined. $225,000 will be paid; and not $675,000).

E. ***Section 457 Deferred Compensation Plan for Employees hired before Ratification.***

Employees hired before the ratification of the 2019-2022 collective bargaining agreement:

The Township shall establish a 457 Deferred Compensation plan provided by the Municipal Employees Retirement System (MERS) for employees hired before the ratification of the 2019-2022 collective bargaining agreement. Employees who are hired after the ratification of the 2019-2022 CBA are not eligible for the 457 Plan under this section. All eligible employees shall have the ability to contribute as much as they wish up to the IRS limit to the 457 Plan. The employer match program shall become effective the first full pay period following May 1, 2020. The parties understand that the Township shall not match on any contribution made before the first full pay period following May 1, 2020. For each payroll period in which the employee contributes into the 457 Plan, the Township will match dollar-for-dollar up to the first 2% of the employee's base wages of that pay period. In no event will the Township's matching contributions made on behalf of an employee exceed 2% of the employee's base wages per pay period. The Township will report and transfer all contributions to MERS on no less than a monthly basis. The Township's contribution to an employee's 457 shall not be included in final average compensation for pension purposes. This section is subject to state and federal tax law and changes in IRS rules and regulations.

5. **Pay Date.** Change payday from Tuesday to Wednesday.

6. **Healthcare Rate.**

Effective 07/01/2019 – $1,143.80/Month
Effective 07/01/2020 – $1,167.60/Month
Effective 07/01/2021 – TBD

7. **Healthcare Reimbursement.**

(b) The Township shall provide hospitalization insurance for all employees, their dependents, and the family continuation riders pursuant to the IUOE Local 324 Health Care Plan. Office visit co-pays, prescription co-pays and emergency room co-pay shall be the responsibility of the employee. The Township shall reimburse all other out-of-pocket cost excluding co-pays, as set forth in paragraph (c) below. Retirees retiring prior to June 30, 2001, upon agreement by the individual to pay monthly premium, shall be enrolled in the Union's Plan.

The Township shall also provide vision insurance as provided to nonsupervisory union employees.

The employer shall make a flat monthly contribution payment for each employee working under the terms of this Agreement. Payment shall be due no later than the last day of the month, two months prior to the month for which coverage applies. (In most cases, 31 days prior to the coverage month).

The monthly contribution payment must be sent to: Operating Engineers' Local 324 Health Care Plan ~~500 Hulet Drive, Bloomfield Township, MI 48302.~~ 550 Hulet Drive, Suite 104 Bloomfield Township, MI, 48302.

Should an employee, on whose behalf payment is made, leave the company for any reason before the first day of the next month, the employer shall notify the Health Care Plan Office within three (3) business days (unless there are not three (3) business days left in the month, then the employer must notify the Health Care Plan Office immediately). The employer would then receive a full refund of the payment, and coverage for the employee would be terminated.

The employer shall report and pay the monthly contribution payment for all new hires or employees recalled from layoff within three (3) business days. Coverage will commence on the first day of the month as long as the employer has paid the required monthly contribution.

The Trust Agreement establishing such Plan. Together with any insurance or related agreements approved by the majority of the Trustees, shall become part of this Agreement by reference. The Company shall be bound by the Trust Agreement and any amendments, rules, regulations and other requirements relating to the Health Care Plan, not in conflict with the terms of this Collective Bargaining Agreement, established by the Trustees of such Plan.

Full monthly contribution payments must be made regardless of the amount of time the employee works. Partial payments or prorated payments are not permitted.

The payment rate schedule is as follows:
$1,052.80 (monthly), effective upon implementation (monthly)
$1,082.20 (monthly), effective 07/01/17
$1,115.80 (monthly), effective 07/01/18

The above aggregate premium rates plus employer reimbursements shall be utilized for purposes of employee premium liability calculation pursuant to Public Act 152 of 2011. The hard caps as set forth under PA 152 are to be utilized for the duration of the contract.

~~(c) The Township shall reimburse employees for all deductibles and co-insurance associated with the plan on an annual basis.~~

Employees will be eligible for reimbursement for all deductibles and co-insurance, subject to PA 152, associated with the plan on an annual basis under the following conditions. The Township may in its sole discretion, engage a third-party administrator to administer the reimbursement program. Eligible employees must submit proof of receipt of payment to said third-party administrator or Township designee. Employees who do not follow the procedures established by the Township or third-party administrator forfeit their right to reimbursement. If the total amount of reimbursement employees requested is greater amount than the total amount of reimbursement available under the PA 152 hard-cap, then each employee who is eligible for reimbursement will receive a prorated share.

8. Sick Leave Increments.

Rather than "increments" use "minimums." The minimum time an employee may use as sick time is one-hour.

9. Add Hours of Work Article with and Lunch Break.

Clerical employees shall work 7.5 hours per day. Employees will be paid for 8 hours per day. Employees will receive one hour lunch. One half-hour will be paid, and one half-hour will be unpaid. The additional half-hour lunch is in exchange of removing the two 15-minute breaks. (Subject to change if Township moves to 4-10 hour shift for Township Offices.) In the event the Township decides to move to a 4/10 hour schedule, it will first bargain with the Union regarding the lunch period and breaks.

10. Job Classifications and rates.

Status quo on rates.
Bookkeeper/Accounts Payable: $21.57
Secretary:$20.00
Utility Billing/Accounts Receivable:$21.29

11. Deputies.

The Township Supervisor, Treasurer, and Clerk (hereinafter "public official") has the sole and exclusive right to select his or her deputy as permitted by law. In the event the public official selects a bargaining unit member to act as a deputy, then such bargaining unit member shall receive a $50 stipend per month for every month while deputized. Public officials retain the right to appoint deputies who are not bargaining unit members. Such deputized non-bargaining unit employees are entitled to perform bargaining unit work. The employment of deputies who are not in the bargaining unit shall not be the cause of layoff of bargaining unit employees.

12. **Status quo on the Remaining, Unmodified Provisions.** The parties agree that the status quo shall prevail for the remaining, unmodified provisions of the collective bargaining agreement which will have full force and effect.

The parties understand that the Tentative Agreement is subject to ratification of both parties. Following ratification, the parties will in good faith and in a reasonable period incorporate the terms of the Tentative Agreement into a complete, written collective bargaining agreement. Both parties shall have the opportunity to review and correct the draft for errors and omissions.

IN WITNESS WHEREOF the parties have executed this Tentative Agreement on the day and year first above written.

Charter Township of East China	**International Union of Operating Engineers, Local 324**
Larry Simons	Koryn Garwood
Larry Simons Township Supervisor	Koryn Garwood Chief Steward
Angelo Patsalis	Brian Berg
Angelo Patsalis Township Trustee	Brian Berg IUOE Business Representative

Municipality Funding Level Calculator

Based on the 12/31/2018 Actuarial Valuation

Municipality # (4 digits)	Municipality Name
7701	**East China Chtr Twp (SCRWSA)**

8,887,284	**Total 12/31/2018 Actuarial Accrued Liability**
5,434,627	**12/31/2018 Valuation Assets**
3,452,657	**Unfunded (Overfunded) Actuarial Accrued Liabilities**
61.2%	**Funding Percentage as of 12/31/2018**
150,000	**Proposed Lump Sum Amount**

Recalculated Expected 12/31/18 Funded Ratio if Payment Contributed by:

63.00%	**December 31, 2018**
63.00%	**January 31, 2019**
63.00%	**February 28, 2019**
63.00%	**March 31, 2019**
63.00%	**April 30, 2019**
62.90%	**May 31, 2019**
62.90%	**June 30, 2019**
62.90%	**July 31, 2019**
62.90%	**August 31, 2019**
62.90%	**September 30, 2019**
62.90%	**October 31, 2019**
62.90%	**November 30, 2019**
62.90%	**December 31, 2019**
62.90%	**January 31, 2020**
62.80%	**February 28, 2020**
62.80%	**March 31, 2020**
62.80%	**April 30, 2020**
62.80%	**May 31, 2020**

Important Notes:

The lump sums are based on the data and benefit provisions as found in the December 31, 2018 actuarial valuation. If benefit provisions have changed, actual funded ratios may be materially different.

The funded ratios above are based on the current conversion between actuarial value of assets and market value assets. Because AVA is greater than MVA, the lump sum improves the funded ratio better than what would be implied based on market value funding.

The MERS Plan Document requires that the requesting division and participating municipality or court be not less than 100% funded at the time a supplemental actuarial valuation is requested; and the MERS Plan Document requires that the funded level be not less than 100% after adoption of the proposed benefit. The above calculations reflect the assets required to achieve 100% funding by the date specified. The governing body may make a cash contribution, or transfer employer assets from a different division, or both, to meet the 100% requirement. The calculations are estimates only, based on the most recent December 31 Annual Actuarial Valuation, and are provided only for purposes of Plan Document compliance. The actual funded percentage may be different than 100%. No estimates will be provided after Dec 31 until the next Annual Actuarial Valuation has been issued by the Actuary.

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ST. CLAIR RIVER SEWER AND WATER AUTHORITY
A Component Unit of the Charter Township of East China
St. Clair County, Michigan

DRAFT

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018

NOTE 10 - EMPLOYEE PENSION PLAN:

Plan Description -

Full-time employees assigned to the Authority are covered under the Charter Township of East China's Retirement Plan (the "Plan"). The Plan is part of the Municipal Employees' Retirement System (MERS), an agent, multiple employer state-wide, public employee defined benefit pension plan created under Public Act 135 of 1945, and now operates under Public Act 220 of 1996, and the MERS Plan Document as revised. MERS was established to provide retirement, survivor and disability benefits on a voluntary basis to the State of Michigan's local government employees. Act No. 427 of the Public Acts of 1984, as amended, establishes and amends the benefits provisions of the participants in MERS. The Municipal Employees' Retirement System of Michigan issues a publicly available financial report that includes financial statements and required supplementary information for MERS. That report may be obtained by writing to the Municipal Employees Retirement System of Michigan, 1134 Municipal Way, Lansing, Michigan 48917, or online at www.mersofmich.com. Contributions are recognized as revenue when due and payable. Benefits and refunds are recognized when due and are payable in accordance with the Plan. Plan investments are reported at fair value or estimated fair value.

Benefits Provided -

Retirement benefits are calculated as 2.50% multiplied by the employees' final average compensation based on the last five years' salary, multiplied by the years worked. Effective February 1, 2018, a 2.25% multiplier will be used to calculate future retirement benefits. The maximum benefit is 80.00% of final average compensation. Employees are vested after 10 years of service. Normal retirement age is 60 or at 55 with 25 years of service, with early retirement with reduced benefits at age 50, with 25 years of service, or at age 55 with 15 years of service. Employees are eligible for non-duty disability benefits after 10 years of service and for duty-related disability benefits upon hire. An employee who leaves service may withdraw his or her contributions, plus accumulated interest.

Contributions -

Participants of the Plan contribute 4.70% of compensation, with the remaining amount contributed by the Authority based on actuarially determined amounts. The Authority pays the actuarially determined amount, which for the year ended December 31, 2019 was 32.42%-33.29% of covered payroll.

*

Proportionate Share Net Pension Liability -

The net pension liability of the Authority has been measured as of December 31, 2019 and 2018 and has been determined on the same basis as used by the pension plan. The Authority's proportionate share of the net pension liability at December 31, 2019 and 2018 is 64.12% and 64.46% of the Plan's liability, compared to 63.66% at December 31, 2017, and is composed of the following:

	2019	2018
Total pension liability	$ 5,628,335	$ 5,723,287
Fiduciary net position	3,395,940	3,198,404
Net pension liability	$ 2,232,395	$ 2,524,883
Fiduciary net position as a percentage of the total pension liability	60.34%	55.88%