



AGENDA

CHARTER TOWNSHIP OF MERIDIAN TOWNSHIP BOARD – VIRTUAL MEETING

June 15, 2021 6:00 PM

1. CALL MEETING TO ORDER
 2. PLEDGE OF ALLEGIANCE/INTRODUCTIONS
 3. ROLL CALL
 4. PRESENTATION
 - A. MERS, Retiree Health Care and Township Pension Fund 2020 Valuation Reports
 5. CITIZENS ADDRESS AGENDA ITEMS AND NON-AGENDA ITEMS
 6. TOWNSHIP MANAGER REPORT
 7. BOARD MEMBER REPORTS OF ACTIVITIES AND ANNOUNCEMENTS
 8. APPROVAL OF AGENDA
 9. CONSENT AGENDA
 - A. Communications
 - B. Minutes
 - (1) May 18, 2021 Virtual Regular Board Meeting
 - (2) June 1, 2021 Virtual Regular Board Meeting
 - C. Bills
 - D. Pathway Master Plan 5-year Update- Set Public Hearing
 - E. Set a Date for Board Study Session-June 30, 2021
 - F. Change Regular Board Meeting Date of August 5, 2021
 - G. Charitable Gaming License-Ebersole Foundation
 10. QUESTIONS FOR THE ATTORNEY
 11. HEARINGS (CANARY)
 12. ACTION ITEMS (PINK)
 - A. Rezoning #21020 (Martin Investment Properties, Inc.) rezone approximately six acres on the north side of Jolly Road and east of Kansas Road from I (Industrial) and RA (Single Family-Medium Density) to PO (Professional and Office) –**Final Adoption**
 - B. Resolution in Recognition and Celebration of Juneteenth
 - C. Resolution for a Traffic Speed Study
 - D. Lake Lansing Advisory Committee Appointment
 - E. Review of Meridian Township Investment Policy
 - F. Amtrak Corridor Development Program Resolution
 13. BOARD DISCUSSION ITEMS (ORCHID)
 - A. Rezoning #21040 (Okemos IL-AL Investors, LLC) rezone approximately 9.07 acres located at 1510 and 1560 Grand River Avenue from C-2 (Commercial) to RA (Single Family-Medium Density)
 - B. Downtown Development Authority Loan Forgiveness
 - C. Citizen’s Survey Draft
 14. COMMENTS FROM THE PUBLIC
 15. OTHER MATTERS AND BOARD MEMBER COMMENTS
 16. ADJOURNMENT
-

All comments limited to 3 minutes, unless prior approval for additional time for good cause is obtained from the Supervisor.
Appointment of Supervisor Pro Tem and/ or Temporary Clerk if necessary.

Individuals with disabilities requiring auxiliary aids or services should contact the Meridian Township Board by contacting:
Township Manager Frank L. Walsh, 5151 Marsh Road, Okemos, MI 48864 or 517.853.4258 - Ten Day Notice is Required.
Meeting Location: 5151 Marsh Road, Okemos, MI 48864 Township Hall (VIRTUAL MEETING)

Providing a safe and welcoming, sustainable, prime community.





MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN
ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2020
MERIDIAN CHTR TWP (3315)

MERIDIAN TOWNSHIP FUNDING LEVEL HISTORY

Valuation Date December 31	Percent Funded
1999	54%
2013	60%
2014	59%
2015	57%
2016	58%
2017	61%
2018	63%
2019	62%
2020	64%

2020 THE HIGHEST % OF FUNDED RATIO SINCE 1999

* Reflects assets from Surplus divisions, if any.

	12/31/1999 *	12/31/2020
Funded Ratio	54%	64%

MONTHLY CONTRIBUTIONS

2021=\$250,300

2022=\$271,613

	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:	12/31/2020	12/31/2020	12/31/2019	12/31/2019	12/31/2020	12/31/2020	12/31/2019	12/31/2019
Fiscal Year Beginning:	January 1, 2022	January 1, 2022	January 1, 2021	January 1, 2021	January 1, 2022	January 1, 2022	January 1, 2021	January 1, 2021
Division								
01 - DPW	-	-	-	-	\$ 12,832	\$ 14,140	\$ 11,965	\$ 13,093
02 - Police Patrol	-	-	26.74%	28.95%	38,551	44,380	40,027	43,330
05 - Firefighters	-	-	-	-	124,049	136,133	118,361	125,690
10 - Admin Professional	-	-	-	-	7,907	9,893	8,560	9,370
11 - Teamsters	-	-	-	-	1,516	1,882	1,267	1,516
12 - Admin Prof on/aft 1/1/17	3.78%	3.88%	2.40%	2.43%	1,055	1,082	481	487
13 - DPW on/aft 01/1/17	3.40%	3.50%	3.15%	3.19%	1,248	1,284	789	798
20 - Police Command	-	-	72.16%	77.29%	55,625	61,220	51,765	55,443
21 - Command/Patrol on/aft 1/1/20	1.35%	1.35%	-	-	316	316	0	0
50 - Fire on/aft 1/1/17	2.76%	3.24%	2.24%	2.18%	1,094	1,283	588	573
Total Municipality - Estimated Monthly Contribution					\$ 244,193	\$ 271,613	\$ 233,803	\$ 250,300
Total Municipality - Estimated Annual Contribution					\$ 2,930,316	\$ 3,259,356	\$ 2,805,636	\$ 3,003,600

100% FUNDING IN 10 YEARS?

\$434,788 X 12 = \$5,217,456

5.35% Rate of Return

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

CAN WE RELY ON MERS 7.35 ROR? NO.

WE ARE USING THE 5.35 MODEL

12/31/2020 Valuation Results	Lower Future Annual Returns	Lower Future Annual Returns	Valuation Assumptions
Investment Return Assumption	5.35%	6.35%	7.35%
Accrued Liability	\$ 102,284,770	\$ 89,527,590	\$ 79,103,874
Valuation Assets ¹	\$ 50,849,504	\$ 50,849,504	\$ 50,849,504
Unfunded Accrued Liability	\$ 51,435,266	\$ 38,678,086	\$ 28,254,370
Funded Ratio	50%	57%	64%
Monthly Normal Cost	\$ 106,054	\$ 71,979	\$ 46,952
Monthly Amortization Payment	\$ 328,734	\$ 274,964	\$ 224,661
Total Employer Contribution²	\$ 434,788	\$ 346,943	\$ 271,613

Retiree Health Care (OPEB)

December 31, 2020

Executive Summary as of December 31, 2020

Actuarial Valuation Date	December 31, 2018
Measurement Date of the Net OPEB Liability	December 31, 2020
Employer's Fiscal Year Ending Date (Reporting Date)	December 31, 2020

Membership

Number of	
- Retirees and Beneficiaries	29
- Inactive, Nonretired Members	34
- Active Members	73
- Total	136
Covered Payroll @	NA

Net OPEB Liability

Total OPEB Liability	\$ 6,980,548
Plan Fiduciary Net Position	6,962,087
Net OPEB Liability	\$ 18,461
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	99.74 %
Net OPEB Liability as a Percentage of Covered Payroll	NA

OPEB Percent Funded

Fiscal Year	2020	2019	2018	2017
Percent Funded	99.74 %	88.58 %	54.14 %	54.60 %

OPEB Liability

<u>FY Ending December 31,</u>	<u>Total OPEB Liability</u>	<u>Plan Net Position</u>	<u>Net OPEB Liability</u>	<u>Plan Net Position as a % of Total OPEB Liability</u>	<u>Covered Payroll</u>	<u>Net OPEB Liability as a % of Covered Payroll</u>
2017	\$ 8,932,451	\$ 4,877,551	\$ 4,054,900	54.60 %	NA	NA
2018	9,214,871	4,988,733	4,226,138	54.14 %	NA	NA
2019	6,800,809	6,024,276	776,533	88.58 %	NA	NA
2020	6,980,548	6,962,087	18,461	99.74 %	NA	NA

2020 \$6,980,548 \$6,962,087 \$18,461 99.74%

OPEB Annual Contributions

Fiscal Year	Actual Contribution
2017	\$295,649
2018	\$450,136
2019	\$447,774
2020	\$447,018
2021	\$400,000
2022	\$88,841

Meridian Employee Pension Plan

December 31, 2020

Net Pension Liability



Funding Status

Actuarial Valuation Date	December 31, 2020
Measurement Date of the Net Pension Liability	December 31, 2020
Employer's Fiscal Year Ending Date (Reporting Date)	December 31, 2020

Membership

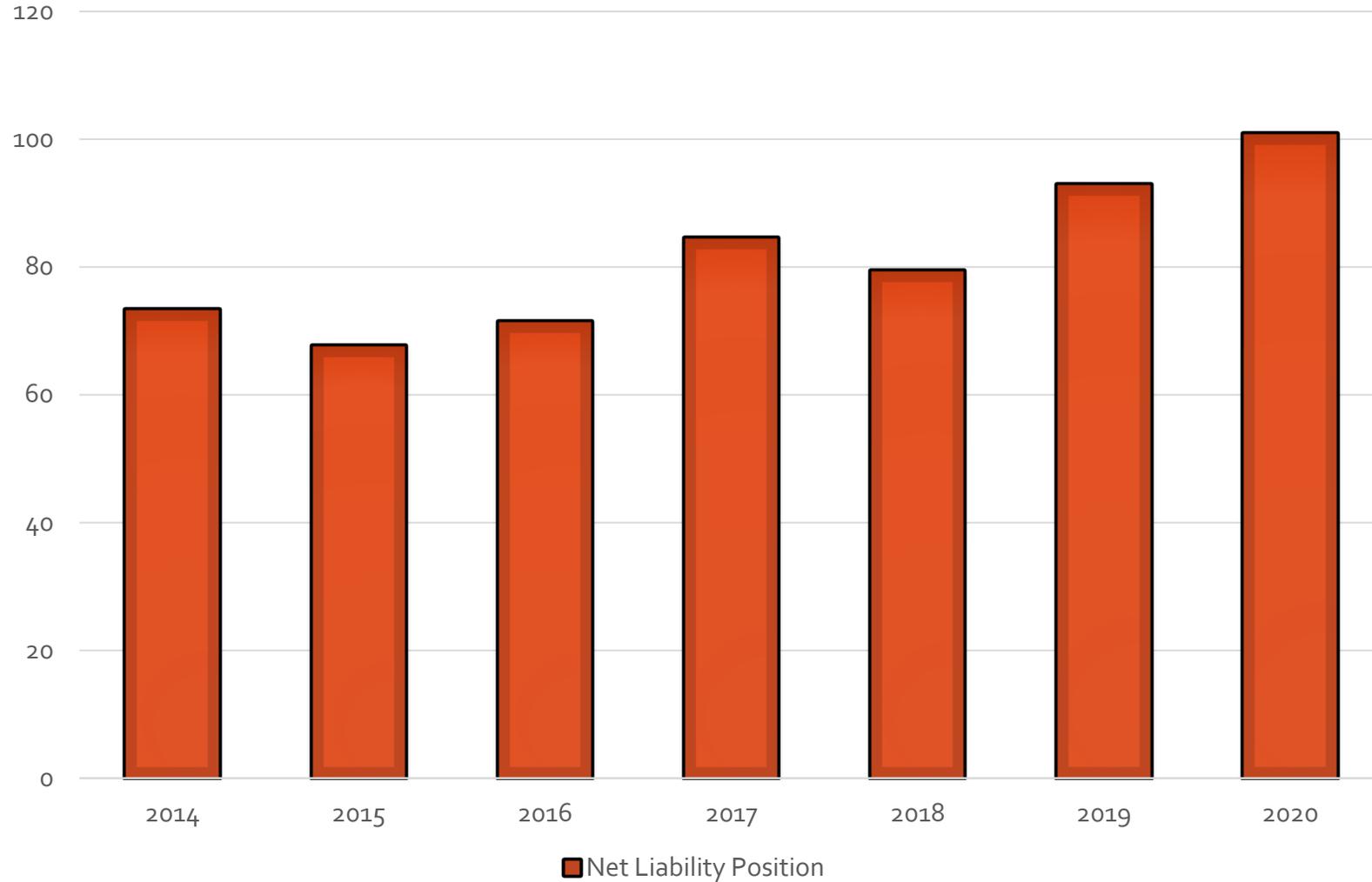
Number of	
- Retirees and Beneficiaries	44
- Inactive, Nonretired Members	15
- Active Members	1
- Total	60
Covered Payroll	\$ 112,521

Net Pension Liability

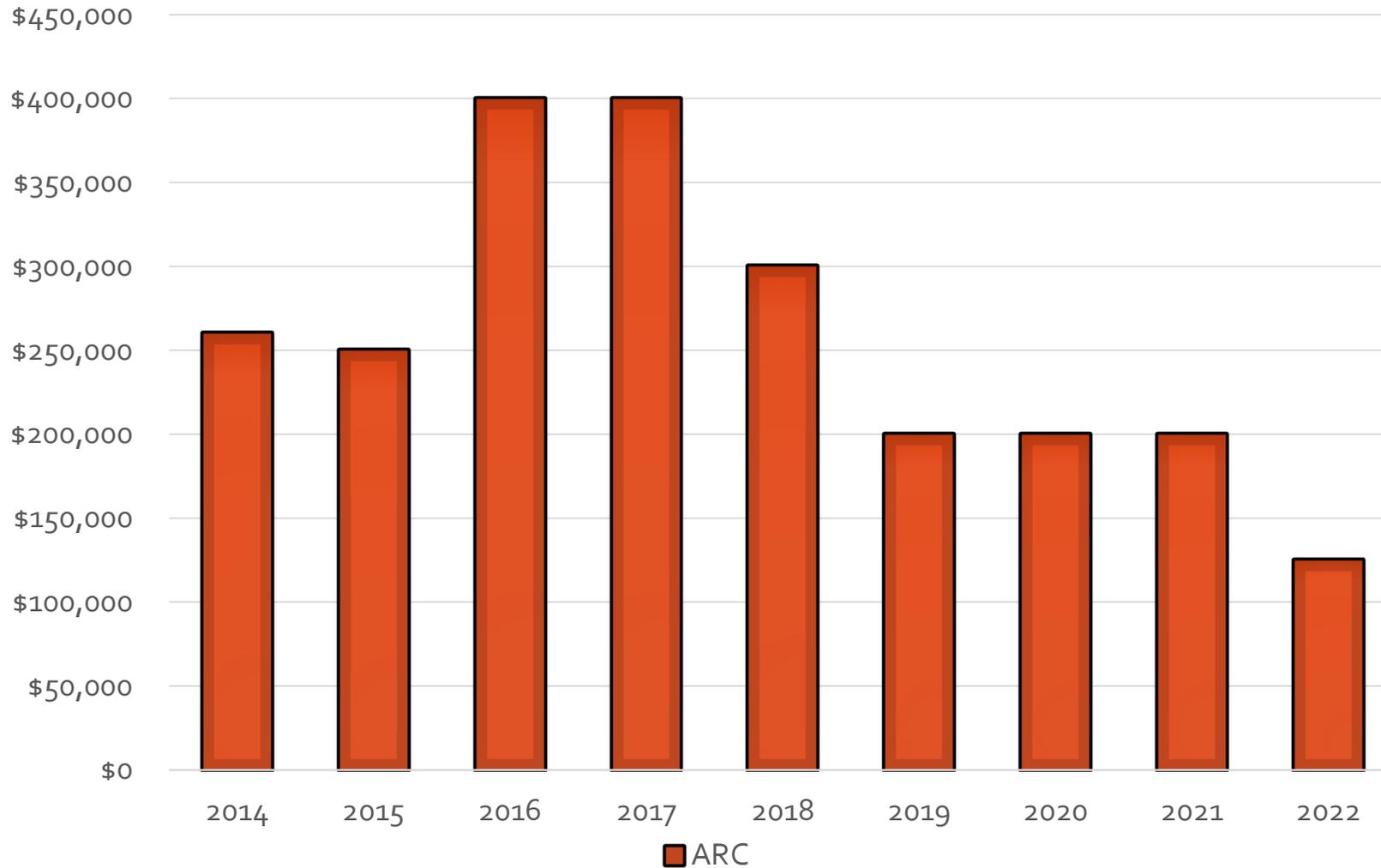
Total Pension Liability	\$ 5,138,314
Plan Fiduciary Net Position	5,182,419
Net Pension Liability	\$ (44,105)
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	
Net Pension Liability as a Percentage of Covered Payroll	(39.20)%

100.86%

Percent Funded



Annual Required Contributions (ARC)



2022 MERS Contribution

Minimum Required
7.35%

\$2,930,316

Recommendation
5.35%

\$5,217,456

\$ 2,287,140 Additional

Not Fully Funded Scenario

MERS \$5,217,456

OPEB \$400,000

Township Plan \$200,000

\$5,817,456

2022 Actual Contribution

MERS \$5,217,456

OPEB \$88,841

Township Plan \$125,000

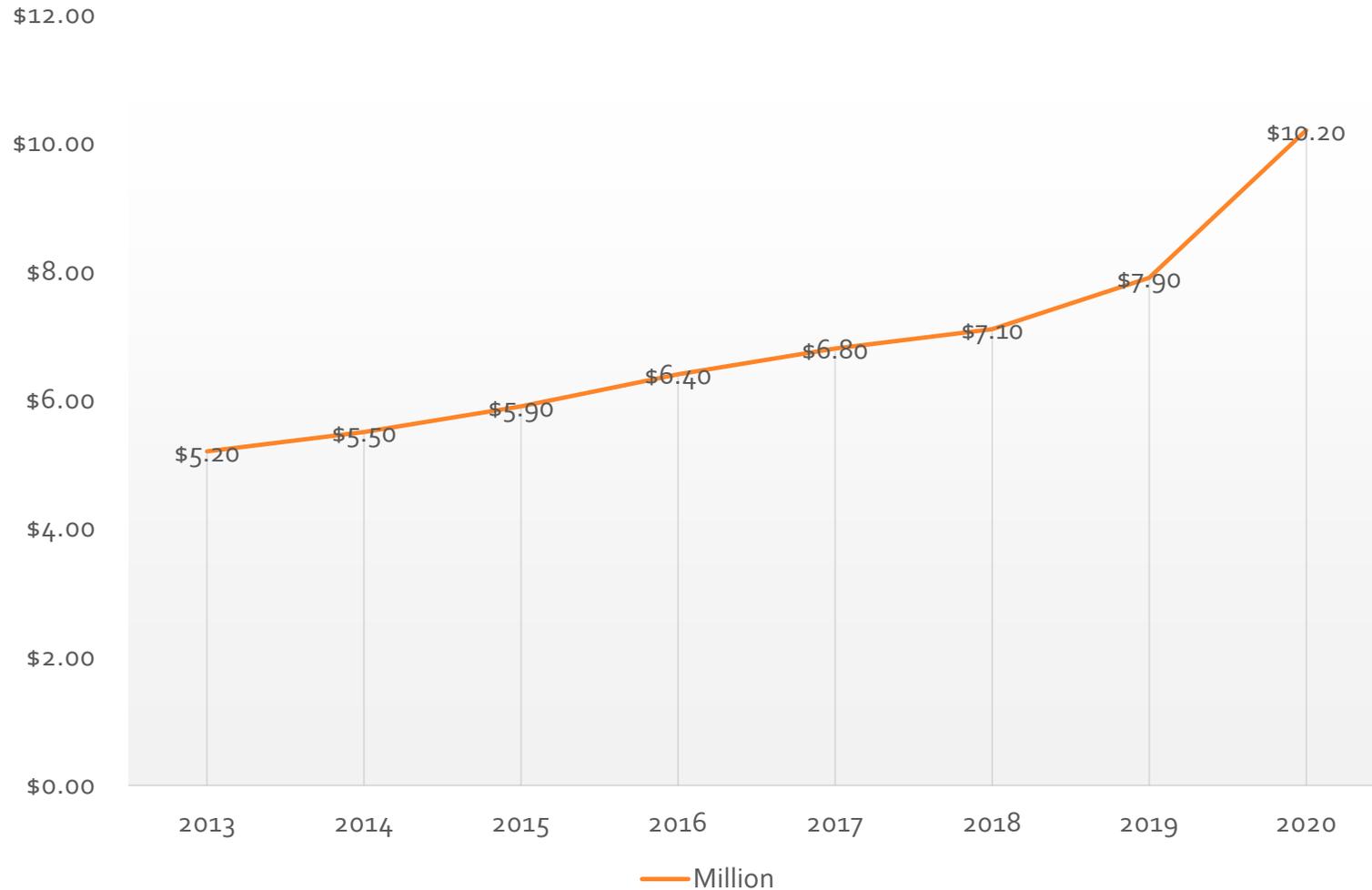
\$5,431,297

2021 vs 2022 Contributions

	Fully Funded	Not Fully Funded
2022	\$5,431,297	\$5,817,456
2021	\$5,165,744	\$5,165,744
	\$266,623	\$651,712

Township Financial Picture

General Fund Balance





Municipal Employees' Retirement System of Michigan

Annual Actuarial Valuation Report
December 31, 2020 - Meridian Chtr Twp (3315)





Spring, 2021

Meridian 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 Meridian Chtr Twp (3315) as of December 31, 2020. 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, the Michigan Constitution, and governing statutes. Meridian 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, 2020,
- Establish contribution requirements for the fiscal year beginning January 1, 2022,
- 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, 2020. 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. Studies were completed in 2018 and 2020, and are the basis of the economic and demographic assumptions and methods currently in place. Updated economic assumptions were adopted by the MERS Retirement Board at the February 28, 2019 board meeting and were effective with the December 31, 2019 annual actuarial valuation. **At the February 27, 2020 board meeting, the MERS Retirement Board adopted demographic assumptions effective with the December 31, 2020 annual actuarial valuation, which will impact contributions beginning in 2022.**

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-2020AnnualActuarialValuation-Appendix.pdf>

The actuarial assumptions used for this valuation, including the assumed rate of investment return, are reasonable for purposes of the measurement.

This report reflects the impact of COVID-19 experience through December 31, 2020. It does not reflect the ongoing impact of COVID-19, which is likely to influence demographic and economic experience, at least in the short-term. We will continue to monitor these developments and their impact on the MERS Defined Benefit and Hybrid plans. Actual future experience will be reflected in each subsequent annual valuation, as experience emerges.

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 Meridian 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).

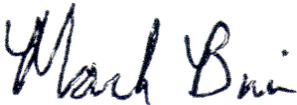
Sincerely,



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



Rebecca L. Stouffer, ASA, FCA, MAAA



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.

	12/31/2020	12/31/2019
Funded Ratio*	64%	62%

* Reflects assets from Surplus divisions, if any.

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.

Effective for the December 31, 2020 valuation, the MERS Retirement Board has adopted updated demographic assumptions. Changes to these assumptions are effective for contributions beginning in 2022. Effective with the 2019 valuation, the MERS Retirement Board adopted updated economic assumptions. The combined impact of these assumption changes may be phased in. This valuation reflects the second year of phase-in for the economic assumption update and the first year of phase-in for the demographic assumption update. The remaining combined phase-in period is four years for all assumption changes.

By default, MERS will invoice you based on the amount in the “No Phase-in” columns. This amount will be considered the minimum required contribution unless you request to be billed the “Phase-in” rates. If you wish to be billed using the phased-in rates, please contact MERS, at which point the alternate minimum required contribution will be the amount in the “Phase-in” columns.

	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
	12/31/2020	12/31/2020	12/31/2019	12/31/2019	12/31/2020	12/31/2020	12/31/2019	12/31/2019
Valuation Date:	January 1, 2022	January 1, 2022	January 1, 2021	January 1, 2021	January 1, 2022	January 1, 2022	January 1, 2021	January 1, 2021
Fiscal Year Beginning:	2022	2022	2021	2021	2022	2022	2021	2021
Division								
01 - DPW	-	-	-	-	\$ 12,832	\$ 14,140	\$ 11,965	\$ 13,093
02 - Police Patrol	-	-	26.74%	28.95%	38,551	44,380	40,027	43,330
05 - Firefighters	-	-	-	-	124,049	136,133	118,361	125,690
10 - Admin Professional	-	-	-	-	7,907	9,893	8,560	9,370
11 - Teamsters	-	-	-	-	1,516	1,882	1,267	1,516
12 - Admin Prof on/aft 1/1/17	3.78%	3.88%	2.40%	2.43%	1,055	1,082	481	487
13 - DPW on/aft 01/1/17	3.40%	3.50%	3.15%	3.19%	1,248	1,284	789	798
20 - Police Command	-	-	72.16%	77.29%	55,625	61,220	51,765	55,443
21 - Command/Patrol on/aft 1/1/20	1.35%	1.35%	-	-	316	316	0	0
50 - Fire on/aft 1/1/17	2.76%	3.24%	2.24%	2.18%	1,094	1,283	588	573
Total Municipality -								
Estimated Monthly Contribution					\$ 244,193	\$ 271,613	\$ 233,803	\$ 250,300
Total Municipality -								
Estimated Annual Contribution					\$ 2,930,316	\$ 3,259,356	\$ 2,805,636	\$ 3,003,600

Employee contribution rates:

Valuation Date:	Employee Contribution Rate	
	12/31/2020	12/31/2019
Division		
01 - DPW	5.00%	5.00%
02 - Police Patrol	8.29%	8.29%
05 - Firefighters	7.76%	7.76%
10 - Admin Professional	5.00%	5.00%
11 - Teamsters	5.00%	5.00%
12 - Admin Prof on/aft 1/1/17	5.00%	5.00%
13 - DPW on/aft 01/1/17	5.00%	5.00%
20 - Police Command	11.24%	11.24%
21 - Command/Patrol on/aft 1/1/20	8.29%	0.00%
50 - Fire on/aft 1/1/17	7.76%	7.76%

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 2022 for the entire employer would be \$395,145, instead of \$271,613.

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), and
- Experience of the plan (investment experience and demographic experience); this is the difference between actual experience of the plan and the actuarial assumptions.

These impacts are reflected in various tables in the report. For more information, please contact your Regional Manager.

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 a significant portion 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 **7.35%** 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 2020

A 5-year experience study analyzing historical experience from 2013 through 2018 was completed in February 2020. In addition to changes to the economic assumptions which took effect with the fiscal year 2021 contribution rates, the experience study recommended updated demographic assumptions, including adjustments to the following actuarial assumptions: mortality, retirement, disability, and termination rates. Changes to the demographic assumptions resulting from the experience study have been approved by the



MERS Retirement Board and are effective beginning with the December 31, 2020 actuarial valuation, first impacting 2022 contributions. A complete description of the assumptions may be found in the Appendix to the valuation.

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 2020 was 8.17%, while the actual market rate of return was 12.70%.** 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, 2020, the actuarial value of assets is 97% of market value due to asset smoothing. This means that the rate of return on the actuarial value of assets should exceed the actuarial assumption in the next few years provided that the annual market returns exceed the 7.35% investment return assumption. When all assumptions are met, contribution rates are expected to stay approximately level as a percent of payroll (dollar amounts are expected to increase with wage inflation of 3.0% each year).

If the December 31, 2020 valuation results were based on market value instead of actuarial value:

- The funded percent of your entire municipality would be 66% (instead of 64%); and
- Your total employer contribution requirement for the fiscal year starting January 1, 2022 would be \$3,148,668 (instead of \$3,259,356).

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. Lower investment returns would result in higher required employer contributions, and vice-versa. The three economic scenarios below provide a quantitative risk assessment for the impact of investment returns on the plan's future financial condition for funding purposes.



The relative impact of the economic scenarios 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, 2020 valuation, and are for the municipality in total, not by division. These results do not reflect a 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.

12/31/2020 Valuation Results	Lower Future Annual Returns	Lower Future Annual Returns	Valuation Assumptions
Investment Return Assumption	5.35%	6.35%	7.35%
Accrued Liability	\$ 102,284,770	\$ 89,527,590	\$ 79,103,874
Valuation Assets ¹	\$ 50,849,504	\$ 50,849,504	\$ 50,849,504
Unfunded Accrued Liability	\$ 51,435,266	\$ 38,678,086	\$ 28,254,370
Funded Ratio	50%	57%	64%
Monthly Normal Cost	\$ 106,054	\$ 71,979	\$ 46,952
Monthly Amortization Payment	\$ 328,734	\$ 274,964	\$ 224,661
Total Employer Contribution²	\$ 434,788	\$ 346,943	\$ 271,613

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 assumption scenarios. All three projections take into account the past investment experience that will continue to affect the actuarial rate of return in the short term.

The 7.35% scenario provides an estimate of computed employer contributions based on current actuarial assumptions, and a projected 7.35% 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 6.35% and 5.35% projection scenarios provide an indication of the potential required employer contribution if these assumptions were met over the long-term.

Your municipality includes one or more Surplus divisions. The assets in a Surplus division may be used to reduce future employer contributions or to accelerate the date by which the municipality becomes 100% funded. The timing and use of these Surplus assets is discretionary.

The Funded Percentage graph shows projections of funded status under the 7.35% investment return assumption, both including the Surplus assets (contributed as of the valuation date), and without the Surplus assets. The graph including the Surplus assets assumes these Surplus assets grow with interest and are not used to lower future employer contributions. We modeled the projections including the Surplus assets in this

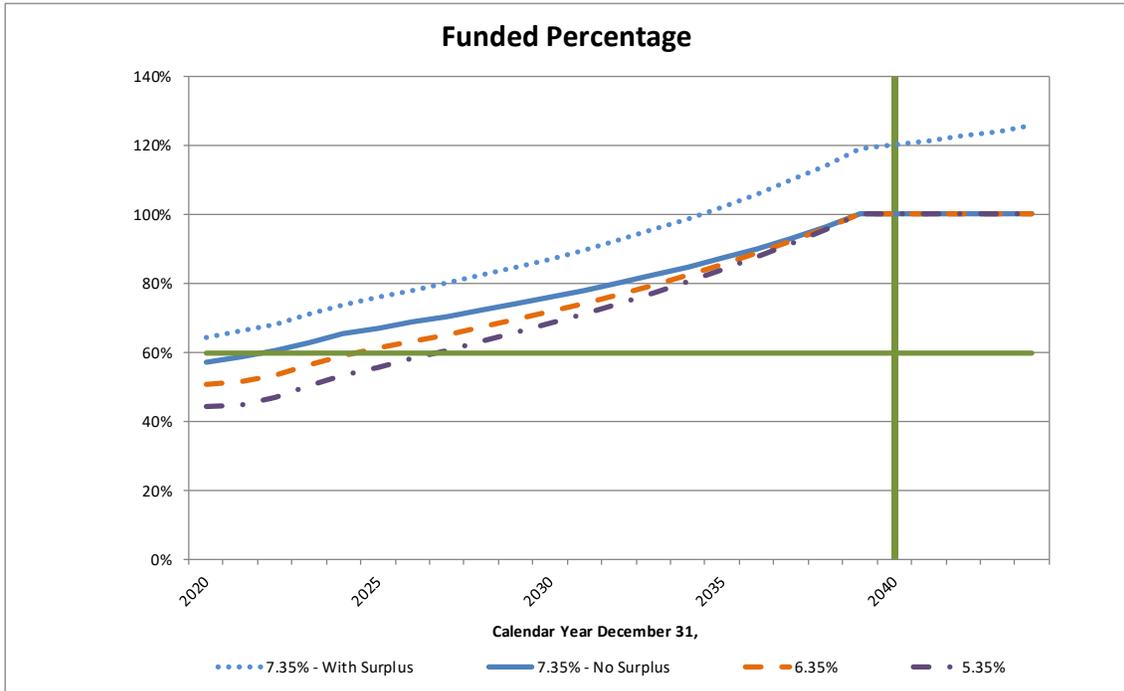


fashion because the use of these assets is discretionary by the employer and we do not know when and how the employer will use them. Once the employer uses these Surplus assets, any future employer contributions are expected to be lower than those shown in the projections.

Valuation Year Ending 12/31	Fiscal Year Beginning 1/1	Actuarial Accrued Liability	Valuation Assets ²	Funded Percentage	Estimated Annual Employer Contribution
7.35%¹ - NO PHASE-IN					
2020	2022	\$ 79,103,874	\$ 45,343,728	57%	\$ 3,259,356
2021	2023	\$ 81,500,000	\$ 48,000,000	59%	\$ 3,320,000
2022	2024	\$ 84,100,000	\$ 50,800,000	60%	\$ 3,400,000
2023	2025	\$ 86,600,000	\$ 54,600,000	63%	\$ 3,390,000
2024	2026	\$ 89,100,000	\$ 58,400,000	65%	\$ 3,410,000
2025	2027	\$ 91,500,000	\$ 61,500,000	67%	\$ 3,490,000
6.35%¹ - NO PHASE-IN					
2020	2022	\$ 89,527,590	\$ 45,343,728	51%	\$ 4,163,316
2021	2023	\$ 92,100,000	\$ 47,600,000	52%	\$ 4,270,000
2022	2024	\$ 94,900,000	\$ 50,800,000	53%	\$ 4,370,000
2023	2025	\$ 97,600,000	\$ 55,100,000	56%	\$ 4,390,000
2024	2026	\$ 100,300,000	\$ 59,300,000	59%	\$ 4,430,000
2025	2027	\$ 102,900,000	\$ 62,900,000	61%	\$ 4,530,000
5.35%¹ - NO PHASE-IN					
2020	2022	\$ 102,284,770	\$ 45,343,728	44%	\$ 5,217,456
2021	2023	\$ 105,100,000	\$ 47,100,000	45%	\$ 5,370,000
2022	2024	\$ 108,100,000	\$ 50,900,000	47%	\$ 5,500,000
2023	2025	\$ 111,000,000	\$ 55,800,000	50%	\$ 5,540,000
2024	2026	\$ 113,900,000	\$ 60,700,000	53%	\$ 5,610,000
2025	2027	\$ 116,600,000	\$ 65,000,000	56%	\$ 5,740,000

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.

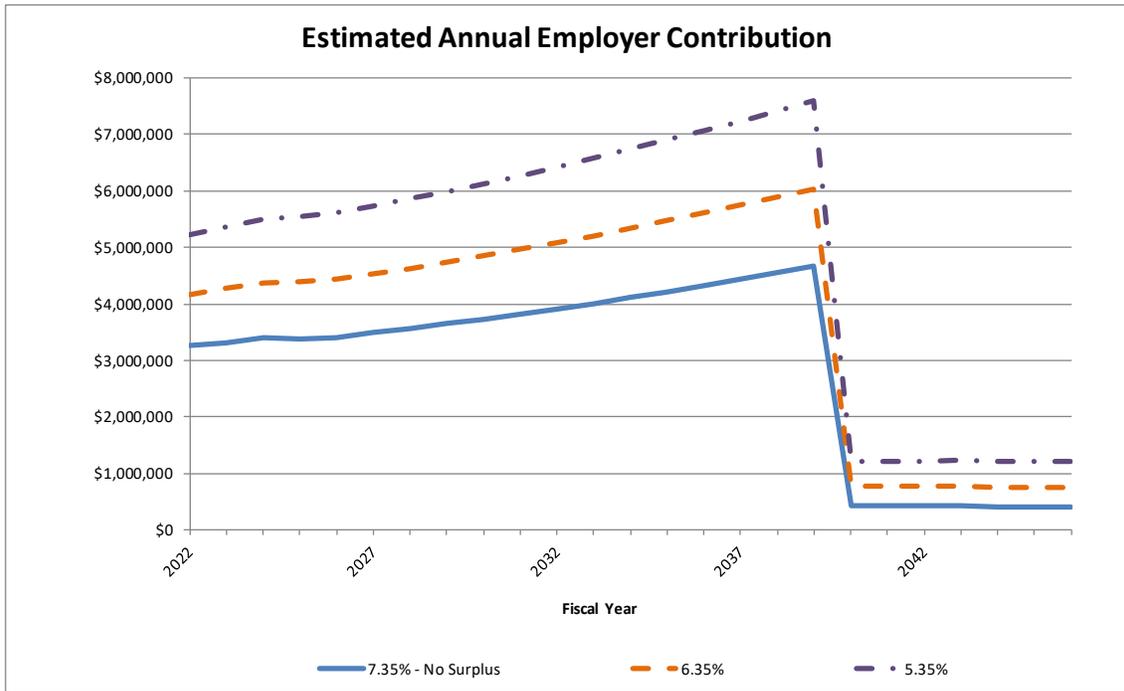


Notes:

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

Assumes assets from Surplus divisions will not be used to lower employer contributions during the projection period.

The green indicator lines have been added at 60% funded and 20 years following the valuation date for PA 202 purposes.



Notes:

All projected contributions are shown with no phase-in.

Projected employer contributions do not reflect the use of any assets from the Surplus divisions.

Table 1: Employer Contribution Details for the Fiscal Year Beginning January 1, 2022

Division	Total Normal Cost	Employee Contribut. Rate	Employer Contributions ¹			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
			Employer Normal Cost ⁶	Payment of the Unfunded Accrued Liability ⁴	Computed Employer Contribut. No Phase-In				
Percentage of Payroll									
01 - DPW	11.49%	5.00%	-	-	-	-	15.81%	14.44%	
02 - Police Patrol	20.30%	8.29%	-	-	-	-	48.77%	43.51%	
05 - Firefighters	17.83%	7.76%	-	-	-	-	68.66%	62.53%	
10 - Admin Professional	10.51%	5.00%	-	-	-	-	17.70%	14.45%	
11 - Teamsters	0.00%	5.00%	-	-	-	-			
12 - Admin Prof on/aft 1/1/17	9.08%	5.00%	4.08%	-0.20%	3.88%	3.78%	17.70%	14.45%	0.84%
13 - DPW on/aft 01/1/17	8.29%	5.00%	3.29%	0.21%	3.50%	3.40%	15.81%	14.44%	0.87%
20 - Police Command	19.95%	11.24%	-	-	-	-	48.77%	43.51%	
21 - Command/Patrol on/aft 1/1/20	9.63%	8.29%	1.34%	0.01%	1.35%	1.35%	48.77%	43.51%	0.77%
50 - Fire on/aft 1/1/17	10.91%	7.76%	3.15%	0.09%	3.24%	2.76%	68.66%	62.53%	0.86%
Estimated Monthly Contribution³									
01 - DPW			\$ 3,950	\$ 10,190	\$ 14,140	\$ 12,832			
02 - Police Patrol			15,208	29,172	44,380	38,551			
05 - Firefighters			16,163	119,970	136,133	124,049			
10 - Admin Professional			1,880	8,013	9,893	7,907			
11 - Teamsters			0	1,882	1,882	1,516			
12 - Admin Prof on/aft 1/1/17			1,138	(56)	1,082	1,055			
13 - DPW on/aft 01/1/17			1,207	77	1,284	1,248			
20 - Police Command			5,844	55,376	61,220	55,625			
21 - Command/Patrol on/aft 1/1/20			314	2	316	316			
50 - Fire on/aft 1/1/17			1,248	35	1,283	1,094			
Total Municipality			\$ 46,952	\$ 224,661	\$ 271,613	\$ 244,193			
Estimated Annual Contribution³			\$ 563,424	\$ 2,695,932	\$ 3,259,356	\$ 2,930,316			

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 No 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).
- ⁶ For divisions with a negative employer normal cost, employee contributions cover the normal cost and a portion of the payment of any unfunded accrued liability.

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

Table 2: Benefit Provisions

01 - DPW: Closed to new hires, linked to Division 13

	2020 Valuation	2019 Valuation
Benefit Multiplier:	2.25% Multiplier (80% max)	2.25% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/20	55/20
Early Retirement (Reduced):	50/25 55/15	50/25 55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	5.00%	5.00%
Act 88:	Yes (Adopted 7/10/2001)	Yes (Adopted 7/10/2001)

02 - Police Patrol: Closed to new hires, linked to Division 21

	2020 Valuation	2019 Valuation
Benefit Multiplier:	2.75% Multiplier (80% max)	2.75% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	55/15	55/15
Final Average Compensation:	3 years	3 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	8.29%	8.29%
D-2:	D2 (25%)	D2 (25%)
Act 88:	Yes (Adopted 7/10/2001)	Yes (Adopted 7/10/2001)

05 - Firefighters: Closed to new hires, linked to Division 50

	2020 Valuation	2019 Valuation
Benefit Multiplier:	Bridged Benefit: 2.75% Multiplier (80% max)-Termination FAC; 2.50% Multiplier (80% max)	Bridged Benefit: 2.75% Multiplier (80% max) Termination FAC; 2.50% Multiplier (80% max)
Bridged Benefit Date:	12/31/2016	12/31/2016
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	55/15	55/15
Final Average Compensation:	3 years	3 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	7.76%	7.76%
D-2:	D2 (25%)	D2 (25%)
Act 88:	Yes (Adopted 7/10/2001)	Yes (Adopted 7/10/2001)



10 - Admin Professional: Closed to new hires, linked to Division 12

	2020 Valuation	2019 Valuation
Benefit Multiplier:	Bridged Benefit: 2.50% Multiplier (80% max)-Termination FAC; 2.25% Multiplier (80% max)	Bridged Benefit: 2.50% Multiplier (80% max) Termination FAC; 2.25% Multiplier (80% max)
Bridged Benefit Date:	12/31/2016	12/31/2016
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/25	55/25
Early Retirement (Reduced):	50/25 55/15	50/25 55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	5.00%	5.00%
Act 88:	Yes (Adopted 7/10/2001)	Yes (Adopted 7/10/2001)

11 - Teamsters: Open Division

	2020 Valuation	2019 Valuation
Benefit Multiplier:	2.00% Multiplier (no max)	2.00% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/20	55/20
Early Retirement (Reduced):	50/25 55/15	50/25 55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	5.00%	5.00%
Act 88:	Yes (Adopted 7/10/2001)	Yes (Adopted 7/10/2001)

12 - Admin Prof on/aft 1/1/17: Open Division, linked to Division 10

	2020 Valuation	2019 Valuation
Benefit Multiplier:	1.50% Multiplier (no max)	1.50% Multiplier (no max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	55/25	55/25
Early Retirement (Reduced):	50/25 55/15	50/25 55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	5.00%	5.00%
Act 88:	Yes (Adopted 7/10/2001)	Yes (Adopted 7/10/2001)



13 - DPW on/aft 01/1/17: Open Division, linked to Division 01

	2020 Valuation	2019 Valuation
Benefit Multiplier:	1.50% Multiplier (80% max)	1.50% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	6 years	6 years
Early Retirement (Unreduced):	55/20	55/20
Early Retirement (Reduced):	50/25	50/25
	55/15	55/15
Final Average Compensation:	5 years	5 years
Employee Contributions:	5.00%	5.00%
Act 88:	Yes (Adopted 7/10/2001)	Yes (Adopted 7/10/2001)

20 - Police Command: Closed to new hires, linked to Division 21

	2020 Valuation	2019 Valuation
Benefit Multiplier:	2.75% Multiplier (80% max)	2.75% Multiplier (80% max)
Normal Retirement Age:	60	60
Vesting:	10 years	10 years
Early Retirement (Unreduced):	50/25	50/25
Early Retirement (Reduced):	55/15	55/15
Final Average Compensation:	3 years	3 years
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)
Employee Contributions:	11.24%	11.24%
D-2:	D2 (25%)	D2 (25%)
Act 88:	Yes (Adopted 7/10/2001)	Yes (Adopted 7/10/2001)

21 - Command/Patrol on/aft 1/1/20: Open Division, linked to Division 02, 20

	2020 Valuation	2019 Valuation
Benefit Multiplier:	1.75% Multiplier (no max)	-
Normal Retirement Age:	60	-
Vesting:	10 years	-
Early Retirement (Unreduced):	55/25	-
Early Retirement (Reduced):	50/25	-
	55/15	-
Final Average Compensation:	3 years	-
Employee Contributions:	8.29%	-
D-2:	D2 (25%)	-
Act 88:	Yes (Adopted 7/10/2001)	-



50 - Fire on/aft 1/1/17: Open Division, linked to Division 05

	2020 Valuation	2019 Valuation
Benefit Multiplier:	1.75% Multiplier (no max)	1.75% Multiplier (no max)
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:	3 years	3 years
Employee Contributions:	7.76%	7.76%
D-2:	D2 (25%)	D2 (25%)
Act 88:	Yes (Adopted 7/10/2001)	Yes (Adopted 7/10/2001)

Table 3: Participant Summary

Division	2020 Valuation		2019 Valuation		2020 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
01 - DPW							
Active Employees	14	\$ 741,003	15	\$ 717,406	45.3	10.3	10.7
Vested Former Employees	4	52,056	3	41,447	40.8	10.5	10.5
Retirees and Beneficiaries	23	409,247	23	409,247	68.5		
Pending Refunds	5		6				
02 - Police Patrol							
Active Employees	23	\$ 1,487,021	29	\$ 1,692,903	33.2	7.2	8.3
Vested Former Employees	12	224,457	11	181,673	47.8	10.6	15.1
Retirees and Beneficiaries	17	745,718	15	641,441	59.1		
Pending Refunds	18		15				
05 - Firefighters							
Active Employees	26	\$ 1,972,595	30	\$ 2,128,554	44.1	15.4	15.7
Vested Former Employees	7	242,823	4	112,095	49.7	17.8	18.3
Retirees and Beneficiaries	31	1,588,879	29	1,505,163	64.0		
Pending Refunds	5		5				
10 - Admin Professional							
Active Employees	10	\$ 477,667	13	\$ 556,959	53.0	17.5	17.5
Vested Former Employees	11	100,503	11	94,287	52.2	10.4	17.8
Retirees and Beneficiaries	13	266,344	12	251,853	71.1		
Pending Refunds	12		11				
11 - Teamsters							
Active Employees	0	\$ 0	0	\$ 0	0.0	0.0	0.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	6	163,830	6	161,932	71.8		
Pending Refunds	0		0				
12 - Admin Prof on/aft 1/1/17							
Active Employees	5	\$ 223,836	4	\$ 141,313	48.2	1.0	3.5
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	1	1,682	1	1,682	67.2		
Pending Refunds	6		3				
13 - DPW on/aft 01/1/17							
Active Employees	8	\$ 362,277	7	\$ 247,142	39.6	2.1	2.1
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
Pending Refunds	2		2				

Table 3 (continued)

Division	2020 Valuation		2019 Valuation		2020 Valuation		
	Number	Annual Payroll ¹	Number	Annual Payroll ¹	Average Age	Average Benefit Service ²	Average Eligibility Service ²
20 - Police Command							
Active Employees	10	\$ 867,021	10	\$ 811,353	44.4	18.7	18.9
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	15	803,880	15	788,114	61.1		
Pending Refunds	0		0				
21 - Command/Patrol on/aft 1/1/20							
Active Employees	3	\$ 102,595	0	\$ 0	24.6	0.2	0.2
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
Pending Refunds	0		0				
50 - Fire on/aft 1/1/17							
Active Employees	6	\$ 291,070	4	\$ 149,751	34.0	1.4	6.0
Vested Former Employees	0	0	0	0	0.0	0.0	0.0
Retirees and Beneficiaries	0	0	0	0	0.0		
Pending Refunds	2		1				
Total Municipality							
Active Employees	105	\$ 6,525,085	112	\$ 6,445,381	41.5	10.5	11.3
Vested Former Employees	34	619,839	29	429,501	48.8	12.0	16.1
Retirees and Beneficiaries	106	3,979,580	101	3,759,433	65.1		
Pending Refunds	50		43				
Total Participants	295		285				

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	2020 Valuation		2019 Valuation	
	Employer and Retiree ¹	Employee ²	Employer and Retiree ¹	Employee ²
01 - DPW	\$ 4,398,606	\$ 275,930	\$ 4,157,930	\$ 241,565
02 - Police Patrol	10,471,052	1,467,558	9,255,268	1,444,120
05 - Firefighters	13,531,278	2,480,722	11,845,173	2,427,674
10 - Admin Professional	3,503,873	358,812	3,200,170	357,568
11 - Teamsters	1,306,330	0	1,310,331	0
12 - Admin Prof on/aft 1/1/17	42,653	17,575	29,343	8,216
13 - DPW on/aft 01/1/17	31,094	36,360	13,714	20,782
20 - Police Command	7,441,435	1,221,512	6,712,793	1,122,936
21 - Command/Patrol on/aft 1/1/20	507	2,101	0	0
50 - Fire on/aft 1/1/17	13,449	31,952	4,494	15,231
S1 - Surplus Assoc Fire	2,831,150	0	1,618,455	0
S2 - Surplus Assoc Police	2,831,150	0	1,618,455	0
Municipality Total³	\$ 46,402,577	\$ 5,892,521	\$ 39,766,124	\$ 5,638,093
Combined Assets³	\$52,295,098		\$45,404,217	

¹ Reserve for Employer Contributions and Benefit Payments.

² Reserve for Employee Contributions.

³ Totals may not add due to rounding.

The December 31, 2020 valuation assets (actuarial value of assets) are equal to 0.972357 times the reported market value of assets (compared to 1.013179 as of December 31, 2019). Refer to the Appendix for a description of the valuation asset derivation and a detailed calculation of valuation assets.

Assets in the Surplus division(s) are employer assets that have been reserved separately and may be used within the plan at the employer's discretion at some point in the future. These assets are not used in calculating the employer contribution for the fiscal year beginning January 1, 2022.

Table 5: Flow of Valuation Assets

Year Ended 12/31	Employer Contributions		Employee Contributions	Investment Income (Valuation Assets)	Benefit Payments	Employee Contribution Refunds	Net Transfers	Valuation Asset Balance
	Required	Additional						
2010	\$ 1,587,121		\$ 463,721	\$ 1,569,522	\$ (1,730,326)	\$ (27,856)	\$ 0	\$ 27,192,819
2011	1,443,888	\$ 0	447,636	1,497,200	(1,930,596)	(15,477)	0	28,635,470
2012	1,502,982	0	440,059	1,394,558	(2,073,753)	0	0	29,899,316
2013	1,727,389	0	446,814	1,873,685	(2,184,485)	(7,344)	0	31,755,375
2014	1,863,475	0	445,419	1,878,815	(2,457,430)	(3,012)	106,873	33,589,515
2015	2,065,675	0	434,297	1,678,089	(2,837,027)	0	0	34,930,549
2016	1,835,443	999,999	442,227	2,065,803	(3,002,485)	(62,383)	12,712	37,221,865
2017	2,318,478	1,141,890	473,016	2,351,814	(3,092,898)	0	46,837	40,461,002
2018	2,302,708	1,500,041	500,743	1,572,989	(3,319,579)	(7,832)	0	43,010,072
2019	2,264,527	1,590,180	503,378	2,210,081	(3,573,024)	(2,615)	0	46,002,599
2020	2,472,037	1,704,767	507,807	4,027,028	(3,852,948)	(11,786)	0	50,849,504

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, 2020**

Division	Actuarial Accrued Liability					Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
	Active Employees	Vested Former Employees	Retirees and Beneficiaries	Pending Refunds	Total			
01 - DPW	\$ 1,494,052	\$ 153,663	\$ 4,419,519	\$ 5,905	\$ 6,073,139	\$ 4,545,318	74.8%	\$ 1,527,821
02 - Police Patrol	3,497,624	1,333,323	11,040,362	122,265	15,993,574	11,608,591	72.6%	4,384,983
05 - Firefighters	10,209,350	2,327,023	21,028,758	50,703	33,615,834	15,569,380	46.3%	18,046,454
10 - Admin Professional	1,682,901	701,164	2,534,864	36,314	4,955,243	3,755,909	75.8%	1,199,334
11 - Teamsters	0	0	1,550,922	0	1,550,922	1,270,219	81.9%	280,703
12 - Admin Prof on/aft 1/1/17	24,625	0	20,008	7,247	51,880	58,563	112.9%	(6,683)
13 - DPW on/aft 01/1/17	73,406	0	0	1,524	74,930	65,589	87.5%	9,341
20 - Police Command	5,600,167	0	11,137,002	0	16,737,169	8,423,476	50.3%	8,313,693
21 - Command/Patrol on/aft 1/1/20	2,727	0	0	0	2,727	2,537	93.0%	190
50 - Fire on/aft 1/1/17	44,904	0	0	3,552	48,456	44,146	91.1%	4,310
S1 - Surplus Assoc Fire	0	0	0	0	0	2,752,888		(2,752,888)
S2 - Surplus Assoc Police	0	0	0	0	0	2,752,888		(2,752,888)
Total	\$ 22,629,756	\$ 4,515,173	\$ 51,731,435	\$ 227,510	\$ 79,103,874	\$ 50,849,504	64.3%	\$ 28,254,370

The following results show the combined accrued liabilities and assets for each set of linked divisions. These results are already shown in the table on the prior page(s).

Table 6 (continued)

Division	Actuarial Accrued Liability					Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
	Active Employees	Vested Former Employees	Retirees and Beneficiaries	Pending Refunds	Total			
Linked Divisions 12, 10	\$ 1,707,526	\$ 701,164	\$ 2,554,872	\$ 43,561	\$ 5,007,123	\$ 3,814,472	76.2%	\$ 1,192,651
Linked Divisions 13, 01	1,567,458	153,663	4,419,519	7,429	6,148,069	4,610,907	75.0%	1,537,162
Linked Divisions 21, 02, 20	9,100,518	1,333,323	22,177,364	122,265	32,733,470	20,034,604	61.2%	12,698,866
Linked Divisions 50, 05	10,254,254	2,327,023	21,028,758	54,255	33,664,290	15,613,526	46.4%	18,050,764

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

The December 31, 2020 valuation assets (actuarial value of assets) are equal to 0.972357 times the reported market value of assets. Refer to the Appendix for a description of the valuation asset derivation and a detailed calculation of valuation assets.

Table 7: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2006	\$ 35,846,996	\$ 18,966,620	53%	\$ 16,880,376
2007	38,924,237	21,360,928	55%	17,563,309
2008	42,180,888	23,244,719	55%	18,936,169
2009	43,641,255	25,330,637	58%	18,310,618
2010	45,576,292	27,192,819	60%	18,383,473
2011	48,645,859	28,635,470	59%	20,010,389
2012	50,274,592	29,899,316	60%	20,375,276
2013	53,345,909	31,755,375	60%	21,590,534
2014	56,783,968	33,589,515	59%	23,194,453
2015	61,743,003	34,930,549	57%	26,812,454
2016	64,160,503	37,221,865	58%	26,938,638
2017	65,850,156	40,461,002	61%	25,389,154
2018	68,549,666	43,010,072	63%	25,539,594
2019	74,014,966	46,002,599	62%	28,012,367
2020	79,103,874	50,849,504	64%	28,254,370

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012, 2015, 2019 and 2020 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.

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.

Tables 8 and 9: Division-Based Comparative Schedules

Division 01 - DPW

Table 8-01: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 4,005,919	\$ 3,442,780	86%	\$ 563,139
2011	4,234,114	3,605,216	85%	628,898
2012	4,028,810	3,732,886	93%	295,924
2013	4,289,392	3,964,718	92%	324,674
2014	4,594,329	4,144,956	90%	449,373
2015	5,065,997	4,235,234	84%	830,763
2016	5,135,243	4,351,046	85%	784,197
2017	5,244,386	4,462,325	85%	782,061
2018	5,384,787	4,459,467	83%	925,320
2019	5,810,793	4,457,476	77%	1,353,317
2020	6,073,139	4,545,318	75%	1,527,821

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 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		
2010	21	\$ 950,103	11.70%	2.30%
2011	19	881,149	12.86%	2.30%
2012	19	856,300	10.97%	2.30%
2013	20	946,020	11.06%	2.30%
2014	20	929,958	12.08%	2.30%
2015	20	901,017	15.07%	2.30%
2016	19	833,791	15.08%	2.30%
2017	18	851,342	\$ 9,180	5.00%
2018	18	840,383	\$ 10,172	5.00%
2019	15	717,406	\$ 13,093	5.00%
2020	14	741,003	\$ 14,140	5.00%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division 02 - Police Patrol

Table 8-02: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 8,103,472	\$ 6,513,330	80%	\$ 1,590,142
2011	9,045,395	7,155,998	79%	1,889,397
2012	9,936,249	7,733,715	78%	2,202,534
2013	10,905,480	8,360,322	77%	2,545,158
2014	11,449,292	8,871,931	78%	2,577,361
2015	12,319,976	9,279,287	75%	3,040,689
2016	12,838,642	10,013,827	78%	2,824,815
2017	13,859,271	10,769,157	78%	3,090,114
2018	14,165,177	10,641,630	75%	3,523,547
2019	14,919,602	10,840,396	73%	4,079,206
2020	15,993,574	11,608,591	73%	4,384,983

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

Table 9-02: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2010	29	\$ 1,806,921	14.01%	8.29%
2011	28	1,754,080	16.25%	8.29%
2012	27	1,723,624	17.93%	8.29%
2013	28	1,773,779	19.10%	8.29%
2014	25	1,587,254	20.72%	8.29%
2015	27	1,649,619	22.66%	8.29%
2016	27	1,699,331	21.59%	8.29%
2017	28	1,777,631	22.53%	8.29%
2018	29	1,734,688	25.07%	8.29%
2019	29	1,692,903	28.95%	8.29%
2020	23	1,487,021	\$ 44,380	8.29%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division 05 - Firefighters

Table 8-05: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 20,287,429	\$ 9,632,575	47%	\$ 10,654,854
2011	21,458,833	9,979,003	47%	11,479,830
2012	21,924,381	10,296,036	47%	11,628,345
2013	23,137,298	10,871,647	47%	12,265,651
2014	24,841,557	11,507,153	46%	13,334,404
2015	26,584,583	11,924,919	45%	14,659,664
2016	27,867,803	12,930,519	46%	14,937,284
2017	28,177,223	13,516,293	48%	14,660,930
2018	28,979,635	13,874,155	48%	15,105,480
2019	31,435,292	14,460,949	46%	16,974,343
2020	33,615,834	15,569,380	46%	18,046,454

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

Table 9-05: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2010	33	\$ 2,183,250	35.34%	7.76%
2011	32	2,115,390	39.70%	7.76%
2012	32	2,070,575	43.48%	7.76%
2013	32	2,123,299	44.85%	7.76%
2014	32	2,061,494	49.38%	7.76%
2015	32	2,037,634	55.69%	7.76%
2016	32	2,086,805	56.20%	7.76%
2017	32	2,033,490	\$ 101,798	7.76%
2018	31	2,019,738	\$ 107,672	7.76%
2019	30	2,128,554	\$ 125,690	7.76%
2020	26	1,972,595	\$ 136,133	7.76%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division 10 - Admin Professional

Table 8-10: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 3,277,716	\$ 2,449,430	75%	\$ 828,286
2011	3,520,950	2,556,521	73%	964,429
2012	3,642,837	2,618,706	72%	1,024,131
2013	3,803,228	2,748,191	72%	1,055,037
2014	3,943,903	2,895,820	73%	1,048,083
2015	4,328,690	3,022,706	70%	1,305,984
2016	4,429,119	3,185,399	72%	1,243,720
2017	4,353,843	3,534,108	81%	819,735
2018	4,447,557	3,564,955	80%	882,602
2019	4,655,786	3,604,626	77%	1,051,160
2020	4,955,243	3,755,909	76%	1,199,334

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

Table 9-10: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2010	18	\$ 723,841	14.20%	3.90%
2011	18	704,419	15.99%	3.90%
2012	18	696,170	17.13%	3.90%
2013	19	770,061	16.56%	3.90%
2014	17	699,196	17.51%	3.90%
2015	19	756,724	19.68%	3.90%
2016	19	783,370	18.67%	3.90%
2017	17	673,625	\$ 7,925	5.00%
2018	15	617,920	\$ 8,416	5.00%
2019	13	556,959	\$ 9,370	5.00%
2020	10	477,667	\$ 9,893	5.00%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division 11 - Teamsters

Table 8-11: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 1,597,765	\$ 462,443	29%	\$ 1,135,322
2011	1,580,710	451,619	29%	1,129,091
2012	1,584,636	439,610	28%	1,145,026
2013	1,593,999	436,926	27%	1,157,073
2014	1,605,233	442,491	28%	1,162,742
2015	1,737,395	355,421	21%	1,381,974
2016	1,724,994	270,628	16%	1,454,366
2017	1,549,888	1,381,962	89%	167,926
2018	1,488,750	1,396,438	94%	92,312
2019	1,553,728	1,327,599	85%	226,129
2020	1,550,922	1,270,219	82%	280,703

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

Table 9-11: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2010	2	\$ 129,971	53.28%	2.00%
2011	2	131,835	53.91%	2.00%
2012	2	132,347	58.92%	2.00%
2013	2	135,314	58.76%	2.00%
2014	2	136,484	58.89%	2.00%
2015	1	66,496	352.21%	2.00%
2016	1	74,010	121.95%	2.00%
2017	1	78,313	13.62%	5.00%
2018	1	81,544	14.04%	5.00%
2019	0	0	\$ 1,516	5.00%
2020	0	0	\$ 1,882	5.00%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division 12 - Admin Prof on/aft 1/1/17

Table 8-12: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 0	\$ 0	0%	\$ 0
2011	0	0	0%	0
2012	0	0	0%	0
2013	0	0	0%	0
2014	0	0	0%	0
2015	0	0	0%	0
2016	0	0	0%	0
2017	222	3,915	1764%	(3,693)
2018	12,734	18,490	145%	(5,756)
2019	31,654	38,054	120%	(6,400)
2020	51,880	58,563	113%	(6,683)

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

Table 9-12: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2010	0	\$ 0	\$ 0	0.00%
2011	0	0	\$ 0	0.00%
2012	0	0	\$ 0	0.00%
2013	0	0	\$ 0	0.00%
2014	0	0	\$ 0	0.00%
2015	0	0	\$ 0	0.00%
2016	0	0	\$ 0	0.00%
2017	2	77,819	5.59%	5.00%
2018	4	147,733	4.15%	5.00%
2019	4	141,313	2.43%	5.00%
2020	5	223,836	3.88%	5.00%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division 13 - DPW on/aft 01/1/17

Table 8-13: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 0	\$ 0	0%	\$ 0
2011	0	0	0%	0
2012	0	0	0%	0
2013	0	0	0%	0
2014	0	0	0%	0
2015	0	0	0%	0
2016	0	0	0%	0
2017	5,967	5,217	87%	750
2018	20,539	17,555	85%	2,984
2019	40,155	34,950	87%	5,205
2020	74,930	65,589	88%	9,341

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

Table 9-13: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2010	0	\$ 0	\$ 0	0.00%
2011	0	0	\$ 0	0.00%
2012	0	0	\$ 0	0.00%
2013	0	0	\$ 0	0.00%
2014	0	0	\$ 0	0.00%
2015	0	0	\$ 0	0.00%
2016	0	0	\$ 0	0.00%
2017	3	83,530	2.87%	5.00%
2018	4	152,299	2.97%	5.00%
2019	7	247,142	3.19%	5.00%
2020	8	362,277	3.50%	5.00%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division 20 - Police Command

Table 8-20: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 8,303,991	\$ 4,692,261	57%	\$ 3,611,730
2011	8,805,857	4,887,113	56%	3,918,744
2012	9,157,679	5,078,363	56%	4,079,316
2013	9,616,512	5,373,571	56%	4,242,941
2014	10,349,654	5,727,164	55%	4,622,490
2015	11,706,362	6,112,982	52%	5,593,380
2016	12,164,702	6,470,446	53%	5,694,256
2017	12,659,356	6,788,025	54%	5,871,331
2018	14,043,572	7,460,719	53%	6,582,853
2019	15,548,130	7,938,996	51%	7,609,134
2020	16,737,169	8,423,476	50%	8,313,693

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

Table 9-20: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2010	9	\$ 675,028	35.90%	11.24%
2011	9	681,394	39.51%	11.24%
2012	9	687,414	43.46%	11.24%
2013	9	695,724	45.30%	11.24%
2014	9	685,804	49.49%	11.24%
2015	9	710,674	58.51%	11.24%
2016	9	720,662	59.49%	11.24%
2017	9	748,325	60.62%	11.24%
2018	10	822,149	63.21%	11.24%
2019	10	811,353	77.29%	11.24%
2020	10	867,021	\$ 61,220	11.24%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division 21 - Command/Patrol on/aft 1/1/20

Table 8-21: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 0	\$ 0	0%	\$ 0
2011	0	0	0%	0
2012	0	0	0%	0
2013	0	0	0%	0
2014	0	0	0%	0
2015	0	0	0%	0
2016	0	0	0%	0
2017	0	0	0%	0
2018	0	0	0%	0
2019	0	0	0%	0
2020	2,727	2,537	93%	190

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

Table 9-21: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2010	0	\$ 0	\$ 0	0.00%
2011	0	0	\$ 0	0.00%
2012	0	0	\$ 0	0.00%
2013	0	0	\$ 0	0.00%
2014	0	0	\$ 0	0.00%
2015	0	0	\$ 0	0.00%
2016	0	0	\$ 0	0.00%
2017	0	0	\$ 0	0.00%
2018	0	0	\$ 0	0.00%
2019	0	0	\$ 0	0.00%
2020	3	102,595	1.35%	8.29%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division 50 - Fire on/aft 1/1/17

Table 8-50: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 0	\$ 0	0%	\$ 0
2011	0	0	0%	0
2012	0	0	0%	0
2013	0	0	0%	0
2014	0	0	0%	0
2015	0	0	0%	0
2016	0	0	0%	0
2017	0	0	0%	0
2018	6,915	7,943	115%	(1,028)
2019	19,826	19,985	101%	(159)
2020	48,456	44,146	91%	4,310

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

Table 9-50: Computed Employer Contributions - Comparative Schedule

Valuation Date December 31	Active Employees		Computed Employer Contribution ¹	Employee Contribution Rate ²
	Number	Annual Payroll		
2010	0	\$ 0	\$ 0	0.00%
2011	0	0	\$ 0	0.00%
2012	0	0	\$ 0	0.00%
2013	0	0	\$ 0	0.00%
2014	0	0	\$ 0	0.00%
2015	0	0	\$ 0	0.00%
2016	0	0	\$ 0	0.00%
2017	0	0	\$ 0	0.00%
2018	2	57,481	1.63%	7.76%
2019	4	149,751	2.18%	7.76%
2020	6	291,070	3.24%	7.76%

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 contribution will be adjusted.

Note: The contributions shown in Table 9 for the 12/31/2015 through 12/31/2020 valuations do not reflect the phase-in of the change in contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above.

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.

Division S1 - Surplus Assoc Fire

Table 8-S1: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 0	\$ 0		\$ 0
2011	0	0		0
2012	0	0		0
2013	0	0		0
2014	0	0		0
2015	0	0		0
2016	0	0		0
2017	0	0		0
2018	0	784,360		(784,360)
2019	0	1,639,784		(1,639,784)
2020	0	2,752,888		(2,752,888)

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

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

Division S2 - Surplus Assoc Police

Table 8-S2: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2010	\$ 0	\$ 0		\$ 0
2011	0	0		0
2012	0	0		0
2013	0	0		0
2014	0	0		0
2015	0	0		0
2016	0	0		0
2017	0	0		0
2018	0	784,360		(784,360)
2019	0	1,639,784		(1,639,784)
2020	0	2,752,888		(2,752,888)

Notes: Actuarial assumptions were revised for the 2010, 2011, 2012, 2015, 2019 and 2020 actuarial valuations.

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

Table 10: Division-Based Layered Amortization Schedule

Division 01 - DPW

Table 10-01: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 830,763	23	\$ 880,282	18	\$ 70,368
(Gain)/Loss	12/31/2016	(82,526)	22	(89,547)	18	(7,164)
(Gain)/Loss	12/31/2017	5,781	21	6,225	18	504
Amendment	12/31/2017	(9,047)	21	(9,755)	18	(780)
(Gain)/Loss	12/31/2018	138,266	20	148,337	18	11,856
(Gain)/Loss	12/31/2019	222,251	19	237,058	18	18,948
Assumption	12/31/2019	192,311	19	200,634	18	16,044
Experience	12/31/2020	145,727	18	156,438	18	12,504
Total				\$ 1,529,672		\$ 122,280

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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.

Division 02 - Police Patrol

Table 10-02: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 3,040,689	23	\$ 3,153,351	18	\$ 252,096
(Gain)/Loss	12/31/2016	(280,062)	22	(303,855)	18	(24,288)
(Gain)/Loss	12/31/2017	260,150	21	280,376	18	22,416
(Gain)/Loss	12/31/2018	394,380	20	423,108	18	33,828
(Gain)/Loss	12/31/2019	(70,906)	19	(75,632)	18	(6,048)
Assumption	12/31/2019	581,584	19	606,913	18	48,516
Experience	12/31/2020	274,390	18	294,558	18	23,544
Total				\$ 4,378,819		\$ 350,064

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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.

Division 05 - Firefighters

Table 10-05: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 14,659,664	23	\$ 15,175,926	18	\$ 1,213,212
(Gain)/Loss	12/31/2016	(5,596)	22	(6,071)	18	(480)
(Gain)/Loss	12/31/2017	(236,519)	21	(254,888)	18	(20,376)
Amendment	12/31/2017	(168,365)	21	(181,444)	18	(14,508)
(Gain)/Loss	12/31/2018	375,305	20	402,660	18	32,196
(Gain)/Loss	12/31/2019	654,589	19	698,190	18	55,812
Assumption	12/31/2019	1,120,922	19	1,134,697	18	90,708
Experience	12/31/2020	968,055	18	1,039,207	18	83,076
Total				\$ 18,008,277		\$ 1,439,640

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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.

Division 10 - Admin Professional

Table 10-10: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 1,305,984	23	\$ 1,357,021	18	\$ 108,480
(Gain)/Loss	12/31/2016	(92,486)	22	(100,335)	18	(8,016)
(Gain)/Loss	12/31/2017	(403,688)	21	(435,060)	18	(34,776)
Amendment	12/31/2017	(24,631)	21	(26,552)	18	(2,124)
(Gain)/Loss	12/31/2018	87,723	20	94,109	18	7,524
(Gain)/Loss	12/31/2019	16,887	19	18,005	18	1,440
Assumption	12/31/2019	141,332	19	147,260	18	11,772
Experience	12/31/2020	138,093	18	148,243	18	11,856
Total				\$ 1,202,691		\$ 96,156

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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.

Division 11 - Teamsters

Table 10-11: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 1,381,974	23	\$ 1,319,238	18	\$ 105,468
(Gain)/Loss	12/31/2016	982	22	1,061	18	84
(Gain)/Loss	12/31/2017	(1,143,013)	21	(1,231,851)	18	(98,484)
Amendment	12/31/2017	(907)	21	(976)	18	(84)
(Gain)/Loss	12/31/2018	4,855	20	5,200	18	420
(Gain)/Loss	12/31/2019	89,079	19	95,007	18	7,596
Assumption	12/31/2019	44,293	19	46,533	18	3,720
Experience	12/31/2020	44,969	18	48,274	18	3,864
Total				\$ 282,486		\$ 22,584

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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.

Division 12 - Admin Prof on/aft 1/1/17

Table 10-12: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
(Gain)/Loss	12/31/2017	\$ (3,693)	15	\$ (3,715)	12	\$ (396)
(Gain)/Loss	12/31/2018	(1,776)	15	(1,840)	13	(192)
(Gain)/Loss	12/31/2019	(1,355)	15	(1,425)	14	(132)
Assumption	12/31/2019	778	15	839	14	84
Experience	12/31/2020	(372)	15	(399)	15	(36)
Total				\$ (6,540)		\$ (672)

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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.

Division 13 - DPW on/aft 01/1/17

Table 10-13: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
(Gain)/Loss	12/31/2017	\$ 750	15	\$ 753	12	\$ 84
(Gain)/Loss	12/31/2018	2,176	15	2,261	13	228
(Gain)/Loss	12/31/2019	1,609	15	1,692	14	168
Assumption	12/31/2019	461	15	462	14	48
Experience	12/31/2020	4,040	15	4,337	15	396
Total				\$ 9,505		\$ 924

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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.

Division 20 - Police Command

Table 10-20: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Initial	12/31/2015	\$ 5,593,380	23	\$ 5,805,919	18	\$ 464,148
(Gain)/Loss	12/31/2016	(22,439)	22	(24,349)	18	(1,944)
(Gain)/Loss	12/31/2017	129,426	21	139,492	18	11,148
(Gain)/Loss	12/31/2018	663,143	20	711,466	18	56,880
(Gain)/Loss	12/31/2019	374,994	19	399,972	18	31,980
Assumption	12/31/2019	574,489	19	585,730	18	46,824
Experience	12/31/2020	646,378	18	693,887	18	55,476
Total				\$ 8,312,117		\$ 664,512

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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.

Division 21 - Command/Patrol on/aft 1/1/20

Table 10-21: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Experience	12/31/2020	190	15	204	15	24
Total				\$ 204		\$ 24

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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.

Division 50 - Fire on/aft 1/1/17

Table 10-50: Layered Amortization Schedule

Type of UAL	Date Established	Original Balance ¹	Original Amortization Period ²	Amounts for Fiscal Year Beginning 1/1/2022		
				Outstanding UAL Balance ³	Remaining Amortization Period ²	Annual Amortization Payment
Experience	12/31/2020	4,310	15	4,627	15	420
Total				\$ 4,627		\$ 420

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, 2020 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2020 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 Statement No. 68 Information

The following information has been prepared to provide some of the information necessary to complete GASB Statement No. 68 disclosures. GASB Statement No. 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:	12/31/2020
Measurement Date of the Total Pension Liability (TPL):	12/31/2020
At 12/31/2020, the following employees were covered by the benefit terms:	
Inactive employees or beneficiaries currently receiving benefits:	106
Inactive employees entitled to but not yet receiving benefits (including refunds):	84
Active employees:	<u>105</u>
	295
Total Pension Liability as of 12/31/2019 measurement date:	\$ 71,804,504
Total Pension Liability as of 12/31/2020 measurement date:	\$ 76,714,010
Service Cost for the year ending on the 12/31/2020 measurement date:	\$ 983,064
Change in the Total Pension Liability due to:	
- Benefit changes ¹ :	\$ 0
- Differences between expected and actual experience ² :	\$ 83,960
- Changes in assumptions ² :	\$ 2,359,578
Average expected remaining service lives of all employees (active and inactive):	4

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.

Covered employee payroll (Needed for Required Supplementary Information):	\$ 6,525,085
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Note: Covered employee payroll may differ from the GASB Statement No. 68 definition.

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

	1% Decrease <u>(6.60%)</u>	Current Discount Rate <u>(7.60%)</u>	1% Increase <u>(8.60%)</u>
Change in Net Pension Liability as of 12/31/2020:	\$ 9,885,231	\$ 0	\$ (8,144,056)

Note: The current discount rate shown for GASB Statement No. 68 purposes is higher than the MERS assumed rate of return. This is because for GASB Statement No. 68 purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes it is net of administrative expenses.

GASB Statement No. 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. GASB Statement No. 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:		12/31/2020
Measurement Date of the Total Pension Liability (TPL):		12/31/2021
At 12/31/2020, the following employees were covered by the benefit terms:		
Inactive employees or beneficiaries currently receiving benefits:		106
Inactive employees entitled to but not yet receiving benefits (including refunds):		84
Active employees:		<u>105</u>
		295
Total Pension Liability as of 12/31/2020 measurement date:	\$	74,143,871
Total Pension Liability as of 12/31/2021 measurement date:	\$	79,066,731
Service Cost for the year ending on the 12/31/2021 measurement date:	\$	1,010,530
Change in the Total Pension Liability due to:		
- Benefit changes ¹ :	\$	0
- Differences between expected and actual experience ² :	\$	226,564
- Changes in assumptions ² :	\$	2,562,224
Average expected remaining service lives of all employees (active and inactive):		4

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

²Changes 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.

Covered employee payroll (Needed for Required Supplementary Information):	\$	6,525,085
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Note: Covered employee payroll may differ from the GASB Statement No. 68 definition.

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

	1% Decrease <u>(6.60%)</u>	Current Discount Rate <u>(7.60%)</u>	1% Increase <u>(8.60%)</u>
Change in Net Pension Liability as of 12/31/2021:	\$ 10,079,377	\$ 0	\$ (8,311,639)

Note: The current discount rate shown for GASB Statement No. 68 purposes is higher than the MERS assumed rate of return. This is because for GASB Statement No. 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 - DPW

1/1/2017	Day of Work defined as 10 8 hour days
1/1/2017	Non Standard Compensation Definition
1/1/2017	Participant Contribution Rate 5%
12/1/2016	Service Credit Purchase Estimates - Yes
7/1/2005	Benefit B-3 (80% max)
7/1/2005	Member Contribution Rate 2.30%
7/10/2001	Covered by Act 88
7/1/1997	Benefit B-2
7/1/1997	Benefit F55 (With 20 Years of Service)
7/1/1995	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1995	6 Year Vesting
7/1/1995	Benefit C-1 (New)
7/1/1995	Member Contribution Rate 0.00%
7/1/1995	Fiscal Month - January
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

02 - Police Patrol

1/1/2019	Day of work defined as 80 Hours a Month for All employees.
12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2007	Member Contribution Rate 8.29%
12/1/2005	Benefit D2 Plan
12/1/2005	Benefit FAC-3 (3 Year Final Average Compensation)
12/1/2005	2.75% Multiplier (80% max)
12/1/2005	Member Contribution Rate 8.79%
1/1/2002	Member Contribution Rate 4.50%
7/10/2001	Covered by Act 88
1/1/2000	Benefit B-4 (80% max)
1/1/2000	Member Contribution Rate 6.50%
1/1/2000	E2 2.5% COLA for future retirees (01/01/2000)
1/1/1999	Member Contribution Rate 2.50%
7/1/1996	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/1996	10 Year Vesting
7/1/1996	Benefit B-3 (80% max)
7/1/1996	Benefit F50 (With 25 Years of Service)
7/1/1996	Member Contribution Rate 3.50%
7/1/1995	Fiscal Month - January
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

05 - Firefighters

1/1/2017	Day of work defined as 100.8 hours in a month
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05 - Firefighters

1/1/2017	Non Standard Compensation Definition
1/1/2017	Benefit B-4 (80% max)
12/31/2016	Current FAC
12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2005	Member Contribution Rate 7.76%
1/1/2004	2.75% Multiplier (80% max)
1/1/2004	Member Contribution Rate 8.07%
7/10/2001	Covered by Act 88
7/1/1999	Benefit D2 Plan
7/1/1999	Benefit FAC-3 (3 Year Final Average Compensation)
7/1/1999	10 Year Vesting
7/1/1999	Benefit B-4 (80% max)
7/1/1999	Benefit F50 (With 25 Years of Service)
7/1/1999	Member Contribution Rate 4.19%
7/1/1999	E2 2.5% COLA for future retirees (07/01/1999)
7/1/1995	Fiscal Month - January
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

10 - Admin Professional

4/1/2017	Participant Contribution Rate 5%
1/1/2017	Day of Work defined as 10 8 hour days
1/1/2017	Non Standard Compensation Definition
1/1/2017	Benefit B-3 (80% max)
12/31/2016	Current FAC
12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2007	Benefit B-4 (80% max)
1/1/2007	Member Contribution Rate 3.90%
1/1/2004	Benefit B-3 (80% max)
1/1/2004	Member Contribution Rate 1.50%
7/10/2001	Covered by Act 88
7/1/2000	Benefit B-2
7/1/2000	Member Contribution Rate 0.60%
1/1/1998	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/1998	10 Year Vesting
1/1/1998	Benefit C-1 (New)
1/1/1998	Benefit F55 (With 25 Years of Service)
1/1/1998	Member Contribution Rate 0.00%
7/1/1995	Fiscal Month - January
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

11 - Teamsters

1/1/2018	Participant Contribution Rate 5%
12/1/2016	Service Credit Purchase Estimates - Yes
1/1/2004	6 Year Vesting
1/1/2002	Member Contribution Rate 2.00%
7/10/2001	Covered by Act 88
7/1/2000	Benefit FAC-5 (5 Year Final Average Compensation)



11 - Teamsters

7/1/2000	10 Year Vesting
7/1/2000	Benefit B-2
7/1/2000	Benefit F55 (With 20 Years of Service)
7/1/2000	Member Contribution Rate 0.00%
7/1/1995	Fiscal Month - January
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

12 - Admin Prof on/aft 1/1/17

1/1/2017	Day of Work defined as 10 8 hour days
1/1/2017	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/2017	Non Standard Compensation Definition
1/1/2017	10 Year Vesting
1/1/2017	Defined Benefit Normal Retirement Age - 60
1/1/2017	Service Credit Purchase Estimates - Yes
1/1/2017	Benefit C-1 (New)
1/1/2017	Benefit F55 (With 25 Years of Service)
1/1/2017	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
1/1/2017	Participant Contribution Rate 5%
7/10/2001	Covered by Act 88
7/1/1995	Fiscal Month - January

13 - DPW on/aft 01/1/17

1/1/2017	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
1/1/2017	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
1/1/2017	Participant Contribution Rate 5%
1/1/2017	Day of Work defined as 10 8 hour days
1/1/2017	Benefit FAC-5 (5 Year Final Average Compensation)
1/1/2017	Non Standard Compensation Definition
1/1/2017	6 Year Vesting
1/1/2017	Defined Benefit Normal Retirement Age - 60
1/1/2017	Service Credit Purchase Estimates - Yes
1/1/2017	1.5% multiplier (80% max)
1/1/2017	Benefit F55 (With 20 Years of Service)
7/10/2001	Covered by Act 88
7/1/1995	Fiscal Month - January

20 - Police Command

1/1/2020	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
1/1/2019	Day of work defined as 80 Hours a Month for All employees.
7/1/2018	Non Standard Compensation Definition
12/1/2016	Service Credit Purchase Estimates - Yes
8/1/2005	2.75% Multiplier (80% max)
8/1/2005	Member Contribution Rate 11.24%
1/1/2005	Member Contribution Rate 5.50%
1/1/2003	Member Contribution Rate 8.00%
1/1/2002	Member Contribution Rate 7.00%
1/1/2002	E2 2.5% COLA for future retirees (07/01/2001)
7/10/2001	Covered by Act 88



20 - Police Command

7/1/2001	Benefit D2 Plan
7/1/2001	Benefit B-4 (80% max)
7/1/2001	Benefit F50 (With 25 Years of Service)
7/1/2001	Member Contribution Rate 6.00%
1/1/2001	Member Contribution Rate 4.50%
1/1/1998	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/1998	10 Year Vesting
1/1/1998	Benefit B-3 (80% max)
1/1/1998	Benefit F55 (With 15 Years of Service)
1/1/1998	Eligible at Age 52 (With 25 Years of Service)
1/1/1998	Member Contribution Rate 5.50%
7/1/1995	Fiscal Month - January
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

21 - Command/Patrol on/aft 1/1/20

1/1/2020	Day of work defined as 80 Hours a Month for All employees.
1/1/2020	Benefit D2 Plan
1/1/2020	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2020	Non Standard Compensation Definition
1/1/2020	10 Year Vesting
1/1/2020	Defined Benefit Normal Retirement Age - 60
1/1/2020	Service Credit Purchase Estimates - Yes
1/1/2020	1.75% multiplier
1/1/2020	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
1/1/2020	Benefit F55 (With 25 Years of Service)
1/1/2020	Participant Contribution Rate 8.29%
7/10/2001	Covered by Act 88
7/1/1995	Fiscal Month - January

50 - Fire on/aft 1/1/17

1/1/2017	Day of work defined as 100.8 hours in a month
1/1/2017	Benefit D2 Plan
1/1/2017	Benefit FAC-3 (3 Year Final Average Compensation)
1/1/2017	Non Standard Compensation Definition
1/1/2017	10 Year Vesting
1/1/2017	Defined Benefit Normal Retirement Age - 60
1/1/2017	Service Credit Purchase Estimates - Yes
1/1/2017	1.75% multiplier
1/1/2017	Benefit F55 (With 25 Years of Service)
1/1/2017	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
1/1/2017	Participant Contribution Rate 7.76%
7/10/2001	Covered by Act 88
7/1/1995	Fiscal Month - January

S1 - Surplus Assoc Fire

7/1/1995	Fiscal Month - January
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S2 - Surplus Assoc Police

7/1/1995

Fiscal Month - January

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%

Miscellaneous and Technical Assumptions

Loads – None.

Amortization Policy for Closed Not Linked Divisions: The default funding policy for closed not linked divisions, including open divisions with zero active members, is to follow a non-accelerated amortization, where each closed period decreases by one-year each year until the period is exhausted. In select instances, closed not linked division(s) may follow an accelerated amortization policy.

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:

	<u>12/31/2020</u>	<u>12/31/2019</u>	<u>12/31/2018</u>
1. Ratio of the market value of assets to total payroll	8.0	7.0	6.1
2. Ratio of actuarial accrued liability to payroll	12.1	11.5	10.6
3. Ratio of actives to retirees and beneficiaries	1.0	1.1	1.2
4. Ratio of market value of assets to benefit payments	13.5	12.7	11.8
5. Ratio of net cash flow to market value of assets (boy)	1.8%	2.0%	2.4%

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 actives 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 Public Act 202 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, 2020	
11	Indicate number of active members	105
12	Indicate number of inactive members (excluding pending refunds)	34
13	Indicate number of retirees and beneficiaries	106
14	Investment Performance for Calendar Year Ending December 31, 2020¹	
15	Enter actual rate of return - prior 1-year period	13.59%
16	Enter actual rate of return - prior 5-year period	9.35%
17	Enter actual rate of return - prior 10-year period	7.91%
18	Actuarial Assumptions	
19	Actuarial assumed rate of investment return ²	7.35%
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	18
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	\$50,493,949
25	Enter retirement pension system's actuarial accrued liabilities using uniform assumptions ⁵	\$82,521,741
27	Actuarially Determined Contribution (ADC) using uniform assumptions, Fiscal Year Ending December 31, 2021	\$3,589,584

1. The Municipal Employees’ Retirement System’s investment performance has been provided to GRS from MERS Investment Staff and is included here for reporting purposes. The investment performance figures reported are net of investment expenses 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.”
5. Line 25 actuarial accrued liability is determined under PA 202 uniform assumptions which differ from the valuation assumptions. In particular, the assumed rate of return for PA 202 purposes is 7.00%.

Charter Township of Meridian Employee Pension Plan

GASB Statement No. 68 Employer Reporting
Accounting Schedules
December 31, 2020





March 19, 2021

Board of Trustees
Charter Township of Meridian
Employee Pension Plan
Okemos, Michigan

Dear Board Members:

This report provides the accounting and financial reporting information that is intended to comply with the Governmental Accounting Standards Board (GASB) Statement No. 68 for the Charter Township of Meridian Employee Pension Plan. These calculations have been made on a basis that is consistent with our understanding of this accounting standard. An excerpt of a portion of the reporting requirements under Public Act 202 of 2017 is included on pages 18-19.

This information is presented in draft form for review by the Township's auditor. Please let us know if there are items that the auditor changes so that we may maintain consistency with the Township's financial statements.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of assisting in the reporting and disclosure information that satisfies certain requirements of GASB Statement No. 68. The calculation of the Township's liability for this report may not be applicable for funding purposes of the Pension Plan. A calculation of the Township's liability for purposes other than satisfying the requirements of GASB Statement No. 68 may produce significantly different results. This report may be provided to parties other than the Charter Township of Meridian Employee Pension Plan and the Board of Trustees only in its entirety and only with the permission of the Township and the Board. GRS is not responsible for the unauthorized use of this report.

This report is based upon information, furnished to us by the Township, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. If your understanding of this information is different, please let us know. This information was checked for internal consistency but was not audited. GRS is not responsible for the accuracy or completeness of such information.

This report includes a measure of the Plan Fiduciary Net Position as a percent of Total Pension Liability as of December 31, 2020. Unless otherwise indicated, with regard to any such measurements in this report:

- This measurement is not intended to be a funded ratio or a measure of funded progress.
- This measurement is inappropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations.
- The measurement is inappropriate for assessing the need for or amount of future employer contributions.

This report was prepared using our proprietary valuation model and related software, which in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report complements the actuarial valuation report that was provided to the Charter Township of Meridian Employee Pension Plan and should be considered collectively as a combined report for the plan year ending December 31, 2020. Please refer to the December 31, 2020 actuarial valuation report for additional discussion of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

To the best of our knowledge, the information contained within this report is accurate and fairly represents the actuarial position of the Charter Township of Meridian Employee Pension Plan. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

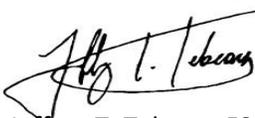
The signing actuaries are independent of the plan sponsor.

Brad Lee Armstrong, Jeffrey T. Tebeau and Kevin T. Noelke are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



Brad Lee Armstrong, ASA, EA, FCA, MAAA



Jeffrey T. Tebeau, FSA, EA, MAAA



Kevin T. Noelke, ASA, MAAA

BLA/JTT/KTN:ah

Summary of Disclosures

Actuarial Valuation Date	December 31, 2020
Measurement Date of the Net Pension Liability	December 31, 2020
Employer's Fiscal Year Ending Date (Reporting Date)	December 31, 2020

Membership

Number of	
- Retirees and Beneficiaries	44
- Inactive, Nonretired Members	15
- Active Members	1
- Total	<u>60</u>
Covered Payroll	\$ 112,521

Net Pension Liability

Total Pension Liability	\$ 5,138,314
Plan Fiduciary Net Position	<u>5,182,419</u>
Net Pension Liability	\$ (44,105)
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	100.86%
Net Pension Liability as a Percentage of Covered Payroll	(39.20)%

Development of the Single Discount Rate

Single Discount Rate	6.00%
Long-Term Expected Rate of Investment Return	6.00%
Long-Term Municipal Bond Rate*	2.00%
Last year ending December 31 in the 2021 to 2120 projection period for which projected benefit payments are fully funded	2120

Total Pension Expense	\$ (41,919)
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Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future Pension Expenses

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference between expected and actual experience	\$ -	\$ -
Changes in assumptions	-	-
Net difference between projected and actual earnings on pension plan investments	<u>193,922</u>	<u>713,405</u>
Total	<u>\$ 193,922</u>	<u>\$ 713,405</u>

*Source: Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of December 31, 2020. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax-exempt securities.



Measurement of the Net Pension Liability

The Net Pension Liability is measured as the Total Pension Liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the Actuarial Accrued Liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

A Single Discount Rate of 6.00% was used to measure the Total Pension Liability. This Single Discount Rate was based on the expected rate of return on pension plan investments of 6.00%. The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

Below is a table providing the sensitivity of the net pension liability to changes in the discount rate. In particular, the table presents the plan's net pension liability, if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher than the single discount rate:

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

1% Decrease	Current Single Discount	1% Increase
5.00%	Rate Assumption	7.00%
	6.00%	
\$342,372	\$(44,105)	\$(377,611)

Statement of Pension Expense Under GASB Statement No. 68

Fiscal Year Ended December 31, 2020

A. Expense

1. Service Cost	\$	8,064
2. Interest on the Total Pension Liability		297,676
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		0
5. Projected Earnings on Plan Investments (made negative for addition here)		(281,393)
6. Pension Plan Administrative Expense		50
7. Other Changes in Plan Fiduciary Net Position		0
8. Recognition of Outflow (Inflow) of Resources due to Liabilities		87,814
9. Recognition of Outflow (Inflow) of Resources due to Assets		(154,130)
10. Total Pension Expense	\$	(41,919)

Statement of Outflows and Inflows Arising from Current Reporting Period Fiscal Year Ended December 31, 2020

A. Outflows (Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total Pension Liability (gains) or losses	\$	120,898
2. Assumption Changes (gains) or losses	\$	(33,084)
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}, not less than one		1.0000
4. Outflow (Inflow) of Resources to be recognized in the current pension expense for the difference between expected and actual experience of the Total Pension Liability	\$	120,898
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes	\$	(33,084)
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	\$	87,814
7. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for the difference between expected and actual experience of the Total Pension Liability	\$	-
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes	\$	-
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	\$	-

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$	(323,645)
2. Recognition period for Assets {in years}		5.0000
3. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Assets	\$	(64,729)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$	(258,916)

Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods

Fiscal Year Ended December 31

A. Outflows and Inflows of Resources due to Liabilities and Assets to be Recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Due to Liabilities	\$ 120,898	\$ 33,084	\$ 87,814
2. Due to Assets	109,865	263,995	(154,130)
3. Total	\$ 230,763	\$ 297,079	\$ (66,316)

B. Outflows and Inflows of Resources by Source to be Recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 120,898	\$ 0	\$ 120,898
2. Assumption Changes	-	33,084	(33,084)
3. Net Difference between projected and actual earnings on pension plan investments	109,865	263,995	(154,130)
4. Total	\$ 230,763	\$ 297,079	\$ (66,316)

C. Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future Pension Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows of Resources
1. Differences between expected and actual experience	\$ -	\$ -	\$ -
2. Assumption Changes	-	-	-
3. Net Difference between projected and actual earnings on pension plan investments	193,922	713,405	(519,483)
4. Total	\$ 193,922	\$ 713,405	\$ (519,483)

D. Deferred Outflows and Deferred Inflows of Resources by Year to be Recognized in Future Pension Expenses

Year Ending December 31	Net Deferred Outflows of Resources
2021	\$ (167,034)
2022	(95,379)
2023	(192,341)
2024	(64,729)
2025	-
Thereafter	-
Total	\$ (519,483)

Recognition of Deferred Outflows and Inflows of Resources

Fiscal Year Ended December 31, 2020

Year Established	Initial Amount	Initial Recognition Period	Current Year Recognition	Remaining Recognition	Remaining Recognition Period
Deferred Outflow (Inflow) due to Differences Between Expected and Actual Experience on Liabilities					
2016	\$ (22,387)	1.0000	\$ -	\$ -	0.0000
2017	(86,411)	1.0000	-	-	0.0000
2018	25,530	1.0000	-	-	0.0000
2019	54,195	1.0000	-	-	0.0000
2020	120,898	1.0000	120,898	-	0.0000
Total			\$ 120,898	\$ -	
Deferred Outflow (Inflow) due to Assumption Changes					
2016	\$ -	1.0000	\$ -	\$ -	0.0000
2017	-	1.0000	-	-	0.0000
2018	-	1.0000	-	-	0.0000
2019	-	1.0000	-	-	0.0000
2020	(33,084)	1.0000	(33,084)	-	0.0000
Total			\$ (33,084)	\$ -	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2016	\$ 64,529	5.0000	\$ 12,905	\$ -	0.0000
2017	(358,269)	5.0000	(71,654)	(71,653)	1.0000
2018	484,802	5.0000	96,960	193,922	2.0000
2019	(638,060)	5.0000	(127,612)	(382,836)	3.0000
2020	(323,645)	5.0000	(64,729)	(258,916)	4.0000
Total			\$ (154,130)	\$ (519,483)	

According to paragraph 33 of GASB No. 68, differences between expected and actual experience and changes in assumptions are recognized in pension expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the current measurement period, the expected remaining service lives of all active employees in the plan was approximately 0.5 years. Additionally, the total plan membership (active DB employees and inactive employees) was 60. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 1.0000 years.

Additionally, differences between projected and actual earnings on pension plan investments should be recognized in pension expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the pension expense as a level dollar amount over the closed period identified above.

Schedule of Changes in Net Pension Liability and Related Ratios

Current Period

Fiscal Year Ended December 31, 2020

A. Total pension liability	
1. Service Cost	\$ 8,064
2. Interest on the Total Pension Liability	297,676
3. Changes of benefit terms	-
4. Difference between expected and actual experience of the Total Pension Liability	120,898
5. Changes of assumptions	(33,084)
6. Benefit payments, including refunds of employee contributions	(424,945)
7. Net change in Total Pension Liability	\$ (31,391)
8. Total Pension Liability – Beginning	5,169,705
9. Total Pension Liability – Ending	<u><u>\$ 5,138,314</u></u>
B. Plan fiduciary net position	
1. Contributions – employer	\$ 200,000
2. Contributions – employee	-
3. Net investment income	605,038
4. Benefit payments, including refunds of employee contributions	(424,945)
5. Pension Plan Administrative Expense	(50)
6. Other	-
7. Net change in Plan Fiduciary Net Position	\$ 380,043
8. Plan Fiduciary Net Position – Beginning	4,802,376
9. Plan Fiduciary Net Position – Ending	<u><u>\$ 5,182,419</u></u>
C. Net pension liability	<u><u>\$ (44,105)</u></u>
D. Plan fiduciary net position as a percentage of the Total Pension Liability	100.86%
E. Covered-employee payroll	\$ 112,521
F. Net pension liability as a percentage of covered-employee payroll	(39.20)%



Schedule of Changes in Net Pension Liability and Related Ratios Multiyear

Ultimately 10 Years Will Be Displayed

Fiscal year ending December 31,	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability							
Service Cost	\$ 8,064	\$ 7,933	\$ 7,751	\$ 14,978	\$ 14,830	\$ 12,993	\$ 10,867
Interest on the Total Pension Liability	297,676	302,038	307,616	318,039	324,026	307,223	302,325
Benefit Changes	-	-	-	-	-	-	-
Difference between Expected and Actual Experience	120,898	54,195	25,530	(86,411)	(22,387)	(124,938)	131,492
Assumption Changes	(33,084)	-	-	-	-	474,087	-
Benefit Payments	(424,945)	(448,911)	(418,997)	(414,434)	(418,211)	(362,253)	(365,991)
Refunds	-	-	-	-	-	-	-
Net Change in Total Pension Liability	(31,391)	(84,745)	(78,100)	(167,828)	(101,742)	307,112	78,693
Total Pension Liability - Beginning	5,169,705	5,254,450	5,332,550	5,500,378	5,602,120	5,295,008	5,216,315
Total Pension Liability - Ending (a)	\$ 5,138,314	\$ 5,169,705	\$ 5,254,450	\$ 5,332,550	\$ 5,500,378	\$ 5,602,120	\$ 5,295,008
Plan Fiduciary Net Position							
Employer Contributions	\$ 200,000	\$ 200,000	\$ 300,000	\$ 400,000	\$ 400,000	\$ 250,000	\$ 260,000
Employee Contributions	-	-	-	-	-	-	-
Pension Plan Net Investment Income	605,038	880,823	(217,924)	593,540	162,003	86,536	296,201
Benefit Payments	(424,945)	(448,911)	(418,997)	(414,434)	(418,211)	(362,253)	(365,991)
Refunds	-	-	-	-	-	-	-
Pension Plan Administrative Expense	(50)	(74)	(25)	(46)	(25)	(69,808)	(72,944)
Other	-	-	-	-	-	-	-
Net Change in Plan Fiduciary Net Position	380,043	631,838	(336,946)	579,060	143,767	(95,525)	117,266
Plan Fiduciary Net Position - Beginning	4,802,376	4,170,538	4,507,484	3,928,424	3,784,657	3,880,182	3,762,916
Plan Fiduciary Net Position - Ending (b)	\$ 5,182,419	\$ 4,802,376	\$ 4,170,538	\$ 4,507,484	\$ 3,928,424	\$ 3,784,657	\$ 3,880,182
Net Pension Liability - Ending (a) - (b)	(44,105)	367,329	1,083,912	825,066	1,571,954	1,817,463	1,414,826
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	100.86 %	92.89 %	79.37 %	84.53 %	71.42 %	67.56 %	73.28 %
Covered-Employee Payroll	\$ 112,521	\$ 106,283	\$ 104,560	\$ 102,156	\$ 100,153	\$ 99,161	\$ 97,050
Net Pension Liability as a Percentage of Covered-Employee Payroll	(39.20)%	345.61 %	1,036.64 %	807.65 %	1,569.55 %	1,832.84 %	1,457.83 %
Notes to Schedule:	N/A						



Schedule of Contributions Multiyear

Ultimately 10 Fiscal Years Will Be Displayed

FY Ending December 31,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2014	\$ 421,346	\$ 260,000	\$ 161,346	\$ 97,050	267.90%
2015	403,377	250,000	153,377	99,161	252.12
2016	430,449	400,000	30,449	100,153	399.39
2017	206,057	400,000	(193,943)	102,156	391.56
2018	151,469	300,000	(148,531)	104,560	286.92
2019	146,745	200,000	(53,255)	106,283	188.18
2020	127,718	200,000	(72,282)	112,521	177.74



Notes to Schedule of Contributions

Valuation Date:	December 31, 2019
Notes	Actuarially determined contribution rates are calculated as of December 31 which is one day prior to the beginning of the fiscal year in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates for the FY Ended December 31, 2020:

Actuarial Cost Method	Individual Entry-Age Normal
Amortization Method	Level Dollar, Closed
Remaining Amortization Period	7 years
Asset Valuation Method	4-Year smoothed market
Wage Inflation	4.50%
Salary Increases	4.50%
Investment Rate of Return	6.00%
Retirement Age	The final active member is assumed to retire at age 67.
Mortality	Fully generational RP-2014 Healthy Annuitant Tables after adjustment to the base year 2006 for males and females with MP-2015 mortality improvement scales.

Notes to Net Pension Liability

Valuation Date:	December 31, 2020
Measurement Date:	December 31, 2020

Methods and Assumptions Used to Determine Net Pension Liability:

Actuarial Cost Method	Individual Entry-Age Normal
Wage Inflation	4.50%
Salary Increases	4.50%
Investment Rate of Return	6.00%, net of administrative and investment expenses.
Municipal Bond Rate	2.00%
Retirement Age	The final active member is assumed to retire at age 68.
Mortality	Fully generational Pub-2010 amount-weighted General Mortality Tables for males and females with MP-2019 mortality improvement scales.

Other Information:

Notes	There were no changes in benefit provisions reflected in the TPL as of December 31, 2020. The mortality assumption was updated to the tables indicated above.
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Calculation of the Single Discount Rate

GASB Statement No. 68 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a “risk-free” rate is required, as described in the following paragraph.

The *Single Discount Rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on Fidelity Index’s “20-Year Municipal GO AA Index” as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 6.00%, the municipal bond rate is 2.00%, and the resulting single discount rate is 6.00%.

The tables in this section provide background for the development of the single discount rate. Note that these projections are specifically used to determine the GASB SDR and should not be interpreted as a funding projection or recommendation.

The **Projection of Contributions** table shows the development of expected contributions in future years.

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the SDR. It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

Single Discount Rate Development Projection of Contributions Ending December 31 for 2021 to 2070

Year	Payroll for Current Employees	Contributions from Current Employees	Service Cost Contributions	UAAL Contributions	Total Contributions
0	\$ 112,521				
1	59,655	\$ -	\$ 8,529	\$ 80,514	\$ 89,043
2	-	-	-	-	-
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-
11	-	-	-	-	-
12	-	-	-	-	-
13	-	-	-	-	-
14	-	-	-	-	-
15	-	-	-	-	-
16	-	-	-	-	-
17	-	-	-	-	-
18	-	-	-	-	-
19	-	-	-	-	-
20	-	-	-	-	-
21	-	-	-	-	-
22	-	-	-	-	-
23	-	-	-	-	-
24	-	-	-	-	-
25	-	-	-	-	-
26	-	-	-	-	-
27	-	-	-	-	-
28	-	-	-	-	-
29	-	-	-	-	-
30	-	-	-	-	-
31	-	-	-	-	-
32	-	-	-	-	-
33	-	-	-	-	-
34	-	-	-	-	-
35	-	-	-	-	-
36	-	-	-	-	-
37	-	-	-	-	-
38	-	-	-	-	-
39	-	-	-	-	-
40	-	-	-	-	-
41	-	-	-	-	-
42	-	-	-	-	-
43	-	-	-	-	-
44	-	-	-	-	-
45	-	-	-	-	-
46	-	-	-	-	-
47	-	-	-	-	-
48	-	-	-	-	-
49	-	-	-	-	-
50	-	-	-	-	-



Single Discount Rate Development Projection of Plan Fiduciary Net Position Ending December 31 for 2021 to 2070

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 6.00%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 5,182,419	\$ 89,043	\$ 473,772	\$ 56	\$ 299,627	\$ 5,097,261
2	5,097,261	-	521,981	61	290,465	4,865,685
3	4,865,685	-	512,320	60	276,855	4,630,160
4	4,630,160	-	503,635	59	262,980	4,389,446
5	4,389,446	-	492,909	58	248,853	4,145,331
6	4,145,331	-	480,081	56	234,583	3,899,777
7	3,899,777	-	466,291	55	220,257	3,653,688
8	3,653,688	-	451,231	53	205,935	3,408,339
9	3,408,339	-	435,362	51	191,681	3,164,607
10	3,164,607	-	418,756	49	177,546	2,923,347
11	2,923,347	-	391,510	46	163,873	2,695,664
12	2,695,664	-	360,438	42	151,126	2,486,310
13	2,486,310	-	339,001	40	139,197	2,286,466
14	2,286,466	-	316,971	37	127,854	2,097,312
15	2,097,312	-	294,761	35	117,160	1,919,676
16	1,919,676	-	272,514	32	107,156	1,754,286
17	1,754,286	-	250,348	29	97,885	1,601,794
18	1,601,794	-	228,483	27	89,380	1,462,664
19	1,462,664	-	207,048	24	81,663	1,337,255
20	1,337,255	-	186,215	22	74,752	1,225,770
21	1,225,770	-	166,156	20	68,654	1,128,248
22	1,128,248	-	147,032	17	63,365	1,044,564
23	1,044,564	-	128,986	15	58,876	974,439
24	974,439	-	112,132	13	55,164	917,459
25	917,459	-	96,563	11	52,204	873,089
26	873,089	-	82,350	10	49,961	840,690
27	840,690	-	69,529	8	48,394	819,547
28	819,547	-	58,101	7	47,462	808,901
29	808,901	-	48,034	6	47,120	807,982
30	807,982	-	39,261	5	47,323	816,039
31	816,039	-	31,709	4	48,029	832,355
32	832,355	-	25,297	3	49,196	856,252
33	856,252	-	19,931	2	50,788	887,107
34	887,107	-	15,503	2	52,770	924,373
35	924,373	-	11,899	1	55,112	967,584
36	967,584	-	9,008	1	57,790	1,016,365
37	1,016,365	-	6,721	1	60,784	1,070,427
38	1,070,427	-	4,942	1	64,081	1,129,565
39	1,129,565	-	3,577	-	67,668	1,193,656
40	1,193,656	-	2,547	-	71,544	1,262,653
41	1,262,653	-	1,782	-	75,706	1,336,577
42	1,336,577	-	1,223	-	80,158	1,415,513
43	1,415,513	-	823	-	84,906	1,499,596
44	1,499,596	-	542	-	89,960	1,589,013
45	1,589,013	-	349	-	95,330	1,683,995
46	1,683,995	-	220	-	101,033	1,784,808
47	1,784,808	-	134	-	107,085	1,891,758
48	1,891,758	-	80	-	113,503	2,005,181
49	2,005,181	-	46	-	120,310	2,125,445
50	2,125,445	-	26	-	127,526	2,252,945



Single Discount Rate Development Projection of Plan Fiduciary Net Position Ending December 31 for 2071 to 2120

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 6.00%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
51	\$ 2,252,945	\$ -	\$ 14	\$ -	\$ 135,176	\$ 2,388,107
52	2,388,107	-	8	-	143,286	2,531,385
53	2,531,385	-	4	-	151,883	2,683,264
54	2,683,264	-	2	-	160,996	2,844,258
55	2,844,258	-	1	-	170,655	3,014,913
56	3,014,913	-	0	-	180,895	3,195,807
57	3,195,807	-	0	-	191,748	3,387,555
58	3,387,555	-	0	-	203,253	3,590,808
59	3,590,808	-	0	-	215,449	3,806,257
60	3,806,257	-	0	-	228,375	4,034,632
61	4,034,632	-	0	-	242,078	4,276,710
62	4,276,710	-	-	-	256,603	4,533,313
63	4,533,313	-	-	-	271,999	4,805,312
64	4,805,312	-	-	-	288,319	5,093,630
65	5,093,630	-	-	-	305,618	5,399,248
66	5,399,248	-	-	-	323,955	5,723,203
67	5,723,203	-	-	-	343,392	6,066,595
68	6,066,595	-	-	-	363,996	6,430,591
69	6,430,591	-	-	-	385,835	6,816,426
70	6,816,426	-	-	-	408,986	7,225,412
71	7,225,412	-	-	-	433,525	7,658,937
72	7,658,937	-	-	-	459,536	8,118,473
73	8,118,473	-	-	-	487,108	8,605,581
74	8,605,581	-	-	-	516,335	9,121,916
75	9,121,916	-	-	-	547,315	9,669,231
76	9,669,231	-	-	-	580,154	10,249,385
77	10,249,385	-	-	-	614,963	10,864,348
78	10,864,348	-	-	-	651,861	11,516,209
79	11,516,209	-	-	-	690,973	12,207,182
80	12,207,182	-	-	-	732,431	12,939,612
81	12,939,612	-	-	-	776,377	13,715,989
82	13,715,989	-	-	-	822,959	14,538,949
83	14,538,949	-	-	-	872,337	15,411,285
84	15,411,285	-	-	-	924,677	16,335,963
85	16,335,963	-	-	-	980,158	17,316,120
86	17,316,120	-	-	-	1,038,967	18,355,088
87	18,355,088	-	-	-	1,101,305	19,456,393
88	19,456,393	-	-	-	1,167,384	20,623,776
89	20,623,776	-	-	-	1,237,427	21,861,203
90	21,861,203	-	-	-	1,311,672	23,172,875
91	23,172,875	-	-	-	1,390,373	24,563,248
92	24,563,248	-	-	-	1,473,795	26,037,043
93	26,037,043	-	-	-	1,562,223	27,599,265
94	27,599,265	-	-	-	1,655,956	29,255,221
95	29,255,221	-	-	-	1,755,313	31,010,534
96	31,010,534	-	-	-	1,860,632	32,871,166
97	32,871,166	-	-	-	1,972,270	34,843,436
98	34,843,436	-	-	-	2,090,606	36,934,043
99	36,934,043	-	-	-	2,216,043	39,150,085
100	39,150,085	-	-	-	2,349,005	41,499,090



Single Discount Rate Development Present Values of Projected Benefits Ending December 31 for 2021 to 2070

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of All Benefit Payments using Single Discount Rate (SDR)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ⁿ ((a)-.5)	(g)=(e)*vf ⁿ ((a)-.5)	(h)=(c)/(1+SDR) ⁿ ((a)-.5)
1	\$ 5,182,419	\$ 473,772	\$ 473,772	\$ -	\$ 460,168	\$ -	\$ 460,168
2	5,097,261	521,981	521,981	-	478,295	-	478,295
3	4,865,685	512,320	512,320	-	442,871	-	442,871
4	4,630,160	503,635	503,635	-	410,719	-	410,719
5	4,389,446	492,909	492,909	-	379,219	-	379,219
6	4,145,331	480,081	480,081	-	348,444	-	348,444
7	3,899,777	466,291	466,291	-	319,278	-	319,278
8	3,653,688	451,231	451,231	-	291,477	-	291,477
9	3,408,339	435,362	435,362	-	265,308	-	265,308
10	3,164,607	418,756	418,756	-	240,744	-	240,744
11	2,923,347	391,510	391,510	-	212,340	-	212,340
12	2,695,664	360,438	360,438	-	184,422	-	184,422
13	2,486,310	339,001	339,001	-	163,635	-	163,635
14	2,286,466	316,971	316,971	-	144,341	-	144,341
15	2,097,312	294,761	294,761	-	126,630	-	126,630
16	1,919,676	272,514	272,514	-	110,446	-	110,446
17	1,754,286	250,348	250,348	-	95,719	-	95,719
18	1,601,794	228,483	228,483	-	82,414	-	82,414
19	1,462,664	207,048	207,048	-	70,455	-	70,455
20	1,337,255	186,215	186,215	-	59,779	-	59,779
21	1,225,770	166,156	166,156	-	50,321	-	50,321
22	1,128,248	147,032	147,032	-	42,008	-	42,008
23	1,044,564	128,986	128,986	-	34,766	-	34,766
24	974,439	112,132	112,132	-	28,513	-	28,513
25	917,459	96,563	96,563	-	23,164	-	23,164
26	873,089	82,350	82,350	-	18,637	-	18,637
27	840,690	69,529	69,529	-	14,844	-	14,844
28	819,547	58,101	58,101	-	11,702	-	11,702
29	808,901	48,034	48,034	-	9,127	-	9,127
30	807,982	39,261	39,261	-	7,038	-	7,038
31	816,039	31,709	31,709	-	5,362	-	5,362
32	832,355	25,297	25,297	-	4,036	-	4,036
33	856,252	19,931	19,931	-	3,000	-	3,000
34	887,107	15,503	15,503	-	2,201	-	2,201
35	924,373	11,899	11,899	-	1,594	-	1,594
36	967,584	9,008	9,008	-	1,138	-	1,138
37	1,016,365	6,721	6,721	-	801	-	801
38	1,070,427	4,942	4,942	-	556	-	556
39	1,129,565	3,577	3,577	-	380	-	380
40	1,193,656	2,547	2,547	-	255	-	255
41	1,262,653	1,782	1,782	-	168	-	168
42	1,336,577	1,223	1,223	-	109	-	109
43	1,415,513	823	823	-	69	-	69
44	1,499,596	542	542	-	43	-	43
45	1,589,013	349	349	-	26	-	26
46	1,683,995	220	220	-	15	-	15
47	1,784,808	134	134	-	9	-	9
48	1,891,758	80	80	-	5	-	5
49	2,005,181	46	46	-	3	-	3
50	2,125,445	26	26	-	1	-	1



Single Discount Rate Development Present Values of Projected Benefits Ending December 31 for 2071 to 2120

Year	Projected Plan Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of All Benefit Payments using Single Discount Rate (SDR)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ^a ((a)-.5)	(g)=(e)*vf ^a ((a)-.5)	(h)=(c)/(1+SDR) ^a ((a)-.5)
51	\$ 2,252,945	\$ 14	\$ 14	\$ -	\$ 1	\$ -	\$ 1
52	2,388,107	8	8	-	0	-	0
53	2,531,385	4	4	-	0	-	0
54	2,683,264	2	2	-	0	-	0
55	2,844,258	1	1	-	0	-	0
56	3,014,913	0	0	-	0	-	0
57	3,195,807	0	0	-	0	-	0
58	3,387,555	0	0	-	0	-	0
59	3,590,808	0	0	-	0	-	0
60	3,806,257	0	0	-	0	-	0
61	4,034,632	0	0	-	0	-	0
62	4,276,710	-	-	-	-	-	-
63	4,533,313	-	-	-	-	-	-
64	4,805,312	-	-	-	-	-	-
65	5,093,630	-	-	-	-	-	-
66	5,399,248	-	-	-	-	-	-
67	5,723,203	-	-	-	-	-	-
68	6,066,595	-	-	-	-	-	-
69	6,430,591	-	-	-	-	-	-
70	6,816,426	-	-	-	-	-	-
71	7,225,412	-	-	-	-	-	-
72	7,658,937	-	-	-	-	-	-
73	8,118,473	-	-	-	-	-	-
74	8,605,581	-	-	-	-	-	-
75	9,121,916	-	-	-	-	-	-
76	9,669,231	-	-	-	-	-	-
77	10,249,385	-	-	-	-	-	-
78	10,864,348	-	-	-	-	-	-
79	11,516,209	-	-	-	-	-	-
80	12,207,182	-	-	-	-	-	-
81	12,939,612	-	-	-	-	-	-
82	13,715,989	-	-	-	-	-	-
83	14,538,949	-	-	-	-	-	-
84	15,411,285	-	-	-	-	-	-
85	16,335,963	-	-	-	-	-	-
86	17,316,120	-	-	-	-	-	-
87	18,355,088	-	-	-	-	-	-
88	19,456,393	-	-	-	-	-	-
89	20,623,776	-	-	-	-	-	-
90	21,861,203	-	-	-	-	-	-
91	23,172,875	-	-	-	-	-	-
92	24,563,248	-	-	-	-	-	-
93	26,037,043	-	-	-	-	-	-
94	27,599,265	-	-	-	-	-	-
95	29,255,221	-	-	-	-	-	-
96	31,010,534	-	-	-	-	-	-
97	32,871,166	-	-	-	-	-	-
98	34,843,436	-	-	-	-	-	-
99	36,934,043	-	-	-	-	-	-
100	39,150,085	-	-	-	-	-	-
Totals					\$ 5,146,598	\$ -	\$ 5,146,598



MICHIGAN PUBLIC ACT 202

State Reporting Assumptions as of December 31, 2020

The Protecting Local Government Retirement and Benefits Act, Public Act 202 of 2017, was put into law effective December 20, 2017. One outcome of the law is the requirement for the local unit of government to provide select reporting disclosures to the State. Section 5(1) of the Act provides the State treasurer with the authority to annually establish uniform actuarial assumptions for purposes of developing the requisite disclosures. Below you will find information which may be used to assist the local unit of government with required reporting attributable to the Charter Township of Meridian Employee Pension Plan.

Uniform Assumptions, as applicable to the measurement and the required disclosures under uniform assumptions are denoted below. Additional discussion of the PA 202 and uniform assumptions may be found on the State website in the uniform assumption memo dated October 21, 2019.

Uniform Assumption	PA 202	Valuation Assumption Used	Uniform Assumption Used
Investment Rate of Return	Maximum of 7.00%	6.00%	6.00%
Salary Increase	Minimum of 3.50% or based on experience study within last 5 years	4.50%	4.50%
Mortality	Version of Pub-2010 or based on experience study within last 5 years	A version of Pub-2010	A version of Pub-2010
Amortization of the Unfunded Accrued Actuarial Liability: Period	Maximum Period of 19 Years	7 years	7 years
Method	Closed Plans: Level Dollar Open Plans: Level Percent of Payroll or Level Dollar	Level Dollar	Level Dollar
Type	Closed	Closed	Closed

State Reporting as of December 31, 2020

The following information attributable to the Charter Township of Meridian Employee Pension Plan 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 on the State website.

Michigan Department of Treasury
Form 5572 (2-19)

The Protecting Local Government Retirement and Benefits Act (PA 202 of 2017) & Public Act 530 of 2016

Line	Descriptive Information	
18	Actuarial Assumptions²	
19	Actuarial assumed rate of investment return ³	6.00%
20	Amortization method utilized for funding the system's unfunded actuarial accrued liability, if any	Level Dollar
21	Amortization period utilized for funding the system's unfunded actuarial accrued liability, if any	7 years
22	Is each division within the system closed to new employees?	Yes
23	Uniform Assumptions¹	
24	Enter retirement pension system's actuarial value of assets using uniform assumptions ²	\$ 4,730,695
25	Enter retirement pension system's actuarial accrued liabilities using uniform assumptions ²	\$ 5,162,873
26	Funded ratio using uniform assumptions	Auto ³
27	Actuarially Determined Contribution (ADC) using uniform assumptions ⁴	\$ 125,070
28	All systems combined ADC/Governmental fund revenues	Auto ³

¹ Information on lines 24-28 is based on assumptions listed on the prior page.

² As of the December 31, 2020 actuarial valuation date.

³ Automatically calculated by State of Michigan Form No. 5572.

⁴ Calculated as of December 31, 2019 applicable for fiscal year ending December 31, 2020.

Charter Township of Meridian

Other Postemployment Benefits Plan

GASB Statement Nos. 74 and 75, Accounting and Financial
Reporting for Postemployment Benefits Other Than Pensions
December 31, 2020





March 19, 2021

Board of Trustees
Charter Township of Meridian
Other Postemployment Benefits Plan
Okemos, Michigan

Dear Board Members:

This report provides information on behalf of the Charter Township of Meridian Other Postemployment Benefits Plan in connection with the Governmental Accounting Standards Board (GASB) Statement Nos. 74 and 75. GASB Statement No. 74 is the accounting standard, which applies to Other Postemployment Benefits (OPEB) plans that are administered through trusts or equivalent arrangements. GASB Statement No. 75 establishes accounting and financial reporting requirements for state and local government employers who provide their employees postemployment benefits other than pensions. An excerpt of a portion of reporting requirements under Public Act 202 of 2017 is included on pages 21-22 for convenience.

The calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement Nos. 74 and 75. The calculation of the plan's liability for this report is not applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement Nos. 74 and 75 may produce significantly different results. This report may be provided to parties other than the Charter Township of Meridian Other Postemployment Benefits Plan only in its entirety and only with the permission of the Township. GRS is not responsible for unauthorized use of this report.

The Total OPEB Liability, Net OPEB Liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of December 31, 2018. The December 31, 2019 Total OPEB Liability was rolled-forward to the plan year ending December 31, 2020 by applying one year of Service Cost, expected benefit payments and refunds during the year, and an interest rate adjustment assuming the beginning of year Single Discount Rate of 4.96%. A full year of interest was applied to the beginning of year Total OPEB Liability and one-half year of interest was applied to the Service Cost and benefit payments. It is our opinion that the recommended assumptions are internally consistent, reasonable, and comply with the requirements under GASB Statement Nos. 74 and 75.

This report complements the actuarial valuation report prepared as of December 31, 2018, and information herein should be considered along with the information from that report, especially for additional discussions of the nature of actuarial calculations and for more information related to participant data, economic, demographic, health care trend, morbidity assumptions, and benefit provisions.

This report is based upon information, furnished to us by Meridian Township, concerning health benefits, retirees and beneficiaries, and financial data. This information was checked for internal consistency, but it was not audited. Based on the available data, the information contained in this report is accurate and fairly represents the actuarial position of the Charter Township of Meridian Other Postemployment Benefits Plan as of the reporting date. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as the Actuarial Standards of Practice.

This report was prepared using our proprietary valuation model and related software, which in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report does not fully reflect the recent and still developing impact of COVID-19, which is likely to influence demographic experience and economic expectations, at least in the short term. We will continue to monitor these developments and their impact.

If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

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; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The signing actuaries are independent of the plan sponsor. Jeffrey T. Tebeau, Brad Lee Armstrong and Kevin T. Noelke are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



Jeffrey T. Tebeau, FSA, EA, MAAA



Brad Lee Armstrong, ASA EA, FCA, MAAA



Kevin T. Noelke, ASA, MAAA

JTT/BLA/KTN:ah

Executive Summary as of December 31, 2020

Actuarial Valuation Date	December 31, 2018
Measurement Date of the Net OPEB Liability	December 31, 2020
Employer's Fiscal Year Ending Date (Reporting Date)	December 31, 2020

Membership

Number of	
- Retirees and Beneficiaries	29
- Inactive, Nonretired Members	34
- Active Members	73
- Total	136
Covered Payroll @	NA

Net OPEB Liability

Total OPEB Liability	\$ 6,980,548
Plan Fiduciary Net Position	6,962,087
Net OPEB Liability	\$ 18,461
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	99.74 %
Net OPEB Liability as a Percentage of Covered Payroll	NA

Development of the Single Discount Rate

Single Discount Rate - Beginning of Fiscal Year	4.96 %
Single Discount Rate - End of Fiscal Year	4.99 %
Long-Term Expected Rate of Investment Return	5.00 %
Long-Term Municipal Bond Rate*	2.00 %
Last year ending December 31 in the 2021 to 2120 projection period for which projected benefit payments are fully funded	2091

Total OPEB Expense	\$ (542,159)
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Deferred Outflows and Deferred Inflows of Resources by Source to be recognized in Future OPEB Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 0	\$ 2,004,850
Changes in assumptions	132,405	44,163
Net difference between projected and actual earnings on OPEB plan investments	185,919	555,669
Total	\$ 318,324	\$ 2,604,682

**Source: Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of December 31, 2020. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax exempt securities.*

@ Covered payroll was not provided for this valuation.



Statement of OPEB Expense Under GASB Statement No. 75

Fiscal Year Ended December 31, 2020

A. Expense

1. Service Cost	\$	109,467
2. Interest on the Total OPEB Liability		336,017
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		0
5. Projected Earnings on Plan Investments (made negative for addition here)		(308,339)
6. OPEB Plan Administrative Expense		0
7. Other Changes in Plan Fiduciary Net Position		0
8. Recognition of Outflow (Inflow) of Resources due to Liabilities		(610,005)
9. Recognition of Outflow (Inflow) of Resources due to Assets		(69,299)
10. Total OPEB Expense	\$	(542,159)

Recognition of Deferred Outflows and Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in OPEB expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with OPEB through the OPEB plan (active employees and inactive former employees) determined as of the beginning of the measurement period.

At the actuarial valuation date, the expected remaining service lives of all active employees in the plan was approximately 692 years. Additionally, the total plan membership (active employees and inactive former employees) was 136. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 5.0887 years.

Additionally, differences between projected and actual earnings on OPEB plan investments should be recognized in OPEB expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the OPEB expense as a level dollar amount over the closed period identified above.

Statement of Outflows and Inflows Arising from Current Reporting Period Fiscal Year Ended December 31, 2020

A. Outflows (Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total OPEB Liability (gains) or losses	\$	(74,110)
2. Assumption Changes (gains) or losses	\$	(29,617)
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}		5.0887
4. Outflow (Inflow) of Resources to be recognized in the current OPEB expense for the difference between expected and actual experience of the Total OPEB Liability	\$	(14,564)
5. Outflow (Inflow) of Resources to be recognized in the current OPEB expense for assumption changes	\$	(5,820)
6. Outflow (Inflow) of Resources to be recognized in the current OPEB expense due to Liabilities	\$	(20,384)
7. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses for the difference between expected and actual experience of the Total OPEB Liability	\$	(59,546)
8. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses for assumption changes	\$	(23,797)
9. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses due to Liabilities	\$	(83,343)

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on OPEB plan investments (gains) or losses	\$	(344,472)
2. Recognition period for Assets {in years}		5.0000
3. Outflow (Inflow) of Resources to be recognized in the current OPEB expense due to Assets	\$	(68,894)
4. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses due to Assets	\$	(275,578)

Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods Fiscal Year Ended December 31, 2020

A. Outflows and Inflows of Resources due to Liabilities and Assets to be Recognized in Current OPEB Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Due to Liabilities	\$ 42,868	\$ 652,873	\$ (610,005)
2. Due to Assets	92,959	162,258	(69,299)
3. Total	\$ 135,827	\$ 815,131	\$ (679,304)

B. Outflows and Inflows of Resources by Source to be Recognized in Current OPEB Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 0	\$ 641,152	\$ (641,152)
2. Assumption Changes	42,868	11,721	31,147
3. Net Difference between projected and actual earnings on OPEB plan investments	92,959	162,258	(69,299)
4. Total	\$ 135,827	\$ 815,131	\$ (679,304)

C. Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future OPEB Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows of Resources
1. Differences between expected and actual experience	\$ 0	\$ 2,004,850	\$ (2,004,850)
2. Assumption Changes	132,405	44,163	88,242
3. Net Difference between projected and actual earnings on OPEB plan investments	185,919	555,669	(369,750)
4. Total	\$ 318,324	\$ 2,604,682	\$ (2,286,358)

D. Deferred Outflows and Deferred Inflows of Resources by Year to be Recognized in Future OPEB Expenses

Year Ending December 31	Net Deferred Outflows of Resources
2021	\$ (679,304)
2022	(679,303)
2023	(772,262)
2024	(153,682)
2025	(1,807)
Thereafter	0
Total	\$ (2,286,358)

Employer contributions subsequent to the measurement date of the net OPEB liability and prior to the end of the employer's reporting period should be reported by the employer as a deferred outflow of resources related to OPEB. The information contained in this report does not incorporate any contributions made subsequent to the measurement date.

See paragraph 44 of GASB 75 for single and agent employers with trusted plans.

Also, Question 4.32 of Implementation Guide No. 2017-1 provides additional guidance for trusted plans.



Recognition of Deferred Outflows and Inflows of Resources

Fiscal Year Ended December 31, 2020

Year Established	Initial Amount	Initial Recognition Period	Current Year Recognition	Remaining Recognition	Remaining Recognition Period
Deferred Outflow (Inflow) Due to Differences Between Expected and Actual Experience on Liabilities					
2018	\$ (177,273)	6.4512	\$ (27,479)	\$ (94,836)	3.4512
2019	(3,048,686)	5.0887	(599,109)	(1,850,468)	3.0887
2020	(74,110)	5.0887	(14,564)	(59,546)	4.0887
Total			\$ (641,152)	\$ (2,004,850)	
Deferred Outflow (Inflow) Due to Assumption Changes					
2018	\$ (38,069)	6.4512	\$ (5,901)	\$ (20,366)	3.4512
2019	218,141	5.0887	42,868	132,405	3.0887
2020	(29,617)	5.0887	(5,820)	(23,797)	4.0887
Total			\$ 31,147	\$ 88,242	
Deferred Outflow (Inflow) Due to Differences Between Projected and Actual Earnings on Plan Investments					
2018	\$ 464,796	5.0000	\$ 92,959	\$ 185,919	2.0000
2019	(466,819)	5.0000	(93,364)	(280,091)	3.0000
2020	(344,472)	5.0000	(68,894)	(275,578)	4.0000
Total			\$ (69,299)	\$ (369,750)	

Measurement of the Net OPEB Liability

The net OPEB liability is to be measured as the total OPEB liability, less the amount of the OPEB plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement). The net OPEB liability should be measured as of the OPEB plan's most recent fiscal year end.

A Single Discount Rate of 4.99% was used to measure the total OPEB liability. This Single Discount Rate was based on an expected rate of return on OPEB plan investments of 5.00% and a municipal bond rate of 2.00%. The projection of cash flows used to determine this Single Discount Rate assumed that employer contributions will be made at rates equal to the actuarially determined contribution rate. Based on these assumptions, the OPEB plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2091. As a result, the long-term expected rate of return on OPEB plan investments was applied to projected benefit payments through the year 2091, and the municipal bond rate was applied to all benefit payments after that date.

Regarding the sensitivity of the net OPEB liability to changes in the Single Discount Rate, the following presents the plan's net OPEB liability, calculated using a Single Discount Rate of 4.99%, as well as what the plan's net OPEB liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher:

Sensitivity of Net OPEB Liability to the Single Discount Rate Assumption

	Current Single Discount	
1% Decrease	Rate Assumption	1% Increase
3.99%	4.99%	5.99%
\$ 1,124,839	\$ 18,461	\$ (919,800)

Regarding the sensitivity of the net OPEB liability to changes in the health care cost trend rates, the following presents the plan's net OPEB liability, calculated using the assumed trend rates as well as what the plan's net OPEB liability would be if it were calculated using a trend rate that is one percent lower or one percent higher:

Sensitivity of Net OPEB Liability to the Health Care Cost Trend Rate Assumption

	Current Healthcare Cost	
1% Decrease	Trend Rate Assumption	1% Increase
\$ (945,827)	\$ 18,461	\$ 1,160,638



Statement of Fiduciary Net Position as of December 31, 2020

Assets		
Cash and Deposits	\$	-
Receivables		
Accounts Receivable	\$	-
Total Receivables	<u>\$</u>	<u>-</u>
Investments		
Mutual Funds	\$	6,962,087
Total Investments	<u>\$</u>	<u>6,962,087</u>
Total Assets	<u>\$</u>	<u>6,962,087</u>
Liabilities		
Payables		
Accounts Payable	\$	-
Total Liabilities	<u>\$</u>	<u>-</u>
Net Position Restricted for OPEB	<u>\$</u>	<u>6,962,087</u>

Statement of Changes in Fiduciary Net Position for Year Ended December 31, 2020

Additions

Contributions

Employer - advance funding	\$ 285,000
Employer - current benefits*	162,018
Employee	-
Other	-
Total Contributions	\$ 447,018

Investment Income

Net Appreciation in Fair Value of Investments	\$ 652,811
Interest and Dividends	-
Less Investment Expense	-
Net Investment Income	\$ 652,811

Other	\$ -
Total Additions	\$ 1,099,829

Deductions

Benefit Payments Less Retiree Contributions*	\$ 162,018
OPEB Plan Administrative Expense	-
Other	-
Total Deductions	\$ 162,018

Net Increase in Net Position	\$ 937,811
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Net Position Restricted for OPEB

Beginning of Year	\$ 6,024,276
End of Year	\$ 6,962,087

* Consistent with the guidance from GASB Statement Nos. 74 and 75, the employer contribution and benefit payment amounts shown above include benefit payments made by the employer as they came due.

Schedule of Changes in Net OPEB Liability and Related Ratios

Current Reporting Period

Fiscal Year Ended December 31, 2020

A. Total OPEB liability		
1. Service cost	\$	109,467
2. Interest on the total OPEB liability		336,017
3. Changes of benefit terms		0
4. Difference between expected and actual experience of the total OPEB liability		(74,110)
5. Changes of assumptions		(29,617)
6. Benefit payments, including refunds of employee contributions		(162,018)
7. Net change in total OPEB liability		<u>179,739</u>
8. Total OPEB liability – beginning		<u>6,800,809</u>
9. Total OPEB liability – ending	\$	<u><u>6,980,548</u></u>
B. Plan fiduciary net position		
1. Contributions – employer	\$	285,000
2. Contributions – nonemployer contributing entities		162,018
3. Contributions – employee		0
4. Net investment income		652,811
5. Benefit payments, including refunds of employee contributions		(162,018)
6. OPEB plan administrative expense		0
7. Other		0
8. Net change in plan fiduciary net position		<u>937,811</u>
9. Plan fiduciary net position – beginning		<u>6,024,276</u>
10. Plan fiduciary net position – ending	\$	<u><u>6,962,087</u></u>
C. Net OPEB liability	\$	<u><u>18,461</u></u>
D. Plan fiduciary net position as a percentage of the total OPEB liability		99.74 %
E. Covered-employee payroll		NA
F. Net OPEB liability as a percentage of covered-employee payroll		NA

Schedules of Required Supplementary Information

Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Last 10 Fiscal Years (which may be built prospectively)

Fiscal year ending December 31,	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Total OPEB liability										
Service cost	\$ 109,467	\$ 101,169	\$ 190,743	\$ 184,032						
Interest on the total OPEB liability	336,017	451,588	433,155	422,016						
Changes of benefit terms	-	-	-	-						
Difference between expected and actual experience	(74,110)	(3,048,686)	(177,273)	(146,888)						
Changes of assumptions	(29,617)	218,141	(38,069)	49,580						
Benefit payments, including refunds of employee contributions	(162,018)	(136,274)	(126,136)	(123,649)						
Net change in total OPEB liability	179,739	(2,414,062)	282,420	385,091						
Total OPEB liability - beginning	6,800,809	9,214,871	8,932,451	8,547,360						
Total OPEB liability - ending (a)	<u>\$ 6,980,548</u>	<u>\$ 6,800,809</u>	<u>\$ 9,214,871</u>	<u>\$ 8,932,451</u>						
Plan fiduciary net position										
Employer contributions - advance funding	\$ 285,000	\$ 311,500	\$ 324,000	\$ 172,000						
Employer contributions - current benefits	162,018	136,274	126,136	123,649						
Employee contributions	-	-	-	-						
OPEB plan net investment income	652,811	724,043	(212,818)	395,193						
Benefit payments, including refunds of employee contributions	(162,018)	(136,274)	(126,136)	(123,649)						
OPEB plan administrative expense	-	-	-	-						
Other	-	-	-	-						
Net change in plan fiduciary net position	937,811	1,035,543	111,182	567,193						
Plan fiduciary net position - beginning	6,024,276	4,988,733	4,877,551	4,310,358						
Plan fiduciary net position - ending (b)	<u>\$ 6,962,087</u>	<u>\$ 6,024,276</u>	<u>\$ 4,988,733</u>	<u>\$ 4,877,551</u>						
Net OPEB liability - ending (a) - (b)	<u>\$ 18,461</u>	<u>\$ 776,533</u>	<u>\$ 4,226,138</u>	<u>\$ 4,054,900</u>						
Plan fiduciary net position as a percentage of total OPEB liability	99.74 %	88.58 %	54.14 %	54.60 %						
Covered-employee payroll	NA	NA	NA	NA						
Net OPEB liability as a percentage of covered-employee payroll	NA	NA	NA	NA						

Notes to Schedule:

Covered payroll was not provided to the actuary for the production of this report.



Schedules of Required Supplementary Information

Schedule of the Net OPEB Liability Multiyear

Last 10 Fiscal Years (which may be built prospectively)

FY Ending December 31,	Total OPEB Liability	Plan Net Position	Net OPEB Liability	Plan Net Position as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
2017	\$ 8,932,451	\$ 4,877,551	\$ 4,054,900	54.60 %	NA	NA
2018	9,214,871	4,988,733	4,226,138	54.14 %	NA	NA
2019	6,800,809	6,024,276	776,533	88.58 %	NA	NA
2020	6,980,548	6,962,087	18,461	99.74 %	NA	NA



Schedule of Contributions Multiyear

Last 10 Fiscal Years

<u>FY Ending December 31,</u>	<u>Actuarially Determined Contribution</u>	<u>Actual Contribution*</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll</u>	<u>Actual Contribution as a % of Covered Payroll</u>
2017	\$ 453,565	\$ 295,649	\$ 157,916	NA	NA
2018	449,295	450,136	(841)	NA	NA
2019	207,005	447,774	(240,769)	NA	NA
2020	205,355	447,018	(241,663)	NA	NA

* Consistent with the guidance from GASB Statement Nos. 74 and 75, the employer contribution shown above includes benefit payments made by the employer as they came due.

Notes to Schedule of Contributions

Valuation Date: December 31, 2018

Notes Actuarially determined contribution rates are calculated as of December 31 of even numbered years, which is 1 day prior to the beginning of the fiscal year biennium in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates for Fiscal Year Ending December 31, 2020:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Dollar, Open
Remaining Amortization Period	30 years
Asset Valuation Method	Market Value
Inflation	2.50%
Salary Increases	NA
Investment Rate of Return	5.00%, including inflation, net of administrative and investment expenses
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	Post-Retirement: RPH-2014 Health Annuitant Mortality Table for males and females, adjusted backward to 2006 with MP-2017. The provision for future mortality improvement is the fully generational projection table MP-2017, beginning in 2006. Disabled Retirement: RPH-2014 Disabled Mortality Table for males and females is used, adjusted backward to 2006 with MP-2017. The provision for future mortality improvement is the fully generational projection table MP-2017, beginning in 2006. Pre-Retirement: RPH-2014 Employee Mortality Table for males and females is used, adjusted backward to 2006 with MP-2017. The provision for future mortality improvement is the fully generational projection table MP-2017, beginning in 2006.
Health Care Trend Rates	Non-Medicare: 8.50% in 2019, grading to 4.50% in 2035. Medicare: 7.00% in 2019, grading to 4.50% in 2029.
Aging Factors	The tables used in developing the retiree premium are based on a recent Society of Actuaries study of health costs.

Calculation of the Single Discount Rate

GASB Statement No. 74 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total OPEB Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on OPEB plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on OPEB plan investments is 5.00%; the municipal bond rate is 2.00%; and the resulting Single Discount Rate is 4.99%.

The tables in this section provide background for the development of the Single Discount Rate.

The **Projection of Contributions** table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities).

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.

Single Discount Rate Development Projection of Contributions Ending December 31 for 2021 to 2070

Year	Projected Contributions from Current Employees	Projected Service Cost and Expense Contributions	Projected UAL Contributions	Projected Total Contributions
1	\$ 0	\$ 89,866	\$ (1,024)	\$ 88,841
2	0	85,285	(2,446)	82,839
3	0	80,935	(3,357)	77,578
4	0	76,225	(3,942)	72,283
5	0	70,746	(3,932)	66,814
6	0	65,487	(3,826)	61,661
7	0	61,045	(3,706)	57,339
8	0	57,207	(3,702)	53,505
9	0	53,337	(3,436)	49,901
10	0	49,347	(3,089)	46,257
11	0	45,428	(2,555)	42,874
12	0	41,973	(2,085)	39,888
13	0	39,117	(1,761)	37,356
14	0	36,664	(1,696)	34,968
15	0	34,470	(1,434)	33,035
16	0	32,476	(1,281)	31,195
17	0	30,641	(1,188)	29,453
18	0	28,452	(943)	27,509
19	0	25,971	(448)	25,523
20	0	23,059	278	23,337
21	0	19,994	1,047	21,041
22	0	17,018	1,899	18,917
23	0	13,923	2,891	16,814
24	0	11,171	3,766	14,937
25	0	8,888	4,522	13,410
26	0	6,991	5,216	12,206
27	0	5,492	5,723	11,215
28	0	4,245	6,181	10,426
29	0	3,285	6,518	9,803
30	0	2,530	6,748	9,278
31	0	1,931	6,939	8,870
32	0	1,438	7,067	8,505
33	0	1,070	7,151	8,221
34	0	733	7,245	7,978
35	0	486	7,242	7,728
36	0	306	7,253	7,559
37	0	221	7,189	7,410
38	0	147	7,124	7,271
39	0	92	7,054	7,146
40	0	52	6,968	7,020
41	0	35	6,874	6,909
42	0	23	6,777	6,800
43	0	11	6,688	6,699
44	0	0	6,592	6,592
45	0	0	6,493	6,493
46	0	0	6,395	6,395
47	0	0	6,299	6,299
48	0	0	6,204	6,204
49	0	0	6,111	6,111
50	0	0	6,019	6,019



Single Discount Rate Development Projection of Plan Net Position Ending December 31 for 2021 to 2070

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 5.000%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 6,962,087	\$ 88,841	\$ 252,563	\$ 0	\$ 344,061	\$ 7,142,427
2	7,142,427	82,839	282,531	0	352,190	7,294,926
3	7,294,926	77,578	316,991	0	358,834	7,414,346
4	7,414,346	72,283	348,618	0	363,893	7,501,904
5	7,501,904	66,814	350,823	0	368,082	7,585,976
6	7,585,976	61,661	341,987	0	372,376	7,678,025
7	7,678,025	57,339	358,868	0	376,455	7,752,952
8	7,752,952	53,505	363,915	0	379,982	7,822,524
9	7,822,524	49,901	379,576	0	382,985	7,875,834
10	7,875,834	46,257	406,586	0	384,893	7,900,399
11	7,900,399	42,874	448,405	0	385,005	7,879,872
12	7,879,872	39,888	487,154	0	382,948	7,815,554
13	7,815,554	37,356	522,448	0	378,798	7,709,260
14	7,709,260	34,968	536,160	0	373,086	7,581,154
15	7,581,154	33,035	519,508	0	367,044	7,461,726
16	7,461,726	31,195	503,577	0	361,421	7,350,765
17	7,350,765	29,453	497,398	0	355,982	7,238,802
18	7,238,802	27,509	491,335	0	350,486	7,125,462
19	7,125,462	25,523	484,119	0	344,948	7,011,814
20	7,011,814	23,337	474,427	0	339,451	6,900,175
21	6,900,175	21,041	486,429	0	333,516	6,768,303
22	6,768,303	18,917	488,103	0	326,829	6,625,946
23	6,625,946	16,814	478,073	0	319,906	6,484,594
24	6,484,594	14,937	491,791	0	312,454	6,320,193
25	6,320,193	13,410	498,129	0	304,039	6,139,513
26	6,139,513	12,206	502,062	0	294,879	5,944,536
27	5,944,536	11,215	511,044	0	284,883	5,729,591
28	5,729,591	10,426	512,908	0	274,071	5,501,180
29	5,501,180	9,803	512,580	0	262,643	5,261,045
30	5,261,045	9,278	496,311	0	251,025	5,025,036
31	5,025,036	8,870	474,162	0	239,761	4,799,506
32	4,799,506	8,505	464,704	0	228,709	4,572,016
33	4,572,016	8,221	445,403	0	217,805	4,352,638
34	4,352,638	7,978	424,230	0	207,353	4,143,740
35	4,143,740	7,728	412,406	0	197,193	3,936,255
36	3,936,255	7,559	398,986	0	187,146	3,731,974
37	3,731,974	7,410	389,565	0	177,161	3,526,981
38	3,526,981	7,271	371,285	0	167,360	3,330,327
39	3,330,327	7,146	350,668	0	158,033	3,144,838
40	3,144,838	7,020	339,502	0	149,031	2,961,388
41	2,961,388	6,909	325,780	0	140,195	2,782,711
42	2,782,711	6,800	311,596	0	131,609	2,609,523
43	2,609,523	6,699	299,371	0	123,249	2,440,101
44	2,440,101	6,592	287,170	0	115,076	2,274,598
45	2,274,598	6,493	274,826	0	107,103	2,113,368
46	2,113,368	6,395	262,031	0	99,355	1,957,087
47	1,957,087	6,299	249,083	0	91,859	1,806,162
48	1,806,162	6,204	235,949	0	84,635	1,661,051
49	1,661,051	6,111	222,737	0	77,703	1,522,128
50	1,522,128	6,019	209,520	0	71,081	1,389,708



Single Discount Rate Development Projection of Plan Net Position Ending December 31 for 2071 to 2120 (Concluded)

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 5.000%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
51	\$ 1,389,708	\$ 5,928	\$ 196,459	\$ 0	\$ 64,780	\$ 1,263,957
52	1,263,957	5,839	183,794	0	58,803	1,144,805
53	1,144,805	5,751	171,591	0	53,145	1,032,110
54	1,032,110	5,665	159,809	0	47,799	925,765
55	925,765	5,579	148,311	0	42,763	825,797
56	825,797	5,496	137,100	0	38,040	732,232
57	732,232	5,413	126,318	0	33,626	644,952
58	644,952	5,331	115,869	0	29,518	563,932
59	563,932	5,251	105,879	0	25,712	489,016
60	489,016	5,172	96,390	0	22,198	419,997
61	419,997	5,094	87,279	0	18,970	356,783
62	356,783	5,018	78,551	0	16,023	299,273
63	299,273	4,942	70,119	0	13,354	247,450
64	247,450	4,868	62,067	0	10,960	201,211
65	201,211	4,795	54,489	0	8,833	160,350
66	160,350	4,723	47,401	0	6,964	124,635
67	124,635	4,651	41,000	0	5,334	93,621
68	93,621	4,581	35,282	0	3,923	66,844
69	66,844	4,513	30,030	0	2,712	44,038
70	44,038	4,445	25,248	0	1,688	24,923
71	24,923	4,378	20,938	0	837	9,200
72	9,200	4,312	17,183	0	142	0
73	0	4,247	13,988	0	0	0
74	0	4,183	11,204	0	0	0
75	0	4,120	8,865	0	0	0
76	0	4,058	6,950	0	0	0
77	0	3,997	5,378	0	0	0
78	0	3,937	4,105	0	0	0
79	0	3,878	3,085	0	0	0
80	0	3,819	2,280	0	0	0
81	0	3,762	1,655	0	0	0
82	0	3,705	1,179	0	0	0
83	0	3,650	824	0	0	0
84	0	3,595	563	0	0	0
85	0	3,541	376	0	0	0
86	0	3,487	245	0	0	0
87	0	3,435	155	0	0	0
88	0	3,383	96	0	0	0
89	0	3,332	58	0	0	0
90	0	3,282	34	0	0	0
91	0	3,233	19	0	0	0
92	0	3,184	11	0	0	0
93	0	3,136	6	0	0	0
94	0	3,089	3	0	0	0
95	0	3,043	1	0	0	0
96	0	2,997	1	0	0	0
97	0	2,952	0	0	0	0
98	0	2,907	0	0	0	0
99	0	2,864	0	0	0	0
100	0	2,821	0	0	0	0



Single Discount Rate Development

Present Values of Projected Benefits Ending December 31 for 2021 to 2070

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of All Benefit Payments using Single Discount Rate (SDR)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ^{(a)-.5}	(g)=(e)*vf ^{^(a)-.5}	(h)=(c)/(1+SDR) ^{^(a)-.5}
1	\$ 6,962,087	\$ 252,563	\$ 252,563	\$ 0	\$ 246,476	\$ 0	\$ 246,489
2	7,142,427	282,531	282,531	0	262,592	0	262,633
3	7,294,926	316,991	316,991	0	280,591	0	280,665
4	7,414,346	348,618	348,618	0	293,892	0	294,000
5	7,501,904	350,823	350,823	0	281,667	0	281,800
6	7,585,976	341,987	341,987	0	261,498	0	261,649
7	7,678,025	358,868	358,868	0	261,339	0	261,517
8	7,752,952	363,915	363,915	0	252,395	0	252,594
9	7,822,524	379,576	379,576	0	250,720	0	250,944
10	7,875,834	406,586	406,586	0	255,772	0	256,028
11	7,900,399	448,405	448,405	0	268,648	0	268,944
12	7,879,872	487,154	487,154	0	277,965	0	278,301
13	7,815,554	522,448	522,448	0	283,907	0	284,280
14	7,709,260	536,160	536,160	0	277,485	0	277,878
15	7,581,154	519,508	519,508	0	256,064	0	256,454
16	7,461,726	503,577	503,577	0	236,391	0	236,776
17	7,350,765	497,398	497,398	0	222,372	0	222,758
18	7,238,802	491,335	491,335	0	209,202	0	209,586
19	7,125,462	484,119	484,119	0	196,314	0	196,695
20	7,011,814	474,427	474,427	0	183,222	0	183,598
21	6,900,175	486,429	486,429	0	178,912	0	179,297
22	6,768,303	488,103	488,103	0	170,978	0	171,365
23	6,625,946	478,073	478,073	0	159,490	0	159,868
24	6,484,594	491,791	491,791	0	156,254	0	156,640
25	6,320,193	498,129	498,129	0	150,732	0	151,120
26	6,139,513	502,062	502,062	0	144,687	0	145,075
27	5,944,536	511,044	511,044	0	140,263	0	140,653
28	5,729,591	512,908	512,908	0	134,071	0	134,458
29	5,501,180	512,580	512,580	0	127,605	0	127,987
30	5,261,045	496,311	496,311	0	117,671	0	118,036
31	5,025,036	474,162	474,162	0	107,066	0	107,410
32	4,799,506	464,704	464,704	0	99,934	0	100,265
33	4,572,016	445,403	445,403	0	91,222	0	91,534
34	4,352,638	424,230	424,230	0	82,748	0	83,040
35	4,143,740	412,406	412,406	0	76,612	0	76,889
36	3,936,255	398,986	398,986	0	70,589	0	70,853
37	3,731,974	389,565	389,565	0	65,640	0	65,892
38	3,526,981	371,285	371,285	0	59,581	0	59,816
39	3,330,327	350,668	350,668	0	53,593	0	53,810
40	3,144,838	339,502	339,502	0	49,416	0	49,621
41	2,961,388	325,780	325,780	0	45,160	0	45,353
42	2,782,711	311,596	311,596	0	41,137	0	41,317
43	2,609,523	299,371	299,371	0	37,641	0	37,810
44	2,440,101	287,170	287,170	0	34,388	0	34,545
45	2,274,598	274,826	274,826	0	31,343	0	31,489
46	2,113,368	262,031	262,031	0	28,460	0	28,597
47	1,957,087	249,083	249,083	0	25,766	0	25,892
48	1,806,162	235,949	235,949	0	23,245	0	23,361
49	1,661,051	222,737	222,737	0	20,898	0	21,005
50	1,522,128	209,520	209,520	0	18,722	0	18,820



Single Discount Rate Development

Present Values of Projected Benefits Ending December 31 for 2071 to 2120 (Concluded)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of All Benefit Payments using Single Discount Rate (SDR)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ^{-(a)-.5}	(g)=(e)*vf ^{-(a)-.5}	(h)=(c)/(1+SDR) ^{-(a)-.5}
51	\$ 1,389,708	\$ 196,459	\$ 196,459	\$ 0	\$ 16,719	\$ 0	\$ 16,808
52	1,263,957	183,794	183,794	0	14,896	0	14,977
53	1,144,805	171,591	171,591	0	13,245	0	13,318
54	1,032,110	159,809	159,809	0	11,748	0	11,814
55	925,765	148,311	148,311	0	10,384	0	10,443
56	825,797	137,100	137,100	0	9,142	0	9,195
57	732,232	126,318	126,318	0	8,022	0	8,069
58	644,952	115,869	115,869	0	7,008	0	7,050
59	563,932	105,879	105,879	0	6,099	0	6,136
60	489,016	96,390	96,390	0	5,288	0	5,321
61	419,997	87,279	87,279	0	4,560	0	4,589
62	356,783	78,551	78,551	0	3,908	0	3,934
63	299,273	70,119	70,119	0	3,323	0	3,345
64	247,450	62,067	62,067	0	2,801	0	2,820
65	201,211	54,489	54,489	0	2,342	0	2,358
66	160,350	47,401	47,401	0	1,940	0	1,954
67	124,635	41,000	41,000	0	1,598	0	1,610
68	93,621	35,282	35,282	0	1,310	0	1,319
69	66,844	30,030	30,030	0	1,062	0	1,070
70	44,038	25,248	25,248	0	850	0	857
71	24,923	20,938	20,938	0	672	0	677
72	9,200	17,183	9,427	7,757	288	1,883	529
73	0	13,988	0	13,988	0	3,328	410
74	0	11,204	0	11,204	0	2,614	313
75	0	8,865	0	8,865	0	2,027	236
76	0	6,950	0	6,950	0	1,558	176
77	0	5,378	0	5,378	0	1,182	130
78	0	4,105	0	4,105	0	885	94
79	0	3,085	0	3,085	0	652	68
80	0	2,280	0	2,280	0	472	48
81	0	1,655	0	1,655	0	336	33
82	0	1,179	0	1,179	0	235	22
83	0	824	0	824	0	161	15
84	0	563	0	563	0	108	10
85	0	376	0	376	0	70	6
86	0	245	0	245	0	45	4
87	0	155	0	155	0	28	2
88	0	96	0	96	0	17	1
89	0	58	0	58	0	10	1
90	0	34	0	34	0	6	0
91	0	19	0	19	0	3	0
92	0	11	0	11	0	2	0
93	0	6	0	6	0	1	0
94	0	3	0	3	0	0	0
95	0	1	0	1	0	0	0
96	0	1	0	1	0	0	0
97	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0
Totals					\$ 7,729,543	\$ 15,624	\$ 7,745,167



MICHIGAN PUBLIC ACT 202

State Reporting Assumptions as of December 31, 2020

The Protecting Local Government Retirement and Benefits Act, Public Act 202 of 2017, was put into law effective December 20, 2017. One outcome of the law is the requirement for the local unit of government to provide select reporting disclosures to the State. Section 5(1) of the Act provides the State treasurer with the authority to annually establish uniform actuarial assumptions for purposes of developing the requisite disclosures. Below you will find information which may be used to assist the local unit of government with required reporting attributable to the Charter Township of Meridian Other Postemployment Benefits Plan.

Uniform Assumptions, as applicable to the measurement and the required disclosures under uniform assumptions are denoted below. Additional discussion of the PA 202 and uniform assumptions may be found on the State website in the uniform assumption memo dated October 21, 2019.

Uniform Assumption	PA 202	Valuation Assumption Used	Uniform Assumption Used
Investment Rate of Return	Maximum of 7.00%	5.00%	5.00%
Salary Increase	Minimum of 3.50% or based on experience study within last 5 years	N/A	N/A
Mortality	Version of Pub-2010 or based on experience study within last 5 years	A version of RP-2014	A version of Pub-2010
Amortization of the Unfunded Accrued Actuarial Liability			
Period	Max. of 29 years	30 years	29 years
Method	Closed Plans: Level Dollar; Open Plans: Level Percent of Payroll or Level Dollar	Open Level Dollar	Closed Level Dollar
Health Care Inflation	8.25% trending to 4.50% for Non-Medicare 6.50% trending to 4.50% for Medicare	8.50% trending to 4.50% for Non-Medicare 7.00% trending to 4.50% for Medicare	8.25% trending to 4.50% for Non-Medicare 6.50% trending to 4.50% for Medicare



State Reporting as of December 31, 2020

The following information attributable to the Charter Township of Meridian Other Postemployment Benefits 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 on the State website.

Michigan Department of Treasury

Form 5572 (2-20)

The Protecting Local Government Retirement and Benefits Act (PA 202 of 2017) Health Care (OPEB) Report

19	Actuarial Assumptions	
20	Actuarial assumed rate of investment return	5.00%
21	Enter discount rate	5.00%
22	Amortization method utilized for funding the system's unfunded actuarial accrued liability, if any	Level Dollar
23	Amortization period utilized for funding the system's unfunded actuarial accrued liability, if any	30 years
24	Is each division within the system closed to new employees?	No
25	Health care inflation assumption for the next year	8.25%
26	Health care inflation assumption - Long-Term Trend Rate	4.50%
27	Uniform Assumptions¹	
28	Enter retirement health care system's actuarial value of assets using uniform assumptions	\$ 6,962,087
29	Enter retirement health care system's actuarial accrued liabilities using uniform assumptions ²	\$ 7,113,993
30	Funded ratio using uniform assumptions	Auto ³
31	Actuarially Determined Contribution (ADC) using uniform assumptions ⁴	\$ 215,022
32	All systems combined ADC/Governmental fund revenues	Auto ²

¹ Information on lines 28-32 is based on assumptions listed on the prior page.

² Calculated as of December 31, 2018 and rolled-forward to December 31, 2020.

³ Automatically calculated by State of Michigan Form 5572.

⁴ Calculated as of December 31, 2018 applicable for fiscal year ending December 31, 2020.





9A

**CONSENT AGENDA
BOARD COMMUNICATIONS
JUNE 15, 2021**

From: [Erin Mock](#)
To: [Township Board](#)
Subject: Railroad Quiet Zones
Date: Tuesday, March 23, 2021 11:41:47 AM
Attachments: [image.png](#)
[November212017TownshipBoar.pdf](#)

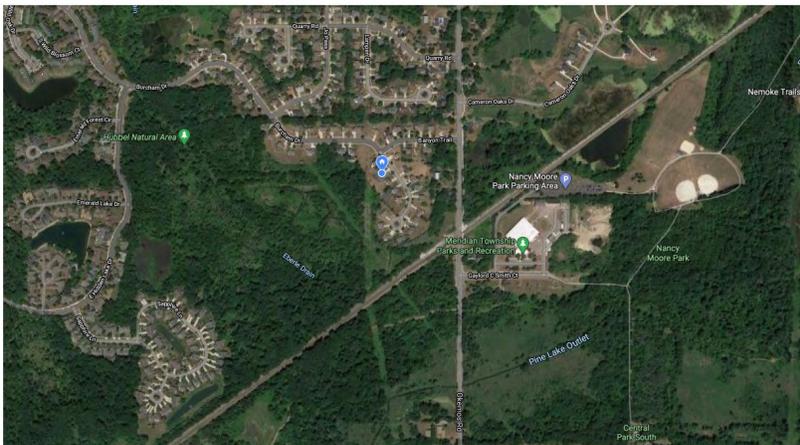
Hello Board Members,

I moved to the area in 2019 and was recently made aware of an effort that was made previously to make certain areas of Meridian "Quiet Zones" for the trains. I have heard from many of my neighbors how disruptive the trains have been, including one family with 5 children who are struggling to sleep through noise at night. I included a map below so you can see not only how close my neighborhood is to the train tracks, but how close we are to the Okemos Road railroad crossing.

I found a Facebook page (<https://www.facebook.com/MeridianOZ/>) that details some of the efforts made in the past as well as the board meeting minutes from 11/21/2017 (attached) that include a detailed study of what it would take to make changes to the major intersections. I was hoping someone could provide an update on how these efforts concluded, or if there is still a chance this could be pursued by the current board members. My family as well as many others in Meridian township would find much value in the reduction of noise, since the train comes through 20+ times each day including very late at night.

I appreciate your time and attention,

Erin Mock



PROPOSED BOARD MINUTES

PROPOSED MOTION:

Move to approve and ratify the minutes of the November 9, 2017 Regular Meeting as submitted.

ALTERNATE MOTION:

Move to approve and ratify the minutes of the November 9, 2017 Regular Meeting with the following amendment(s): [insert amendments].

**November 21, 2017
REGULAR MEETING**

CHARTER TOWNSHIP OF MERIDIAN
TOWNSHIP BOARD REGULAR MEETING - **DRAFT** -
5151 Marsh Road, Okemos, MI 48864-1198
853-4000, Town Hall Room
THURSDAY, November 9, 2017, **6:00 P.M.**

PRESENT: Supervisor Styka, Clerk Dreyfus, Treasurer Brixie, Trustees Deschaine, Jackson, Opsommer, Sundland

ABSENT: None

STAFF: Township Manager Frank Walsh, Director of Public Works & Engineering Derek Perry, Director of Community Planning & Development Mark Kieselbach, Economic Development Director Christopher Buck, Senior Planner Peter Menser

1. CALL MEETING TO ORDER

Supervisor Styka called the meeting to order at 6:03 P.M.

2. PLEDGE OF ALLEGIANCE/INTRODUCTIONS

Supervisor Styka led the Pledge of Allegiance.

3. ROLL CALL

The secretary called the roll of the Board.

4. PRESENTATION

Supervisor Styka mentioned artwork showcased in the Townhall Room from Chippewa Middle School

5. CITIZENS ADDRESS AGENDA ITEMS AND NON-AGENDA ITEMS (None)

6. TOWNSHIP MANAGER REPORT

Manager Walsh updated the board on discussion in the community about the relocation of the Farmers Market next to Studio C. Met with owners of the Meridian Mall, LuAnn Maisner Director of Parks and Recreation is leading the project, and Dave Ledeburgh of the EDC working on this as well.

November 14th Goal setting Study Session at the Central Fire Station.

Mariam Mattison will be working on picking an Auditor for the Township and bringing a recommendation to the Board at the November 21, 2017 meeting.

7. BOARD MEMBER REPORTS AND ANNOUNCEMENTS

Clerk Dreyfus – Election Report:

- Reported the results of the November 7, 2017 Election
- 30,273 registered voters in Meridian Township
- 4,734 voted: 15.6% voter turnout
- 2,309 YES votes, 2425 NO votes: Ballot proposal FAILED in Meridian Township
- Ingham County millage proposal passed countywide
- Absentee Voter ballots comprised almost 50% of the total ballots cast

Treasurer Brixie reported:

- Attended MABA's 20th-anniversary banquet commemorating the Townships involvement with MABA over the past 20 years.
- Attended the October 26th joint meeting of Park Commission and Land Preservation, discussed park land as natural area and importance of continuity with other open space in order to be able to protect larger parcels of land.
- Attended the November 8th Tri-County Regional Planning Commission (TCRPC), changing public input processes to encourage more input in the planning process.
- Attended the neighborhood leader meeting, no significant issues in the Township reported.

Trustee Deschaine reported:

- Attended the TCRPC open house Moving Mid-Michigan, pavement conditions were a large concern; 57.3% of roads in poor condition in Tri-County region. Roads are hurting most likely due to State slashing funding for roads.
- CATA 10.9 million riders a year, "great" mass transit helps keep businesses strong.
- Attended Commission member recognition night, John Scott-Craig and Sue Elder were honored.
- Attended the November 2, 2017, EDC meeting regarding the efficacy of a redevelopment fund, EDC looking for new members, 2 openings.
- November 16th Transportation meeting will focus on a "road diet" (from two lanes to one lane) for Lake Lansing Road, from Saginaw Highway to Hagadorn, presented by Bill Conklin.

Trustee Opsommer reported:

- November 15, 2017, CATA meeting announcement on two final candidates for CEO, special meeting to interview candidates and make final decision. Contract negotiations will follow.
- Search firm was used, approach respected confidentiality of applicants, now in final phase, will update the Township Board on the special CATA meeting.
- October CATA board meeting discussed Zone 2 fares in Delta Township, they decided not to continue their Redi-Ride services. Discussed "double fares" for certain rider situations.

Clerk Dreyfus reported:

- Met with new MSU Museum Director. Discussed his previous experience, Clerk proposed exhibit called "Voice of the People" featuring history of elections in Michigan, issues of voter suppression, third parties, campaigning. Looking for ways to collaborate with MSU.
- Attended tour of Old Okemos Cemetery, several citizens attended from families of early Meridian settlers; sponsored by the Friends of Historic Meridian.
- Attending Moving Mid-Michigan afternoon session of the TCRPC open house, great networking and innovative, interactive methods of demonstrating transportation issues and getting participant input.

Trustee Jackson reported:

- Attended the Neighborhood Leadership Meeting.
- Attended the TCRPC open house, looked roads MDOT and Meridian Township were responsible for, and looking at ways on how to improve poor road conditions.
- Please to note two new businesses – a bakery on Haslett Road and a restaurant on Central Park Drive – and Hampton Inn redeveloped their site, which is a good direction for the Township
- Parks Commission dedicated a new mural in Hillbrook Park.

Trustee Sundland Reported:

- Attended the Costco opening.
- Attended the Meridian Cares fundraiser at Old Chicago.
- Saddleback BBQ opening day and support of their new business.
- Attended the award ceremony for Boards and Commissioners.

Supervisor Styka Reported:

- Along with Manager, Treasurer, and Economic Development Director, attended the Chamber of Commerce Meeting.
- Attended a symposium with Van Martin Realty, economist discussed the area and the potential for development, real estate, and which areas look better than others; he predicted a small recession in 2019.
- Attended the Costco ribbon cutting.
- Meridian Downtown Development Authority (DDA) and Corridor Improvement Authority (CIA) both looking at increasing amenities in Meridian Township.
- Attended the Meridian Cares event, which raised almost \$4,000.
- Attended Boards and Commissions awards.

8. APPROVAL OF AGENDA

Treasurer Brixie moved to approve the agenda as submitted. Seconded by Trustee Opsommer.

VOICE VOTE: YEAS: Supervisor Styka, Treasurer Brixie, Clerk Dreyfus, Trustees Deschaine, Jackson, Opsommer, Sundland

NAYS: None

Motion carried unanimously.

9. CONSENT AGENDA (SALMON)

Supervisor Styka reviewed the consent agenda.

Opsommer moved to adopt the Consent Agenda. Motion failed for lack of a second. Trustee Deschaine moved to amend Section H and approve the consent agenda. Seconded by Clerk Dreyfus.

ROLL CALL VOTE: YEAS: Trustees Deschaine, Jackson, Opsommer, Sundland, Supervisor Styka, Treasurer Brixie, and Clerk Dreyfus

NAYS: None

Motion carried unanimously.

A. Communications

Trustee Deschaine moved that the communications be received and placed on file, and any communications not already assigned for disposition be referred to the Township Manager or Supervisor for follow-up. Seconded by Clerk Dreyfus.

ROLL CALL VOTE: YEAS: Trustees Deschaine, Jackson, Opsommer, Sundland, Supervisor Styka, Treasurer Brixie, and Clerk Dreyfus

NAYS: None

Motion carried unanimously.

B. Minutes

Trustee Deschaine moved to approve and ratify the minutes of the Regular Meeting as substituted. Seconded by Clerk Dreyfus.

ROLL CALL VOTE: YEAS: Trustees Deschaine, Jackson, Opsommer, Sundland, Supervisor Styka, Treasurer Brixie, and Clerk Dreyfus

NAYS: None

Motion carried unanimously.

C. Bills

Trustee Deschaine moved that the Township Board approve the Manager’s Bills as follows:

Common Cash	\$	965,241.85
Public Works	\$	663,786.34
Trust & Agency	\$	173,517.23
Total Checks	\$	1,802,545.42
Credit Card Transactions (Dec. 1 to Dec. 7, 2016)	\$	12,430.34
Total Purchases	\$	<u>1,814,975.76</u>
ACH Payments	\$	<u>1,039,001.24</u>

Seconded by Clerk Dreyfus

ROLL CALL VOTE: YEAS: Trustees Deschaine, Jackson, Opsommer, Sundland, Supervisor Styka, Treasurer Brixie, and Clerk Dreyfus

NAYS: None

Motion carried unanimously.

D. Marriott Hotel Liquor License

Trustee Deschaine moved to adopt the resolution approving the Resort B Hotel liquor license for PHG Land Development to sell beer, wine, and spirits at the proposed Marriott Courtyard Hotel at 3454 Meridian Crossing Drive. Seconded by Clerk Dreyfus.

ROLL CALL VOTE: YEAS: Trustees Deschaine, Jackson, Opsommer, Sundland, Supervisor Styka, Treasurer Brixie, and Clerk Dreyfus

NAYS: None

Motion carried unanimously.

E. Charitable Gaming License- Okemos Central Elementary

Trustee Deschaine moved to approve a request from the Central Elementary PTO of Meridian Township, Ingham County, asking that they be recognized as a non-profit organization operating in the community for the purposes of obtaining a gaming license for approval and further that the Township Clerk is authorized to execute the resolution from the State of Michigan. Seconded by Clerk Dreyfus.

ROLL CALL VOTE: YEAS: Trustees Deschaine, Jackson, Opsommer, Sundland, Supervisor Styka, Treasurer Brixie, and Clerk Dreyfus

NAYS: None

Motion carried unanimously.

F. Additions to the Tax Roll

Trustee Deschaine moved to assess the charges identified in the staff memorandum with parcel identification available in the Treasurer's Office dated November 3, 2017, for Delinquent Special Assessments, Utility Bills, False Alarms, Nuisance, Lot Mowing/Code Violation, and Misc. Fees as a tax lien against the subject properties as authorized by Michigan Compiled Laws (MCL) 41.727, 41.728 and Meridian Township Ordinance Code Sections 58-32, 58-33, 78-98, 78-155, 46-5, 82-27, 18-1 and 18-15. Seconded by Clerk Dreyfus.

ROLL CALL VOTE: YEAS: Trustees Deschaine, Jackson, Opsommer, Sundland, Supervisor Styka, Treasurer Brixie, and Clerk Dreyfus

NAYS: None

Motion carried unanimously.

G. Disposal of Surplus Equipment

Trustee Deschaine moved to authorize the sale of the vehicles and equipment that have been declared surplus by the Department of Public Works; at public auction, internet auction, or by sealed bid. Seconded by Clerk Dreyfus.

ROLL CALL VOTE: YEAS: Trustees Deschaine, Jackson, Opsommer, Sundland, Supervisor Styka, Treasurer Brixie, and Clerk Dreyfus

NAYS: None

Motion carried unanimously.

H. 2018 Regular Board Meeting Schedule

Supervisor Styka offered some changes to the schedule, along with other members of the board.

Trustee Deschaine moved to amend the 2018 Board Meeting Schedule by striking the April 3, 2018 Township Board Meeting from the schedule. Seconded by Clerk Dreyfus.

VOICE VOTE: YEAS: Supervisor Styka, Treasurer Brixie, Clerk Dreyfus, Trustees Deschaine, Jackson, Opsommer, Sundland

NAYS: None

Motion carried unanimously.

10. QUESTIONS FOR THE ATTORNEY (None)

11. HEARINGS (None)

12. ACTION ITEMS

A. Zoning Amendment #17030 Allow Golf Courses as Open Space in a Planned Unit Development (PUD) and in a Planned Residential Development (PRD) - **Final Adoption**

Trustee Deschaine moved to approve the Resolution for Final Adoption of Zoning Amendment #17030 to amend section 86-378 and section 86-439 of the Code of Ordinances to allow a golf course to be counted as open space in a Planned Residential Development (PRD) and Planned Unit Development (PUD). Seconded by Trustee Opsommer

ROLL CALL VOTE: YEAS: Trustees Deschaine, Jackson, Opsommer, Sundland, Supervisor Styka, Treasurer Brixie, and Clerk Dreyfus

NAYS: None

Motion carried unanimously 7-0.

B. Donley Elementary School

Treasurer Brixie moved to authorize the Township manager to submit a request to the Michigan Department of Licensing and Regulatory Affairs for the delegation of school plan review and inspection authority to The Charter Township of Meridian Building Department. Seconded by Trustee Opsommer.

Board and staff discussion:

- Board member belief local government collaboration with shared school districts and coming together helps the schools and East Lansing, while Meridian Township retains building permit fees
- Manager stated that Meridian Township has to work with The State of Michigan, the City of East Lansing, and East Lansing Schools for this project

VOICE VOTE: YEAS: Supervisor Styka, Treasurer Brixie, Clerk Dreyfus, Trustees Deschaine, Jackson, Opsommer, Sundland

NAYS: None

Motion carried unanimously.

C. Section 61 Review- Land Preservation Purchases

Trustee Jackson moved to refer the five properties on the Land Preservations Acquisitions 2017 Map for purchase by the Land Preservation Advisory Board to the Planning Commission for a Section 61 Review in Compliance with the Michigan Planning Enabling Act. Seconded by Treasurer Brixie.

Board and staff discussion:

- Before the Board can approve, the Planning Commission reviews the proposal and options
- Board member excited about these purchases, properties acquired take years to negotiate and work out details
- Properties can be complete donations, purchased with grants, partial donation and partial purchases, and some are outright purchases
- Land Preservation will total approximately 900 acres with these additions
- Land Preservation is innovative, originated in 2000 and was the first of its kind in the state
- Preserved land will be appreciated by citizens for years to come
- Hope that Planning Commission can support requests for more land preservation projects
- Board member suggested working with the Parks Department and with volunteers to keep the preserved land natural without being overrun with invasive species

VOICE VOTE: YEAS: Supervisor Styka, Treasurer Brixie, Clerk Dreyfus, Trustees Deschaine, Jackson, Opsommer, Sundland

NAYS: None

Motion carried unanimously.

13. BOARD DISCUSSION ITEMS

A. Commission Review #17093 2017 Master Plan Update

- Director Kieselbach introduces the 2017 Master Plan Update that the Planning Commission (PC) voted to approve with conditions, ready for the Township Board meeting on November 21, 2017
- Board approved the Climate Sustainability Plan and it will be referenced in the Master Plan
- Board changes to the Master Plan requires another public hearing at the PC
- Inquiry if the Greenspace Plan is referenced like the Climate Sustainability Plan
- Master Plan does not provide clear vision on the direction Meridian wants to be moving in
- Plan focuses on mainly on increasing density, developers are going to build out apartments and party/convenience stores which serve transient renters
- Community members discussing redevelopment don't want apartments, they want destinations to go to, a park or a community interaction zone or a real grocery store
- 89% of Meridian citizens surveyed stated they do not want more apartment complexes
- Board member belief that condensing zoning categories is not a vision, it allows developers to make the decisions, and developers benefit the most from the Master Plan

- Board member assertion that MUPUD is just a tool and the developer's use of it is driving the vision, rather than citizens and the Township Board driving the vision
- Board member belief that Meridian needs more walkable areas, create interaction zones, new citizen engagement, natural sustainability and innovative landscaping
- Clerk presents examples of what Meridian could be aiming for in creating "place" with examples of innovative pocket parks: squeezed in "tight areas," can have art/murals, theater, community engagement, food carts, unique seating, waterfalls, fountains, lush greenery, a sanctuary/labyrinth, 3 dimensionality
- Commercial zones can have town squares, add innovative landscaping, be more community friendly, add water features, create new interaction patterns between people and business
- Board member belief the Master Plan does get into vision and incorporates some of these same ideas being mentioned, nothing prevents innovative ideas from being adopted
- Inquiry about medical marijuana facilities and inclusion in the Master Plan
- Ordinance has to be adopted for medical marijuana but Master Plan does not prohibit them
- Questions about several maps in the Master Plan addressing streets and pathway markings
- Funding is an issue, Meridian Redevelopment Fund and form-based code could create green spaces

B. Outdoor Assemblies

- Director Kieselbach presents information regarding a resident who submitted an application for an outdoor assembly license
- License is required under Chapter 38, Article V, Outdoor Assemblies
- An applicant proposing to have 500 people at their residence for an event, raised issues with noise, parking, disturbing other residents, and how will the host handle these issues
- Staff is willing to write an amendment to ordinances
- Township would be able to give more direction for the issues of concern
- Township will take into consideration weddings, graduation parties, and large gatherings when writing the ordinances and ordinances amendments
- Board members wonder why a need for an regulations regarding large gatherings since they are rare, questioned if there have been reports of problems in the past
- Board member suggests a threshold for gathering sizes

14. COMMENTS FROM THE PUBLIC

Supervisor Styka opened Public Remarks.

Jack Vos, 5720 Lebaron Ct., East Lansing; his primary concern is the Master Plan adding density to open spaces, and stated the township is struggling to have open spaces that aren't designated as public parks. Masonic Temple had many problems with the Township in the past when trying to add parking, so how can there now be apartment buildings designated in that same flood area? He wondered if planners saw blank spaces on a map and decided to indiscriminately fill up spaces with apartments.

James Hart, 5706 Lebaron Ct., East Lansing; President of Okemos Masonic Temple, one of the oldest entities in Meridian Township and zoned commercial, feel they are being forced to consider selling and move out of the area. Wants the Board to understand their concerns and states that they have to adapt to the Master Plan. They are worried about how they will fit into the plan.

Supervisor Styka closed Public Remarks.



To: Supervisor Ronald J. Styka & Board Members

From: Phil Deschaine, Township Trustee and Board Representative to the Transportation Commission

Date: November 16, 2017

Re: Railroad Quiet Zone Preliminary Study

At a recent meeting of the Township Transportation Commission, representatives of Abonmarche engineering firm presented the findings of a study performed for the Township on the concept of implementing **Railroad Quiet Zones** to eliminate the need for trains to use their horn at crossings when they traverse our community. A copy of their study is attached.

By way of background, an interested citizen completed preliminary research and petitioned the Township to pursue this endeavor. According to MDOT, no Michigan regulations or state statutes are available pertaining to whistle blowing, so only the federal guidelines apply.

Two rail lines cross through the township: CSX and CN as the Grand Western Trunk Railroad (GTW). The current CSX line runs for 5.5 miles from East Mount Hope Road to Meridian Road that carries 1 day train, 2 night trains, and 1 switching train cross through the Township daily.

The CN railroad travels as the GTW rail line for approximately 6.7 miles through the Township. The CN railroad has much heavier train traffic than the CSX railroad with 17 trains per day and 1 train each night. These 21 trains per day create a significant amount of noise pollution to Township's residents and businesses. In particular, residents in the northern half of the township endure these extremely loud railroad crossing horns day and night.

The costs associated with upgrading all 5.5 miles of CSX crossings \$648,490. Over \$600,000 of this is cost to upgrade the Meridian Road and Hulett Road crossings. A limited option could be implemented to extend the quiet zone from the Okemos Road crossing to Van Atta Road crossing, a distance of 2.91 miles at a cost of \$27,440. The cost would be significantly reduced because of the elimination of the upgrade costs required at the Hulett Road and Meridian Road crossings.

The CN railroad travels as the Grand Trunk Western Railroad (GTW) for approximately 6.7 miles. The cost of the minor tasks needed to meet the standards is \$7,500. This is summarized on page 17 on the study. Because Haslett Public Schools are in close proximity to the Haslett Road – CN railroad crossing, the Abonmarche study recommends implementation of Z-gates like the one on used on the Michigan State University campus to improve safety by making pedestrians more aware as they approach the crossing. The cost associated with these Z-Gates for the Haslett Road crossing is \$30,000.

At its August 24th meeting, the Transportation Commission unanimously recommends that the Township Board implement the Quiet Zone limited option for the CSX line and for the CN Line with

Memo to Township Board
November 16, 2017
Re: Railroad Quiet Zone Preliminary Study
Page 2

the additional costs of Z-gates at Haslett Road. The commission made these recommendations in as a way to mitigate the significant noise pollution of the many rail crossings in our Township while still maintaining acceptable safety standards.

Attachment:

1. Railroad Quiet Zones Study



PRELIMINARY STUDY: RAILROAD QUIET ZONES

Prepared for:

The Charter Township of Meridian
5151 Marsh Road
Okemos, Michigan 48864

Prepared by:



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Introduction

The Federal Railroad Administration (FRA) requires trains to blow whistles for at least 15 seconds before every public grade crossing to maintain the safety of the crossing and reduce the potential for collisions. This whistle blowing can impact the quality of life and home values for the environment near the tracks.

One option for mitigating this noise pollution is for municipalities to establish quiet zones. Quiet zones must extend for at least ½ mile of track and may include one or several crossings. To be considered for a quiet zone, crossings must, at a minimum, have active warning devices such as flashing lights, gates, constant warning train detection systems and power out indicators. Once these basics are provided, the process of seeking a quiet zone can be pursued by improving the crossing to meet one of the following criteria:

- The Quiet Zone Risk Index (QZRI) is less than or equal to the Risk Index with [Train] Horns Sounding (RIWH)
- The QZRI is less than the National Significant Risk Threshold (NSRT)

The NSRT is determined annually. Crossings established as quiet zones based on being less than the NSRT require more frequent reevaluation. It may be a more conservative practice to establish a quiet zone based on the RIWH. The QZRI can be reduced through the implementation of one of many possible Supplementary Safety Measures (SSMs) as described in Figure 1.

SSM CODES | other codes

- 1 Temporary Closure of a Public Highway-Rail Grade Crossing
- 2 Permanent Closure of a Public Highway-Rail Grade Crossing
- 3 Grade Separation of a Public Highway-Rail Grade Crossing
- 4 Four-Quadrant Gates Upgrade from Two Quadrant gates, No Vehicle Presence Detection
- 5 Four-Quadrant Gates Upgrade from Two Quadrant Gates, with medians and no Vehicle Presence Detection
- 6 Four-Quadrant Gates Upgrade from Two Quadrant Gates, with Vehicle Presence Detection
- 7 Four-Quadrant Gates Upgrade from Two Quadrant Gates, with medians and Vehicle Presence Detection
- 8 Four-Quadrant Gates New Installation, No Vehicle Presence Detection
- 9 Four-Quadrant Gates New Installation with medians and no Vehicle Presence Detection
- 10 Four-Quadrant Gates New Installation with Vehicle Presence Detection
- 11 Four-Quadrant Gates New Installation with medians and Vehicle Presence Detection
- 12 Mountable medians with Reflective Traffic Channelization Devices
- 13 Non-Traversable Curb Medians with or without Channelization Devices
- 14 One-Way Streets with Gates

Figure 1: Available SSM codes for use in reducing Quiet Zone Risk Index

The QZRI can also be reduced through the use of other Alternative Safety Measures (ASMs), with written permission from the FRA. Upgrading crossings to reduce the QZRI to an acceptable value can cost anywhere from \$3,000 to over \$1 million depending on what measures are necessary to improve safety. [1] The SSMs required to meet these criteria can be determined by utilizing the FRA Quiet Zone Calculator to implement SSMs and evaluate their reduction of risk. If a quiet zone is implemented, the crossing warning signs must be upgraded to include a warning that horns are not being used at the crossing. The FRA recommends a diagnostic team be created to evaluate the crossings in the proposed quiet zone. A diagnostic team evaluation is **required** for proposed quiet zones which include private crossings. Diagnostic teams consist of representatives from the public authority,



railroad, State agency responsible for crossing safety and FRA grade crossing managers before a quiet zone is created.

Background

The Charter Township of Meridian requested an investigation into the requirements and feasibility of establishing a railroad quiet zone on the rail lines that stretch through the township. An interested citizen completed preliminary research and petitioned the township to pursue this endeavor. According to MDOT, no Michigan regulations or state statutes are available pertaining to whistle blowing, so only the federal guidelines apply. [3] Michigan is in Region 4 of the FRA, based out of Chicago. [4] Two rail lines cross through the township: CSX and CN as the Grand Western Trunk Railroad (GTW).

Railroad Crossings of Interest

CSX Rail Line Evaluation

The current CSX line from East Mount Hope Road to Meridian Road in the Charter Township of Meridian is an approximately 5.5 mile stretch of track with 8 at-grade crossings including one private crossing, depicted in Figure 2. 1 day train, 2 night trains, and 1 switching train cross through the township daily.

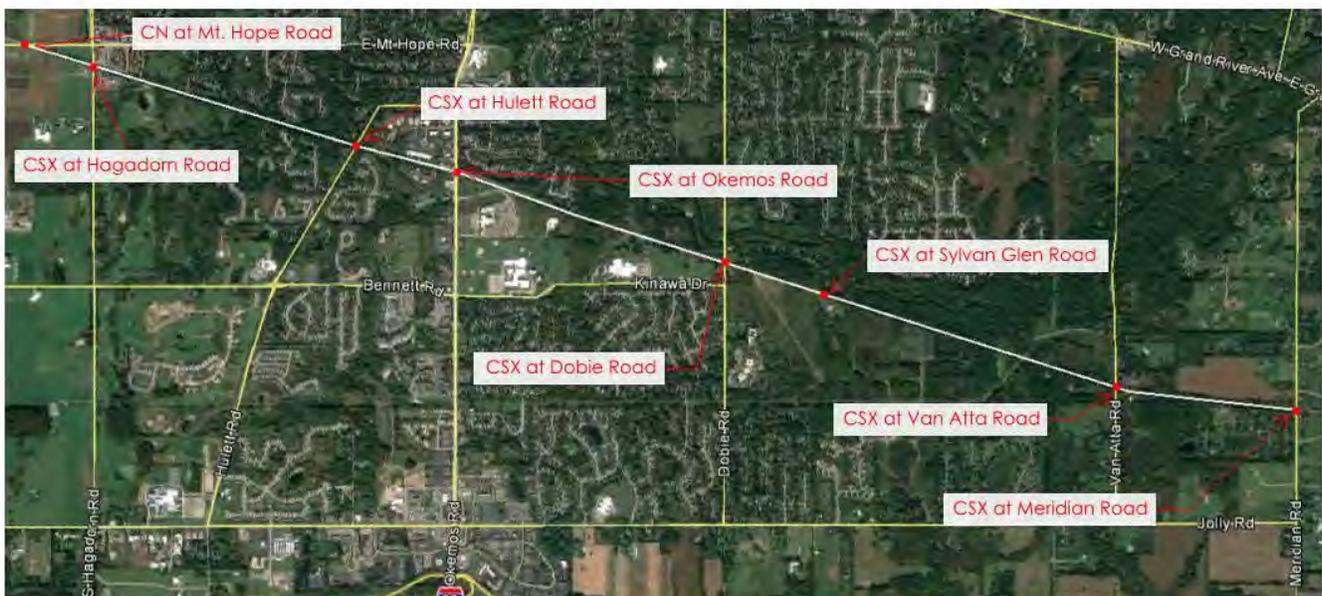


Figure 2: Aerial map depicting 5.5 miles of CSX railroad crossings in the Charter Township of Meridian



Preliminary findings based on Google Earth street view and a field visit to each CSX crossing are summarized in the following table:

At Grade Crossing	Sidewalk		Detectable Warnings	Lights	Bells	Gates	Signage	Pavement Markings	Existing SSMS (# from Fig. 1)
	W	E							
E Mt Hope Rd	<input type="checkbox"/>	<input type="checkbox"/>	n/a	<input checked="" type="checkbox"/>					
S Hagadorn Rd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	n/a	<input checked="" type="checkbox"/>					
Hulett Rd	<input type="checkbox"/>	<input type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Okemos Rd	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
Dobie Rd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
Sylvan Glen Rd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Van Atta Rd	<input type="checkbox"/>	<input type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Meridian Rd	<input type="checkbox"/>	<input type="checkbox"/>	n/a	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

The public crossings at Hulett Road and Meridian Road need to be upgraded to include gates before a quiet zone could be considered for the entire length. MDOT would not financially contribute to these improvements as there is not a measureable safety benefit to implementing a quiet zone; therefore all the funding must come from the road authority. The Michigan Department of Transportation's Office of Rail advised that the cost of implementing new lights and gates systems at a crossing would depend on the complexity of the crossing such as its proximity to other crossings, but may be estimated to cost \$300,000 per crossing.

The private crossing at Sylvan Glen Road appears to serve two homes from a private drive and only has signs as a crossing warning, see Figure 3. A private crossing's risk index is not factored into the overall QZRI, but requires diagnostic team review during consideration of a quiet zone. At a minimum the FRA requires private crossings in a quiet zone to have a stop sign and a sign signifying "no horn".



Figure 3: Private CSX crossing on Sylvan Glen Road



The FRA conducts crossing inventories which include: crossing location, railroad information, traffic control device information, physical characteristics, and public highway information. The most recent inventory forms for the crossings within Meridian Township along the CSX railroad can be found in Appendix A. To establish a quiet zone, these forms would need to be updated within a year preceding a request for a quiet zone.

Assuming the minimum required updates could be completed by adding gates at the Hulett Road and Meridian Road crossings, the FRA's Quiet Zone Calculator can be utilized to determine the current risk indices at each crossing as shown in Figure 4.

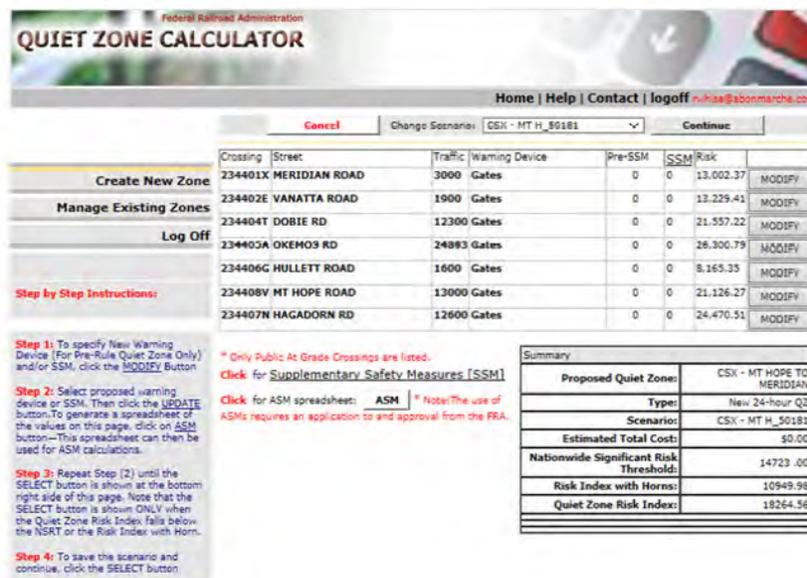


Figure 4: Quiet Zone Evaluation of the CSX Railroad in the Charter Township of Meridian including lights and gates at Hulett and Meridian Roads

The quiet zone calculator result indicates that additional safety measures beyond the implementation of gates would be required to improve the crossings to meet the qualifications of a quiet zone since the QZRI is higher than the NSRI and the RIWH.

SSM 12 is defined as mountable medians with channelization devices and is the most cost effective SSM option; SSM 13 is a non-traversable curb median with or without channelization devices, as defined in Figure 1. Each of these methods requires implementation for 100 feet along the roadway on either side of the crossing. Driveway entrances are located within 100 feet from the crossing at Hagadorn, Okemos, Dobie, and Meridian Roads making the implementation of SSMs 12 and 13 impossible without impeding access. SSM 12 could be installed at the crossing on Mount Hope, Hulett, and Van Atta Roads with no impacts on driveways. The result of constructing those improvements is shown in Figure 5.



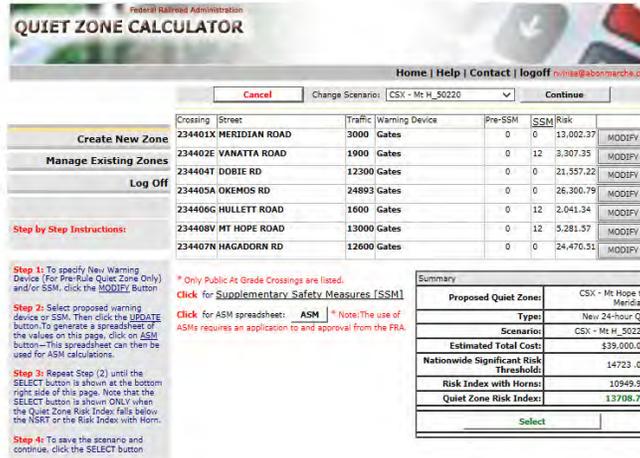


Figure 5: Risk calculation with installation of SSM 12 at CSX crossings on Mt. Hope, Hulett, and Van Atta Roads

While installing SSM 12 at Mount Hope, Hulett, and Van Atta Roads does make the quiet zone technically acceptable by reducing the QZRI lower than the NSRI, it is advised that improving overall safety in the quiet zone should concentrate first on reducing risk at the highest-risk crossings. The following two options were, therefore, also considered. The driveways within 100 feet of the crossing at Okemos Road appear to receive low volume use, so impeding access may not be very impactful. Figure 6 shows that implementing SSM 13 at the Okemos Road crossing and SSM 12 at Van Atta Road would be adequate to reduce the risk within the zone to below NSRI.

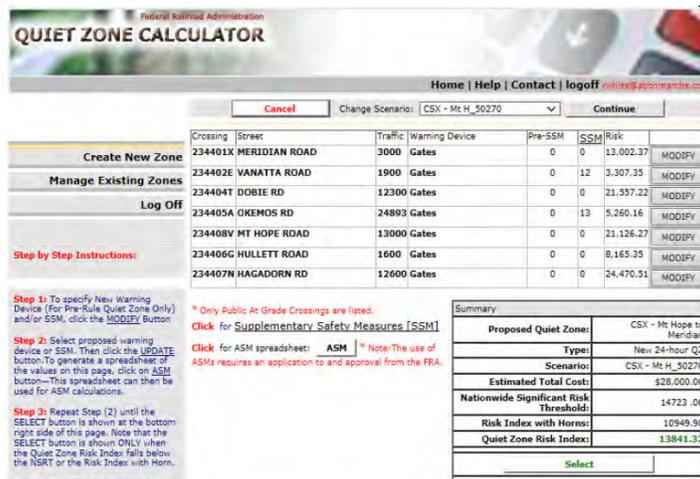


Figure 6: CSX Quiet Zone with SSM 13 at Okemos Road and SSM at Van Atta Road



Because a quiet zone only has to extend for a continuous 0.5 miles of track, a quiet zone could be implemented from the Okemos Road crossing to Van Atta Road crossing, a distance of 2.91 miles shown in Figure 7.



Figure 7: Aerial map depicting 2.91 miles of CSX railroad crossings in the Charter Township of Meridian

The cost would be significantly reduced because of the elimination of the upgrade costs required at the Hulett Road and Meridian Road crossings. Running the quiet zone calculator again yields the results shown in Figure 8. Since the QZRI is greater than the NSRI and the RIWH, some additional improvements are necessary.

Quiet Zone Calculator interface showing a table of crossings and a summary table.

Crossing	Street	Traffic	Warning Device	Pre-SSM	SSM	Risk	
234402E	VANATTA ROAD	1900	Gates	0	0	13,229.41	MODIFY
234404T	DOBIE RD	12300	Gates	0	0	21,557.22	MODIFY
234405A	OKEMOS RD	24893	Gates	0	0	26,300.79	MODIFY

Summary	
Proposed Quiet Zone:	Shorter CSX - Okemos to Van Atta
Type:	New 24-hour QZ
Scenario:	SHORTER_CS_50233
Estimated Total Cost:	\$0.00
Nationwide Significant Risk Threshold:	14723.00
Risk Index with Horns:	12207.72
Quiet Zone Risk Index:	20362.47

Figure 8: Proposed 2.91 mile long CSX quiet zone



If SSM 13 was implemented at the Okemos Road crossing as discussed previously, the risk would be reduced enough to implement a quiet zone from Okemos Road to Van Atta Road, see Figure 9.

Federal Railroad Administration

QUIET ZONE CALCULATOR

Home | Help | Contact | [logoff](#) rwilise@abonmarche.com

Change Scenario: Shorter_CS_50269

Buttons	Cancel	Change Scenario: Shorter_CS_50269	Continue					
Create New Zone	Crossing	Street	Traffic	Warning Device	Pre-SSM	SSM	Risk	
Manage Existing Zones	234402E	VANATTA ROAD	1900	Gates	0	0	13,229.41	MODIFY
Log Off	234404T	DOBIE RD	12300	Gates	0	0	21,557.22	MODIFY
	234405A	OKEMOS RD	24893	Gates	0	13	5,260.16	MODIFY

Step by Step Instructions:

Step 1: To specify New Warning Device (For Pre-Rule Quiet Zone Only) and/or SSM, click the **MODIFY** Button.

Step 2: Select proposed warning device or SSM. Then click the **UPDATE** button. To generate a spreadsheet of the values on this page, click on **ASM** button—This spreadsheet can then be used for ASM calculations.

Step 3: Repeat Step (2) until the **SELECT** button is shown at the bottom right side of this page. Note that the **SELECT** button is shown **ONLY** when the Quiet Zone Risk Index falls below the NSRT or the Risk Index with Horns.

Step 4: To save the scenario and continue, click the **SELECT** button.

* Only Public At Grade Crossings are listed.
 Click for [Supplementary Safety Measures \(SSM\)](#)
 Click for ASM spreadsheet: **ASM** * Note: The use of ASMs requires an application to and approval from the FRA.

Summary	
Proposed Quiet Zone:	Shorter CSX - Okemos to Van Atta
Type:	New 24-hour QZ
Scenario:	Shorter_CS_50269
Estimated Total Cost:	\$15,000.00
Nationwide Significant Risk Threshold:	14723.00
Risk Index with Horns:	12207.72
Quiet Zone Risk Index:	13348.93
Select	

Figure 9: 2.91 mile long CSX Quiet Zone with SSM 13 at Okemos Road



CN Rail Line Evaluation

The CN railroad travels as the Grand Trunk Western Railroad (GTW) for approximately 6.7 miles through the Charter Township of Meridian. Figure 10 shows the 5 public at-grade crossings.

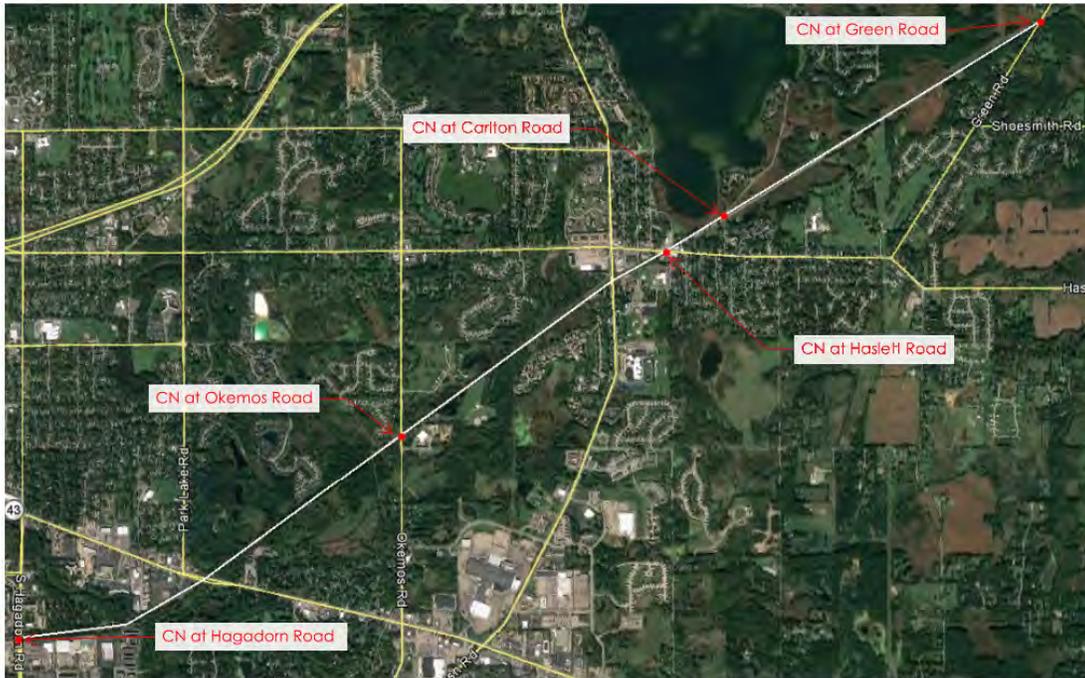


Figure 10: Aerial map depicting 6.7 miles of CN railroad crossings in the Charter Township of Meridian

Preliminary findings utilizing Google Earth street view and a field visit to each CN crossing are summarized in the following table:

At Grade Crossing	Sidewalk			Lights	Bells	Gates	Signage	Pavement Markings	Other SSMS (# per Figure 1)
	W	E	Detectable Warnings						
Hagadorn Rd	<input checked="" type="checkbox"/>	14, Z-gate							
Okemos Rd	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Haslett Rd	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Carlton Rd	<input type="checkbox"/>	<input type="checkbox"/>	n/a	<input checked="" type="checkbox"/>					
Green Rd	<input type="checkbox"/>	<input type="checkbox"/>	n/a	<input checked="" type="checkbox"/>					



Hagadorn Road marks the division between the Charter Township of Meridian and the City of East Lansing, specifically Michigan State University's campus. At this railroad crossing there is a Z-gate, shown in Figure 11, on the East Lansing side of the street, which acts as a passive warning device to alert pedestrians to the fact they are about to cross the tracks.



Figure 11: A z-gate used as a passive warning system to pedestrians of railroad crossing on East Lansing side of Hagadorn Road

The inventory forms for the crossings within Meridian Township along the CN railroad can be found in Appendix B. The CN railroad has much heavier train traffic than the CSX railroad with 17 trains daily and 1 train each night.

Hagadorn Road acts as a divided road at this crossing, and the curb height is the required 6" to be considered a preexisting SSM 13. The calculator shows, in Figure 12, that the QZRI is lower than the RIWH at the current conditions; therefore it is possible a quiet zone could be established without additional SSM installation.



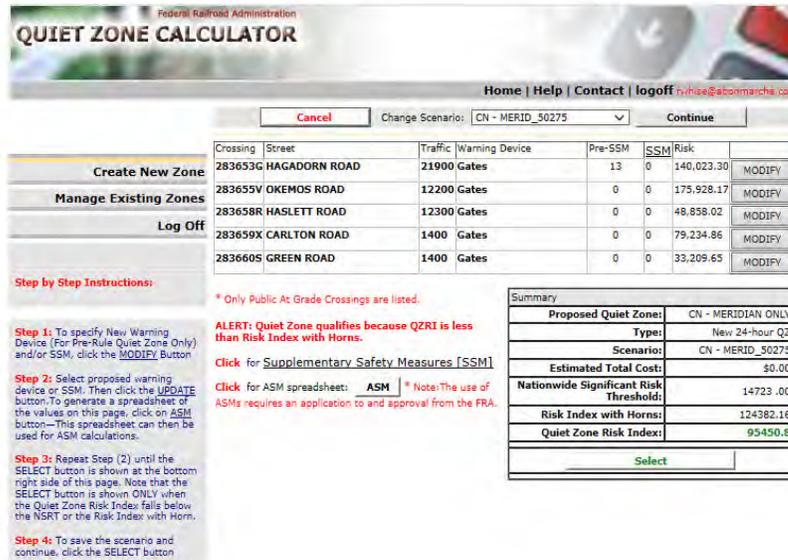


Figure 12: Current quiet zone evaluation of the CN railroad in the Charter Township of Meridian

Alternative options

As an alternative to quiet zones, communities may choose to silence locomotive horns through the installation of wayside horns, like the one in Figure 13, at each crossing as a one for one substitute for train horns. Wayside horns are directed at the highway at their installed crossing so they confine the noise to a radius directly around the crossing as compared to a locomotive horn being sounded along the track before reaching the crossing.



Figure 13: A wayside horn



Costs

CSX Quiet Zone

Option 1: E Mount Hope Road to Meridian Road

The costs associated with upgrading 5.5 miles of CSX crossings in the Township to Quiet Zone appropriate risk levels are summarized in the following table and shown in Figure 14.

Cost Location	Cost Description	Price
Every Public Crossing	Update USDOT Inventory Forms (7)	\$7,000
Hulett Road	Upgrade to lights and gates	\$300,000
Hulett Road	New pavement marking on S side	\$305
Okemos Road	Implement SSM 13	\$23,000
Van Atta Road	Implement SSM 12	\$15,000
Meridian Road	Upgrade to lights and gates	\$300,000
Meridian Road	New pavement marking on N side	\$305
Every Crossing	Install "No Horn" Signs (16)	\$2,880
	Total	\$648,490





Figure 14: Quiet zone implementation costs at each CSX crossing from Hagadorn Road to Green Road as described in Option 1



Option 2: Okemos Road to Van Atta Road

The costs associated with upgrading 2.91 miles of CSX crossings in the Township to Quiet Zone appropriate risk levels are summarized in the following table and shown in Figure 15.

Cost Location	Cost Description	Price
Every Public Crossing	Update USDOT Inventory Forms (3)	\$3,000
Okemos Road	Implement SSM 13	\$23,000
Every Crossing	Install "No Horn" Signs (8)	\$1,440
	Total	\$27,440





Figure 15: Quiet zone implementation costs at each CSX crossing from Okemos Road to Van Atta Road as described in Option 2



CN Quiet Zone

Hagadorn Road to Green Road

The preexisting SSM 13 at Hagadorn Road reduces the quiet zone's risk index to an acceptable level without further safety measures being taken. The cost of the minor tasks needed to meet the standards is summarized in the following table.

Cost Location	Cost Description	Price
Every Public Crossing	Update USDOT Inventory Forms (5)	\$5,000
Green Road	Install pavement marking on S side	\$305
Every Crossing	Install "No Horn" Signs (10)	\$1,800
	Total	\$7,105

Option 1: Additional Suggested Safety Improvements

During the investigation it was discovered that the Haslett Public Schools are in close proximity to the Haslett Road – CN railroad crossing. Due to school's proximity, more, younger pedestrian traffic is prevalent at this crossing than others. Implementation of Z-gates like the one on Michigan State University's campus at the CN Hagadorn Road crossing would improve safety by making pedestrians more aware as they approach the crossing. The cost associated with moving forward with this option is described in the following table and shown in Figure 16.

Cost Location	Cost Description	Price
Haslett Road	Z-gates at each pedestrian approach	\$30,000
	Total	\$30,000



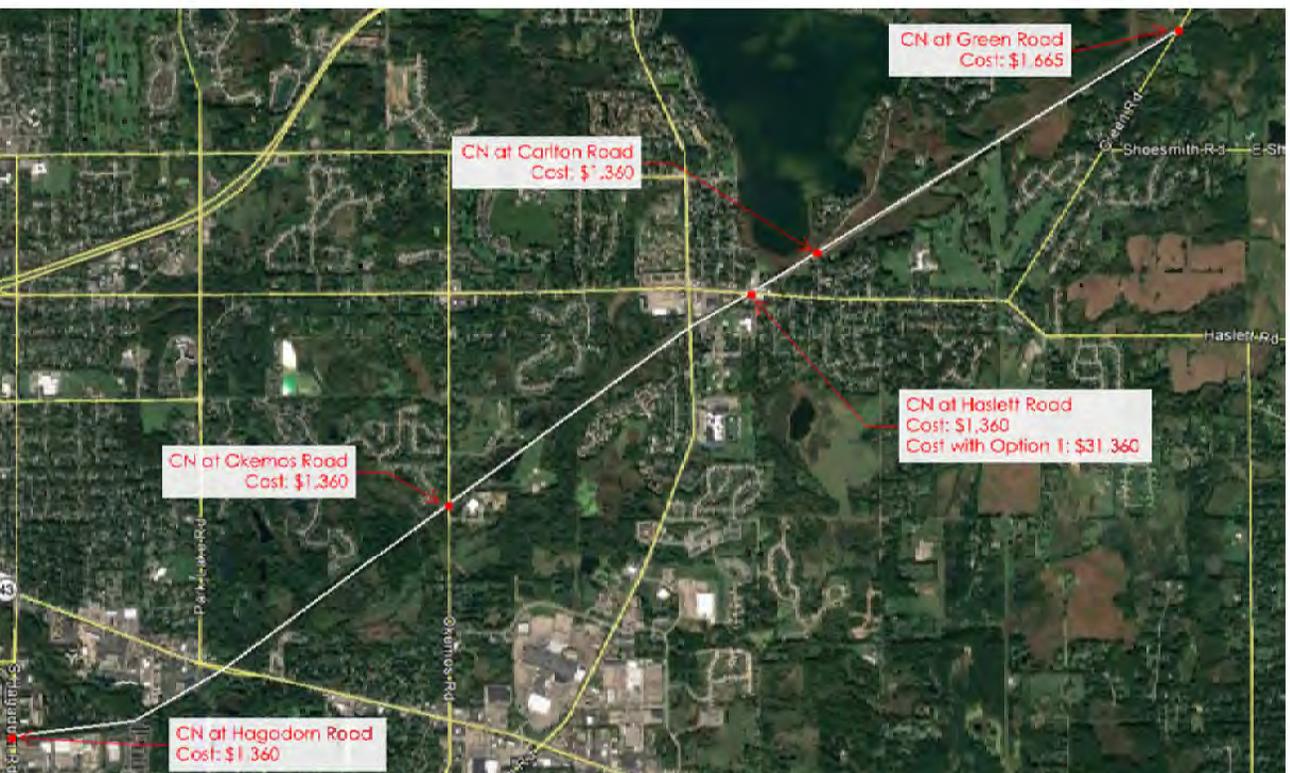


Figure 16: Quiet zone implementation costs at each CN crossing including the Z-gate option at the Haslett Road



Next Steps

CSX Quiet Zone

If the Charter Township of Meridian decides to pursue a quiet zone on the CSX railroad from either Mount Hope Road to Meridian Road or Okemos Road to Van Atta Road, the following steps are recommended. [5]

1. Upgrade all public crossings to include, at a minimum, lights and gates with constant warning time devices and power out indicators before a quiet zone. The crossings at Hulett Road and Meridian Road both only have lights currently.
2. Update the U.S. DOT Crossing Inventory Forms for each crossing within the proposed quiet zone within a year of the proposal as required by the FRA.
3. Provide a Notice of Intent (NOI) to: railroads who utilize the crossings, the State agency responsible for highway safety and the State agency responsible for crossing safety with the location of the proposed quiet zone and the tentative plan to improve safety to the standards necessary. Because the public authority of the roads in the Charter Township of Meridian is Ingham County, the diagnostic team would likely include a representative from the County.
4. Install the most cost-effective risk-abating solutions. An application must be filed with the FRA if any ASMs are being used.
5. Update the pavement markings at the Hulett and Meridian Road crossings if included in the quiet zone and the signage for all private, public, and pedestrian crossings.
6. Establish a quiet zone by providing a Notice of Quiet Zone Establishment; the quiet zone can take effect no sooner than 21 days after the Notice is mailed.

CN Quiet Zone

If the Charter Township of Meridian decides to pursue a quiet zone on the CN railroad from Hagadorn Road to Green Road, the following steps are recommended. [5]

1. Update the U.S. DOT Crossing Inventory Forms for each crossing within the proposed quiet zone within a year of the proposal as required by the FRA.
2. Provide a Notice of Intent (NOI) to: railroads who utilize the crossings, the State agency responsible for highway safety and the State agency responsible for crossing safety with the location of the proposed quiet zone and the tentative plan to improve safety to the standards necessary. Because the public authority of the roads in the Charter Township of Meridian is Ingham County, the diagnostic team would likely include a representative from the County.
3. Update the pavement markings at the Green Road crossing and the signage for all private, public, and pedestrian crossings.
4. Establish a quiet zone by providing a Notice of Quiet Zone Establishment; the quiet zone can take effect no sooner than 21 days after the Notice is mailed.



References

- [1] <https://www.csx.com/index.cfm/library/files/about-us/property/quiet-zones/>
- [2] <http://safetydata.fra.dot.gov/quiet/index.aspx>
- [3] http://www.michigan.gov/mdot/0,4616,7-151-12967_22649-60220--,00.html
- [4] <https://www.fra.dot.gov/Page/P0244>
- [5] <https://www.fra.dot.gov/eLib/Details/L04781>



U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 07 / 10 / 2014	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> Re-Open <input type="checkbox"/> New Crossing <input type="checkbox"/> Date Change Only <input type="checkbox"/> Closed <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 234408V
---	--	--	--

Part I: Location and Classification Information

1. Primary Operating Railroad CSX Transportation [CSX]	2. State MICHIGAN	3. County INGHAM
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near EAST LANSING	5. Street/Road Name & Block Number MT HOPE ROAD (Street/Road Name) * (Block Number)	6. Highway Type & No. CR
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR	8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR SOO	
9. Railroad Division or Region <input type="checkbox"/> None CHICAGO	10. Railroad Subdivision or District <input type="checkbox"/> None PLYMOUTH	11. Branch or Line Name <input type="checkbox"/> None
12. RR Milepost 0083.03 (prefix) (nnnn.nnn) (suffix)	13. Line Segment * CH	14. Nearest RR Timetable Station * WILLIAMSTON
15. Parent RR (if applicable) <input type="checkbox"/> N/A	16. Crossing Owner (if applicable) <input type="checkbox"/> N/A CSX	17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.	19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over	20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter	<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other	22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0
23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard		
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number	25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established	
26. HSR Corridor ID <input type="checkbox"/> N/A	27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.7078590	28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.4508510
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated	30.A. Railroad Use *	
30.B. Railroad Use *		31.A. State Use *
30.C. Railroad Use *		31.B. State Use *
30.D. Railroad Use *		31.C. State Use *
32.A. Narrative (Railroad Use) *		31.D. State Use *
32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-232-0144	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.) 517-335-2592

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 1	1.B. Total Night Thru Trains (6 PM to 6 AM) 2	1.C. Total Switching Trains 1	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 40 3.B. Typical Speed Range Over Crossing (mph) From 35 to 40		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 07/10/2014		PAGE 2		D. Crossing Inventory Number (7 char.) 234408V	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>2</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>2</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic Number of Lanes <u>4</u> <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input checked="" type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input checked="" type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input checked="" type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input checked="" type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit <u>45</u> MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>2004</u> AADT <u>013000</u>		8. Estimated Percent Trucks <u>30</u> %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 07 / 10 / 2014	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 234407N
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Part I: Location and Classification Information

1. Primary Operating Railroad CSX Transportation [CSX]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near EAST LANSING		5. Street/Road Name & Block Number HAGADORN RD (Street/Road Name) * (Block Number)		6. Highway Type & No. CR	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR SOO		
9. Railroad Division or Region <input type="checkbox"/> None CHICAGO		10. Railroad Subdivision or District <input type="checkbox"/> None PLYMOUTH		11. Branch or Line Name <input type="checkbox"/> None	
12. RR Milepost 0082.76 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * CH		14. Nearest RR Timetable Station * TROWBRIDGE	
15. Parent RR (if applicable) <input type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A CSX		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.7105440		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.4620350	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated		30.A. Railroad Use * J75313 305521692-AID		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		31.C. State Use *	
30.C. Railroad Use *		31.D. State Use *		32.A. Narrative (Railroad Use) *	
30.D. Railroad Use *		32.B. Narrative (State Use) *		33. Emergency Notification Telephone No. (posted) 800-232-0144	
34. Railroad Contact (Telephone No.) 904-359-1048		35. State Contact (Telephone No.) 517-335-2592			

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 1	1.B. Total Night Thru Trains (6 PM to 6 AM) 2	1.C. Total Switching Trains 1	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 40 3.B. Typical Speed Range Over Crossing (mph) From 35 to 40		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 07/10/2014		PAGE 2		D. Crossing Inventory Number (7 char.) 234407N	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. Types of Passive Traffic Control Devices associated with the Crossing				
2.A. Crossbuck Assemblies (count) 4	2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____		
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No	2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None	2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.I. ENS Sign (I-13) Displayed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)		
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>2</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED	3.D. Mast Mounted Flashing Lights (count of masts) <u>0</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 10	
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No	3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2	
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None			3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____		
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>3</u>	<input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic	2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input checked="" type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) <u>75</u>		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal Aid	2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input checked="" type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit <u>50</u> MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory	
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>2003</u> AADT <u>012600</u>	8. Estimated Percent Trucks <u>25</u> %	9. Regularly Used by School Buses? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Average Number per Day <u>7</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No	
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 07 / 10 / 2014	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> Re-Open <input type="checkbox"/> New Crossing <input type="checkbox"/> Date Change Only <input type="checkbox"/> Closed <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 234406G
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Part I: Location and Classification Information

1. Primary Operating Railroad CSX Transportation [CSX]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near OKEMOS		5. Street/Road Name & Block Number HULLETT ROAD (Street/Road Name) * (Block Number)		6. Highway Type & No. CR	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR SOO		
9. Railroad Division or Region <input type="checkbox"/> None CHICAGO		10. Railroad Subdivision or District <input type="checkbox"/> None PLYMOUTH		11. Branch or Line Name <input type="checkbox"/> None	
12. RR Milepost 0081.61 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * CH		14. Nearest RR Timetable Station * TROWBRIDGE	
15. Parent RR (if applicable) <input type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A CSX		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.7055020		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.4406970	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
31.C. State Use *		30.D. Railroad Use *		31.D. State Use *	
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-232-0144		34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 1	1.B. Total Night Thru Trains (6 PM to 6 AM) 2	1.C. Total Switching Trains 1	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 40 3.B. Typical Speed Range Over Crossing (mph) From 35 to 40		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input checked="" type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 07/10/2014		PAGE 2		D. Crossing Inventory Number (7 char.) 234406G	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 0 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates <input type="checkbox"/> 4 Quad	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 2 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 2 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input checked="" type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal AID		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input checked="" type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit 25 _____ MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year 2003 AADT 001600		8. Estimated Percent Trucks 15 _____ %	9. Regularly Used by School Buses? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Average Number per Day 9 _____		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 07 / 10 / 2014	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 234405A
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Part I: Location and Classification Information

1. Primary Operating Railroad CSX Transportation [CSX]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near OKEMOS		5. Street/Road Name & Block Number OKEMOS RD (Street/Road Name) * (Block Number)		6. Highway Type & No. CR	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR SOO		
9. Railroad Division or Region <input type="checkbox"/> None CHICAGO		10. Railroad Subdivision or District <input type="checkbox"/> None PLYMOUTH		11. Branch or Line Name <input type="checkbox"/> None	
12. RR Milepost 0081.18 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * CH		14. Nearest RR Timetable Station * TROWBRIDGE	
15. Parent RR (if applicable) <input type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A CSX		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0		23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard	
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.7038000		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.4324040	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
30.D. Railroad Use *		31.C. State Use *		30.D. Railroad Use *	
32.A. Narrative (Railroad Use) *		32.B. Narrative (State Use) *		33. Emergency Notification Telephone No. (posted) 800-232-0144	
34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592			

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 1	1.B. Total Night Thru Trains (6 PM to 6 AM) 2	1.C. Total Switching Trains 1	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 40 3.B. Typical Speed Range Over Crossing (mph) From 35 to 40		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 07/10/2014		PAGE 2		D. Crossing Inventory Number (7 char.) 234405A	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. Types of Passive Traffic Control Devices associated with the Crossing				
2.A. Crossbuck Assemblies (count) 0	2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____		
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No	2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None	2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No	
2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)		
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>2</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED	3.D. Mast Mounted Flashing Lights (count of masts) <u>0</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0	
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No	3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2	
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None			3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____		
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>4</u>	<input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic	2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input checked="" type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) <u>75</u>		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input checked="" type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid	2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input checked="" type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit <u>40</u> MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory	
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>2004</u> AADT <u>024893</u>	8. Estimated Percent Trucks <u>10</u> %	9. Regularly Used by School Buses? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Average Number per Day <u>60</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No	
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 07 / 10 / 2014	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 234404T
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Part I: Location and Classification Information

1. Primary Operating Railroad CSX Transportation [CSX]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near OKEMOS		5. Street/Road Name & Block Number DOBIE RD (Street/Road Name) * (Block Number)		6. Highway Type & No. CR	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR SOO		
9. Railroad Division or Region <input type="checkbox"/> None CHICAGO		10. Railroad Subdivision or District <input type="checkbox"/> None PLYMOUTH		11. Branch or Line Name <input type="checkbox"/> None	
12. RR Milepost 0079.99 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * CH		14. Nearest RR Timetable Station * TROWBRIDGE	
15. Parent RR (if applicable) <input type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A CSX		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Transit <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Commuter <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0		23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard	
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.6986010		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.4105990	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
30.D. Railroad Use *		31.C. State Use *		30.A. Narrative (Railroad Use) *	
32.A. Narrative (Railroad Use) *		31.D. State Use *		32.B. Narrative (State Use) *	
33. Emergency Notification Telephone No. (posted) 800-232-0144		34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 1	1.B. Total Night Thru Trains (6 PM to 6 AM) 2	1.C. Total Switching Trains 1	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 40 3.B. Typical Speed Range Over Crossing (mph) From 35 to 40		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 07/10/2014		PAGE 2		D. Crossing Inventory Number (7 char.) 2344041	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>2</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>2</u> <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input checked="" type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) <u>75</u>			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input checked="" type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit <u>35</u> MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>2004</u> AADT <u>012300</u>		8. Estimated Percent Trucks <u>15</u> %	9. Regularly Used by School Buses? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Average Number per Day <u>36</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 07 / 10 / 2014	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 234403L
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Part I: Location and Classification Information

1. Primary Operating Railroad CSX Transportation [CSX]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near OKEMOS		5. Street/Road Name & Block Number SYLVAN GLEN RD (Street/Road Name) _____ (* (Block Number))		6. Highway Type & No. PVT.	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR _____			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR _____		
9. Railroad Division or Region <input type="checkbox"/> None CHICAGO		10. Railroad Subdivision or District <input type="checkbox"/> None PLYMOUTH		11. Branch or Line Name <input type="checkbox"/> None	
12. RR Milepost _____ 0079.57 _____ (prefix) (nnnn.nnn) (suffix)		13. Line Segment * CH		14. Nearest RR Timetable Station * TROWBRIDGE	
15. Parent RR (if applicable) <input type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A		17. Crossing Type <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Transit <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Commuter <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0		23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard	
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number _____			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established _____		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.6907460		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.3729930	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
30.D. Railroad Use *		31.C. State Use *		30.A. Narrative (Railroad Use) *	
32.A. Narrative (Railroad Use) *		31.D. State Use *		32.B. Narrative (State Use) *	
33. Emergency Notification Telephone No. (posted) 800-232-0144		34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 1	1.B. Total Night Thru Trains (6 PM to 6 AM) 2	1.C. Total Switching Trains 1	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 40 3.B. Typical Speed Range Over Crossing (mph) From 35 to 40		
4. Type and Count of Tracks Main 0 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 07/10/2014		PAGE 2		D. Crossing Inventory Number (7 char.) 234403L	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 0 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 0 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 0
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes _____ <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year 1970 AADT _____		8. Estimated Percent Trucks _____ %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 07 / 10 / 2014	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> Re-Open <input type="checkbox"/> New Crossing <input type="checkbox"/> Date Change Only <input type="checkbox"/> Closed <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 234402E
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Part I: Location and Classification Information

1. Primary Operating Railroad CSX Transportation [CSX]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near OKEMOS		5. Street/Road Name & Block Number VANATTA ROAD (Street/Road Name) * (Block Number)		6. Highway Type & No. CR	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR SOO		
9. Railroad Division or Region <input type="checkbox"/> None CHICAGO		10. Railroad Subdivision or District <input type="checkbox"/> None PLYMOUTH		11. Branch or Line Name <input type="checkbox"/> None	
12. RR Milepost 0078.27 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * CH		14. Nearest RR Timetable Station * WILLIAMSTON	
15. Parent RR (if applicable) <input type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A CSX		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0		23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard	
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.6912000		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.3786010	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
31.C. State Use *		30.D. Railroad Use *		31.D. State Use *	
32.A. Narrative (Railroad Use) *		32.B. Narrative (State Use) *			
33. Emergency Notification Telephone No. (posted) 800-232-0144		34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 1	1.B. Total Night Thru Trains (6 PM to 6 AM) 2	1.C. Total Switching Trains 1	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 40 3.B. Typical Speed Range Over Crossing (mph) From 35 to 40		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 07/10/2014		PAGE 2		D. Crossing Inventory Number (7 char.) 234402E	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>2</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>2</u> <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input checked="" type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input checked="" type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit <u>45</u> MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>2004</u> AADT <u>001900</u>		8. Estimated Percent Trucks <u>15</u> %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 07 / 10 / 2014	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> Re-Open <input type="checkbox"/> New Crossing <input type="checkbox"/> Date Change Only <input type="checkbox"/> Closed <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 234401X
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Part I: Location and Classification Information

1. Primary Operating Railroad CSX Transportation [CSX]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near EAST LANSING		5. Street/Road Name & Block Number MERIDIAN ROAD (Street/Road Name) * (Block Number)		6. Highway Type & No. CR	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR SOO		
9. Railroad Division or Region <input type="checkbox"/> None CHICAGO		10. Railroad Subdivision or District <input type="checkbox"/> None PLYMOUTH		11. Branch or Line Name <input type="checkbox"/> None	
12. RR Milepost 0077.53 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * CH		14. Nearest RR Timetable Station * WILLIAMSTON	
15. Parent RR (if applicable) <input type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A CSX		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.6899990		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.3638000	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
31.C. State Use *		30.D. Railroad Use *		31.D. State Use *	
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-232-0144		34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 1	1.B. Total Night Thru Trains (6 PM to 6 AM) 2	1.C. Total Switching Trains 1	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 40 3.B. Typical Speed Range Over Crossing (mph) From 35 to 40		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 07/10/2014		PAGE 2		D. Crossing Inventory Number (7 char.) 234401X	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 0 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates <input type="checkbox"/> 4 Quad	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 2 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 2 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input checked="" type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input checked="" type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input checked="" type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit 55 _____ MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year 2004 AADT 003000		8. Estimated Percent Trucks 25 _____ %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0 _____		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2013	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 283653G
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Part I: Location and Classification Information

1. Primary Operating Railroad Grand Trunk Western Railroad Incorporated [GTW]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near EAST LANSING		5. Street/Road Name & Block Number HAGADORN ROAD (Street/Road Name) * (Block Number)		6. Highway Type & No. CITY	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR ATK		
9. Railroad Division or Region <input type="checkbox"/> None MIDWEST		10. Railroad Subdivision or District <input type="checkbox"/> None FLINT		11. Branch or Line Name <input type="checkbox"/> None MAIN LINE	
12. RR Milepost 0225.47 (prefix) (nnnn.nnn) (suffix)		13. Line Segment *			
14. Nearest RR Timetable Station *		15. Parent RR (if applicable) <input type="checkbox"/> N/A CN		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A GTW	
17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over	
20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		22. Average Passenger Train Count Per Day <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.7212980		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.4621960	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *			
30.B. Railroad Use *		31.A. State Use *			
30.C. Railroad Use *		31.B. State Use *			
30.D. Railroad Use *		31.C. State Use *			
30.E. Railroad Use *		31.D. State Use *			
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-617-6617		34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 17	1.B. Total Night Thru Trains (6 PM to 6 AM) 1	1.C. Total Switching Trains 0	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 65 3.B. Typical Speed Range Over Crossing (mph) From 60 to 65		
4. Type and Count of Tracks Main 2 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2013		PAGE 2		D. Crossing Inventory Number (7 char.) 283653G		
Part III: Highway or Pathway Traffic Control Device Information						
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing				
2.A. Crossbuck Assemblies (count) 4		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 <input type="checkbox"/> W10-3 <input type="checkbox"/> W10-11 <input type="checkbox"/> W10-2 <input type="checkbox"/> W10-4 <input type="checkbox"/> W10-12		
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No	2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None		2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No	
2.J. Other MUTCD Signs <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Specify Type _____ Count 4 Specify Type _____ Count 4 Specify Type _____ Count _____			2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)		
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)						
3.A. Gate Arms (count) Roadway 2 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 4 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0	
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2	
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____		
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None		
Part IV: Physical Characteristics						
1. Traffic Lanes Crossing Railroad Number of Lanes 4 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input checked="" type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____						
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) 75			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Part V: Public Highway Information						
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input checked="" type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input checked="" type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit 35 _____ MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory	
5. Linear Referencing System (LRS Route ID) *						
6. LRS Milepost *						
7. Annual Average Daily Traffic (AADT) Year 2004 AADT 021900	8. Estimated Percent Trucks 25 _____ %	9. Regularly Used by School Buses? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Average Number per Day 8		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No		
Submission Information - This information is used for administrative purposes and is not available on the public website.						
Submitted by _____ Organization _____ Phone _____ Date _____						
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.						

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2013	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 283655V
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Part I: Location and Classification Information

1. Primary Operating Railroad Grand Trunk Western Railroad Incorporated [GTW]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near HASLETT		5. Street/Road Name & Block Number OKEMOS ROAD (Street/Road Name) * (Block Number)		6. Highway Type & No. COUNTY	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR ATK		
9. Railroad Division or Region <input type="checkbox"/> None MIDWEST		10. Railroad Subdivision or District <input type="checkbox"/> None FLINT		11. Branch or Line Name <input type="checkbox"/> None MAIN LINE	
12. RR Milepost 0227.51 (prefix) (nnnn.nnn) (suffix)		13. Line Segment *		14. Nearest RR Timetable Station *	
15. Parent RR (if applicable) <input type="checkbox"/> N/A CN		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A GTW		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.7528990		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.5407030	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
30.D. Railroad Use *		31.C. State Use *		30.D. Railroad Use *	
32.A. Narrative (Railroad Use) *		32.B. Narrative (State Use) *		33. Emergency Notification Telephone No. (posted) 800-617-6617	
34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592			

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 17	1.B. Total Night Thru Trains (6 PM to 6 AM) 1	1.C. Total Switching Trains 0	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 65 3.B. Typical Speed Range Over Crossing (mph) From 60 to 65		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2013		PAGE 2		D. Crossing Inventory Number (7 char.) 283655V	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. Types of Passive Traffic Control Devices associated with the Crossing				
2.A. Crossbuck Assemblies (count) 2	2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____		
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No	2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No
2.J. Other MUTCD Signs Specify Type _____ Count 2 Specify Type _____ Count 2 Specify Type _____ Count _____		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)	
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 2 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 2 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 2 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input checked="" type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) 75			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input checked="" type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input checked="" type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit 40 _____ MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year 2004 AADT 012200		8. Estimated Percent Trucks 25 _____ %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2013	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> Re-Open <input type="checkbox"/> New Crossing <input type="checkbox"/> Date Change Only <input type="checkbox"/> Closed <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 283658R
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Part I: Location and Classification Information

1. Primary Operating Railroad Grand Trunk Western Railroad Incorporated [GTW]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near HASLETT		5. Street/Road Name & Block Number HASLETT ROAD (Street/Road Name) * (Block Number)		6. Highway Type & No. COUNTY	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR ATK		
9. Railroad Division or Region <input type="checkbox"/> None MIDWEST		10. Railroad Subdivision or District <input type="checkbox"/> None FLINT		11. Branch or Line Name <input type="checkbox"/> None MAIN LINE	
12. RR Milepost 0229.01 (prefix) (nnnn.nnn) (suffix)		13. Line Segment *		14. Nearest RR Timetable Station *	
15. Parent RR (if applicable) <input type="checkbox"/> N/A CN		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A GTW		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.7253990		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.5822980	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
30.D. Railroad Use *		31.C. State Use *		30.D. Railroad Use *	
32.A. Narrative (Railroad Use) *		32.B. Narrative (State Use) *		33. Emergency Notification Telephone No. (posted) 800-617-6617	
34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592			

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 17	1.B. Total Night Thru Trains (6 PM to 6 AM) 1	1.C. Total Switching Trains 0	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 65 3.B. Typical Speed Range Over Crossing (mph) From 60 to 65		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2013		PAGE 2		D. Crossing Inventory Number (7 char.) 283658R	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. Types of Passive Traffic Control Devices associated with the Crossing				
2.A. Crossbuck Assemblies (count) 2	2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____		
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No	2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None	2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No	
2.J. Other MUTCD Signs Specify Type _____ Count 2 Specify Type _____ Count 2 Specify Type _____ Count _____	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)		
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 2 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 2 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED	3.D. Mast Mounted Flashing Lights (count of masts) 2 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0	
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) _____/_____/_____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/_____ <input type="checkbox"/> No	3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2	
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None			3.K. Other Flashing Lights or Warning Devices Count 1 Specify type SIDELITE		
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 3 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic	2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/_____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input checked="" type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) 75		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input checked="" type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input checked="" type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid	2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input checked="" type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit 25 _____ MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory	
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year 2002 AADT 012300	8. Estimated Percent Trucks 05 _____ %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No	
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2013	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> Re-Open <input type="checkbox"/> New Crossing <input type="checkbox"/> Date Change Only <input type="checkbox"/> Closed <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 283659X
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Part I: Location and Classification Information

1. Primary Operating Railroad Grand Trunk Western Railroad Incorporated [GTW]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near HASLETT		5. Street/Road Name & Block Number CARLTON ROAD (Street/Road Name) * (Block Number)		6. Highway Type & No. COUNTY	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR ATK		
9. Railroad Division or Region <input type="checkbox"/> None MIDWEST		10. Railroad Subdivision or District <input type="checkbox"/> None FLINT		11. Branch or Line Name <input type="checkbox"/> None MAIN LINE	
12. RR Milepost 0229.33 (prefix) (nnnn.nnn) (suffix)		13. Line Segment *		14. Nearest RR Timetable Station *	
15. Parent RR (if applicable) <input type="checkbox"/> N/A CN		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A GTW		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input type="checkbox"/> No	
21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0		23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard	
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.7490010		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -84.3981020	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
30.D. Railroad Use *		31.C. State Use *		30.D. Railroad Use *	
32.A. Narrative (Railroad Use) *		32.B. Narrative (State Use) *		33. Emergency Notification Telephone No. (posted) 800-617-6617	
34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592			

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 17	1.B. Total Night Thru Trains (6 PM to 6 AM) 1	1.C. Total Switching Trains 0	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 65 3.B. Typical Speed Range Over Crossing (mph) From 60 to 65		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2013		PAGE 2		D. Crossing Inventory Number (7 char.) 283659X	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. Types of Passive Traffic Control Devices associated with the Crossing				
2.A. Crossbuck Assemblies (count) 2	2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____		
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No	2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None	2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No	
2.J. Other MUTCD Signs <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Specify Type _____ Count 2 Specify Type _____ Count 2 Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)		
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 2 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED	3.D. Mast Mounted Flashing Lights (count of masts) 2 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0	
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) _____/_____/_____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/_____ <input type="checkbox"/> No	3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2	
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None			3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____		
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 2	<input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic	2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/_____ <input checked="" type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) 75		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input checked="" type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal AID	2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input checked="" type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit 25 _____ MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory	
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year 2003 AADT 001400	8. Estimated Percent Trucks 15 _____ %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No	
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2013		PAGE 2		D. Crossing Inventory Number (7 char.) 283660S	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 2		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Specify Type _____ Count 2 Specify Type _____ Count 2 Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 2 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 2 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 2 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input checked="" type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input checked="" type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal AID		2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input checked="" type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit 35 _____ MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year 2003 AADT 001400		8. Estimated Percent Trucks 15 _____ %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0 _____		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

Appendix B

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2013	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 283661Y
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Part I: Location and Classification Information

1. Primary Operating Railroad Grand Trunk Western Railroad Incorporated [GTW]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near HASLETT		5. Street/Road Name & Block Number BARRY ROAD <small>(Street/Road Name) * (Block Number)</small>		6. Highway Type & No. CR	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>If Yes, Specify RR</small>			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>If Yes, Specify RR</small> ATK		
9. Railroad Division or Region <input type="checkbox"/> None MIDWEST		10. Railroad Subdivision or District <input type="checkbox"/> None FLINT		11. Branch or Line Name <input type="checkbox"/> None MAIN LINE	
12. RR Milepost 0232.07 <small>(prefix) (nnnn.nnn) (suffix)</small>					
13. Line Segment *		14. Nearest RR Timetable Station * HASLETT		15. Parent RR (if applicable) <input type="checkbox"/> N/A CN	
16. Crossing Owner (if applicable) <input type="checkbox"/> N/A GTW					
17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over	
20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input type="checkbox"/> No		21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		22. Average Passenger Train Count Per Day <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No <small>If Yes, Provide Crossing Number</small>			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused <small>Date Established</small>		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees <small>(WGS84 std: nn.nnnnnnn)</small> 42.7695010		28. Longitude in decimal degrees <small>(WGS84 std: -nnn.nnnnnnn)</small> -84.3522030	
29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated					
30.A. Railroad Use *			31.A. State Use *		
30.B. Railroad Use *			31.B. State Use *		
30.C. Railroad Use *			31.C. State Use *		
30.D. Railroad Use *			31.D. State Use *		
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-617-6617		34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 17	1.B. Total Night Thru Trains (6 PM to 6 AM) 1	1.C. Total Switching Trains 0	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> <small>How many trains per week? _____</small>
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 65 3.B. Typical Speed Range Over Crossing (mph) From 60 to 65		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2013		PAGE 2		D. Crossing Inventory Number (7 char.) 283661Y	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 2		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Specify Type _____ Count 2 Specify Type _____ Count 2 Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 2 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 2 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 2 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input checked="" type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) 75			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input checked="" type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input checked="" type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit 55 _____ MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year 2004 AADT 001000		8. Estimated Percent Trucks 15 _____ %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2013	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 283662F
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Part I: Location and Classification Information

1. Primary Operating Railroad Grand Trunk Western Railroad Incorporated [GTW]		2. State MICHIGAN		3. County INGHAM	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near HASLETT		5. Street/Road Name & Block Number SHOEMAN ROAD <small>(Street/Road Name) * (Block Number)</small>		6. Highway Type & No. COUNTY	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR ATK		
9. Railroad Division or Region <input type="checkbox"/> None MIDWEST		10. Railroad Subdivision or District <input type="checkbox"/> None FLINT		11. Branch or Line Name <input type="checkbox"/> None MAIN LINE	
12. RR Milepost 0232.15 <small>(prefix) (nnnn.nnn) (suffix)</small>					
13. Line Segment *		14. Nearest RR Timetable Station *		15. Parent RR (if applicable) <input type="checkbox"/> N/A CN	
16. Crossing Owner (if applicable) <input type="checkbox"/> N/A GTW					
17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over	
20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		21. Type of Train <input type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other	
22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0					
23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input type="checkbox"/> N/A		27. Latitude in decimal degrees <small>(WGS84 std: nn.nnnnnnn)</small> 42.7703020		28. Longitude in decimal degrees <small>(WGS84 std: -nnn.nnnnnnn)</small> -84.3500980	
				29. Lat/Long Source <input type="checkbox"/> Actual <input type="checkbox"/> Estimated	
30.A. Railroad Use *			31.A. State Use *		
30.B. Railroad Use *			31.B. State Use *		
30.C. Railroad Use *			31.C. State Use *		
30.D. Railroad Use *			31.D. State Use *		
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-617-6617		34. Railroad Contact (Telephone No.)		35. State Contact (Telephone No.) 517-335-2592	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 17	1.B. Total Night Thru Trains (6 PM to 6 AM) 1	1.C. Total Switching Trains 0	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY)		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 65 3.B. Typical Speed Range Over Crossing (mph) From 60 to 65		
4. Type and Count of Tracks Main 1 Siding _____ Yard _____ Transit _____ Industry _____				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2013		PAGE 2		D. Crossing Inventory Number (7 char.) 283662F	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 2		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Specify Type _____ Count 2 Specify Type _____ Count 2 Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 2 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 2 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 2 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input checked="" type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) 75			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input checked="" type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input checked="" type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit 55 _____ MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year 2002 AADT 003700		8. Estimated Percent Trucks 20 _____ %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

THE EAST LANSING—MERIDIAN WATER & SEWER AUTHORITY

2020 Drinking Water Quality Report for The City of East Lansing & Meridian Township

Why you should read this report!



This report presents important information on the quality of your drinking water. It also discusses where the water originates, and how it's made consistently plentiful, reliable and pleasant, and then provided to your tap every day.

While much of the content of this report is required by regulation, the East Lansing—Meridian Water and Sewer Authority (“Authority”) has included other important information about this critical resource that may be of interest to you. The Authority supports and encourages your understanding about our water quality and, in this

report, is attempting to convey this information in a clear and useful format. We also want to enlist your help in protecting and preserving this resource, now and for the future.

From a regulatory standpoint, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and US Environmental Protection Agency (EPA) oversee the quality and availability of the drinking water that is produced by the Authority. In calendar year 2020, the drinking water produced by the Authority was in compliance with all State and Federal regulations. There were no violations of water quality standards.

To help ensure the water supply is reliable and adequate, the Authority employs operations and maintenance staff that maintain proficiency through continuous training and education programs and EGLE certification. Through this process, the staff stays current with the best practices and evolving regulations governing your tap water.

We encourage public interest and participation in decisions affecting your drinking water. Regular Authority Board meetings normally occur at 11:00 a.m. on the third Thursday of each month. These meetings are normally held at the Water Conditioning Plant at 2470 Burcham Drive, East Lansing, MI 48823. The public is welcome. For current information on meeting times and dates call (517) 337-7535.



Hidden Lakes ■ Meridian Township

WHERE DOES OUR WATER COME FROM?

The Authority was formed as a joint venture of the City and Township to address the water supply and quality needs for both communities. In 1972, the Water Conditioning Plant was placed in service and has provided softened water to both systems since then. Each community owns and operates its separate water distribution utility.

Groundwater is pumped to the conditioning plant from 28 wells that are approximately 400 feet deep. Lime is added to the water to remove excess hardness, and Ferric Chloride is added to treat very fine particulates. The water then passes through sand filters to remove any cloudiness that was not taken out during the chemical treatment part of the process. Through this method, the excess hardness is removed and recycled for agricultural soil amend-

ment or other beneficial uses. It is not disposed of into the sewer or drain as is commonly done with in-home water softeners.

Although the source-water is very pure, we add Chloramine to ensure the water is thoroughly disinfected and stays fresh, as it is delivered to your home or business. We also add Fluoride for the prevention of tooth decay, especially for children.

In 2020, the Authority processed and pumped 2.03 billion gallons of treated water to the two communities. In the water production process, our operators run numerous routine chemical analyses to ensure the water stays fresh and pleasant tasting. Other more sophisticated testing is performed by us using outside labs, for a wide range of regulated and unregulated contaminants. Through this testing we verify that the water consistently meets state and federal drinking water standards.

In This Report

Why you should read this report!	1
Where does our water come from?	1
Contaminants in groundwater	2
Important notices about water quality	2
Water quality data and test results	3 & 4
Information on Lead and PFAS	5
You Can Help Protect the Water Supply	6

The tables on pages 3 and 4 list some parameters that were detected, and show what the regulatory limits are. No contaminant concentration exceeds regulatory limits.

Note: The Authority purchases water from the Lansing Board of Water and Light (LBWL) to supply the southern portion of Meridian Township. Water quality data for the LBWL is included in this report.

THE EAST LANSING—MERIDIAN WATER & SEWER AUTHORITY

Vulnerability of sub-populations:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (800-426-4791).

Contaminants and their presence in water:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Sources of drinking water:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and Herbicides**, which may come from a variety of sources such as farming, storm water runoff, residential or business.
- **Organic Chemical Contaminants**, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- **Radioactive Contaminants**, which can be naturally-occurring, or may be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

WATER QUALITY DATA

The US EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The tables on pages 3 & 4 list all of the drinking water contaminants that we detected during the 2020 calendar year. Although we routinely test for more than 140 different contaminants, only those contaminants listed were found in your water.

All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels.

Unless otherwise noted, the data presented in these tables is from testing done January 1 - December 31, 2020. The EPA or the State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old.

In these tables you will find terms and abbreviations that might not be familiar to you. To help you better understand the information, please refer to the definitions of terms used in the data tables.

DEFINITIONS

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Level 1 Assessment: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A very detailed study of the water supply to identify potential problems and determine (if possible) why an E-coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Note: There is a Key to terms or units used in the Table, located on Page 4 of this report.

THE EAST LANSING—MERIDIAN WATER & SEWER AUTHORITY

Water Quality Data and Test Results

Contaminants	Last Tested	Unit	MCL, TT or MRDL	MCLG or MRDLG	Detected In Your Water	Range (2020)	Violation No/Yes	Typical Source of Contamination
Disinfectants and Disinfection By-Products								
Chloramines (as Cl₂) -Plant tap	12/31/20	ppm	MRDL = 4	MRDLG = 4	HRAA = 1.40	0.93–1.82	No	Water additive used to control microbes
Chloramines (as Cl₂) -Distribution	12/16/20	ppm	MRDL = 4	MRDLG = 4	HRAA = 0.63	0.10 - 2.02	No	
Chloramine was calculated using the highest quarterly running annual average (RAA), which includes data from 2019. The Range represents individual measurements taken during 2020. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.								
Haloacetic Acids (HAA5)	10/6/20	ppb	60	NA	Highest LRAA = 4.0	ND - 5.0	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes]	10/6/20	ppb	80	NA	Highest LRAA = 12.6	6.8–14.7	No	By-product of drinking water disinfection
The MCL for haloacetic acids is the sum of the concentrations of the individual haloacetic acids.								
The MCL for total trihalomethanes is the sum of the concentrations of the individual trihalomethanes.								
Inorganic Contaminants								
					Highest Value	Range		
Barium	ELMWSA	9/10/15	ppm	2	2	0.07	0.07	No
	LBWL	7/25/12	ppm	2	2	0.022	0.015 - 0.022	No
Fluoride	ELMWSA	12/31/20	ppm	4.0	4.0	0.77	0.49 - 0.77	No
	LBWL	7/9/20	ppm	4.0	4.0	0.61	0.54 - 0.61	No
The Authority strives to maintain an optimum Fluoride level of 0.6 - 0.7 ppm in the distribution system.								
Radiological Contaminants								
					Value	Range		
Radium 226 & 228	ELMWSA	9/1/20	pCi/L	5	0	2.01 ± 0.77		No
	LBWL	7/7/16	pCi/L	5	0	1.95 ± 0.44	0.84 ± 0.51 to 1.95 ± 0.44	No

Turbidity	Sample Date	MCL	MCLG	Detected In Your Water	Range	Violation No/Yes	Typical Source of Contaminant
	12/31/20	TT = 1.0 NTU	N/A	0.05 NTU	0.04 – 0.09	No	
Turbidity	12/31/20	TT = < 95% of samples below 0.3 NTU	0	100% of samples below 0.3 NTU	NA	No	Soil runoff, water softening process
At least 95% of combined filter effluent turbidity samples taken each month must be below the Treatment Technique (TT) limit of 0.3 NTU. Also, any measurement in excess of 1.0 NTU would be a Treatment Technique violation. In 2020, 100% of the samples were below the Treatment Technique (TT) limit of 0.3 NTU.							

Microbial Contaminants	Last Tested	MCL or TT	MCLG	Highest % Detected	Violation: No/Yes	Typical Source of Contaminant
Total Coliform Bacteria	12/16/20	TT	N/A	0 *	No	Naturally present in the environment
E. coli in the distribution system (positive samples)	12/16/20	0**	0	0	No	Human and animal fecal waste
* Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. If the presence of coliforms are confirmed, it would indicate the need to look for potential problems in water treatment or distribution, in which case we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. During 2020, we had no MCL exceedances and were not required to conduct any Level 1 or Level 2 assessments for our water system.						
** An E. coli violation occurs if: (1) routine or repeat samples are total coliform-positive and either is E. coli-positive, or (2) the system fails to take all required repeat samples following an E. coli-positive routine sample, or (3) the system fails to analyze total coliform-positive repeat sample for E.coli. During 2020, no E. coli violation occurred on our system.						

Inorganics Subject to Action Levels (Values measured at customer's taps)	Unit	AL	MCLG	Your Water	Range of Results	Test Period	# Samples Above AL	Violation No/Yes	Typical Source of Contamination	
Lead	City of East Lansing	ppb	15	0	0 – 2	Jan–Jun 2020	0	No	Lead service lines*, corrosion of household plumbing including fittings and fixtures; erosion of natural deposits	
	Meridian Township	ppb	15	0	1	0 – 12	Jan–Jun 2020	0		No
Copper	City of East Lansing	ppm	1.3	1.3	0.0	0.0 – 0.1	Jan–Jun 2020	0	No	Corrosion of household plumbing systems; erosion of natural deposits
	Meridian Township	ppm	1.3	1.3	0.0	0.0 – 0.2	Jan–Jun 2020	0	No	
* See information on Lead in drinking water and lead service line materials on page 5 of this report.										

THE EAST LANSING—MERIDIAN WATER & SEWER AUTHORITY

Special Monitoring and Unregulated Contaminant Monitoring

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

Unregulated Contaminant	Last Tested	Unit	Reported Level	Range	
				Low	High
The following unregulated contaminants were detected by ELMWSA					
Sodium (erosion of natural deposits)	9/22/20	ppm	23	23	23
Chlorate	9/2/15	ppb	93	34	180
Chromium (total chromium)	9/2/15	ppb	0.5	0.4	0.5
Chromium—6 (hexavalent chromium)	9/2/15	ppb	0.33	0.24	0.38
Molybdenum	9/2/15	ppb	5.3	4.6	5.8
Strontium	9/2/15	ppb	436	190	513
HAA5	7/8/20	ppb	4.20	1.94	6.35
HAA6Br	7/8/20	ppb	2.95	0.84	4.60
HAA9	7/8/20	ppb	6.64	2.78	9.43
Manganese	7/7/20	ppb	1.16	1.04	1.27
The following unregulated contaminants were detected by LBWL					
Sodium (erosion of natural deposits)	7/9/20	ppm	100	99	100
Chlorate	8/2015	ppb	174	32	330
Chromium (total chromium)	8/2015	ppb	0.2	0.2	0.3
Chromium—6 (hexavalent chromium)	8/2015	ppb	0.2	0.14	0.24
Molybdenum	8/2015	ppb	1.1	0	1.2
Strontium	8/2015	ppb	166	120	210
Vanadium	8/2015	ppb	0.3	0.2	0.4
1,4-Dioxane	8/2015	ppb	0.14	0.14	0.14
Manganese	8/2020	ppb	0.54	0.44	0.67
HAA6	8/2020	ppb	0.31	0.00	0.46
HAA9	8/2020	ppb	2.56	2.20	3.46

KEY to Water Quality Table

- AL = Action Level
- ELMWSA = East Lansing-Meridian Water & Sewer Authority
- HRAA = Highest Running Annual Average (Includes data from prior year)
- LBWL = Lansing Board of Water and Light
- LRAA = Locational Running Annual Average (Includes data from prior year)
- MCL = Maximum Contaminant Level
- MCLG = Maximum Contaminant Level Goal
- MRDL = Maximum Residual Disinfectant Level
- MRDLG = Maximum Residual Disinfectant Level Goal
- NA = Not Applicable
- ND = Not Detected
- NR = Not Regulated
- NTU = Nephelometric Turbidity Unit
- pCi/L = Picocuries per Liter
- ppb = parts per billion, or micrograms per liter (µg/L)
- ppm = parts per million, or milligrams per liter (mg/L)
- ppt = parts per trillion, or nanograms per liter (ng/L)
- RAA = Running Annual Average (Includes data from prior year)
- TT = Treatment Technique

Monitoring and Reporting Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety. We met all monitoring and reporting requirements for 2020. We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. This Drinking Water Quality Report (also referred to as a "Consumer Confidence Report") will not be sent to you unless you contact us and request one. Copies are available at the Water Conditioning Plant, or by calling (517) 337-7535, or at <https://www.cityofeastlansing.com/600/Annual-Water-Quality-Report>.

This is a general analysis of the water in the East Lansing and Meridian Township water distribution systems:

Total Hardness.....	120 - 125 ppm
Total Alkalinity	60 - 70 ppm
Calcium Hardness.....	65 - 80 ppm
Magnesium Hardness	50 - 60 ppm
Total Chlorine Residual	1.0 - 1.4 ppm*
Sodium	25 - 50 ppm
Fluoride.....	0.6 - 0.7 ppm
Nitrate	Not Detected
pH.....	8.9 - 9.1
Chloride.....	50 - 70 ppm
Iron.....	0.02 - 0.10 ppm
Total Dissolved Solids	250 - 300 ppm
Total Coliform	Not Detected

* Levels of Chlorine will vary in the distribution system depending on proximity to the Water Treatment Plant. Homes closer to the Water Treatment Plant would normally receive a higher concentration of chlorine in the tap water than a home that is located farther from the Treatment Plant. The maximum chlorine level in the distribution system is typically below 1.2 ppm.

All hardness and alkalinity values are expressed as Calcium Carbonate equivalent.

Information Regarding Lead in Drinking Water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Authority, the City of East Lansing and Meridian Township are responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you have a lead service line, galvanized previously connected to lead, or unknown but likely to be lead, it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink water over many years could develop kidney problems or high blood pressure.

This report includes information for the City of East Lansing's and for Meridian Township's water distribution systems. In our 2019 CCR, we inadvertently left off required information regarding how many service lines are present in the water distribution systems that contain lead or are of unknown material. The following table shows the service line materials information for both East Lansing and for Meridian Township.

Water System	Effective Date	Number of known lead service lines	Number of services of unknown material	Total Number of Services
City of East Lansing	12/31/2019	4	3443 *	7935
Meridian Township	12/31/2019	0	0	11,852

* The City of East Lansing is seeking to identify the location of any lead components in its system. East Lansing customers can participate in a survey at <https://www.cityofeastlansing.com/watersurvey>, to help identify these components.

INFORMATION ON PFAS IN DRINKING WATER

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) had a statewide initiative to test drinking water from all schools that use well water and community water supplies. The test was looking for a group of manmade chemicals called per- and polyfluoroalkyl substances (PFAS). EGLE took this precautionary step of testing these drinking water sources to determine if public health actions were needed.

The Authority's tap water was tested by AECOM, EGLE's contractor, on July 12, 2018. The test results can be found on the Michigan PFAS Action Response Team website, https://www.michigan.gov/pfasresponse/0,9038,7-365-86510_88061_92549_92526-495899--,00.html. The results show that of the PFOA and PFOS tested, no detectable levels were found in the water.

In October 2019, on the recommendation of the Michigan PFAS Action Response Team (MPART), the Michigan Department of Environment, Great Lakes, and Energy (EGLE) provided a draft rule to Governor Whitmer for regulating PFAS in drinking water. The purpose of the rule is to establish maximum contaminant levels (MCLs) for seven PFAS compounds in approximately 2,700 water supplies in Michigan. In accordance with the regulatory process, the rule was adopted and became effective on August 3, 2020. Following adoption of the PFAS Rule, additional samples were taken by the Authority on December 11, 2020 for 16 PFAS compounds, including the 7 newly regulated compounds. Again, no detectable levels were found in the water.

The Authority is committed to providing our customers with quality drinking water. As your water supplier, we are working closely with EGLE to maintain the quality of your water. For health related questions, contact the Michigan Department of Health and Human Services (MDHHS) at 1-800-648-6942 or visit one of the websites below.

[FOR INFORMATION ON PFAS INCLUDING POSSIBLE HEALTH OUTCOMES, VISIT THESE WEBSITES](#)

State of Michigan PFAS Action Response Team (MPART) website, serving as the main resource for public information on PFAS contamination in Michigan: www.michigan.gov/pfasresponse

Agency for Toxic Substances and Disease Registry (ASTDR) website, including health information, exposure, and links to additional resources: www.atsdr.cdc.gov/pfas

United States Environmental Protection Agency (U.S. EPA) website, including basic information, U.S. EPA actions, and links to informational resources: www.epa.gov/pfas

You Can Help Protect the Water Supply for Our Communities!

Where Does Our Water Come From?

Every day we turn on our faucets, showers, dishwashers, laundry machines, and countless other water-dependent conveniences without stopping to consider: where does all that water come from?

For the tri-county region of Clinton, Eaton, and Ingham counties, 100% of our water comes from below ground. Through a private well or a public utility, we all rely heavily on groundwater. This is the water that soaks into the ground as rain, melting snow, sprinkler spray, or from any other outlet. Thanks to gravity, water seeps through the different layers of soil and rock until it reaches a layer it can no longer pass through. From there, it will begin to pool and grow in size until it becomes an aquifer.

An aquifer is an underground layer where all space between rocks and soil is filled by water. The top of the aquifer, where the water only fills some space between rocks and soil, is referred to as the water table. The water table level can change throughout the year, or over the course of many years, depending on a variety of things like the demand for water pumped from wells, droughts, heavy rainfall, flooding events, or warm winters, just to name a few.

The water source for our communities is entirely groundwater, and it is drawn from deep wells drilled several hundred feet into the local aquifer underlying the greater Lansing area. The aquifer is contained within a sandstone geologic formation known as the Saginaw Formation. Due to the ability of the formation to allow water to flow relatively freely to the wells, we maintain a plentiful supply of clean drinking water.

In order to protect and manage this water supply, the City of East Lansing and Meridian Township both support the local Groundwater Management Board (GMB). The GMB provides a forum for the coordination of groundwater matters for all communities in the tri-county region, and reviews and comments on land use and/or water development projects that may have a potential impact on groundwater management. It is composed of representatives from Michigan State University and governmental units from Clinton, Eaton, and Ingham counties, and was designated by the State of Michigan as the local Large Water Users Group. Should there be a water use dispute, the GMB acts as the organizing body for discussion and mediation.

Protecting the Water Supply From Contamination

In 2003, the Authority participated in a source water assessment performed by the Michigan Department of Environmental Quality to determine the aquifer's susceptibility to contamination. The susceptibility rating is on a seven-tiered scale from "very low" to "very high" based primarily on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility rating of our source is "high" which means **"substances may easily pass through the soil in groundwater recharge areas and contaminate our drinking water source"**.

To help protect this vital resource, the City of East Lansing and Meridian Township are participating in Michigan's Wellhead Protection Program. Wellhead protection is a set of activities and management practices to identify recharge areas and protect the public groundwater supplies from contamination. The City and Township have had an active State approved wellhead protection plan since 2000, most recently updated in September of 2018.

The two communities have also been involved in undertaking a program to protect the groundwater in the area by identifying and properly sealing abandoned or unused private wells. If you would like to know more about the wellhead protection plan or protective methods for well abandonment, contact Clyde Dugan at (517) 337-7535.



Ultimately, the responsibility for protecting this vital resource of clean fresh water rests with all of us!



So, what can "I" do, that will actually make a difference:

- ◆ Properly recycle or dispose of wastes and don't let them get into the water, especially pharmaceuticals or liquids like solvents, oils or fuels.
- ◆ Treat all land, lawns and flower beds as if they were your garden. Use only treatments that are essential, using them prudently and sparingly. Otherwise, they may enter your food or water supply.
- ◆ Report all spills so they can be properly cleaned up before they enter lakes, streams or the groundwater.
- ◆ Identify any abandoned wells so they can be removed and properly sealed.
- ◆ Support community efforts in proper urban planning and development controls, so groundwater recharge areas are preserved and protected.

For additional information, or for a paper copy of this Drinking Water Quality Report, contact Clyde Dugan or Mike Mulder at (517) 337-7535.

Lake Lansing Park North



From: [Darci Marcum](#)
To: [Deborah Guthrie](#)
Subject: Proposed Sparrow Health System Development
Date: Tuesday, June 1, 2021 8:07:00 AM
Attachments: [image001.png](#)

To whom it may concern:

I am contacting you to support the proposed Sparrow Health System development off of Jolly Road near Okemos Road.

The project would improve access to healthcare for residents of Meridian Township and surrounding communities. The innovative services Sparrow proposes would be a unique addition to the Township and further enable Meridian as a Prime Community. The Sparrow development will be a influencing factor for people to choose Meridian Township, knowing they will have nearby emergency care and other services.

Sparrow also has a history of top-notch developments that bring millions of dollars in new investment to the Lansing-area economy, provide local jobs, and promote potential employment growth. The proposed project meets the high standards set by other upscale developments in the Jolly Road-Okemos Road corridor and fits with the long-term vision of the area. As the region's only community-based and community-governed health system, you can be sure of Sparrow's commitment to Meridian Township and the entire region.

For these reasons and others, I urge you to positively consider this project.

Sincerely,

[Darci Marcum](#)

Plant Director, GM Lansing Grand River Assy
682-209-6037



Nothing in this message is intended to constitute an electronic signature unless a specific statement to the contrary is included in this message.

Confidentiality Note: This message is intended only for the person or entity to which it is addressed. It may contain confidential and/or privileged material. Any review, transmission, dissemination or other use, or taking of any action in reliance upon this message by persons or entities other than the intended recipient is prohibited and may be unlawful. If you received this message in error, please contact the sender and delete it from your computer.

SHARE:

[Join Our Email List](#)

Issue #179



Green Gazette

June 2021

News you can reuse!

300 Trees Distributed!

Thank you to the Meridian Tree Team and all who adopted, planted, donated, and helped distribute red pine seedlings last month at the [Marketplace on the Green!](#)

Volunteers also helped distribute information about [household hazardous waste collections](#), [pollution prevention](#), [wetland protection](#), and [My Citizen's Climate](#)



[Commitment.](#)



My Citizen's Climate Commitment

Consider the climate as you plan for future vehicle, appliance, and tool purchases. View more [here](#) and take the pledge.

100 Bikes Donated

Over 100 bikes were donated by residents from around Greater Lansing with help from [MSU Bikes](#) and volunteers. About 40 children's bikes went to [Share-A-Bike Program](#) for distribution to youth in need

and the rest will be refurbished or recycled by MSU Bikes' staff and volunteers.

Stay tuned for future recycling and educational events.



	 PictureThis	 PlantNet	 iNaturalist	 Seek	 PlantSnap	 LeafSnap
periwinkle/vinca	+	+	+	+	+	+
goldenrod	+	+	+	+/-	-	+
yellow woodsorrel	+	+	+	+/-	+/-	+/-
bull thistle	+	+	+	-	+/-	+/-
common burdock	+	+	+	+/-	+	+
perennial sowthistle	-	+/-	+/-	-	-	-
black medic	+	+/-	+/-	-	-	+
giant foxtail	+	+/-	+	+	+/-	+/-
yellow nutsedge	+	+	+/-	+/-	-	+
tall fescue	-	-	-	-	+/-	+
c. lambsquarters _{seedling}	+	+/-	+	-	-	+/-
purslane speedwell _{seedling}	-	-	-	-	-	-

Table 1. Results of 2020 plant identification app evaluation for CSS226L Weed Science Lab. Correct identifications are marked "+," those that were identified to the correct genus, but not species or were listed as a secondary or greater identification are labeled "+/-," and those incorrectly identified are labeled "-."

An App for That

Plant identification apps for smartphones have seen significant improvements over the past several years, offering the opportunity to take a photo and get an instant identification in many cases. [Learn More](#)

Tune In To...

Environmental Commission meetings on the 1st Wednesdays, 7pm on Comcast Ch 21, homtv.net or on [Zoom](#) (passcode 5151 if needed).

Green Dialogues Wednesday at 9am on Zoom, Meeting #89458603363 PW: "green" or 1-click [here](#) Tune in (or out) as your morning allows and interests dictate.



On Wednesday June 12th, there will be a presentation on home energy topics with members of the **Meridian Energy Team** followed by dialogue. Tune in by clicking the link above after 8:55am.



Recycling Center News

The [Meridian Recycling Center](#) is now open an hour longer six days a week through the summer and fall. Check the website for updates, rates, cardboard status and more.

M & F 2 pm. - 6 pm.
T, W, & Th 10 am. - 6 pm.
Saturday 10 am. - 5 pm.

Help achieve stewardship goals while learning valuable skills. Consider joining the...

- Forest Watch
- Clean-Up Crew
- Trail Blazers
- and/or Invasive Species Strike Team

Learn more [here](#)



Thank you Volunteers!

Thank you to several volunteers (Sara, Emma, Madison, Alana, Cathy, and Ginger) who assisted with some recent weeding and mulching in the "Hidden River Rain Garden" (AKA Roundabout at Park Lake and Burcham, near the Interurban Pathway).

If you'd like to join in another learning, mulching, weeding outing, please contact LeRoy at 517.853.4466. The next time will be June 4 at noon.

Learn more [here](#)

Land Stewardship Coordinator, Emma Campbell helps identify a plant in the roundabout.

Curbside Tips...

The image displays three informational graphics from Granger:

- CART PLACEMENT:** A graphic with a cartoon character and instructions on how to properly place recycling carts. It includes sections for 'PARK IT.', 'POINT IT.', and 'SPACE IT.' with corresponding photos and icons.
- WINDY DAY TIPS:** A graphic with a green header and text providing tips for recycling on windy days, such as 'Keep your cart full and consistently clean' and 'Use your cart's wheels to help it roll away from the curb'.
- RECYCLING GUIDELINES:** A graphic with a green header and a list of 'ACCEPTED MATERIALS' and 'RECYCLING SCHEDULE'. It includes a QR code and a list of items that are not accepted for recycling.

[View all as a PDF](#)

Save the Date

Electronics Recycling

Saturday Sep 18 9am-2pm

Chippewa Middle School Parking Lot

4000 Okemos Rd. Okemos, MI

in partnership with the

State of Michigan, R2C2,

Delta Dental, Granger, and YOU!



Hazardous Waste...

collections continue through September!

Household hazardous waste is accepted Tuesdays and Thursdays from 2-6pm (weather permitting) through September behind the Human Services Building near Jolly and Cedar in Lansing. [Click here](#) or [view a brochure](#).

UNACCEPTED ITEMS

The following items have special disposal procedures. Visit our website for information on proper disposal options.

- Appliances
- Asbestos
- Asphalt
- Car Batteries
- Carbon Monoxide Detectors
- Cooking Oil
- Dry Wall Compound
- Electronics
- Explosives / Ammunition
- Latex Paint: proper disposal below
- Medication: www.takebackmeds.org
- Product in 55 Gallon Drums
- Propane Tanks: >1 pound
- Radioactive Material
- Smoke Detectors
- Waste Oil

ACCEPTED ITEMS

The following items must be generated from households within Ingham County. Small household businesses are unaccepted.

Acids & Bases: pool chemicals, toilet bowl cleaners

Aerosol Products

Antifreeze

Automotive Products: brake, steering, transmission fluid

Cleaners & Polishes

Flammables & Gasoline: be prepared to leave your gas container

Fluorescent Lights & Ballasts: removed from fixture

Fuel Oil

Home Repair Products

**** Mercury Containing Devices:** all devices must be sealed in a baggie

Oil Based Paints & Paint Products: thinners, mineral spirits, stains

Pesticides, Herbicides & Fungicides

Photographic Chemicals

Sharps: needles, lancets, epinephrine pens

Small Propane Tanks: 1 pound size only

Wood Preservatives



From: [Flegler, Stanley](#)
To: [Board](#)
Subject: Deer Management Program
Date: Tuesday, June 1, 2021 1:44:53 PM

Dear Members of Meridian Township Board:

We are writing to express our sincere appreciation for the 2020-21 Deer Management Program that included participation by members of the Meridian Police Department.

We are forty plus year residents of the Indian Hills neighborhood. Our observations are that for the first time, the 2020-21 deer harvest with police participation has finally made a significant impact on the deer population in our neighborhood!

Deer have long been a problem in our neighborhood. We've had thousands of dollars of landscaping destroyed. Two of our three children were involved in deer collisions. Our next-door neighbor had a lab confirmed case of Lyme disease.

We hope the township board and the police department continue the program into the 2021-2022 season.

If there is anything we can do to assist in this decision, please let us know.

Sincerely,

Stanley L. Flegler

From: [Piotr Lupa](#)
To: [Frank Walsh](#); [Dan Opsommer](#); [Ronald Styka](#); [Courtney Wisinski](#); [Kathy Ann Sundland](#); [Patricia Herring Jackson](#); [Deborah Guthrie](#); [Phil Deschaine](#)
Subject: Re: Proposed Sparrow ER on Jolly Rd
Date: Tuesday, June 1, 2021 6:26:02 PM

Hello Board Members,

I would like to repeat my support for the proposed Sparrow project. I really feel that Sparrow addressed concerns that were voiced by residents of Kansas Rd, and the project will benefit those directly on Kansas Rd and beyond. I was initially against the project, but with the proposed improvements (water, road access, buffer zone on North and West) this may be one of major improvements to quality of life we have seen on Kansas Rd not seen in a long time. I feel that most of the remaining negative opinions are now actually from people outside of Kansas Rd, or have some other agenda.

For me the prospect of tested municipality water is a winning factor. There are a number of studies <https://www.pnas.org/content/117/29/16898> showing impact on private wells with growing urbanization and that is exactly the situation we are facing on Kansas rd. My water samples came back from the Ingham Health Department with elevated levels of contamination, and I'm required to install expensive reverse osmosis filtration that isn't a good long term solution.

New medical facility will also be safer for children than current Midwest Power Equipment where machines are stored outside next to the road often in a high pile.

Currently there is zero landscaping on the industrial or residential lots and Sparrow offers an ample 70' green space buffer that I feel won't be matched by other potential developers, and will make the neighborhood nicer.

Lastly, the two Single Residential lots have been vacant for a long time. In the current situation they may not be most attractive for single family homes with Industrial Midwest Power Equipment directly to the South and Elevation directly to the East without good buffer zones, and no municipal water. There is still a lot of empty land North on Kansas Rd, and I think that with future availability of municipal water and better street view appearance there will be more residential development in future resulting in more families on Kansas Rd. Without municipal water and Midwest Power Equipment being eye sore in current condition, it's less attractive to build family homes on the remaining vacant lots on Kansas road or families to move on Kansas Rd to the existing homes.

Thanks for your attention and leadership,
Peter Lupa

On Tue, May 18, 2021 at 9:07 PM Piotr Lupa <piotrkarollupa@gmail.com> wrote:

Hello Board Members,

I think Sparrow made significant progress with the new proposed conditions for the proposed development. I'm the resident of 3575 Kansas Rd and now open to the project, given the township can keep the investor accountable on all the points.

In particular, public water, removal of the Industrial zone lot, and removal of the access to the business from the Kansas Rd, could benefit the neighborhood. The public water is of

great need for health reasons, and cost prohibitive to be paid by residents of Kansas Rd, so this being paid by investors can be a great benefit to the neighborhood.

I also see the benefit to the Meridian Township as a whole to the additional access to primary medical care.

Again as the resident, I would like to see the board keep the investor accountable on all the proposed improvements to the development project.

Best Regards,
Peter Lupa
517 899-4864



FOR IMMEDIATE RELEASE
June 3, 2021

CONTACT: Abby Tithof, Human Resources Director
517.853.4210 | tithof@meridian.mi.us

Township Lifts Temporary Building Access Restrictions
Safety Procedures Remain In Place for Visitors and Employees

Meridian Township, MI – Due to the recent changes regarding COVID-19 safety procedures, the Township is lifting the temporary access restrictions for all buildings.

As of June 1, 2021, the Township Municipal Building (5151 Marsh Road, Okemos), the Public Safety Building lobby and the Service Center lobby (2100 Gaylord C. Smith Court, Haslett) are now fully accessible for in-person transactions. All members of the public must wear a mask to enter any Township building, unless they meet any of the exemptions provided in the Michigan Department of Health and Human Services (MDHHS) Gatherings and Face Mask Order listed below.

- You are fully vaccinated
- You are younger than 2 years of age
- You cannot medically tolerate a mask
- You are receiving medical or personal care where removal of the face mask is necessary
- You need to communicate with someone who is deaf, deafblind or hard of hearing and whose ability to see the mouth is essential to communication
- You are asked to remove your mask for identification purposes

Members of the public are to stop at the Information Desk upon entering Township buildings, to control group numbers in certain areas to honor social distancing or other protocol if appropriate while waiting for service.

“We’d like to express our sincere gratitude to our residents and employees. Your patience, mindfulness and understanding have been paramount as we take these positive steps towards reconnecting in the workplace and in our community,” stated Meridian Township’s Human Resources Director Abby Tithof. “We thank you for your support.”

Per Michigan Occupational Safety & Health Administration (MIOSHA) guidance, Township employees who turn in proper exemption documentation to Human Resources will be permitted to work without wearing a mask.

Residents are encouraged to continue utilizing digital options for assistance, including the Township’s website, email, phone or the 24-Hour White Drop Boxes located outside the Municipal Building. Additional information, including a full Staff Directory is available on the Township website at www.meridian.mi.us/COVID-19.

###

The community of Meridian Township is in close proximity to the Michigan State Capitol and Michigan State University. The Township serves the community through exceptional services, beneficial amenities and an outstanding quality of life. It is a welcoming community that celebrates quality education, recreation and lifestyles.



From: [Ceil Heller](#)
To: [Board](#)
Subject: Food for thought before you vote on Sparrow ER
Date: Friday, June 4, 2021 8:52:37 AM

Please read the comments in the FB post that was posted by WILX and know whom you are dealing with before you vote to have that ER built.

That ER is not necessary. What is necessary is keeping their urgent cares open past 7 or 8 pm . This will alleviate a lot of over crowding in the main ER.

I have spoken to several employees that I used to work with in this ER and they are dismayed that for years they have worked short handed and now this.

They closed St Lawrence campus because they had no staff.

These are red flags that need to be addressed . Besides Meridian Fire EMS are top notch and can handle any emergency necessary.

Thank you Ceil Heller

<https://www.facebook.com/139971542712997/posts/4167832569926854/?d=n>

Sent from my iPhone

From: [Road Department](#)
To: [Roxann Graham](#); [Road Department](#)
Cc: [Emily Stivers](#); [Board](#)
Subject: RE: Carlton Street RR Tracks
Date: Tuesday, June 8, 2021 11:44:37 AM

Hi Roxann,

I spoke with CN Railroad last week to inquire when they would be returning to repair this area. We have had 3 or 4 complaints over the last 3-4 weeks.

CN does not have manpower or resources until mid to late July to finish what is needed. CN did a temporary repair earlier this year, and the permanent repair still needs to be performed. CN would like to close the crossing until repairs are able to be completed. They are planning to close this as soon as possible.

Please let me know if I can assist you further.

Thank you,

Kellie

Kellie Knauff
Ingham County Road Department
Reception/Permits/Public Information Coordinator
301 Bush St
Mason MI 48854
Ph: 517.676.9722 x2300
Email: knauff@ingham.org

-----Original Message-----

From: Roxann Graham <roxieg1@icloud.com>
Sent: Monday, June 7, 2021 11:26 PM
To: Road Department <roads@ingham.org>
Cc: Emily Stivers <Estivers@ingham.org>; board@meridian.mi.us
Subject: Carlton Street RR Tracks

Despite one re-repair by CN Railroad, the tracks at Carlton and Lake Drive have once again become dangerous unless driving at about 3 mph. I have lived on Hickory Island for 60+ years and can attest that the tracks are in the worst condition ever. When I was a child the tracks were fairly stable with wood construction that was appropriate for the amount of traffic that crosses the railroad headed to the lake. The new blacktop continues to sink and is a danger to cars, bikes, and pedestrians. CN needs to be held accountable for a permanent solution that protects the public and vehicle safety with construction that is appropriate to the traffic volume and usage.

Roxann Graham
1390 Hickory Island

From: [Frank Walsh](#)
To: ["ronstyka@gmail.com"](mailto:ronstyka@gmail.com)
Subject: FW: Wolverine Pipe Line Co - Mowing Operations
Date: Wednesday, June 9, 2021 4:03:14 PM
Attachments: [MOWING NOTICE LETTER - 2021.05.14.pdf](#)
[Wolverine Pipeline Mowing Operations ROW.pdf](#)

From: Derek Perry <perry@meridian.mi.us>
Sent: Wednesday, June 9, 2021 3:56 PM
To: Rob MacKenzie <mackenzie@meridian.mi.us>; Kati Adams <kadams@meridian.mi.us>; Brandie Yates <yates@meridian.mi.us>
Cc: Denise Green <green@meridian.mi.us>; LuAnn Maisner <maisner@meridian.mi.us>
Subject: Wolverine Pipe Line Co - Mowing Operations

We received word from Wolverine Pipeline that they will be performing their routine inspection and mowing work along their easement in the next few weeks. All property owners should have received the attached letter explaining the program.

GIS put together a map of the route using the supplied parcel numbers to identify the affected Township properties.

The easements are marked and frequently maintained, so the inspection and mowing should not be a surprise to those along the pipeline corridor.

Please let me know if you have any questions.

Derek N. Perry
Deputy Township Manager
Director of Public Works & Engineering
perry@meridian.mi.us
W 517.853.4440 | F 517.853.4099
5151 Marsh Road | Okemos, MI 48864

From: Jason Clark <jclark@orcolan.com>
Sent: Tuesday, June 8, 2021 9:52 AM
To: PW <dpw@meridian.mi.us>
Subject: Wolverine Pipe Line Co - Mowing Operations

Meridian Charter Twp.,

I am contacting with Wolverine Pipe Line Company, who are currently having some mowing operations conducted on their pipeline right-of-way, which crosses several parcels owned by Meridian Charter Township. I've attached a copy of the mowing notice letter I sent out, dated May 14, 2021, which you may have received in the mail. The attached letter describes the anticipated work involved for conducting these subject mowing operations.

Below is a list of parcel numbers for lands that I show as being owned by Meridian Charter Township, which are crossed by Wolverine's pipeline right-of-way. Please let me know if there are any questions about the proposed work, which I anticipate would be conducted in the next week or two.

Regards,
Jason Clark

33-02-02-06-127-027
33-02-02-06-201-004
33-02-02-06-251-026
33-02-02-06-251-034
33-02-02-06-251-044
33-02-02-16-100-014
33-02-02-16-400-027
33-02-02-16-400-028
33-02-02-21-226-011
33-02-02-22-376-004
33-02-02-27-401-002

Jason Clark, *Agent 3*

ORC | Real Estate Solutions for Infrastructure

34441 W. Eight Mile Road, Suite 103, Livonia, MI 48152

Mobile: 231-852-0505 | orcolan.com

Email | [Twitter](#) | [LinkedIn](#) | [Careers](#) | [History of ORC Book](#)

inspiring confidence in progress for 50 years...



Jason Clark
Senior Right of Way Agent, ORC

Email: jclark@orcolan.com
Phone: (231) 852-0505

May 14, 2021

Dear Landowner,

Wolverine Pipe Line Company ("Wolverine") has contracted with Lanracorp, Inc. ("Lanracorp") to perform necessary maintenance activities on the pipeline right of way ("ROW") in your community. Please be advised that Lanracorp representatives will be present shortly on or near your property to inspect the surface conditions. Such inspection may involve necessary ingress and egress using equipment to traverse the ROW and catalog the work that must be completed to remain compliant with stringent federal regulations for the safe operation of our pipelines.

Upon completion of the site visit, Lanracorp crews will subsequently visit those locations on our ROW where it was determined vegetation removal must occur. The removal of vegetation will facilitate the complete inspection of the ROW conditions by aircraft or ground inspection. Vegetation removal is done using mechanized equipment and hand tools designed for the clearing of the ROW. When such activity is occurring, we encourage you not to approach crews working for your safety. Please call to confirm receipt of this letter and to ask any questions you may have about our process.

In closing, thank you for your constant cooperation with Wolverine as we work to secure the safety of you and those in your community while we improve ROW conditions in your area. Please do not hesitate to contact me if you wish to discuss this matter further.

Best Regards,

A handwritten signature in black ink that reads 'Jason Clark'.

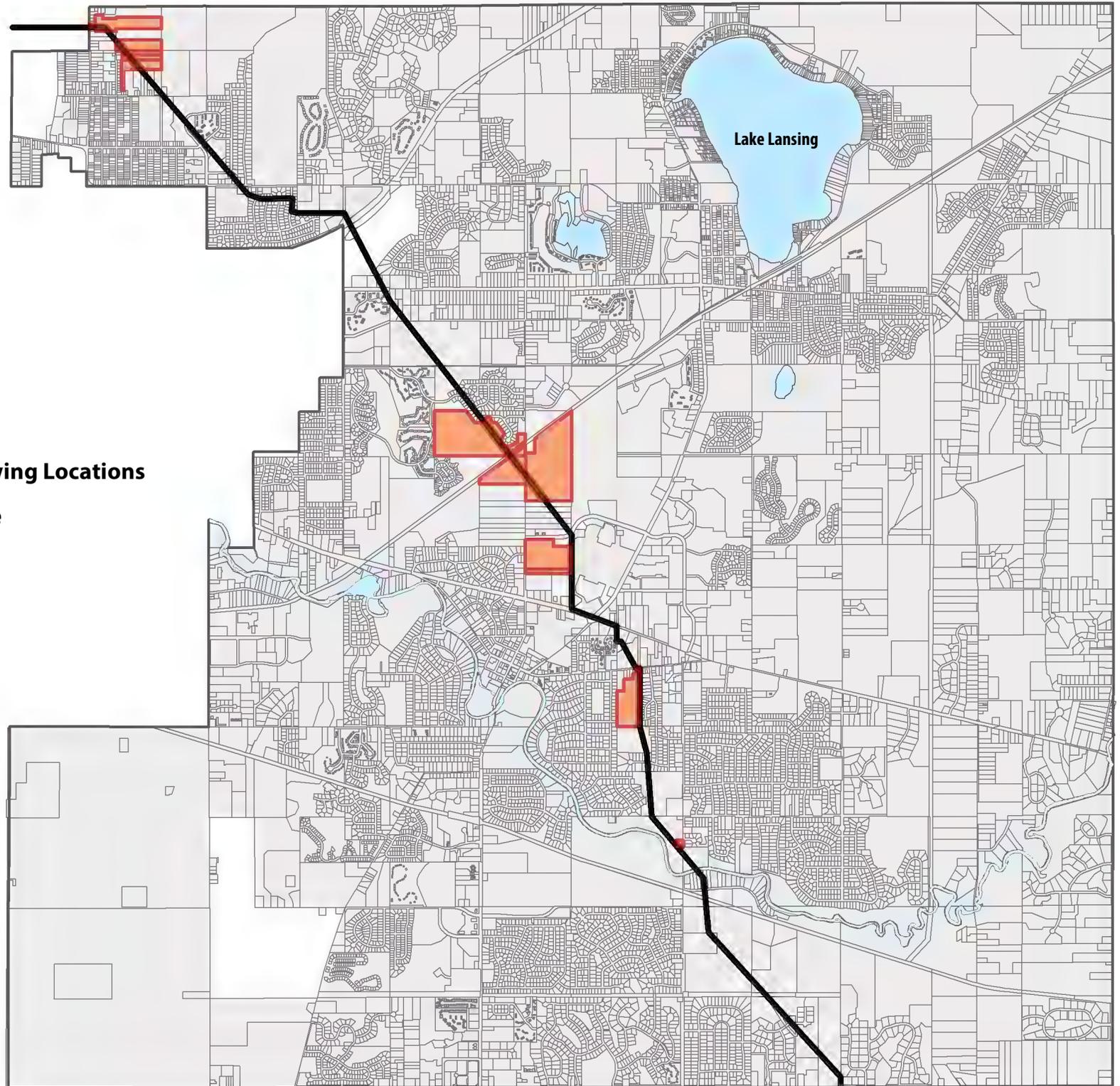
Jason Clark
Senior Right of Way Agent, ORC
Assigned to Wolverine Pipe Line Company



MERIDIAN TOWNSHIP

Legend

-  Pipeline ROW Mowing Locations
-  Wolverine Pipeline
-  Water
-  Parcels



0 0.3 0.6 1.2 Miles

From: [Meridian Township, MI](#)
To: [Board](#)
Subject: Rezoning #21020 rezone six acres on the north side of Jolly Road and east of Kansas Road
Date: Wednesday, June 9, 2021 10:18:52 PM

Message submitted from the <Meridian Township, MI> website.

Site Visitor Name: Sondos Al-Hachim
Site Visitor Email: dralhachim@gmail.com

Good evening members,

My name is Sondos Alhachim, I'm a healthcare administration consultant. I just moved to 3589 Kansas Road last year after a long search for a house that provided the good quality life in a quiet neighborhood in Okemos.

It saddens me to hear my neighbors getting frustrated regarding the zoning issue and feeling unheard. I know there is no need for a healthcare building on this street knowing the number of professional vacant buildings available.

I'm concerned about our neighborhood's environment, the noise that comes with construction and traffic, and the changes in the neighborhood that would come from having such a space present so close to our homes. We have enjoyed the peace and privacy this neighborhood has provided as well as the feeling of safety and security for ourselves and our children on our wonderful street and wish to keep it this way.

We urge you to stand by us in maintaining these high standards and preventing the construction of a commercial office space, which will undoubtedly disturb the home we have created for ourselves and our families on Kansas St.

Respectfully,
Dr. Sondos Alhachim

From: [Joell Ackerman](#)
To: [Board](#)
Subject: ER on Kansas Rd, Okemos
Date: Thursday, June 10, 2021 11:04:05 PM

Dear Meridian Township Board,

1. I am still opposed to non residence use on Kansas Road, Okemos.

- 2.If Anyone else attempted to rezone the property it would be denied.

- 3.Apparently the planning commission which all recommended No is just a formality.

- 4.Sparrow is concerned with revenue lost....goal to intervene and send people to Sparrow preventing some of the business from going to the new hospital.

- 5.Perhaps there is some clout/prestige with having a free standing ER in Okemos.

Sent from [Mail](#) for Windows 10

From: [Meridian Township, MI](#)
To: [Board](#)
Subject: Kansas road rezoning
Date: Thursday, June 10, 2021 10:54:03 PM

Message submitted from the <Meridian Township, MI> website.

Site Visitor Name: joell ackerman
Site Visitor Email: joellackerman@hotmail.com

1. Anyone else who tried to rezone Kansas road would be denied.
2. Sparrow 's goal is to prevent loss of business by transferring back to Sparrow instead of people going to the new hospital...Apparently it's a real threat to Sparrow.
3. Am not sure if it's Clout/pull/prestige for the board to want an ER...would that make Okemos more marketable? Already there have been many apartments & hotels built, yet we still don't have a nice downtown.

4. Light pollution, lack of privacy, noise pollution, safety issues-apparently these are not important to the township....just buy people out with city water... Fresh air, clean food, clean water, safety should be everyone's RIGHT!

This situation reminds me of the 50 's and 60's when cities ran expressways through poor & or minority neighborhoods...Yes we are a small working class neighborhood...perhaps the township would like to get rid of this small neighborhood???

5. This whole issue gives me concern as to the integrity of the Meridian Township Board.
6. Who does the Meridian Township Board work for/represent?
the residents of the township or Sparrow Hospital?
7. Two residents have been here about 40 yrs and had no intension of moving....
8. I continue to be opposed to the rezoning of Kansas Road for anything.

Joell Ackerman....

From: [john david faichney](#)
To: [Board](#)
Cc: [john david faichney](#)
Subject: Opposition to Kansas Rd Neighborhood Development
Date: Thursday, June 10, 2021 10:38:53 AM

Health Care Planning By Businessmen Without Residential Consent.

By John David Faichney, MD, FACP

23/24 persons oppose. 2 have received a buy out. Your proposal is inappropriate.

It has been only 3 months, and Sparrow Hospital has broken the rules of honesty with the residents of Kansas Rd Neighborhood. It demanded rezoning from residential to professional office building. And afterward, added the coup de grace: a free standing emergency room. Why was this fact hidden from us at the beginning? Because it is this medical service which makes their proposal most incompatible with the Kansas Rd Neighborhood, a place where above all residents desire peace, security and quiet. All of which is broken by emergency services. **We are the taxpayers of Okemos. We deserve a better opinion!**

The Meridian Board is impressed with the concessions which Sparrow has given to the pitiful near-do-wells of Kansas Rd Neighborhood. One Board member expressed to me, "I can't understand why you are still opposed with all the concessions." After all, you are being awarded with running, municipal water. **We all have wells and anticipate that municipal water may be needed in the future, so water is a good thing. However, the odd syllogism here is the following: You can have water, a gift really of God, but you will have to trade this water for quiet at night and weekends and security at all times. Persons in the Kansas Rd Neighborhood are living there for the very qualities which Sparrow's development is taking away: Quiet at night and weekends and nil security threat at all times. Persons in Kansas Rd Neighborhood are there because they have chosen not to live in an urban environment. Yet you deny us this choice.**

The Planning Commission got the point and said, "no". This was not an appropriate place.

But is the service not unique? No, it is emergency care without immediate hospital back up. Is that Sparrow's point? We only deserve the elements of emergency care, not real emergency care. After all, we are told, there will be a board certified emergency physician there at all times. **That is fine, let this group of emergency docs open up their practice across the street, at 2445 Jolly. They don't deserve to dig up the Kansas Rd Neighborhood!**

I am an endocrinologist, I desire to open a practice with my colleagues on Kansas Rd and I demand that you permit me and my associates to override zoning and take away residential properties because I am a physician and I am working for a hospital. What will you say? Why don't I have the same rights and privileges that these docs have? I have worked for four major institutions including Henry Ford Hospital, McLaren Hospital, Flint, St. Mary's Hospital in Grand Rapids and Munson Health Care in Traverse City. I can tell you none of these hospitals would behave in such a high-handed, unprofessional fashion. Why not Alaedin Township? Well, they just want to be with Okemos. Who cares? If they want to provide care to Okemos then they can do it in Alaedin Township if that is expedient and will permit delivery of the care. If they want to invest money then find appropriate property which will not destroy a neighborhood!

Health Care Planning Without Residential Consent.

-2-

There are four health care professionals in the Kansas Rd. neighborhood. Two the MD, one the DO and one a Ph.D. , Public Health. All of them oppose this arrogant proposal by Sparrow. None of them are working for Sparrow and none of them are working for or against Sparrow. We understand that health care planning is not done this way. We can see the state of art University Hospital only 8 minutes down the road. We can see the differential in the kind of care which will be given there, where specialty support is immediately available and procedures such as cardiac catheterizations, state-of-art delivery of babies and surgery can be done immediately. This excellent emergency service will be from 8 to 15 minutes to get to from any point in Okemos. What will be the problem with emergency access once this hospital is completed? One of us, an emergency physician, has warned you about the security implications of emergency care and how that would adversely effect our neighborhood.

All residents of Kansas Rd Neighborhood desire improved access to care and improved quality of care. However, health is the consequence of a balance between quality of life factors, age, genetics, experience and the like. **By inflicting this mechanism upon Kansas Rd you, the Meridian Board, are taking responsibility for health care planning. Which you are not qualified to do.** And you are taking the words of Sparrow Hospital, which has not demonstrated a vision of clarity

and goodness for all in Okemos. This is the least we can expect of them!

Health delivery decisions should not be made by MBAs and by individuals who are trying to maximize profit margins. Hospitals and emergency room placement cannot be evaluated adequately by municipal boards which lack health care expertise. Health care facilities should not be built against the will of residents, especially those who have the potential to know what is for the good. People should not be forced to accept urbanization because of a corporate decision. Please ask Sparrow to go elsewhere.

**John David Faichney, MD,
FACP
Kansas Rd and Sheldrake, Okemos
jdfaichney@hotmail.com
copyright 6/9/2021**

From: ronstyka@gmail.com
To: [Frank Walsh](#); [Board](#); [Ken Plaga](#); [William Fahey](#)
Subject: Serial killer
Date: Thursday, June 10, 2021 9:35:21 PM

The State denied parole to Don Miller, as the Board & numerous others requested.
Thanks everyone.

Sent from my iPhone

From: [Sharon Morrisett](#)
To: [Board](#)
Subject: Sparrow Hospital ER on Jolly
Date: Thursday, June 10, 2021 8:16:11 PM

To the Meridian Board,

I have called and shared my STRONG opposition to this 24 hour ER and rezoning. Now I'm writing to all of you to PLEASE consider Us, the people that live here.

Fact: if this was being asked east of Okemos Rd it would be a flat out NO!

Fact: this is Not a necessity to our quality of life in Meridian Township.

Fact: it will take away more of the quality of mine and my families lives.

Yes, I understand Meridian Township has Light Ordinances and I appreciate them. However, where I live the lights on the side of Midwest power are quite bright against the white and red building. The Dentist office on the corner of Jolly, Kansas and Indiana only has 1 light on the west side of the building at night. The parking lot lights go off at 11:00 pm. I can live with that.. With the Sparrow building the parking lot lights will be on all night long.

Noise is another issue. Any time you take out trees we loose the buffer of sound they provide.

Across the street from this site is another Sparrow building that has been vacant more than it was ever occupied.

I really don't understand why they can't use another site the doesn't need to be rezoned. We have so many vacant sites, bulldoze one of them and start over....

I truly believe the only reason Sparrow wants this on Jolly is to compete with McLaren being built on Collins Rd. That is not in our best interest.

Again, I ask you all to remember US, the ones that live on Kansas and Indiana. Would any of you want a 24 hour anything next door or across the street or in your back yard??? I know the answer. I'm pretty sure your minds are made up but I had to give it one more try.

My husband and I are celebrating our fortieth wedding anniversary this August. This has been our home for 40 years and we were hoping our only home. We feel we'll have to leave if this goes through. Just letting you know your decisions have consequences for everyday people.

I will be paying attention on Tuesday night.

Thank you for listening,

Sharon Morrisett

3531 Indiana Rd, Okemos, MI 48864

From: [SHEREEN TABRIZI](#)
To: [Board](#)
Subject: # 21020
Date: Thursday, June 10, 2021 12:59:52 PM

June 10, 2021

Greetings, Meridian Board Members,

Re: Rezoning #21020 (Martin Investment Properties, Inc.)/Sparrow

The proposal submitted by Martin for Sparrow to rezone two residential parcels will make many neighbors on Kansas, Indiana and Robin's Way suffer. Spot rezoning the two residential parcels is detrimental. It will destroy the wildlife, the tranquility and threaten safety of children and the elderly. It will depreciate the value of our homes despite the proposed green buffer and access to city water Sparrow is promising. Sparrow's *revised* proposal includes 24/7 medical emergency services. This means light and sound pollution, strangers in the neighborhood at all times, some of whom may be drug users. Who would want to live next to such place? We are not agreeable to trade peace and safety for city water. Neighbors can connect to municipal water on their own when they choose to do so.

The vast majority of residents on Kansas and Indiana roads have spoken and they vehemently oppose this proposal as reflected in our written petition as well as our calls into your board meetings. When I purchased the property on 3566 Kansas Rd, Meridian Township Master Plan was my guide. The plan *did not* include rezoning those parcels. The proposed change was not expected nor justified.

If the real reason for this proposal is providing health services, then Sparrow needs to seek another location that doesn't disturb neighbors. There are several commercial properties off Jolly 1/4 mile west from Kansas at James Philips Street parallel to I 96 and others by Fountain Pointe in the same location. There is also McLaren hospital being completed and is 8 minutes away from Kansas Rd. Allowing a developer to buy exposure on the expense of our neighborhood is a poor decision. ***The free-standing emergency services facility does not need to be on Okemos property to serve Okemos residents!***

Once you grant the rezoning request, the parcels are fair game. The developer may use it in any way they please. Think about the neighborhood children playing in their backyards, walking to catch the school bus. Think of the disruption you'll be causing to the neighbors and their quiet and safe lives. ***They need to be safe. They need to feel safe. They deserve to have your protection!***

Instead of reducing Kansas street by two residential parcels, you should support increased opportunities for building future houses and further develop it into a more attractive and desired residential neighborhood. I urge you to put the welfare of Kansas Rd neighborhood first regardless of the promises provided in this developer's proposal. As an educator, may I suggest that you initiate a meeting with the neighbors, hear their perspectives, listen to reasons for their pride in their neighborhood as well as their grievances? We are all vaccinated, and I'll be glad to provide soft drinks or coffee in the backyard of 3566 Kansas. This way, you'll be able to familiarize yourselves with the nature of Kansas area and its pleasant and open-minded residents!

Respectfully yours,

Shereen Tabrizi, Ph.D.

3566 Kansas Rd and 3917 Sheldrake Avenue

Okemos, MI 48864

Shereen-faith@comcast.net

248-444-6055

From: [sfreeatbp](#)
To: [Board](#)
Subject: Sparrow/Kansas Rd Opposition
Date: Thursday, June 10, 2021 5:25:14 PM

Dear board members.

My name is Steven Freemire and I live at 3622 Kansas Rd and have since 1994

i would like to emphasis ROAD

During all board meetings you constantly refer to it as Kansas Street. It is not a city street but a country road.

If you look at the street sign it plainly states Kansas Rd.. Should we start calling Jolly Rd. Jolly Street?? Just one of my pet peeves:)

I am still opposed to the Emergency room being built at Kansas and Jolly roads..

It doesn't fit into OUR rural neighborhood. It is a 24/7 365 operation and we will never get any relief from the noise, light pollution, traffic and our privacy. It ill bring bad actors into our neighborhood and jeopardize our safety and tranquility of life.

This location is not warranted. Plenty of room across the road at 2445 Jolly in Alaedin township. It is already built, it is the approximate size of what they want to build and it is already painted Sparrows colors. Ecologically it would keep materials out of land fills and lend itself toward recycle , reuse and repurpose.

if not there further down the road at James Phillips is plenty of vacant land to build till their hearts content. Even further down at Jolly and Hagadorn Roads are acres of land owned by MSU in which a joint venture could be worked out with MSU.

With the new state of the art McClaren Hospital being built 8 miles away is there really a purpose to this emergency room structure??

i may be dating myself but if any of you used to read Mad magazine there was a section called spy vs spy. Or Sparrow vs McClaren

It seems like a marketing ploy to scoop up anybody on their way to McClaren. Let Sparrow do a little triage at there facility and then ship them to the big hospital downtown. Take that McClaren!! Why is this board buying into this???

I know some of you were on the board when the zoning for the Elevation project was being batted around. Whoa were we handed a pack of BS. The township was promised that a grocery store was going to be built so people would not have to drive to a store to buy groceries and that would hold traffic down. Guess what no grocery store exists today and instead we got another Bar and Grill "Joes on Jolly " Like the corners of Okemos and jolly Roads needs more alcohol to be served or another place to eat. We were also promised a 'Community Center ' that would have a park and all sorts of activities going on. Elevation painted a picture of a community inside of a community. Guess what, no community center either. Who is going to hold Sparrows feet to the fire for these concessions. you all pretty much stated because of these concessions you are on board.. Your own planning commission was against this project but you have now bought into these concessions that they were not privy to.

So the two concessions that flipped all of you is public water. I am not apposed to public water but i have spent a lot of money to condition my well water to make it potable and I am fine with it. Plus i do not get monthly bill for my well water. What guarantees are you going to ask for to make sure this happens???? No exits or entrances off of Kansas ROAD. So once approved and it turns out that Sparrows plan B is not going to work where are out guarantees that this wont happen???? you approve zoning and then the developers do what they want and no stopping them.

Look what LaFontaine did clear cutting 300 tree's then saying oh we don't want to build our dealership there????

The board keeps buying into these lies and has no power after the vote is made.

i would suggest at a minimum that two escrow/trust accounts be set up for Kansas Rd residents. For the water it should be at least \$340,000. A couple of years ago i inquired about getting public water down our road. I asked the township engineer Younes to do a study of the costs. At that time it was \$15,000 assessment for each resident. Additional costs to hook up to the city water per G A Hunt between \$3-

4,000 to connect and probably another \$2,000 for a plumber to come in and go from the water meter to hook up inside of our homes. ALL of these costs should be considered into the escrow/trust account. If we do hook up, will we have to disable our wells???

The entrance/exit situation is a little trickier. how about another escrow/trust account with \$100,000 put in for each resident of Kansas Rd if the promise is broken for this promise. i know one person on the street is having their property bought by Sparrow and i heard another was going to be bought out also. So what is Sparrow planning for those properties. I want some guarantee's and not empty promises.

Crap on me once , twice (Elevation, LaFontaine) shame on me for the third one. Do you really want egg on your face again???

I have a beautiful 5 bedroom 2.5 bath home Sparrow can buy it. It could be used as a nice lure to get some resident physician to move here and have a place to live .within walking distance to his/her job. Sparrow is throwing around a lot of money to get THEIR way. WHY when so many other possibilities exist and a much lesser cost. That is what this board needs to ask them selves.

Would you want this in YOUR neighborhood?? You know you would not, so why stick it in OUR neighborhood.

Something is not right and Sparrow is not coming clean. PO zoning is normally 9-5 operations M-F THIS is not your typical PO zoning.

This change of zoning is not in your own master plan. your own planning commission voted it down 3/0. and at that point they were not told it was going to be a 24/7/365 operation.

Tell Sparrow to take a hike with your vote

Thank you for listening

Steven E Freemire

517-256-1861 and open to any questions, comments or concerns

EAST LANSING – MERIDIAN WATER AND SEWER AUTHORITY

2470 BURCHAM DRIVE – EAST LANSING, MICHIGAN 48823

PHONE: 517-337-7535 – FAX 517-337-7240

Agenda

East Lansing-Meridian Water and Sewer Authority

June 17, 2021

11:00 A.M.

BOARD OF TRUSTEES

DEREK PERRY
Chair

SCOTT HOUSE
Vice-Chair

CHUCK PETERSON
Secretary

BRADLEY BROGREN
Trustee

JIM CLELAND
Trustee

JIM ECKLUND
Trustee

•

JILL FELDPAUSCH
Treasurer

•

CLYDE DUGAN
Operator/Manager

1. Roll call.
2. Approval of minutes of the May 20, 2021 meeting.
A. Motion to approve.
3. Communications.
4. Public Comments.
5. Treasurer's Report.
6. Resolution 2021-6-1.
A. Motion to Tentatively Award Construction Contractor for Filter Additions/Controls upgrade project.
A. Motion to Award.
7. SCADA Controls at remote Well sites.
A. Motion to Authorize.
8. Long Term Planning update.
9. Manager's Report.
A. Expenditure list (Motion to acknowledge).
B. ELMWSA July (annual) meeting.
10. Other Business
A. Tuition Reimbursement for Operator Thomas Fish.
11. Adjournment.

EAST LANSING – MERIDIAN WATER AND SEWER AUTHORITY

2470 BURCHAM DRIVE – EAST LANSING, MICHIGAN 48823

PHONE: 517-337-7535 FAX 517-337-7240

BOARD OF TRUSTEES MEETING NOTICE OF ELECTRONIC AND TELEPHONIC MEETING

Please take notice that the Board of Trustees of the East Lansing – Meridian Water and Sewer Authority (“Authority Board”) will hold a public meeting at 11:00 AM, on Thursday, June 17, 2021 by convening the Authority Board through remote electronic access as provided in this Notice. Proceedings conducted at this meeting are pursuant to the provisions of the Ingham County Local State of Emergency declaration, Res #21-261 and the Meridian Township Local State of Emergency declaration, dated February 2, 2021.

1. The Authority Board is meeting electronically to address necessary business operations and allow ongoing work to sustain and protect the lives of the residents of its constituent municipalities.
2. This meeting is being held electronically to comply with federal, state and local agency recommendations to cease in-person public assemblies, self-quarantine, and help prohibit the spread of COVID-19. The Authority Board recognizes its continuing responsibility for needed decision-making and will conduct this meeting in a manner that effectuates as fully as possible the purposes of the Open Meetings Act.
3. Individuals are encouraged to participate in the meeting electronically, including providing public comment, either through prior e-mail correspondence, online audio-conferencing, and telephone comments.
4. For those seeking to participate electronically through online video or audio-conferencing, participants can access the electronic meeting through the following link: <https://zoom.us/j/572589791>, Password 2470, or by calling 1 (646) 558-8656, Meeting ID 572 589 791, Password 2470. Participants may use any device that supports the video-conferencing app or when prompted after clicking the link, choose to join the meeting through a default browser, if applicable. For those who choose to access through the video-conference app, you will be prompted to download the app to participate.
5. To participate in public comment during the virtual meeting, upon entering the meeting indicate you wish to take part in public comment in the chat, or verbally if on the phone or audio-conferencing. You’ll be called upon by the Chairperson during the Public Comment section or other appropriate sections of the meeting. When directed by the Chairperson, please call (517) 349-1232 to make your comments. Members of the public are allowed three minutes to speak. You can then return to the meeting as before
6. Questions and comments may be submitted prior to the meeting by email to cdugan@elmwsa.com. Emails to that address relevant to this meeting will be distributed to the Authority Board.
7. Further information and materials related to this meeting can be requested by contacting cdugan@elmwsa.com or (517) 337-7535 Ext. 1.
8. Persons with disabilities needing accommodations for effective participation in the meeting should contact the Authority Manager at (517) 337-7535 Ext. 1 or through the Michigan Relay Center at 7-1-1 (TDD) at least twenty-four (24) hours in advance of the meeting to request visual, hearing, technological, or other assistance.
9. If you are unable to access the meeting due to technical difficulties, please contact Director of IT, Stephen Gebes; (517) 853-4222; geb@meridian.mi.us. Every effort will be made to help you participate in the meeting.



**CONSENT AGENDA
PROPOSED BOARD MINUTES
JUNE 15, 2021**

PROPOSED MOTION:

- (1) Move to approve and ratify the minutes of the the Virtual Regular Meeting of May 18, 2021, and June 1, 2021, as submitted.**

ALTERNATE MOTION:

- (1) Move to approve and ratify the minutes of the the Virtual Regular Meeting of May 18, 2021 and June 1, 2021 with the following amendment(s):**

[insert amendments]

CHARTER TOWNSHIP OF MERIDIAN
TOWNSHIP BOARD VIRTUAL REGULAR MEETING **-DRAFT-**
5151 Marsh Road, Okemos MI 48864-1198
517.349.1232, Virtual Meeting via Zoom
TUESDAY, MAY 18, 2021; 6:00 pm.

PRESENT: Supervisor Styka, Clerk Guthrie, Trustees Jackson, Opsommer, Sundland, Wisinski

ABSENT: Treasurer Deschaine

STAFF: Township Manager Walsh, Director of Public Works Perry, Fire Chief Hamel, Police Chief Plaga, Community Planning and Development Director Kieselbach, Information Technology Director Gebes, Finance Director Mattison, Human Resources Director Tithof, Economic Development and Neighborhoods Director Clark, Communications Manager Yates; incoming Community Planning and Development Director Tim Schmitt

1. CALL MEETING TO ORDER

Supervisor Styka called the meeting to order at 6:00 pm.

2. PLEDGE OF ALLEGIANCE/INTRODUCTIONS

Supervisor Styka led the Pledge of Allegiance.

3. ROLL CALL

Clerk Guthrie called the roll of the Board.

The Board took a moment of silence in remembrance for Treasurer Deschaine's daughter, Marianne Deschaine.

4. PRESENTATIONS

- A. Xavier DeGroat Autism Foundation – Chief Plaga stated the Xavier DeGroat Autism Foundation's offers autism awareness activities, proposes and supports state legislation to assist law enforcement with the driver's with autism issues. Xavier DeGroat, CEO, summarized the fundraising event on June 8 at the Meridian Mall.
- B. Capital Area District Libraries – Tom Warner, Head Librarian at the Haslett Branch and Betsy Hull, Head Librarian at the Okemos Branch offered their 2020 Annual Report and summarized upcoming open branch hours and activities.
- C. Tribute to Mark Kieselbach – Supervisor Styka read the resolution offering a Tribute to retiring Community Planning and Development Director Mark Kieselbach and designated May 25, 2021 as MARK KIESELBACH DAY.

Director Kieselbach thanked the Board for the tribute and stated he learned a great deal at the Township and worked with wonderful staff, board and commission members and residents.

Trustee Jackson moved to make the tribute an official resolution of the Township Board. Seconded by Trustee Opsommer

ROLL CALL VOTE: YEAS: Supervisor Styka, Clerk Guthrie, Trustees Jackson, Opsommer, Sundland, Wisinski

NAYS: None

Motion carried: 6-0

5. CITIZENS ADDRESS AGENDA ITEMS AND NON-AGENDA ITEMS

Supervisor Styka opened public remarks at 6:29 pm.

Jody Bond, 1502 Jolly Road, Okemos, spoke in support of Special Use Permit #18091 (Newton Pointe LLC).

Will Randle, 4409 Dobie Road, Okemos, spoke in support of Special Use Permit #18091 (Newton Pointe LLC).

Bill Fahey, 6149 Cottage Drive, stated he has offices at 4151 Okemos Road, is currently the Township's attorney and the legal contract is due to expire. His law firm has enjoyed work with the Township, would like to continue the relation and is available for a meeting to discuss renewing the contract.

Sharon and Jerry Morrisett 3531 Indiana Road, spoke in opposition to the change and has concerns with the current development.

Jay Murthy, 2483 Robins Way, spoke in opposition to the Sparrow rezoning proposal.

Shereen Tabrizi, 3566 Kansas Road and 3917 Sheldrake Avenue, spoke in opposition to Rezoning #21020.

John Faichney, MD, 3917 Sheldrake Avenue, spoke in opposition to Rezoning #21020.

Peter Lupa, 3575 Kansas Road, spoke in opposition to rezoning residential parcels to commercial uses.

Supervisor Styka closed public remarks at 6:51 pm.

6. TOWNSHIP MANAGER REPORT

Manager Walsh reported: all rezoning request notifications follow State law; thanked Mark Kieselbach for his 40 years of service; continuing the building operations contract negotiations with the City of Mason; with the termination of the 11-year agreement to share assessing services with the City of East Lansing, the Township is searching for a Level 4 Assessor; staff attended meeting with Indian Hills Neighborhood Association; will be meeting with Consumers Energy regarding tree clearing; staff is working on the challenging issues at Lakeview Apartments and on the Georgetown sewer payback issues that date back to 2013; Chief Plaga is working with Ingham County on a speed limit issue on Mt. Hope Road; HOMTV interns will be returning to the Township Building on May 24; reviewed the agenda items for the June 1 Township Board meeting; received the payroll Public Health Public Safety Reimbursement payment from the federal government program for \$915,000; congratulated Supervisor Styka and his wife Georgia on their 50th year anniversary; introduced the new Community Planning and Development Director Tim Schmitt; invited everyone to the celebration for Mark Kieselbach on Tuesday, May 25 in the Central Park Pavilion

7. BOARD MEMBER REPORTS AND ANNOUNCEMENTS

Clerk Guthrie:

- Announced the Glendale Cemetery Memorial Day Ceremony on Monday, May 31 at 11 am

Trustee Opsommer:

- Land Preservation Advisory Board received a presentation on the proposed updates to the Pathway Master Plan from Deputy Manager Perry and the LPAB offered input on the Plan
- Transportation Commission will be meeting Thursday and will also be discussing the Pathway Master Plan

8. APPROVAL OF AGENDA

Supervisor Styka recommended moving Action Item #12C Community Survey Draft to Discussion Item #13E

Trustee Opsommer moved to approve the agenda with the recommendation by Supervisor Styka to move item #12C to item #13E. Seconded by Trustee Jackson

ROLL CALL VOTE: YEAS: Trustees Sundland, Opsommer, Wisinski, Clerk Guthrie, Supervisor Styka, Trustee Jackson

NAYS: None

Motion carried: 6-0

9. CONSENT AGENDA

Supervisor Styka reviewed the consent agenda.

Trustee Opsommer moved to approve the Consent Agenda as presented. Seconded by Trustee Wisinski

ROLL CALL VOTE: YEAS: Trustees Opsommer, Jackson, Clerk Guthrie, Supervisor Styka, Trustees Wisinski, Sundland

NAYS: None

Motion carried: 6-0

A. Communications

Trustee Opsommer moved that the communications not already assigned for disposition be referred to the Township Manager or Supervisor for follow-up. Seconded by Trustee Wisinski

ROLL CALL VOTE: YEAS: Trustees Opsommer, Jackson, Clerk Guthrie, Supervisor Styka, Trustees Wisinski, Sundland

NAYS: None

Motion carried: 6-0

B. Approval of Minutes – April 20, 2021 Virtual Regular Meeting

Trustee Opsommer moved to approve and ratify the minutes of the April 20, 2021 Virtual Regular Meeting, as submitted. Seconded by Trustee Wisinski

ROLL CALL VOTE: YEAS: Trustees Opsommer, Jackson, Clerk Guthrie, Supervisor Styka,
Trustees Wisinski, Sundland

NAYS: None

Motion carried: 6-0

C. Bills

Trustee Opsommer moved to approve that the Township Board approve the Manager’s Bills as follows: Seconded by Trustee Wisinski

Common Cash		\$	177,249.68
Public Works		\$	32,954.09
Trust & Agency		\$	<u>121.36</u>
	Total Checks	\$	210,325.13
Credit Card Transactions		\$	10,878.57
04.15.2021 – 04.29.2021			
	Total Purchases	\$	<u>221,203.70</u>
ACH Payments		\$	<u>877,807.85</u>

ROLL CALL VOTE: YEAS: Trustees Opsommer, Jackson, Clerk Guthrie, Supervisor Styka,
Trustees Wisinski, Sundland

NAYS: None

Motion carried: 6-0

D. DNR Acquisition Grant for Property on Okemos Road

Trustee Opsommer moved to request that the Township Board enter into a Project Agreement with the Michigan Department of Natural Resources for the purpose of acquiring a 1.85-acre parcel (Parcel #33-02-02-1-200-011) located at 5280 Okemos Road, Haslett, in the amount of \$170,000 with 75% of the costs (\$127,500) funded by the MNRTF Grant and committing \$42,500 or 25% of costs from the Township’s Park Millage Fund. This site, when acquired, will host a dedicated entrance to Nancy Moore Park and serve as a trailhead area for users of the Pedestrian/Bicycle Pathway System. Seconded by Trustee Wisinski

ROLL CALL VOTE: YEAS: Trustees Opsommer, Jackson, Clerk Guthrie, Supervisor Styka,
Trustees Wisinski, Sundland

NAYS: None

Motion carried: 6-0

10. QUESTIONS FOR THE ATTORNEY – NONE

11. HEARINGS

A. **Powell Road Public Road Improvement SAD #43**

Deputy Manager Perry outlined the 63 feet of the proposed improvements to grade, gravel and pave Powell Road and to have the owner of Silverstone Subdivision construct the improvements and to defray the cost by special assessment and to partially reimburse the owner of the Silverstone Subdivision

The public hearing was opened at 7:06 pm.

Kathy spoke on behalf of Helen Hong, 4714 Powell Road, spoke in opposition to the amount of her special assessment.

The public hearing was closed at 7:10 pm

12. ACTION ITEMS

A. **Powell Road Public Road Improvement SAD #43 – Resolution #5**

Deputy Manager Perry summarized the road costs, special assessment calculations, payment period of the special assessment, and the Ingham County Road Department will maintain future road maintenance because it will be a public road.

Trustee Jackson moved to approve the Powell Road Public Road Improvements Special Assessment District No. 43 – Resolution 5, which approves the special assessment roll; designates the project as “Powell Road Improvements Special Assessment District No. 43, the assessment roll as the “Powell Road Public Road Improvements Special Assessment District No. 43 Special Assessment Roll”, and the district as the “Powell Road Public Road Improvements Special Assessment District No. 43”; adopts the amount of \$504,269.71 as the final amount for the assessment roll; and the amount of \$223,253.46 to be collected and reimbursed to the owner of the Silverstone Subdivision; and orders and directs the assessed parcels of the assessment roll to be paid and collected. Seconded by Trustee Wisinski

ROLL CALL VOTE: YEAS: Trustees Sundland, Opsommer, Wisinski, Jackson, Supervisor Styka,
Clerk Guthrie

NAYS: None

Motion carried: 6-0

B. Special Use Permit #18091 (Newton Pointe, LLC) request for an extension of the special use permit for the square footage of buildings at Newton Place, 6276 Newton Road

Trustee Opsommer moved to adopt the resolution to grant a one year (12 months) extension of Special Use Permit #18091 for Newton Place from April 9, 2021 to April 9, 2022. Seconded by Trustee Jackson

ROLL CALL VOTE: YEAS: Supervisor Styka, Clerk Guthrie, Trustees Jackson, Opsommer, Sundland, Wisinski

NAYS: None

Motion carried: 6-0

C. Community Survey Draft

This item was moved to Discussion Item #13C

D. Preliminary Plat #03012 Sierra Ridge Estates Extension

Trustee Opsommer moved to adopt the resolution extending preliminary plat approval for the remaining 27 lots in Sierra Ridge to July 1, 2023. Seconded by Trustee Wisinski

ROLL CALL VOTE: YEAS: Trustees Jackson, Opsommer, Clerk Guthrie, Supervisor Styka, Trustees Sundland, Wisinski

NAYS: None

Motion carried: 6-0

E. 2020 Downtown Development Authority Annual Report

Trustee Jackson moved to approve the 2020 Annual Report and to submit to the State of Michigan, post on the Township Website and make available for the members of the public. Seconded by Trustee Opsommer

ROLL CALL VOTE: YEAS: Trustees Jackson, Opsommer, Sundland, Wisinski, Supervisor Styka, Clerk Guthrie

NAYS: None

Motion carried: 6-0

The Board took a ten minutes break

13. BOARD DISCUSSION ITEMS

A. Rezoning #21020 (Martin Investment Properties, Inc.) rezone approximately six acres on the north side of Jolly Road and east of Kansas Road from I (Industrial) and RA (Single Family-Medium Density) to PO (Professional Office)

Director Kieselbach outlined the proposed rezoning request and surrounding existing property uses

Thomas Bres, Chief Administrative Officer for Sparrow Hospital, Dr. Karen Kent VanGorder, Chief Medical Officer, Stacy Bakkegard, Director of Facilities and John Shaski, Government Relations Officer, gave an overview of the project, the feedback received, the changes made to the facility from the feedback, and conditions being offered since the public hearing and hearing the Planning Commission’s recommendation for denial.

Manager Walsh stated he will provide the requested property assessment information.

Board consensus to place this item on the next Board meeting agenda.

B. Okemos Drain

Deputy Manager Perry outlined the Grand River Avenue drain and road improvement projects and the partnership with the Ingham County Drain Commissioners Office, the Michigan Department of Transportation and Ingham County Road Department.

Deputy Drain Commissioner Carla Clos, Consulting Engineer Alan Boyer, and Drain Commissioner Douglas Kelly offered an update on the drain study of the Grettenberger, Okemos and Meijer Drains and their recommendation to combine the three drains into a single “Okemos Consolidated Drain”.

Board consensus to place this item on the next Board meeting agenda.

C. SmartZone Local Development Finance Authority

Director Clark stated LEAP and members of the Lansing SmartZone approached the Township in 2020 as a potential community to increase the financial strength of the SmartZone. City of Lansing and City of East Lansing created the “SmartZone” district as the LDFA, a collaborative tax authority to create incentive to development industrial zoned parcels. The purpose of the authority is to connect university and community with innovation, commercialization, good high tech jobs and entrepreneurship. The LDPA focuses on assisting with startup and a recent success is High Caliber Karting. Staff is recommending adding properties along Dawn Avenue and Towner Avenues to the LDFA.

Public Sector Consultant Tim Dempsey outlined the process to join the Lansing Regional SmartZone and how the tax increment-financing plan will work for the Township.

Board consensus to place this item for discussion on the next Board meeting agenda

Trustee Opsommer moved to proceed with board discussion on agenda items #13D and #13E this evening. Seconded by Trustee Wisinski.

ROLL CALL VOTE: YEAS: Supervisor Styka, Trustee Sundland, Clerk Guthrie, Trustees Opsommer, Wisinski, Jackson

NAYS: None

Motion carried: 6-0

D. Legal Counsel Contract & Continuing Legal Services

Supervisor Styka summarized the expiration of the current contract with the legal counsel and asked if the members would like to renew the contract for another three years or send out an RFP.

Board consensus to place this item on the next Board meeting agenda.

E. Community Survey

It was the consensus of the board members to send their questions and concerns to Director Clark and Deputy Manager Perry and then present a revised survey that will be presented at the June 15th board meeting.

14. COMMENTS FROM THE PUBLIC

Supervisor Styka Opened Public Remarks at 10:34 pm.

Jay Murthy, 2438 Robins Way, voiced concerns with the rezoning request.

Shereen Tabrizi, co-owner of 3566 Kansas Road, spoke in opposition

Supervisor Styka Closed Public Remarks at 7:39 pm.

15. OTHER MATTERS AND BOARD MEMBER COMMENTS -NONE

16. ADJOURNMENT

Trustee Wisinski moved to adjourn. Seconded by Trustee Jackson

VOICE/HAND VOTE: Motion carried 6-0

Supervisor Styka adjourned the meeting at 10:40 pm.

RONALD J. STYKA,
TOWNSHIP SUPERVISOR

DEBORAH GUTHRIE,
TOWNSHIP CLERK

CHARTER TOWNSHIP OF MERIDIAN
TOWNSHIP BOARD VIRTUAL REGULAR MEETING **-DRAFT-**
5151 Marsh Road, Okemos MI 48864-1198
517.349.1232, Virtual Meeting via Zoom
TUESDAY, JUNE 1, 2021; 6:00 pm.

PRESENT: Supervisor Styka, Clerk Guthrie, Treasurer Deschaine, Trustees Jackson, Opsommer, Sundland, Wisinski

ABSENT: None

STAFF: Township Manager Walsh, Director of Public Works Perry, Fire Chief Hamel, Community Planning and Development Director Schmitt, Information Technology Director Gebes, Finance Director Mattison, Human Resources Director Tithof

1. CALL MEETING TO ORDER

Supervisor Styka called the meeting to order at 6:00 pm.

2. PLEDGE OF ALLEGIANCE/INTRODUCTIONS

Supervisor Styka led the Pledge of Allegiance

3. ROLL CALL

Clerk Guthrie called the roll of the Board.

The Township Board took a moment of silence in remembrance of the 100th year anniversary of the Tulsa Oklahoma Race Massacre

4. PRESENTATIONS

A. Introduction of New Police Officers – Lt Bart Crane introduced new police officers Bryant Martin, Taya Catherwood, Meghan Cole and Maggie Cole

B. Introduction of Assessor Candidate – Supervisor Styka introduced Assessor Candidate Ashley Winstead

C. 2020 Audit Presentation – Finance Director Mattison introduced Ali N. Barnes, CPA, Yeo & Yeo, who presented the findings of the virtual 2020 Township Audit

5. CITIZENS ADDRESS AGENDA ITEMS AND NON-AGENDA ITEMS

Supervisor Styka opened public remarks at 6:45 pm

Jody Bond, 1502 Jolly Road, spoke in support of the rezoning request for the Sparrow facility

Dr. Sherren Tabrizi, co-owner of 3566 Kansas Road and owner of 3917 Sheldrake Avenue, spoke in opposition to the Sparrow rezoning request

John Faichney, 3566 Kansas, spoke in opposition to the Sparrow rezoning request

Celene Tabrizi, 3566 Kansas, spoke in opposition to the Sparrow rezoning request

Peter Lupa, 3575 Kansas, spoke in support the Sparrow rezoning project with conditions

Aubrey Holmes, Smith/Packett Med-Com LLC, 34 Broadstreet, Charlestown, South Carolina, representing Okemos IL-AL Investors LLC, outlined the application to rezone two parcels from C-2 (Commercial) to RA One Family, Medium Density Residential)

Brent Felton, 2470 Robins Way, spoke in opposition to the Sparrow rezoning request

Joell Ackerman, 3521 Indiana Road, spoke in opposition to the rezoning request

Steve Freemire, 3622 Kansas Road, spoke in opposition to the rezoning request

Sharon Morrisett, 3531 Indiana Road, spoke in opposition to the rezoning request

Alex Amiri, 3566 Kansas Road, spoke in opposition to the rezoning request

Supervisor Styka closed public remarks at 7:16 pm.

6. TOWNSHIP MANAGER REPORT

Manager Walsh reported welcomed new Community Planning and Development Director Tim Schmitt; local road program has begun in Tacoma Hills; thanked Supervisor Styka for his work with Consumers Energy on the Briarwood area project; thank you for responding to the Community Survey and it will be on the June 15 agenda for discussion; thanked Clerk Guthrie for the Memorial Day Service; the Township is at full service, open to the public and the work from home program has been discontinued; the EDC meets this Thursday; induction of four new police officers by Lt Bart Crane and 75% of them being female; Road Safety Concerns for the Skyline Neighborhood have been referred to Ingham County Road Department and Road Director Conklin is in contact with Mr. Thompson on what can and cannot be done on Skyline

7. BOARD MEMBER REPORTS AND ANNOUNCEMENTS

Treasurer Deschaine:

- Thanked staff, board, community members and friends for their support to the Deschaine family and contributions to the Meridian Cares Fund in the memory of his daughter, Marianne

Trustee Wisinski

- Environmental Commission meets on Wednesday; Green Grant for Rademoor Montessori is almost complete with the planting underway and installing water lines by the children; Tree Team volunteers and the Green Team have distributed over 300 trees in May at the Farmers Market; Green Team has also recycled 100 bikes with MSU Bike and Share a Bike Program volunteers; has been weeding and mulching at the Hidden River Garden; Green Neighbors Network is increasing in membership with over two dozen neighborhoods
- Ground Water Management Board Meeting on Wednesday and submitted a letter of support to Senate Majority Leader Shirkey and Speaker of House Wentworth to appropriate funds to support the Water Use Advisory Council and update the Michigan geologic survey

Trustee Opsommer:

- The Transportation Commission met last month and had a second over-view and discussion on the Pathway Master Plan update. With Deputy Manager Perry receiving updates from the other boards and commissions, this will be before the Township Board in the near future

Trustee Jackson

- On May 25 attended the Tri-County Regional Planning Commission Board meeting and the group is going through a federal certification process by the Federal Highway Administration and Federal Transit Administration. There is an opportunity for input on an individual's experiences on-line and could receive a gift card

Clerk Guthrie

- Thank you to the community members for attending the Memorial Service with over 100-150 attending; thanked the participants: Meridian Community Band, Flags Over Meridian Program, benediction by Pastor Dave Davis; presentation by Retired Air Force Captain Tom Cooper, Scout Troops presented the flags, Meridian Fire Department personnel and bagpiper Terry Carroll

8. APPROVAL OF AGENDA

Supervisor Styka recommended the addition of Action Item 12G Lesbian Gay, Bisexual, Transgender and Queer (LGBTQ) Pride Month Resolution

Trustee Wisinski moved to approve the revised agenda as presented. Seconded by Trustee Jackson

ROLL CALL VOTE: YEAS: Trustees Opsommer, Jackson, Treasurer Deschaine Clerk Guthrie, Supervisor Styka, Trustees Sundland, Wisinski

NAYS: None

Motion carried: 7-0

9. CONSENT AGENDA

Supervisor Styka reviewed the consent agenda.

Treasurer Deschaine moved to approve the Consent Agenda as presented. Seconded by Trustee Jackson

ROLL CALL VOTE: YEAS: Treasurer Deschaine, Supervisor Styka, Clerk Guthrie, Trustees Wisinski, Sundland, Opsommer, Jackson

NAYS: None

Motion carried: 7-0

A. Communications

Treasurer Deschaine moved that the communications not already assigned for disposition be referred to the Township Manager or Supervisor for follow-up. Seconded by Trustee Jackson

ROLL CALL VOTE: YEAS: Treasurer Deschaine, Supervisor Styka, Clerk Guthrie, Trustees Wisinski, Sundland, Opsommer, Jackson

NAYS: None

Motion carried: 7-0

B. Approval of Minutes – May 6, 2021 Virtual Regular Meeting

Treasurer Deschaine moved to approve and ratify the minutes of the May 6, 2021 Virtual Regular Meeting, as submitted. Seconded by Trustee Jackson

ROLL CALL VOTE: YEAS: Treasurer Deschaine, Supervisor Styka, Clerk Guthrie, Trustees Wisinski, Sundland, Opsommer, Jackson

NAYS: None

Motion carried: 7-0

C. Bills

Treasurer Deschaine moved to approve that the Township Board approve the Manager’s Bills as follows: Seconded by Trustee Jackson

Common Cash		\$	212,542.28
Public Works		\$	41,202.32
Trust & Agency		\$	<u>120.80</u>
	Total Checks	\$	253,865.40
Credit Card Transactions		\$	6,428.08
05.13.2021 – 05.26.2021			
	Total Purchases	\$	<u>260,293.45</u>
ACH Payments		\$	<u>518,736.98</u>

ROLL CALL VOTE: YEAS: Treasurer Deschaine, Supervisor Styka, Clerk Guthrie, Trustees Wisinski, Sundland, Opsommer, Jackson

NAYS: None

Motion carried: 7-0

10. QUESTIONS FOR THE ATTORNEY – NONE

11. HEARINGS - NONE

12. ACTION ITEMS

A. Appointment of Assessor

Trustee Jackson moved to support the Township Manager’s recommendation to appoint Ashley Winstead as Township Assessor with a starting date to be determined by the Administration. Seconded by Trustee Opsommer

ROLL CALL VOTE: YEAS: Trustee Jackson, Treasurer Deschaine, Trustee Opsommer, Clerk Guthrie, Trustees Sundland, Wisinski, Supervisor Styka

NAYS: None

Motion carried: 7-0

B. Rezoning #21020 (Martin Investment Properties, Inc.) rezone approximately six acres located on the north side of Jolly Road and east of Kansas Road from I (Industrial) and RA (Single Family-Medium Density) to PO (Professional Office)

Trustee Opsommer moved to adopt the resolution approving for introduction Rezoning #21020 (Martin Investment Properties, Inc.) to rezone approximately six acres of land located on the north side of Jolly Road and east of Kansas Road, from I (Industrial) and RA (Single Family-Medium Density) to PO (Professional Office) with conditions. Seconded by Clerk Guthrie

ROLL CALL VOTE: YEAS: Trustee Jackson, Treasurer Deschaine, Clerk Guthrie, Supervisor Styka, Trustee Wisinski, Sundland, Opsommer

NAYS: None

Motion carried: 7-0

C. Okemos Drain

Trustee Jackson moved to approve the Resolution Requesting the Relinquishment of the Okemos Drain to Township, Approve the Operation and Maintenance of Township Drain Agreement, Approve the Resolution to File a Drain Petition Pursuant to Chapter 8 and 19 of the Michigan Drain Code of 1956, as Amended and Approve and Submit the Petition For The Consolidation Of Drainage Districts and For Cleaning Out, Relocating, Widening, Deepening, Straightening, Tiling, Extending, Providing Structures, Adding Lands Not Within The Existing Drainage Districts, Adding Branches And Relief Drains, Relocating Along A Highway, Adding Structures And Mechanical Devices That Will Properly Purify or Improve The Flow, Adding Pumping Equipment Necessary to Assist Or Relieve The Flow And For The Consolidation Of Drains Pursuant To Chapters 8 And 19 Of The Michigan Drain Code Of 1956, as Amended and presented.. Seconded by Treasurer Deschaine

Discussion:

- Deputy Manager Perry summarized the consolidated drain proposal

ROLL CALL VOTE: YEAS: Trustees Opsommer, Sundland, Wisinski, Jackson, Supervisor Styka, Clerk Guthrie, Treasurer Deschaine

NAYS: None

Motion carried: 7-0

D. National Gun Violence

Treasurer Deschaine moved to approve the National Gun Violence Awareness Day Resolution. Seconded by Clerk Guthrie

ROLL CALL VOTE: YEAS: Trustee Jackson, Treasurer Deschaine, Clerk Guthrie, Supervisor Styka, Trustees Wisinski, Sundland, Opsommer

NAYS: None

Motion carried: 7-0

E. Acceptance of 2020 Township Audit Findings

Trustee Jackson moved to approve the 2020 Audited Financial Statements and the Single Audit as presented by Yeo & Yeo. Seconded by Trustee Wisinski

ROLL CALL VOTE: YEAS: Trustee Opsommer, Jackson, Treasurer Deschaine, Trustees Sundland, Wisinski, Supervisor Styka, Clerk Guthrie

NAYS: None

Motion carried: 6-0

F. Legal Counsel Contract & Continuing Legal Services

Trustee Opsommer moved to approve the Renewal Engagement as Township Attorneys with Fahey, Schultz, Burzych and Rhodes for a term of three-years as presented, and authorize the Township Supervisor to sign the agreement on behalf of the Township. Seconded by Treasurer Deschaine

ROLL CALL VOTE: YEAS: Treasurer Deschaine, Clerk Guthrie, Supervisor Styka, Trustees Wisinski, Sundland, Opsommer, Jackson

NAYS: None

Motion carried: 7-0

G. Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) Pride Month Resolution

Clerk Guthrie moved to approve the resolution Celebrating Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) Pride Month. Seconded by Trustee Wisinski

ROLL CALL VOTE: YEAS: Trustees Jackson, Opsommer, Sundland, Wisinski, Treasurer
Deschaine Clerk Guthrie, Supervisor Styka

NAYS: None

Motion carried: 7-0

13. BOARD DISCUSSION ITEMS

A. Rezoning #21040 (Okemos IL-AL Investors, LLC) rezone approximately 9.07 acres located at 1510 and 1560 Grand River Avenue from C-2 (Commercial) to RA (Single Family-Medium Density)

Community Planning and Development Director Schmitt outlined the proposed rezoning request

Aubrey Holmes Senior Development Manager; Lynn Bishop Senior Vice President Development and Construction; and Michele Sons Development Manager, Smith/Packett Med-Com LLC, 34 Broadstreet, Charlestown, South Carolina, representing Okemos IL-AL Investors LLC, outlined their aging in place senior facility. They plan to customize the building with many amenities to blend into the surrounding area such as walking paths, three gardens, three dining halls, etc. There will be approximately 90-100 independent living units, 50-70 assisted living units and 35-40 memory care units. They plan to have everything approved for the project before closing on the property and financing is in place when they are ready to proceed with the purchase and construction

Board members expressed the following concerns with the proposed plan: density, preserving green space and the wetlands, reforesting the area, creating a rural residential atmosphere, potentially seeking an alternative location with at least 10 acres to develop on

Board consensus to place this item on the next Board meeting agenda

14. COMMENTS FROM THE PUBLIC

Supervisor Styka Opened Public Remarks at 9:07 pm.

None

Supervisor Styka Closed Public Remarks at 9:08 pm.

15. OTHER MATTERS AND BOARD MEMBER COMMENTS

Supervisor Styka stated there is not a meeting schedule during the week of July 4th and the July meetings are the 13th and 20th. It was suggested to move July 13th meeting to June 29th. Trustee Opsommer stated he would not be available.

16. ADJOURNMENT

Treasurer Deschaine moved to adjourn. Seconded by Trustee Wisinski

VOICE/HAND VOTE: Motion carried 7-0

Supervisor Styka adjourned the meeting at 9:10 pm.

RONALD J. STYKA,
TOWNSHIP SUPERVISOR

DEBORAH GUTHRIE,
TOWNSHIP CLERK



To: Board Members
From: Miriam Mattison, Finance Director
Date: June 10, 2021
Re: Board Bills

Charter Township of Meridian
Board Meeting
6/10/2021

MOVED THAT THE TOWNSHIP BOARD APPROVE THE MANAGER'S
BILLS AS FOLLOWS:

COMMON CASH	\$	347,814.80
PUBLIC WORKS	\$	609,424.56
TRUST & AGENCY	\$	-
TOTAL CHECKS:	\$	957,239.36
CREDIT CARD TRANSACTIONS 05/27/2021 to 06/09/2021	\$	12,571.26
TOTAL PURCHASES:	\$	<u>969,810.62</u>
ACH PAYMENTS	\$	<u>792,245.13</u>

06/10/2021 03:15 PM
 User: GRAHAM
 DB: Meridian

INVOICE APPROVAL BY INVOICE REPORT FOR CHARTER TOWNSHIP OF MERIDIAN
 EXP CHECK RUN DATES 06/15/2021 - 06/15/2021
 BOTH JOURNALIZED AND UNJOURNALIZED OPEN AND PAID
 BANK CODE: GF

Vendor Name	Description	Amount	Check #
1. ADVANCED REDEVELOPMENT SOLUTIONS	1ST REIMB - BRA REDEVELPMENT FUND - VILLAGE OF OKE	855.00	
2. AIRGAS GREAT LAKES	MEDICAL OXYGEN ORDER #1100305446	123.41	
	MEDICAL OXYGEN	568.01	
	MEDICAL OXYGEN	83.03	
	TOTAL	774.45	
3. ALLGRAPHICS CORP	MERIDIAN CONSERVATION CORP LOGO WEAR FOR VOLUNTEER	756.64	
	WILLIAMSTON BASEBALL/SOFTBALL/T-BALL SHIRTS	518.40	
	TOTAL	1,275.04	
4. AMERICAN RENTALS	05/21/21 TO 06/21/21 PORTAPOTTY RENTAL - TRANSFER	60.00	
5. APPLGATE HOME COMFORT	RFND CANCELLED PERMIT FOR A/C WORK \$15	15.00	
6. ASAP PRINTING	PRINTING TRAFFIC CRASH & TRAFFIC STOPS BROCHURES	466.17	
7. ASTI	PHASE II ENVIRONMENTAL SITE ASSESSMENT	2,900.00	
8. AT & T	LEGACY TELEPHONE NUMBERS - 517.349.1200	33.93	
9. AT & T	SWITCHED ETHERNET DATA SERVICE - ACCT #831-000-821	1,067.42	
10. AT & T	ACCT #171-802-7578 001	(32.24)	
	DS-1 TO FIRE#92 - SERVICES FROM MAY 2 TO JUNE 1 20	543.33	
	TOTAL	511.09	
11. AT & T MOBILITY	DISPATCH NON-EMERGENCY - SERVICES FROM MAY 5 - JUN	76.50	
12. AUTO VALUE OF EAST LANSING	FLEET REPAIR PARTS 05/21/2021 - LIGHT	30.18	
	FLEET REPAIR PARTS 04/28/2021 - SAFETY CHUCK/OE ST	15.08	
	FLEET REPAIR PARTS 04/28/2021 - AIR FILTER	20.78	
	FLEET REPAIR PARTS 05/04/2021 - ENGINE MOUNT	60.39	
	FLEET REPAIR PARTS 05/05/2021 - ENGINE MOUNT & FRE	72.39	
	FLEET REPAIR PARTS 05/042021 - THROTTLE CONTROL	17.19	
	FLEET REPAIR PARTS 05/05/2021 - BLK LIGHTING XL	81.38	
	FLEET REPAIR PARTS 05/07/2021 - DIESEL FLUID/LEAK	46.48	
	FLEET REPAIR PARTS 05/11/2021 - AIR FILTER	8.66	
	FLEET REPAIR PARTS 05/17/2021 - EVAPO RUST	10.19	
	FLEET REPAIR PARTS 05/18/2021 - 1 7/8 COMBO WRENCH	29.49	
	FLEET REPAIR PARTS 05/18/2021 - IGNITION COIL	113.78	
	FLEET REPAIR PARTS 05/19/2021 - 10MM HEX BIT	5.19	
	FLEET REPAIR PARTS 05/19/2021 - 21MM LG GEAR WRENC	45.99	
	FLEET REPAIR PARTS 05/21/2021 - AIR FRESHENERS VAN	16.36	
	FLEET REPAIR PARTS 05/24/2021 - T50 TORX BIT SOCKE	17.69	
	FLEET REPAIR PARTS 05/25/2021 - RETURNED T50 TORX	(17.69)	
	FLEET REPAIR PARTS 05/25/2021 - O-RINGS/270 PC O-R	28.17	
	TOTAL	601.70	
13. BULL ENTERPRISES	JANITORIAL SERVICES FOR TOWNSHIP BUILDINGS - MAY 2	8,477.00	
	WINDOW CLEANING	1,600.00	
	TOTAL	10,077.00	
14. CDW	CDW WINDOWS ENTERPRISE SOFTWARE ASSURANCE 3 YEAR R	9,144.00	
15. CENTRALSQUARE TECHNOLOGIES LLC	CRYWOLF ANNUAL RENEWAL 08/01/2021 TO 07/31/2022	2,923.00	

Vendor Name	Description	Amount	Check #
16. CINTAS CORPORATION #725	MECHANICS UNIFORMS 05/05/2021 - J HANSEN/T FRANK	48.35	
	MECHANICS UNIFORMS 5/11/2021 - J HANSEN/T FRANK	48.35	
	MECHANICS UNIFORMS 05/18/2021 - J HANSEN/T FRANK	48.35	
	MECHANICS UNIFORMS 05/25/2021 - J HANSEN/T FRANK	48.35	
	TOTAL	193.40	
17. CITY OF EAST LANSING	SHARED ASSESSOR SERVICES - MAY 2021	6,247.80	
18. COMCAST	FD 'FREE' DROP - SERVICES MAY 20 2021 TO JUNE 19 2	8.01	
19. CONNIE SUNG	REFUND SPORTIES FOR SHORTIES	35.00	
20. CORBIN DESIGN	TOWNSHIP ENTRYWAY, WAYFINDING AND LOCATION SIGN DE	810.00	
21. DBI	OFFICE SUPPLIES ORDER ACCT #280044	36.32	
	OFFICE SUPPLIES ACCT #280044	131.60	
	TOTAL	167.92	
22. DESIGNS BY NATURE	PLANTS FOR HNC NATIVE PLANT SALE 5-1-2021	3,467.00	
	PLANTS FOR HNC NATIVE PLANT SALE 5-1-2021	111.00	
	TOTAL	3,578.00	
23. DEWOLF AND ASSOCIATES	TROY FTO PROGRAM POLICE OFFICER TRAINING	1,590.00	
24. DMC HOME IMPROVEMENT	CANCELLED PERMIT 50% RFND- REQUEST FOR \$52.50	52.50	
25. FAHEY SCHULTZ BURZYCH RHODES PLC	PROFESSIONAL SERVICES THRU MAY 31 2021	12,500.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	2,859.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	3,258.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	5,674.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	25.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	38.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	22.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	1,067.50	
	PROFESSIONAL SERVICES THRU MAY 31 2021	676.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	44.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	66.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	1,100.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	132.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	541.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	66.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	906.00	
	PROFESSIONAL SERVICES THRU MAY 31 2021	579.50	
	PROFESSIONAL SERVICES THRU MAY 31 2021	500.22	
	PROFESSIONAL SERVICES THRU MAY 31 2021	3,405.17	
	PROFESSIONAL SERVICES THRU MAY 31 2021	254.94	
	PROFESSIONAL SERVICES THRU MAY 31 2021	475.21	
	PROFESSIONAL SERVICES THRU MAY 31 2021	250.11	
	PROFESSIONAL SERVICES THRU MAY 31 2021	351.86	
	PROFESSIONAL SERVICES THRU MAY 31 2021	12.49	
	TOTAL	34,804.00	
26. FD HAYES ELECTRIC	ELECTRICAL REPAIRS ON MAY 13 2021	254.50	
27. FINLEY CARTER III	HONORARIUM FOR SERGEANT'S PROMOTIONAL PROCESS	200.00	
28. FIRST AMERICAN ADMINISTRATORS	MAY 2021 EYEMED VISION EXPENSES	900.39	

06/10/2021 03:15 PM
 User: GRAHAM
 DB: Meridian

INVOICE APPROVAL BY INVOICE REPORT FOR CHARTER TOWNSHIP OF MERIDIAN
 EXP CHECK RUN DATES 06/15/2021 - 06/15/2021
 BOTH JOURNALIZED AND UNJOURNALIZED OPEN AND PAID
 BANK CODE: GF

Vendor Name	Description	Amount	Check #
29. FISHBECK, THOMPSON, CARR & HUBER	WUP 15-01 FOR PROFESSIONAL SERVICES RENDERED THRU	868.90	
	WDV 21-03 PROFESSIONAL SERVICES RENDERED THRU 5/14	2,024.80	
	WUP HANNAH CROSS - PROFESSIONAL SERVICES RENDERED	984.90	
	TOTAL	3,878.60	
30. FORESIGHT GROUP	#10 WINDOW ENVELOPES 5,000	255.33	
	TREASURER #9 RETURN ENVELOPES	178.49	
	#10 WINDOW ENVELOPES	314.79	
	WATER BILL ENVELOPES	462.02	
	WATER BILLS & POSTAGE MAY 28 2021	1,586.23	
	TOTAL	2,796.86	
31. GARY & CAROL ORYSZCZAK	OVRPMT OF RENTAL INSPECTION	5.00	
32. GORDON CONSTRUCTION SERVICES	CONSTRUCTION OF MARKETPLACE ON THE GREEN PROJECT	6,047.29	
33. GRANGER	RUBBISH & RECYCLING DISPOSAL SERVICES JUNE/JULY/AU	164.52	
	RUBBISH & RECYCLING DISPOSAL SERVICES MAY/JUNE 202	53.33	
	RUBBISH & RECYCLING DISPOSAL SERVICES MAY 2021	17.50	
	RUBBISH & RECYCLING DISPOSAL SERVICES ACCT #110610	114.33	
	RUBBISH & RECYCLING DISPOSAL SERVICES ACCT #110620	256.98	
	RUBBISH & RECYCLING DISPOSAL SERVICES ACCT #110630	74.26	
	RUBBISH & RECYCLING DISPOSAL SERVICES ACCT #250975	87.00	
	TOTAL	767.92	
34. HOME MADE PORK RINDS	FARM MARKET VENDOR	65.00	
35. IAN MANDERNACK	REIMB FOR OUT OF COUNTY LUNCHES	31.48	
36. INGHAM COUNTY TREASURER	VARIOUS PRIOR YEAR TAX ROLLS CHANGES	2,220.84	
37. JACK DOHENY COMPANIES INC	WATER DEPT - UNIT #30 REPAIRS	550.00	
38. JEFFORY BROUGHTON	RADIO MAINTENANCE POLICE	331.00	
	RADIO MAINTENANCE/PARTS/EQUIPMENT	224.00	
	TOTAL	555.00	
39. JEROME J GALLAGHER PH.D.	EVALUATIONS FOR POLICE OFFICER NEW HIRES	400.00	
40. KMI ROAD MAINTENANCE	2021 CONCRETE REPAIR PROGRAM	26,475.08	
41. LAKEVIEW APARTMENTS	EMERGENCY RENT PAYMENT - M PETERS	795.00	105180
42. LANSING SANITARY SUPPLY INC	CUSTODIAL SUPPLIES ORDER #1123124	444.49	
	CUSTODIAL SUPPLIES POLY LINERS/PAPER TOWELS	316.06	
	TOTAL	760.55	
43. LANSING UNIFORM COMPANY	POLICE UNIFORM PURCHASES - ORDER #	176.35	
	POLICE UNIFORM PURCHASES - ORDER #47941	1,045.70	
	POLICE UNIFORM PURCHASES - ORDER #NEGOTIATOR	237.80	
	POLICE UNIFORM PURCHASES - ORDER #47941	317.70	
	POLICE UNIFORM PURCHASES - ORDER #47941	38.00	
	POLICE UNIFORM PURCHASES - ORDER #47941	1,018.35	
	POLICE UNIFORM PURCHASES - ORDER #47941	17.50	
	POLICE UNIFORM PURCHASES - ORDER #47941	199.95	
	POLICE UNIFORM PURCHASES - ORDER #47941	379.70	
	TOTAL	3,431.05	
44. LEAK PETROLEUM EQUIPMENT INC	COMPLETE FUEL MONITORING SYSTEM FUEL ISLAND	340.00	

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Vendor Name	Description	Amount	Check #
45. LEROY HARVEY	REIMB FOR PARK LAKE ROUNDABOUT MULCH	39.60	
46. LOGICALIS	MAIL ENCRYPTION POLICY SERVICES	515.63	
	IT SERVICES HELP DESK SET UP CHARGES	14,499.50	
	IT SERVICES HELP DESK - JUNE 2021 RECURRING CHARGE	3,115.00	
	TOTAL	18,130.13	
47. LUKE LANDSCAPE COMPANY	CODE ENFORCEMENT LAWN MOWING - BAYONEE AVE	60.00	
	CODE ENFORCEMENT LAWN MOWING ON 05/20/2021	70.00	
	CODE ENFORCEMENT LAWN MOWING ON 05/20/2021	70.00	
	CODE ENFORCEMENT LAWN MOWING - BIBER/W.GR RIVER/GR	275.00	
	CODE ENFORCEMENT LAWN MOWING ON MAY 14, 2021	80.00	
	TOTAL	555.00	
48. MACOMB COMMUNITY COLLEGE	BASIC SWAT SCHOOL - OFFICER TRAINING	1,300.00	
49. MARCUS BALDORI	RFND OF PERFORMANCE GUARANTEE - MT. HOPE ROAD	500.00	
50. MARK'S LOCK SHOP, INC.	PSB - BATHROOM DOOR LOCK	800.00	
51. MAY BUILDERS	SIGN PERMIT APPLICATION REFUND, 100%, NO PERMIT RE	125.00	
52. MCKESSON MEDICAL-SURGICAL	GOC SOL		
	AMBULANCE SUPPLIES/EQUIP - ORDER #8824867	626.85	
	AMBULANCE SUPPLIES/EQUIP - ORDER #8824867	692.77	
	AMBULANCE SUPPLIES/EQUIP ORDER #12019159	584.31	
	AMBULANCE SUPPLIES/EQUIP ORDER #12019159	27.90	
	AMBULANCE SUPPLIES/EQUIP ORDER #12019159	28.85	
	TOTAL	1,960.68	
53. MEDICAL MANAGEMENT SYSTEMS OF	MARCH/APRIL 2021 COLLECTION FEE FOR AMBULANCE BILL	9,793.33	
54. MEI TOTAL ELEVATOR SERVICES	CUSTOMER ID #MI1767 - JUNE-AUG 2021 QTRLY ELEVATOR	463.84	
	PSB ELEVATOR REPAIR - MI27847 - SERVICE CALL #1412	1,038.00	
	PSB ELEVATOR SERVICE MI27847 - SERVICE CALL #14120	286.00	
	TOTAL	1,787.84	
55. MELISSA USIAK	REIMB INVISIBLE FENCE REPAIR - 2021 ROADWAY IMPROV	95.00	
56. MERIDIAN TOWNSHIP	TRANSFER FOR FLEX CHECKING 06/04/2021 PAYROLL	370.23	
57. MERIDIAN TOWNSHIP RETAINAGE	2021 LOCAL ROAD PROG - REHAB & RESURFACING	2,724.88	
	2021 CONCRETE REPAIR PROGRAM	2,941.67	
	TOTAL	5,666.55	
58. MERRILL FORD	FORD FLEET PARTS UNIT #653	93.90	
	FORD FLEET REPAIRS AND PARTS MAY 19 2021 UNIT #653	1,629.88	
	FORD FLEET REPAIRS & PARTS MAY 19, 2021 UNIT #130	1,055.55	
	FORD FLEET REPAIRS & PARTS MAY 21, 2021 UNIT #28	144.71	
	FORD FLEET PARTS BS SEAL	62.10	
	FORD FLEET PARTS UNIT #653	14.72	
	FORD FLEET PARTS MOULDING UNIT #120	110.19	
	FORD FLEET RETURNED PART BS SEAL	(62.10)	
	TOTAL	3,048.95	
59. MICHIGAN MUNICIPAL LEAGUE	POLICY #5000880-20 POLICY PREMIUM - WORKERS COMP	29,413.67	
60. MICHIGAN PAVING	2021 LOCAL ROAD PROG - REHAB & RESURFACING	51,772.62	
61. MICHIGAN TOWNSHIP ASSOCIATION	MTA ANNUAL DUES - 7/1/2021-6/30/2022	7,253.26	

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62. MID-MICHIGAN CODE OFFICIALS ASSOC			
	04/01/2021 TO 03/31/2022 MEMBERSHIP DUES FOR J HEC	60.00	
	04/01/2021 TO 03/31/2022 MEMBERSHIP DUES FOR R RAU	60.00	
	TOTAL	120.00	
63. MUZZALL GRAPHICS	PROPERTY TAX BILLS	1,972.52	
64. NAPA			
	FLEET REPAIR PARTS UNIT #653	113.69	
	FLEET REPAIR PARTS - SHOP SUPPLY	183.98	
	FLEET REPAIR PARTS - TOOLS	27.66	
	FLEET REPAIR PARTS CREDIT - RETURNED AIR FILTERS	(14.58)	
	FLEET REPAIR PARTS - SHOP SUPPLY	220.38	
	TOTAL	531.13	
65. OKEMOS MARATHON			
	VEHICLE TOWING - 02/27/2021	385.00	
	VEHICLE TOWING - 04/17/2021	360.00	
	VEHICLE TOWING - 04/22/2021	110.00	
	VEHICLE TOWING - 04/23/2021	60.00	
	VEHICLE TOWING - 04/17/2021	350.00	
	TOTAL	1,265.00	
66. PEOPLEFACTS LLC	MAY 2021 EMPLOYEE PRE-EMPLOYMENT CREDIT CHECKS	16.67	
67. PIONEER MFG.CO/PIONEER ATHLETICS			
	SMALL SOCCER NETS AND BASE ANCHORS FOR PARKS	136.98	
	LARGE SOCCER NETS FOR PARKS	660.00	
	TOTAL	796.98	
68. POLYNESIAN POOL & SPA	OVRPMT FOR PERMIT \$15 REFUND	15.00	
69. PRO-TECH SECURITY SALES			
	2 BALLISTIC VESTS (DUTY)	1,749.00	
	4 BALLISTIC VESTS (DUTY)	3,493.00	
	HILITE VEST CARRIER	110.00	
	TOTAL	5,352.00	
70. QUALITY TIRE INC	STOCK 4 EA NOKIAN TIRES MAY 2021	613.40	
71. RICHARD VONTERSCH LANDSCAPING	MAY 2021 MULCH APPLICATION, SPRINKLERS, WEEDING & P	210.00	
72. ROWERDINK AUTOMOTIVE PARTS			
	FLEET REPAIR PARTS ORDER #707110	218.34	
	FLEET REPAIR PARTS 2021 - ORDER #418770	15.06	
	FLEET REPAIR PARTS 2021 - ORDER #1484690	30.12	
	FLEET REPAIR PARTS 2021 - ORDER #587570	97.50	
	FLEET REPAIR PARTS 2021 - ORDER #588070	37.00	
	FLEET REPAIR PARTS 2021 - ORDER #266190	73.78	
	FLEET REPAIR PARTS 2021 - ORDER #175040	15.06	
	FLEET REPAIR PARTS 2021 - ORDER #595640	122.44	
	FLEET REPAIR PARTS 2021 - ORDER #595650	18.32	
	FLEET REPAIR PARTS 2021 - ORDER #747850	129.34	
	FLEET REPAIR PARTS 2021 - ORDER #175041	49.08	
	FLEET REPAIR PARTS 2021 - ORDER #500000	85.92	
	FLEET REPAIR PARTS 2021 - ORER #501490	68.58	
	FLEET REPAIR PARTS 2021 - ORDER #506540	36.56	
	FLEET REPAIR PARTS 2021 - ORDER #507890	114.50	
	FLEET REPAIR PARTS 2021 - ORDER #513910	199.56	
	TOTAL	1,311.16	
73. SAFETY SYSTEMS INC	CENTRAL FIRE - PULL STATION FAILURE - SERVICE CALL	123.00	

Vendor Name	Description	Amount	Check #
74. SPARROW OCCUPATIONAL	MAY 3 TO MAY 7 2021 PRE-EMPLOYMENT & FITNESS FOR D	1,253.50	
	MAY 10-14 2021 PRE-EMPLOYMENT & FITNESS FOR DUTY P	807.00	
	MAY 17 TO MAY 25 2021 PRE-EMPLOYMENT & FITNESS FOR	741.00	
	TOTAL	2,801.50	
75. SPARTAN DISTRIBUTORS	TORO MOWER REPAIR PARTS ORDER #10884054 - UNIT #70	32.42	
	TORO MOWER REPAIR PARTS ORDER #10884054 - UNIT #70	169.56	
	TORO MOWER REPAIR PARTS ORDER #10884054 - UNIT #70	150.59	
	TOTAL	352.57	
76. STATE OF MICHIGAN	MDHHS - QA ASSESSMENT - AMBULANCE - 4/1/2021 TO 6/	2,012.80	
77. SUPREME SANITATION	PORT-A-JOHNS FOR BENNET WOODS	90.00	
	PORT-A-JOHNS FOR TOWNER ROAD PARK MAY 2021	90.00	
	PORT-A-JOHNS FOR HNC MAY 2021	96.00	
	PORT-A-JOHNS FOR NANCY MOORE PARK MAY 2021	90.00	
	PORT-A-JOHNS FOR HILLBROOK PARK MAY 2021	90.00	
	PORT-A-JOHNS FOR EASTGATE PARK MAY 2021	90.00	
	PORT-A-JOHNS FOR NEWTON RD MAY 2021	90.00	
	TOTAL	636.00	
78. T MOBILE	BACKUP LINE - 517.980.0920 - 04/21/21 TO 05/20/21	29.96	
79. TASC	COBRA ADMINISTRATION FEE - 07/01/2021 TO 09/30/202	308.79	
80. TDS	TELEPHONE & PRI SERVICE - 05/20/2021 TO 06/27/2021	1,645.79	
81. TEAM FINANCIAL GROUP	COPER LEASE JUNE 2021	1,471.50	
82. TENNIS COURT SUPPLY LLC	WIND SCREENS FOR PICKLEBALL COURTS AT TOWNER ROAD	2,914.23	
83. URBAN LAND INSTITUTE	ULI MEMBERSHIP JUNE - DEC 2021 & JAN - MAY 2022 -	240.00	
84. VAN ATTA'S FLOWER SHOP	MERIDIAN GARDEN CLUB ANNUAL FLAT/HEUCHERA/PERENNIA	69.91	
	MERIDIAN GARDEN CLUB ANNUAL 4" POT/CAMPANULA/PEREN	75.37	
	FLAT ANNUALS/BIO-TONE/WEED KILLER/DEER RABBIT RPEL	115.91	
	MERIDIAN GARDEN CLUB SOIL	50.85	
	MERIDIAN GARDEN CLUB SEEDS	9.65	
	MERIDIAN GARDEN CLUB ANNUAL FLAT & HERBS	66.98	
	MERIDIAN GARDEN CLUB 20 4" ANNUAL POTS	78.00	
	MERIDIAN GARDEN CLUB ANNUALS/PERENNIALS	32.98	
	MERIDIAN GARDEN CLUB 2 FLATS ANNUALS	28.88	
	TOTAL	528.53	
85. VARIPRO BENEFIT ADMINISTRATORS	MONTHLY FLEX ADMINISTRATION JUNE 2021	153.00	
	JULY 2021 RETIREE HARTFORD MEDICARE SUPPLEMENTAL C	13,252.40	
	TOTAL	13,405.40	
86. VERIZON WIRELESS	SERVICES FROM APRIL 24 TO MAY 23 2021	3,773.74	
	CREDIT APRIL 24 TO MAY 23 2021	(93.63)	
	TOTAL	3,680.11	
87. VILLAGE OF OKEMOS LLC	1ST REIMB - UTILITY POLE STABILIZATION	8,586.00	
88. WASTE MANAGEMENT	SERVICE 6/1/21 TO 6/30/21 - 2100 GAYLORD C SMITH C	132.74	
89. WEST SHORE FIRE INC	MI 2 WAY OVERHEAD SERVICE ALERT SIREN	24,200.00	
90. YOUNG ST JOHNS CHEVROLET	FIRE DEPARTMENT - UNIT 134 MEDIC 93 REPAIRS	9,098.71	

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Vendor Name	Description	Amount	Check #
91. ZOLL MEDICAL CORP	HEART MONITOR SUPPLIES/EQUIP ORDER #2484958	1,035.00	
	HEART MONITOR SUPPLIES/EQUIP ORDER #2501368	965.50	
	HEART MONITOR SUPPLIES/EQUIP ORDER #2501368	89.46	
	TOTAL	<u>2,089.96</u>	
TOTAL - ALL VENDORS		347,814.80	

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Vendor Name	Description	Amount	Check #
1. CARL SCHLEGEL INC	SAND , GRAVEL & TOPSOIL MAY 2021	1,695.83	
2. CITY OF EAST LANSING	SEWER OPERATIONS BILLINGS - JUNE 2021	254,513.75	
	ELMWSA OPERATING & INTERCONNECT COSTS JUNE 2021	274,846.66	
	TOTAL	529,360.41	
3. CORBIN DESIGN	TOWNSHIP ENTRYWAY, WAYFINDING AND LOCATION SIGN DE	405.00	
4. CUMMINS INC	GENERATOR MAINTENANCE CHAMPION WOODS LIFT STATION	2,408.56	
5. FERGUSON WATERWORKS #3386	WATER SYSTEM REPAIR PARTS MAY 28, 2021 BATCH IO 10	2,030.00	
	WATER METERS MAY 28, 2021 BATCH ID #10448	25,500.00	
	TOTAL	27,530.00	
6. FIRST AMERICAN ADMINISTRATORS	MAY 2021 EYEMED VISION EXPENSES	85.08	
7. HYDROCORP	CROSS CONNECTION CONTROL PROGRAM SERVICES- JUNE 20	2,430.00	
8. INNOVATED ENERGY CONTROLS	2021 STANDBY GENERATOR CONTRACT- SHOAL & I-69 BL L	16,195.50	
	2021 STANDBY GENERATOR - SHOALS & I-69 BL LIFTSTAT	22,053.30	
	TOTAL	38,248.80	
9. JACK DOHENY COMPANIES INC	WATER DEPT - UNIT #30 REPAIRS	492.06	
10. JOSEPH HEINEN	OVERPAID FINAL BILL	25.00	
11. MERIDIAN TOWNSHIP RETAINAGE	2021 STANDBY GENERATOR CONTRACT- SHOAL & I-69 BL L	1,799.50	
	2021 STANDBY GENERATOR - SHOALS & I-69 BL LIFTSTAT	95.70	
	TOTAL	1,895.20	
12. MICHIGAN MUNICIPAL LEAGUE	POLICY #5000880-20 POLICY PREIMUM - WORKERS COMP	3,527.33	
13. MICHIGAN RURAL WATER ASSOC	JULY 1, 2021- JUNE 30, 2022 MEMBERSHIP DUES	905.00	
14. TARI'S CORNERSTONE SCHOOL FOR DANCE	OVRPMT ON FINAL SEWER/WATER BILL - HASLETT RD	5.89	
15. VERIZON WIRELESS	SERVICES FROM APRIL 24 TO MAY 23 2021	410.40	
TOTAL - ALL VENDORS		609,424.56	

Credit Card Report 5/27/2021-6/9/2021

Posting Date	Merchant Name	Amount	Name
2021/05/27	SQ *COUNTRYSIDE PARTY REN	\$540.00	DEBORAH GUTHRIE
2021/05/27	MEIJER # 025	\$15.87	ANDREW MCCREADY
2021/05/27	USPS PO 2569800864	\$25.89	ROBIN FAUST
2021/05/27	KIMBALL MIDWEST PAYEEZY	\$505.99	TODD FRANK
2021/05/27	EXOTIC AUTOMATION&SUPPLY	\$86.07	TODD FRANK
2021/05/27	AMZN MKTP US*2R59Y5VD0	\$415.92	ROBERT MACKENZIE
2021/05/27	WAL-MART #2866	\$28.90	CATHERINE ADAMS
2021/05/28	THE HOME DEPOT #2723	\$74.48	LAWRENCE BOBB
2021/05/28	AMAZON.COM*2R5DH9HLO AMZN	\$86.73	KRISTI SCHAEING
2021/05/28	HUTSON INC	\$351.31	TODD FRANK
2021/05/28	AMAZON.COM*2R1IN7WM1 AMZN	\$19.98	MICHELLE PRINZ
2021/05/31	THE HOME DEPOT #2723	\$108.56	LAWRENCE BOBB
2021/05/31	THE HOME DEPOT 2723	\$82.83	CHAD HOUCK
2021/05/31	OFFICEMAX/OFFICEDEPT#3379	\$17.15	KYLE ROYSTON
2021/05/31	GALLS	\$204.95	KYLE ROYSTON
2021/05/31	OFFICEMAX/OFFICEDEPT#3379	\$2.89	RYAN CAMPBELL
2021/05/31	QUALITY DAIRY 31280027	\$13.57	ANDREW MCCREADY
2021/05/31	YPS*VPNPROPERTYLODGINGDIV	\$477.42	ANDREW MCCREADY
2021/05/31	AMZN MKTP US*2X4R30FB1	\$52.80	STEPHEN GEBES
2021/05/31	MICHIGAN SUPPLY	\$201.20	DAN PALACIOS
2021/05/31	THE HOME DEPOT 2723	\$88.89	KEITH HEWITT
2021/05/31	THE HOME DEPOT #2723	\$48.86	KEITH HEWITT
2021/05/31	AMZN MKTP US*2R0756BP0	\$192.78	MICHELLE PRINZ
2021/05/31	LANSING COMMUNITY COLL	\$22.00	WILLIAM PRIESE
2021/05/31	STATE OF MI EMS	\$25.00	WILLIAM PRIESE
2021/05/31	AMAZON.COM*2R2UD2KB0 AMZN	\$51.40	CATHERINE ADAMS
2021/06/01	AMZN MKTP US*2R15K99N0	\$236.00	KRISTI SCHAEING
2021/06/01	OPENTIMECLOCK	\$25.00	KRISTEN COLE
2021/06/01	FACEBK YDBA93K692	\$9.82	MICHAEL DEVLIN
2021/06/02	MCKESSON MEDICAL SURGICAL	\$221.45	KRISTI SCHAEING
2021/06/02	LEADERS RPM	\$190.70	WILLIAM PRIESE
2021/06/03	FEDEX 81507663	\$8.90	KRISTI SCHAEING
2021/06/03	STATE SIDE DELI	\$93.25	KRISTI SCHAEING
2021/06/03	MEIJER # 025	\$22.63	KRISTI SCHAEING
2021/06/03	BARNUM & TENNY BODY SHOP	\$476.00	TODD FRANK
2021/06/03	AMZN MKTP US*2R7CK0YD0	\$66.89	STEPHEN GEBES
2021/06/03	GRAINGER	\$9.34	ROBERT MACKENZIE
2021/06/03	CATHEY COMPANY	\$138.24	ROBERT MACKENZIE
2021/06/03	AMZN MKTP US*2R3JF9WZ0	\$6.99	LUANN MAISNER
2021/06/03	AMAZON.COM*2X89291Y1	\$27.67	LUANN MAISNER
2021/06/03	AMAZON.COM*2R3TA3UJ2 AMZN	\$41.45	MICHELLE PRINZ
2021/06/03	AMZN MKTP US*2R9SL8WF0	\$31.34	MICHELLE PRINZ
2021/06/03	AMAZON.COM*2R1C52UL2	\$7.49	MICHELLE PRINZ
2021/06/04	EATON FARM COOP MASON	\$53.73	TYLER KENNELL
2021/06/04	COMCAST	\$317.62	ANDREA SMILEY
2021/06/04	ELECTRICAL TERMINAL SERVI	\$56.51	TODD FRANK
2021/06/04	THE HOME DEPOT #2725	\$9.88	JANE GREENWAY
2021/06/04	THE HOME DEPOT #2725	\$50.00	JANE GREENWAY
2021/06/04	AMZN MKTP US*2X7WG0GP1	\$167.34	ROBERT MACKENZIE
2021/06/04	FBI NATIONAL ACADEMY ASSO	\$110.00	KEN PLAGA
2021/06/04	AMZN MKTP US*2R3EM2U82	\$139.81	MICHELLE PRINZ
2021/06/04	APOLLO FIRE EQUIPMENT CO	\$1,012.44	WILLIAM PRIESE

2021/06/04	MIDWEST POWER EQUIPMENT	\$155.30	CATHERINE ADAMS
2021/06/04	GRANGER WASTE SERVICES	\$100.53	CATHERINE ADAMS
2021/06/07	MIDWEST POWER EQUIPMENT	\$220.41	LAWRENCE BOBB
2021/06/07	THE HOME DEPOT #2723	\$151.51	LAWRENCE BOBB
2021/06/07	THE HOME DEPOT #2723	\$194.80	LAWRENCE BOBB
2021/06/07	GOVERNMENT FINANCE OFFICE	\$610.00	MIRIAM MATTISON
2021/06/07	THE HOME DEPOT #2723	\$19.66	TYLER KENNEL
2021/06/07	MUNICIPAL SUPPLY COMPAN	\$167.50	CHAD HOUCK
2021/06/07	ULINE *SHIP SUPPLIES	\$175.42	CHAD HOUCK
2021/06/07	HASLETT TRUE VALUE HARDW	\$9.95	KYLE FOGG
2021/06/07	WALMART.COM AX	\$32.87	SAMANTHA DIEHL
2021/06/07	LANGUAGE LINE	\$8.40	KRISTI SCHAEING
2021/06/07	LEXISNEXIS EPIC	\$150.00	KRISTI SCHAEING
2021/06/07	MI STATE POLICE PMTS	\$120.00	KRISTI SCHAEING
2021/06/07	AMAZON.COM*2X9PE6XF1	\$165.22	STEPHEN GEBES
2021/06/07	THE HOME DEPOT #2723	\$152.74	JANE GREENWAY
2021/06/07	THE HOME DEPOT #2723	\$141.71	JANE GREENWAY
2021/06/07	THE HOME DEPOT #2723	\$43.29	JANE GREENWAY
2021/06/07	BECK MOBILE CONCRETE	\$375.00	ROBERT MACKENZIE
2021/06/07	MICHIGAN MUNICIPAL LEAGUE	\$195.00	DEREK PERRY
2021/06/07	THE HOME DEPOT #2723	\$40.33	KEITH HEWITT
2021/06/07	AMAZON.COM*2X6OP6FX2 AMZN	\$30.33	MICHELLE PRINZ
2021/06/07	LANSING COMMUNITY COLL	\$126.00	WILLIAM PRIESE
2021/06/07	CARROT TOP INDUSTRIES	\$118.39	CATHERINE ADAMS
2021/06/07	MEIJER # 253	\$34.36	CATHERINE ADAMS
2021/06/08	SPARTAN ARMOR SYSTEMS	\$31.49	KYLE ROYSTON
2021/06/08	WEST MICHIGAN INTERNATION	\$177.02	TODD FRANK
2021/06/08	USA BLUE BOOK	(\$6.92)	ROBERT MACKENZIE
2021/06/08	MICHIGAN SUPPLY	\$73.98	DAN PALACIOS
2021/06/08	MICHIGAN MUNICIPAL LEAGUE	\$270.00	MICHELLE PRINZ
2021/06/08	PRE-AUTHOR* USAARCHERY	\$65.00	CATHERINE ADAMS
2021/06/08	PRE-AUTHOR* USAARCHERY	\$65.00	CATHERINE ADAMS
2021/06/09	THE HOME DEPOT #2723	\$21.88	CHAD HOUCK
2021/06/09	MEIJER # 025	\$41.98	KYLE FOGG
2021/06/09	AMZN MKTP US*2X0WI9TR2	\$21.99	KRISTI SCHAEING
2021/06/09	MERAKINETWOR	\$50.00	KRISTEN COLE
2021/06/09	CORNWELL HACKERT TOOLS	\$65.37	TODD FRANK
2021/06/09	HASLETT TRUE VALUE HARDW	\$2.07	TODD FRANK
2021/06/09	SQ *DESIGNS BY NATURE	\$100.00	JANE GREENWAY
2021/06/09	GRAINGER	\$578.16	ROBERT MACKENZIE
2021/06/09	OFFICEMAX/OFFICEDEPT#3379	\$193.45	CATHERINE ADAMS
2021/06/09	SOLDANS FEEDS & PET S	\$10.14	CATHERINE ADAMS

Total	\$12,571.26
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ACH Transactions

Date	Payee	Amount	Purpose
5/27/2021	Blue Care Network	\$ 73,183.47	Employee Health Insurance
5/28/2021	MERS	\$ 288,259.97	Employee Retirement
5/28/2021	Alerus	\$ 2,473.24	Payroll Deductions 05/21/2021
6/2/2021	Blue Care Network	\$ 8,407.05	Employee Health Insurance
6/3/2021	IRS	\$ 95,670.57	Payroll Taxes 06/04/2021
6/4/2021	Nationwide	\$ 4,887.93	Payroll Deductions 06/04/2021
6/4/2021	ICMA	\$ 32,820.21	Payroll Deductions 06/04/2021
6/6/2021	Various Financial Institutions	\$ 259,956.47	Direct Deposit 06/04/2021
6/9/2021	Invoice Cloud	\$ 1,407.25	Utility Transaction Fees
6/9/2021	Blue Care Network	\$ 25,178.97	Employee Health Insurance
Total ACH Payments		<u><u>\$ 792,245.13</u></u>	



9. D.

To: Township Board Members
**From: Derek N. Perry, Deputy Township Manager
Director of Public Works & Engineering**
Date: June 9, 2021
Re: Pathway Master Plan 5-Year Update- Set Public Hearing

As part of our 5-year review of the Pathway Master Plan, we have attended and solicited input from various Township Boards and Commissions over the past several months. In addition, we have also encouraged comments from various stakeholder groups and residents of the community.

We are requesting that the Township Board set a public hearing for the July 13, 2021 meeting, so that all of the information that has been collected can be provided to the Township Board and the public for review and consideration. All comments regarding the Pathway Master Plan are welcome and encouraged at the public hearing.

Upon completion of the public hearing and receipt of all the comments, we will develop a draft updated Pathway Master Plan for the Township Board to consider adopting at its July 20, 2021 regularly scheduled meeting.

Proposed motion:

“Move to schedule a public hearing for the Township’s regularly scheduled meeting on July 13, 2021 to review the draft Pathway Master Plan update and hear comments regarding additions and/or deletions from the plan.”



To: Board Members
From: Frank L. Walsh, Township Manager
Date: June 15, 2021
Re: Charitable Gaming License-Ebersole Foundation

The Township has received a request from the Ebersole Foundation for a gaming license to run a raffle. The Ebersole Foundation is a 501 (c) (3) non-profit organization under the IRS code. The organization is planning a raffle to be held on September 26, 2021.

Under state lottery laws, a local governing body must approve the function through a vote of the Board. Attached is the resolution request by the Lottery Bureau along with the Ebersole Foundation IRS tax exempt letter.

A motion is prepared for Board consideration:

MOVE APPROVAL OF A REQUEST FROM THE EBERSOLE FOUNDATION OF MERIDIAN TOWNSHIP, INGHAM COUNTY, ASKING THAT THEY BE RECOGNIZED AS A NON-PROFIT ORGANIZATION OPERATING IN THE COMMUNITY FOR THE PURPOSES OF OBTAINING A GAMING LICENSE FOR APPROVAL, AND FURTHER THAT THE TOWNSHIP CLERK BE AUTHORIZED TO EXECUTE THE RESOLUTION FROM THE STATE OF MICHIGAN.

Attachments:

1. Resolution for Charitable Gaming License
2. IRS Tax Exempt Letter

MICHIGAN LOTTERY
CHARITABLE GAMING DIVISION
101 E. HILLSDALE, BOX 30023
LANSING, MICHIGAN 48909
(517) 335-5780
www.michigan.gov/cg

LOCAL GOVERNING BODY RESOLUTION FOR
CHARITABLE GAMING LICENSES
(Required by MCL.432.103(K)(ii))

RESOLUTION

At a Regular meeting of the Charter Township of Meridian Board of Trustees called to order by Supervisor Styka on June 15, 2021 at 6:00 P.M.

the following resolution was offered:

Moved by _____ and supported by _____.

That the request from The Ebersole Foundation of Meridian Township, County of Ingham, asking that they be recognized as a nonprofit organization operating in the community for the purpose of obtaining a gaming license be considered for APPROVAL.

YEAS: _____

NAYS: _____

ABSENT: _____

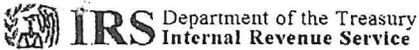
STATE OF MICHIGAN)

) ss

COUNTY OF INGHAM)

I hereby certify that the foregoing is a true and complete copy of resolution offered and adopted by the Township Board at a Regular meeting held on June 15, 2021.

Deborah Guthrie
Meridian Township Clerk
5151 Marsh Road, Okemos MI 48864



ATLANTA GA 39901-0001

In reply refer to: 0752439619
June 13, 2016 LTR 4168C 0
30-0174227 000000 00

00031846
BODC: TE

VERNON D EBERSOLE ENVIRONMENTAL EDU
& CONF CENTER FOUNDATION
% DONNA OLD
4104 CORNELL RD
OKEMOS MI 48864

Employer ID Number: 30-0174227
Form 990 required: Y

Dear Taxpayer:

We issued you a determination letter in July 2003, recognizing you as tax-exempt under Internal Revenue Code (IRC) Section 501(c)(03).

Our records also indicate you're not a private foundation as defined under IRC Section 509(a) because you're described in IRC Sections 509(a)(1) and 170(b)(1)(A)(vi).

Donors can deduct contributions they make to you as provided in IRC Section 170. You're also qualified to receive tax deductible bequests, legacies, devises, transfers, or gifts under IRC Sections 2055, 2106, and 2522.

In the heading of this letter, we indicated whether you must file an annual information return. If a return is required, you must file Form 990, 990-EZ, 990-N, or 990-PF by the 15th day of the fifth month after the end of your annual accounting period. IRC Section 6033(j) provides that, if you don't file a required annual information return or notice for three consecutive years, your exempt status will be automatically revoked on the filing due date of the third required return or notice.

For tax forms, instructions, and publications, visit www.irs.gov or call 1-800-TAX-FORM (1-800-829-3676).

If you have questions, call 1-877-829-5500 between 8 a.m. and 5 p.m., local time, Monday through Friday (Alaska and Hawaii follow Pacific Time).

0752439619
June 13, 2016 LTR 4168C 0
30-0174227 000000 00
00031847

VERNON D EBERSOLE ENVIRONMENTAL EDU
& CONF CENTER FOUNDATION
% DONNA OLD
4104 CORNELL RD
OKEMOS MI 48864

Sincerely yours,



Teri M. Johnson
Operations Manager, AM Ops. 3



To: Township Board

From: Timothy R. Schmitt, AICP, Director Community Planning & Development

Date: June 8, 2021

Re: **Rezoning #21020 (Martin Investment Properties, LLC), rezone three parcels totaling approximately six acres located on the north side of Jolly Road, east of Kansas Road, from I (Industrial) and RA (Single Family-Medium Density) to PO (Professional and Office) with conditions.**

The Township Board approved Rezoning #21020 for introduction at its last meeting on June 1, 2021. The proposed ordinance was published, as directed by the Board, in advance of a final decision being made on the request.

Rezoning #21020 is a request to rezone approximately six acres at the northeast corner of Jolly Road and Kansas Road from I (Industrial) and RA (Single Family-Medium Density) to PO (Professional and Office) with the following conditions that have been voluntarily offered by the applicant:

1. The use of the north 75 feet along the depth of Parcel Number: 33-02-02-33-353-004 (commonly known as 3558 Kansas Road) would be limited to screening, landscape buffer and storm water detention with associated underground utilities.
2. The north property line of Parcel Number: 33-02-02-33-353-004 (commonly known as 3558 Kansas Road) would be landscaped to match or exceed the buffer requirement between Professional Office Zoning and Residential Zoning as outlined in the current Meridian Charter Township Zoning Ordinance Section 86-404 (b)(3) for rear yard buffer.
3. The west property line of Parcel Numbers: 33-02-02-33-353-004 and 33-02-02-33-353-005 (commonly known as 3532 and 3558 Kansas Road) to the extent that the properties across Kansas Road are zoned Residential (RA) (to the southern edge of Parcel Number: 33-02-02-33-352-004) would be landscaped to exceed the landscape screening material buffer requirements as outlined in the current Meridian Charter Township Zoning Ordinance Section 86-404 (b)(3). This would require a double row of interlocking trees, primarily evergreens, or the equivalent in addition to general screening standards.
4. Driveways would be limited to a primary drive access on Jolly Road, a secondary drive to Woodlake Drive on the east, and a drive on Kansas Road aligning with the current curb cut on Kansas Road for 2476 Jolly Road. This condition would be subject to Ingham County Road Commission approval of the driveways and location of the driveways.
5. The Owner will pursue LEED certification for the proposed project.
6. As a condition of the rezoning, the developer will provide for the extension and construction of a public water main along Kansas Road subject to the Meridian Department of Public Works specifications and design. In addition, the developer will establish an escrow account to cover the connection costs of up to 14 Residential Houses on Kansas Road to be serviced by such water main extension in an amount not to exceed \$10,000 per Residential House to be used on or before May 31, 2026. Any such funds held in escrow

after such date, shall be returned to the developer. "Residential Houses" shall mean the current owner(s) and parcel numbers identified in the attached Exhibit A.

Township Board Options

The Township Board may approve or deny the proposed rezoning from I (Industrial) and RA (Single Family-Medium Density) to PO (Professional and Office) with conditions. If the Board amends the proposal, the request may be referred back to the Planning Commission for a new recommendation. A resolution for final adoption of the rezoning request, subject to the conditions offered by the application, is included with this memo.

Staff would offer the following motion for the Township Board to consider during their review of the proposed rezoning request.

Move to adopt the resolution approving for final adoption Rezoning #21020, an ordinance to rezone approximately six acres of land located on the north side of Jolly Road, east of Kansas Road, from I (Industrial) and RA (One-Family, Medium-Density Residential) to PO (Professional and Office) with conditions, *for the following reasons:*

- The proposed rezoning and the conditions voluntarily offered by the applicant ensure that the development of the site will be consistent with Goal 3 and Goal 7 of the Township's Master Plan,
- The conditions voluntarily offered by the applicant will limit the potential impacts of the development on the surrounding residential properties while allowing for commercial development to continue in the Jolly Road corridor, consistent with the Future Land Use map.

Attachments

1. Resolution to approve for final adoption
2. Communications

RESOLUTION TO APPROVE – Final Adoption

**Rezoning #21020
Martin Investment Properties, Inc.**

RESOLUTION

At a regular meeting of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, held virtually using the Zoom web conferencing application, in said Township on the 15th day of June, 2021, at 6:00 p.m., Local Time.

PRESENT: _____

ABSENT: _____

The following resolution was offered by _____ and supported by _____.

WHEREAS, Martin Investment Properties, Inc. requested the rezoning of 6.0 acres located on the north side of Jolly Road, east of Kansas Road, including Parcel #33-353-016, Parcel #33-353-005, and Parcel #33-353-004, from I (Industrial) and RA (One-Family, Medium-Density) to PO (Professional and Office) with conditions; and

WHEREAS, the applicant voluntarily offered the following six conditions on the rezoning: 1) The use of the north 75 feet along the depth of Parcel Number: 33-02-02-33-353-004 (commonly known as 3558 Kansas Road) would be limited to screening, landscape buffer and storm water detention with associated underground utilities, 2) The north property line of Parcel Number: 33-02-02-33-353-004 (commonly known as 3558 Kansas Road) would be landscaped to match or exceed the buffer requirement between Professional Office Zoning and Residential Zoning as outlined in the current Meridian Charter Township Zoning Ordinance Section 86-404 (b)(3) for rear yard buffer, 3) The west property line of Parcel Numbers: 33-02-02-33-353-004 and 33-02-02-33-353-005 (commonly known as 3532 and 3558 Kansas Road) to the extent that the properties across Kansas Road are zoned Residential (RA) (to the southern edge of Parcel Number: 33-02-02-33-352-004) would be landscaped to exceed the landscape screening material buffer requirements as outlined in the current Meridian Charter Township Zoning Ordinance Section 86-404 (b)(3). This would require a double row of interlocking trees, primarily evergreens, or the equivalent in addition to general screening standards, 4) Driveways would be limited to a primary drive access on Jolly Road, a secondary drive to Woodlake Drive on the east, and a drive on Kansas Road aligning with the current curb cut on Kansas Road for 2476 Jolly Road. This condition would be subject to Ingham County Road Commission approval of the driveways and location of the driveways, 5) The Owner will pursue LEED certification for the proposed project, 6) As a condition of the rezoning, the developer will provide for the extension and construction of a public water main along Kansas Road subject to the Meridian Department of Public Works specifications and design. In addition, the developer will establish an escrow account to cover the connection costs of up to 14 Residential Houses on Kansas Road to be serviced by such water main extension in an amount not to exceed \$10,000 per Residential House to be used on or before May 31, 2026. Any such funds held in escrow after such date, shall be returned to the developer. "Residential Houses" shall mean the current owner(s) and parcel numbers identified in the attached Exhibit A; and

**Resolution to Approve
Rezoning #21020 (Martin Investment Properties, Inc.)
Page 2**

WHEREAS, the Planning Commission held a public hearing on the request at its regular meeting on March 8, 2021 and voted to recommend denial of the request at its meeting on March 22, 2021; and

WHEREAS, the Township Board discussed the proposed rezoning at its meetings on May 18, 2021, June 1, 2021, and June 15, 2021 and has reviewed the staff and Planning Commission materials provided under cover memorandums dated March 3, 2021, March 18, 2021, April 13, 2021, May 28, 2021, and June 8, 2021; and

WHEREAS, the proposed rezoning to PO and the conditions voluntarily offered by the applicant ensure future development of the site will be consistent with Goal 3 of the 2017 Master Plan to enhance the viability of township businesses by promoting economic development and Goal 7 of the 2017 Master Plan to promote efficient and sustainable growth practices by promoting LEED certification or the equivalent for new or redeveloped projects; and

WHEREAS, the proposed rezoning to PO and the conditions voluntarily offered by the applicant will result in a potential development that will bring emergency medical services into the township, serving our population directly; and

WHEREAS, the condition of approval offered by the applicant to extend water infrastructure to the homes along Kansas Road will bring public water service to the properties at no cost the property owners; and

WHEREAS, public water and sanitary sewer are available for the subject site.

WHEREAS, the Township Board introduced Rezoning #21020 for publication and subsequent adoption at its meeting on June 1, 2021.

NOW THEREFORE, BE IT RESOLVED THE TOWNSHIP BOARD OF THE CHARTER TOWNSHIP OF MERIDIAN hereby ADOPTS Ordinance No. 2021-03, entitled "Ordinance Amending the Zoning District Map of Meridian Township pursuant to Rezoning Petition #21020" from I (Industrial) and RA (One-Family, Medium-Density) to PO (Professional and Office) subject to the following conditions voluntarily offered by the applicant:

1. The use of the north 75 feet along the depth of Parcel Number: 33-02-02-33-353-004 (commonly known as 3558 Kansas Road) would be limited to screening, landscape buffer and storm water detention with associated underground utilities.
2. The north property line of Parcel Number: 33-02-02-33-353-004 (commonly known as 3558 Kansas Road) would be landscaped to match or exceed the buffer requirement between Professional Office Zoning and Residential Zoning as outlined in the current Meridian Charter Township Zoning Ordinance Section 86-404 (b)(3) for rear yard buffer.
3. The west property line of Parcel Numbers: 33-02-02-33-353-004 and 33-02-02-33-353-005 (commonly known as 3532 and 3558 Kansas Road) to the extent that the properties across Kansas Road are zoned Residential (RA) (to the southern edge of Parcel Number: 33-02-02-33-352-004) would be landscaped to exceed the landscape screening material buffer requirements as outlined in the current Meridian Charter Township Zoning Ordinance Section 86-404 (b)(3). This would

**Resolution to Approve
Rezoning #21020 (Martin Investment Properties, Inc.)
Page 3**

require a double row of interlocking trees, primarily evergreens, or the equivalent in addition to general screening standards.

- 4. Driveways would be limited to a primary drive access on Jolly Road, a secondary drive to Woodlake Drive on the east, and a drive on Kansas Road aligning with the current curb cut on Kansas Road for 2476 Jolly Road. This condition would be subject to Ingham County Road Commission approval of the driveways and location of the driveways.
- 5. The Owner will pursue LEED certification for the proposed project.
- 6. As a condition of the rezoning, the developer will provide for the extension and construction of a public water main along Kansas Road subject to the Meridian Department of Public Works specifications and design. In addition, the developer will establish an escrow account to cover the connection costs of up to 14 Residential Houses on Kansas Road to be serviced by such water main extension in an amount not to exceed \$10,000 per Residential House to be used on or before May 31, 2026. Any such funds held in escrow after such date, shall be returned to the developer. "Residential Houses" shall mean the current owner(s) and parcel numbers identified in the attached Exhibit A.

BE IT FURTHER RESOLVED that the Clerk of the Charter Township of Meridian is directed to publish the Ordinance in the form in which it was adopted.

ADOPTED: YEAS: _____

 NAYS: _____

STATE OF MICHIGAN)

) ss

COUNTY OF INGHAM)

I, the undersigned, the duly qualified and acting Clerk of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and complete copy of a resolution adopted at a regular meeting of the Township Board on the 15th day of June, 2021.

Deborah Guthrie
Township Clerk

ORDINANCE NO. 2021-03
ORDINANCE AMENDING THE ZONING DISTRICT MAP
OF MERIDIAN TOWNSHIP
PURSUANT TO REZONING #21020

The Charter Township of Meridian ordains:

Section 1. Amending the Zoning District Map.

A. The Zoning District Map of Meridian Township, as adopted in Section 86-312 of the Code of the Charter Township of Meridian, Michigan, as previously amended, is hereby amended by changing the I (Industrial) District symbol and indication as shown on the Zoning District Map, for Parcel #33-353-016 and the RA (One-Family, Medium-Density Residential) District symbol and indication as shown on the Zoning District Map for Parcel #33-353-005, and Parcel #33-353-004 for the land legally described as:

A parcel of land in the Southwest 1/4 of Section 33, T4N, R1W, Meridian Township, Ingham County, Michigan, further described as: Commencing at the Southwest corner of said Section 33; thence East along the South line of said Section 33, 396 feet to the point of beginning of this description; thence North 641.14 feet; thence East 462 feet; thence South 377.14 feet; thence West 132 feet; thence South 264 feet to a point on the South line of said Section 33; thence along said South line, 330 feet to the point of beginning. Containing 6.00 acres of land, more or less.

to that of PO (Professional and Office) with the following conditions:

- 1) The use of the north 75 feet along the depth of Parcel Number: 33-02-02-33-353-004 (commonly known as 3558 Kansas Road) would be limited to screening, landscape buffer and storm water detention with associated underground utilities.
- 2) The north property line of Parcel Number: 33-02-02-33-353-004 (commonly known as 3558 Kansas Road) would be landscaped to match or exceed the buffer requirement between Professional Office Zoning and Residential Zoning as outlined in the current Meridian Charter Township Zoning Ordinance Section 86-404 (b)(3) for rear yard buffer.
- 3) The west property line of Parcel Numbers: 33-02-02-33-353-004 and 33-02-02-33-353-005 (commonly known as 3532 and 3558 Kansas Road) to the extent that the properties across Kansas Road are zoned Residential (RA) (to the southern edge of Parcel Number: 33-02-02-33-352-004) would be landscaped to exceed the landscape screening material buffer requirements as outlined in the current Meridian Charter Township Zoning Ordinance Section 86-404 (b)(3). This would require a double row of interlocking trees, primarily evergreens, or the equivalent in addition to general screening standards.
- 4) Driveways would be limited to a primary drive access on Jolly Road, a secondary drive to Woodlake Drive on the east, and a drive on Kansas Road aligning with the current curb cut on Kansas Road for 2476 Jolly Road. This condition would be subject to Ingham County Road Commission approval of the driveways and location of the driveways.
- 5) The Owner will pursue LEED certification for the proposed project.
- 6) As a condition of the rezoning, the developer will provide for the extension and construction of a public water main along Kansas Road subject to the Meridian

Department of Public Works specifications and design. In addition, the developer will establish an escrow account to cover the connection costs of up to 14 Residential Houses on Kansas Road to be serviced by such water main extension in an amount not to exceed \$10,000 per Residential House to be used on or before May 31, 2026. Any such funds held in escrow after such date, shall be returned to the developer. "Residential Houses" shall mean the current owner(s) and parcel numbers identified in the attached Exhibit A (on file with the Township).

Section 2. Validity and Severability. The provisions of this Ordinance are severable and the invalidity of any phrase, clause or part of this Ordinance shall not affect the validity or effectiveness of the remainder of the Ordinance.

Section 3. Repealer Clause. All ordinances or parts of ordinances in conflict therewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

Section 4. Savings Clause. This Ordinance does not affect rights and duties matured, penalties that were incurred, and proceedings that were begun, before its effective date.

Section 5. Effective Date. This Ordinance shall be effective seven (7) days after its publication or upon such later date as may be required under Section 402 of the Michigan Zoning Enabling Act (MCL 125.3402) after filing of a notice of intent to file a petition for a referendum.

Ronald J. Styka, Township Supervisor

Deborah Guthrie, Township Clerk

EXHIBIT A

Owner	Address	Parcel Number
Murphy, Rick DC & Charmaine	2414 Kansas Rd	33-02-02-33-302-002
Muringathery, Suresh & Joseph, Sunita	2422 Kansas Rd	33-02-02-33-302-001
Halm, James & Carol	3535 Kansas Rd	33-02-02-33-352-004
Hanks Trust, Steven W	3545 Kansas Rd	33-02-02-33-352-003
Kane Sam Jr & Renea	3565 Kansas Rd	33-02-02-33-352-002
Tabrizi, Shereen & Faichney, John	3566 Kansas Rd	33-02-02-33-353-003
Lupa, Piotr & Szum-Lupa, Malgorzata	3575 Kansas Rd	33-02-02-33-352-001
Alhachim, Sondos	3589 Kansas Rd	33-02-02-33-351-021
Baldori, Leonard	3589 Kansas Rd	33-02-02-33-351-017
Baker, Monica	3596 Kansas Rd	33-02-02-33-353-002
Freemire, Steven E	3622 Kansas Rd	33-02-02-33-353-017
Kraai, Linda	3657 Kansas Rd	33-02-02-33-301-004
Hooker, Carlene E Trustee	3663 Kansas Rd	33-02-02-33-301-003
Miller, Kenneth A & Brenda K	3681 Kansas Rd	33-02-02-33-301-009

01196:01916:5509496-1

Frequently Asked Questions

About Freestanding Emergency Departments

June 8, 2021

Q: What is a Freestanding Emergency Department?

A: A Freestanding Emergency Department offer emergency care without being physically attached to a hospital. They provide care for those with limited access to hospital-based Emergency Departments and help alleviate stress on traditional hospital facilities. Both freestanding and hospital ERs are open 24 hours a day, seven days a week. The staff at both will include emergency medicine doctors, emergency nurses, laboratory technicians, and radiology technicians. They can both handle potentially life-threatening conditions, including bleeding, fractures, respiratory problems, heart attack, and stroke. We believe the Freestanding Emergency Department in Meridian Township will improve healthcare access and convenience to a major population center in the Lansing area and to communities further east, such as Williamston, Webberville, Fowlerville, Mason, and Alaieton Township.

Q: What's involved in the Sparrow project?

A: The project, part of a medical office building, includes a 12,000-square-foot Emergency Department that will serve as a companion to our Sparrow Hospital Emergency Department and Level 1 Trauma Center. It will also include imaging equipment for CTs, ultrasounds, and X-rays, and a Lab with four draw stations. A six-provider Sparrow Medical Group practice is also planned for the site.

Q: How common are Freestanding Emergency Departments?

A: A Freestanding Emergency Department is a new concept for Mid-Michigan but there are several around the state and they've become much more common nationwide in recent years.

Q: Will this Freestanding Emergency Department be able to handle the same cases as the Sparrow Hospital Emergency Department?

A: All Emergency Departments, including those attached to hospitals, have different levels of care they are able to provide. For example, our Sparrow Emergency Department downtown is considered a "Level 1 Trauma Center." This means we are certified to handle the most acute emergencies. We are the only Level 1 Trauma Center in the area. First Responders, those who operate and staff ambulances, know this and will bring the appropriate patients to our downtown location versus the freestanding site.

Frequently Asked Questions

Q: Won't there be a potentially dangerous delay in care if I go to a Freestanding Emergency Department, am found to need more complex treatment, and require being transferred for surgery or further care at Sparrow Hospital in Lansing?

A: The most important issue during an emergency is the time required to diagnose and begin stabilization. A Freestanding Emergency Department allows for improved access to immediate care. This enhances the opportunity to diagnose and begin intervention. We have seen across the country the difficulty in rapid assessment in major trauma centers. Freestanding EDs get around this challenge and put the patient in front of the provider quicker. This allows us to diagnose and begin intervention faster, and closer to home. In the need for surgery or hospital admission we activate the same systems but bypass the major trauma center and admit the patient directly to the hospital unit necessary to provide the best care.

Q: Who pays for the cost of an ambulance if I have to be transferred from the freestanding location to Sparrow Hospital in Lansing or another site?

A: That cost is typically billed to insurance companies.

Q: Will there potentially be overnight stays at the new facility if my condition is not serious enough to be admitted to the hospital but I'm told to wait to go home until my condition stabilizes?

A: The Freestanding ED never closes. If a patient needs to stay for a few hours we can do that at the Freestanding ED. If it's more than a few hours, we would directly admit the patient to a hospital observation unit.

Q: What's the difference between going to this Freestanding Emergency Department versus an Urgent Care?

A: Emergency care is aimed at those facing a potentially life-threatening illness or serious injury. Urgent Care is when it's not an emergency but you feel you need care right away rather than wait for an appointment with your primary care physician. A Freestanding ED can treat any conditions a hospital-based ED can. An urgent care can only treat minor injuries and illnesses.



To: Board Members
From: Ronald J. Styka, Township Supervisor
Date: June 11, 2021
Re: Resolution in Recognition and Celebration of Juneteenth

Juneteenth celebrates America’s commitment to liberty and equality in accordance with the Constitution of the United States, along with the Emancipation Declaration, issued by President Lincoln on September 22, 1862, and later became effective on January 1, 1863 and the 13th Amendment to the Constitution which abolished slavery, ratified by Congress on December 6, 1865.

A motion is prepared for Board consideration:

MOVE TO APPROVE THE RESOLUTION IN RECOGNITION AND CELEBRATION OF JUNETEENTH.

Attachment:

1. Resolution in Recognition and Celebration of Juneteenth



To: Board Members
From: Ken Plaga, Chief of Police
Date: June 9, 2021
Re: Resolution for a Traffic Speed Study

There have been requests for a speed study on Mount Hope Road due to limited site distance and recent traffic crashes.

The resolution will allow the Michigan State Police (MSP) and the Ingham County Roads Department to conduct a speed study and safety audit on Mount Hope Road in Okemos between Comanche Drive and Chippewa Drive. Please be advised that MSP will conclude one of three outcomes:

- 1 – Leave the speed limit the same on Mount Hope Road.
- 2 – Reduce the speed limit on Mount Hope Road.
- 3 – Increase the speed limit on Mount Hope Road.

The following motion is proposed for Board consideration:

**MOVE TO ADOPT THE RESOLUTION TO AUTHORIZE MICHIGAN STATE POLICE (MSP)
TO CONDUCT A SPEED STUDY AND SAFETY AUDIT ON MOUNT HOPE ROAD AND
ADVISE THE BOARD OF THEIR RESULTS.**

Attachment:

1. Resolution to Authorize a Speed Study and Safety Audit

RESOLUTION TO AUTHORIZE A SPEED STUDY AND SAFETY AUDIT

At a regular meeting of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, held on the 15th day of June, 2021, at 6:00 p.m. local time.

PRESENT: _____

ABSENT: _____

WHEREAS, the current traffic speeds on Mount Hope Road from Comanche Dr. to Chippewa Dr. are believed to be hazardous to pedestrians, bicyclists and motorists; and,

WHEREAS, limited roadway sight distances create an undue hazard to pedestrian, bicyclists and motorized vehicular traffic entering Mt. Hope Road or making turns onto side streets and drives from Mount Hope Road; and,

NOW, THEREFORE, BE IT RESOLVED BY THE TOWNSHIP BOARD OF THE CHARTER TOWNSHIP OF MERIDIAN, INGHAM COUNTY, MICHIGAN, that the Meridian Township Board is formally requesting the Ingham County Road Department to conduct a traffic, engineering, and speed study on Mount Hope Rd from Comanche Drive to Chippewa Drive. It is understood that the Road Department in cooperation with Michigan State Police (MSP) will use the engineering data gathered in the study to make a decision which could raise the speed limit, lower the speed limit, or keep the speed limit as it is.

It is further understood that Meridian Township will abide by the decision made by the Road Department and MSP as a result of this traffic, engineering, and speed study.

ADOPTED:

YEAS: _____

NAYS: _____

Resolution declared

STATE OF MICHIGAN)
)SS:
COUTNY OF INGHAM)

I, the undersigned, the duly qualified and acting Clerk of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and complete copy of a resolution adopted at a regular meeting of the Township Board on the 15th day of June 2021.

Deborah Guthrie
Meridian Township Clerk



12. D.

To: Township Board Members

**From: Derek N. Perry, Deputy Township Manager
Director of Public Works & Engineering**

Younes Ishraidi, P.E., Chief Engineer

Date: June 10, 2021

Re: Lake Lansing Advisory Committee Appointment

The Advisory Committee for the Lake Lansing Special Assessment District recently received a resignation of Tier 1 member Timothy McCarty, whose term would have expired on April 30, 2022.

Subsequently, the advisory committee solicited interested property owners within Tier 1 to fill this vacancy for more than a month. Only one eligible Tier 1 resident applied. During its June, regular meeting the advisory committee voted unanimously recommending to the Township Board the appointment of Mr. Roger Taylor to fill the Tier 1 vacancy. Mr. Taylor has attended the last two meetings of the advisory committee. His information and Public Service application are attached.

Recommended motion:

“Move to approve the appointment of Mr. Roger Taylor of 6089 E Lake Drive, Haslett, MI, as a Tier 1 representative to the Lake Lansing Advisory Committee for a term ending April 30 2022.”

CHARTER TOWNSHIP OF MERIDIAN

Ronald J. Styka
Brett Dreyfus
Julie Brixie
Frank L. Walsh

Supervisor
Clerk
Treasurer
Manager



Phil Deschaine
Patricia Herring Jackson
Dan Opsommer
Kathy Ann Sundland

Trustee
Trustee
Trustee
Trustee

APPLICATION FOR PUBLIC SERVICE

I am interested in service on one or more of the following public bodies as checked below:

- | | |
|---|---|
| <p>___ Assessing Board of Review*</p> <p>___ Board of Water and Light Representative*</p> <p>___ Brownfield Redevelopment Authority*</p> <p>___ Building and/or Fire Board of Appeals and Building Hearing Officer</p> <p>___ Capital Area Transportation Authority (C.A.T.A).</p> <p>___ Communications Commission*</p> <p>___ Community Resources Commission</p> <p>___ Corridor Improvement Authority*</p> <p>___ Downtown Development Authority*</p> <p>___ East Lansing-Meridian Water & Sewer Authority</p> <p>___ Economic Development Corporation</p> | <p>___ Elected Officials Compensation Commission*</p> <p>___ Environmental Commission</p> <p><input checked="" type="checkbox"/> Lake Lansing Watershed Advisory Committee*</p> <p>___ Land Preservation Advisory Board</p> <p>___ Park Commission (elected/appointed)</p> <p>___ Pension Trustees</p> <p>___ Planning Commission</p> <p>___ Township Board (elected/appointed)</p> <p>___ Transportation Commission*</p> <p>___ Zoning Board of Appeals</p> <p>___ Other</p> |
|---|---|

(*Special conditions restrict eligibility for appointment)

Indicate areas not included above which may warrant special attention or study that are of interest to you:

Communication Commission , where we are to where we need to be.

Summarize your reasons for applying for this type of public service:

Lake Lansing is priority to keep clean for the people. Also, my Grand kids

Describe education, experience or training which will assist you if appointed. (Attach resume if available)

Name: Roger Taylor

Occupation: Retired Place of Employment: General Motors , FCA

Home Address: 6089 E Lake dr

Phone: (days) 517.8817976 (evenings) same E-mail rtaylornt13@comcast.net

Signature Roger Taylor Date 5/11/2021

Other than the Downtown Development Authority Board and the Economic Development Corporation, persons appointed to Meridian Township boards and commissions must be a resident and elector (if of voting age) of the Township during the term of office. Excessive absences may be cause for review of appointment

(PLEASE USE BACK IF NEEDED)

The policy for appointment of candidates to the various public service positions is based on the following criteria: desire to serve, experience, expertise, availability of time to serve, and maintenance of equitable geographic representation. In most instances it will be desirable to develop further information through a personal interview. This application will be retained in township files for two years. Please return this form to the Office of the Clerk, Charter Township of Meridian.

FOR OFFICE USE ONLY			
Date Received		Distro:	Application #
Registered Voter:	Y / N		
Date Appointed:			



Resume

Experience

***Resident of Haslett for 10 years while living on lake Lansing.
6089 E Lake Dr .***

We have Dock , Boat and raft that are on the lake .

We love the lake , keeping it clean is a priority for my family .

***The Fauna and flora are always surprising us , from Bald eagles
, weasels , geese , ducks and the many kinds of fish .***

Education

MSU BS Physiology 2015

**Duo Skilled Trade Journey person Maintenance Manager 1970 2016- GM
FCA employed**

Athletic Trainer Eastern Mich University 2010 -13

Roosevelt High School 1969 grad , Class President

Epilogue

**I have a vested interest in Lake Lansing , I enjoy the people using the lake
to the fullest. A clean lake is a must for our community , both
environmental and ecologically , it will be enjoyed for future generations .**

Roger Taylor



12.E

To: Board Members
From: Phil Deschaine, Township Treasurer
Date: June 15, 2021
Re: Review of Meridian Township Investment Policy

As Meridian Township Treasurer, I believe it is advisable and prudent to have our Investment Policy approved by the Board every two years. As we have had a recent addition to the Board composition with our new Clerk Guthrie, the review of the Meridian Township Investment Policy is even timelier.

Attached is the Meridian Township Investment Policy. This policy was first approved on March 3, 2009, and last endorsed on June 18, 2019.

As for our current investment practices, we do not purchase commercial paper or repurchase agreements directly. We do hold money in investment pools that may purchase commercial paper and repurchase agreements depending on the markets.

Also attached is a resolution to approve the Investment Policy.

MERIDIAN TOWNSHIP INVESTMENT POLICY

Date Adopted: March 3, 2009

Date Amended: June 16, 2015

Date Adopted: January 3, 2017

Date Adopted June 18, 2019

Purpose

It is the policy of Meridian Township to invest its funds in a manner which will ensure the preservation of principal and provide the highest investment return with the maximum security while meeting the daily cash flow needs of the Township and complying with all state statutes governing the investment of public funds.

Scope

This investment policy applies to all financial assets of the Township. These assets are accounted for in various funds of the Township and include the general fund, special revenue funds, debt service funds, capital project funds, enterprise funds (e.g. public works), internal service funds, trust and agency funds, and any new funds established by the Township.

Objectives

The primary objectives of the Township's investment activities in priority order shall be:

Safety – Safety of principal is the foremost objective of the investment program. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio.

Diversification – The investments will be diversified by security type and institution in order to reduce overall portfolio risk while obtaining market average rates of return.

Liquidity – The investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated.

Return of Investment – The investment portfolio shall be designed with the objective of obtaining a reasonable rate of return throughout the budgetary and economic cycles, while taking into account the investment risk constraints and the cash flow characteristics of the portfolio.

Delegation of Authority

Management responsibility for the investment program is hereby delegated to the Township Treasurer pursuant to MCL 41.76 who shall establish written procedures and internal control policies for the operation of the investment program consistent with this investment policy. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the Treasurer. The Treasurer shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials.

Authorized Investments

The Township is limited to investments authorized by Act 20 of 1943 MCL 129.91 as amended, but may only invest in the following:

- (a) Bonds, securities, and other obligations of the United States or an agency or instrumentality of the United States.
- (b) Certificates of deposit, savings accounts, deposit accounts, or depository receipts of a financial institution, but only if the financial institution is eligible to be a depository of funds belonging to the state under a law or rule of this state or the United States.
- (c) Banker's acceptance of United States banks.
- (d) Obligations of this state or any of its political subdivisions that at the time of purchase are rated as investment grade by not less than one standard rating service.
- (e) Mutual funds registered under the investment company act 1940, title 1 of chapter 686, 54 Stat. 789, 15 U.S.C. 80a-1 to 80a-3 and 80a-4 to 80a-64, with authority to purchase only investment vehicles that are legal for direct investment solely by reason of either of the following:
 - (i) The purchase of securities on a when-issued or delayed delivery basis.
 - (ii) The ability to lend portfolio securities as long as the mutual fund receives collateral at all times equal to at least 100% of the value of the securities loaned.
 - (iii) The limited ability to borrow and pledge a like portion of the portfolio's assets for temporary or emergency purposes.
 - (iv) Investments in mutual funds shall be limited to securities whose intention is to maintain a net asset value of \$1.00 per share.*

- (f) Obligations described in subdivisions (a) through (e) if purchased through an interlocal agreement under the urban corporations act of 1967, 1967 (Ex Sess) PA 7, MCL 124.501 to 124.512.
- (g) Investment pools organized under the surplus funds investment pool act, 1982 PA 367, MCL 129.111 to 129.118.
- (h) Investment pools organized under the local government investment pool act, 1985 PA 121, MCL 129.141 to 129.150.
- (i) Certificates of Deposit as authorized by MCL 129.91(5) including Certificate of Deposit Account Registry Service (CDARS).

* This is a requirement of this policy but not required under MCL 129.91
Commercial Paper and Repurchase agreements may not be directly purchased but may be indirectly owned through investment pools and mutual funds.

Safekeeping and Custody

All security transactions, including collateral for repurchase agreements and financial institution deposits, entered into by the Treasurer shall be on a cash or delivery vs. payment basis. Securities may be held by a third party custodian designated by the Treasurer and evidenced by safekeeping receipts as determined by the Treasurer.

Prudence

Investments shall be made with judgment and care, under circumstances then prevailing which persons of prudence, discretion and intelligence exercise in the management of their own affairs. These decisions are not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.

Reporting

The Treasurer shall provide quarterly (or more often) written investment reports to the Township Board which provide a clear picture of the status of the current investment portfolio. In addition, the Treasurer shall, as required by law, present an annual written report to the Board.

Conflict of Interest and Ethics

Officials and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution of the investment program, or which could impair their ability to make impartial investment decisions. Employees and Board Members shall disclose to the Treasurer, and the Treasurer shall disclose to the Board, any material financial interest in financial institutions that conduct business with the Township. The Board, Employees, and the Treasurer shall disclose any material financial investment position related to the performance of the Township's portfolio.

Authorized Financial Institutions and Dealers

A list will be maintained of financial institutions authorized to provide investment services to Meridian Township. In addition, a list will also be maintained of approved security broker/dealers selected by credit worthiness who are authorized to provide investment services to Meridian Township.

All financial institutions and broker/dealers who desire to become qualified bidders for investment transactions must first be provided with a copy of the Township's Investment Policy and return to the Township a signed copy of the agreement to comply (appendix #1).

Adoption and Review

The Township's investment policy shall be adopted by the Township Board. The policy shall be reviewed annually by the Treasurer and any modifications must be approved by the Township Board.

Appendix #1

ACKNOWLEDGEMENT OF RECEIPT OF INVESTMENT POLICY AND AGREEMENT TO COMPLY

I have read and fully understand Act 20 PA 1943 as amended, and the Investment Policy of the Charter Township of Meridian.

Any investment advice or recommendation on investments given by _____ representing _____, to the Meridian Township Treasurer shall comply with the requirement of ACT 20 PA 1943 as amended, and the Investment Policy of the Charter Township of Meridian. Any existing investment not conforming to the statute or policy will be disclosed promptly to the Meridian Township Treasurer. Further, should a broker/dealer learn of a forthcoming downgrading or devaluation of an investment that has been sold to the Charter Township of Meridian, the broker/dealer shall notify the Treasurer as soon as possible to determine if there is a need to trade or dispose of that investment.

By: _____

Title: _____

Date: _____

RESOLUTION

At the regular meeting of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 15th day of June, 2021, at 6:00 p.m., Local Time.

PRESENT: _____

ABSENT: _____

The following resolution was offered by _____ and supported by _____.

WHEREAS, Meridian Township has a policy to invest funds; and

WHEREAS, the purpose of the policy is to ensure the safety of those funds and maximize the return of investment; and

NOW, THEREFORE, BE IT RESOLVED THE TOWNSHIP BOARD OF THE CHARTER TOWNSHIP OF MERIDIAN hereby approves the Meridian Township Investment Policy attached.

ADOPTED: YEAS: _____

NAYS: _____

STATE OF MICHIGAN)

) ss

COUNTY OF INGHAM)

I, the undersigned, the duly qualified and acting Clerk of the Charter Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY the foregoing is a true and complete copy of a resolution adopted at a regular meeting of the Township Board on the 15th day of June 2021.

Deborah Guthrie
Township Clerk



To: Board Members
From: Ronald J. Styka, Township Supervisor
Date: June 15, 2021
Re: Amtrak Corridor Development Program Resolution

Meridian Township would benefit greatly from Amtrak's Connects US 2035 vision for more train frequencies on all three current Michigan routes and new corridor routes from Detroit to Cleveland & Toronto.

A motion is prepared for Board consideration:

**MOVE TO APPROVE THE AMTRAK CORRIDOR DEVELOPMENT PROGRAM
RESOLUTION**

Attachment:

1. Amtrak Corridor Development Program Resolution



To: Township Board

From: Timothy R. Schmitt, AICP, Director Community Planning & Development

Date: June 10, 2021

Re: Rezoning #21040 – 1560 & 1510 Grand River Avenue - C-2, Commercial, to RA, One Family, Medium-Density Residential

Rezoning #21020 is a request from Okemos IL-AL Investors, LLC. to rezone approximately nine acres of land on the north side of Grand River Avenue, just to the west of Powell Road, from C-2, Commercial, to RA, One Family, Medium-Density Residential. The applicant is the potential buyer of the two parcels and has indicated their intention to construct a senior living facility on the property, with the rezoning being the first step in their development process. As part of the rezoning request, the applicant has voluntarily offered the following condition to be attached to the rezoning:

“Okemos IL-AL Investors, LLC becoming fee simple owner of the property pursuant to a PSA (Purchase Sale Agreement) dated February 8, 2021 on or before September 19, 2022, unless such condition is expressly waived by Okemos IL-AL Investors, LLC.”

The Township Board reviewed the matter initially at their June 1st meeting. There was extensive discussion about the history of the site, the proposed use and density, and the natural features on the site. The applicant agreed to return with a concept plan and elevations for the Township Board’s information, which are attached to this memo. They have indicated that they will be planning on a density of 18 du/acre, based on the conceptual layout, lower than the initial discussions that occurred. The applicant is seeking additional feedback from the Township Board, before any resolution for adoption is presented and would welcome the opportunity to discuss the proposal further with the Board.

Township Board Options

The Township Board may approve or deny the proposed rezoning from C-2, Commercial, to RA, One Family, Medium-Density Residential, with the condition as presented. The applicant has not offered any additional conditions at this time. The Board may also amend the proposal. If the Board chooses to amend the proposal, the request may be referred back to the Planning Commission for a revised review and recommendation. A resolution will be provided at a future meeting.

Attachments

1. Conceptual layout and elevations

GHILA

ARCHITECTURE
PLANNING
INTERIOR DESIGN
817.801.7200
www.ghila-nc.com



HARMONY AT OKEMOS
SENIOR LIVING COMMUNITY
CONCEPT SITE PLAN


SMITH/PACKETT



9.07 ACRES +/-

POWELL ROAD

1.0 ACRES +/-



ENTRY ELEVATION DETAIL



SOUTH ELEVATION
AS SEEN FROM GRAND RIVER AVE.

ARCHITECTURE
GHILA
PLANNING
INTERIOR DESIGN
817.261.7200
www.ghila.com

HARMONY AT OKEMOS
SENIOR LIVING COMMUNITY
CONCEPT ELEVATIONS



SMITH/PACKETT



To: Meridian Township Board Members

**From: Downtown Development Authority Members
&
Neighborhoods & Economic Development Director Amber Clark**

Date: June 15, 2021

RE: Downtown Development Authority Loan Forgiveness Letter

In response to COVID-19 the Federal government established the American Rescue Plan with stimulus funding planned for each community. This federal support is for eligible projects that enhance the entire community and bridge gaps for our businesses and residents. As the community looks to proceed in recovery of COVID-19, the Downtown Development Authority (DDA) would like to take more progressive steps to enhance the financial strength of the DDA. The proposed request is to forgive the remaining \$124,500 of the current loan with the Meridian Charter Township. The current fund balance of the DDA is (\$83,407.36) with total cash on hand of \$57,320.01.

A loan agreement was formed by the DDA and Meridian Township Board for \$190,000 for streetlight installations throughout the DDA in 2010. 2012 the Township was notified of a tax appeal made by the DDA's largest commercial operator. The tax appeal was approved with a reduction in tax value in 2010 for \$1.2 million, 2011 for \$1.5 million, and over \$2 million in 2012. The DDA as the responsible tax authority then owed this establishment \$84,078.41. At the time the cash on hand was \$27,751. To pay back those taxes, the DDA had to borrow the additional funding in a loan from the Meridian Township general fund.

Beginning in 2017 the DDA elected to make payments on the principal; last year was the first year that the DDA did not elect to pay down a large portion of the principal. With the newly established loan agreement written in 2013 the DDA was required to pay \$10,000 with no requirement to pay on the principal of the loan until 2023. In 2017 the DDA paid \$50,000 down on the principal and additionally elected to pay \$25,000 down on the principal in 2019. Payments to the principal alter the repayment schedule with the current loan to be paid in full by 2027.

Attached is a letter from the Downtown Development Authority to the Township board for discussion and concurrence to forgive the DDA of their remaining debt.

Township Board Options:

Township Board members have the option to suspend the rules at discussion and vote to move the item for "action" should the Township Board members feel it is appropriate. Board members can move to adopt the attached resolution to forgive the remaining debt of the Downtown Development Authority of Meridian Charter Township; authorize the Township Manager and staff to proceed with the loan forgiveness process.

MOTION TO APPROVE THE GRANTING OF \$124,500 TO THE DOWNTOWN DEVELOPMENT AUTHORITY, AS FORGIVENESS OF THE LOAN TO THE GENERAL FUND. AUTHORIZE THE TERMINATION OF THE LOAN AGREEMENT BETWEEN MERIDIAN CHARTER TOWNSHIP AND THE DOWNTOWN DEVELOPMENT AUTHORITY.



Attachments:

Support Letter from Downtown Development Authority

2017 Loan Agreement

Current Amortization Schedule of Loan

Current Financial balance of DDA

Drafted Loan Termination Agreement



June 7, 2021

To: Meridian Township Board

From: Meridian Township Downtown Development Authority

Re: Downtown Development Authority Loan Forgiveness

Members of the Township Board;

The Downtown Development Authority (DDA), met at their regularly scheduled meeting June 7, 2021 to submit our request to the Meridian Township board to forgive the remaining \$124,500 on the loan the DDA took out with the Township in 2013. Our request comes at a time when our nation has to creatively address economic development in a world with retraction of commercial spaces and availability of commercial lending. The steps to ensure financial health of the Downtown Development Authority are congruent with the current Economic Development plan of Meridian Township. We ask for this loan forgiveness to better propel the DDA's ability to assist future development.

In 2010 the DDA purchased the streetlights that align Okemos Road and Hamilton Road through the roundabout onto Marsh Road for \$190,000. This was a loan through the general fund of Meridian Township. The original agreement was for the purchase and installation of the units for 15 years. In 2012 a local business won tax appeal for 2010 tax year for \$1.2 million, the 2011 tax year for \$1.5 million, and 2012 tax year for over \$2 million. Reduction in tax value at the property required the DDA to pay back a total of \$84,078.41 for these years in 2012. At the time the cash on hand was \$27,751 and the DDA needed to take out another loan to cover the remaining \$60,000 owed. In 2013 the DDA had a total debt of \$250,000 for the streetlights and the tax appeal. The loan agreement required the DDA to pay \$10,000 down on the principal up front and did not require principal payments until 2023. In our efforts to become financially sound, we have elected to each year to pay a large sum down on the principal. Beginning in 2017 we paid \$50,000 down and \$25,000 in 2019 toward the principal. With the adoption of the DDA's Tax Increment Financing plan in 2017 the total remaining owed to Meridian Township at that time was \$149,000. Since 2013 the DDA has paid over \$80,000 on the principal and \$40,000 in interest to the Township for the loan.

With the oncoming improvements made by the Village of Okemos project, Okemos bridge reconstruction and future developments we respectfully request the Meridian Township Board to forgive the remaining debt of the DDA. This tax authority will be the anchor for funding sources for improvements in the DDA. We will be in much better standing to assist with these projects without a debt payment to continue to be made. These enhancements are equally enjoyed by all and redevelopment of Okemos is our priority. Another reason in support of eliminating the DDA's debt is related to the accounting of the Township's overall finances. As the DDA is an entity of the Township, our account show the debt owed to the Township,



annually this must be explained. We are confident that soon the Downtown area will begin to resemble the former "downtown" feel it once did. We are actively reengaging the current businesses and meet regularly as a commission to ensure the path to redevelopment of the area. We will be stronger without the debt and appreciate your concurrence. For more information related to the history of the debt please review the included attachments.

Sincerely,

A handwritten signature in blue ink, which appears to read 'Renee Korrey', is written over the typed name and title.

Renee Korrey
Downtown Development Authority Chair
Charter Township of Meridian

**THIRD AMENDMENT TO THE LOAN AGREEMENT
BETWEEN THE CHARTER TOWNSHIP OF MERIDIAN AND THE MERIDIAN
TOWNSHIP DOWNTOWN DEVELOPMENT AUTHORITY**

THIS AGREEMENT made as of the 4th day of April, 2017 by and between the **CHARTER TOWNSHIP OF MERIDIAN** ("Township"); a public body organized and existing pursuant to Act 359, Michigan Public Acts of 1947, and the **MERIDIAN TOWNSHIP DOWNTOWN DEVELOPMENT AUTHORITY** ("DDA"), a public body corporate organized and existing pursuant to Act 197, Michigan Public Acts of 1975.

WHEREAS, the Township and the DDA had entered into an Inter-Fund Loan Agreement approved by the Meridian Township Board at their regular meeting on August 5, 2010 and by the DDA Board of Directors at a special meeting on August 2, 2010; and

WHEREAS, the originally requested loan amount from the Township was \$190,000; and

WHEREAS, the DDA, pursuant to the DDA development program described in the DDA Plan, used the loan to purchase and install 21 LED lighting fixtures and street poles in downtown Okemos; and

WHEREAS, the principal amount of the original loan was amended in 2011 from \$190,000 to \$160,000; and

WHEREAS, the principal amount of the loan was amended in 2013 from \$160,000 to \$200,000; and

WHEREAS, the parties wish to amend the loan agreement to adjust the repayment schedule of the principal payment from 2020 to 2027, to 2022 through 2027.

NOW, THEREFORE, in consideration of the premises and the covenants of each other, the parties agree as follows:

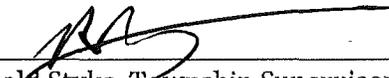
1. The DDA may prepay any portion of the Loan without penalty. Any additional payments shall be applied against interest and principal as the Township, in its sole discretion, decides.
2. In the event the DDA defaults in the terms of this Agreement, or any other agreement between the parties, the entire Loan shall be immediately due and payable and the Township may take whatever action it deems necessary to collect the Loan, including (without limitation) offsetting any funds due to the DDA from the Township, bringing a suit to collect on the Loan Agreement (as amended), or any combination thereof. The DDA shall pay all of the costs incurred by the Township in connection with a default and/or collection, including reasonable attorney fees.
3. Payment on the Loan shall be made in annual interest payments and annual principal payments (beginning in 2022), as depicted in the following table. Notwithstanding anything to the contrary, the Loan is due in full on October 1, 2027.

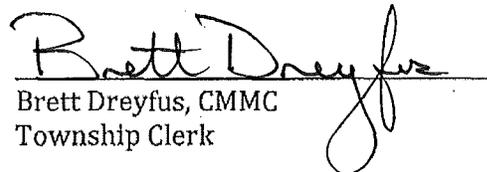
4.4.17
9D

DDA Installment Loan due to General Fund							
Year	Additions*	Payments**	Principal (Due 4/1)	Interest Rate (3%)	Interest (Due 10/1)	Total Payment	Outstanding Balance
							\$150,000.00
2013	\$ 60,000.00	\$ 500.00	\$ 10,000.00	3.00%	\$ 4,423.75	\$ 14,923.75	\$199,500.00
2014			\$ -	3.00%	\$ 5,985.00	\$ 5,985.00	\$199,500.00
2015			\$ -	3.00%	\$ 5,985.00	\$ 5,985.00	\$199,500.00
2016			\$ -	3.00%	\$ 5,985.00	\$ 5,985.00	\$199,500.00
2017		\$ 50,000.00	\$ -	3.00%	\$ 5,485.00	\$ 55,485.00	\$149,500.00
2018			\$ -	3.00%	\$ 4,485.00	\$ 4,485.00	\$149,500.00
2019			\$ -	3.00%	\$ 4,485.00	\$ 4,485.00	\$149,500.00
2020			\$ -	3.00%	\$ 4,485.00	\$ 4,485.00	\$149,500.00
2021			\$ -	3.00%	\$ 4,485.00	\$ 4,485.00	\$149,500.00
2022			\$ 25,000.00	3.00%	\$ 3,922.50	\$ 28,922.50	\$124,500.00
2023			\$ 25,000.00	3.00%	\$ 3,172.50	\$ 28,172.50	\$ 99,500.00
2024			\$ 25,000.00	3.00%	\$ 2,422.50	\$ 27,422.50	\$ 74,500.00
2025			\$ 25,000.00	3.00%	\$ 1,672.50	\$ 26,672.50	\$ 49,500.00
2026			\$ 25,000.00	3.00%	\$ 922.50	\$ 25,922.50	\$ 24,500.00
2027			\$ 24,500.00	3.00%	\$ 183.75	\$ 24,683.75	\$ -
TOTAL	\$ 60,000.00	\$ 50,500.00	\$ 159,500.00		\$58,100.00	\$268,100.00	
Total Principal Payments		\$ 210,000.00					

4. Except as otherwise set forth above, all other terms and conditions of the August 5, 2010 Loan Agreement, as modified by the Amendment dated July 26th, 2013, continue in full force and effect.

IN WITNESS WHEREOF, the parties have set their hands and seals on the date above first written.


 Ronald Styka, Township Supervisor


 Brett Dreyfus, CMMC
 Township Clerk

DDA Installment Loan due to General Fund

Year	Additions*	Payments**	Principal (Due 4/1)	Interest Rate (3%)	Interest (Due 10/1)	Total Payment	Ousting Balance
							\$ 150,000.00
2013	\$ 60,000.00	\$ 500.00	\$ 10,000.00	3.00%	\$ 4,423.75	\$ 14,923.75	\$ 199,500.00
2014			\$ -	3.00%	\$ 5,985.00	\$ 5,985.00	\$ 199,500.00
2015			\$ -	3.00%	\$ 5,985.00	\$ 5,985.00	\$ 199,500.00
2016			\$ -	3.00%	\$ 5,985.00	\$ 5,985.00	\$ 199,500.00
2017		\$ 50,000.00	\$ -	3.00%	\$ 5,485.00	\$ 55,485.00	\$ 149,500.00
2018			\$ -	3.00%	\$ 4,485.00	\$ 4,485.00	\$ 149,500.00
2019		\$ 25,000.00	\$ -	3.00%	\$ 4,485.00	\$ 29,485.00	\$ 124,500.00
2020			\$ -	3.00%	\$ 3,735.00	\$ 3,735.00	\$ 124,500.00
2021			\$ -	3.00%	\$ 3,735.00	\$ 3,735.00	\$ 124,500.00
2022			\$ -	3.00%	\$ 3,735.00	\$ 3,735.00	\$ 124,500.00
2023			\$ 25,000.00	3.00%	\$ 3,172.50	\$ 28,172.50	\$ 99,500.00
2024			\$ 25,000.00	3.00%	\$ 2,422.50	\$ 27,422.50	\$ 74,500.00
2025			\$ 25,000.00	3.00%	\$ 1,672.50	\$ 26,672.50	\$ 49,500.00
2026			\$ 25,000.00	3.00%	\$ 922.50	\$ 25,922.50	\$ 24,500.00
2027			\$ 24,500.00	3.00%	\$ 183.75	\$ 24,683.75	\$ -
TOTAL	\$ 60,000.00	\$ 75,500.00	\$ 134,500.00		\$ 56,412.50	\$ 266,412.50	

Total Principal Payments **\$ 210,000.00**

*Addition of \$60K in July 2013

**Payment of \$500 in Sept 2013 using money donated by board member to reduce the debt

Assuming \$50,000 Payment will be made in May 2017

Meridian Twp DDA
Preliminary Financial Statements
 Period Ending 4/30/2021 - UNAUDITED

BALANCE SHEET

Year to Date

ASSETS		
Cash		\$57,320.01
Due from General Fund		\$0.00
Taxes Receivable		\$0.00
Accounts Receivable		\$0.00
Prepaid Expense		\$0.00
TOTAL ASSETS		\$57,320.01
LIABILITIES		
Accrued Interest Payable		\$0.00
Due to General Fund		\$0.00
Unearned Revenue		\$0.00
Deferred Inflows of Revenue		\$0.00
LT Note Payable		\$124,500.00
TOTAL LIABILITIES		\$124,500.00
FUND BALANCE		
Fund Balance 12/31/20		(\$83,407.36)
2021 YTD Net Income		\$16,227.37
TOTAL FUND BALANCE		(\$67,179.99)
TOTAL LIABILITIES & FUND BALANCE		\$57,320.01

INCOME STATEMENT

REVENUES	March	April	Year to Date
Tax Capture	\$13,393.69	\$2,461.59	\$15,752.29
PPT Reimbursement	\$0.00	\$0.00	\$0.00
Grants	\$0.00	\$0.00	\$0.00
DDA Downtown Events/Donations	\$0.00	\$0.00	\$0.00
Other	\$0.00	\$0.00	\$0.00
TOTAL REVENUE	\$13,393.69	\$2,461.59	\$15,752.29
EXPENDITURES	March	April	Year to Date
Operating Costs	\$151.42	\$228.44	\$458.92
Professional Consultant/Contractual Services	\$0.00	\$0.00	\$0.00
Community Projects	\$0.00	\$0.00	\$0.00
Communications	\$0.00	\$0.00	\$0.00
Conferences	\$0.00	\$0.00	\$0.00
Special Events - Celebrate Expenses	\$0.00	\$0.00	\$0.00
Tax Appeal Refunds	\$0.00	\$0.00	\$0.00
Interest on Loan	\$0.00	\$0.00	(\$934.00)
TOTAL EXPENDITURES	\$151.42	\$228.44	(\$475.08)
2021 Net Income	\$13,242.27	\$2,233.15	\$16,227.37



INDEPENDENT

BANK

PO Box 279 | Belding, MI 48809 | IndependentBank.com

Last statement: March 31, 2021
This statement: April 30, 2021
Total days in statement period: 30

MERIDIAN CHARTER TOWNSHIP
DOWNTOWN DEVELOPMENT
AUTHORITY
ACCOUNTS PAYABLE
5151 MARSH RD
OKEMOS MI 48164-1198

1-1698

Page 1 of 2
XXXXXX5474
(0)

Direct inquiries to:
800.355.0641

Independent Bank
2119 Hamilton RD
Okemos MI 48864



01698

INTRODUCING ONE WALLET, INDEPENDENT BANK'S NEW AND ENHANCED ONLINE AND MOBILE BANKING PLATFORM, LAUNCHING ON MONDAY, MAY 24! WITH ONE WALLET, YOU CAN BANK WHEN, WHERE, AND HOW YOU WANT—JUST ANOTHER WAY WE ARE HELPING YOU TO BE INDEPENDENT. TO BRING YOU THESE NEW ENHANCEMENTS, OUR CURRENT ONLINE AND MOBILE BANKING WILL BE UNAVAILABLE AS OF FRIDAY, MAY 21, AT 5 PM (ET). MEMBER FDIC.

Business Freedom Checking

Account number	XXXXXX5474	Beginning balance	\$55,086.86
Low balance	\$55,086.86	Total additions	2,461.59
Average balance	\$56,824.99	Total subtractions	228.44
		Ending balance	\$57,320.01

DEBITS

Date	Description	Subtractions
04-15	' POS Purchase MERCHANT PURCHASE TERMINAL 55432861 CONSUMERS ENERGY C O 800-477-5 MI XXXXXXXXXXXXXXX2615 SEQ # 200572995353	118.85
04-30	' POS Purchase MERCHANT PURCHASE TERMINAL 55432861 CONSUMERS ENERGY C O 800-477-5 MI XXXXXXXXXXXXXXX2615 SEQ # 200698074474	109.59

CREDITS

Date	Description	Additions
04-09	' Deposits	2,461.59



01698

DAILY BALANCES

<u>Date</u>	<u>Amount</u>	<u>Date</u>	<u>Amount</u>	<u>Date</u>	<u>Amount</u>
03-31	55,086.86	04-15	57,429.60		
04-09	57,548.45	04-30	57,320.01		

Date	JNL	Type	Description	Reference #	Debits	Credits	Balance
Fund 900 DOWNTOWN DEVELOPMENT AUTHORITY							
Assets							
Department 000.000							
01/2021			900-000.000-001.000 CASH		BEG. BALANCE		55,086.86
04/07/2021	GJ	JE	DEPOSIT -WINTER DPP TAX COLLECTION	61707	2,461.59		57,548.45
04/14/2021	GJ	JE	COMSUMERS PMT (SERVICE 2.15-3.15)	62123		118.85	57,429.60
04/29/2021	GJ	JE	COMSUMERS PMT (SERVICE 3.16-4.14)	62115		109.59	57,320.01
04/30/2021			900-000.000-001.000	END BALANCE	2,461.59	228.44	57,320.01
TOTAL FOR DEPARTMENT 000.000					<u>2,461.59</u>	<u>228.44</u>	
TOTAL Assets					<u>2,461.59</u>	<u>228.44</u>	57,320.01
TOTAL FOR FUND 900 DOWNTOWN DEVELOPMENT AUTHORITY					<u>2,461.59</u>	<u>228.44</u>	57,320.01

PERIOD ENDING 04/30/2021

GL NUMBER	DESCRIPTION	2021 AMENDED BUDGET	YTD BALANCE 04/30/2021	ACTIVITY FOR MONTH 04/30/2021	AVAILABLE BALANCE	% BDGT USED
Fund 900 - DOWNTOWN DEVELOPMENT AUTHORITY						
Revenues						
Dept 000.000						
900-000.000-402.000	CURRENT PROPERTY TAXES	6,500.00	15,752.29	2,461.59	(9,252.29)	242.34
Total Dept 000.000		6,500.00	15,752.29	2,461.59	(9,252.29)	242.34
TOTAL REVENUES		6,500.00	15,752.29	2,461.59	(9,252.29)	242.34
Expenditures						
Dept 000.000						
900-000.000-728.000	OPERATING SUPPLIES	3,000.00	458.92	228.44	2,541.08	15.30
900-000.000-995.000	DEBT SERVICE-INTEREST	3,735.00	(934.00)	0.00	4,669.00	(25.01)
Total Dept 000.000		6,735.00	(475.08)	228.44	7,210.08	(7.05)
TOTAL EXPENDITURES		6,735.00	(475.08)	228.44	7,210.08	(7.05)
Fund 900 - DOWNTOWN DEVELOPMENT AUTHORITY:						
TOTAL REVENUES		6,500.00	15,752.29	2,461.59	(9,252.29)	242.34
TOTAL EXPENDITURES		6,735.00	(475.08)	228.44	7,210.08	7.05
NET OF REVENUES & EXPENDITURES		(235.00)	16,227.37	2,233.15	(16,462.37)	6,905.26

Fund 900 DOWNTOWN DEVELOPMENT AUTHORITY

GL Number	Description	Balance
*** Assets ***		
	RECEIVABLES-CUSTOMERS	0.00
	RECEIVABLES-TAXES	0.00
	Cash and Cash Equivalents	57,320.01
	Due From Other Funds	0.00
	Investments	0.00
	OTHER ASSETS	0.00
	Total Assets	57,320.01
*** Liabilities ***		
	Accounts Payable	0.00
	ACCRUED AND OTHER LIABILITIES	0.00
	Deferred Revenue	0.00
	Due to Other Funds	0.00
	Long Term Liabilities	124,500.00
	Unclassified	0.00
	UNEARNED REVENUE	0.00
	Total Liabilities	124,500.00
*** Fund Balance ***		
	UNASSIGNED FUND BALANCE	(83,407.36)
	Total Fund Balance	(83,407.36)
	Beginning Fund Balance	(83,407.36)
	Net of Revenues VS Expenditures	16,227.37
	Ending Fund Balance	(67,179.99)
	Total Liabilities And Fund Balance	57,320.01

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-21-254-016	402	4837 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	36,680	14,870	-21,810
33-02-02-21-254-017	202	OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	27,000	16,600	-10,400
33-02-02-21-254-018	202	4825 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	27,000	16,600	-10,400
33-02-02-21-254-030	201	4767 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	128,285	135,732	7,447
33-02-02-21-254-031	201	4787 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	120,621	127,623	7,002
33-02-02-21-254-032	201	4815 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	256,679	271,581	14,902
33-02-02-21-254-037	201	2131 GRAND RIVER AVE	Active	0.0000	DDA #2-OKEMOS	1,297,251	1,486,100	94,425*
33-02-02-21-276-003	201	2041 GRAND RIVER AVE	Active	0.0000	DDA #2-OKEMOS	218,172	230,839	12,667
33-02-02-21-276-005	201	2037 GRAND RIVER AVE	Active	0.0000	DDA #2-OKEMOS	196,417	207,821	11,404
33-02-02-21-276-006	201	2049 GRAND RIVER AVE	Active	0.0000	DDA #2-OKEMOS	573,699	607,008	33,309
33-02-02-21-276-009	201	2045 GRAND RIVER AVE	Active	0.0000	DDA #2-OKEMOS	537,816	585,469	47,653
33-02-02-21-276-011	201	2085 GRAND RIVER AVE	Active	0.0000	DDA #2-OKEMOS	642,923	1,282,200	639,277
33-02-02-21-276-012	201	4800 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	547,266	579,041	31,775
33-02-02-21-276-014	201	2075 GRAND RIVER AVE	Active	0.0000	DDA #2-OKEMOS	935,100	982,015	46,915
33-02-02-21-276-015	201	2055 GRAND RIVER AVE	Active	0.0000	DDA #2-OKEMOS	4,001,605	4,198,900	197,295
33-02-02-21-277-001	201	4780 OKEMOS RD #1	Active	0.0000	DDA #2-OKEMOS	184,554	195,269	10,715
33-02-02-21-277-002	201	4780 OKEMOS RD #2	Active	0.0000	DDA #2-OKEMOS	132,589	152,400	19,811
33-02-02-21-277-003	201	4780 OKEMOS RD #3	Active	0.0000	DDA #2-OKEMOS	184,554	195,269	10,715
33-02-02-21-277-004	201	4780 OKEMOS RD #4	Active	0.0000	DDA #2-OKEMOS	135,109	142,952	7,843
33-02-02-21-402-007	202	METHODIST ST	Active	0.0000	DDA #2-OKEMOS	20,250	21,078	828
33-02-02-21-402-008	202	4217 ARDMORE AVE	Active	0.0000	DDA #2-OKEMOS	20,250	21,078	828
33-02-02-21-403-003	201	2154 METHODIST ST	Active	0.0000	DDA #2-OKEMOS	50,836	53,787	2,951
33-02-02-21-403-004	202	METHODIST ST	Active	0.0000	DDA #2-OKEMOS	20,250	21,078	828
33-02-02-21-403-007	201	4733 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	94,200	99,668	5,468
33-02-02-21-403-008	401	4731 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	44,016	46,570	2,554

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-21-403-009	401	4717 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	54,763	57,941	3,178
33-02-02-21-403-011	201	4747 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	120,069	127,040	6,971
33-02-02-21-404-001	401	2188 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	82,943	87,757	963*
33-02-02-21-404-002	401	4705 ARDMORE AVE	Active	0.0000	DDA #2-OKEMOS	49,168	52,022	2,854
33-02-02-21-404-007	201	2160 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	149,372	117,800	-31,572
33-02-02-21-405-005	202	2148 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	72,937	77,171	4,234
33-02-02-21-405-008	201	4700 ARDMORE AVE	Active	0.0000	DDA #2-OKEMOS	155,817	300,000	144,183
33-02-02-21-405-009	201	4695 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	197,676	209,152	11,476
33-02-02-21-405-010	201	2138 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	152,067	160,895	8,828
33-02-02-21-406-001	201	4708 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	134,899	142,730	7,831
33-02-02-21-406-002	201	4696 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	74,849	79,194	4,345
33-02-02-21-406-003	202	4703 MOORE ST	Active	0.0000	DDA #2-OKEMOS	42,289	44,742	2,453
33-02-02-21-406-004	202	MOORE ST	Active	0.0000	DDA #2-OKEMOS	5,240	5,542	302
33-02-02-21-406-005	201	4690 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	182,488	193,082	10,594
33-02-02-21-406-006	201	2114 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	154,626	163,603	8,977
33-02-02-21-408-001	201	2175 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	186,402	197,224	10,822
33-02-02-21-408-009	201	4663 ARDMORE AVE	Active	0.0000	DDA #2-OKEMOS	436,090	461,410	25,320
33-02-02-21-409-001	201	2153 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	26,033	27,174	1,141
33-02-02-21-409-002	201	2149 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	74,115	87,310	13,195
33-02-02-21-409-003	201	2143 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	86,292	54,500	-31,792
33-02-02-21-409-004	201	2137 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	50,743	24,800	-25,943
33-02-02-21-409-006	202	2150 CLINTON ST	Active	0.0000	DDA #2-OKEMOS	32,700	33,787	1,087
33-02-02-21-409-008	201	4661 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	124,051	75,200	-48,851
33-02-02-21-409-009	201	4675 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	75,656	82,557	6,901
33-02-02-21-410-007	201	4646 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	105,163	111,268	6,105

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-21-410-008	201	4659 MOORE ST	Active	0.0000	DDA #2-OKEMOS	165,216	174,808	9,592
33-02-02-21-410-010	099	OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	0	0	0
33-02-02-21-410-012	201	2119 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	145,278	153,712	8,434
33-02-02-21-410-015	202	CLINTON ST	Active	0.0000	DDA #2-OKEMOS	63,046	66,705	3,659
33-02-02-21-411-001	401	2177 CLINTON ST	Active	100.0000	DDA #2-OKEMOS	14,523	15,365	842
33-02-02-21-411-002	201	2165 CLINTON ST	Active	0.0000	DDA #2-OKEMOS	51,663	54,661	2,998
33-02-02-21-412-002	401	2149 CLINTON ST	Active	0.0000	DDA #2-OKEMOS	38,716	40,963	2,247
33-02-02-21-412-003	401	4633 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	36,337	38,445	2,108
33-02-02-21-412-004	401	4625 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	46,909	49,631	2,722
33-02-02-21-412-005	401	4619 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	80,846	85,539	4,693
33-02-02-21-412-006	401	2155 CLINTON ST	Active	100.0000	DDA #2-OKEMOS	78,607	83,170	4,563
33-02-02-21-413-001	401	2120 CLINTON ST	Active	0.0000	DDA #2-OKEMOS	98,339	104,048	5,709
33-02-02-21-413-002	401	2122 CLINTON ST	Active	100.0000	DDA #2-OKEMOS	92,898	98,291	5,393
33-02-02-21-413-003	401	2124 CLINTON ST	Active	0.0000	DDA #2-OKEMOS	92,686	98,066	5,380
33-02-02-21-413-004	401	2126 CLINTON ST	Active	100.0000	DDA #2-OKEMOS	101,218	107,094	5,876
33-02-02-21-413-100	402	CLINTON ST	Active	0.0000	DDA #2-OKEMOS	0	0	0
33-02-02-21-426-001	201	4750 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	145,400	153,841	8,441
33-02-02-21-426-012	202	4649 MARSH RD	Active	0.0000	DDA #2-OKEMOS	62,542	66,172	3,630
33-02-02-21-426-013	202	4657 MARSH RD	Active	0.0000	DDA #2-OKEMOS	13,907	14,713	806
33-02-02-21-426-014	202	4663 MARSH RD	Active	0.0000	DDA #2-OKEMOS	47,990	50,775	2,785
33-02-02-21-426-015	202	4669 MARSH RD	Active	0.0000	DDA #2-OKEMOS	11,537	12,205	668
33-02-02-21-426-016	202	4675 MARSH RD	Active	0.0000	DDA #2-OKEMOS	77,991	82,518	4,527
33-02-02-21-426-020	201	2110 METHODIST ST	Active	0.0000	DDA #2-OKEMOS	118,102	124,958	6,856
33-02-02-21-426-021	301	4704 MOORE ST	Active	0.0000	DDA #2-OKEMOS	238,072	251,893	13,821
33-02-02-21-426-022	201	2104 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	187,596	198,487	10,891

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-21-426-023	099	4734 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	0	0	0
33-02-02-21-427-001	201	4737 MARSH RD	Active	0.0000	DDA #2-OKEMOS	308,000	194,300	-113,700
33-02-02-21-428-006	099	2086 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	0	0	0
33-02-02-21-429-003	201	4650 MOORE ST	Active	0.0000	DDA #2-OKEMOS	118,206	136,200	17,994
33-02-02-21-429-004	202	2099 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	65,380	17,130	-48,250
33-02-02-21-429-005	202	2095 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	49,700	51,353	1,653
33-02-02-21-429-027	201	2109 HAMILTON RD	Active	0.0000	DDA #2-OKEMOS	208,617	220,728	12,111
33-02-02-21-451-005	099	4555 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	0	0	0
33-02-02-21-452-001	201	2248 MT HOPE RD	Active	0.0000	DDA #2-OKEMOS	350,741	421,000	70,259
33-02-02-21-452-002	099	OKEMOS R/W RD	Active	0.0000	DDA #2-OKEMOS	0	0	0
33-02-02-21-453-005	099	OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	0	0	0*
33-02-02-21-453-006	401	4622 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	46,261	48,946	2,685
33-02-02-21-453-007	401	4612 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	82,088	80,077	-2,011
33-02-02-21-453-008	201	4632 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	115,270	121,961	6,691
33-02-02-21-453-009	401	2123 CLINTON ST	Active	100.0000	DDA #2-OKEMOS	54,288	57,439	3,151
33-02-02-21-454-002	301	CONSUMERS R.O.W.	Active	0.0000	DDA #2-OKEMOS	5,211	5,513	302
33-02-02-21-454-007	401	4534 OKEMOS RD	Active	0.0000	DDA #2-OKEMOS	41,349	43,749	2,400
33-02-02-22-152-001	201	4775 MARSH RD	Active	0.0000	DDA #2-OKEMOS	235,703	249,387	13,684
33-02-02-22-152-002	301	MARSH RD	Active	0.0000	DDA #2-OKEMOS	7,984	8,400	416
33-02-02-90-200-115	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-200-120	251	2110 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-200-121	251	4750 OKEMOS RD #101	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-200-164	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-200-266	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-500-315	951	4787 OKEMOS RD #2	Active	100.0000	DDA #2-OKEMOS	0	0	0

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-90-501-800	251	4787 OKEMOS RD #1	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-502-350	951	2137 HAMILTON RD	Inactive	100.0000	DDA #2-OKEMOS	14,800	0	-14,800
33-02-02-90-502-815	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-502-902	251	4780 OKEMOS RD #1	Active	100.0000	DDA #2-OKEMOS	44,000	57,700	13,700
33-02-02-90-503-170	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-503-340	251	2154 METHODIST ST	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-504-305	251	4767 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	3,400	0	-3,400
33-02-02-90-505-620	951	4700 ARDMORE AVE #100	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-506-700	251	4663 ARDMORE AVE	Active	100.0000	DDA #2-OKEMOS	43,600	0	-43,600
33-02-02-90-510-705	251	4780 OKEMOS RD #4	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-510-800	251	2041 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-511-320	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-511-970	351	4704 MOORE ST	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-514-823	251	4646 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-514-900	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	1,838,600	1,642,700	-195,900
33-02-02-90-515-000	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	1,700	1,600	-100
33-02-02-90-515-300	951	2160 HAMILTON RD #A	Inactive	100.0000	DDA #2-OKEMOS	2,700	0	-2,700
33-02-02-90-515-504	251	VARIOUS LOCATIONS - DDA	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-515-558	251	2128 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	2,100	1,800	-300
33-02-02-90-517-700	251	4688 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-518-900	951	2143 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-519-000	251	4775 MARSH RD	Active	100.0000	DDA #2-OKEMOS	7,100	10,400	3,300
33-02-02-90-519-770	251	4775 MARSH RD	Active	100.0000	DDA #2-OKEMOS	4,800	4,500	-300
33-02-02-90-522-020	951	4737 MARSH RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-523-190	951	4661 OKEMOS RD #3	Active	100.0000	DDA #2-OKEMOS	0	0	0

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-90-523-590	251	4780 OKEMOS RD #3	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-523-950	251	4747 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-524-676	251	2108 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-525-333	251	2160 HAMILTON RD #100	Active	100.0000	DDA #2-OKEMOS	500	0	-500
33-02-02-90-525-472	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	800	500	-300
33-02-02-90-528-012	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-528-054	251	2109 HAMILTON RD #109	Active	100.0000	DDA #2-OKEMOS	100	100	0
33-02-02-90-528-088	251	4692 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-528-176	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	104,400	80,300	-24,100
33-02-02-90-528-191	251	2160 HAMILTON RD #C	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-528-416	951	2055 GRAND RIVER AVE	Inactive	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-528-475	951	2112 HAMILTON RD	Inactive	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-528-549	951	4650 MOORE ST	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-528-659	251	4632 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	39,700	39,700
33-02-02-90-528-712	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	8,700	0	-8,700
33-02-02-90-528-736	251	4646 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-528-991	251	4700 ARDMORE AVE #106	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-017	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-018	951	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-019	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-020	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-032	251	1841 NEWMAN RD	Active	100.0000	DDA #2-OKEMOS	46,000	123,000	77,000
33-02-02-90-529-054	551	VARIOUS OKEMOS DDA	Active	0.0000	DDA #2-OKEMOS	196,400	220,700	24,300
33-02-02-90-529-226	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-227	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-90-529-241	951	2104 HAMILTON RD	Inactive	100.0000	DDA #2-OKEMOS	300	0	-300
33-02-02-90-529-309	251	2109 HAMILTON RD #100-C	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-340	251	2193 ASSOCIATION DR 100	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-344	951	2085 GRAND RIVER AVE	Inactive	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-379	251	4750 OKEMOS RD #2	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-462	251	2045 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	83,900	88,300	4,400
33-02-02-90-529-463	951	VARIOUS LOCATIONS	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-466	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-467	951	2055 GRAND RIVER AVE	Inactive	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-468	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-523	251	4659 MOORE ST	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-576	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-578	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-579	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-614	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-638	951	2114 HAMILTON RD	Inactive	100.0000	DDA #2-OKEMOS	300	0	-300
33-02-02-90-529-663	951	2160 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-797	251	2131 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	159,500	113,400	-23,050*
33-02-02-90-529-799	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	1,000	1,000
33-02-02-90-529-806	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	200	200
33-02-02-90-529-817	251	2112 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-826	251	2110 METHODIST ST	Active	100.0000	DDA #2-OKEMOS	1,200	0	-1,200
33-02-02-90-529-860	251	2055 GRAND RIVER AVE #B	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-865	951	4708 OKEMOS RD	Inactive	100.0000	DDA #2-OKEMOS	2,500	0	-2,500
33-02-02-90-529-866	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-90-529-967	251	2109 HAMILTON RD #110	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-529-997	951	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-011	251	4690 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-025	251	2104 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-030	951	4646 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-113	951	2160 HAMILTON RD #C	Inactive	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-133	251	4750 OKEMOS RD #108	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-152	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-153	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	800	800
33-02-02-90-530-160	951	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-203	090	2055 GRAND RIVER AVE #C	Active	0.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-241	251	2049 GRAND RIVER AVE #A	Active	100.0000	DDA #2-OKEMOS	20,000	56,200	36,200
33-02-02-90-530-248	951	4800 OKEMOS RD	Inactive	100.0000	DDA #2-OKEMOS	1,500	0	-1,500
33-02-02-90-530-291	251	LEASED EQUIPMENT-DDA	Active	100.0000	DDA #2-OKEMOS	27,500	0	-27,500
33-02-02-90-530-333	251	4717 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-356	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-357	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-358	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	1,000	1,000
33-02-02-90-530-359	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-360	251	2055 MEIJER	Inactive	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-361	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-363	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-391	251	2075 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	249,200	187,600	-61,600
33-02-02-90-530-401	251	4733 OKEMOS RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-411	251	2109 HAMILTON RD 201	Active	100.0000	DDA #2-OKEMOS	0	0	0

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-90-530-413	251	2155 CLINTON ST	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-434	951	4700 ARDMORE AVE 104	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-436	951	4700 ARDMORE AVE 106	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-508	251	2160 HAMILTON RD C	Active	100.0000	DDA #2-OKEMOS	0	7,700	7,700
33-02-02-90-530-589	251	4750 OKEMOS RD #103	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-591	251	4750 OKEMOS RD #104	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-592	951	4750 OKEMOS RD #105	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-593	251	4750 OKEMOS RD #106	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-594	251	4750 OKEMOS RD #107	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-530-595	951	4750 OKEMOS RD #112	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-434	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-440	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-441	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-443	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-446	951	2075 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-449	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-450	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-453	251	LEASED EQUIPMENT-DDA	Active	100.0000	DDA #2-OKEMOS	0	500	500
33-02-02-90-532-455	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	100	100
33-02-02-90-532-460	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-469	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-478	251	2055 GRAND RIVER AVE	Active	100.0000	DDA #2-OKEMOS	0	1,700	1,700
33-02-02-90-532-479	251	2055 GRAND RIVER - MEIJER	Active	100.0000	DDA #2-OKEMOS	0	2,100	2,100
33-02-02-90-532-484	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-494	251	2037 GRAND RIVER AVE A	Active	100.0000	DDA #2-OKEMOS	0	1,000	1,000

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-90-532-496	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	1,500	1,500
33-02-02-90-532-515	251	4700 ARDMORE 100B	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-516	951	4700 ARDMORE 102	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-535	251	2109 HAMILTON RD 100	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-536	251	2109 HAMILTON RD 206	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-537	251	2109 HAMILTON RD 230	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-538	951	2109 HAMILTON RD 130C	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-539	951	2109 HAMILTON RD 210B	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-540	251	2109 HAMILTON RD 203	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-541	951	2109 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-542	951	2109 HAMILTON RD 200	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-561	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-562	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	800	800
33-02-02-90-532-565	251	2055 GRAND RIIVER	Active	100.0000	DDA #2-OKEMOS	0	1,300	1,300
33-02-02-90-532-566	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	500	500
33-02-02-90-532-567	951	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-597	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-598	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	5,200	5,200
33-02-02-90-532-604	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-663	951	4700 ARDMORE 103	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-664	951	4700 ARDMORE 104	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-683	251	2109 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	500	500
33-02-02-90-532-684	251	2109 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	500	500
33-02-02-90-532-686	251	2109 HAMILTON RD STE 207	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-687	251	2109 HAMILTON RD #215	Active	100.0000	DDA #2-OKEMOS	0	0	0

Parcel Number	Property Class	Property Address	Status	Homestead	DDA/LDFA	Base Taxable Value	Taxable Value 2021	Captured Value
33-02-02-90-532-688	951	2109 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	500	500
33-02-02-90-532-689	251	2109 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	500	500
33-02-02-90-532-709	951	2160 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-710	251	2160 HAMILTON RD	Active	100.0000	DDA #2-OKEMOS	0	500	500
33-02-02-90-532-913	251	2055 GRAND RIVER	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-532-928	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	0	0
33-02-02-90-632-926	251	LEASED EQUIPMENT	Active	100.0000	DDA #2-OKEMOS	0	5,400	5,400

***** DDA/LDFA Totals *****

DDA/LDFA	Count	Base Taxable Value	Taxable Value 2021	Captured Value
DDA #2-OKEMOS	257	19,823,387	21,109,492	1,210,880



LOAN TERMINATION AGREEMENT

(Charter Township of Meridian and the Meridian Township Downtown Development Authority)

THIS LOAN TERMINATION AGREEMENT (this "Termination Agreement"), dated as of _____, 2021 (the "Termination Date"), is entered into by and between **CHARTER TOWNSHIP OF MERIDIAN** ("Township", "Lender"); a public body organized and existing pursuant to Act 359, Michigan Public Acts of 1947, and the **MERIDIAN TOWNSHIP DOWNTOWN DEVELOPMENT AUTHORITY** ("DDA", "Borrower"); a public body corporate organized and existing pursuant to the Act 197, Michigan Public Acts of 1975.

RECITALS

A. The Downtown Development Authority and the Meridian Charter Township are parties to that certain Amended and Restated Loan Agreement dated as of April 4, 2017 (as amended or modified from time to time, the "Loan Agreement"). Initially capitalized words or terms used but not defined in this Termination Agreement shall have the meanings assigned to such words or terms in the Loan Agreement.

B. In connection with the transactions contemplated by that certain Amended Loan Agreement made effective as of April 4th, 2017, Borrower and Lender have agreed to terminate the Loan Documents on the terms, and subject to the conditions, set forth herein.

C. This Termination Agreement is the Loan Termination Agreement (Charter Township of Meridian and the Meridian Township Downtown Development Authority Loan Agreement).

AGREEMENT

NOW THEREFORE, FOR GOOD AND VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Termination of Loan Documents. As of the Termination Date, the Loan Documents are terminated in their entirety, and shall be of no further force or effect. As of the Termination Date, Lender releases, reconveys and otherwise terminates all liens encumbering the Collateral in favor of Lender (collectively the "Liens"). Lender agrees to execute such documentation as is reasonably requested by Borrower to evidence the termination of the Loan Documents and such release, reconveyance and/or termination of the Liens.

2. Waiver and Release. Borrower and Lender waive and release the other party from any and all claims, actions and causes of action, whether known or unknown and whether in law or in equity, that the waiving and releasing party may have against the other party arising out of, or in connection with, the Loan, the Loan Documents or the Collateral.

Initials of Authorized Borrower
DDA Chair: _____

Initials of Authorized Lender
Township Supervisor: _____



Initials of Authorized Lender
Township Clerk: _____

3. Governing Law. This Termination Agreement, and the rights of the parties hereto, shall be governed by, and construed under, the laws of the State of Michigan.

4. Counterparts. This Termination Agreement may be executed in one or more duplicate counterparts, each of which will be deemed an original but all of which together shall constitute one and the same agreement.

5. Integration. This Termination Agreement constitutes the entire agreement of the parties hereto with respect to the subject matter hereof, and supersedes, in all respects, all other communications between or among such parties, whether oral or written.

(Remainder of page intentionally left blank, signatures appear on following page)

IN WITNESS WHEREOF, this Loan Termination Agreement is executed as of the day and year first above written.

BORROWER:

Downtown Development Authority
Meridian Charter Township
Authorized Title: DDA Chair

Authorized signature: _____
Renee Korrey

LENDER:

Meridian Charter Township
Authorized Title: Township Supervisor

Authorized Signature: _____
Ron Styka

Meridian Charter Township
Authorized Title: Township Clerk

Authorized Signature: _____
Deborah Guthrie



To: Board Members
**From: Amber Clark, Neighborhoods & Economic Development Director
Derek Perry, Deputy Township Manager & Director of Public Works**
Date: June 15, 2021
Re: Community Survey Draft

The Township Board elected to have comments sent to Manager Walsh for edits pertaining to the Draft Community Survey version 3 at the last Township Board meeting. Included with this memo is Draft 4 of the Meridian Township Community Survey. Taking comments from board members, questions were removed to create a concise survey that will take residents less time to complete. A rearranging of the questions from the last presentation has like questions positioned together. This drafted survey does include one question regarding recreational marihuana in Meridian Township.

Next steps

With approval, Meridian Township staff will provide Cobalt Community Research the voter registration list for a sample mailing group. To capture members of our audience that may not be registered voters, we will allow for members of the public to take the survey online. The analysis of the entire survey will not combine the two response groups; however will provide for an overall holistic view from the community. Of the approximate 43,318 Meridian Township residents, 33,980 are registered to vote.

Township Board Options

Presented to you today are the current formatted questions, lay out and order of the survey questions. The Township Board may elect to suspend the rules and move to adopt the drafted survey with minor edits.

Motion for Consideration:

MOVE TO ADOPT THE DRAFTED SURVEY AND INSTRUCT MERIDIAN TOWNSHIP STAFF TO PROCEED WITH COBALT COMMUNITY RESEARCH.

Attachments:

- 1. Draft Survey Cover Letters
- 2. Draft Survey version 4



**REMINDER: 2021 MERIDIAN TWP
FEEDBACK REQUESTED**

C/O Cobalt Community Research
PO Box 416 | Charlotte, MI 48813

You may complete this assessment online:
www.CobaltCommunityResearch.org/MERIDIAN

STUDY ID: [ID]

NAME
ADDRESS I
ADDRESS II
CITY, STATE, ZIP

Your response will be strictly
confidential – your name will
Not be released for any purpose

DUE: Before 6/XX/21

[SAL]:

Please help improve the quality of life in Meridian Township. This short evaluation will help us understand how the Township can better meet your needs.

We really want to know what we're doing well and where we need to improve. It is very important that we hear from you.

Enclosed is a short evaluation that takes fewer than 10 minutes to complete. If there are individual questions not applicable to you or your household, select "Don't Know" and then complete the rest of the evaluation.

Please return the evaluation in the enclosed postage-paid envelope **before June xx.**

Meridian Township is reaching out to citizens like you to help meet and exceed your expectations and to ensure your tax dollars are being spent wisely. Your responses will help shape policies and priorities for the Township now and in the future.

This evaluation may be completed online by typing **<http://www.CobaltCommunityResearch.org/Meridian>** into your internet browser. Once on the evaluation page, type in the STUDY ID number shown at the top of this letter. The STUDY ID number helps us ensure we hear from you, but your response will be **strictly confidential** – your name will not be released or shared with the Township for any purpose without your permission.

The Meridian Township and Cobalt Community Research are working together on this evaluation to ensure your responses are shared anonymously with the Township and to provide outside analysis. Cobalt is a 501(c)(3) nonprofit organization created to help governmental and non-profit organizations measure, benchmark, and manage their efforts through high-quality, affordable research.

If you have any questions about this evaluation, please call the Township at (517) XXX-XXXX.

Thank you for your cooperation and your insight.



**IMPORTANT: 2021 MERIDIAN TWP
FEEDBACK REQUESTED**

C/O Cobalt Community Research
PO Box 416 | Charlotte, MI 48813

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Thank you for your cooperation and your insight.

Transportation and Public Works

6. Please think about the **transportation infrastructure** in Meridian Township and rate it on the following attributes:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
Street surface maintenance/repair	<input type="checkbox"/>						
CATA/Redi-Ride	<input type="checkbox"/>						
Pathway system for biking and walking	<input type="checkbox"/>						
Street tree maintenance and care	<input type="checkbox"/>						

7. Next, rate the **Public Works services** that you use on the following attributes:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
Drinking water quality	<input type="checkbox"/>						
Response time to water/sewer emergencies	<input type="checkbox"/>						
Storm water/drain maintenance	<input type="checkbox"/>						
Ease of paying Township utility bills	<input type="checkbox"/>						
Snow management on trails and pathways	<input type="checkbox"/>						
Streetlight maintenance	<input type="checkbox"/>						
Respectful treatment of residents/customer service	<input type="checkbox"/>						

8. Please rate the maintenance of Meridian Township's **facilities and grounds**:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
Meridian Township Hall (government offices)	<input type="checkbox"/>						
Okemos Library CADL Branch	<input type="checkbox"/>						
Haslett Library CADL Branch	<input type="checkbox"/>						
Glendale Cemetery	<input type="checkbox"/>						
Recycling/transfer station	<input type="checkbox"/>						

Community Development

9. Rate the **economic health** of Meridian Township on the following aspects:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
Cost of living	<input type="checkbox"/>						
Affordability of housing	<input type="checkbox"/>						
Availability of quality jobs	<input type="checkbox"/>						
Stability of property values	<input type="checkbox"/>						
Strength of local economy	<input type="checkbox"/>						
Access to general health care services	<input type="checkbox"/>						
Access to mental health care services	<input type="checkbox"/>						

10. Please rate your satisfaction with the following **Township services**:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
Building, plumbing and electrical inspections	<input type="checkbox"/>						
Professionalism of code enforcement staff	<input type="checkbox"/>						
Code enforcement/property maintenance in your neighborhood	<input type="checkbox"/>						
Rental inspections	<input type="checkbox"/>						
Ease of permitting services	<input type="checkbox"/>						
Plan review	<input type="checkbox"/>						

11. Do you own or operate a business in Meridian Township?

 Yes

 No

12. What would make Meridian Township a better place for small businesses?

Overall

13. Consider your experiences in the last year with Meridian Township. How satisfied are you? Use a 6-point scale, where 1 means "Very Dissatisfied" and 6 means "Very Satisfied."

Very Dissatisfied= 1

2

3

4

5

Very Satisfied= 6

14. On a scale where 1 means "Not Likely" and 6 means "Very Likely," how likely are you to take the following actions:

Not Likely= 1

2

3

4

5

Very Likely=6

Be a community volunteer

Encourage someone to start a business here

Participate in community events and festivals

Remain living here **five** years from now

15. What barriers keep you from participating more in the areas above or remaining here five years from now?

16. On a scale where 1 is "Strongly Disagree" and 6 is "Strongly Agree," to what extent do you agree that Meridian Township is:

Strongly Disagree= 1

2

3

4

5

Strongly Agree= 6

Don't Know

A safe place to live

An enjoyable place for children

An enjoyable place for young adults (age 18-35)

An enjoyable place for older adults (age 62+)

An enjoyable place for people to visit

Physically attractive/great curb appeal

A great place to have a business

A community that is growing responsibly

A safe place to bike and walk

A safe place to bike and walk at night

A perfect community for me

A place that is inclusive and celebrates diversity

17. What do you like most about living in Meridian Township?

18. What are the top improvements the Township should prioritize:

Communication Preference

19. How do you prefer to receive information from the Township (events, programs, updates, etc.)? (Mark all that apply.)

- | | | |
|---|---|--|
| <input type="checkbox"/> Email | <input type="checkbox"/> Prime Meridian Magazine | <input type="checkbox"/> Meridian Township YouTube channel |
| <input type="checkbox"/> Township website | <input type="checkbox"/> Utility bill insert | <input type="checkbox"/> Text message |
| <input type="checkbox"/> Meridian Happenings Digital Newsletter | <input type="checkbox"/> Township social media (Facebook, etc.) | <input type="checkbox"/> HOMTV Cable Channel |
| | <input type="checkbox"/> NextDoor | |

20. What types of information, updates or special topics would you like to receive from the Township?

- | | | |
|--|--|---|
| <input type="checkbox"/> Township news | <input type="checkbox"/> Township meetings | <input type="checkbox"/> Budget information |
| <input type="checkbox"/> Township projects | <input type="checkbox"/> Community events | <input type="checkbox"/> Other (note below) |

21. Which languages are spoken in your home?

22. The Federal Communications Commission (FCC) defines high-speed broadband as download speeds of up to 25 megabits per second and upload speeds of up to 3 megabits per second. The Township has a goal to provide reliable broadband access throughout the Township. Please note the type of internet service you have? (Mark all that apply.)

- | | | |
|---|--|-----------------------------------|
| <input type="checkbox"/> No access (skip to 30) | <input type="checkbox"/> Fiber | <input type="checkbox"/> Not sure |
| <input type="checkbox"/> DSL (dial up) | <input type="checkbox"/> Mobile/wireless | |
| <input type="checkbox"/> Cable Modem | <input type="checkbox"/> Satellite | |

23. How do you and your household use the internet? (Mark all that apply.)

- | | | |
|------------------------------------|---|--|
| <input type="checkbox"/> Business | <input type="checkbox"/> Personal/general use | <input type="checkbox"/> Video conferencing (Zoom, Teams, FaceTime, etc) |
| <input type="checkbox"/> Education | <input type="checkbox"/> Streaming/gaming | <input type="checkbox"/> Medical care appointments |
| <input type="checkbox"/> K-12 | | |

24. Think about the **internet and cell phone services** available in Meridian Township using the scale where 1 means "**Poor**" and 6 means "**Excellent.**" Please rate the community for providing:

	Poor= 1	2	3	4	5	Excellent= 6	Don't Know
Your ability to access high-speed broadband	<input type="checkbox"/>						
Speed of your internet connection for your household needs	<input type="checkbox"/>						
The reliability of your internet connection for your household needs	<input type="checkbox"/>						
Variety of providers available for internet access	<input type="checkbox"/>						
Cell phone reception	<input type="checkbox"/>						

25. What is your current **download** speed (if known)?

- | | | | |
|--|---|---|-------------------------------------|
| <input type="checkbox"/> Fewer than 25 megabits per second | <input type="checkbox"/> 25 to 99 megabits per second | <input type="checkbox"/> 100+ megabits per second | <input type="checkbox"/> Don't know |
|--|---|---|-------------------------------------|

26. What is your current **upload** speed (if known)?

- | | | | |
|---|--|---|-------------------------------------|
| <input type="checkbox"/> Fewer than 3 megabits per second | <input type="checkbox"/> 3 to 99 megabits per second | <input type="checkbox"/> 100+ megabits per second | <input type="checkbox"/> Don't know |
|---|--|---|-------------------------------------|

27. What Township services would you like to see available online?

28. Which **six Township services, programs or amenities** below are the most important to the people living in your household?

(Mark up to 6.)

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> Fire and ambulance services | <input type="checkbox"/> Police Services | <input type="checkbox"/> Economic development | <input type="checkbox"/> Recycling services |
| <input type="checkbox"/> Building inspection | <input type="checkbox"/> Township parks | <input type="checkbox"/> Election and voting process | <input type="checkbox"/> Road maintenance |
| <input type="checkbox"/> Code enforcement/property maintenance | <input type="checkbox"/> Township Ice Center | <input type="checkbox"/> Storm water management/flooding prevention | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Rental inspection | <input type="checkbox"/> Trails and pathways | <input type="checkbox"/> Public water and sewer | |
| <input type="checkbox"/> Permit services | <input type="checkbox"/> Trash/recycling containers in parks | | |

29. Which of the following community amenities below would you like to see **added or enhanced in the future?**

(Mark up to 6.)

- | | | | |
|---|---|---|---|
| <input type="checkbox"/> Community Center | <input type="checkbox"/> New gateway signage | <input type="checkbox"/> Outdoor seating spaces (around fire pit, fountain, game space) | <input type="checkbox"/> Pop up pedestrian spaces (streeteries, parklets, plazas) |
| <input type="checkbox"/> Community engagement opportunities | <input type="checkbox"/> Outdoor athletic fields/courts | <input type="checkbox"/> Pickleball courts | <input type="checkbox"/> Sidewalks |
| <input type="checkbox"/> Dog parks | <input type="checkbox"/> Outdoor performance space | <input type="checkbox"/> Playgrounds, indoor | <input type="checkbox"/> Sport shooting areas |
| <input type="checkbox"/> Green space | <input type="checkbox"/> Skateboard/bike park | <input type="checkbox"/> Playgrounds, outdoor | <input type="checkbox"/> Traffic enforcement |
| <input type="checkbox"/> Indoor recreational space | <input type="checkbox"/> Safe pedestrian/non-motorized railroad crossings | | <input type="checkbox"/> Walking/biking trails |

30. Residents have shared many ideas for potential improvements throughout the Township. Which of the following potential future community improvements should the Township pursue? (Mark all that apply.)

- | | |
|---|--|
| <input type="checkbox"/> Improve broadband internet access to all areas of the Township | <input type="checkbox"/> Expand/enhance pedestrian/non-motorized safety features at railroad crossing |
| <input type="checkbox"/> Improve broadband internet service to key business areas of the Township to encourage economic development | <input type="checkbox"/> Establish railroad quiet zones (crossings that eliminate need for safety horns to be sounded) |
| <input type="checkbox"/> Support installation of 5G cellular services in the Township | <input type="checkbox"/> Invest in upgrading and modernizing our water and sewer facilities |
| <input type="checkbox"/> Expand solar and other green initiatives | <input type="checkbox"/> None of these |
| <input type="checkbox"/> Expand/enhance trails and pathways | |

31. What other community amenities would you like to see considered for the future?

32. Meridian Township has an over-population of deer that has resulted in an increase of damage to landscaping, reports of vehicle/deer accidents, concern for public health, and a disruption to the ecological balance of our natural areas. In response, the Meridian Township Board directed staff to develop and implement a deer management plan that outlines measures for a highly-managed program to harvest white-tailed deer in a number of selected township-owned properties. Do you support or oppose continuation of this program?

- Support
 Oppose
 Not sure

33. In 2018 Michigan voters approved Proposal 1: the legalization of recreational use and possession of Marihuana for persons 21 years of age or older in Michigan and enactment of tax on the sale of Marihuana. Meridian Township Board approved licenses for medical marihuana only in 2019. **Do you support the establishment of recreational Marihuana retail outlets in Meridian Township?**

- Support
 Oppose
 Not sure

Meridian Township is a welcoming community. The information below helps us improve services for all of our residents. These questions are for analysis only and will not be used in any way to identify you. You may skip any questions that you are not comfortable answering.

How long have you been living in Meridian Township?

- One year or less 1-5 years 6-10 years More than 10 years

Do you own or rent/lease your residence?

- Own Rent/Lease

Is your place of employment located in Meridian Township?

- Yes No, a different community I am not currently employed I am retired

What is your age group?

- 18 to 24 25 to 34 35 to 44 45 to 54 55 to 64 65 or over

Which of the following categories best describes your level of education?

- Some high school or less High school graduate Some college College graduate Graduate degree(s)

Which of the following categories includes your total household income last year?

- \$25,000 or less \$25,001 to \$50,000 \$50,001 to \$100,000 \$100,001-\$175,000 More than \$175,000

Please indicate your marital status:

- Single Married/living with partner Widowed Separated/divorced

Mark the boxes that describe the people living in your house (other than yourself). Check all that apply.

- Child(ren) age 12 or under Adult child(ren) age 18+ Roommate None of these
 Child(ren) age 12-17 Spouse/partner Parent age 65 or older

How do you identify (check all that apply)?

- Male Non-binary Prefer to self describe (note below)
 Female Prefer not to say

To which group do you consider yourself to belong? Check all that apply.

- Asian Black/African American Indigenous American Other
 White/Caucasian Hispanic/Latinx Prefer not to say

What is your ZIP Code?

- 48864 48823 48840 48895 Other (note below)

If you are interested in participating in potential future Township planning workshops, focus groups, or similar conversations, please enter your name, email, phone number, and address below. Your identity will not be linked with your other answers in this survey.

Thank you for your time. Please return this assessment in the postage-paid envelope provided.