

AGENDA

COUNTY SERVICES COMMITTEE

111 S. Michigan Ave., Room 200, Saginaw MI 48602

Wednesday, February 5, 2020 - 4:00 p.m.

Members: Charles Stack – Chair, Cheryl Hadsall – Vice-Chair, Kyle Harris, Dennis Krafft, Michael Webster

Others: Robert Belleman, Civil Counsel, Koren Thurston, Jennifer Broadfoot, Board Staff, *The Saginaw News*, WSGW

- I. Call to order
- II. Welcome
- III. Public Comment (*Speakers limited to 3 minutes*)
- IV. Agenda

1. **Denise Babbitt, Equalization Director, re:**

- **2-18-4** Requesting approval of a proposed Independent Contractor Agreement for Equalization Services to be used when local governmental units utilize Saginaw County Equalization for property tax database maintenance and tax billing services

2. **Brian Wendling, Public Works Commissioner, re:**

- **2-18-9** Submitting the 2019 Drain Assessment Roll Report

3. **INFORMATIONAL COMMUNICATIONS (To be Received & Filed in Committee)**

- **2-18-6** **ROBERT V. BELLEMAN, CONTROLLER/CAO** submitting the 2019 Fourth Quarter Finance and Program reports on behalf of the Historical Society of Saginaw County and its four out-county museums
- **2-18-5** **CITY OF ZILWAUKEE** submitting Notice of a Public Hearing on the request of RMC Engine Rebuilding Equipment, Inc., 5775 Bridgeview Center, Saginaw, MI on its request for an Industrial Facilities Exemption Certificate

- V. Miscellaneous
- VI. Adjournment

AGENDA

COUNTY SERVICES COMMITTEE

111 S. Michigan Ave., Room 200, Saginaw MI 48602

Wednesday, March 4, 2020 - 4:00 p.m.

Members: Charles Stack – Chair, Cheryl Hadsall – Vice-Chair, Kyle Harris, Dennis Krafft, Michael Webster

Others: Robert Belleman, Civil Counsel, Koren Thurston, Jennifer Broadfoot, Board Staff, *The Saginaw News*, *WSGW*

I. Call to order

II. Welcome

III. Public Comment (*Speakers limited to 3 minutes*)

IV. Agenda

1. **Katie A. Kelly, Register of Deeds, re:**

- **3-17-2** Presenting its updated Remonumentation County Plan submitted to the State of Michigan, Bureau of Licensing and Regulatory Affairs Office

2. **Jonathan T. Webb, President & CEO, Castle Museum, re:**

- **3-17-3** Submitting millage renewal language for inclusion on the August 2020 ballot

3. **Jamie Furbush, President, Frankenmuth Convention & Visitors Bureau, re:**

- **3-17-6** Submitting its FY ending September 30, 2019 Audit

V. Miscellaneous

VI. Adjournment



COUNTY OF SAGINAW

BOARD OF COMMISSIONERS

Michael A. Webster, Chairman

Saginaw County Governmental Center
111 S. Michigan Avenue • Saginaw, Michigan 48602
Phone (989) 790-5267 • Fax (989) 790-5569 • Email boc@saginawcounty.com

STATE OF MICHIGAN

COUNTY OF SAGINAW

NOTICE IS HEREBY GIVEN: The following committee meeting(s) that were scheduled for the week of **April 6 - 10, 2020** have been cancelled as follows:

DISTRICT #1
KATHLEEN K. DWAN

DISTRICT #2
CHARLES M. STACK

DISTRICT #3
KIRK W. KILPATRICK

DISTRICT #4
SHELDON MATTHEWS

DISTRICT #5
JAMES G. THEISEN

DISTRICT #6
KYLE R. HARRIS

DISTRICT #7
CHERYL M. HADSALL

DISTRICT #8
DENNIS H. KRAFFT

DISTRICT #9
AMOS O'NEAL

DISTRICT #10
CARL E. RUTH

DISTRICT #11
MICHAEL A. WEBSTER

	<u>COMMITTEE</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>PLACE</u>
	Human Services	Monday	6th	4:00 p.m.	Rm. 200
	Cancelled				
	Courts & Public Safety	Tuesday	7th	4:00 p.m.	Rm. 200
	Cancelled				
	County Services	Wednesday	8th	4:00 p.m.	Rm. 200
	Cancelled				
	Budget/Audit	Thursday	9th	4:00 p.m.	Rm. 200
	Cancelled				

NOTE: Any committee matters to go before the Board at its April 21, 2020 session will be reviewed at an Executive Committee meeting on Tuesday, April 14, 2020 at 4:00 p.m. via Zoom.

PURPOSE: To consider matters pending before the committee, or as noted.

Meetings are open to all members of the public under Michigan's Open Meeting Act. Individuals with disabilities requiring auxiliary aids or services should contact the Board Office by writing to the address or calling the phone number listed on this letterhead.

STAFF –

SUZY KOEPLINGER
BOARD COORDINATOR

CINDY L. LOUCHART
ASSISTANT BOARD COORDINATOR

Sue Arceo
Board Assistant

Minutes available for inspection in the Board Office.

POSTED: April 3, 2020
Board Office Initials: sek



COUNTY OF SAGINAW

BOARD OF COMMISSIONERS

Michael A. Webster, Chairman

Saginaw County Governmental Center
111 S. Michigan Avenue • Saginaw, Michigan 48602
Phone (989) 790-5267 • Fax (989) 790-5569 • Email boc@saginawcounty.com

STATE OF MICHIGAN

COUNTY OF SAGINAW

NOTICE IS HEREBY GIVEN: The following committee meeting(s) that were scheduled for the week of **May 4 - 8, 2020** have been cancelled as follows:

DISTRICT #1
KATHLEEN K. DWAN

DISTRICT #2
CHARLES M. STACK

DISTRICT #3
KIRK W. KILPATRICK

DISTRICT #4
SHELDON MATTHEWS

DISTRICT #5
JAMES G. THEISEN

DISTRICT #6
KYLE R. HARRIS

DISTRICT #7
CHERYL M. HADSALL

DISTRICT #8
DENNIS H. KRAFFT

DISTRICT #9
AMOS O'NEAL

DISTRICT #10
CARL E. RUTH

DISTRICT #11
MICHAEL A. WEBSTER

<u>COMMITTEE</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>PLACE</u>
Human Services Cancelled	Monday	4th	4:00 p.m.	Rm. 200
Courts & Public Safety Cancelled	Tuesday	5th	4:00 p.m.	Rm. 200
County Services Cancelled	Wednesday	6th	4:00 p.m.	Rm. 200
Budget/Audit Cancelled	Thursday	7th	4:00 p.m.	Rm. 200

NOTE: Any committee matters to go before the Board at its May 19, 2020 session will be reviewed at an Executive Committee meeting on Tuesday, May 12, 2020 at 4:00 p.m. via Zoom.

PURPOSE: To consider matters pending before the committee, or as noted.

Meetings are open to all members of the public under Michigan's Open Meeting Act. Individuals with disabilities requiring auxiliary aids or services should contact the Board Office by writing to the address or calling the phone number listed on this letterhead.

STAFF –

SUZY KOEPLINGER
BOARD COORDINATOR

CINDY L. LOUCHART
ASSISTANT BOARD COORDINATOR

Sue Arceo
Board Assistant

Minutes available for inspection in the Board Office.

POSTED: May 1, 2020
Board Office Initials: sek

AGENDA

COUNTY SERVICES COMMITTEE

111 S. Michigan Ave., Room 200, Saginaw MI 48602

Wednesday, June 3, 2020 - 4:00 p.m.

**VIA TELECONFERENCE PER
EXECUTIVE ORDER 2020-75**

Members: Charles Stack – Chair, Cheryl Hadsall – Vice-Chair, Kyle Harris, Dennis Krafft, Michael Webster
Others: Robert Belleman, Civil Counsel, Koren Thurston, Jennifer Broadfoot, Board Staff,
Media

***The County Services Committee meeting will be held via Zoom online meeting platform.
As the County Building is closed to the public, the meeting is open remotely
to the public to follow along and participate during the public portion of the meeting, as follows:***

County of Saginaw is inviting you to a scheduled Zoom meeting.

Topic: See Agenda below

Date/Time: June 3, 2020 04:00 PM EST

Join Zoom Meeting: <https://zoom.us/j/8024441727>

Meeting ID: **802 444 1727**

INSTRUCTIONS using ZOOM audio conferencing:

Dial: **1 (877) 853-5257** or **1 (888) 475-4499** US Toll-free and enter Meeting ID: **802 444 1727**

- I. Call to order
- II. Welcome
- III. Public Comment (*Speakers limited to 3 minutes*)
- IV. Agenda
 1. **Saginaw County Convention & Visitors Bureau, re:**
 - **6-16-8** Submitting its Audited Financial Statements for FY 2019 (*Receive and File*)
 2. **INFORMATIONAL COMMUNICATIONS (To be received and filed in committee)**
 - **6-16-3** **MICHIGAN DEPARTMENT OF TREASURY** forwarding the Preliminary State Equalization Report for the 2020 tax year as approved by the State Tax Commission
- V. Miscellaneous
- VI. Adjournment

COUNTY SERVICES

6-16-8

SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC. Saginaw County, Michigan

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 MAY 28 PM 2:02

FINANCIAL STATEMENTS December 31, 2019



Gardner | Provenzano
Thomas & Luplow

CERTIFIED PUBLIC ACCOUNTANTS

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Gardner | Provenzano Thomas & Luplow

CERTIFIED PUBLIC ACCOUNTANTS

Frederick C. Gardner
Giacamo Provenzano
Heather Thomas-Verhaeghe
Brett A. Luplow

INDEPENDENT AUDITOR'S REPORT

May 8, 2020

To the Board of Directors
Saginaw County Convention
and Visitors Bureau, Inc.
Saginaw, Michigan

We have audited the accompanying financial statements of the Saginaw County Convention and Visitors Bureau (a nonprofit organization), which comprise the statements of financial position as of December 31, 2019 and 2018, and the related statements of activities, functional expenses and cash flows for the years then ended and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

To the Board of Directors
Saginaw County Convention
and Visitors Bureau, Inc.
May 8, 2020
Page Two

In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Report on Summarized Comparative Information

We have previously audited the Saginaw County Convention & Visitors Bureau's 2018 financial statements, and our report dated March 31, 2019 expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2018, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Saginaw County Convention and Visitors Bureau as of December 31, 2019 and 2018, and the changes in its net assets and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As described in Note 1 to the financial statements, the Saginaw County Convention & Visitors Bureau implemented FASB Accounting Standards Update ASU 2018-08 *Clarifying the Scope and Accounting Guidance for Contributions Received and Contributions Made*. Our opinion is not modified with respect to that matter.

Murphy, Provenzano, Thomas & Lupton

Certified Public Accountants

SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
 STATEMENTS OF FINANCIAL POSITION
 DECEMBER 31, 2019 AND 2018

	2019	2018
<u>Assets</u>		
Cash	\$ 1,110,718	\$ 935,684
Accommodation tax receivable	485,461	507,083
Prepaid expenses	4,950	4,950
Due from Great Lakes Bay Regional CVB	-	125,000
Beneficial interest in assets held by others	241,846	204,964
Total current assets	1,842,975	1,777,681
Fixed assets		
Vehicles	141,409	129,406
Office equipment	286,227	216,527
Less accumulated depreciation	(236,772)	(231,862)
Fixed assets, net	190,864	114,071
Total assets	\$ 2,033,839	\$ 1,891,752
<u>Liabilities and net assets</u>		
Current liabilities		
Accounts payable	\$ 400	\$ 13,206
Due to Great Lakes Bay Regional CVB	88,310	366,709
Total current liabilities	88,710	379,915
Net assets		
Without donor restrictions		
Designated	150,000	150,000
Undesignated	1,795,129	1,361,837
Total net assets	1,945,129	1,511,837
Total liabilities and net assets	\$ 2,033,839	\$ 1,891,752

The accompanying notes are an integral part of these financial statements.

SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
STATEMENTS OF ACTIVITIES
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

	<u>Without Donor Restrictions 2019</u>	<u>Without Donor Restrictions 2018</u>
Operating activities		
Saginaw County accommodation tax	\$ 1,910,449	\$ 1,901,643
Other income	5,450	-
Total support and revenue	<u>1,915,899</u>	<u>1,901,643</u>
Expenses		
Advertising and promotion	1,343,667	1,370,833
Management and general	178,039	173,875
Total expenses	<u>1,521,706</u>	<u>1,544,708</u>
Change in net assets from operating activities	<u>394,193</u>	<u>356,935</u>
Nonoperating activities		
Interest income	4,821	4,125
Unrealized gain (loss) on investments held by others	34,278	(22,211)
Change in net assets from nonoperating activities	<u>39,099</u>	<u>(18,086)</u>
Change in net assets	433,292	338,849
Net assets - beginning of year	<u>1,511,837</u>	<u>1,172,988</u>
Net assets - end of year	<u>\$ 1,945,129</u>	<u>\$ 1,511,837</u>

The accompanying notes are an integral part of these financial statements.

**SAGINAW COUNTY CONVENTION AND VISITORS BUREAU
STATEMENT OF FUNCTIONAL EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2019
(With Summarized Comparative Information for 2018)**

	<u>Current Year</u>			<u>Prior Year</u>
	<u>Program Activity</u>	<u>Supporting Activity</u>	<u>Total Expenses</u>	<u>Total Expenses</u>
	<u>Advertising and Promotion</u>	<u>Management and General</u>	<u>2019</u>	<u>2018</u>
Salaries and wages	\$ -	\$ 30,000	\$ 30,000	\$ 25,000
Fringe benefits	-	12,395	12,395	11,998
Payroll taxes	-	2,844	2,844	2,461
Total salary and related expenses	-	45,239	45,239	39,459
Great Lakes Bay Regional CVB	1,335,061	-	1,335,061	1,328,612
Community Spotlight Program	120	-	120	31,801
Champion program	-	-	-	96
Economic development	8,486	-	8,486	10,312
Legal and accounting	-	7,979	7,979	28,208
Postage	-	434	434	659
Equipment and maintenance	-	250	250	1,139
Stationary and supplies	-	6,951	6,951	1,188
Dues and subscriptions	-	1,341	1,341	5,600
Meetings	-	1,038	1,038	1,608
Rent	-	59,400	59,400	54,000
Insurance	-	3,502	3,502	3,123
Management fees	-	2,218	2,218	2,255
Miscellaneous	-	20	20	20
Depreciation	-	49,667	49,667	36,828
Total functional expenses	<u>\$ 1,343,667</u>	<u>\$ 178,039</u>	<u>\$ 1,521,706</u>	<u>\$ 1,544,708</u>

The accompanying notes are an integral part of these financial statements.

SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
 STATEMENTS OF CASH FLOWS
 FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

	<u>2019</u>	<u>2018</u>
Operating activities		
Increase (decrease) in net assets	\$ 433,292	\$ 338,849
Adjustment to reconcile change in net assets to net cash provided by operating activities:		
Depreciation	49,667	36,828
Gain on sale of fixed asset	(5,450)	
Net realized and unrealized (gains) losses on investments held by others	(36,882)	20,343
Changes in operating assets and liabilities which provided (used) cash:		
Accommodation tax receivable	21,622	(34,253)
Prepaid expenses	-	(450)
Accounts payable	(12,806)	6,679
Due from Great Lakes Bay Regional CVB	125,000	-
Due to Great Lakes Bay Regional CVB	(278,399)	(156,261)
Net cash provided (used) by operating activities	<u>296,044</u>	<u>211,735</u>
Investing activities		
Sale of fixed asset	5,450	-
Purchase of fixed assets	(126,460)	(43,484)
Net cash provided (used) by investing activities	<u>(121,010)</u>	<u>(43,484)</u>
Net increase (decrease) in cash and cash equivalents	175,034	168,251
Cash and cash equivalents at beginning of year	<u>935,684</u>	<u>767,433</u>
Cash and cash equivalents at end of year	<u>\$ 1,110,718</u>	<u>\$ 935,684</u>

The accompanying notes are an integral part of these financial statements.

SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
NOTES TO FINANCIAL STATEMENTS

NOTE 1--Nature of Activities and Significant Accounting Policies

Nature of Activities and Concentration of Revenue Source

The Saginaw County Convention and Visitors Bureau, Inc. (the "Bureau") is a nonprofit organization which derives substantially all of its operating revenue from accommodation taxes collected from hotel and motel facilities in Saginaw County. Its activities and resulting operating costs involve promoting overnight tourism for Saginaw County.

Basis of Presentation

The financial statements of the Bureau have been prepared on the accrual basis in accordance with accounting principles generally accepted in the United States of America. The financial statements are presented in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 958 dated August 2016, and the provisions of the American Institute of Certified Public Accountants (AICPA) "Audit and Accounting Guide for Not-for-Profit Organizations" (the "Guide"). (ASC) 958-205 was effective January 1, 2018.

Under the provisions of the Guide, net assets and revenues, and gains and losses are classified based on the existence or absence of donor-imposed restrictions. Accordingly, the net assets of the Organization and changes therein are classified as follows:

Net assets without donor restrictions: Net assets that are not subject to donor-imposed restrictions and may be expended for any purpose in performing the primary objectives of the Organization. The Organization's board may designate assets without restrictions for specific operational purposes from time to time.

Net assets with donor restrictions: Net assets subject to stipulations imposed by donors, and grantors. Some donor restrictions are temporary in nature; those restrictions will be met by actions of the Non-Profit Organization or by the passage of time. Other donor restrictions are perpetual in nature, where by the donor has stipulated the funds by maintained in perpetuity.

Contributions

Unconditional contributions are recognized when pledged and recorded as net assets without donor restrictions or net assets with donor restrictions, depending on the existence and/or nature of any donor-imposed restrictions. Conditional promises to give are recognized when the conditions on which they depend are substantially met. Gifts of cash and other assets are reported with donor restricted support if they are received with donor stipulations that limit the use of the donated assets.

SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
NOTES TO FINANCIAL STATEMENTS

NOTE 1--Summary of Significant Accounting Policies (continued)

Basis of Presentation (continued)

When a restriction expires, that is, when a stipulated time restriction ends or a purpose restriction is accomplished, net assets with donor restrictions are reclassified to net assets without donor restrictions and reported in the statement of activities as net assets released from restrictions. Donor-restricted contributions whose restrictions are met in the same reporting period are reported as net assets without donor restriction support. Donations of property and equipment are recorded as support at their estimated fair value at the date of donation. Contributions restricted for the acquisition of land, buildings, and equipment are reported as net assets without donor restriction upon acquisition of the assets and the assets are placed in service.

The Bureau had no contribution revenue during either of the years ended December 31, 2019 or 2018. All operating revenue derives from accommodation taxes.

Measure of Operations

The statements of activities reports all changes in net assets, including changes in net assets from operating and non-operating activities. Operating activities consist of those items attributable to the Bureau's ongoing activities. Non-operating activities are limited to resources that generate return from investments, endowment contributions, financing costs, and other activities considered to be of a more unusual or nonrecurring nature.

New Accounting Pronouncement

On June 21, 2018, FASB issued ASU 2018-08, (Topic 958) *Clarifying the Scope and Accounting Guidance for Contributions Received and Contributions Made*, as of the beginning of the year ended December 31, 2019. This has been adopted using the retrospective approach. Net assets did not change as a result of this change.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles require management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
NOTES TO FINANCIAL STATEMENTS

NOTE 1--Nature of Activities and Significant Accounting Policies (continued)

Cash and Cash Equivalents

Cash consists of a commercial checking account maintained in a federally insured financial institution located in Saginaw County. Deposits for the commercial checking and savings accounts are insured by the Federal Deposit Insurance Corporation up to \$250,000. At December 31, 2019, the Bureau bank balances totaled \$1,415,568. The Bureau had uninsured bank balances of \$1,165,568 at December 31, 2019. Management believes that the Bureau is not exposed to any significant interest rate or other financial risk on this account.

Cash and cash equivalents include all monies in banks and highly liquid investments with a maturity of three months or less. There were no cash equivalents at December 31, 2019 and 2018.

Accounts Receivable

Management of the Bureau considers all accounts receivable to be fully collectible; accordingly, no allowance for doubtful accounts has been provided.

Functional Allocation of Expenses

The direct costs of providing the Bureau's program and supporting services have been reported on a functional basis in the statement of activities. There were no indirect costs that required allocation during the year ended December 31, 2019.

Income Taxes

The Bureau is exempt from federal income taxes under Section 501(c)(6) of the Internal Revenue Code and is also exempt from similar state and local taxes. The Bureau is classified as an organization that is not a private foundation. Accordingly, no provision for income taxes is included in the accompanying financial statements.

Date of Management's Review

Subsequent events were evaluated through May 8, 2020, which is the date the financial statements were available to be issued.

Advertising

All advertising costs are expensed as incurred.

**SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
NOTES TO FINANCIAL STATEMENTS**

NOTE 2--Fixed Assets and Depreciation

The Bureau's vehicle, equipment, and leasehold improvements are stated at cost. Expenditures in excess of \$500 for new acquisitions and renewals and betterments which increase the productive capacity or prolong service lives of equipment are capitalized. Maintenance and repairs which do not enhance the value or extend the useful life are expensed as incurred. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets. Depreciation expense for the year ended December 31, 2019 and 2018 was \$49,667 and \$36,828, respectively.

At December 31, 2019 and 2018, the Bureau's vehicle, office equipment, and accumulated depreciation related to those assets were as follows:

	2019	2018
Vehicles	\$ 141,409	\$ 129,406
Office equipment	286,227	216,527
Less: accumulated depreciation	(236,772)	(231,862)
Net fixed assets	\$ 190,864	\$ 114,071

NOTE 3--Leases

The Bureau leases its office facility under an agreement with SSP Associates, Inc. The lease agreement expires in December 2024. At the end of the lease term, the Bureau has the option of renewing the lease for an additional five year period at the terms of the original lease agreement adjusted by the change in the Consumer Price Index.

Future commitments under this lease agreement are as follows:

Year ending December 31	
2021	\$ 59,400
2022	59,400
2023	59,400
2024	59,400
Total	\$ 237,600

Rent expense was \$59,400 for the year ended December 31, 2019 and \$54,000 for the year ended December 31, 2018.

**SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
NOTES TO FINANCIAL STATEMENTS**

NOTE 4--Related Party Transactions

In January 2011, the Saginaw County Convention and Visitors Bureau entered into a marketing partnership with the Bay County Convention and Visitors Bureau, and the Midland County Convention and Visitors Bureau to form the Great Lakes Bay Regional Convention and Visitors Bureau (GLBRCVB). The partnership allowed those organizations to combine their resources under the direction of the Great Lakes Bay Regional Convention and Visitors Bureau to more effectively market the Great Lakes Bay Region to potential overnight visitors. Under terms of the agreement, the SCCVB provides the GLBRCVB 75 percent of the accommodation tax received to fund the GLBRCVB's marketing programs and operating expenses.

The activity between the SCCVB and the GLBRCVB is summarized below.

	<u>Expense Year ended 12/31/19</u>	<u>Expense Year ended 12/31/18</u>
Accommodation tax revenue transferred to the GLBRCVB:	<u>\$ 1,335,061</u>	<u>\$ 1,328,612</u>
	<u>Due to/from GLBRCVB at 12/31/19</u>	<u>Due to/from GLBRCVB at 12/31/18</u>
Amounts due to the GLBRCVB:	<u>\$ 88,310</u>	<u>\$ 366,709</u>
Amounts due from the GLBRCVB:	<u>\$ -</u>	<u>\$ 125,000</u>

NOTE 5--Accommodations Tax

Accommodations taxes are collected by Saginaw County and are expended as required according to the Accommodations Tax Ordinance.

NOTE 6--Economic Dependence

The Bureau receives a substantial amount of its support from accommodation tax revenue. If a significant reduction in the level of this funding were to occur, the Bureau's programs and activities may be affected.

**SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
NOTES TO FINANCIAL STATEMENTS**

NOTE 7--Reserve Fund with the Saginaw Community Foundation

During the fiscal year ended September 30, 2007, the Saginaw County Convention and Visitors Bureau transferred assets totaling \$150,000 to the Saginaw Community Foundation (the "Foundation") for the purpose of creating a reserve fund. This amount of assets without donor restrictions has been designated by the Board of Directors of the Bureau for unforeseen emergency cash flow needs. The Foundation maintains legal ownership of the agency fund and administers and preserves the fund. Because this is a reserve fund, the ability to draw from the fund's principal is a negotiated and necessary element of this fund. The Bureau has the ability to draw from the fund's principal under specific conditions. If circumstances require the Bureau to draw down the principal, a repayment strategy is required to be submitted by the Bureau to the Foundation along with a request to draw down the principal of the fund. A request for principal will require two signatures; that of both the Chief Executive Officer of the Bureau and the President and Chief Executive Officer of the Foundation.

The Saginaw Convention and Visitors Bureau recognizes these assets held by the Saginaw Community Foundation in the Statement of Financial Position as beneficial interest in assets held by others. The market value of these assets at the Saginaw Community Foundation at December 31, 2019 is \$241,846 and \$204,964 at December 31, 2018.

NOTE 8--Liquidity and Availability of Financial Assets

The following reflects the Bureau's financial assets as of the balance sheet date, reduced by amounts not available for general use.

	<u>2019</u>	<u>2018</u>
Assets at year end	\$ 2,033,839	\$ 1,891,752
Less those not available for general expenditures within one year:		
Prepaid expenses	(4,950)	(4,950)
Fixed assets, net	(190,864)	(114,071)
Assets available to meet general expenditures within one year	<u>\$ 1,838,025</u>	<u>\$ 1,772,731</u>

SAGINAW COUNTY CONVENTION AND VISITORS BUREAU, INC.
NOTES TO FINANCIAL STATEMENTS

NOTE 9--Subsequent Event

As a result of the global coronavirus pandemic (COVID--19), many organizations have found their financial picture take an unanticipated change. The duration and full effects of the outbreak are currently unknown as the global picture continues to change daily. While management is hopeful that the impact is temporary in nature, a description of known and anticipated circumstances expected to have a significant impact on the Organization as of the date of management's review is as follows:

Accommodation tax revenue – The Bureau relies heavily on accommodation tax revenue that is generated by overnight hotel stays in Saginaw County. As travel has been and continues to be restricted during the COVID-19 crisis, the number of overnight hotel stays in Saginaw County have declined significantly, resulting in a substantial decrease in the revenue collected from the tax. The Bureau is closely monitoring this situation; however, it is unable to determine the impact this will have on operations at this time.



STATE OF MICHIGAN
DEPARTMENT OF TREASURY
LANSING

GRETCHEN WHITMER
GOVERNOR

COUNTY
SERVICES

RACHAEL EUBANKS
STATE TREASURER

6-16-3

May 14, 2020

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 MAY 19 PM 4:42

Enclosed please find the Preliminary State Equalization Report for the 2020 tax year that was approved by the State Tax Commission at their May 11, 2020 meeting.

If there are any discrepancies in the enclosed report, please notify our office in writing no later than 5:00 p.m. on May 22, 2020. Any objections to the Preliminary State Equalization Report by the Designated Representative from any County Board of Commissioners will be heard at the May 26, 2020 meeting of the State Tax Commission.

Should you have further questions, please do not hesitate to contact our office at (517) 335-3429 (ext. 5).

Sincerely,

David A. Buick, Executive Director
State Tax Commission

Enclosure



STATE OF MICHIGAN
DEPARTMENT OF TREASURY
LANSING

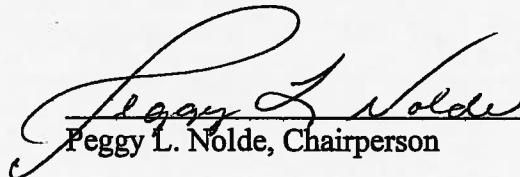
GRETCHEN WHITMER
GOVERNOR

RACHAEL EUBANKS
STATE TREASURER

May 11, 2020

We hereby certify that the valuations of the several counties in the State of Michigan as equalized by the State Tax Commission at the regular session in the year 2020, as provided by Act 44 of the Public Acts of 1911, as amended by Act 143 of the Public Acts of 1986, are as presented by the attached report.

STATE TAX COMMISSION


Peggy L. Nolde, Chairperson

Approved at May 11, 2020 STC meeting - out for
W. Howard Morris, Commissioner *signature*

Leonard D. Kutschman, Commissioner

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Alcona	36,665,000	28,944,200	11,219,600	751,366,900	N/C	N/C	828,195,700	37,738,700
Alger	10,305,800	48,438,400	9,886,000	433,244,173	N/C	N/C	501,874,373	22,598,560
Allegan	854,234,862	542,530,983	280,551,750	5,212,311,205	N/C	3,769,100	6,893,397,900	344,187,648
Alpena	88,115,150	116,699,825	33,761,100	825,410,750	N/C	N/C	1,061,988,825	71,443,797
Antrim	84,243,800	102,523,200	9,287,100	2,331,071,114	N/C	N/C	2,527,125,614	84,210,200
Arenac	114,819,400	48,314,500	8,377,000	531,514,415	N/C	N/C	703,026,315	50,062,550
Baraga	10,991,045	20,215,548	23,248,656	254,334,294	22,747,046	N/C	331,536,689	53,187,800
Barry	410,353,200	158,532,800	70,267,600	2,472,362,604	N/C	N/C	3,111,516,204	106,270,150
Bay	487,451,429	501,486,200	162,063,200	2,202,366,135	N/C	N/C	3,363,365,964	278,470,111
Benzie	28,717,059	106,073,900	4,831,800	1,893,661,489	917,400	N/C	1,832,201,628	45,058,891
Berrien	528,187,000	805,302,900	1,303,308,342	6,976,092,338	N/C	N/C	9,612,890,580	537,937,607
Branch	640,416,075	175,018,553	45,959,316	1,217,189,937	N/C	N/C	2,078,583,881	160,414,878
Calhoun	571,866,302	614,012,459	217,043,529	2,860,652,410	N/C	N/C	4,253,564,700	457,480,632
Cass	567,206,600	106,780,600	42,573,500	2,239,878,800	N/C	N/C	2,956,439,500	259,988,545
Charlevoix	56,029,100	187,672,700	43,384,800	2,606,012,978	N/C	N/C	2,893,099,578	76,801,200
Cheboygan	33,799,500	161,333,900	6,371,800	1,582,403,921	100,000	N/C	1,784,009,121	71,427,700
Chippewa	47,680,200	189,433,600	25,862,600	1,083,043,940	N/C	N/C	1,346,020,340	77,797,800
Clare	104,882,580	90,758,682	19,918,140	1,030,372,943	N/C	N/C	1,245,732,345	132,299,737
Clinton	825,387,250	488,382,189	68,727,100	2,528,703,600	N/C	N/C	3,912,200,139	154,994,411
Crawford	N/C	49,579,300	95,813,400	604,909,325	N/C	N/C	750,302,025	51,603,100
Delta	48,773,600	161,283,200	26,171,100	1,078,777,368	N/C	108,300	1,316,113,568	120,696,279
Dickinson	21,436,200	147,962,585	51,233,100	700,968,987	24,080,600	N/C	945,681,472	103,983,900
Eaton	484,062,819	738,828,674	252,760,735	2,936,376,569	N/C	9,102,700	4,420,131,497	325,199,562
Emmet	48,798,800	411,664,700	15,650,700	3,603,058,998	N/C	N/C	4,079,173,198	120,960,000
Genesee	218,131,014	2,423,356,600	303,773,500	9,178,759,910	N/C	N/C	12,124,021,024	776,228,000
Gladwin	103,635,500	56,854,250	10,690,200	1,042,597,700	N/C	N/C	1,213,777,650	64,472,600
Gogebic	1,226,526	57,273,826	14,406,169	511,141,665	24,362,296	N/C	608,409,482	82,291,292
Grand Traverse	154,982,400	1,248,367,074	93,141,000	5,582,211,881	N/C	N/C	7,078,702,355	276,011,050
Grand	882,656,722	140,794,000	46,945,900	672,550,890	N/C	N/C	1,742,947,512	479,286,843
Gratiot	601,182,451	98,128,873	41,425,676	1,210,555,085	N/C	548,000	1,952,840,085	80,670,469
Hillsdale								
Houghton	16,195,955	187,408,815	19,557,360	1,003,732,332	16,077,267	1,546,807	1,244,518,536	63,754,946
Huron	1,740,246,600	125,929,700	48,522,974	1,166,910,992	N/C	N/C	3,081,610,256	722,916,018
Ingham	467,302,938	2,535,914,964	220,250,974	6,379,509,090	N/C	2,751,000	9,606,728,966	668,322,256
Ionia	705,109,300	149,496,300	46,585,413	1,508,671,998	N/C	N/C	2,409,863,011	126,557,400
Iosco	62,816,500	116,086,400	27,827,850	1,085,040,900	N/C	4,663,200	1,296,434,850	94,295,100
Iron	18,378,730	40,145,859	41,918,889	504,854,448	37,813,155	N/C	643,111,081	59,655,163
Isabella	451,021,845	528,109,987	36,051,200	1,318,182,037	N/C	N/C	2,333,365,069	213,395,800
Jackson	465,650,980	778,104,213	159,393,316	4,312,682,674	N/C	N/C	5,715,831,183	513,593,171
Kalamazoo	330,806,231	2,326,235,900	465,439,650	7,586,881,125	N/C	N/C	10,709,162,906	665,952,503
Kalkaska	24,413,300	53,683,800	11,200,900	851,574,300	N/C	N/C	940,872,100	150,267,400
Kent	408,240,000	6,467,804,433	1,530,251,000	21,861,286,615	N/C	N/C	30,267,582,048	1,641,479,841
Keweenaw	N/C	12,604,783	202,176	216,775,538	2,933,813	N/C	232,516,310	5,823,283
Lake	31,254,400	58,047,300	1,802,300	673,963,300	N/C	N/C	765,067,300	40,725,700
Lapeer	463,956,491	289,322,430	77,150,400	3,206,048,199	N/C	3,980,100	4,040,457,620	232,887,745
Leelanau	171,979,000	194,586,790	10,450,370	3,623,899,805	N/C	N/C	4,000,918,965	63,712,394

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Lenawee	988,581,532	424,428,150	114,192,700	2,885,143,301	N/C	N/C	4,392,346,683	355,989,825
Livingston	284,144,350	1,222,573,290	338,197,690	10,042,217,988	N/C	8,864,500	11,876,997,818	573,142,430
Luce	5,862,000	16,803,138	2,822,700	204,824,080	775,500	N/C	230,687,418	10,364,983
Mackinac	14,355,013	241,046,186	19,548,472	906,771,029	3,851,700	N/C	1,185,571,400	150,894,365
Macomb	211,847,200	5,287,788,541	2,456,508,026	28,663,233,259	N/C	N/C	36,629,377,026	1,848,508,493
Manistee	41,699,100	106,498,700	27,536,700	1,236,972,708	N/C	N/C	1,412,707,208	109,260,178
Marquette	12,754,340	527,012,050	69,054,119	2,307,845,236	52,242,200	N/C	2,968,907,945	277,743,559
Mason	99,896,700	156,511,300	582,712,000	1,376,324,231	N/C	N/C	2,214,444,231	147,046,700
Mecosta	198,353,360	158,689,800	58,637,900	1,256,878,069	N/C	N/C	1,670,559,129	107,357,300
Menominee	104,443,584	75,112,839	40,193,499	763,894,326	N/C	N/C	983,844,248	74,455,192
Midland	189,628,500	540,139,100	267,357,400	2,439,195,000	N/C	N/C	3,436,320,000	516,735,700
Missaukee	170,772,500	49,827,500	9,593,200	598,568,100	N/C	N/C	828,561,300	73,937,844
Monroe	594,853,663	860,577,640	685,209,795	4,745,151,947	N/C	2,324,730	6,887,917,765	895,739,561
Montercalm	457,036,300	186,644,000	42,972,900	1,755,740,350	N/C	N/C	2,442,392,550	233,432,000
Montmorency	21,203,922	28,631,800	9,177,800	553,630,712	N/C	N/C	612,644,234	37,093,118
Muskegon	147,704,600	712,674,600	188,572,800	4,572,055,800	N/C	N/C	5,619,007,800	336,842,500
Newaygo	233,094,800	120,758,200	53,341,300	1,808,817,582	N/C	N/C	2,014,001,882	120,986,307
Oakland	83,078,430	13,049,878,829	2,468,568,940	62,000,752,770	N/C	N/C	77,592,268,960	3,603,125,954
Oceana	223,672,500	92,909,000	39,792,800	1,379,198,072	N/C	N/C	1,735,572,372	65,396,500
Ogemaw	89,474,100	107,181,900	6,321,900	826,729,836	N/C	N/C	1,031,707,735	64,146,030
Ontonagon	10,749,391	16,043,071	31,892,720	240,353,597	21,786,495	N/C	320,824,274	23,609,574
Osceola	137,698,000	45,630,300	32,333,800	676,794,091	N/C	N/C	892,456,191	96,173,500
Oscoda	12,086,400	22,610,800	8,222,200	399,028,915	N/C	N/C	431,949,115	48,119,900
Oshtemo	46,364,700	202,628,900	29,529,700	1,085,909,991	N/C	N/C	1,364,333,291	244,269,546
Ottawa	727,378,200	1,875,808,900	851,632,400	11,869,624,624	N/C	138,400	15,324,562,524	837,501,500
Presque Isle	81,144,700	25,914,400	27,659,900	660,425,890	84,000	N/C	816,228,890	33,903,700
Roscommon	4,964,500	101,831,700	1,961,900	1,514,374,650	N/C	N/C	1,623,132,750	50,669,200
Saginaw	760,546,756	1,099,418,800	167,504,400	3,699,557,697	21,900	N/C	5,727,047,553	511,169,700
Saint Clair	481,075,525	759,286,900	565,743,640	5,338,286,542	N/C	N/C	7,162,402,607	1,064,013,160
Saint Joseph	771,405,791	198,683,200	117,522,600	1,708,810,929	N/C	N/C	2,797,422,520	276,345,748
Sanilac	1,331,686,124	124,287,818	23,769,766	1,055,825,782	N/C	N/C	2,535,570,490	223,751,505
Schoolcraft	6,436,700	32,553,300	11,241,300	362,026,646	1,499,000	N/C	413,726,946	54,448,294
Shiawassee	578,630,200	217,354,290	39,677,760	1,617,220,516	N/C	N/C	2,452,882,766	122,646,359
Tuscola	986,990,366	98,543,550	38,321,500	1,184,605,341	N/C	N/C	2,318,480,757	534,704,449
Van Buren	428,414,100	259,893,900	122,103,800	3,016,051,300	N/C	N/C	3,826,463,100	613,253,400
Washtenaw	544,197,980	5,113,361,273	530,644,910	16,429,142,339	N/C	N/C	22,662,359,812	1,240,391,927
Wayne	26,087,000	11,637,139,325	3,734,367,850	38,192,048,501	N/C	305,400	53,589,928,076	4,430,718,639
Wexford	46,669,100	142,938,000	50,923,700	996,179,575	N/C	N/C	1,238,710,375	79,513,900
TOTALS	24,553,750,881	69,841,154,576	19,908,615,072	341,422,127,968	209,261,372	73,115,537	466,008,025,206	30,842,019,912

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Alcona	36,665,000	28,944,200	11,219,600	751,366,900	N/C	N/C	828,195,700	37,738,700
Alger	10,305,800	48,438,400	9,886,000	433,244,173	N/C	N/C	501,874,373	22,596,560
Allegan	854,234,862	542,530,983	280,551,750	5,212,311,205	N/C	3,769,100	6,893,367,900	344,187,648
Alpena	86,115,150	116,699,825	33,761,100	826,410,750	N/C	N/C	1,061,986,825	71,443,797
Antrim	84,243,800	102,523,200	9,287,500	2,331,071,114	N/C	N/C	2,527,125,614	84,210,200
Arenac	114,819,400	48,314,600	8,377,000	531,514,415	N/C	N/C	703,025,315	50,062,550
Baraga	10,991,045	20,215,648	23,248,656	254,334,294	22,747,046	N/C	331,536,689	53,187,800
Barry	410,353,200	168,532,800	70,267,600	2,472,362,604	N/C	N/C	3,111,516,204	106,270,150
Bay	497,451,429	501,486,200	162,063,200	2,202,365,135	N/C	N/C	3,363,365,964	278,470,111
Benzie	26,717,059	106,587,405	4,831,800	1,893,661,499	917,400	N/C	1,832,715,133	45,068,891
Berrien	528,187,000	805,302,900	1,303,308,342	6,976,082,338	N/C	N/C	9,612,890,580	537,937,607
Branch	640,416,075	175,018,553	45,959,316	1,217,189,937	N/C	N/C	2,078,583,881	160,414,878
Calhoun	571,856,302	614,012,459	217,043,529	2,860,652,410	N/C	N/C	4,253,564,700	457,480,632
Cass	568,198,243	106,754,383	42,623,294	2,241,548,936	N/C	N/C	2,959,125,856	259,988,545
Charlevoix	56,029,100	187,672,700	43,384,800	2,606,012,878	N/C	N/C	2,893,099,578	76,801,200
Cheboygan	33,799,500	161,333,900	6,371,800	1,582,403,921	100,000	N/C	1,784,009,121	71,427,700
Chippewa	47,680,200	189,433,600	25,862,600	1,083,043,940	N/C	N/C	1,346,020,340	77,797,800
Clare	104,682,580	90,758,882	19,918,140	1,030,372,943	N/C	N/C	1,245,732,345	132,299,737
Clinton	825,387,250	498,382,189	68,727,100	2,529,703,600	N/C	N/C	3,912,200,139	154,694,411
Crawford	N/C	49,579,300	95,813,400	604,909,325	N/C	N/C	750,302,025	51,603,100
Delta	48,773,600	161,283,200	26,171,100	1,079,777,368	N/C	108,300	1,316,113,588	120,896,279
Dickinson	21,436,200	147,962,595	51,233,100	700,968,987	24,080,600	N/C	945,681,472	103,983,900
Eaton	484,062,819	738,828,674	252,760,735	2,935,376,569	N/C	9,102,700	4,420,131,497	325,199,562
Emmet	48,798,800	411,684,709	15,650,700	3,603,058,998	N/C	N/C	4,079,173,198	120,990,000
Genesee	218,131,014	2,423,366,600	303,773,500	9,178,759,910	N/C	N/C	12,124,021,024	776,228,000
Gladwin	103,635,500	56,854,250	10,690,200	1,042,597,700	N/C	N/C	1,213,777,650	54,472,600
Gogebic	1,226,526	57,273,826	14,405,169	504,909,913	24,487,761	N/C	602,303,195	82,291,292
Grand Traverse	154,982,400	1,248,367,074	83,141,000	5,582,211,881	N/C	N/C	7,078,702,355	276,011,050
Grafton	882,656,722	140,794,000	46,945,900	672,550,890	N/C	N/C	1,742,947,512	479,285,843
Hillsdale	601,182,451	99,128,873	41,425,676	1,210,555,085	N/C	548,000	1,952,840,085	80,670,469
Houghton	16,195,955	189,991,085	19,557,360	1,003,732,332	16,077,267	1,546,807	1,247,100,806	63,754,946
Huron	1,740,246,800	125,929,700	48,522,974	1,166,910,982	N/C	N/C	3,081,610,256	722,916,018
Ingham	467,302,938	2,535,914,964	220,250,974	6,379,509,090	N/C	2,751,000	9,605,728,966	668,322,256
Ironia	705,109,300	149,496,300	46,928,519	1,525,437,753	N/C	N/C	2,426,971,872	126,557,400
Iosco	62,816,500	116,086,400	27,827,850	1,085,040,900	N/C	4,663,200	1,296,434,850	94,296,100
Iron	18,378,730	40,145,859	41,918,889	504,854,448	37,813,155	N/C	643,111,081	59,655,163
Isabella	451,021,845	528,109,987	36,051,200	1,318,182,037	N/C	N/C	2,333,365,069	213,395,800
Jackson	465,650,980	778,104,213	159,393,316	4,312,682,674	N/C	N/C	5,715,831,183	513,593,171
Kalamazoo	330,806,231	2,326,235,900	465,439,650	7,586,881,125	N/C	N/C	10,709,162,906	665,952,503
Kalkaska	24,413,300	53,663,600	11,200,900	851,574,300	N/C	N/C	940,872,100	150,267,400
Kent	408,240,000	6,467,804,433	1,530,251,000	21,861,286,615	N/C	N/C	30,267,582,048	1,641,479,841
Keweenaw	N/C	12,504,783	202,176	216,775,538	2,933,813	N/C	232,516,310	5,623,283
Lake	31,254,400	58,047,300	1,802,300	673,963,300	N/C	N/C	765,067,300	40,725,700
Lapeer	463,966,491	289,322,430	77,150,400	3,206,048,199	N/C	3,980,100	4,040,457,620	232,887,745
Leelanau	171,979,000	194,589,780	10,450,370	3,623,899,805	N/C	N/C	4,000,918,955	63,712,394

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Lenawee	968,581,532	424,428,150	114,192,700	2,885,143,301	N/C	N/C	4,392,345,863	355,989,625
Livingston	264,144,350	1,222,573,290	338,197,690	10,042,217,988	N/C	8,864,500	11,875,997,818	573,142,430
Luce	5,862,000	16,603,138	2,822,700	204,824,080	775,500	N/C	230,687,418	10,364,983
Mackinac	14,355,013	241,045,186	19,548,472	906,771,029	3,851,700	N/C	1,185,571,400	150,894,365
Macomb	211,847,200	5,297,788,541	2,456,508,026	28,663,233,259	N/C	N/C	36,628,377,026	1,848,506,493
Manistee	41,699,100	106,498,700	27,536,700	1,236,972,708	N/C	N/C	1,412,707,208	109,260,178
Marquette	12,764,340	524,885,770	69,048,162	2,307,845,236	52,242,200	N/C	2,966,575,708	277,743,559
Mason	99,896,700	156,511,300	582,712,000	1,376,324,231	N/C	N/C	2,214,444,231	147,046,700
Mecosta	198,353,380	158,689,800	56,637,900	1,256,878,069	N/C	N/C	1,670,559,129	107,367,300
Menominee	104,443,584	75,112,839	40,193,499	763,894,326	N/C	N/C	983,644,248	74,455,192
Midland	189,628,500	540,139,100	267,357,400	2,439,195,000	N/C	N/C	3,436,320,000	516,735,700
Missaukee	170,772,500	49,627,500	9,593,200	598,568,100	N/C	N/C	828,561,300	73,937,644
Monroe	594,653,653	880,577,640	685,209,795	4,745,151,947	N/C	2,324,730	6,887,917,765	895,739,581
Montcalm	457,036,300	186,644,000	42,972,900	1,755,740,350	N/C	N/C	2,442,392,550	233,432,000
Montmorency	21,203,922	28,631,800	9,177,800	553,630,712	N/C	N/C	612,644,234	37,093,118
Muskegon	147,704,600	712,674,600	186,572,800	4,572,055,800	N/C	N/C	5,619,007,800	336,842,500
Newaygo	233,084,800	120,758,200	53,341,300	1,606,769,217	N/C	N/C	2,013,953,517	120,896,307
Oakland	83,078,430	13,049,878,820	2,458,559,940	62,000,752,770	N/C	N/C	77,592,269,960	3,603,125,954
Oceana	223,672,500	92,909,000	39,792,800	1,379,198,072	N/C	N/C	1,735,572,372	66,396,500
Ogemaw	89,474,100	107,161,900	8,321,900	826,729,835	N/C	N/C	1,031,707,735	64,146,030
Ontonagon	10,749,391	16,043,071	31,892,720	240,353,597	21,786,495	N/C	320,824,274	23,609,574
Oscoda	137,699,000	45,630,300	32,333,800	676,794,091	N/C	N/C	892,466,191	96,173,500
Oscoda	12,086,400	22,610,600	8,222,200	389,029,915	N/C	N/C	431,949,115	48,119,900
Oshtego	46,364,700	202,528,900	29,529,700	1,085,909,991	N/C	N/C	1,364,333,291	244,269,546
Ottawa	727,378,200	1,875,808,900	853,253,256	11,869,624,624	N/C	138,400	15,326,203,380	837,501,500
Presque Isle	81,144,700	25,914,400	27,659,900	680,425,890	84,000	N/C	815,228,890	33,903,700
Roscommon	4,964,500	101,831,700	1,961,900	1,514,374,650	N/C	N/C	1,623,132,750	50,669,200
Saginaw	760,546,756	1,099,416,800	167,504,400	3,699,548,688	21,900	N/C	5,727,038,524	511,169,700
Saint Clair	481,075,525	769,296,900	585,743,640	5,336,286,542	N/C	N/C	7,162,402,607	1,064,013,180
Saint Joseph	771,406,791	199,663,200	117,522,600	1,708,810,929	N/C	N/C	2,797,422,520	275,345,748
Sanilac	1,330,906,363	124,287,818	23,769,766	1,058,419,905	N/C	N/C	2,537,383,852	223,751,505
Schoolcraft	6,436,700	32,553,300	11,241,300	362,026,846	1,469,000	N/C	413,726,946	54,448,294
Shiawassee	578,630,200	217,354,290	39,677,760	1,617,220,516	N/C	N/C	2,452,882,766	122,646,359
Tuscola	996,990,366	98,543,550	38,321,500	1,184,905,341	N/C	N/C	2,318,460,757	534,704,449
Van Buren	428,414,100	259,893,900	122,103,800	3,016,051,300	N/C	N/C	3,826,463,100	613,253,400
Washtenaw	544,197,990	5,113,361,273	530,644,910	16,429,142,339	N/C	35,013,300	22,652,359,812	1,240,391,927
Wayne	26,067,000	11,637,139,325	3,734,367,850	38,192,048,501	N/C	305,400	53,689,928,076	4,430,718,639
Wexford	46,666,100	142,938,000	50,923,700	986,179,575	N/C	N/C	1,238,710,375	79,513,900
TOTALS	24,553,982,563	69,841,897,854	19,910,622,871	341,436,868,836	209,366,837	73,115,537	456,025,854,498	30,842,019,912

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Alcona	37,977,000	27,408,800	11,450,900	714,370,900	N/C	N/C	791,207,700	38,232,100
Alger	9,909,400	42,276,201	9,751,500	424,629,158	N/C	N/C	486,586,257	22,236,240
Allegan	831,544,809	516,112,829	258,692,687	4,873,597,428	N/C	5,042,441	6,485,080,194	328,964,269
Alpena	88,413,600	114,884,700	36,338,300	781,264,725	N/C	N/C	1,020,901,325	68,686,223
Antrim	79,954,800	92,868,800	9,136,000	2,165,458,046	N/C	N/C	2,347,417,646	90,145,900
Arenac	104,450,700	48,027,900	8,278,800	506,618,860	N/C	N/C	667,377,280	46,616,550
Baraga	10,754,847	20,592,946	22,740,365	251,977,890	23,340,413	N/C	329,406,461	40,344,776
Barry	390,051,250	148,686,700	68,109,500	2,329,772,335	N/C	N/C	2,938,619,785	105,919,220
Bay	528,528,110	438,386,200	150,119,800	2,069,894,363	N/C	N/C	3,186,928,473	221,147,218
Benzie	26,201,712	97,980,500	5,266,800	1,630,433,246	1,105,100	N/C	1,760,987,358	42,119,800
Berrien	534,363,600	789,736,133	1,279,874,500	6,796,011,576	N/C	N/C	9,399,985,809	506,987,070
Branch	613,483,835	163,618,142	39,780,692	1,127,656,320	N/C	N/C	1,944,518,989	152,792,036
Calhoun	539,533,714	598,978,870	209,964,425	2,683,950,286	N/C	N/C	4,032,427,295	467,263,496
Cass	553,667,900	103,658,800	40,189,700	2,141,060,166	N/C	N/C	2,838,576,586	241,796,594
Charlevoix	53,708,688	181,429,395	45,831,300	2,448,889,102	N/C	N/C	2,730,859,485	76,608,333
Cheboygan	33,954,550	159,405,650	5,977,600	1,517,899,630	100,000	3,809,400	1,721,146,830	66,916,450
Chippewa	49,023,800	170,122,900	25,965,100	1,046,296,300	N/C	N/C	1,291,408,100	75,320,475
Clare	97,750,907	86,541,754	19,063,118	966,705,146	N/C	N/C	1,170,060,925	123,308,508
Clinton	808,082,300	446,686,040	57,312,200	2,360,724,350	N/C	N/C	3,671,804,890	148,481,250
Crawford	133,500	48,238,000	95,195,700	568,353,880	N/C	N/C	709,921,080	53,245,000
Delta	47,367,176	172,853,600	25,904,426	1,062,182,401	N/C	109,100	1,298,416,703	120,014,615
Dickinson	22,152,317	148,935,588	49,515,200	679,593,485	24,380,500	N/C	924,677,090	103,072,698
Eaton	486,571,994	707,468,715	206,046,175	2,755,809,496	N/C	9,174,500	4,165,070,880	317,150,798
Emmet	46,360,155	389,459,200	14,629,500	3,393,404,725	N/C	N/C	3,843,853,580	108,184,000
Genesee	208,183,150	2,336,372,064	289,946,200	8,504,602,416	N/C	N/C	11,339,103,830	696,460,185
Gladwin	96,337,200	51,741,050	9,942,450	969,350,511	N/C	N/C	1,127,371,211	51,119,160
Gogebic	1,108,625	56,230,738	14,003,030	504,136,247	25,528,742	N/C	601,007,382	73,822,983
Grand Traverse	149,612,400	1,140,530,600	89,888,100	5,196,659,937	N/C	N/C	6,576,691,037	261,628,431
Gratiot	872,097,423	134,038,842	41,668,581	633,980,282	N/C	N/C	1,691,785,128	369,319,100
Hillsdale	578,171,251	99,110,610	40,461,245	1,118,363,375	N/C	662,400	1,826,768,881	82,266,011
Houghton	16,553,368	181,098,815	15,645,697	981,529,995	18,134,426	2,278,522	1,215,240,823	64,992,875
Huron	1,775,558,200	120,853,500	50,636,000	1,106,635,293	N/C	N/C	3,053,682,993	784,769,900
Ingham	418,888,955	2,305,359,227	209,257,265	6,004,564,278	N/C	3,101,400	8,941,151,125	671,281,104
Ionia	697,078,095	148,508,900	43,608,300	1,407,805,905	N/C	N/C	2,297,002,200	111,373,300
Iosco	60,858,600	109,050,354	25,285,000	1,040,072,430	N/C	4,682,800	1,239,949,184	91,911,600
Iron	18,527,779	39,476,794	40,609,863	486,741,452	38,196,563	N/C	633,552,471	54,576,286
Isabella	437,599,134	533,937,500	34,598,700	1,265,089,400	N/C	N/C	2,271,224,734	167,223,011
Jackson	452,549,017	758,996,389	156,501,349	3,929,522,103	N/C	1,674,300	5,299,243,158	503,369,967
Kalamazoo	328,448,799	2,078,513,788	434,818,350	7,079,917,979	N/C	N/C	9,922,696,916	655,834,791
Kalkaska	24,063,600	56,002,300	9,483,900	786,443,200	N/C	N/C	875,983,000	143,630,300
Kent	382,120,000	5,911,965,222	1,438,231,200	20,119,508,050	N/C	N/C	27,851,824,472	1,650,256,100
Keweenaw	N/C	12,866,700	75,912	204,172,583	2,894,901	N/C	702,010,096	5,314,943
Lake	29,908,200	57,144,200	1,523,900	614,423,600	N/C	N/C	720,999,900	39,844,500
Lapeer	444,374,880	263,905,392	71,966,700	2,976,584,993	N/C	3,913,200	3,760,745,165	233,087,391
Leelanau	169,894,170	184,990,339	11,367,470	3,470,426,556	N/C	N/C	3,836,678,635	57,586,313

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Lenawee	962,898,576	416,847,149	111,411,100	2,730,115,794	N/C	N/C	4,221,272,608	348,257,732
Livingston	255,044,130	1,167,882,070	320,914,580	9,334,165,509	N/C	5,468,500	11,073,474,789	562,943,966
Luce	5,278,500	17,561,400	3,164,900	298,627,600	651,000	N/C	235,283,400	10,243,707
Mackinac	13,919,599	227,368,039	18,320,623	885,254,440	3,777,600	N/C	1,148,630,301	147,575,328
Macomb	212,674,200	4,948,354,566	2,280,364,680	26,649,318,648	N/C	N/C	34,088,712,082	1,801,236,491
Manistee	40,223,400	103,976,400	50,762,500	1,183,232,450	N/C	N/C	1,378,184,750	89,939,760
Marquette	13,257,556	520,077,582	73,974,921	2,222,729,593	53,021,950	N/C	2,883,061,601	207,438,209
Mason	96,728,900	166,381,200	536,508,700	1,323,924,980	N/C	N/C	2,113,639,460	160,476,500
Mecosta	198,613,700	157,016,600	55,260,500	1,181,044,385	N/C	N/C	1,591,935,185	106,282,100
Memphis	104,400,381	74,116,211	36,695,022	762,044,926	N/C	N/C	967,256,540	73,906,570
Midland	166,678,300	506,585,316	262,301,100	2,334,910,550	N/C	N/C	3,290,476,266	533,391,500
Missaukee	166,938,900	46,468,700	9,018,600	571,839,900	N/C	N/C	794,266,000	70,763,100
Monroe	561,328,241	818,367,050	1,130,029,990	4,451,098,690	N/C	7,005,200	6,967,829,171	495,767,181
Montcalm	445,450,800	183,181,200	43,560,800	1,600,166,600	N/C	N/C	2,272,359,400	213,766,700
Montmorency	19,232,000	28,803,400	9,401,900	519,328,734	N/C	N/C	576,568,034	43,617,910
Muskegon	145,973,600	711,649,900	178,835,800	4,238,183,084	N/C	N/C	5,274,642,384	326,230,670
Newaygo	231,212,700	116,551,700	52,198,500	1,493,453,900	N/C	N/C	1,893,416,800	110,801,967
Oakland	78,490,550	12,230,078,570	2,308,382,440	58,567,480,435	N/C	N/C	73,184,421,995	3,531,580,300
Oceana	218,845,517	91,191,600	36,758,900	1,302,076,933	N/C	N/C	1,648,872,950	59,968,300
Ogemaw	89,618,438	106,454,700	8,227,500	782,450,500	N/C	N/C	966,751,138	65,589,510
Ontonagon	10,545,787	15,617,629	31,291,304	231,214,863	22,221,418	N/C	310,891,001	21,127,666
Osceola	137,766,300	45,503,300	30,253,350	637,059,701	N/C	N/C	850,582,651	90,608,400
Oscoda	12,177,400	21,399,800	8,454,400	374,594,830	N/C	N/C	416,626,430	45,297,800
Oshtemo	49,000,700	187,543,251	26,045,065	1,013,563,848	N/C	N/C	1,276,152,862	249,560,100
Ottawa	673,756,900	1,680,456,900	755,862,300	10,987,914,553	N/C	155,900	14,098,146,553	850,050,844
Presque Isle	80,623,700	25,056,300	27,302,500	683,476,000	84,000	N/C	796,542,500	28,712,747
Roscommon	4,927,800	100,927,300	2,031,900	1,429,387,540	N/C	N/C	1,537,274,440	48,225,700
Saginaw	767,070,800	1,090,697,050	146,093,200	3,518,600,250	19,000	N/C	5,522,480,300	509,646,524
Saint Clair	483,262,272	727,881,650	881,363,100	4,928,886,250	N/C	N/C	7,019,193,272	782,040,588
Saint Joseph	745,669,527	185,674,056	122,955,950	1,595,359,419	N/C	N/C	2,649,649,952	280,782,193
Sanilac	1,335,119,012	111,928,280	18,675,007	1,003,193,770	113,700	4,902,400	2,473,932,169	226,391,239
Schoolcraft	5,942,100	31,869,400	12,519,700	363,082,900	1,515,300	N/C	404,929,400	50,135,778
Shiawassee	568,249,100	207,668,850	37,658,600	1,500,403,085	N/C	N/C	2,311,979,635	114,463,700
Tuscola	1,007,590,517	94,006,100	37,848,300	1,109,929,134	N/C	N/C	2,249,374,051	446,063,604
Van Buren	437,423,897	251,913,900	95,917,000	2,844,029,081	N/C	N/C	3,628,283,878	668,646,900
Washtenaw	534,329,140	4,853,078,268	509,532,660	15,324,795,391	N/C	28,002,700	21,249,738,359	1,178,432,732
Wayne	26,478,100	11,374,546,635	3,563,599,057	35,144,019,870	N/C	N/C	50,108,643,662	4,303,024,832
Wexford	47,034,138	135,904,600	51,175,500	911,670,413	N/C	N/C	1,145,784,651	76,355,900
TOTALS	24,127,707,286	66,044,428,409	19,610,294,569	319,596,513,032	215,084,613	79,982,763	429,674,010,672	29,241,372,608

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Alcona	36,665,000	28,944,200	11,219,600	751,366,900	N/C	N/C	828,196,700	37,738,700
Alger	10,305,800	48,438,400	9,886,000	433,244,173	N/C	N/C	501,874,373	22,586,560
Allegan	854,234,862	542,530,983	280,551,750	5,212,311,205	N/C	3,768,100	6,893,397,900	344,187,648
Alpena	86,115,150	116,689,825	33,761,100	825,410,750	N/C	N/C	1,061,986,825	71,443,797
Antrim	84,243,800	102,523,200	9,287,500	2,331,071,114	N/C	N/C	2,527,125,614	84,210,200
Arenac	114,819,400	48,314,500	8,377,000	531,514,415	N/C	N/C	703,025,315	50,062,550
Baraga	10,991,045	20,215,648	23,248,656	254,334,294	22,747,046	N/C	331,536,689	53,187,800
Barny	410,353,200	158,532,800	70,267,600	2,472,362,604	N/C	N/C	3,111,516,204	106,270,150
Bay	497,451,429	501,486,200	162,063,200	2,202,365,135	N/C	N/C	3,363,365,964	278,470,111
Benzie	28,717,059	106,587,405	4,831,800	1,893,661,469	917,400	N/C	1,832,715,133	45,068,891
Berrien	528,187,000	805,302,900	1,303,308,342	6,976,092,338	N/C	N/C	9,612,890,580	537,937,607
Branch	640,416,075	175,018,553	45,959,316	1,217,189,937	N/C	N/C	2,078,583,881	160,414,878
Calhoun	571,856,302	614,012,459	217,043,529	2,850,652,410	N/C	N/C	4,253,564,700	457,480,632
Cass	568,198,243	106,754,363	42,623,294	2,241,549,936	N/C	N/C	2,969,125,856	259,988,545
Charlevoix	56,029,100	187,672,700	43,384,800	2,606,012,978	N/C	N/C	2,893,099,578	76,801,200
Cheboygan	33,799,500	161,333,900	6,371,800	1,582,403,921	100,000	N/C	1,784,009,121	71,427,700
Chippewa	47,680,200	189,433,600	25,862,600	1,063,043,940	N/C	N/C	1,346,020,340	77,797,800
Clare	104,682,580	90,758,682	19,918,140	1,030,372,943	N/C	N/C	1,245,732,345	132,299,737
Clinton	825,387,250	488,382,189	68,727,100	2,529,703,600	N/C	N/C	3,912,200,139	154,694,411
Crawford	N/C	49,579,300	95,813,400	604,909,325	N/C	N/C	750,302,025	51,603,100
Delta	48,773,600	161,283,200	26,171,100	1,079,777,368	N/C	108,300	1,316,113,568	120,696,279
Dickinson	21,438,200	147,962,585	51,233,100	700,968,987	24,080,600	N/C	945,681,472	103,983,900
Eaton	484,062,819	738,828,674	252,760,735	2,935,376,569	N/C	9,102,700	4,420,131,497	325,199,562
Emmet	48,798,800	411,664,700	15,650,700	3,603,058,998	N/C	N/C	4,079,173,198	120,960,000
Genesee	218,131,014	2,423,356,600	303,773,500	9,178,759,910	N/C	N/C	12,124,021,024	776,228,000
Gladwin	103,635,500	56,854,250	10,690,200	1,042,597,700	N/C	N/C	1,213,777,650	54,472,600
Gogebic	1,226,526	57,273,826	14,405,169	504,909,913	24,487,761	N/C	602,303,195	82,291,292
Grand Traverse	154,982,400	1,248,367,074	93,141,000	5,582,211,881	N/C	N/C	7,078,702,355	276,011,050
Grand Island	882,656,722	140,794,000	46,945,900	672,550,890	N/C	N/C	1,742,947,512	479,285,843
Hillsdale	601,182,451	99,128,873	41,425,676	1,210,555,085	N/C	548,000	1,952,840,085	80,670,469
Houghton	16,195,955	189,991,085	19,557,360	1,003,732,332	16,077,267	1,546,807	1,247,100,806	63,754,946
Huron	1,740,246,600	125,929,700	48,522,974	1,196,910,982	N/C	N/C	3,091,610,256	722,916,018
Ingham	467,302,938	2,535,914,964	220,250,974	6,379,509,090	N/C	2,751,000	9,605,728,986	668,322,256
Ironia	705,109,300	149,496,300	46,928,519	1,525,437,753	N/C	N/C	2,426,971,872	126,557,400
Iosco	62,816,500	116,088,400	27,827,850	1,085,040,900	N/C	4,663,200	1,296,434,850	94,295,100
Iron	18,378,730	40,145,859	41,918,889	504,854,448	37,813,155	N/C	643,111,081	59,655,163
Isabella	451,021,845	528,109,987	36,051,200	1,318,182,037	N/C	N/C	2,333,365,069	213,395,800
Jackson	465,650,980	778,104,213	159,393,316	4,312,682,674	N/C	N/C	5,715,831,183	513,593,171
Kalamazoo	330,608,231	2,326,235,900	465,439,650	7,586,881,125	N/C	N/C	10,709,162,906	665,952,503
Kalkaska	24,413,300	53,683,600	11,200,900	851,574,300	N/C	N/C	940,872,100	150,267,400
Kent	408,240,000	6,467,804,433	1,530,251,000	21,861,286,615	N/C	N/C	30,287,582,048	1,641,479,841
Keweenaw	N/C	12,604,783	202,176	216,775,538	2,933,813	N/C	232,516,310	5,623,283
Lake	31,254,400	58,047,300	1,802,300	673,963,300	N/C	N/C	765,067,300	40,725,700
Lapeer	463,956,491	289,322,430	77,150,400	3,206,048,199	N/C	3,980,100	4,040,457,620	232,887,745
Leelanau	171,979,000	194,589,790	10,450,370	3,623,999,805	N/C	N/C	4,000,918,965	63,712,394

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Lenawee	968,581,532	424,428,150	114,192,700	2,885,143,301	N/C	N/C	4,392,345,663	355,989,625
Livingston	264,144,350	1,222,573,290	338,197,690	10,042,217,988	N/C	8,864,500	11,875,997,818	573,142,430
Luce	5,662,000	16,603,138	2,822,700	204,824,080	775,500	N/C	230,687,418	10,364,983
Mackinac	14,355,013	241,045,186	19,648,472	906,771,029	3,851,700	N/C	1,185,571,400	150,894,365
Macomb	211,847,200	5,297,788,541	2,456,508,028	28,663,233,259	N/C	N/C	36,829,377,026	1,848,506,493
Manistee	41,699,100	106,498,700	27,536,700	1,236,972,708	N/C	N/C	1,412,707,208	109,260,178
Marquette	12,754,340	524,685,770	69,048,162	2,307,845,236	52,242,200	N/C	2,966,575,708	277,743,559
Mason	99,896,700	156,511,300	582,712,000	1,375,324,231	N/C	N/C	2,214,444,231	147,046,700
Mecosta	198,353,380	158,689,800	56,637,900	1,256,878,069	N/C	N/C	1,870,559,129	107,367,300
Menominee	104,443,584	75,112,839	40,193,499	763,994,326	N/C	N/C	983,644,248	74,455,192
Midland	189,628,500	540,139,100	267,357,400	2,439,195,000	N/C	N/C	3,436,320,000	516,735,700
Missaukee	170,772,500	49,627,500	9,593,200	598,568,100	N/C	N/C	828,561,300	73,937,644
Monroe	594,653,653	880,577,640	685,209,795	4,745,151,947	N/C	2,324,730	6,887,917,785	896,739,581
Montcalm	457,035,300	186,644,000	42,972,900	1,755,740,350	N/C	N/C	2,442,392,550	233,432,000
Montmorency	21,203,922	28,631,800	9,177,800	553,630,712	N/C	N/C	612,644,234	37,093,118
Muskegon	147,704,600	712,674,600	186,572,800	4,572,055,800	N/C	N/C	5,619,007,800	336,842,500
Newaygo	233,084,800	120,758,200	53,341,300	1,606,769,217	N/C	N/C	2,013,953,517	120,996,307
Oakland	83,078,430	13,049,878,820	2,458,568,940	62,000,752,770	N/C	N/C	77,592,268,960	3,603,125,954
Oceana	223,672,500	92,909,000	39,792,800	1,379,198,072	N/C	N/C	1,735,572,372	86,396,500
Ogemaw	89,474,100	107,181,900	8,321,900	826,729,835	N/C	N/C	1,031,707,735	64,146,030
Ontonagon	10,749,391	16,043,071	31,892,720	240,353,597	21,785,495	N/C	320,824,274	23,609,574
Oscoda	137,699,000	45,630,300	32,333,800	676,794,091	N/C	N/C	892,456,191	95,173,500
Oscoda	12,086,400	22,810,600	8,222,200	389,029,915	N/C	N/C	431,949,115	49,119,900
Otsego	46,364,700	202,528,900	29,529,700	1,085,909,991	N/C	N/C	1,364,333,291	244,289,546
Ottawa	727,378,200	1,875,608,900	853,253,256	11,869,624,624	N/C	138,400	15,326,203,380	837,501,500
Presque Isle	81,144,700	25,914,400	27,859,900	680,425,890	84,000	N/C	815,228,990	33,903,700
Roscommon	4,964,500	101,831,700	1,961,900	1,514,374,650	N/C	N/C	1,623,132,750	50,669,200
Saginaw	760,546,756	1,099,416,800	167,504,400	3,699,548,668	21,900	N/C	5,727,038,524	511,169,700
Saint Clair	481,075,525	759,296,900	585,743,640	5,398,286,542	N/C	N/C	7,162,402,607	1,084,013,180
Saint Joseph	771,405,791	199,663,200	117,522,600	1,708,810,929	N/C	N/C	2,797,422,520	275,345,748
Sanilac	1,330,906,363	124,287,818	23,769,766	1,058,419,905	N/C	N/C	2,537,383,852	223,751,505
Shiawassee	6,436,700	32,553,300	11,241,300	362,026,646	1,469,000	N/C	413,726,946	54,448,294
Shiawassee	578,630,200	217,354,290	39,677,760	1,617,220,516	N/C	N/C	2,452,882,766	122,646,359
Tuscola	986,990,366	96,543,550	38,321,500	1,184,605,341	N/C	N/C	2,318,460,757	534,704,449
Van Buren	428,414,100	269,963,900	122,103,800	3,016,051,300	N/C	N/C	3,826,463,100	613,253,400
Washtenaw	544,197,990	5,113,361,273	530,644,910	16,429,142,339	N/C	N/C	22,652,359,812	1,240,391,927
Wayne	26,067,000	11,637,139,325	3,734,367,650	38,192,048,501	N/C	305,400	53,569,928,076	4,430,718,639
Wexford	46,669,100	142,938,000	50,923,700	998,179,575	N/C	N/C	1,238,710,375	79,513,900
TOTALS	24,553,962,563	69,841,897,854	19,910,622,871	341,436,868,836	209,386,837	73,115,537	466,025,854,498	30,842,019,912

AGENDA

COUNTY SERVICES COMMITTEE

111 S. Michigan Ave., Room 200, Saginaw MI 48602

Wednesday, August 5, 2020 - 4:00 p.m.

**VIA TELECONFERENCE PER
EXECUTIVE ORDER 2020-154**

Members: Charles Stack – Chair, Cheryl Hadsall – Vice-Chair, Kyle Harris, Dennis Krafft, Michael Webster
Others: Robert Belleman, Civil Counsel, Koren Thurston, Jennifer Broadfoot, Board Staff,
Media

***The County Services Committee meeting will be held via Zoom online meeting platform.
As the County Building is closed to the public except by appointment, the meeting is open remotely
to the public to follow along and participate during the public portion of the meeting, as follows:***

County of Saginaw is inviting you to a scheduled Zoom meeting.

Topic: See Agenda below

Date/Time: **August 5, 2020 04:00 PM EST**

Join Zoom Meeting: <https://zoom.us/j/8024441727>

Meeting ID: **802 444 1727**

INSTRUCTIONS using ZOOM audio conferencing:

Dial: **1 (312) 626-6799** or **1 (929) 436-2866** and enter Meeting ID: **802 444 1727**

- I. Call to order
 - II. Welcome
 - III. Public Comment (*Speakers limited to 3 minutes*)
 - IV. Agenda
 1. **Annette Rummel, Saginaw County Convention & Visitors Bureau, re:**
 - **8-25-1** 2020 Saginaw County Convention & Visitors Bureau Budget
 2. **Kelly Suppes, Purchasing/Risk Manager, re:**
 - **8-25-2** Revised County Policy #411, Policy on the Sale of Real and Personal Property
 3. **INFORMATIONAL COMMUNICATIONS (To be Received & Filed in committee)**
 - **8-25-3** **BAY CITY PUBLIC SCHOOLS** submitting revised Form L-4029 detailing the 2020 property tax levies for Bay City Public Schools
 - **8-25-4** **MICHIGAN DEPARTMENT OF TREASURY** forwarding the Final State Equalization Report for the 2020 tax year
 - **8-25-5** **BIRCH RUN TOWNSHIP** submitting its Annual Tax Increment Financing (TIF) Plan for FY 2020 for the Birch Run Township DDA
 - V. Miscellaneous
 - VI. Adjournment
- 7-31-20/cll/sea/sk

April 18, 2020

Mr. Chuck Stack, Chairman
Mr. Robert Belleman, County Controller
County of Saginaw
County Services Committee 
111 South Michigan Avenue 
Saginaw, Michigan 48602

8-25-1

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 JUN 12 PM 2:58

Dear Chairman Stack and Mr. Belleman,

In accordance with the Management Agreement by and between the County of Saginaw and the Saginaw County Convention & Visitors Bureau, I request to be assigned time during an upcoming County Services Committee Agenda to present the review the 2020 Saginaw County Convention & Visitors Bureau Budget.

You have already received and filed copies of the 2019 Saginaw County Convention & Visitors Bureau Audit. The 2020 budget for the Saginaw County Convention & Visitors Bureau is attached. Please advise me of the date, time and location or link that would serve you best.

Respectfully submitted,



Annette M Rummel, Ph. D. CEO

Attachment: 2020 approved SCCVB Budget

Saginaw County Convention & Visitors Bureau

Summary of Budget - Proposed

	2020 Budget	2019 YTD Thru June	2019 Budget	Account #
Income				
Room Tax	\$1,901,643	\$849,843	\$1,817,000	1500
Interest Income	\$200	\$0	\$800	1520
Other Income	\$200	\$0	\$500	1525
Unrealized Gain (Loss) SCF Fund	\$200	\$0	\$500	1521
Total Income	\$1,902,243	\$849,843	\$1,818,800	
Expense				
Administrative:				
Grand Total Wage/Salary/Benefits	\$48,310	\$22,621	\$46,046	
Grand Total Overhead	\$176,700	\$93,039	\$140,450	
Total Administrative	\$225,010	\$115,660	\$186,496	
Marketing				
Marketing GLBRCVB	\$1,426,233	\$599,533	\$1,362,750	
Marketing Other	\$133,000	\$60	\$10,000	
Total Marketing	\$1,559,233	\$599,593	\$1,372,750	
Tourism Development Project	\$118,000	\$8,485	\$259,554	
Total Expense/Investments	\$1,902,243	\$723,738	\$1,818,800	
Income/Expense	\$0	\$126,105	\$0	

Saginaw County CVB Continued Administrative	2020 Budget	2019 YTD Thru June	2019 Budget	Account #
Memberships/Other				
Education	\$6,500	\$0	\$6,500	1630
Membership/Administrative	\$2,500	\$716	\$1,000	1625
Meetings Administrative	\$3,000	\$461	\$3,000	1643
Travel & Mileage	\$500	\$0	\$500	1720
Miscellaneous	\$1,000	\$0	\$1,000	1660
Total Memberships/Other	\$13,500	\$1,177	\$12,000	
Grand Total Overhead	\$176,700	\$93,039	\$140,450	

Saginaw County CVB - Continued				
Marketing	2020 Budget	2019 YTD Thru June	2019 Budget	Account #
Marketing GLBRCVB	\$1,426,233	\$599,533	\$1,362,750	4601
Marketing Other:				
Advertising	\$120,000	\$60	133000	4605
Visitor Guide	\$10,000	\$0	\$10,000	4686
Champion/VFR Program	\$3,000	\$0	\$3,000	6692
Marketing Other	\$133,000	\$60	\$146,000	
Total Marketing	\$1,559,233	\$599,593	\$1,508,750	

Saginaw County CVB - Continued				
	2020 Budget	2019 YTD Thru June	2019 Budget	Account #
Tourism Development Project	\$118,000	\$8,485	\$259,554	1628



COUNTY OF SAGINAW
OFFICE OF COUNTY CONTROLLER

**COUNTY
SERVICES**

111 SOUTH MICHIGAN AVENUE
SAGINAW, MICHIGAN 48602

June 22, 2020

Commissioner Michael A. Webster, Chairman
Saginaw County Board of Commissioners
111 South Michigan Ave.
Saginaw, MI 48602

Re: Revised County Policy #411 Sale of Real and Personal Property Policy

Dear Chairman Webster:

Attached for the consideration is revised County Policy #411, Policy on the Sale of Real and Personal Property. The policy is being revised at the request of the Controller's Office who handles the Sale of Real and Personal Property.

Pre 2009 the County held an annual auction at the Saginaw County Mosquito Abatement Facility. It was later determined to abandon the auction as vehicles and equipment had to be stored for a period of time and moved just prior to the auction. Many of the vehicles were sitting for anywhere between 2-9 months and were in rough condition from sitting idle.

Since that time, I have used a variety of selling options including listing on Craigslist, EBay, GovDeals, Marketplace, etc. to advertise and sell County Personal Property. The current sales methods nets more of a fair market selling price than the old method. The policy revision reflect the current sales methods used to dispose/sell County equipment.

I will be available at the August 5th County Services Committee meeting to answer questions about the revised Policy.

Sincerely,

Kelly M. Suppes, Purchasing/Risk Manager

cc: Robert V. Belleman, Controller/CAO

ROBERT V. BELLEMAN
Controller/Chief Administrative Officer
rbelleman@saginawcounty.com

8-25-2

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 JUN 23 PM 4: 31

Category: 400
Number: 411

Subject: **POLICY ON THE SALE OF REAL AND PERSONAL PROPERTY**

1. **PURPOSE:** The purpose of this Policy is to:
 - 1.1 Formulate a formal written County Policy with respect to the Sale Of Real And Personal Property; and,
 - 1.2 Define and clarify proper procedure to be followed in the event that conditions necessitate The Sale of Real or Personal Property by County officials.
2. **AUTHORITY:** The Saginaw County Board of Commissioners.
3. **APPLICATION:** This policy applies to all Elected Offices, Departments and Agencies of Saginaw County.
4. **RESPONSIBILITY:** The Saginaw County Board of Commissioners hereby authorizes the Saginaw County Controller's Office to implement The Sale of Real or Personal Property that is titled to the County of Saginaw when such sale is proper and appropriate. The Purchasing Division of the Saginaw County Controller's Office will administer this Policy and the sale of such property using the following procedures.
5. **DEFINITION(S):** NONE
6. **POLICY:**
 - 6.1 Sale of Personal Property and/or surplus supplies or equipment shall be sold or otherwise disposed of using the best online option deemed by the Purchasing Division. This will include determining fair market value and listing the personal property using online or auction sites, i.e. Craigslist, EBay, Marketplace, GovDeals, etc. ~~a competitive process. Once annually, or more or less often as required, the Purchasing Division of the Saginaw County Controller's office shall hold a public auction whereby personal property and/or surplus supplies and equipment may be disposed of by accepting the highest proposal offered.~~
 - 6.2 ~~When it is not feasible to sell or dispose of personal property and/or surplus supplies and equipment through public auction, the Purchasing Division of the Saginaw County Controller's Office is hereby authorized to sell and/or dispose of such equipment and/or supplies using a competitive process as detailed below.~~
 - 6.3 The Purchasing Division of the Saginaw County Controller's office is further authorized to sell and/or dispose of real estate ~~using a competitive process.~~ Before such process is begun, the Purchasing Division of the Saginaw County Controller's Office will determine the fair market value of such residential and/or commercial real estate by using a professional appraisal firm or the County's Equalization Department. Once a fair market

value has been determined, the Purchasing Division of the Saginaw County Controller's Office shall use either of the following procedures to sell and/or dispose of real estate.

6.3.1 Use of a Professional Realtor: When the Purchasing Division, in consultation with the Saginaw County Controller, has determined that it is optimal to use a Professional Realtor for sale of real estate, the Purchasing Division will engage the services of a realtor serving the geographical area where the property is located. The Purchasing Division shall negotiate a commissioned rate for the sale and shall authorize the Professional Realtor to market the property for a period not to exceed six (6) months.

6.3.1.1 The Purchasing Division of the Saginaw County Controller's Office shall be authorized to accept cash offers that are not lower than twenty (20) percent of the fair market value as determined by the Professional Appraisal Firm. (If the Purchasing Division of the Saginaw County Controller's Office receives an offer which is less than 20% under the fair market value as determined by the Appraisal Firm and believes it is in the best interest of the County to accept such offer, the Saginaw County Controller is authorized to accept such offers.) If the Purchasing Division believes it is in the best interest of the County to accept an offer which is lower than 30% below the fair market value of the property, the Saginaw County Board of Commissioners is hereby authorized to accept such offers.

6.3.2 Selling of Real Estate through Competitive Sealed Proposals: In the event that the Purchasing Division of the Saginaw County Controller's Office determines it is appropriate to sell and/or dispose of real estate through competitive sealed proposals, an invitation for proposals shall be issued by the Purchasing Division of the Controller's Office and shall include all contractual terms and conditions applicable to the sale.

6.3.2.1 Public Notice: Adequate public notice through ~~a newspaper of general circulation~~ the County website of the invitation to purchase such real estate shall be published in a reasonable time, not less than 14 calendar days prior to the date set forth for the opening of proposals. Public Notice shall state the place, date and time of such proposal opening.

6.3.2.2 Proposal Opening: Proposals shall be opened publicly in the presence of one or more witnesses at the time and place designated in the invitations for proposal. The amount of each proposal and such relevant information as deemed appropriate, together with the name and address of each proposer shall be recorded. The record of sealed proposals received shall be open to public inspection.

- 6.3.2.3 **Proposal Acceptance:** Proposals shall be unconditionally accepted without alteration and correction. Proposals, which do not comply with the criteria set forth in the invitation for proposal, may, at the discretion of the Purchasing Agent, be deemed not qualified proposals. Also, proposals that do not meet or exceed fair market value of the property being sold, as determined by a real estate appraiser, may, at the discretion of the Purchasing Agent, be deemed not qualified proposals.
- 6.3.2.4 **Correction or Withdrawal of Proposals:** Correction or withdrawal of inadvertently erroneous proposals, before or after proposal opening or cancellation of contracts based on such proposal mistakes may be permitted where appropriate. After proposal opening, no changes in proposal prices or other provisions are allowed.
- 6.3.2.5 **Award:** Award shall be made to the responsible offerer whose proposal is determined to be the most advantageous to the County of Saginaw.
- 6.3.2.6 **Reservation:** The County of Saginaw shall reserve the right to accept, reject, or negotiate and amend any proposal submitted with the high proposer, or to accept or reject any proposal received if doing so would be in the best interests of the County of Saginaw, and to waive any irregularities and/or informalities in the proposal process.

6.4 Earnest Money

- 6.4.1 In the sale of real estate through either the use of a professional realtor or the use of competitive sealed proposals, an earnest money deposit shall be required of the successful vendor. The amount of such earnest money deposit shall be determined by the Purchasing Agent in consultation with the Saginaw County Controller.

7. ADMINISTRATIVE PROCEDURES: NONE

- 8. **CONTROLLER/CAO LEGAL COUNSEL REVIEW:** The Controller/CAO has determined that this policy as submitted to the Board of Commissioners contains the necessary substance in order to carry out the purpose of the policy. County Civil Counsel has determined that this policy as submitted contains content that appears to be legal activities of the Saginaw County Board of Commissioners.

Approved as to Substance:
Saginaw County Controller/CAO

Approved as to Legal Content:
Saginaw County Civil Counsel

ADOPTED: ~~November 23, 1999~~ June 18, 2020



COUNTY SERVICES
Finance and Accounting
910 North Walnut Street
Bay City, Michigan 48706
Tel: (989) 686-9700
Fax: (989) 266-8203

8-25-3

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 JUN 17 PM 12:26

June 9, 2020

Saginaw County
Board of Commissioners
111 S. Michigan
Saginaw MI 48603

To Whom It May Concern:

Enclosed please find a revised L-4029 for the current year. The revision is due to a notice of change from Bay County Equalization Department that we received May 28, 2020. Please note, that the rate is now 18 mills and disregard our previous submission.

The District's Board of Education approved the Revised L-4029 during the Regular Board meeting held on June 8, 2020.

Should you have any questions regarding this form, please feel free to contact me at comptonj@bcschools.net.

Sincerely,

Jolene L. Compton, CPA
Director of Finance & Accounting

Enc.

File

REVISED

L-4029

ORIGINAL TO: County Clerk(s)
COPY TO: Equalization Department(s)
COPY TO: Each township or city clerk

2020 Tax Rate Request (This form must be completed and submitted on or before September 30, 2020)
MILLAGE REQUEST REPORT TO COUNTY BOARD OF COMMISSIONERS

Carefully read the instructions on page 2.

This form is issued under authority of MCL Sections 211.24e, 211.34 and 211.34d. Filing is mandatory. Penalty applies.

2020 Taxable Value of ALL Properties in the Unit as of 5-28-2020 1,869,309,347	2020 Taxable Value excluding Principal Residence, Qualified Agricultural, Qualified Forest, Industrial Personal and Commercial Personal Properties. 546,369,128
--	---

This form must be completed for each unit of government for which a property tax is levied. Penalty for non-filing is provided under MCL Sec 211.119. The following tax rates have been authorized for levy on the 2020 tax roll.

(1) Source	(2) Purpose of Millage	(3) Date of Election	(4) Original Millage Authorized by Election Charter, etc.	(5) ** 2019 Millage Rate Permanently Reduced by MCL 211.34d "Headlee"	(6) 2020 Current Year "Headlee" Millage Reduction Fraction	(7) 2020 Millage Rate Permanently Reduced by MCL 211.34d "Headlee"	(8) Sec. 211.34 Truth in Assessing or Equalization Millage Rollback Fraction	(9) Maximum Allowable Millage Levy *	(10) Millage Requested to be Levied July 1	(11) Millage Requested to be Levied Dec. 1	(12) Expiration Date of Millage Authorized
VOTED	SINKING FUND	5/8/2018	0.6500	0.6500	0.9992	0.6494	1.0000	.06494	0.6494	0.0000	2024
VOTED	BOND RETIREMENT	5/2/2006	N/A	N/A	N/A	N/A	N/A	N/A	2.2200	0.0000	2035
VOTED	OPERATING NON-HOMESTEAD	6/9/2003	18.0000	17.6747	1.0000	17.6747	1.0000	17.6747	17.6747	0.0000	2023
VOTED	OPERATING NON-HOMESTEAD	5/8/2007	0.3253	0.3253	1.0000	0.3253	1.0000	0.3253	0.3253	0.0000	2023

Prepared by	Telephone Number	Title of Preparer	Date
-------------	------------------	-------------------	------

CERTIFICATION: As the representatives for the local government unit named above, we certify that these requested tax levy rates have been reduced, if necessary to comply with the state constitution (Article 9, Section 31), and that the requested levy rates have also been reduced, if necessary, to comply with MCL Sections 211.24e, 211.34 and, for LOCAL school districts which levy a Supplemental (Hold Harmless) Millage, 380.1211(3).

<input type="checkbox"/> Clerk	Signature: <i>Carrie Sepeda</i>	Print Name: CARRIE SEPEDA	Date: <i>9-5-2020</i>	Rate
<input checked="" type="checkbox"/> Secretary	Signature: <i>Eugene Rademacher</i>	Print Name: EUGENE RADEMACHER	Date: <i>6-8-2020</i>	0.0000
<input type="checkbox"/> Chairperson				6.0000
<input checked="" type="checkbox"/> President				18.0000

* Under Truth in Taxation, MCL Section 211.24e, the governing body may decide to levy a rate which will not exceed the maximum authorized rate allowed in column 9. The requirements of MCL 211.24e must be met prior to levying an operating levy which is larger than the base tax rate but not larger than the rate in column 9.

** IMPORTANT: See instructions on page 2 regarding where to find the millage rate used in column (5).



STATE OF MICHIGAN
DEPARTMENT OF TREASURY
LANSING

COUNTY
SERVICES

RACHAEL EUBANKS
STATE TREASURER

GRETCHEN WHITMER
GOVERNOR

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May 28, 2020

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BOARD OF COMMISSIONERS
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Enclosed please find the Final State Equalization Report for the 2020 tax year that was approved and certified by the State Tax Commission at their May 26, 2020 meeting.

Should you have further questions, please do not hesitate to contact our office at (517) 335-3429 (ext. 5).

Sincerely,

David A. Buick, Executive Director
State Tax Commission

Enclosure



STATE OF MICHIGAN
DEPARTMENT OF TREASURY
LANSING

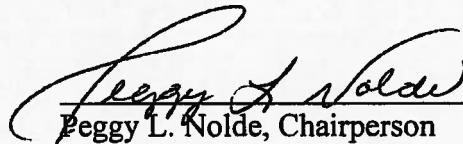
GRETCHEN WHITMER
GOVERNOR

RACHAEL EUBANKS
STATE TREASURER

May 26, 2020

We hereby certify that the valuations of the several counties in the State of Michigan as equalized by the State Tax Commission at the regular session in the year 2020, as provided by Act 44 of the Public Acts of 1911, as amended by Act 143 of the Public Acts of 1986, are as presented by the attached report.

STATE TAX COMMISSION


Peggy L. Nolde, Chairperson

W. Howard Morris, Commissioner

Leonard D. Kutschman, Commissioner

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Alcona	36,665,000	28,944,200	11,219,600	751,368,900	N/C	N/C	828,195,700	37,738,700
Alger	10,305,800	48,438,400	9,886,000	433,244,173	N/C	N/C	501,874,373	22,596,560
Allegan	854,234,862	542,630,983	280,551,750	6,212,311,205	N/C	3,769,100	6,893,397,900	344,187,648
Alpena	86,115,150	116,999,825	33,761,100	825,410,750	N/C	N/C	1,061,986,825	71,443,797
Antrim	84,243,800	102,523,200	9,287,500	2,331,071,114	N/C	N/C	2,527,125,614	84,210,200
Areneac	114,819,400	48,314,500	8,377,000	531,514,415	N/C	N/C	703,025,315	50,062,550
Arearaga	10,991,045	20,215,648	23,248,656	254,334,294	22,747,046	N/C	331,536,689	53,187,800
Areary	410,363,200	158,632,800	70,287,600	2,472,362,604	N/C	N/C	3,111,516,204	106,270,150
Areay	497,451,429	501,486,200	162,083,200	2,202,365,135	N/C	N/C	3,363,365,964	278,470,111
Areenzle	26,717,059	106,073,900	4,631,800	1,693,661,469	917,400	N/C	1,832,201,628	45,058,891
Areerian	528,187,000	805,302,900	1,303,308,342	6,976,092,338	N/C	N/C	9,612,890,580	537,937,807
Areeranch	640,416,075	175,018,553	45,959,316	1,217,189,937	N/C	N/C	2,078,583,881	160,414,878
Areerathoun	571,856,302	614,012,459	217,043,529	2,850,662,410	N/C	N/C	4,253,564,700	457,480,632
Areerass	587,206,600	106,780,600	42,573,500	2,239,878,800	N/C	N/C	2,956,439,500	259,988,545
Areerharlevoix	58,029,100	187,672,700	43,384,800	2,606,012,978	N/C	N/C	2,893,099,578	76,801,200
Areerheboygan	33,799,500	161,333,900	6,371,800	1,582,403,921	100,000	N/C	1,784,009,121	71,427,700
Areerhippewa	47,680,200	189,433,600	25,862,600	1,083,043,940	N/C	N/C	1,346,020,340	77,797,800
Areerlare	104,682,580	90,758,682	19,918,140	1,030,372,943	N/C	N/C	1,245,732,345	132,299,737
Areerlinton	825,387,250	486,382,189	68,727,100	2,529,703,600	N/C	N/C	3,912,200,139	154,694,411
Areerlawford	N/C	49,579,300	95,813,400	604,909,325	N/C	N/C	750,302,025	51,603,100
Areerdelta	48,773,600	161,283,200	26,171,100	1,079,777,368	N/C	108,300	1,316,113,568	120,696,279
Areerjackson	21,436,200	147,982,585	51,233,100	700,968,987	24,080,600	N/C	945,881,472	103,983,900
Areeraton	484,062,819	739,828,674	252,760,735	2,935,378,569	N/C	9,102,700	4,420,131,497	325,199,562
Areerimmet	48,798,800	411,664,700	15,650,700	3,603,058,998	N/C	N/C	4,079,173,198	120,960,000
Areerjenesee	218,131,014	2,423,356,600	303,773,500	9,178,759,910	N/C	N/C	12,124,021,024	776,228,000
Areerbladwin	103,635,500	56,854,250	10,690,200	1,042,597,700	N/C	N/C	1,213,777,650	54,472,600
Areerogebic	1,226,526	57,273,826	14,405,169	511,141,665	24,382,296	N/C	608,408,482	82,291,292
AreerGrand Traverse	164,982,400	1,248,367,074	93,141,000	5,582,211,881	N/C	N/C	7,078,702,355	276,011,050
AreerIraott	882,656,722	140,794,000	46,945,900	672,550,890	N/C	N/C	1,742,947,512	479,285,843
AreerHillsdale	601,182,451	99,128,873	41,425,676	1,210,555,085	N/C	548,000	1,952,840,085	80,670,469
AreerIoughton	16,195,955	187,408,815	19,557,360	1,003,732,332	16,077,267	1,546,807	1,244,518,536	63,754,946
AreerIuron	1,740,246,600	125,929,700	48,522,974	1,166,910,982	N/C	N/C	3,081,610,256	722,916,018
AreerIngham	467,302,938	2,535,914,964	220,250,974	6,379,509,090	N/C	2,751,000	9,605,728,966	668,322,256
Areeronia	705,109,300	149,496,300	46,585,413	1,508,671,998	N/C	N/C	2,409,863,011	126,557,400
Areerosco	62,818,500	116,086,400	27,827,850	1,085,040,900	N/C	4,663,200	1,296,434,850	94,295,100
Areeron	18,378,730	40,145,859	41,918,889	504,854,448	37,813,155	N/C	643,111,081	59,655,163
AreerSabella	451,021,845	528,109,987	36,051,200	1,318,182,037	N/C	N/C	2,333,365,069	213,395,800
AreerJackson	465,650,980	778,104,213	159,393,316	4,312,882,674	N/C	N/C	5,715,831,183	513,593,171
AreerCalamazoo	330,606,231	2,326,235,900	465,439,650	7,586,881,125	N/C	N/C	10,709,162,906	665,952,503
AreerCalkaska	24,413,300	53,683,600	11,200,900	851,574,300	N/C	N/C	940,872,100	150,267,400
AreerCent	408,240,000	6,467,804,433	1,530,251,000	21,861,286,615	N/C	N/C	30,267,582,048	1,641,479,841
AreerCeweenaw	N/C	12,604,783	202,176	216,775,538	2,933,813	N/C	232,516,310	5,623,283
AreerLake	31,254,400	58,047,300	1,802,300	673,963,300	N/C	N/C	766,067,300	40,725,700
AreerLeapeer	463,956,491	289,322,430	77,150,400	3,206,048,199	N/C	3,980,100	4,040,457,620	232,887,745
AreerLeelanau	171,979,000	194,589,790	10,450,370	3,623,899,805	N/C	N/C	4,000,918,965	63,712,394

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Lenawee	968,581,532	424,428,150	114,192,700	2,885,143,301	N/C	N/C	4,392,345,683	355,989,625
Livingston	284,144,350	1,222,573,290	338,197,690	10,042,217,988	N/C	8,884,500	11,875,997,818	573,142,430
Lucas	5,662,000	16,603,138	2,822,700	204,824,080	775,500	N/C	230,887,418	10,364,983
Mackinac	14,355,013	241,045,188	19,548,472	906,771,029	3,851,700	N/C	1,185,571,400	150,894,365
Macomb	211,847,200	5,297,788,541	2,456,508,028	28,963,233,259	N/C	N/C	36,629,377,028	1,848,506,493
Manistee	41,699,100	106,498,700	27,536,700	1,236,972,708	N/C	N/C	1,412,707,208	109,260,178
Marquette	12,754,340	527,012,050	89,054,119	2,307,845,238	52,242,200	N/C	2,968,907,945	277,743,559
Mason	99,896,700	156,511,300	582,712,000	1,375,324,231	N/C	N/C	2,214,444,231	147,046,700
Mecosta	198,353,360	158,689,800	56,637,900	1,256,878,069	N/C	N/C	1,670,569,129	107,357,300
Menominee	104,443,584	75,112,839	40,193,499	763,894,328	N/C	N/C	983,644,248	74,455,192
Midland	189,628,500	540,139,100	267,357,400	2,439,195,000	N/C	N/C	3,436,320,000	516,735,700
Missaukee	170,772,500	49,627,500	9,593,200	598,588,100	N/C	N/C	828,561,300	73,937,844
Monroe	594,653,653	860,577,640	685,209,795	4,745,151,947	N/C	2,324,730	6,887,917,765	895,739,581
Montcalm	457,035,300	186,644,000	42,972,900	1,756,740,350	N/C	N/C	2,442,392,550	233,432,000
Montmorency	21,203,922	28,631,800	9,177,800	553,630,712	N/C	N/C	612,644,234	37,093,118
Muskegon	147,704,600	712,674,800	186,572,800	4,572,055,800	N/C	N/C	5,619,007,800	336,842,500
Newaygo	233,084,600	120,758,200	53,341,300	1,606,817,582	N/C	N/C	2,014,001,882	120,996,307
Oakland	83,078,430	13,049,878,820	2,458,568,940	62,000,762,770	N/C	N/C	77,592,268,960	3,603,125,954
Oceana	223,672,500	92,909,000	38,792,800	1,379,198,072	N/C	N/C	1,735,572,372	65,396,500
Ogemaw	89,474,100	107,181,900	8,321,900	826,729,835	N/C	N/C	1,031,707,735	64,146,030
Ontonagon	10,749,391	16,043,071	31,892,720	240,353,597	21,785,495	N/C	320,824,274	23,609,574
Oseola	137,698,000	45,630,300	32,333,800	676,794,091	N/C	N/C	892,456,191	95,173,500
Oscoda	12,086,400	22,610,600	8,222,200	389,029,915	N/C	N/C	431,949,115	48,119,900
Otsego	46,384,700	202,628,900	29,529,700	1,085,909,991	N/C	N/C	1,364,333,291	244,269,546
Ottawa	727,378,200	1,875,808,900	851,632,400	11,669,624,624	N/C	138,400	15,324,582,524	837,501,500
Presque Isle	81,144,700	25,914,400	27,659,900	680,425,890	84,000	N/C	815,228,890	33,903,700
Roscommon	4,984,500	101,831,700	1,961,900	1,514,374,650	N/C	N/C	1,623,132,750	50,669,200
Saginaw	760,546,756	1,099,416,800	167,504,400	3,699,557,697	21,900	N/C	5,727,047,553	511,169,700
Saint Clair	481,075,525	759,298,900	585,743,640	5,336,286,542	N/C	N/C	7,162,402,607	1,064,013,180
Saint Joseph	771,405,791	199,683,200	117,522,600	1,708,810,929	N/C	N/C	2,797,422,520	275,345,748
Sanilac	1,331,686,124	124,287,818	23,769,768	1,055,828,782	N/C	N/C	2,535,570,490	223,751,505
Schoolcraft	6,436,700	32,553,300	11,241,300	362,026,648	1,469,000	N/C	413,726,946	54,448,294
Shiawassee	578,630,200	217,354,290	39,677,760	1,617,220,516	N/C	N/C	2,452,682,766	122,646,359
Tuscola	996,990,366	98,543,550	38,321,500	1,184,605,341	N/C	N/C	2,318,460,757	534,704,449
Van Buren	428,414,100	259,893,900	122,103,800	3,016,051,300	N/C	N/C	3,826,463,100	613,253,400
Washtenaw	544,197,980	5,113,361,273	530,644,910	16,429,142,339	N/C	35,013,300	22,852,359,812	1,240,391,927
Wayne	26,087,000	11,637,139,325	3,734,367,850	36,192,048,501	N/C	305,400	53,589,928,076	4,430,718,639
Wexford	46,669,100	142,938,000	50,923,700	998,179,575	N/C	N/C	1,238,710,375	79,513,900
TOTALS	24,553,750,681	69,841,154,576	19,908,615,072	341,422,127,988	209,261,372	73,115,537	456,008,025,206	30,842,019,912

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Alcona	36,665,000	28,944,200	11,219,600	751,366,800	N/C	N/C	828,195,700	37,738,700
Alger	10,305,800	48,438,400	9,886,000	433,244,173	N/C	N/C	501,874,373	22,596,560
Allegan	854,234,862	542,530,983	280,551,750	5,212,311,205	N/C	3,769,100	6,893,397,800	344,187,648
Alpena	86,115,150	116,699,825	33,781,100	825,410,750	N/C	N/C	1,061,986,825	71,443,797
Antrim	84,243,800	102,623,200	9,287,500	2,331,071,114	N/C	N/C	2,527,125,614	84,210,200
Benec	114,819,400	48,314,500	8,377,000	531,514,415	N/C	N/C	703,025,315	50,062,550
Benara	10,991,045	20,215,648	23,248,666	254,334,294	22,747,046	N/C	331,536,689	53,187,800
Benary	410,353,200	158,632,800	70,267,800	2,472,362,604	N/C	N/C	3,111,516,204	106,270,150
Benay	497,451,429	501,486,200	162,063,200	2,202,365,135	N/C	N/C	3,363,365,964	278,470,111
Benzie	28,717,059	106,667,405	4,831,800	1,693,661,489	917,400	N/C	1,832,715,133	45,058,891
Benrien	528,187,000	805,302,900	1,303,308,342	6,976,092,338	N/C	N/C	9,612,890,580	537,937,607
Branch	640,416,075	175,018,553	45,959,316	1,217,189,937	N/C	N/C	2,078,583,881	160,414,878
Calhoun	571,856,302	614,012,459	217,043,529	2,850,652,410	N/C	N/C	4,253,564,700	457,480,632
Cass	588,198,243	106,754,383	42,623,284	2,241,549,936	N/C	N/C	2,959,125,856	259,988,546
Charlevoix	56,029,100	187,672,700	43,384,800	2,606,012,978	N/C	N/C	2,893,099,578	76,801,200
Cherboygan	33,799,500	161,333,900	6,371,800	1,582,403,921	100,000	N/C	1,784,009,121	71,427,700
Chippewa	47,680,200	189,433,600	25,862,600	1,083,043,940	N/C	N/C	1,346,020,340	77,797,800
Clare	104,682,580	90,756,682	19,918,140	1,030,372,943	N/C	N/C	1,245,732,345	132,289,737
Clinton	825,387,250	488,382,189	68,727,100	2,529,703,600	N/C	N/C	3,912,200,139	154,694,411
Crawford	N/C	49,579,300	95,813,400	604,909,325	N/C	N/C	750,302,025	51,603,100
Delta	48,773,600	161,283,200	26,171,100	1,079,777,368	N/C	106,300	1,316,113,568	120,696,279
Dickinson	21,436,200	147,982,585	51,233,100	700,988,987	24,080,600	N/C	945,681,472	103,983,900
Eaton	484,062,819	738,828,674	252,760,735	2,935,376,569	N/C	9,102,700	4,420,131,497	325,199,582
Emmet	48,798,800	411,664,700	15,650,700	3,603,058,988	N/C	N/C	4,079,173,198	120,960,000
Genesee	218,131,014	2,423,356,600	303,773,500	9,178,759,910	N/C	N/C	12,124,021,024	776,228,000
Gladwin	103,635,500	56,854,250	10,690,200	1,042,597,700	N/C	N/C	1,213,777,650	54,472,600
Gogebic	1,226,526	57,273,826	14,405,169	504,909,913	24,487,761	N/C	602,303,195	82,291,292
Grand Traverse	154,982,400	1,248,367,074	93,141,000	5,582,211,881	N/C	N/C	7,078,702,355	276,011,050
Gratiot	882,658,722	140,794,000	46,945,900	672,550,890	N/C	N/C	1,742,947,512	479,285,843
Hillsdale	601,182,451	99,128,873	41,425,676	1,210,555,086	N/C	548,000	1,952,840,085	80,670,469
Houghton	16,195,955	189,991,085	19,557,360	1,003,732,332	16,077,267	1,546,807	1,247,100,806	63,754,946
Huron	1,740,246,600	125,929,700	48,522,974	1,166,910,982	N/C	N/C	3,081,610,256	722,916,018
Ingham	467,302,938	2,535,914,964	220,250,974	6,379,509,090	N/C	2,751,000	9,605,728,966	668,322,256
Ionia	705,109,300	149,496,300	46,928,519	1,525,437,753	N/C	N/C	2,426,971,872	126,557,400
Iosco	62,816,500	116,086,400	27,827,850	1,085,040,900	N/C	4,663,200	1,296,434,850	94,295,100
Iron	18,378,730	40,145,859	41,918,889	504,854,448	37,813,155	N/C	643,111,081	59,655,183
Isabella	451,021,645	528,109,987	38,051,200	1,318,182,037	N/C	N/C	2,333,365,069	213,395,800
Jackson	465,650,980	778,104,213	159,393,316	4,312,682,674	N/C	N/C	5,715,831,183	513,593,171
Kalamazoo	330,608,231	2,326,235,900	465,439,650	7,586,881,125	N/C	N/C	10,709,162,906	665,952,503
Kalkaska	24,413,300	53,683,600	11,200,900	851,574,300	N/C	N/C	940,872,100	150,267,400
Kent	408,240,000	6,467,804,433	1,530,251,000	21,861,286,615	N/C	N/C	30,267,582,048	1,641,479,841
Keweenaw	N/C	12,604,783	202,176	216,775,538	2,933,813	N/C	232,516,310	5,623,283
Lake	31,254,400	58,047,300	1,802,300	673,963,300	N/C	N/C	765,067,300	40,725,700
Lapeer	463,956,491	289,322,430	77,150,400	3,206,048,199	N/C	3,980,100	4,040,457,620	232,867,745
Leelanau	171,979,000	194,589,790	10,450,370	3,623,899,805	N/C	N/C	4,000,918,965	63,712,394

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Lenawee	968,581,532	424,428,150	114,192,700	2,885,143,301	N/C	N/C	4,392,345,683	355,989,625
Livingston	264,144,350	1,222,673,290	338,197,690	10,042,217,988	N/C	8,864,500	11,875,987,818	573,142,430
Luce	5,662,000	16,603,138	2,822,700	204,824,080	775,500	N/C	230,687,418	10,364,983
Mackinac	14,355,013	241,045,188	18,548,472	906,771,029	3,851,700	N/C	1,185,571,400	150,894,366
Macomb	211,847,200	5,297,788,541	2,456,508,026	28,663,283,259	N/C	N/C	36,629,377,028	1,848,506,493
Manistee	41,699,100	106,498,700	27,536,700	1,236,972,708	N/C	N/C	1,412,707,208	109,260,178
Marquette	12,754,340	524,685,770	69,048,162	2,307,845,236	52,242,200	N/C	2,968,575,708	277,743,559
Mason	99,896,700	158,511,300	582,712,000	1,375,324,231	N/C	N/C	2,214,444,231	147,046,700
Mecosta	198,353,360	158,689,800	56,637,900	1,268,876,069	N/C	N/C	1,670,559,129	107,357,300
Menominee	104,443,584	75,112,839	40,193,499	763,894,326	N/C	N/C	983,644,248	74,455,192
Midland	189,628,500	540,139,100	267,357,400	2,439,195,000	N/C	N/C	3,436,320,000	516,735,700
Missaukee	170,772,500	49,627,500	9,593,200	598,568,100	N/C	N/C	828,561,300	73,937,644
Monroe	594,653,653	860,577,840	685,209,795	4,745,151,947	N/C	2,324,730	6,887,917,765	895,739,581
Montcalm	457,035,300	186,644,000	42,972,900	1,755,740,350	N/C	N/C	2,442,392,550	233,432,000
Montmorency	21,203,922	28,631,800	9,177,800	553,630,712	N/C	N/C	612,644,234	37,093,118
Muskegon	147,704,600	712,674,600	186,572,800	4,572,055,800	N/C	N/C	5,619,007,800	336,842,500
Newaygo	233,084,800	120,758,200	53,341,300	1,606,768,217	N/C	N/C	2,013,953,517	120,996,307
Oakland	83,078,430	13,049,878,820	2,458,558,940	62,000,752,770	N/C	N/C	77,592,288,960	3,603,125,954
Oceana	223,672,500	92,909,000	39,792,800	1,379,198,072	N/C	N/C	1,736,572,372	65,396,500
Ogemaw	89,474,100	107,181,900	6,321,900	828,729,835	N/C	N/C	1,031,707,735	64,146,030
Ontonagon	10,749,391	16,043,071	31,892,720	240,353,597	21,785,495	N/C	320,824,274	23,609,574
Osceola	137,698,000	45,630,300	32,333,800	676,794,091	N/C	N/C	892,456,191	95,173,500
Oscoda	12,088,400	22,610,600	8,222,200	389,029,915	N/C	N/C	431,949,115	48,119,900
Otsego	46,364,700	202,528,900	29,529,700	1,085,909,991	N/C	N/C	1,364,333,291	244,269,546
Ottawa	727,378,200	1,875,808,900	853,253,258	11,869,624,624	N/C	138,400	15,326,203,380	837,501,500
Presque Isle	81,144,700	25,914,400	27,659,900	680,425,890	84,000	N/C	815,228,890	33,903,700
Roscommon	4,984,500	101,831,700	1,961,900	1,514,374,650	N/C	N/C	1,623,132,750	50,669,200
Saginaw	760,546,756	1,099,416,800	167,504,400	3,699,548,668	21,900	N/C	5,727,038,524	511,169,700
Saint Clair	481,075,525	759,296,900	585,743,640	5,336,286,542	N/C	N/C	7,162,402,607	1,064,013,180
Saint Joseph	771,405,791	199,683,200	117,522,600	1,708,810,929	N/C	N/C	2,797,422,520	275,345,748
Sanilac	1,330,908,363	124,287,818	23,769,766	1,058,419,905	N/C	N/C	2,537,383,652	223,751,505
Schoolcraft	6,436,700	32,553,300	11,241,300	362,026,646	1,489,000	N/C	413,726,946	54,448,294
Shiawassee	578,630,200	217,354,280	39,677,760	1,617,220,516	N/C	N/C	2,452,882,766	122,646,359
Tuscola	986,990,366	98,543,550	38,321,500	1,184,605,341	N/C	N/C	2,318,460,757	534,704,449
Van Buren	428,414,100	259,893,900	122,103,800	3,016,051,300	N/C	N/C	3,826,463,100	613,253,400
Washtenaw	544,197,990	5,113,361,273	530,644,910	18,429,142,339	N/C	35,013,300	22,662,359,612	1,240,391,927
Wayne	26,067,000	11,637,139,325	3,734,367,850	36,192,048,501	N/C	305,400	53,589,928,078	4,430,718,639
Wexford	46,669,100	142,938,000	50,923,700	988,179,575	N/C	N/C	1,238,710,375	79,513,900
TOTALS	24,553,962,553	69,641,897,864	19,910,622,871	341,436,868,836	209,386,637	73,115,537	466,025,854,498	30,842,019,912

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
leona	36,665,000	28,944,200	11,219,600	751,366,900	N/C	N/C	828,195,700	37,738,700
liger	10,305,800	48,438,400	9,886,000	433,244,173	N/C	N/C	501,874,373	22,596,560
llegan	854,234,862	542,530,983	280,551,750	5,212,311,205	N/C	3,769,100	6,893,397,900	344,187,648
lpena	86,115,150	116,899,825	33,761,100	825,410,750	N/C	N/C	1,061,986,825	71,443,797
ltrim	84,243,800	102,523,200	9,287,500	2,331,071,114	N/C	N/C	2,527,125,614	84,210,200
renac	114,819,400	48,314,500	8,377,000	531,514,415	N/C	N/C	703,025,315	50,062,550
araga	10,991,045	20,215,648	23,248,656	254,334,294	22,747,046	N/C	331,536,689	53,187,800
arry	410,353,200	168,532,800	70,267,600	2,472,362,604	N/C	N/C	3,111,516,204	106,270,150
ay	497,451,429	501,486,200	162,063,200	2,202,365,135	N/C	N/C	3,363,365,964	278,470,111
enzie	26,717,059	108,587,405	4,831,800	1,693,661,469	917,400	N/C	1,832,715,133	45,058,891
errien	528,187,000	805,302,900	1,303,308,342	6,976,092,338	N/C	N/C	9,612,890,580	537,937,607
ranch	640,418,075	175,018,553	45,959,316	1,217,189,937	N/C	N/C	2,078,583,881	160,414,878
alhoun	571,858,302	614,012,459	217,043,529	2,850,652,410	N/C	N/C	4,253,564,700	457,480,632
lass	568,198,243	106,754,383	42,623,294	2,241,549,936	N/C	N/C	2,959,125,856	259,988,545
harlevoix	56,029,100	187,672,700	43,384,800	2,606,012,978	N/C	N/C	2,893,099,578	76,801,200
heboygan	33,799,500	161,333,900	6,371,800	1,562,403,921	100,000	N/C	1,784,009,121	71,427,700
hippewa	47,680,200	189,433,600	25,862,600	1,083,043,940	N/C	N/C	1,346,020,340	77,797,800
lare	104,682,580	90,758,682	19,918,140	1,030,372,943	N/C	N/C	1,245,732,345	132,299,737
linton	825,387,250	488,382,189	68,727,100	2,528,703,600	N/C	N/C	3,912,200,139	154,694,411
lawford	N/C	49,579,300	95,813,400	604,909,325	N/C	N/C	750,302,025	51,603,100
leita	48,773,600	161,283,200	26,171,100	1,079,777,368	N/C	108,300	1,316,113,568	120,896,279
lickinson	21,436,200	147,962,585	51,233,100	700,968,987	24,080,600	N/C	945,681,472	103,983,900
lton	484,062,819	738,828,674	252,760,735	2,936,376,569	N/C	9,102,700	4,420,131,497	325,199,562
lmmet	48,798,800	411,684,700	15,650,700	3,603,058,998	N/C	N/C	4,079,173,198	120,960,000
lnessee	218,131,014	2,423,356,600	303,773,500	9,178,759,910	N/C	N/C	12,124,021,024	776,228,000
lledwin	103,635,500	56,854,250	10,690,200	1,042,597,700	N/C	N/C	1,213,777,650	54,472,600
lodgevic	1,226,526	57,273,826	14,405,169	504,909,913	24,487,761	N/C	602,303,195	82,291,292
lrand Traverse	154,982,400	1,248,367,074	93,141,000	5,582,211,881	N/C	N/C	7,078,702,355	276,011,050
lratlot	882,656,722	140,794,000	46,945,900	672,550,890	N/C	N/C	1,742,947,512	479,285,843
llisdale	601,182,451	99,128,873	41,425,676	1,210,555,085	N/C	548,000	1,952,840,085	80,670,469
loughton	16,195,955	189,991,085	19,557,360	1,003,732,332	16,077,267	1,546,807	1,247,100,806	63,754,946
luron	1,740,246,600	125,929,700	48,522,974	1,166,910,982	N/C	N/C	3,081,610,256	722,916,018
lgham	467,302,938	2,535,914,964	220,250,974	6,379,609,090	N/C	2,751,000	9,606,728,966	668,322,256
lria	705,109,300	149,496,300	46,928,519	1,525,437,753	N/C	N/C	2,426,971,872	126,557,400
lisco	62,816,500	116,086,400	27,827,850	1,085,040,900	N/C	4,663,200	1,298,434,850	94,295,100
lon	18,378,730	40,145,859	41,918,889	504,854,448	37,813,155	N/C	643,111,081	59,655,163
labella	451,021,845	528,109,987	36,051,200	1,318,182,037	N/C	N/C	2,333,365,069	213,395,800
lackson	465,650,980	778,104,213	159,393,316	4,312,682,674	N/C	N/C	5,715,831,183	513,593,171
lalmazoo	330,606,231	2,326,235,900	465,439,650	7,586,881,125	N/C	N/C	10,709,162,906	665,952,503
lalkaska	24,413,300	53,683,600	11,200,900	851,574,300	N/C	N/C	940,872,100	150,267,400
lent	408,240,000	6,467,804,433	1,530,251,000	21,861,286,615	N/C	N/C	30,267,582,048	1,641,479,841
lweenaw	N/C	12,604,783	202,176	216,775,538	2,933,813	N/C	232,516,310	5,623,283
lake	31,254,400	58,047,300	1,802,300	673,963,300	N/C	N/C	765,067,300	40,725,700
lapeer	463,956,491	289,322,430	77,150,400	3,206,048,199	N/C	3,980,100	4,040,457,620	232,887,745
lcelanau	171,979,000	194,589,790	10,450,370	3,623,899,805	N/C	N/C	4,000,918,965	63,712,394

	Agricultural	Commercial	Industrial	Residential	Timber Cutover	Developmental	Total Real Property	Total Personal Property
Lenewee	968,581,532	424,428,150	114,192,700	2,885,143,301	N/C	N/C	4,392,345,683	355,989,825
Livingston	264,144,350	1,222,673,290	338,197,690	10,042,217,988	N/C	8,864,500	11,875,997,818	573,142,430
Luce	5,662,000	16,603,138	2,822,700	204,824,080	775,500	N/C	230,687,418	10,364,983
Mackinac	14,355,013	241,045,186	19,548,472	906,771,029	3,851,700	N/C	1,185,571,400	150,894,365
Macomb	211,847,200	5,297,788,541	2,456,508,026	28,663,233,269	N/C	N/C	36,629,377,026	1,848,506,493
Manistee	41,699,100	106,498,700	27,536,700	1,236,972,708	N/C	N/C	1,412,707,208	109,280,178
Marquette	12,754,340	524,686,770	69,048,162	2,307,845,236	52,242,200	N/C	2,966,575,708	277,743,569
Mason	99,896,700	158,511,300	582,712,000	1,375,324,231	N/C	N/C	2,214,444,231	147,046,700
Mecosta	198,353,360	158,689,800	56,637,900	1,256,878,069	N/C	N/C	1,670,559,129	107,357,300
Menominee	104,443,694	75,112,839	40,193,499	763,894,326	N/C	N/C	983,644,248	74,455,192
Midland	189,628,500	540,139,100	267,357,400	2,439,195,000	N/C	N/C	3,436,320,000	516,735,700
Missaukee	170,772,500	49,627,500	9,593,200	598,588,100	N/C	N/C	828,561,300	73,937,644
Monroe	594,653,653	680,577,640	685,209,795	4,745,151,947	N/C	2,324,730	6,887,917,765	895,739,581
Montcalm	457,035,300	186,844,000	42,972,900	1,756,740,360	N/C	N/C	2,442,392,560	233,432,000
Montmorency	21,203,922	28,631,800	9,177,800	553,630,712	N/C	N/C	612,644,234	37,093,118
Muskegon	147,704,800	712,674,800	186,572,800	4,572,055,800	N/C	N/C	5,619,007,800	336,842,500
Newaygo	233,084,800	120,758,200	53,341,300	1,606,769,217	N/C	N/C	2,013,953,517	120,996,307
Oakland	83,078,430	13,049,878,820	2,458,558,940	62,000,752,770	N/C	N/C	77,592,268,980	3,603,125,954
Oceana	223,672,500	92,909,000	39,792,800	1,379,196,072	N/C	N/C	1,735,572,372	65,396,500
Ogemaw	89,474,100	107,181,900	8,321,900	826,729,835	N/C	N/C	1,031,707,735	64,146,030
Ontonagon	10,749,391	16,043,071	31,892,720	240,363,597	21,766,495	N/C	320,824,274	23,609,574
Oscoda	137,698,000	45,630,300	32,333,800	676,794,091	N/C	N/C	892,456,191	95,173,500
Oscoda	12,086,400	22,610,800	8,222,200	389,029,915	N/C	N/C	431,949,115	48,119,900
Oshtego	46,384,700	202,528,900	29,529,700	1,085,909,991	N/C	N/C	1,384,333,291	244,269,548
Ottawa	727,378,200	1,875,808,900	853,253,256	11,869,624,624	N/C	138,400	15,928,203,380	837,501,500
Presque Isle	81,144,700	25,914,400	27,659,900	680,425,890	84,000	N/C	815,228,890	33,903,700
Roscommon	4,984,500	101,831,700	1,961,900	1,514,374,850	N/C	N/C	1,623,132,750	50,689,200
Saginaw	760,548,756	1,099,416,800	167,504,400	3,699,548,668	21,900	N/C	5,727,038,524	511,169,700
Saint Clair	481,075,525	759,296,900	585,743,840	5,338,286,542	N/C	N/C	7,162,402,907	1,064,013,180
Saint Joseph	771,405,791	199,683,200	117,522,600	1,708,810,929	N/C	N/C	2,797,422,520	275,345,748
Sanilac	1,330,906,363	124,287,618	23,766,766	1,058,419,905	N/C	N/C	2,537,363,852	223,751,505
Schoolcraft	6,436,700	32,553,300	11,241,300	362,026,646	1,469,000	N/C	413,728,948	54,448,294
Shiawassee	578,630,200	217,354,290	39,677,760	1,617,220,518	N/C	N/C	2,452,882,766	122,646,369
Tuscola	996,990,366	98,543,550	38,321,500	1,184,605,341	N/C	N/C	2,318,460,757	534,704,449
Van Buren	428,414,100	259,893,900	122,103,800	3,016,051,300	N/C	N/C	3,826,463,100	613,253,400
Washtenaw	544,197,990	5,113,361,273	530,644,910	16,429,142,339	N/C	35,013,300	22,662,359,912	1,240,391,927
Wayne	26,067,000	11,637,139,325	3,734,367,850	38,192,048,501	N/C	305,400	53,589,928,076	4,430,718,639
Wexford	46,869,100	142,938,000	50,923,700	998,179,575	N/C	N/C	1,236,710,375	79,513,900
TOTALS	24,553,962,663	69,841,897,654	19,910,622,871	341,436,868,836	209,386,837	73,115,537	456,025,854,498	30,842,019,912



Birch Run Township SAGINAW COUNTY SERVICES

8425 Main Street • P.O. Box 152 • Birch Run, MI 48415
Phone: (989) 624-9773 • Fax: (989) 624-1177

June 10, 2020

RE: Fiscal Year 2020 Annual Tax Increment Financing Report

Dear Saginaw County Board of Commissioners,

Pursuant to MCL 125.4911 'Recodified Tax Increment Financing Act'; *as an authority that is capturing tax increment revenues shall submit to the governing body of a taxing unit levying taxes subject to capture by an authority, a report on the status of the tax increment financing account.* Enclosed please find the Annual TIF Report for Birch Run Township DDA. If you have any questions regarding this report or otherwise, please feel free to contact me.

Regards,

Karen Parlberg, Treasurer
Birch Run Township
(989) 624-9773
treasurer@birchruntwp.com

Enclosure: Copy of Annual Report on Status of TIF Plan

RECEIVE & FILE

8-25-5

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 JUN 17 PM 12:26

AGENDA

COUNTY SERVICES COMMITTEE

111 S. Michigan Ave., Room 200, Saginaw MI 48602

Wednesday, September 9, 2020 - 4:00 p.m.

**VIA TELECONFERENCE PER
EXECUTIVE ORDER 2020-154**

Members: Charles Stack – Chair, Cheryl Hadsall – Vice-Chair, Kyle Harris, Dennis Krafft, Michael Webster
Others: Robert Belleman, Civil Counsel, Koren Thurston, Jennifer Broadfoot, Board Staff,
Media

***The County Services Committee meeting will be held via Zoom online meeting platform.
As the County Building is closed to the public except by appointment, the meeting is open remotely
to the public to follow along and participate during the public portion of the meeting, as follows:***

County of Saginaw is inviting you to a scheduled Zoom meeting.

Topic: See Agenda below

Date/Time: **September 9, 2020 04:00 PM EST**

Join Zoom Meeting: <https://zoom.us/j/8024441727>

Meeting ID: **802 444 1727**

INSTRUCTIONS using ZOOM audio conferencing:

Dial: **1 (312) 626-6799** or **1 (929) 436-2866** and enter Meeting ID: **802 444 1727**

- I. Call to order
- II. Welcome
- III. Public Comment (*Speakers limited to 3 minutes*)
- IV. Agenda
 1. **Greenfelder Law Office, re:**
 - **9-22-6** Submitting a Petition for Change of Boundaries requesting approval of a Resolution to detach the property known as 15414 McKeighan Road, Chesaning, Michigan 48616 owned by Brenda Tithof from the Village of Chesaning
 2. **Brian Keenan-Lechel, Director, Parks and Recreation, re:**
 - **9-22-9** Requesting approval of a Resolution accepting a grant from the Michigan Natural Resources Trust Fund in the amount of \$300,000 for development of a splash pad at William H. Haithco Recreation Area, with local match of \$125,000 provided by the Saginaw Community Foundation and \$75,000 from Saginaw County Parks fund balance, for a total project cost of \$500,000

3. **MANAGEMENT ASSISTANT, re:**
 - **9-22-24** Forwarding a request from Kylie Kienitz, Life Scout Troop 366, who is working on her Eagle Scout Project and would like to place a First Responder Monument on Saginaw County Property at 219 S. Michigan Ave.

4. **Kathy Dwan, Commissioner District #1, re:**
 - **9-22-7** Submitting for approval amended County Policy #241 titled "Purchasing Policy" with all references to "prevailing wage" deleted

5. **Robert Belleman, Controller/CAO, re:**
 - **9-22-20** Submitting amendment of County Policy #241 titled "Purchasing Policy" and adoption via Resolution of new County Policy #244 titled "Responsible Contractors Policy."

6. **INFORMATIONAL COMMUNICATIONS (To be Received & Filed in committee)**
 - **9-22-5** **SAGINAW CHARTER TOWNSHIP** sending notice that the State Street Corridor Improvement Authority (CIA) held an informational meeting for the benefit of taxing jurisdictions subject to tax capture on Tuesday, August 11, 2020 and has scheduled a second meeting for October 6, 2020
 - **9-22-8** **CITY OF SAGINAW** sending notice of a Public Hearing on the application of 217 Washington LLC for creation of a Commercial Rehabilitation Act (CRA) District for property 218, 222, 224 and 226 S. Washington Ave., Saginaw, Michigan, to be held September 14, 2020

- V. Miscellaneous
- VI. Adjournment

AGENDA

COUNTY SERVICES COMMITTEE

111 S. Michigan Ave., Room 200, Saginaw MI 48602

Wednesday, October 7, 2020 - 4:00 p.m.

**VIA TELECONFERENCE PER
EXECUTIVE ORDER 2020-154**

Members: Charles Stack – Chair, Cheryl Hadsall – Vice-Chair, Kyle Harris, Dennis Krafft, Michael Webster
Others: Robert Belleman, Civil Counsel, Koren Thurston, Jennifer Broadfoot, Board Staff,
Media

***The County Services Committee meeting will be held via Zoom online meeting platform.
As the County Building is closed to the public except by appointment, the meeting is open remotely
to the public to follow along and participate during the public portion of the meeting, as follows:***

County of Saginaw is inviting you to a scheduled Zoom meeting.

Topic: See Agenda below

Date/Time: **October 7, 2020 04:00 PM EST**

Join Zoom Meeting: <https://zoom.us/j/8024441727> Meeting ID: **802 444 1727**

INSTRUCTIONS using ZOOM audio conferencing:

Dial: 1 (877) 853-5257 or 1 (888) 475-4499 and enter Meeting ID: **802 444 1727**

- I. Call to order
- II. Welcome
- III. Public Comment (*Speakers limited to 3 minutes*)
- IV. Agenda
 1. **Jamie Furbush, Frankenmuth Convention & Visitors Bureau, re:**
 - **10-20-5** Submitting for discussion and approval its FY 2020/2021 Budget
 2. **Dennis Borchard, Director, Saginaw County Road Commission, re:**
 - **10-20-6** Submitting its 2019 Annual Report (*Receive & File*)
 3. **Denise Babbit, Director, Equalization, re:**
 - **10-20-8** Submitting for approval the 2020 Saginaw County Apportionment Report
 4. **Steve Jonas, Executive Vice President, Saginaw Future, re:**
 - **10-20-10** Requesting an appearance before the County Services Committee to discuss a Commercial Rehabilitation District approved by the City of Saginaw for 218 S. Washington Ave., Saginaw, MI and Saginaw County Policy #254
 - **10-20-11** Submitting notice of a virtual Public Hearing on the application of 218 Washington LLC for a Commercial Rehabilitation Act (CRA) Tax Exemption Certificate for property located at 218, 221, 224, and 226 S. Washington Ave., for Monday, September 28, 2020 at 6:30 p.m.

5. **Robert Belleman, Controller/CAO – Dave Gilbert, Civil Counsel, re:**

Tabled at September County Services Committee

- **9-22-20** Submitting for approval amended County Policy #241 titled “Purchasing Policy” with all references to “prevailing wage” deleted
- **10-20-16** Forwarding information received in response to the draft Responsible Contractor Policy submitted in September for discussion and modification of the policy

6. **INFORMATIONAL COMMUNICATIONS (To be Received & Filed in committee)**

- **10-20-2 BIRCH RUN TOWNSHIP** submitting notice of a special meeting of its Downtown Development Authority on October 7, 2020 at 8:00 a.m. to discuss and take action on various issues
- **10-20-3 BRIDGEPORT CHARTER TOWNSHIP** submitting notice of a Public Hearing on the request of Amigo Mobility Products for an Industrial Facilities Tax Exemption at 6693 Dixie Highway, Bridgeport
- **10-20-4 VILLAGE OF BIRCH RUN** submitting the Downtown Development Authority Annual Report on Status of Tax Increment Financing Plan for fiscal year ending 2020

V. Miscellaneous

VI. Adjournment

AGENDA

COUNTY SERVICES COMMITTEE

111 S. Michigan Ave., Room 200, Saginaw MI 48602

Wednesday, November 4, 2020 - 4:00 p.m.

VIA TELECONFERENCE PER PA 228 of 2020

Members: Charles Stack – Chair, Cheryl Hadsall – Vice-Chair, Kyle Harris, Dennis Krafft, Michael Webster
Others: Robert Belleman, Civil Counsel, Koren Thurston, Jennifer Broadfoot, Board Staff,
Media

***The County Services Committee meeting will be held via Zoom online meeting platform.
As the County Building is closed to the public except by appointment, the meeting is open remotely
to the public to follow along and participate during the public portion of the meeting, as follows:***

County of Saginaw is inviting you to a scheduled Zoom meeting.

Topic: [See Agenda below](#)

Date/Time: [November 4, 2020 04:00 PM EST](#)

Join Zoom Meeting: <https://zoom.us/j/8024441727> Meeting ID: [802 444 1727](#)

INSTRUCTIONS using ZOOM audio conferencing:

Dial: 1 (877) 853-5257 or 1 (888) 475-4499 and enter Meeting ID: [802 444 1727](#)

- I. Call to order
- II. Welcome
- III. Public Comment (*Speakers limited to 3 minutes*)
- IV. Agenda
 1. **Annette Rummel, CEO, Saginaw County Convention & Visitors Bureau, re:**
 - **11-17-4** Submitting for discussion and approval its FY 2021 proposed Budget
 2. **Denise Babbitt, Director, Equalization, re:**
 - **11-17-7** Submitting information for Saginaw County to enter into an agreement for a Designated Assessor pursuant to PA 660 of 2018
 3. **Dave Gilbert, Civil Counsel, re:**
 - **11-17-8** Submitting for approval a Responsible Contractor Policy and Resolution and revisions to the Saginaw County Purchasing Policy
 4. **INFORMATIONAL COMMUNICATIONS (To be Received & Filed in committee)**
 - **11-17-5** **ROBERT BELLEMAN, Controller/CAO** submitting the 2020 Third Quarter Finance and Program reports for the Historical Society of Saginaw County and its four out-county museums
 - **11-17-6** **CITY OF FRANKENMUTH** submitting Public Hearing Notices to establish an Industrial Development District and Industrial Facilities Exemption Certificate for Star of the West, 245 S. Main St.
- V. Miscellaneous
- VI. Adjournment

AGENDA

COUNTY SERVICES COMMITTEE

111 S. Michigan Ave., Room 200, Saginaw MI 48602

Wednesday, December 2, 2020 - 4:00 p.m.

VIA TELECONFERENCE PER PA 228 of 2020

Members: Charles Stack – Chair, Cheryl Hadsall – Vice-Chair, Kyle Harris, Dennis Krafft, Michael Webster
Others: Robert Belleman, Civil Counsel, Koren Thurston, Jennifer Broadfoot, Board Staff,
Media

***The County Services Committee meeting will be held via Zoom online meeting platform.
As the County Building is closed to the public except by appointment, the meeting is open remotely
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Topic: [See Agenda below](#)

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Join Zoom Meeting: <https://zoom.us/j/8024441727> Meeting ID: [802 444 1727](#)

INSTRUCTIONS using ZOOM audio conferencing:

Dial: 1 (877) 853-5257 or 1 (888) 475-4499 and enter Meeting ID: [802 444 1727](#)

- I. Call to order
- II. Welcome
- III. Public Comment (*Speakers limited to 3 minutes*)
- IV. Agenda
 1. (*Held over from October County Services Committee*)
Dennis Borchard, Director, Saginaw County Road Commission, re:
 - **10-20-6** Submitting its 2019 Annual Report (*Receive & File*)
 2. **Brian Wendling, Public Works Director, re:**
 - **12-15-3** Requesting approval of (1) Resolution Approving Apportionment of Operational Costs and Accepting for File the FY 2021 Budget of the Saginaw Area Storm Water Authority; and (2) Resolution Appointing Trustee and Alternate Trustee of the SASWA Board of Trustees
 - **12-15-4** Submitting for discussion its “Stormwater Management Design Requirements” document that will be offered to each of the County’s municipalities for adoption
 3. **Brian Keenan-Lechel, Parks & Recreation Director, re:**
 - **12-15-5** Requesting approval to utilize an additional \$100,000 from the Parks & Recreation Commission’s fund balance account to enhance the development of a splash pad and playground installation at William H. Haithco Recreation Area

4. **INFORMATIONAL COMMUNICATIONS (To be Received & Filed in committee)**

- **12-15-6 BAY CITY PUBLIC SCHOOLS** submitting a Resolution by the Board of Education of the School District of the City of Bay City that has determined its summer tax levy on all school district property

- **12-15-7 BIRCH RUN TOWNSHIP** submitting notice of a Public Hearing on Wednesday, December 9, 2020 at 8:00 a.m. for the Birch Run Downtown Development Authority to provide public information, appointment of new members and officers, and a streetscape project update

- **12-15-8 VILLAGE OF BIRCH RUN** submitting notice of a Public Hearing on Thursday, December 17, 2020 at 7:30 a.m. for the Village of Birch Run Downtown Development Authority to have an informational meeting

V. Miscellaneous

VI. Adjournment

COUNTY SERVICES

2019 Annual Report

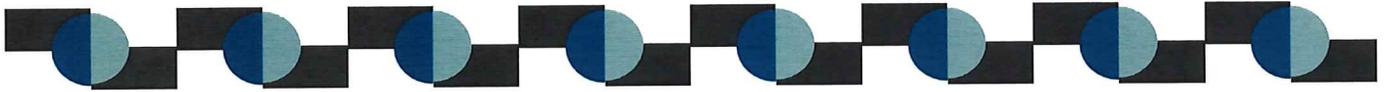
10-20-6



RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 OCT - 1 PM 4:3



Saginaw County Road Commission
3020 Sheridan Ave.
Saginaw, MI 48601
www.scrs-mi.org



ANNUAL REPORT OF THE BOARD OF COUNTY ROAD COMMISSIONERS OF SAGINAW COUNTY, MICHIGAN

Fiscal Year Ending December 31, 2019



John Sangster
Chairperson



Dave Adams
Vice-Chairperson



Richard H. Crannell, PE
Member



Todd M. Hare
Member



Deb Kestner
Member

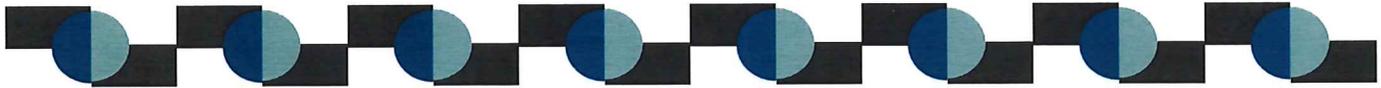
The Saginaw County Road Commission takes pleasure in submitting to you and the people of Saginaw County our fiscal year 2019 annual report in compliance with the provisions of Public Act 283 of 1909, as amended. Information in this report covers the fiscal year of January 1, 2019 through December 31, 2019.

Respectfully submitted,

**BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF SAGINAW**

John Sangster, Chairperson





FACT SHEET

Saginaw County residents:	200,169	Total miles of road	1,851.03
Residents of townships served:	142,059	Miles of primary road	507.27
Road Commission employees:	72	Miles of local road	1344.18
Commissioners:	5		
Townships served:	27		

- | | |
|-------------|---------------|
| Albee | Kochville |
| Birch Run | Lakefield |
| Blumfield | Maple Grove |
| Brady | Marion |
| Brant | Richland |
| Bridgeport | Saginaw |
| Buena Vista | St. Charles |
| Carrollton | Spaulding |
| Chapin | Swan Creek |
| Chesaning | Taymouth |
| Frankenmuth | Thomas |
| Fremont | Tittabawassee |
| James | Zilwaukee |
| Jonesfield | |

Total Revenue	\$ 30,187,221.00
Michigan Transportation Fund (MTF)	\$ 20,622,748.00
Federal, State, Twp. & Other Revenue	\$ 9,564,473.00
Miles of 2019 construction projects	28.94
Bridges replaced	7
Miles of local roads chip sealed	66
Miles of primary roads chip sealed	104
Miles of gravel placed roads	32
Tons of salt used	15,425





PRIMARY ROAD PROJECTS

Township	Road Name	Project Type	Amount
Albee Twp	Fergus	Bridge Replacement	\$ 1,407,290.86
Albee Twp	Gasper	Bridge Replacement	\$ 77,672.79
Brant Twp	Dempsey	Resurfacing	\$ 22,906.61
Bridgeport Twp	Dixie #1	Rehabilitation	\$ 386,144.26
Bridgeport Twp	Dixie @ Mill	Traffic Signal Upgrades	\$ 20,219.74
Bridgeport Twp	Williamson @ Southfield	Traffic Signal Upgrades	\$ 71,317.25
Bridgeport Twp	Dixie #2	Resurfacing	\$ 1,236,436.31
Bridgeport Twp	Williamson	Bridge Replacement	\$ 520,592.86
Buena Vista Twp	Portsmouth	Drainage	\$ 9,103.07
Carrollton Twp	Tittabawassee @ Michigan	Intersection Improvements	\$ 465,732.66
James Twp	Swan Creek @ River	Safety	\$ 870,373.65
James Twp	Swan Creek @ Weigl	Drainage	\$ 6,071.16
Lakefield Twp	Swan Creek	Cross Culvert	\$ 41,130.91
Maple Grove Twp	Gary	Drainage	\$ 28,183.74
Richland Twp	O'Hara	Cross Culvert	\$ 12,610.89
Saginaw Twp	Brockway	Traffic Signal Upgrades	\$ 97,152.69
Saginaw Twp	Center @ Seidel	Traffic Signal Upgrades	\$ 80,382.27
Saginaw Twp	Shattuck	Resurfacing	\$ 731,958.60
Saginaw Twp	West Michigan and Center	Resurfacing	\$ 405,347.90
Saginaw Twp	Tittabawassee	Resurfacing	\$ 21,991.11
Spaulding Twp	Sheridan	Resurfacing	\$ 925,933.63
Taymouth Twp	Seymour	Rehabilitation	\$ 33,648.51
Taymouth Twp	Sheridan	Bridge Replacement	\$ 91,797.05
Tittabawassee Twp	Freeland @ River	Roundabout	\$ 140,916.20
Primary Roads - Preservation/Structural Improvements			\$ 7,704,914.72



LOCAL ROAD PROJECTS

Township	Road Name	Project Type	Amount
Albee Twp	Briggs	Cross Culvert	\$ 6,803.19
Albee Twp	Verne	Cross Culvert	\$ 42,636.11
Albee Twp	Sloan	Drainage	\$ 3,788.16
Albee Twp	Burt	Resurfacing	\$ 104,358.48
			\$ 157,585.94
Birch Run Twp	Dehmel	Cross Culvert	\$ 14,219.46
Birch Run Twp	Beyer	Cross Culvert	\$ 10,220.97
Birch Run Twp	Willard	Drainage	\$ 28,596.10
Birch Run Twp	Burt	Resurfacing	\$ 86,458.19
			\$ 139,494.72
Blumfield Twp	Beyer	Box Culvert	\$ 167,654.40
Blumfield Twp	Mueller	Box Culvert	\$ 157,432.93
			\$ 325,087.33
Brant Twp	Schroder	Cross Culvert	\$ 8,543.67
Brant Twp	Raucholz	Cross Culvert	\$ 5,567.72
			\$ 14,111.39
Bridgeport Twp	Gabel	Cross Culvert	\$ 3,194.06
			\$ 3,194.06
Buena Vista Twp	Hack	Bridge Replacement	\$ 11,658.32
			\$ 11,658.32
Chapin Twp	Fenmore	Cross Culvert	\$ 4,878.17
			\$ 4,878.17
Chesaning Twp	Stuart	Cross Culvert	\$ 8,311.50
Chesaning Twp	Volkmer	Cross Culvert	\$ 6,835.16
Chesaning Twp	Stuart	Cross Culvert	\$ 8,058.69
Chesaning Twp	Volkmer	Cross Culvert	\$ 6,790.03
			\$ 29,995.38
Frankenmuth Twp	Tuscola	Cross Culvert	\$ 2,661.72
Frankenmuth Twp	Tuscola	Cross Culvert	\$ 21,541.28
Frankenmuth Twp	Baker	Resurfacing	\$ 661,628.83
			\$ 685,831.83
Fremont Twp	Ederer	Cross Culvert	\$ 11,049.10
Fremont Twp	Raucholz	Drainage	\$ 10,859.45
Fremont Twp	Ridgewood	Cross Culvert	\$ 3,631.04
Fremont Twp	Grabowski	Return to Gravel	\$ 47,413.38
Fremont Twp	Orr @ Marsh Creek	Bridge Replacement	\$ 1,068,791.94
			\$ 1,141,744.91
James Twp	River	Drainage	\$ 4,923.61
James Twp	Weigel	Drainage	\$ 94,235.36
James Twp	Miller	Return to Gravel	\$ 44,264.39
James Twp	Hart	Resurfacing	\$ 99,953.70
			\$ 243,377.06
Jonesfield Twp	Chapin	Cross Culvert	\$ 8,619.76

LOCAL ROAD PROJECTS

Township	Road Name	Project Type	Amount
Jonesfield Twp	Meridian	Resurfacing	\$ 596,761.05
Jonesfield Twp	Chapin @ Weeks Dr	Bridge Replacement	\$ 475,810.30
			\$ 1,081,191.11
Kochville Twp	Davis	Resurfacing	\$ 257,972.68
			\$ 257,972.68
Lakefield Twp	Ederer	Cross Culvert	\$ 5,392.87
Lakefield Twp	Nelson	Cross Culvert	\$ 8,239.04
			\$ 13,631.91
Maple Grove Twp	Maple	Drainage	\$ 113,286.82
Maple Grove Twp	Swan Creek	Resurfacing	\$ 256,261.63
			\$ 369,548.45
Marion Twp	Brant	Cross Culvert	\$ 2,154.97
Marion Twp	Burt	Cross Culvert	\$ 5,149.36
Marion Twp	Fenmore	Drainage	\$ 1,333.63
Marion Twp	Chapin	Drainage	\$ 39,751.44
			\$ 48,389.40
Richland Twp	Pangborn	Cross Culvert	\$ 4,896.00
Richland Twp	Raucholz	Cross Culvert	\$ 6,058.63
Richland Twp	Pruess	Cross Culvert	\$ 11,197.15
Richland Twp	Raucholz	Cross Culvert	\$ 9,385.54
Richland Twp	Pruess	Cross Culvert	\$ 12,978.53
			\$ 44,515.85
Saginaw Twp	Various	Concrete Repair	\$ 100,036.47
Saginaw Twp	White Beech	Drainage	\$ 16,542.42
Saginaw Twp	Cambridge Village	Resurfacing	\$ 850,526.07
Saginaw Twp	Barnard	Resurfacing	\$ 295,893.85
Saginaw Twp	Autumn Ridge	Resurfacing	\$ 614,171.60
			\$ 1,877,170.41
Spaulding Twp	Ambrose	Design	\$ 4,998.61
Spaulding Twp	Tom Cresswell	Return to Gravel	\$ 33,739.44
			\$ 38,738.05
Swan Creek Twp	Baumgartner	Cross Culvert	\$ 1,531.18
Swan Creek Twp	Wahl	Cross Culvert	\$ 12,475.98
Swan Creek Twp	Stello	Cross Culvert	\$ 14,684.13
Swan Creek Twp	Stello	Cross Culvert	\$ 13,733.86
			\$ 42,425.15

LOCAL ROAD PROJECTS

Township	Road Name	Project Type	Amount
Taymouth Twp	Dorwood	Cross Culvert	\$ 10,437.31
Taymouth Twp	Burt	Cross Culvert	\$ 2,989.83
Taymouth Twp	Canada	Cross Culvert	\$ 12,038.64
Taymouth Twp	Moorish	Cross Culvert	\$ 4,532.87
Taymouth Twp	Seymour	Drainage	\$ 87,186.08
			\$ 117,184.73
Thomas Twp	Gladstone	Cross Culvert	\$ 3,194.06
Thomas Twp	Gleaner	Cross Culvert	\$ 1,410.75
Thomas Twp	Thomas	Drainage	\$ 7,320.20
Thomas Twp	Tittabawassee	Cross Culvert	\$ 7,902.10
Thomas Twp	Orr	Culvert	\$ 11,248.66
Thomas Twp	Dice	Drainage	\$ 104,800.45
Thomas Twp	O'Hern	Non-Motorized	\$ 534,684.73
			\$ 670,560.95
Tittabawassee Twp	Graham	Cross Culvert	\$ 4,321.29
			\$ 4,321.29

COUNTY OF SAGINAW

BRIAN J. WENDLING
PUBLIC WORKS COMMISSIONER

Governmental Center
111 S. Michigan Avenue
Saginaw, Michigan 48602-2086
Phone 989-790-5258 • FAX 989-790-5259

COUNTY SERVICES



November 12, 2020

12-15-3

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 NOV 12 PM 4:31

Honorable Chairman Michael Webster
Saginaw County Board of Commissioners
111 South Michigan Avenue
Saginaw, MI 48602

Dear Chairman Webster,

Please allow this letter to serve as my request to meet with the County Services Committee at its December 2, 2020, meeting regarding the following matters:

- Request to approve by resolution and forward the annual Saginaw Area Storm Water Authority cost apportionments and 2021 budget.
- Appointment of trustee and alternate trustee to the SASWA Board.

Attached for your review is a copy of the 2020 annual membership apportionments as well as the proposed 2021 apportionments. I will be in attendance on December 2nd to answer any questions you or the committee may have.

Thank you for your consideration.

Respectfully,

Brian J. Wendling
Public Works Commissioner

Enclosure



Saginaw Area Storm Water Authority Apportionment 2021

Total Number of Members		15				
Member Name	Standard Apportionment (%)	2021 Standard Apportionment	CB Inspection Apportionment	2021 Budget CB Apportionment	2021 Budget Total Apportionment	
Municipalities						
Bridgeport Charter Twp.	6.667	\$5,674.00	1.5%	\$387.32	\$6,061.32	
Buena Vista Charter Twp.	6.667	\$5,674.00	4.4%	\$1,091.55	\$6,765.55	
Carrollton Twp. & Schools	6.667	\$5,674.00	8.7%	\$2,183.10	\$7,857.10	
Saginaw - City	6.667	\$5,674.00	6.3%	\$1,584.51	\$7,258.51	
Saginaw Charter Twp.	6.667	\$5,674.00	23.8%	\$5,950.70	\$11,624.70	
Thomas Twp.	6.667	\$5,674.00	5.6%	\$1,408.45	\$7,082.45	
Tittabawassee Twp.	6.667	\$5,674.00	11.1%	\$2,781.69	\$8,455.69	
Zilwaukee - City	6.667	\$5,674.00	2.3%	\$563.38	\$6,237.38	
Sub-Total	53.33					
Agencies						
Saginaw County	6.667	\$5,674.00	0.0%	\$0.00	\$5,674.00	
Sub-Total	6.667					
Area Apportioned Total	60.00					
School Districts / University						
Bridgeport/Spaulding Schools	6.667	\$5,674.00	9.4%	\$2,359.15	\$8,033.15	
Saginaw Twp. Community Schools	6.667	\$5,674.00	14.6%	\$3,661.97	\$9,335.97	
Saginaw ISD	6.667	\$5,674.00	9.2%	\$2,288.73	\$7,962.73	
Saginaw Valley State University	6.667	\$5,674.00	0.0%	\$0.00	\$5,674.00	
Swan Valley School District	6.667	\$5,674.00	3.0%	\$739.44	\$6,413.44	
Agencies						
S.C.R.C.	6.667	\$5,674.00	0.0%	\$0.00	\$5,674.00	
Pre Determined Total	40.000					
Total	100.00	\$85,110.00	100%	\$25,000.00	\$110,110.00	



SASWA ANNUAL BUDGET 2021

	Cost estimate
Public Participation Process (PPP)/ Public Education Plan (PEP) Implementation	\$1,000.00
Surveys for PEP (year five of permit)	\$0.00
Website (upload documents, utilization fee, etc.)	\$1,000.00
 Illicit Discharge Elimination Program (IDEP) Implementation	
Water Quality test supplies	\$1,000.00
Dry Weather Screening	\$5,600.00
Spill Documentation and follow-ups	\$3,000.00
 Post Construction Controls (Documentation)	\$2,000.00
 Construction Site Controls	\$0.00
 Pollution Control and Good Housekeeping Controls	
Employee training (IDEP & spill refresher)	\$1,000.00
Catch Basin Inspections	\$25,000.00
PIPP / SWPPP Updates	\$2,500.00
 Progress Report - 2021 Documentation & Submittal via MiWaters	\$13,000.00
 Administration, consultation & meetings	\$24,000.00
EGLE Audits	\$5,000.00
Insurance, mailing, miscellaneous	\$6,000.00
Accountant and Auditor	\$9,000.00
Legal consultation	\$1,000.00
Conferences for officers	\$0.00
	TOTAL = \$100,100.00
	Contingencies (10%) = \$10,010.00
	Carry over from 2020 Budget
	Budget for 2021 = \$110,110.00

2020

Saginaw Area Storm Water Authority

Total Number of Members		15	
Member Name		Standard Apportionment	2020 Budget Apportionment
Municipalities			
Bridgeport Charter Twp.		6.667	\$6,893.33
Buena Vista Charter Twp.		6.667	\$6,893.33
Carrollton Twp. & Schools		6.667	\$6,893.33
Saginaw - City		6.667	\$6,893.33
Saginaw Charter Twp.		6.667	\$6,893.33
Thomas Twp.		6.667	\$6,893.33
Tittabawassee Twp.		6.667	\$6,893.33
Zilwaukee - City		6.667	\$6,893.33
Sub-Total		53.33	
Agencies			
Saginaw County		6.667	\$6,893.33
Sub-Total		6.667	
Area Apportioned Total		60.00	
School Districts / University			
Bridgeport/Spaulding Schools		6.667	\$6,893.33
Saginaw Twp. Community Schools		6.667	\$6,893.33
Saginaw ISD		6.667	\$6,893.33
Saginaw Valley State University		6.667	\$6,893.33
Swan Valley School District		6.667	\$6,893.33
Agencies			
S.C.R.C.		6.667	\$6,893.33
Pre Determined Total		40.000	
Total		100.00	\$103,400.00

SASWA ANNUAL BUDGET 2020

	Cost estimate	
PPP Implementation	\$0.00	
PEP Implementation	\$1,000.00	
Surveys for PEP	\$0.00	
Website (upload documents, utilization fee, etc.)	\$1,000.00	
IDEP Implementation		
WQ test supplies	\$1,000.00	
Dry Weather Screening	\$5,000.00	
Spill Documentation and follow-ups	\$3,000.00	
Post Construction Controls (Documentation)	\$2,000.00	
Construction Site Controls	\$0.00	
Pollution Control and Good Housekeeping Controls	\$5,000.00	
Employee training (IDEP & spill refresher)		
Structural stormwater control effectiveness		
Roadways, Parking Lots and Bridges		
Fleet Maintenance and storage yards - PIPPs		
Managing vegetated properties		
Progress Report - 2020 Documentation	\$8,000.00	
Administration, consultation & meetings	\$26,500.00	
MDEQ Audits	\$500.00	<i>(Only used if scheduled)</i>
Insurance, mailing, miscellaneous	\$6,000.00	
Accountant and Auditor	\$9,000.00	
Legal consultation	\$1,000.00	
Conferences for officers	\$0.00	
Grant Match	\$0.00	
MS4 Permit Application Revisions	\$25,000.00	
TOTAL =	\$94,000.00	
Contingencies (10%) =	\$9,400.00	
Carry over from 2019 Budget		
Budget for 2019 =	\$103,400.00	

SAGINAW COUNTY, MICHIGAN
RESOLUTION: APPROVING APPORTIONMENT OF OPERATIONAL COSTS and
ACCEPTING FOR FILE THE FISCAL 2021 BUDGET OF THE
SAGINAW AREA STORM WATER AUTHORITY

At a regular meeting of the Board of Trustees of the _____, held on the
_____ day of _____, 2020, at _____ o'clock __. m. Michigan Time.

PRESENT:

ABSENT:

_____ offered the following resolution and moved for adoption. The motion was
seconded by _____.

WHEREAS, _____ has previously joined the Saginaw Area
Storm Water Authority, hereafter "Authority", and is a constituent municipality pursuant to the Articles of
Incorporation adopted by the Authority and

WHEREAS, two-thirds (2/3) of the legislative bodies of the Member Municipalities are required
to approve the apportionment of the annual operating costs of the Authority and

WHEREAS, the authority is required to file with the legislative bodies of the Member
Municipalities an annual budget for the next fiscal year covering the proposed expenditures to be made
for the organization and operation of the Authority.

NOW, THEREFORE, BE IT RESOLVED by the _____ Board of
Trustees as follows:

1. The apportionment of the 2021 annual operational costs for the Authority is approved as
presented.
2. The 2021 annual budget of the Authority is received and accepted as presented.

YEAS:

NAYS:

ABSTENTIONS:

ABSENT:

The Supervisor declared the resolution duly adopted.

_____, Supervisor

_____, Clerk

IN WITNESS WHEREFORE, I have hereunto fixed my official signature on this _____ day
of _____, 2020.

_____, Clerk

SAGINAW COUNTY, MICHIGAN
RESOLUTION: APPOINTING TRUSTEE AND ALTERNATE TRUSTEE
SAGINAW AREA STORM WATER AUTHORITY BOARD OF TRUSTEES

I, the undersigned, at a regular meeting of the Township Board of _____, held on the _____ day of _____, 2020, at _____, Michigan Time.

PRESENT:

ABSENT:

_____ offered the following resolution and moved for adoption. The motion was seconded by _____.

WHEREAS, _____ has previously joined the Saginaw Area Storm Water Authority, hereafter "Authority", and is a constituent municipality pursuant to the Articles of Incorporation adopted by the Authority and

WHEREAS, each constituent municipality is required to periodically designate a constituent member and alternate constituent member to serve on the Authority Board of Trustees.

NOW, THEREFORE, BE IT RESOLVED by the _____ Board of Trustees as follows:

1. The following are hereby appointed as trustee and alternate trustee, respectively of this

_____:

Trustee: _____

Alternate Trustee: _____

2. The above appointed trustee and alternate trustee will serve a **four-year** term from **January 1, 2021 through December 31, 2024**, or until otherwise replaced by the _____ Board of Trustees.

NOW, THEREFORE, BE IT RESOLVED by the _____ Board of Trustees as follows:

1. _____ is hereby appointed as Saginaw Area Storm Water Authority Trustee on behalf of _____.
2. _____ is hereby appointed as Saginaw Area Storm Water Authority Alternate Trustee on behalf of _____.

YEAS:

NAYS:

ABSTENTIONS:

ABSENT:

The Supervisor declared the resolution duly adopted.

_____, Supervisor

_____, Clerk

IN WITNESS WHEREFORE, I have hereunto fixed my official signature on this _____ day
of _____, 2020.

_____, Clerk



**OATH OF OFFICE
SAGINAW AREA STORM WATER AUTHORITY**

The undersigned, having been appointed Trustee/Alternative Trustee, by the following member municipality: _____, do hereby solemnly swear (or affirm) that I will support the Constitution of the United States and the Constitution of the State of Michigan, and that I will faithfully discharge the duties of the office of the Trustee/Alternative Trustee of the Saginaw Area Storm Water Authority, according to the best of my ability.

Dated this _____ day of _____, 201__.

By: _____

CERTIFICATION OF CLERK

I hereby certify that the foregoing Oath of Office was made and subscribed before me this _____ day of _____, 201__.

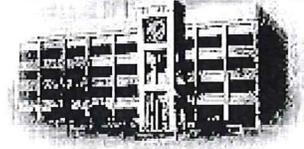
Clerk

Name of Member of Municipality

COUNTY OF SAGINAW

BRIAN J. WENDLING
PUBLIC WORKS COMMISSIONER
Governmental Center
111 S. Michigan Avenue
Saginaw, Michigan 48602-2086
Phone 989-790-5258 • FAX 989-790-5259

COUNTY SERVICES



November 12, 2020

12-15-4

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 NOV 12 PM 4:31

Honorable Chairman Michael Webster
Saginaw County Board of Commissioners
111 South Michigan Avenue
Saginaw, MI 48602

Dear Chairman Webster,

Please find enclosed a copy of the "Stormwater Management Design Requirements" recently completed by my office. This document is being submitted for informational purposes only and is in follow up to a revenue generating concept that I discussed with the Board last December.

As a quick recap, these Design Requirements will be offered to each of the County's Municipalities for adoption. If adopted, my office will then provide development plan review services, using these requirements, on behalf of the Municipality. This service to the Municipalities will not only provide a revenue source for my office, but will significantly reduce the possibility of future long term flooding issues that many of the Municipalities are currently dealing with due to little or no plan review for stormwater.

I will be in attendance on December 2nd to answer any questions you or the committee may have.

Thank you for your consideration.

Respectfully,

Brian J. Wendling
Public Works Commissioner

Enclosure

SAGINAW COUNTY PUBLIC WORKS
COMMISSIONER
STORMWATER MANAGEMENT DESIGN
REQUIREMENTS



Prepared on behalf of:

SAGINAW COUNTY
SAGINAW COUNTY PUBLIC WORKS COMMISSIONER (SCPWC)

Brian J. Wendling
Saginaw County Public Works Commissioner
Saginaw County Courthouse
Address: 111 S. Michigan Ave, Saginaw, MI 48602
Telephone: (989) 790-5258

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I. INTRODUCTION

A. NPDES Phase II Requirements for Stormwater

The Saginaw County Public Works Commissioner (SCPWC), Saginaw County, and the following municipalities have implemented their own Stormwater Management Plans and/or Stormwater Management Design Requirements (PCC) for new development and/or re-development and have the following NPDES stormwater discharge permits:

Table 1. Stormwater Management Plans and/or Stormwater Management Design Requirements

Member	Old NPDES Permit #
Saginaw County (SCPWC)	MIG610171
Saginaw County Road Commission	MIG610178
Carrollton Township	MIG610165
City of Saginaw	MIG610161
Saginaw Charter Township	MIG610166
Thomas Township	MIG610174
Bridgeport Charter Township	MIG610181

Saginaw County Public Works Commissioner serves as a secondary reviewer for compliance of the ultimate outlet discharge into any county drain within Saginaw County from sites which meet review criterion for all municipalities with implemented Stormwater Management Plans, listed above.

These members must attain compliance with the National Pollutant Discharge Elimination System (NPDES) Phase II requirements as they relate to stormwater discharge in Saginaw County's jurisdictional area within the urbanized area based on the most recent Census Data. Members of the Saginaw Area Storm Water Authority (SASWA) who do not have established post construction controls in their jurisdictional boundary may adopt these stormwater design requirements by resolution. They must provide the resolution to the SCPWC.

These Stormwater Management Design Requirements are only for industrial, commercial, non-residential development, or platted subdivisions or condominium complex development or re-development. These Design Requirements are not to be applied to single family or duplex residential structure or other multi-family residences that are constructed on a parcel that is less than an acre and not part of a subdivision or condominium project. Any questions regarding this should be referred to the Saginaw County Public Works Commissioner's office for clarification.

These Design Requirements for Saginaw County are adopted pursuant to the general authority granted under the Michigan Drain Code of 1956, Public Act No. 40 of 1956, as amended, M.C.L. §§ 280.1 – 280.630 (hereinafter "Drain Code") and other applicable laws, to protect the public health, safety, and welfare regarding drainage matters over which the Saginaw County Public Works Commissioner has jurisdiction. These requirements are meant to assist in maintaining the County's stormwater drainage systems, waterways and watersheds, focusing on the legally established drainage districts and drains within Saginaw County.

Specifically, these Requirements are designed to provide guidance in order for project design to minimize flood damage, to preserve farm drainage, to promote best management practices relating to drainage, to protect the quality of surface and ground waters, to protect Saginaw County residents' natural flow rights under common law and to manage the County's drains, drainage resources, and drainage districts for multiple purposes including drainage, sustainable development, recreation, scenic beauty, and fish and wildlife habitats. These Requirements are applicable to all development or re-

development projects that disturb at least one or more acres, including projects less than an acre that are a part of a larger common plan of development or sale and discharge into the applicant's MS4 and are within the current census defined Urbanized Areas within the jurisdictional boundary of Saginaw County. These proposed developments are subject to review and approval and either the Saginaw County Public Works Commissioner has jurisdiction, or the local jurisdiction has adopted these design requirements by resolution and have an agreement with the Saginaw County Public Works Commissioner to act as their review agency for water quality Best Management Practices (BMPs).

Additionally, if a project takes place in a township outside of the Urbanized Area which has adopted these stormwater Design Requirements by resolution, the SCPWC will provide review services as needed to assure the development meets the requirements.

Other communities within the Urbanized Area which have adopted their own Stormwater Design Guidelines will be doing their own site plan reviews per their own standards or using the SCPWC design standards. The SCPWC will only oversee the allowable discharge rate and detention volumes in these situations, the community will review for water quality treatment trains, water quality BMPs along with the allowable discharge rate and detention volumes.

These Requirements provide minimum requirements for developments covered under the Stormwater Management Design Requirements. However, the Saginaw County Public Works Commissioner reserves the right to deviate from the specific design requirements set forth when, on a case-by-case basis, such deviation is appropriate or necessary in order to accommodate the goals and purposes underlying these Design Requirements. For example: 1. A site which has an existing storm water management plan in place, but is just re-doing their paved parking lot with a new surface (0% change in impervious area); 2. A site which has a storm water management plan in place and is removing impervious areas to add green space, or 3. A site which is discharging to an MDOT MS4 where the County Public Works Office has no jurisdiction.

The Design Requirements and their implementation are designed to promote low impact designs such as green infrastructure or other site controls of stormwater. The Saginaw County Public Works Commissioner is committed to working with those developing projects or applying for permits to use alternative drainage methods which help meet local landscape ordinance requirements and improve the quality of water in our environment. The review of these procedures is the same as it is for any site review process. The submittal of the deviations is accepted and reviewed by the SCPWC engineer or designee and then a final decision is made as to whether this proposed design will be accepted.

The following outlines basic ideas and principals of stormwater management, and provides a conceptual foundation for the design requirements contained in this document:

1. Impacts of Development on Water Quantity

The hydrology of a watershed changes in response to site clearing and development of the natural landscape displays itself with an increase in the quantity of runoff. A site's existing stormwater storage capacity can be lost as vegetation is removed, natural depressions are graded and both topsoil and wetlands are eliminated. As the soil is compacted and resurfaced with impervious materials such as concrete and asphalt, rainfall may no longer penetrate into the ground and runs off of the land. These modifications, along with the installation of drainage facilities, alter natural drainage patterns within the area drained. The following are just a few examples of changes in hydrology in site development:

- Increases in runoff volume from a site.

- Direction of stormwater discharges to open grassed areas such as swales and lawns rather than allowing stormwater to run off from impervious areas directly into the stormwater conveyance system.
- Careful design and installation of erosion control mechanisms and rigorous maintenance throughout the construction period. Effective erosion control measures include minimizing the area cleared, leaving a minimum ten (10) foot wide vegetated buffer between drains/streams (with appropriate additional BMPs as needed) and the site construction area, minimizing the length of time that a site is cleared and graded, and the timely vegetative stabilization of disturbed areas.

5. Site Controls

Site controls are the subject of this document. After the implementation of source controls, site controls are then required to convey, pre-treat, and treat (e.g., detain, retain or infiltrate) the stormwater runoff generated by development. The range of engineering and design techniques available to achieve these objectives is to some degree dictated by site configuration, soil type, and the receiving waterway. For example, flat or extremely steep topography may preclude the use of grassed swales, which are otherwise preferable to curb and gutter systems. But while each site will be unique, some universal guidelines for controlling stormwater quality and quantity can be utilized.

6. "Drain" and "Drainage District" Defined

The term "Drain" as used in these Design Requirements shall have the meaning as proscribed in Section 3 of the Drain Code as follows:

The word "drain", whenever used in this act, shall include the main stream or trunk and all tributaries or branches of any creek or river, any watercourse or ditch, either open or closed, any covered drain, any sanitary, storm, or combined sewer or conduit composed of tile, brick, concrete, or other material, any structures or mechanical devices, that will properly purify the flow of such drains, any pumping equipment necessary to assist or relieve the flow of such drains and any levee, dike, barrier, or a combination of any or all of same constructed, or proposed to be constructed, for the purpose of drainage or for the purification of the flow of such drains, but shall not include any dam and flowage rights used in connection therewith which is used for the generation of power by a public utility subject to regulation by the public service commission.

The term "Drainage District" as used in these Design Requirements shall have the following meaning:

A Drainage District is any county or inter-county drainage district legally established pursuant to applicable provisions of the Drain Code. Drain Code Section 5 provides that each such drainage district is a body corporate with the power to contract, to sue and be sued, and to hold, manage, and dispose of real property, in addition to any other powers conferred by law. Generally, a drainage district is comprised of all lands which drain to a legally established Drain.

7. Goals of these Design Requirements

It is the goal of these site development requirements minimize impacts on communities and/or adjacent properties. The goal is to establish minimum stormwater management requirements to meet the following objectives:

- Increases in bankfull events creating erosion issues in streams, rivers and open drains.
- Increases in flow velocities, smoother hydraulic surfaces which can result in shorter times of concentration.
- Dramatic stream flow fluctuations from concentrated runoff from improperly designed sites.
- Less infiltration into the underlying groundwater table which can reduce base flow to rivers and streams.
- Increased sediment loads from construction sites into drains, streams or rivers, with resultant effects on aquatic habitats.

2. Impacts of Development on Water Quality

As development occurs, changes in land use may contribute new or additional pollutants to stormwater runoff. In addition, some accompanying impervious surfaces may provide efficient delivery of these pollutants into receiving waterways. Leaves, litter, animal droppings, exposed soil from construction sites, fertilizer and pesticides are all washed off the land. Vehicles and deteriorating urban surfaces deposit trace metals, oil, and grease onto streets and parking lots. These and other toxic substances may be carried by stormwater and conveyed through creeks, ditches and storm drains into our rivers and lakes.

In short, the ecology of drains and waterways may be re-shaped by the shifts in hydrology, morphology and water quality that can accompany the development process. The stresses that these changes place on the environment are often gradual and invisible, yet they may produce significant effects over time. The Michigan Department Environment, Great Lakes, and Energy (EGLE) has identified streams in the urban and urbanizing areas as requiring special initiatives to restore degraded habitats, and to improve water quality.

3. Strategy for Design of Stormwater Management Systems

Comprehensive site planning can substantially reduce environmental and drainage impacts associated with site development. To achieve this, communities, regulatory agencies, and designers must evaluate the impact of each individual development project over the long term and on a watershed scale. Such an approach requires consideration of Best Management Practices (BMPs) that function together as a system to ensure that the volume, rate, timing and pollutant load of runoff remains stable and sustainable. A "BMP" is a practice or combination of practices that prevent or reduce stormwater runoff and/or associated pollutants. This can be achieved through a coordinated network of structural and nonstructural BMPs. In such a system, each BMP by itself may not provide major benefits, but becomes very effective when developed as a treatment train on the site.

4. Source Controls

Source controls reduce the volume of runoff generated on-site and eliminate initial opportunities for pollutants to enter the drainage system. By working to prevent problems, source controls are the best option for controlling stormwater, and include the following key practices:

- Use of existing on-site natural features that perform stormwater management functions, such as depressions, wetlands, woodlands and vegetative buffers along drains or stream banks.
- The minimization of impervious surface area through site planning that makes efficient use of paved, developed areas and maximizes open space. Encouraging flexible street and parking standards and the use of permeable ground cover materials can also reduce impervious surfaces.

- Ensure that stormwater drainage systems and BMPs for water quality and quantity are in place at site developments.
- Reduce the risk of urban flood damage from site developments.
- Minimize impacts on county drains and natural stream courses where storm systems may discharge.
- Reduce non-point source pollution from site developments.
- Maintain existing site hydrology to avoid environmental impacts.
- Ensure compliance with site planning efforts and compliance with the National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit.
- Ensure adequate drainage systems are being constructed for future development in which the Saginaw County Public Works Commissioner has jurisdiction over, including projects which disturb at least one or more acres, and projects less than an acre which are a part of a larger common plan of development or sale and discharge into the SCPWC drainage system or MS4 under these design guidelines by resolution.

Measurable goals will be implemented and assessed on a yearly basis to determine the effectiveness of the Design Requirements. The following measurable goals will be reviewed annually:

- How many site design plans are reviewed,
- The number of SESC permits that are utilized by the Saginaw County Public Works Commissioner (CEA),
- The Low Impact Development practices implemented and the effectiveness of each,
- The number of any complaints received, investigated and/or passed on to the Saginaw County Public Works Commissioner, CEA, that are related to site development and stormwater issues from that development.

Further documentation of the impacts of development on land and water resources and the importance of stormwater management can be found in Chapter 2 of the Low Impact Development Manual for Michigan (SEMCOG, 2008).

<https://semcog.org/Reports/LID/files/assets/basic-html/page-1.html#>

OR, the following:

<https://www.semcog.org/Green-Infrastructure>

8. Enforcement of Stormwater Management Design Requirements

Each municipality or township that has adopted these design requirements for stormwater must initiate the action of enforcement through their zoning regulations or another regulatory mechanism.

FOR NEW DEVELOPMENTS or RE-DEVELOPMENTS of 1 acre or more in area (including projects less than an acre that are a part of a larger common plan of development or sale and discharge into the applicant's MS4):

If a site is not in compliance with the design requirements and has not completed the site review process successfully, the county will rely on the local building inspector to withhold an occupancy permit for the structure until it is in compliance with the requirements.

If the site is already occupied, then a letter will be issued from the municipality's zoning enforcement staff to bring the site into compliance within the specified period dictated on the letter. If the site is a **High Priority** site (*human health and safety hazard*) it must be brought into compliance immediately upon receiving either verbal or written notice. If the site is considered a **Medium Priority** (*flood and property damage hazard to nearby parcels/structures*) action must start within 5 days of receiving written or verbal notice and be completed within 10 days after action has started. If the site is **Low Priority** (*nuisance site, no imminent property damage can occur, no water quality issues*) the site must come into compliance within 30 days of receiving written or verbal notice.

9. Goals for Water Quality Requirements

Table 2. Stormwater Management Criteria

Stormwater Management Criteria	Description
A. Water Quality (WQ)	All site development projects are required to detain the water quality (first flush) volume. The WQ Volume is determined by the Saginaw County Public Works Commissioner's guidelines and site applicability. Design for a minimum removal of 80% of TSS as compared to uncontrolled runoff or a discharge concentration not to exceed 80 mg/L Total Suspended Solids (TSS). This criterion is assumed to be met if extended detention time of the Channel Protection (CP) Volume is provided.
B. Channel Protection (CP)	The Channel Protection (CP) Criteria was developed to prevent or minimize the channel enlargement process in streams and rivers. The post construction runoff rate and volume for a site must not exceed up to the 2-yr 24-hr storm event. In areas with C/D soils, the site should be maximized for opportunities to reduce runoff (i.e., amended soils, harvesting, reuse) prior to allowing the option for extended detention. HOWEVER, in Saginaw County with its high seasonal water table and the effects of Lake Huron's water level these methods will need to be proven to work in HIGH WATER conditions with NO ADVERSE effects to neighboring properties ¹ . Extended detention should focus on maximizing the volume reduction onsite and then detaining the remaining volume of the 2-yr 24-hr storm event with the release rate of 0.2 cfs per acre or the 1-yr 24-hr storm whichever is the lower rate. The CP is NOT required for the following waterbody: <ul style="list-style-type: none"> Saginaw River

NOTE: See Engineered drains; see table 1 in Section II - Definitions

¹The SCPWC will require ground borings for determination of groundwater table on sites they feel may have issues with extended detention. This will be especially in times when the Lake Huron WSEL is above 579-ft (IGLD85). Also, use of the NRCS/USDA soils data banks and soils descriptions in the Saginaw Valley must be used to evaluate the groundwater table. This data will indicate seasonal water tables.

10. Design Criteria for Existing and Proposed Stormwater Collection

Proper sizing of storm sewers and open drains is accomplished by examining past rainfall data and projecting the amount of surface water runoff that can be expected from a precipitation event. In this study, the design rainstorm was chosen with a recurrence frequency of 10-years (10% recurrence interval). The amount of surface water runoff to be collected in storm sewers and open drains will be estimated using the Modified Rational Method.

11. Tapering or Removal of Stormwater Controls or Best Management Practices

No property owner or other party shall remove or modify any stormwater device or best management practice designed to restrict the flow of stormwater into a stormwater conveyance system or waters of the State. The removal or modification of a device or best management practice to restrict flows of stormwater can only be performed if the party responsible for the removal has had a detailed hydrology & hydraulic study done that provides proof of no significant impact on neighboring properties upstream or downstream of the site. The County Engineer, or other appointed designee, must approve this study. The party removing such a restrictor will be held liable for any water damage incurred on neighboring properties.

No property owner or other party shall remove or modify a best management practice that protects, preserves, or improves stormwater quality. The owner or their designee must obtain permission from the County to remove or modify a best management practice. If permission is not received in writing from the County, the owner or other party must replace the best management practice at their expense. It is the responsibility of every parcel owner to discharge the cleanest possible stormwater from their site as this water drains to the Great Lakes, and we all must take care to protect this water resource to the maximum extent possible.

B. Codes / Laws for Enforcement of Stormwater Management Requirements for Pollution of Surface Waters or MS4

Municipalities within Saginaw County have adopted or have the following as commercial / residential building enforcement procedures:

- 2012 or newer versions of the Michigan Plumbing Code,
- 2009 or newer versions of the Michigan Residential Code, or
- The International Property Maintenance Code of 2012, or newer versions.

These administrative procedures when adopted by a community provide the "right of entry" for the municipality's inspector, code enforcement staff, or their designee to enter private property if a violation of the code is witnessed, visible, or quantifiable evidence is present to suggest that a violation exists on the property. If access is denied, and evidence of violation is present, then staff will obtain a warrant for entry if necessary.

Enforcement Venues for Townships, Cities and Villages:

PA245-1999 which amended PA230-1972 (the Stille-Derossett-Hale Single State Construction Code Act) established the "Single State Construction Code" whereby the entire state of Michigan is subject to a single "family" of construction codes without exception. This means that every portion of the State is subject to the 2012 Michigan Plumbing Code or most recently adopted version, and the 2009 Michigan Residential Code, or most recently adopted version, enforced either locally (as an authorized enforcing agency) or by the State Bureau of Construction Codes (BCC).

Since Code Enforcement and Property Maintenance is not a function enabled by PA230-72 and not otherwise mandated by state law, a local governmental unit would have to locally adopt the International Property Maintenance Code (IPMC) to lawfully enforce its provisions. If a municipal member has adopted, by ordinance, the IPMC then it enforces the IPMC through its Code Enforcement Program. See Table 1 below.

Additionally, if the municipality has a Code Enforcement Log that is marked above also. The Code Enforcement Log is a tracking mechanism used by communities to track violations and their outcome and will be used by that community as its tracking mechanism.

Table 1: Communities with Regulatory Mechanisms in place. NOTE: these can be found in the Collaborative Enforcement Response Procedure of the SASIVA.

Community/County Agency	Building Code/Ordinances/ Code Enforcement	Code Enforcement Log	Ordinance or Code
<i>Municipalities</i>			
Bridgeport Charter Township	Yes	Yes	Chop. 8, 14, 20, 32 http://www.bridgeportmi.org/index.php/code-of-ordinances?task=document.viewdoc&id=99
Buena Vista Charter Township	Yes	Yes	http://www.bvclnet/vp-content/uploads/2015/03/ord-inter-prop-code_updated_1_23_15.pdf Chapter 34
Carrollton Township & School District	Yes	Yes	https://www.municode.com/library/mi/carrollton-township_saginaw-co/codes/code-of-ordinances Section 14 & 58
City of Saginaw	Yes	Yes	http://library.ami.legal.com/nxt/gateway.dll/MI/ichigan/saginaw/cityof/saginaw/codeofordinances?templates\$fu-defanlh.htm\$3.0\$vid-a-ilegalsaginaw_mi Chapter 31, 32, 94
City of Zilwaukee	Yes	Yes	https://www.municode.com/library/mi/zilwaukee/codes/code_of_ordinances?nodeId=COO-RZIM Chapters 6, 10, 30
Saginaw Charter Township	Yes	Yes	https://www.municode.com/library/mi/saginaw-charter-township_saginaw-co/codes/code_of_ordinances Chapters 2, 14, 26, 78
Thomas Township	Yes	Yes	https://www.municode.com/library/mi/thomas-township_saginaw-co/codes/code_of_ordinances Title 1, 8 and 9 (chap.8)
Tittabawassee Township & School District	Yes	Yes	http://www.tittabawassee.org/code-of-ordinances.html Chap. 14, 38, 42, 66
Saginaw County / SCPWC	Yes, at local level	Yes, at local level	Use of Local Ordinance, Drain Code, or County Health Code
Saginaw County Road Commission	Yes, at local level	Yes, at local level	Use of Local Ordinance or County Health Code

<i>Educational Institutions*</i>			
Bridgeport-Spaulding School District	N/A	N/A	N/A
Saginaw ISD	N/A	N/A	N/A
Saginaw Township Community Schools	N/A	N/A	N/A
Saginaw Valley State University	N/A	N/A	N/A
Swan Valley School District	N/A	N/A	N/A

Enforcement Venues for County Agencies/Departments:

The Saginaw County Road Commission (SCRC) and the Saginaw County Public Works Commissioner (SCPWC) do not have ordinance authority. However, the SCPWC has some authority to control water pollution in county drains provided by the State of Michigan Drain Code of 1956. The following are pertinent excerpts:

The Michigan Drain Code Public Act 40 of 1956 states:

Sec. 423. (1) A person shall not continue to discharge or permit to be discharged into any county drain or inter-county drain of the state any sewage or waste matter capable of producing in the drain detrimental deposits, objectionable odor nuisance, injury to drainage conduits or structures, or capable of producing such pollution of the waters of the state receiving the flow from the drains as to injure livestock, destroy fish life, or be injurious to public health.

(10) Failure to comply with any of the provisions of this section subjects the offender to the penalties described in section 602.

Sec. 602. If any person shall willfully or maliciously remove any section or grade stake set along the line of any drain, or obstruct or injure any drain, he shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$100.00 and the costs of prosecution, or in default of the payment thereof, by imprisonment in the county jail not exceeding 90 days.

The SCRC has limited authority under state law to control water pollution in statutory road right-of-ways. When evidence of an illicit discharge to a Road Commission ditch or drain is found, and voluntary correction is not forthcoming, the SCRC will contact the appropriate agency, depending on the nature of the illicit discharge, and work with the Saginaw County Public Works Commissioner, the County Health Department, the local unit of government, the local policing authority and/or the Department of Environment, Great Lakes, and Energy (EGLE) to require elimination. The EGLE has broad authority to control pollution, either directly or indirectly, to waters of the state provided by Part 31 of Act 451 of 1994.

Additionally, the Saginaw County Health Department has an enforceable County Public Health Code, as follows:

Excerpts from the SAGINAW COUNTY PUBLIC HEALTH CODE:

Section 2 — Authority, Jurisdiction and Administration

- 2.1 Authority.** By virtue of the power vested in the Saginaw County Department of Public Health under Act 368, P.A. 1978, as amended, there are hereby provided regulations affecting the public health, safety, welfare and environmental quality of Saginaw County, including the provisions for violations of said regulations.
- 2.2 Jurisdiction.** The Saginaw County Department of Public Health shall have jurisdiction throughout the County of Saginaw, including all cities, villages and townships in the administration and enforcement of these regulations and relevant State Laws including all regulations or amendments hereafter adopted unless otherwise specifically stated.
- 2.3 Enforcement.** All premises affected by the requirements of these regulations shall be subject to the inspection by the Health Officer and the Health Officer may collect such samples for laboratory examination, make tests or take such photographs as he deems necessary for the enforcement of these regulations.
- 2.4 Right of Entry.** No person shall refuse to permit the Health Officer, after proper identification, to inspect as deemed necessary in the enforcement of this Code, any property, public or private, located in the County of Saginaw for the purpose of obtaining information, conducting surveys or inspections, collecting samples, inspecting sewage disposal or water supply systems, or evaluating a premise to ensure compliance with any permits, requirements, codes, regulations, and enforcement actions at reasonable times nor shall any person molest, interfere, or resist the Health Officer in the discharge of his duty.
- 2.5 Abatement of Nuisances.** Nothing stated in these regulations shall be construed to limit the power of the Health Officer toward the immediate abatement of a public nuisance or menace to the public health or of a condition, which in the opinion of the Health Officer may become a menace to the health of the community.
- 2.6 Interference with Notices.** No person shall remove, mutilate, or conceal any notice or placard posted by the Health Officer, except by written permission of the Health Officer.
- 2.7 Validity.** If any section, subsection, clause or phrase of these regulations is for any reason adjudged unconstitutional or invalid, it is hereby provided that the remaining portions of these regulations shall not be affected.

CHAPTER II Penalties Section 1 — Penalties

- 1.1** Any person who shall intentionally fail to comply with the provisions of these regulations as set forth in the Code or any part thereof shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine not exceeding the sum of \$200.00 or by imprisonment in the County jail, not exceeding 30 days or both such fine and imprisonment at the discretion of the Court. Each day a violation is permitted to exist shall constitute a separate and distinct violation.

Sec. 3103.

(1) The department shall protect and conserve the water resources of the state and shall have control of the pollution of surface or underground waters of the state and the Great Lakes, which are or may be affected by waste disposal of any person. The department may make or cause to be made surveys, studies, and investigations of the uses of waters of the state, both surface and underground, and cooperate with other governments and governmental units and agencies in making the surveys, studies, and investigations. The department shall assist in an advisory capacity a flood control district that may be authorized by the legislature. The department, in the public interest, shall appear and present evidence, reports, and other testimony during the hearings involving the creation and organization of flood control districts. The department shall advise and consult with the legislature on the obligation of the state to participate in the costs of construction and maintenance as provided for in the official plans of a flood control district or inter-county drainage district.

(2) The department shall enforce this part and may promulgate rules as it considers necessary to carry out its duties under this part. However, notwithstanding any rule-promulgation authority that is provided in this part, except for rules authorized under section 3112(6), the department shall not promulgate any additional rules under this part after December 31, 2006.

(3) The department may promulgate rules and take other actions as may be necessary to comply with the federal water pollution control act, 33 USC 1251 to 1387, and to expend funds available under such law for extension or improvement of the state or interstate program for prevention and control of water pollution. This part shall not be construed as authorizing the department to expend or incur any obligation to expend any state funds for such purpose in excess of any amount that is appropriated by the legislature.

(4) Notwithstanding the limitations on rule promulgation under subsection (2), rules promulgated under this part before January 1, 2007 shall remain in effect unless rescinded.

History: 1994, Act 451, Eff. Mar. 30, 1995; -- Am. 2004, Act 91, Imd. Eff. Apr. 22, 2004; -- Am. 2005, Act 33, Imd. Eff. June 6, 2005
Compiler's Notes: For transfer of authority, powers, duties, functions, and responsibilities of the Environmental Assistance Division to the Director of the Michigan Department of Environmental Quality, see E.R.O. No. 1995-16, compiled at MCL 324.99901 of the Michigan Compiled Laws. For transfer of authority, powers, duties, functions, and responsibilities of the Surface Water Quality Division to the Director of the Michigan Department of Environmental Quality, see E.R.O. No. 1995-16, compiled MCL 324.99901 of the Michigan Compiled Laws. For transfer of authority, powers, duties, functions, and responsibilities of the Waste Management Division to the Director of the Michigan Department of Environmental Quality, see E.R.O. No. 1995-16, compiled at MCL 324.99901 of the Michigan Compiled Laws.
Popular Name: Act 451
Popular Name: NREPA
Admin Rule: R 323.1001 et seq. and R 323.2101 et seq. of the Michigan Administrative Code.

CHAPTER IV. -- Sewage (wastewater) Disposal Regulations

Under Section 2 - Definitions:

2.10 Nuisance. "Nuisance" shall include but not be limited to any condition where effluent from any sewage disposal facilities is exposed to the surface of the ground or is permitted to drain on or to the surface of the ground, into any ditch, storm sewer, lake or stream, or when the odor, appearance or presence of this material has an obnoxious or detrimental effect on or to the senses or health of persons or when it shall obstruct the comfortable use or sale of adjacent property.

Section 6. -- Individual Sewage Disposal Systems:

6.3 In the event of a failure of an existing onsite sewage disposal system, the Health Officer must be notified of the failure. Upon investigation of the cause of failure, the Health Officer may require repair specifications necessary to correct the problem and upgrade the system to be in compliance with this Code. At the discretion of the Health Officer, modifications to the required isolation distances, materials or size as stated in this Code may be applied if local conditions warrant and in cases where dimensions, site development, features, or site suitability create a challenge to comply with the requirements of this Code. In such event, modifications will be applied if the Health Officer finds that the public health would not be jeopardized.

Section 9 -- Sewage of Unknown Origin

9.1 Whenever the Health Officer shall determine that improperly treated sewage is flowing or is being discharged from the outlet of any public or private drain into any public drainage system or surface water body so as to create a public health hazard, water pollution or nuisance, he shall notify in writing the person owning, leasing, or residing on such premises from which such sewage originates to connect such sewage flow to a sewage disposal system which complies with these regulations. At the end of such reasonable time as specified in the written notice, which has been served on the owner, lessee, or resident, the Health Officer shall cause the outlet of such drain carrying sewage to be plugged until such time as the source(s) of sewage have been eliminated or the sewerage system complies with the provisions of this Code.

Section 11 -- Injunction

11.1 Notwithstanding the existence and pursuit of any other remedy, the Health Officer may maintain an action in the name of the County for injunction or other process against any person, firm, or corporation to restrain or prevent the construction, enlargement, or alteration of a sewage disposal system without a permit therefore, or the operation or conduct of a residence of a habitable building, structure or premise contrary to this regulation or the discharge of waste actually or potentially unsanitary or hazardous to public health, life, property values or the public welfare into public stream, county drain, road ditch or upon the ground surface, creating a health hazard or nuisance.

STATE OF MICHIGAN - Responsibility

Public Act 451 of 1994 (NREPA) -- Part 31 Water Resources

324.3103 Department of environmental quality; powers and duties generally; rules; other actions.

II. DEFINITIONS

For the purpose of this Stormwater Management Design Requirements for the Saginaw County Public Works Commissioner, the following definitions are adopted:

- 1. Allowable Discharge:** The maximum flow rate that can be discharged from a site, as calculated for design criteria in accordance with this Stormwater Management Plan.
- 2. Base Flood Elevation:** The 100-year flood elevation as determined from Flood Insurance Rate Maps (FIRMs) or the best available information.
- 3. Bankfull or Channel Protection:** The purpose of bankfull or channel protection criteria is to prevent habitat degradation and erosion in urban streams caused by an increased frequency of bankfull and sub bankfull stormwater flows. Channel protection seeks to minimize downstream channel enlargement and incision that is a common consequence of urbanization. The post construction runoff rate and volume for a site must not exceed up to the 2-yr 24hr storm event. In areas with C/D soils, the site should be maximized for opportunities to reduce runoff (i.e., amended soils, harvesting, reuse) prior to allowing the option for extended detention. HOWEVER; in Saginaw County with its high seasonal water table and the effects of Lake Huron's water level during high water level cycles (WSELS above 579-ft IGLD-85) these methods will need to be proven to work in HIGH WATER conditions with NO ADVERSE effects to neighboring properties. For additional evaluation designers need to determine historical situation on the sites, especially near the rivers. Also, use of soils drainage data and groundwater tables from the soil's descriptions from the NRCS/USDA soils data bases. Extended detention could focus on maximizing the volume reduction onsite and then detaining the remaining volume of the 2-yr 24-hr storm event with the release rate of 0.2 cfs per acre of the 1-yr 24-hr storm whichever is the lower rate. Typical design is not to exceed the pre-development rate and volume for all storms up to the 2-yr, 24-hr storm at the site. At a minimum, pre-development is the last land use prior to the planned new development or re-development. Exclusions to this standard are the following: The Great Lakes or connecting channels of the Great Lakes; Rouge River downstream of the Turning Basin; Saginaw River; Mona Lake and Muskegon Lake (Muskegon County); and Lake Macatawa and Spring Lake (Ottawa County). Source: MDEQ WRD -- MS4 Program -- Post Construction Stormwater Runoff Controls Program, compliance assistance document, pg 12
- 4. Best Management Practices (BMPs):** Structural, vegetative, or managerial practices used to protect and improve the quality of surface water and groundwater.
- 5. Bio-filtration:** A system comprised of native plants and amended soils with an underdrain that goes to a detention area. The system is designed to receive stormwater runoff and clean it via a filtration process and slow the runoff by letting it percolate through the amended soils to reach an underdrain, which then conveys it to a detention area. The system is designed to remove sediment and pollutants from stormwater before discharge.
- 6. Bio-swales:** Drainage channels that divert runoff water from the storm sewer into a natural area where native wetland plants help absorb and recycle it. Plants like grasses, rushes, native plants, other water and drought tolerant flowers and bushes are commonly found in bio-swales because they help to trap the water and force it to absorb, rather than flowing through the bio-swale to the other side. It should be noted that these systems are generally

dry most of the time and do not have standing water in them.

7. **Conduit:** Any channel, pipe, sewer, or culvert used for the conveyance or movement of water, whether open or closed.
8. **Control Elevation:** Contour lines and points of predetermined elevation used to denote a detention storm area on a plat or site drawing.
9. **Detention Facility:** A facility constructed to provide detention storage.
10. **Detention Storage:** The temporary detaining or storage of stormwater in a storage basin, on rooftops, in streets, parking lots, school yards, parks, open space, or other areas under predetermined and controlled conditions, with the rate of drainage regulated to the allowable discharge by appropriately installed devices. These detention storage areas shall not be considered regulated wetlands as there is no connectivity other than man-made.
11. **Developer/Owner Engineer:** The engineering company formally designated by the Developer/Owner to act as their Engineer.
12. **Development:** The construction of a building, parking lot, structure, etc. on a piece of land or otherwise changing the use of a piece of land.
13. **Discharge:** The release or outflow of water from any source.
14. **Drainage Area:** The area from which stormwater runoff is conveyed to a single outlet (i.e. a watershed or catchment area).
15. **Easement:** A parcel of land on which the owner has granted rights-of-way to make surveys, construct, maintain, operate, alter, replace, repair, and remove at any time that part of the storm drainage system located within the easement. The landowner will not be allowed to construct buildings or other structures on said easement without the written consent of the easement grantee.
16. **Emergency Overflow:** A hydraulic control structure used to control the location and flow direction of stormwater which is either in excess of the required detention storage or is due to a failure in the site's stormwater management system. The emergency overflow shall be directed to a public road right-of-way or to an available municipal storm drainage system. This feature must be labeled on the design plans and an elevation provided. It is the design engineer's responsibility to assure no detrimental effects to neighboring parcels.
17. **Emergency Overflow Elevation:** The elevation at which emergency overflow is activated. This elevation is recommended to be at least one foot below finished floor elevation of nearby buildings, even if on adjacent parcels. This elevation must be labeled on the design plans.
18. **Engineer:** A civil engineer that is licensed to work in the state of Michigan or a person who is working under the direct supervision of a civil engineer licensed to work in Michigan.
19. **Engineered Drains:** These are designed or engineered drains in Saginaw County which are in extremely flat areas with little slope and discharge into the Saginaw River by pump stations, they are linear detention areas and in periods of high-water elevations only flow when pumps

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26. **Peak Flow:** The maximum rate of flow of stormwater runoff at a given location.
27. **Percent Imperviousness (IMP):** The actual proposed percentage of impervious surface for a proposed development or re-development. The IMP is used to calculate the design discharge (Q_d). The design discharge is used to determine storm sewer sizes and required detention volumes.
28. **Pervious Surface:** A surface that allows infiltration or penetration of water. During rainstorm events, a percentage of water will infiltrate into the surface with the remaining stormwater running off. The percentage of runoff is dependent on the type, slope, percent saturation, etc. of the surface. (i.e. lawns, farm fields, parks, wooded areas, golf courses, etc.) Design personnel should attempt to maximize these surfaces as much as possible.
29. **Rain Gardens:** A depressed area of a size that is determined by specified engineering guidelines with amended soils and specific plants, shrubs, and trees that have a specific volume to store stormwater runoff. The site can be underdrained to increase performance. Use of Michigan's Low Impact Development Design Manual is recommended for design purposes, located at: <http://www.semco.org/LowImpactDevelopment.aspx>
30. **Rear lot drainage:** A stormwater system designed to provide drainage in rear lot areas to prevent water from ponding for extended periods of time. It must be noted that these systems are not designed to convey stormwater in a rapid manner. These systems are NOT part of the MS4 or a county drain. This system is a deliberately designed system which can provide additional detention capabilities during severe runoff conditions. It is a system that in condos or subdivisions is the responsibility of the homeowner's / condo association to maintain. It is constructed for the benefit of homeowners to assist with property drainage. It is not the Saginaw County Public Works Commissioner's responsibility. However, the township or municipality may repair the system if necessary, to prevent damage to neighboring properties, but all associated repair costs, plus a 25% administrative fee will be assessed to the owner or homeowner / condo association.
31. **Restrictor:** A hydraulic control structure used to restrict the stormwater discharge from the site to the allowable discharge of the site as determined by this plan. Simple restrictors such as the orifice or metering line are outlined in this plan. For more complex restrictors a stage/storage/discharge relation shall be required in the complete submittal and may alter the storage requirements for the site.
32. **Re-development:** Altering, improving, reconstructing or otherwise changing the use of an existing developed property. A site will be considered a re-development for this Stormwater Management Design Requirements when an area greater than or equal to 5% of the existing developed portion of the site (i.e. roof, gravel, & paved surfaces) or, an area greater than 20,000 square feet is increased or reconstructed with roof, pavement, or any other impervious surface.

NOTE: this percentage is cumulative. If re-development is 2% one year and 3% at another time, this will meet the 5% rule. Also, at times, less than 5% can create drainage problems, and the County Engineer or designated designee may require additional detention or storage based on historical or anecdotal problems on a site.

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are activated. If the pumps are shut off the only flow may be as the linear detention is filling or if the flap valve can allow water to flow out of the drain into the river during low water levels. The following is a list of those drains in Saginaw County.

Drain	Location	Latitude (N)	Longitude (W)
Bridgeport Drain	Bridgeport Charter Township	43.356222	-83.880870
Gage No. 1 Drain	Buena Vista Township	43.469995	-83.907335
Saginaw Zilwaukee Drain	City of Zilwaukee	43.493830	-83.906618
Universal Drain	City of Zilwaukee	43.468888	-83.917127

These drains are also considered waters of the state and direct discharges from new development or re-development are not subject to the MS4 permit requirements and therefore the post construction control requirements.

20. **Excess Stormwater Runoff:** The volume and rate of flow of stormwater discharged from a drainage area, which is in excess of the allowable discharge.
21. **Floodplain:** The special flood hazard lands adjoining a watercourse, the surface elevation of which is lower than the Base Flood Elevation and is subject to periodic inundations determined from Flood Insurance Rate Maps (FIRMs), or the best available information. A parcel of land can be located within a floodplain without being shown on a FIRM map.
22. **Impervious Factor (IF):** The percentage of impervious surface specific to a site that the existing storm drain outlet has been historically designed to convey. The IF is used to calculate the allowable discharge from a site. Proposed developments or re-developments will not be allowed to discharge stormwater at a rate, which is greater than the runoff that would occur from the site with the percentage of impervious surfaces defined by the impervious factor. Refer to the County for established IF values, if applicable.
23. **Impervious Surface:** A surface that does not easily allow the infiltration or penetration of water. During rainstorm events, a large percentage of water will runoff. (Typically considered as rooftops, paved walks, roadways, driveways, sidewalks, parking lots, etc.)
24. **Low Impact Development:** Implementation of developmental strategies or best management practices in a manner that maintains pre-development hydrology, or decreases runoff quantity, and improves runoff quality. It is recommended that the *Low Impact Development Manual of Michigan* be used as a design standard. This document is available for download from the following website: <http://www.semco.org/LowImpactDevelopment.aspx>
25. **NPDES:** National Pollutant Discharge Elimination System. In 1987 the Clean Water Act (CWA) was amended and required to implement a program that would address pollutants being discharged to the nation's waters. This now includes stormwater discharges into waters of the nation/state. The Saginaw County Public Works Commissioner has an NPDES stormwater discharge permit as required by the State of Michigan in compliance with the CWA.

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predetermined and controlled conditions. The only discharge of stormwater from the retention storage area is by ground infiltration, evaporation, etc. An emergency overflow must be provided in the event the capacity of the retention facility is exceeded. These retention storage areas shall not be considered regulated wetlands, as there is no connectivity to surface waters.

34. **Saginaw Area Storm Water Authority (SASWA):** The SASWA was formed by the NPDES Phase II communities in Saginaw County. The Authority provides communities with information on stormwater education, issues and regulations. The website address is: www.saswa.org
35. **Stormwater Management Plan (SWMP):** Also known as post construction controls, this is a site specific stormwater runoff drainage plan developed specifically for individual sites. The plan includes calculation of allowable and restricted discharge rates, detention/retention volume, restrictor sizing, size of pipes, or conveyance devices and a train of best management practices to provide for discharge of clean stormwater runoff from a site.
36. **Stormwater Runoff:** The water from a rainstorm or snowmelt, which flows over the surface of the ground or is collected in a drainage system.
37. **Sub-Surface Detention Storage:** Detention storage that is provided in underground storage facilities such as pipes, arch systems (Cultec, Stormtech, or similar), or tanks. Detention storage within aggregate bedding will not be accepted unless geo fabric is used to keep sediment out of the void spaces. Use of underground storage facilities warrants calculations submitted for the system along with maintenance of the system included in the submitted Operation and Maintenance Plan and signed agreement.
38. **Ten-Year Design Storm:** A precipitation event with a duration equal to the time of concentration, having a ten percent probability of occurring in any given year or occurring once every 10 years on average. This amounts to approximately 3.46 inches of rain in 24 hours. But, brief, intense storms of 10-year design can range from 1.71 inches in 1 hour to 3.05 inches in 12 hours. (Source: http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mi)
39. **Time of Concentration (T_c):** The elapsed time for stormwater runoff to flow from the most hydraulically distant point in a drainage area to the outlet or other predetermined point.
40. **Engineer:** The civil engineer or civil engineering firm formally designated by the Saginaw County Public Works Commissioner or another designated designee to act as their Engineer. This person or firm must have qualifications suitable for review of stormwater management plans and knowledgeable with NPDES Phase II regulations in the State of Michigan.
41. **Underdrain:** Consists of perforated drainage tile with either slot cuts or holes along the lateral haunch and covered with a sock or other means to prevent sediment from entering the pipe. These drains are placed below the grade of detention basins that have flat slopes to assure complete drainage of the detention basin or other structure. This will prevent the basin from being continuously wet and allow for moving of the basin or care of the structure. Also used in underground storage systems to prevent ground water from taking up storage volumes. This will apply to basins that do not meet the 1% minimum slopes for the bottom of the basin.

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42. **Upland Area:** Land located in the upper portion of a watershed whose surface drainage flows toward the area being considered for development.
43. **Urbanization:** The development, change, or improvement of any parcel of land consisting of one or more lots for residential, commercial, industrial, institutional, recreational, or public utility purposes.
44. **Urbanized Area:** An area designated by the US Census Bureau, which has specific rules and regulations concerning stormwater under the NPDES Phase II regulations. This regulated area may require adherence to specific water quality requirements.
45. **Watercourse:** Any natural or artificial stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, street, roadway, swale, or wash in which water flows in a definite direction, either continuously or intermittently.
46. **Waters of the State:** Means any of the following: The Great Lakes bordering the State and their connecting waters, all inland lakes, rivers, streams, impoundments, open drains, wetlands, and other surface bodies of water within the jurisdiction of the state, including wetlands as defined by Part 303 of PA 451 of 1994. In Saginaw County, that would include streams that have a defined bed and bank, and established flow, naturally established and engineered county drains, and including but not limited to, the Saginaw River, Cass River, Flint River, Bad River, Swan Creek, and the Tittabawassee River.
47. **Water Quality volume:** Is the volume of one (1) inch of rain from the area contributing storm runoff. The water quality volume (aka first flush) of a rain event typically carries the most pollutants to our storm sewer system and ultimately to our rivers, lakes and streams. This water quality volume must be discharged over a 24-48-hour period of time to settle out pollutant loads (minimum 1-inch diameter) or discharge through an engineered infiltration system or treatment which can meet water quality goals. The Low Impact Design Manual for Michigan has an option to treat the first one inch of runoff from all impervious contributing areas and 0.25 inches of runoff from all disturbed contributing pervious areas.

III. REVIEW PROCESS AND PROCEDURES

A. Review Procedures

These Design Requirements are applicable to all development projects that disturb at least one or more acres, including projects less than an acre that are a part of a larger common plan of development or sale and discharge into the applicant's MS4 subject to review and approval of the Saginaw County Public Works Commissioner and over which the Saginaw County Public Works Commissioner has jurisdiction or the local jurisdiction has adopted these requirements and have an agreement with the Saginaw County Public Works Commissioner to act as their review agency. These Design Requirements are only for industrial, commercial, non-residential development, or platted subdivisions or condominium complex development or re-development. These Design Requirements are not to be applied to single family or duplex residential structure or other multi-family residences that are constructed on a parcel that is not part of a subdivision or condominium project. Any questions regarding this should be referred to the Saginaw County Public Works Commissioner's office for clarification. These Design Requirements provide minimum requirements for developments covered under the Stormwater Management Design Requirements, provided,

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management proposals of the developer. Conceptual stormwater management alternatives can be discussed and potential problems addressed prior to the design phase of the project. The goal of the meeting is to eliminate potential problems up front and reduce the time and costs needed for the design and review of the project.

This meeting will be required for all platted developments, condominium projects, and site developments larger than five (5) acres. It is recommended other site development projects have this meeting or at a minimum correspond with the County's Engineer, or other designee, by phone, e-mail, and/or facsimile regarding conceptual design alternatives prior to submitting for formal review.

The Developer's Engineer and/or SCPWC's Engineer, or other appointed designee, should have in his/her possession, or have an understanding of, the following information prior to attending the pre-design meeting:

- a. The drainage district or area in which the proposed development is located and the outlet condition for the proposed development. This information can be obtained from the Saginaw County Public Works Commissioner.
- b. Small location map showing where the site is situated.
- c. Location and description of activities that may impact or be impacted by the proposed development or re-development both on and off the site.
- d. Acreage of the total site and an estimate of the area tributary to the proposed storm drainage system, including offsite runoff. (Include detention, retention, etc.)
- e. The size and location of the proposed storm drainage outlet and information on contributing area.
- f. If known, a conceptual layout of the proposed storm drainage system for the development or re-development.

If required, the Owner/Developer and his/her technical consultant shall attend a land development advisory committee (LDAC) meeting. The intention of this meeting is to obtain uniform direction and communication to minimize misdirection of early construction and minimize financial losses to proprietors, developers, and consultants.

If the conceptual layout of the storm drainage system is agreed upon by the County Engineer or other appointed designee and the Developer's Engineer, the Owner/Developer shall begin completing plans and calculations for formal review by the SCPWC or another appointed designee.

2. Formal Review

- a. The Owner/Developer or representative shall submit one (1) set of plans, one (1) set of calculations, one (1) digital copy of plans & calculations, a copy of the completed checklist, a completed Stormwater Discharge Permit Application, an operation and maintenance plan with signed maintenance agreement for the Stormwater Management Plan, if applicable, and any other supporting information for the site to the SCPWC's Engineer, or other appointed designee. The plans and calculations shall comply with the requirements of these Stormwater Management Design Requirements. The checklist, design calculations, and design

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however, that the Saginaw County Public Works Commissioner reserves the right to deviate from the specific design requirements set forth in the Design Requirements when, on a case-by-case basis, such deviation is appropriate or necessary in order to accommodate the goals and purposes underlying these Design Requirements. These requirements and their implementation are designed to promote low impact designs such as bio-swales, rain gardens or other types of management of stormwater runoff.

The Saginaw County Public Works Commissioner, or another appointed designee, shall review all plans for development of subdivisions, multiple family projects, commercial, and industrial sites for compliance with the County's regulations for stormwater management, as recommended in the Stormwater Management Design Requirements.

The Saginaw County Public Works Commissioner, or another appointed designee, shall designate a review Engineer who will provide the services required to assure that all the requirements of the plan and the ordinance are being met. The Engineer shall review the Developer's plan and submit a report to the Saginaw County Public Works Commissioner showing the acceptance or rejection of the proposed site drainage plans, calculations, best management practices for discharge of clean stormwater and an operation and maintenance plan with signed agreement.

A site will be considered in compliance with the Stormwater Runoff Regulation and Control Ordinance when an approval of the site's Stormwater Management Plan and post-construction stormwater runoff BMPs has been completed. The County will not accept runoff into drainage systems located within the County's jurisdictional areas from newly developed or re-developed sites without compliance with the Stormwater Management Design Requirements. Developers or Builders should not install the stormwater system unless they are working from a set of plans that have been stamped as "APPROVED" with appropriate signature from the Saginaw County Public Works Commissioner's Engineer or other appointed designee.

To comply with the Saginaw County Public Works Commissioner's Stormwater Management Design Requirements, complete the following process and deliver or mail all submittals to the Saginaw County Public Works Commissioner, Saginaw County Courthouse at 111 South Michigan Avenue, Saginaw, MI 48602:

A complete submittal package for a stormwater review consists of:

- Associated fee for stormwater review for the site
- A completed Stormwater Discharge Permit Application
- A completed Drainage Checklist
- One (1) set of Site Plans
- One (1) set of calculations
- One DIGITAL set of site plans and calculations, which may be emailed or delivered on a digital storage device (e.g. flash drive, CD, DVD, etc).
- If applicable, a signed Stormwater Management Operation and Maintenance Plan and Agreement. This will include the maintenance and schedule for all structural stormwater controls being implemented on the site (i.e. detention basins, underground storage detention basin systems, catch basins, vegetated swale, restrictors, spill plan, etc.).

1. Pre-Design Meeting/ Conceptual Review

This meeting, at a minimum, shall consist of the Developer's Engineer and the County's Engineer, or another appointed designee. The purpose of the meeting is to address the various stormwater

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requirements that will be used during the formal review process are established by these Stormwater Management Design Requirements.

- b. Submit deposit/fee for Stormwater Management Plan review and inspection to the Saginaw County Public Works Commissioner's Office in accordance with the current fee schedule established by the SCPWC's Engineer.
- c. Formal review and approval will not begin until all items required for application have been received. The proposed drainage system will be either approved or rejected with reason and returned to the owner/ developer.
- d. The SCPWC's Engineer, or other appointed designee will review all plans, calculations, and other information for compliance with the County's design guidelines. All materials will be reviewed for completeness. Calculations will be checked. The minimum design calculations and design requirements outlined in this document and additional supporting documents pertaining to required calculations will be used for review. The drainage plan checklist will be reviewed.
- e. Furthermore, the SCPWC's Engineer, or other appointed designee, will review how the developer meets the performance standards and ensures long-term operation and maintenance of BMPs based on the signed maintenance plans submitted with all construction plans. The SCPWC's Engineer, or other appointed designee, will review the submitted evaluation of cost-effective structural and non-structural BMPs, if applicable, and the BMPs utilized on all new or re-development sites to minimize post construction impacts on water quality.
- f. A typical review will take approximately two (2) weeks to complete from the date the plan is submitted in complete form.

If the proposed drainage system is rejected, one (1) set of revised plans and one (1) set of revised calculations will need to be resubmitted; this can be done digitally via email. A completed checklist will also have to be resubmitted along with any revisions to the operation and maintenance plan with signed maintenance agreement, if applicable.

B. Plan Approval

Once the Stormwater Management Plan has been recommended for approval by the SCPWC's Engineer, or other appointed designee, a recommendation for approval letter will be sent to the Saginaw County Public Works Commissioner only if the review is performed by another designee. A copy of the letter will be forwarded to the Developer and local government's planning and building departments. The approval letter will include, if necessary, inspection and compliance requirements and any additional supporting information for the site. Additionally, an approved Stormwater Discharge Permit Application will be provided to the Developer by the Saginaw County Public Works Commissioner. It is the developer's/owner's responsibility to assure the APPROVED plans are provided to the contractor for construction. Any errors in resulting from the use of unapproved plans is the financial responsibility of the owner or developer and must be corrected to reflect the approved plans.

C. Changes to Plan after Approval

1. Any changes made to the approved plan after issuance of the stormwater permit shall require one (1) set of plans submitted to the SCPWC's, or other appointed designee, for review and approval.

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- Upon receipt of this information, it will be determined if additional information, such as calculations, revised checklist, updates to the operation and maintenance plan and signed agreement, if applicable, etc. will be required.
- A building or occupancy permit will not be issued until all changes have been approved and the SCPWC, or other appointed designee, has received all review fees.

D. Inspection/Letter of Certification Requirement

Inspection of storm sewer systems and/or detention facilities (including underground storage detention basins/vaults) will be required on all development and re-development projects. The extent of the inspection will depend on the size and type of the development or re-development. Descriptions of these inspection requirements are outlined below. Specific inspection requirements, including the frequency of inspections, will be outlined on the approval letter. The fees associated with this inspection are included in the original deposit.

- Small Developments/ Re-developments (1 acre or more or less than 5 acres or less than one acre that is part of a larger common plan of development or sale)** - A general site inspection of the restrictor and the detention storage areas by the SCPWC's Engineer, or other appointed designee, will be required. This one-time inspection will be performed at the completion of the project. Subsequent inspections may be required if deficiencies exist. The fees for inspections will be established by the SCPWC.

A letter of certification will have to be completed by the developer's engineer indicating the stormwater drainage system and structural stormwater controls have been constructed as shown on the approved Stormwater Management Plans and all structural stormwater controls are included in the operation and maintenance plan with signed agreement. A building or occupancy permit will not be issued until a letter of certification has been received by the SCPWC's Engineer, or other appointed designee, and the final approved inspection of the site has been completed by the SCPWC's Engineer or designee.

- Large Developments/ Re-developments (5 acres and greater)** - Periodic site inspections of the storm sewer, outlet, restrictors, and detention storage areas may be required by the SCPWC's Engineer, or other appointed designee. Specific items needing inspection prior to the completion of the project will be identified in the approval letter (i.e. installation of restrictors, restricting pipes, etc.). The SCPWC's Engineer, or other appointed designee, shall be informed twenty-four (24) hours in advance of the placement of items requiring inspection as outlined on the stormwater management permit.

A final inspection of the restrictor and the detention storage areas by the SCPWC's Engineer, or other appointed designee, will be required. This one-time inspection will be performed at the completion of the project. Subsequent inspections may be required if deficiencies exist.

A letter of certification will have to be completed by the developer's engineer indicating the stormwater drainage system and structural stormwater controls has been inspected during construction, the drainage system was constructed as shown on the approved Stormwater Management Plans and all structural stormwater controls are included in the operation and maintenance plan with signed agreement. A building or occupancy permit will not be issued until the SCPWC's Engineer, or other appointed designee, has received a letter of certification and the SCPWC's Engineer, or other appointed designee, has completed the final approved

inspection of the site.

- Any Single Family, Two Family, or Multi-Family Development Projects (Plats)** - Weekly, bi-weekly, or as-needed inspections will be negotiated for inspections of the storm sewer and drainage system construction for platted subdivision or condominium developments. The municipality / township may require more inspection time. This inspection shall be performed by the SCPWC's Engineer, or other appointed designee. Daily inspection reports shall be completed for all days on which construction of the stormwater drainage system and structural stormwater controls occurs. These daily inspection reports do not have to be submitted to the SCPWC's Engineer, or other appointed designee. However, they should be on file with the design engineer and made available upon request.

A final inspection of the best management practices, structural controls, restrictor and the detention storage areas by the SCPWC's Engineer, or other appointed designee, will be required. This one-time inspection will be performed at the completion of the project. Subsequent inspections may be required if deficiencies exist.

A letter of certification will have to be completed by the developer's engineer indicating the stormwater drainage system and structural stormwater controls have been constructed as shown on the approved Stormwater Management Plans. A building or occupancy permit will not be issued until the SCPWC's Engineer, or other appointed designee, has received a letter of certification and the SCPWC's Engineer, or other appointed designee, has completed the final approved inspection of the site.

E. Fee Schedule

The fee schedule for reviewing storm drainage submittals and performing inspections of drainage system construction shall conform to the current fee structure established by the Saginaw County Public Works Commissioner. This fee schedule will be reviewed on an annual basis and fees may be adjusted if deemed necessary. Communities adopting these design standards may set up their own fee schedule to cover their costs as necessary and should be reviewed annually.

The fee schedule for reviewing storm drainage submittals and performing inspection of drainage system construction can be found in Appendix A.

IV. STORM DRAINAGE SYSTEMS WITHIN SAGINAW COUNTY

Within Saginaw County there are drains that fall under several different agencies jurisdiction. These include the following:

- Established County Drains** - Work done directly on or connected to these drains falls under the jurisdiction of the Saginaw County Public Works Commissioner. Preliminary and final plat approval requires a signature and review from the Public Works Commissioner. However, many site plan developments, condominiums, etc. that impact established county drains are not submitted for review to the Saginaw County Public Works Commissioner, but are reviewed at the township or municipal level.
- County Roadside Drains** - There are many drains that fall under the jurisdiction of the Saginaw County Road Commission. When a crossing is installed over a county roadside drain, a permit or

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permission must be obtained from the Saginaw County Road Commission. A copy of this permit must be provided to the SCPWC and local municipality.

- Michigan Department of Transportation (MDOT)** - There are several drains that are located along M-52, M-13, M-46, M-81, M-47, M-58, M-83 and M-84 which fall under the jurisdiction of MDOT. Any development that proposes to use these drains for a stormwater outlet must obtain a permit from MDOT. As part of this permit, stormwater detention and water quality BMPs may be required. A copy of this permit application is available at the website address located in Appendix B of this document. The Saginaw County Public Works Commissioner must additionally review the development and/or re-development as well for approval. The Developer must provide the SCPWC and local municipality a copy of the approved MDOT permit once it has been received.

- Michigan Department of Environment, Great Lakes, and Energy (EGLE)** - The EGLE regulates any work done within the 100-year floodplain, wetland, and/or any inland lakes or streams. A copy of the EGLE /USACE Joint Permit application for a site to discharge to waters of the State of Michigan or within 500 feet of inland lakes or streams, as well as wetlands, is provided from a website address that can be found in Appendix B. These EGLE Joint Permit Applications must be completed and submitted on the EGLE's MiWaters online database system. A copy of this permit must be posted on the construction site and a copy should be provided to the SCPWC if it involves their drainage system and the local municipality.

Each of the agencies listed previously have their own design criteria for reviewing proposed developments, re-developments and drainage improvements. These criteria are not always consistent with the stormwater requirements of the County as a whole. For example, the MDOT is concerned about the proper drainage of the roadway and sub-base of the road; a permit may be obtained to discharge a large quantity of water to a road side drain not causing a problem now, but may not leave any additional stormwater outlet capacity for future development upstream. For these reasons, it is very important that the SCPWC's Engineer, or other appointed designee, review all proposed developments, re-developments and drainage improvements to assure that the proposed stormwater management is consistent with the future plans of the County or local municipality.

V. DESIGN CALCULATIONS

A. Allowable Discharge Rate (Q_a) and 10-Year Design Discharge (Q_{10})

The NPDES Phase II program requires that the post-construction runoff rate and volume of discharges do not exceed the pre-development rate and volume for all storms up to the 2-year, 24-hour storm for the site. The peak stormwater discharge from any proposed development or re-development as required in these Design Requirements shall be restricted to an allowable discharge (Q_a). The allowable discharge from the proposed area of development or re-development cannot exceed the calculated discharge from the proposed site based on methods listed within the SCPWC's excel calculation spreadsheets. The method resulting in the lowest allowable discharge from the site shall be used in determining the required detention. If it is determined the existing runoff from the drainage district is at or exceeding the capacity of the downstream storm sewer or drain the proposed development or re-development will, at a minimum, have to be restricted to existing conditions.

The storm water discharge rate from any proposed development or redevelopment site in Saginaw County discharging to a county drain under jurisdiction of the SCPWC shall be restricted to an

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allowable discharge rate (Q_a). The allowable discharge required by Unit Allowable Discharge (q_a) as provided herein.

Calculate the allowable discharge (Q_a) in cubic feet per second (cfs):

$$Q_a = (q_a)(A_{site})$$

a - Allowable Discharge Rate (cfs).

$$q_a = 0.2 \text{ cfs/acre is the Unit Allowable Discharge rate}^1$$

A_{site} - Proposed site area or contributing area in acres

The site's pipe sizes, and emergency overflow must be able to convey the 10-year storm event (Q_{10}) under proposed conditions. This discharge can be determined using the rational or modified rational method.

$$Q = (C) \times (I) \times (A)$$

Q is the runoff rate in cubic feet per second (cfs).

C is the coefficient of runoff.

I_{10} is the intensity of rainfall in inches per hour (in. / hr.).

A is the contributing area of the site in acres (acres).

Please refer to the excel spreadsheet for the required design calculations that must be submitted for review to the Saginaw County Public Works Commissioner, or appointed designee. This is available at the following websites: <http://www.saginawcounty.com/PublicWorks/Default.aspx> (or contact the SCPWC's Engineer or appointed designee for the excel spreadsheet) and <http://www.saswa.org>.

¹NOTE: this rate is more restrictive than the 2yr-24hr discharge rate for a 1 acre parcel HSG of C and Open Space - RCN 74 (0.58 cfs).

B. Stormwater Detention Requirements

The stormwater detention storage required for a site is to be calculated using the Saginaw County Public Works Commissioner's excel spreadsheet; this can be obtained at the following websites: <http://www.saginawcounty.com/PublicWorks/Default.aspx> <http://www.saswa.org>

In order to meet the stormwater quality discharge requirements of Phase II of Section 10 of the Clean Water Act and to meet the Environmental Protection Agency's stormwater guidelines, designs must provide for stormwater treatment. This can be accomplished by implementation of one of the following measures:

- On systems that utilize a stormwater detention basin, a sediment forebay retention area or engineered filtration can be utilized within the detention facility. This forebay area, if required, may be in addition to the stormwater 10-yr design detention requirements equal of 1-inch of runoff from the contributing area of the site (see the calculation spreadsheet). The forebay must be designed to remove a minimum 80% of total suspended solids.

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2. Rain gardens or an equivalent low impact design approach can be utilized that provides a soil or media filter for the water prior to entering the storm drainage system or storm detention system. The utilization of this type of treatment measure does not require the additional capture of 1-inch of runoff from contributing surfaces above the detention requirement for the site.
3. Mechanical treatment devices designed to remove suspended solids and other debris. Mechanical treatment devices include specially designed treatment units that will remove 80% of the total suspended solids for a 2-year 24-hour storm event from the site's contributing area.

Discharge Restrictor Requirements

Restrictors are required to regulate the discharge of stormwater to the allowable discharge rate established for a site. The circular in-line restrictor is sized based on the orifice formula.

$$a = \frac{Q_d}{0.62 \cdot (64.4 \cdot \Delta h)^{0.5}}$$

a = area of orifice (sq. ft.)
 Δh = head differential from center of orifice to Hydraulic Grade Line of detention pond at maximum capacity, (ft.)

Water Quality Requirements

All site development projects are required to detain the water quality volume, which is defined as 1-inch of runoff over the area contributing storm runoff (A) for new development or re-development. C_w is the weighted runoff coefficient for the site. Use Table 1, Appendix D to calculate this variable. This volume will be calculated as:

$$3630 \times A \times C_w = WQ \text{ volume}$$

This volume must be held for more than 18 hours but not more than 24 hours. The average allowable release rate for runoff resulting from 1.0 inch of rain in 24 hours is calculated as follows:

$$Q_R = \frac{\text{Volume}}{(24\text{hr}) \cdot (3600\text{sec}/1\text{hour})} = \frac{V}{86,400\text{sec}}$$

Please refer to the excel spreadsheet for the required design calculations that must be submitted for review to the Saginaw County Public Works Commissioner, or appointed designee. This is available at the following websites: <http://www.saginawcounty.com/PublicWorks/Default.aspx> (or contact the SCPWC's Engineer or appointed designee for the excel spreadsheet) and <http://www.saswa.org>.

Channel Protection Criteria (Discuss with SCPWC Engineer if site needs this requirement)

The purpose of bankfull or channel protection criteria is to prevent habitat degradation and erosion in streams caused by an increased frequency of bankfull and sub-bankfull stormwater flows. Channel protection seeks to minimize downstream channel enlargement and incision that is a common consequence of urbanization. Typical design is not to exceed the pre-development rate and volume for all storms up to the 2-yr, 24-hr storm at the site. At a minimum, pre-development is the last land use prior to the planned new development or re-development. Waterbodies excluded to this channel protection performance standard are the following; Saginaw River, based on the

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shall be located in easements dedicated to the public, and shall be subject to continual inspection during the construction period.

- h. Proposed storm sewer enclosures must be designed so they will not adversely impact any adjacent properties, upstream or downstream, and must be designed to the impervious factors of the lands based upon zoning, not necessarily existing conditions.
- i. Soil erosion and sedimentation control measures must be implemented per Part 91 of Public Act 451 of 1994 (NREPA). SESC Part 91 permits are issued by the Saginaw County Public Works Commissioner (CEA).
- j. The use of infiltration BMPs will not be implemented for new development or re-development projects in areas of soil or groundwater contamination. When encountering these conditions, the SCPWC or municipality will contact and coordinate with local EGLE staff. The local EGLE must be made aware of the contamination. Any storm pipes used in these areas must have joints which prevent seepage of groundwater into the storm system.
- k. Best Management Practices will be implemented to address the associated pollutants in potential hot spots as part of meeting the water quality treatment and channel protection standards for new development or re-development projects. These hot spots include areas with the potential for significant pollutant loading such as gas stations, commercial vehicle maintenance and repair, auto recyclers, recycling centers, and scrap yards, whether existing currently or throughout the duration of the five year permit. Hot spots also include areas with the potential for contaminating public water supply intakes.

2. Storm Sewer Piping Requirements

- a. Proposed storm sewers shall be designed to have capacity to pass the 10-year design storm runoff rate (Q₁₀). Please refer to the Design Calculations section of this document along with the additional supporting documents pertaining to calculation requirements.
- b. Class III or IV concrete pipe must be used for the following:
 - i. Storm Sewers within township, county, and state right-of-way
 - ii. Combined sewers (Combined sewers must have premium joints)
- c. Provide 2-ft Minimum cover with minimum 5-ft cover in M.D.O.T. R.O.W.
- d. Provide 18-inch Vertical separation between all other utilities including, sanitary sewers and water mains. Provide 10-ft Horizontal separation from other utilities, such as sanitary.
- e. A minimum of 4-inch of sand bedding is required beneath the pipe and a minimum of 6-inch of sand backfill is required above the pipe.
- f. Manhole/catch basin shall be placed at a maximum distance of 300-ft from any other manhole/catch basin for access/maintenance purposes.
- g. Provide a sump discharge outlet for each individual property/lot in all developments. Sump leads shall not be connected to rear lot drainage systems unless they are designed to handle the flow and back flow valves are placed. This outlet shall be a catch basin (minimum 3-ft diameter) or a storm sewer lead extended to the Right-of-Way/Property line of each lot

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document cited in the definitions section. Contact the Saginaw County Public Works Commissioner's Engineer upon determination of bankfull flood requirements when dealing with Saginaw County drains. Drains which may be excluded are specifically engineered drains which discharge to the Saginaw River via pump stations, e.g. Universal, Gage, Saginaw Ziltwaucke, etc, see Engineered Drains in definition section.)

Please refer to the excel spreadsheet for the required design calculations that must be submitted for review to the Saginaw County Public Works Commissioner, or appointed designee. This is available at the following websites: <http://www.saginawcounty.com/PublicWorks/Default.aspx> (or contact the SCPWC's Engineer or appointed designee for the excel spreadsheet) and <http://www.saswa.org>.

VI. DESIGN REQUIREMENTS

A. Requirements

1. General Requirements

- a. Stormwater detention requirements for any new construction development, re-development, or land use change occurring within Saginaw County will be determined according to these stormwater management design requirements and additional supporting documents pertaining to calculation requirements.
- b. The peak runoff rate during a 10-year storm event from a developed or improved site shall not exceed the allowable discharge rate (Q_d). This rate is determined as outlined in the design calculations section and additional supporting documents pertaining to calculation requirements.
- c. There shall be no detrimental effect on the floodway or the floodplain elevation during a 10-year design storm upstream or downstream of the proposed development area as a result of the proposed development.
- d. Engineering calculations must be submitted with the proposed stormwater drainage system plans. The calculations shall follow the procedures outlined in this document and the additional supporting documents pertaining to calculation requirements.
- e. Roof drains may be connected to a storm sewer system if the flow through the outlet to the SCPWC system is properly restricted. Unrestricted runoff from a roof drain directed off of the property onto an adjacent parcel will not be accepted; there are no exemptions.
- f. The developer and/or Saginaw County Public Works Commissioner shall make a determination as to whether any or all of the facilities proposed are to become private or part of the Saginaw County Drainage system or part of any other regulating agencies storm sewer system.
- g. The SCPWC Engineer shall in the case of a proposed subdivision, make a determination as to those control elevations that shall be entered on the final plat or make a determination as to the necessity for deed restrictions on any particular lot in said subdivision requiring the preservation of mandatory drainage facilities. Where a non-subdivided parcel of land is proposed for development, the SCPWC Engineer shall make a determination as to the need for covenants to maintain responsibility for mandatory drainage facilities. All the said facilities

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(minimum 6-inch diameter).

- h. Place a catch basin (minimum 3-ft diameter) between each pair of driveways, if curb and gutter, driveway culverts, and/or valley shaped ditches are not proposed.
 - i. Minimum pipe grades must be such to produce minimum scouring velocity of 2.5 ft./sec when pipe is flowing full without surcharging.
 - j. Concrete pipe (C-76-III, IV) shall have fabric wrapped joints.
 - k. For private storm sewer systems Plastic pipe may be used. This plastic pipe shall be either smooth walled HDPE or SDR 35 P.V.C. Pipe. If pipe is perforated a manufacturer's "Sock" shall be used over the pipe.
 - l. Private storm systems in areas with contaminated soils or groundwater must have joints which prevent seepage into the storm system.
 - m. Minimum pipe diameter for catch basin leads is 10-inch diameter.
 - n. Minimum pipe size for sewer main is 12-inch diameter.
 - o. When two pipes or more of different sizes come into a structure, the 8/10th flow lines shall match when possible.
 - p. Catch basins will have a minimum sump depth of 18-inch. It should be noted that some new systems using "end of pipe" BMPs may require systems with no sumps. This type of system requires less maintenance of each individual catch basin, but requires routine maintenance of the BMP.
- #### 3. Detention Requirements
- a. If a separate lot or parcel is used for detention or retention, the outer limits shall be delineated on the Exhibit B drawings of a Condominium Development, or on the Final Plat.
 - i. Condominium Developments - Detention or Retention areas shall be designated as general common areas.
 - ii. Platted Developments - Detention or Retention areas shall be designated as a stormwater detention/retention area. (See State Requirements)
 - b. Requirements for all Detention / Retention Areas
 - i. Proposed stormwater detention facilities shall be designed to detain the 10-year design storm runoff volume from the entire contributing area in excess of the allowable discharge from the site (See Design Calculations, Section V along with additional supporting documents pertaining to design calculation requirements).
 - ii. The maximum design storage elevation in a detention area must be a minimum of one (1) foot below the lowest ground elevation adjacent to the detention area.

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- iii. The required volume in a detention basin must be achieved in the basin. At no time will volumes of stormwater stored in conveyance pipes be considered as part of the detention volume.
- iv. In areas of high water table, the detention volume must be calculated from the ground water elevation to the one foot freeboard elevation.

The design maximum storage elevation in a detention area must not exceed a coordinate Survey, fill out forms, develop plan for survey, mapping

- v. depth of nine (9) inches above any paved surfaced in non-residential developments. In residential developments the maximum ponding elevation in the detention pond shall not exceed the lowest rim elevation in the development.
- vi. If parking lot detention is used the owner or lessee must be aware of this detention and sign a letter of understanding that the parking lot will flood during design storms and be flooded for periods of time.
- vii. If common areas such as play lands, recreational fields, school yards are used for shallow detention areas the owner or home owner or property owner associations must be made aware of this storage area. This notification will prevent the owners from thinking something is wrong with the drainage system as it detains stormwater.
- viii. The design maximum storage elevation in a detention area must be minimally one (1) foot below the minimum finish floor elevation of the proposed structure(s) or existing facilities.
- ix. An emergency overflow shall be provided at the detention basin to insure the maximum ponding elevation does not exceed the depths outlined in items iv, v, and vii above. This overflow shall be able to allow drainage from the site in the event the 10-year storm is exceeded, or the restricted outlet is obstructed. The emergency overflow elevation shall be labeled and its location clearly shown on the plan set. The maximum elevation of the emergency overflow is one (1) foot below the surrounding top of elevation of the detention basin.

NOTE: Sites with no acceptable emergency overflow outlet available **MUST** hold the volume of **two (2) 100-year design storm events**. Please contact the SCPWC and/or designee if site needs this requirement.

- x. Designs of detention facilities shall incorporate safety features, particularly at inlets, outlets, on steep slopes, and at any attractive nuisances. These features may include, but not be limited to, landscaping, fencing, handrails, lighting, steps, grills, signs, and other protective or warning devices so as to restrict access as required by the SCPWC.
- xi. Side slopes and the bottom of detention basins must receive a minimum of 3 inches of topsoil, and seeded. Side slopes should have erosion control blankets placed to prevent erosion and establish vegetation faster.
- xii. The side slopes and bottom of the basins shall be shaped with maximum slopes of 1 vertical to 4 horizontal to allow mowing of these surfaces. **NOTE:** 1 vertical to 6 horizontal is preferable.

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- f. Rear lot catch basins shall have a minimum diameter of 2 feet. Plastic structures may be used for rear lot drainage systems. Concrete structures are required for storm sewer systems. The catch basins shall be placed at a maximum distance of 300 feet from any other structure. A structure is required for any bends, turns, or dead ends. Each lot shall have access to a structure; these structures may be shared.
- g. If pipe is perforated, a manufacturer's "Sock" may be used over the pipe but is not required.
- h. A 20-foot easement will be required for all rear lot drainage systems. This easement should be centered along lot lines to allow for a 10-foot easement along adjacent lots and to provide access to the rear lot drainage system from either adjacent property owners. Said easements shall be written as to permit neighboring property and/or condominium owners to maintain the rear lot drainage system as it may affect their property.
- i. Rear lot drainage shall be large enough to convey all contributing area to the rear lot system, including off site drainage if it is not diverted around the development.
- j. Existing rear lot drainage systems abutting a proposed development may be used for the new development provided:
 - i. The existing rear lot drainage system has the capacity to convey stormwater runoff from the proposed rear lot drainage areas.
 - ii. A signed agreement is obtained from property owners located within the existing subdivision allowing the proposed subdivision's rear lot stormwater runoff to pass through their existing system.
- k. Phased developments owned by the same proprietor may utilize proposed rear lot drainage for a current development phase on future phases of the development provided:
 - i. Covenants shall be recorded into the deeds of the property owners affected in the current phase allowing for future phases of the development to drain into the current phase's rear lot drainage system.
 - ii. If covenants are not made as outlined above, future phases will require separate rear lot drainage systems or agreements from the current land-owners allowing for the use of their rear lot drainage system.
 - iii. The rear lot drainage system shall be constructed to convey rear lot drainage from both the existing and proposed rear lot drainage areas.
 - iv. Easements shall be provided allowing for maintenance by both abutting landowners in current and proposed phases of development.
- l. Rear lot drainage shall be shown on the preliminary plat (subdivisions) or site plan (condominiums).
- m. All rear lot drains shall connect to an approved stormwater drainage system.

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- xiii. Detention basins with bottom slopes less than 1% shall be underdrained.
- xiv. Detention basins shall be constructed with the top of banks a minimum of 5 feet from any pedestrian walkway (i.e. public and private sidewalks/ bike paths).
- xv. If a "Wet" detention pond is proposed, the bottom of the pond shall be a minimum of 5 feet below the proposed pond's outlet elevation. Item x. shall not apply to "Wet" detention facilities, but local ordinances may have other requirements for "ponds" which must be met. Design must consider groundwater elevation and provide this elevation for the review.
- xvi. Use of underground storage facilities requires specific design calculations and an Operation & Maintenance Plan and signed agreement.

4. Rear Lot Drainage Requirements

- a. **NOTE:** Rear lot drainage systems are not owned or maintained by the township(s) or the county; they are the sole responsibility of the subdivision's homeowners association or condo association. These systems are NOT part of a county or municipal storm system. There are easements in place are to assure these systems can be accessed when repairs are necessary. After any maintenance is completed in these drainage easements it is the responsibility of the person doing the maintenance to return the site to its previous existing condition.
- b. Minimum rear lot tile drain sizes and slopes have been determined assuming ponding will occur in rear yards for a duration 4 times the duration of a given 10-year design storm event. This time may range from 4 to 24 hours depending on drainage conditions. The following minimum pipe sizes and slopes apply:
 - i. Rear lot tile drains with contributing drainage areas up to 2 acres will have a minimum diameter of 6 inches and a minimum slope of 0.5 %.
 - ii. Rear lot tile drains with contributing drainage areas greater than 2 and less than 3 acres shall have a minimum diameter of 8 inches and a minimum slope of 0.4%.
 - iii. Rear lot tile drains with contributing drainage areas greater than 3 and less than 4 acres shall have a minimum diameter of 10 inches and a minimum slope of 0.32%.
- c. Rear lot tile drains with a contributing area greater than 4 acres shall be considered main line storm sewer and shall be designed according to corresponding storm sewer requirements (See the Design Calculations Section of these requirements along with additional supporting documents pertaining to design calculation requirements). Calculations shall be submitted to verify that rear lot drains have the capacity to pass the 10-year design storm event. Plastic pipe is acceptable for rear lot drainage systems draining more than 4 acres provided it is installed in landscaped/ lawn areas.
- d. Rear lot tile drains cannot connect to road underdrains.
- e. Rear lot drainage tiles shall have a minimum cover of 2 feet. A minimum of 4 inches of sand bedding is required beneath the pipe and a minimum of 6 inches of sand backfill is required above the pipe.

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B. General Compliance Guidelines

The following guidelines are recommended but are not a requirement of this plan. These guidelines are provided for reference.

1. The minimum surface slopes for overland drainage are as follows:
 - a. For bituminous paved surfaces, 1%.
 - b. For concrete paved surfaces, 0.5%.
 - c. For concrete curb and gutter, 0.32%.
 - d. For drainage swales and valley shaped ditches, 0.5%.
 - e. For rear lot drainage swales and valley shaped ditches, 0.5%.
 - f. Landscape grading, 2%.
2. The maximum surface slopes for overland drainage are as follows:
 - a. For bituminous, concrete paved surfaces, 5%.
 - b. For concrete curb and gutter, 5%.
 - c. For drainage swales and valley shaped ditches, 5%.
 - d. For rear lot drainage swales and valley shaped ditches, 5%.
 - e. Drainage swales and valley shaped ditches shall have maximum side slopes of 3 horizontal to 1 vertical.
 - f. Landscape grading, 4 horizontal to 1 vertical.

C. Variances from Requirements

The Saginaw County Public Works Commissioner may waive allowable discharge requirements and or detention requirements. All variances will be reviewed under the appeal procedures established in the stormwater management design requirements. Variances from these requirements shall require the approval of the County whose actions shall be conditioned upon the following:

1. A petition shall be submitted describing in detail the rationale for the proposed design changes including hydraulic and or hydrologic computations.
2. Special circumstances or conditions exist which will affect the property under consideration such that strict compliance with the provisions of the stormwater discharge permit would deprive the applicant of the reasonable use of their land.
3. A variance is necessary for the preservation and enjoyment of a substantial property right of the proprietor.
4. Granting of the variance will not be detrimental to the public health, safety or welfare, or injurious to other property in the territory in which said property is located. Nor, will there be a violation of any local ordinances.
5. An affirmative recommendation must be received from the SCPWC Engineer supporting such variance. In the event that the SCPWC Engineer does not submit an affirmative recommendation, a recommendation shall be received from the County.

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D. Stormwater Management System Maintenance Plans for Subdivisions/ Condominiums

1. Signed maintenance plans will be submitted with all construction plans and included in the subdivision agreement or master deed documents of all businesses, subdivisions, and site condominiums. These maintenance plans are the responsibility of the private owner or home/condo owners association. These plans are not to be construed as a responsibility of the county, city, village or township, nor will the county, city, village, or township be responsible for maintenance of private systems. The plans may include, but not limited to, the following:
 - a. A projected annual maintenance budget itemized by task (for homeowners/condo associations only).
 - b. Proposed mechanism to finance maintenance (for homeowners/condo associations only).
 - c. A copy of the final approved drainage plan for the development that delineates the facilities and all easements, maintenance access, and buffer areas.
 - d. A listing of appropriate tasks defined for each component of the system, and a schedule for their implementation. The listing may include, but not limited to, the following:
 - 1) Long-term operation and maintenance of all structural and vegetative BMPs installed and implemented to meet the performance standards.
 - 2) Maintenance of facilities such as pipes, channels, outflow control structures, infiltration devices, emergency overflows, detention basins, BMPs, and other structures.
 - 3) Debris and sediment removal from catch basins, channels, and basins.
 - 4) Dredging operations for both channels and basins to remove sediment accumulation. Stormwater system maintenance plans shall require that sediment be removed when depth equal to 50% of a pond's forebay or 12" of sediment accumulates, whichever is less.
 - e. Identification of the party responsible for performing each of the various maintenance activities described. This will be recorded with final approved plans and plats.
 - f. A detailed description of the procedure for both preventative and corrective maintenance activities. Preventative maintenance shall include, but not be limited to, the following:
 - 1) Periodic inspections, adjustments, and replacements.
 - 2) Record keeping of operations, inspections, expenditures, and associated activities.
 - g. Provision for the routine and non-routine inspection of all components within the system described:
 - 1) SCPWC recommends regularly scheduled wet-weather inspections of structural elements. Inspection for sediment accumulation in detention basins (or underground storage basins/vaults) shall be conducted annually, with as-built plans in-hand for comparison. These inspections should be performed by a Professional Engineer reporting to the responsible

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E. Evaluation of Cost – Effective structural and non-structural Best Management Practices (BMPs)

1. To meet Saginaw County's NPDES Phase II regulatory requirements for stormwater, the SCPWC may request, and the developer must supply, the following:
 - a. Either preliminary or actual constructed cost of best management practices.
 - b. Projected or actual maintenance costs of best management practices.
 - c. A maintenance agreement from the developer, owner, or operator responsible for the long-term maintenance of structural and vegetative BMPs installed and implemented to meet the water quality performance standards. Please see an example of an operation & maintenance plan and agreement for various sites in Appendix C.
 - d. Any other pertinent information deemed necessary to meet NPDES Phase II regulations.
2. If the requested information is not provided in a timely manner the final occupancy permit will be held until compliance is attained and the information received in the requested format.
3. The information requested will be in a concise formatted manner.

F. BMPs To Minimize Post Construction Impacts On Water Quality

1. Saginaw County recommends that BMPs be utilized on all new or re-development sites to improve stormwater runoff quality in the post construction phase.
2. Saginaw County recommends BMPs to be designed on a site-specific basis to reduce post-development total suspended solids (TSS) loadings by 80 percent or achieve a discharge concentration of TSS not to exceed 80 milligrams per liter.
3. The BMPs used on a site must be reviewed and approved by the SCPWC Engineer, or other appointed designee, during the site plan review and approval process.
4. The site Designer, Engineer, or Architect must supply a list of BMPs being used on a site that will improve water quality of the runoff being discharged from a site for the review process.

VII. STORM SYSTEM OPERATION & MAINTENANCE PLANS

A. Operation & Maintenance Plans (O & M)

Operation and maintenance plans will be developed for new site developments and/or re-developments of 1 acre or more in area, including projects less than an acre that are a part of a larger common plan of development or sale and discharge into the applicant's MS4. These plans must address the implemented best management practices on the site. Additionally, this plan must address the long term operation and maintenance of all structural and vegetative BMPs installed and implemented to meet performance requirements. The property owner / developer is the sole responsible party for the BMPs on the site. These plans are not to be construed as a responsibility of the County, City, Village or Township, nor will the County, City, Village, or Township be responsible for maintenance of private systems.

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agency or owner.

- 2) Housekeeping inspections, such as checking for trash removal, should take place at least twice annually.
- 3) Emergency inspections shall be completed on an as-needed basis. Upon identification of problems a professional engineer, with experience in stormwater systems, shall be contacted for inspection.
 - h. A description of ongoing landscape maintenance is recommended to be included in the plan. Landscaping shall consist of low maintenance, regionally native species whenever possible. The proprietor will monitor the viability of plantings for at least two (2) years after establishment and replace plantings, as needed. Subsequent monitoring shall be the responsibility of the landowner, development association, or appointed designee (such as a landscaping company, lawn care provider, etc.). The Saginaw County Public Works Commissioner, nor the local government (e.g. city, village, township), is not responsible for landscape maintenance.
2. Provision for the maintenance of vegetative buffers by landowner, development associations, conservation groups, or public agencies. Buffers must be inspected annually for evidence of erosion or concentrated flows through or around the buffer.
3. Property deed restrictions or condominium master deed documents will specify the time frame for action to address needed maintenance of stormwater management facilities. These restrictions or documents will also specify that, should the private entity fail to act within this time frame, the local or county governmental entity may take action against the property owners within the subdivision or condominium association, in accordance with Act 288 of the Public Acts of 1967.
 - a. Routine maintenance of stormwater management facilities will be completed per the schedule submitted with the construction plans or within 15 days of receipt of written notification by the local or county governmental entity that action is required, unless other acceptable arrangements are made with the supervising governmental entity.
 - b. Emergency maintenance will be completed within 36 hours of written notification unless a threat to public health, safety and welfare requires immediate action.
4. The proprietor may fulfill the obligation to ensure that a governmental entity will be responsible for drainage system maintenance by establishing a county drain drainage district, or any other similar mechanism approved by the Saginaw County Public Works Commissioner, to provide for the permanent maintenance of stormwater management facilities and necessary funding.
5. If a County Drain is not established, the proprietor will submit evidence of a legally binding agreement with another governmental agency who responsible for maintenance oversight.
6. A legally binding maintenance agreement for subdivisions or condominium developments will be executed before final project approval is granted. The agreement shall be included in the property deed restrictions or condominium master deed documents so that it is binding on all subsequent property owners.

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These plans must be developed to be in perpetuity and, in situations of private or commercial development, must be transferred to the new owner. It is the owner's responsibility to transfer the document and make the new owners aware of the conditions of the O & M Plan. The owners must provide the transfer information to the Saginaw County Public Works Commissioner about the change in owner responsibility within five (5) business days of the transfer. *(In the case of subdivisions, platted or condominium developments the O & M Plans will be in the form of deed restrictions.)*

O & M Plans must have a provision in them to allow representatives from the local municipality to enter the property to inspect structural and vegetative BMPs which are not being maintained as stated in the O & M Plan. If the O & M plan is not being maintained to meet minimal performance requirements described in the Operation and Maintenance Plan for Stormwater Drainage Systems, Structural and Vegetative Best Management Practices (BMPs) document in the Appendix Section, then the local municipality has the option to obtain a contractor to complete the work and charge the owner / developer for costs incurred plus a 25% surcharge for administrative fees.

Additionally, the property owner / developer will provide an email address of the designated person responsible for assuring the O & M Plan is implemented. This email address must be updated when changed or when a new person assumes the maintenance responsibility position. This responsible party must annually inform the local municipality, if they have an NPDES MS4 Permit, that the O & M Plan has been carried out as described in the plan. All reports on this performance objective must be received by the local NPDES MS4 municipal permit holder or their designee (SASWA) on or before December 31st of each year. Failure to report will be construed as non-compliance with the design requirements. An email will be sent to the owner / developer for follow up response to determine compliance. No answer to this email within five (5) business days will result in further administrative action up to and including fines.

Please refer to Appendix C for the Long Term Maintenance Plan and Agreement Document that needs to be completed and submitted for development or re-development of all regular commercial, industrial and non-residential developments that disturb at least one (1) or more acres, including projects less than an acre that are part of a larger common plan of development or sale, are located within the areas designated by US Census as Urbanized Areas (see map in Appendix A) and require the operation and maintenance of stormwater drainage systems and/or structural and vegetative best management practices.

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APPENDIX A

1. SAGINAW COUNTY STORMWATER DISCHARGE PERMIT APPLICATION FORM
2. DESIGN CALCULATIONS
3. DRAINAGE PLAN CHECKLIST
4. TYPICAL INSPECTION REPORT FORM
5. NPDES SOIL EROSION SEDIMENT CONTROL PERMIT FOR CONSTRUCTION SITES
6. FINAL INSPECTION FORM
7. 2010 CENSUS DATA'S URBANIZED AREA MAPS

SAGINAW COUNTY
STORMWATER DISCHARGE PERMIT APPLICATION

PROJECT NAME:	
Property Tax Identification #:	
Site Plan Review Date:	
Date Applied:	
Deposit Amount Submitted:	
NAME OF DEVELOPER/OWNER:	ENGINEER/ARCHITECT:
Contact Person:	Contact Person:
Street Address:	Street Address:
City, State, Zip:	City, State, Zip:
Telephone:	Telephone:
Email:	Email:
PROJECT LOCATION:	
Street Address:	
Name of Subdivision/Plat:	
Drainage District:	
STORMWATER DESIGN INFORMATION (*Calculations must be submitted for verification. Calculations must have clearly labeled headings, formulas, and units.)	
Type of Development (Circle): <i>COMMERCIAL SITE, INDUSTRIAL SITE, RESIDENTIAL PLATTED, RESIDENTIAL CONDOMINIUM, OTHER</i>	
*AREA OF DEVELOPMENT (acres):	
*AREA OF CONTRIBUTING DRAINAGE DISTRICT (acres):	
*AREA OF EXISTING IMPERVIOUS SURFACE (acres):	
*AREA OF PROPOSED IMPERVIOUS SURFACE (acres):	
*ALLOWABLE DISCHARGE RATE (Q) (cfs):	
*TOTAL VOLUME OF STORAGE REQUIRED (cu. ft.):	
*TOTAL VOLUME OF STORAGE DESIGNED (cu. ft.):	
10 YR DESIGN STORMWATER DETENTION STORAGE ELEVATION:	
EMERGENCY OVERFLOW/MAXIMUM STORAGE ELEVATION:	
LOWEST FINISHED FLOOR ELEVATION:	
OUTLET DRAIN SIZE AND DESIGN FLOW CAPACITY:	
OUTLET DRAIN INVERT ELEVATION:	
DESIGN IMPERVIOUS FACTOR (IMP):	
*10 YEAR DESIGN DISCHARGE (cfs):	
*HEAD DIFFERENTIAL THROUGH RESTRICTOR (ft.):	
*DIAMETER OF PROPOSED RESTRICTOR (in.):	
*ACTUAL RESTRICTED DISCHARGE (cfs):	
Latitude and Longitude of outfall to county drain or MS4	
AUTHORIZED SIGNATURE	DATE
PLEASE DRAINAGE PLAN CHECKLIST TO ASSURE ALL INFORMATION IS PRESENT FOR REVIEW	

DRAINAGE PLAN CHECKLIST

In order for the Owner, Developer, or Builder to be in compliance with these guidelines he/she shall for review by the SCPWC Engineer or designee, two complete sets of the site drainage and grading plan, and two copies of the calculations for allowable discharge and on-site storage requirements, as prepared by a Registered Professional Engineer or Architect. A copy of the completed checklist will be sent with all submittals.

Each of the following items shall be included on the plan:

- _____ Total acres of site.
- _____ Total acres of watershed draining through the site outlet.
- _____ Drainage district lines including sub-district lines contributing to individual storm sewers and rear lot drainage systems.
- _____ Location of site including dimension to nearest intersection road or section line.
- _____ Existing ground elevations at maximum 50' centers, including shots on perimeter of site and 50' beyond or contour lines at 1 foot intervals extending 50 feet beyond the site limits.
- _____ Elevations of ground, edge of pavement, and buildings within 50' of site.
- _____ Top of curb, gutter, ditch line, and centerline of road elevation at maximum 50' intervals.
- _____ Existing storm catch basins, manholes, sewers, and culverts showing rim and invert elevation(s).
- _____ Proposed elevations showing parking lot grades and control and building elevations.
- _____ Lawn/landscape areas.
- _____ Location, size, length, slope, and type of proposed storm sewer and rear lot drains.
- _____ Rim and invert elevation(s) of proposed manholes and catch basins, including rear lot drainage.
- _____ Location of on-site storage showing contour line for the top of storage elevation.
- _____ Provide sufficient dimensions, cross-sections, profiles, tie downs, etc. to determine the location and size of proposed storm sewers and detention areas. This information will be used for verifying proposed detention volume calculations in grassed and paved areas.
- _____ Location of restrictor and proposed restrictor detail(s).
- _____ Location and elevation of the Emergency Overflow.
- _____ Latitude and Longitude of site's stormwater discharge point

DRAINAGE PLAN - CHECKLIST (Continued)

Each of the following items shall be included in the submitted calculations:

- _____ Drainage District and impervious factor (if applicable and already established for the location of the site).
- _____ Calculation of maximum allowable discharge (Obtain impervious factor from the SCPWC Engineer, if applicable).
- _____ Calculation of on-site storage required.
- _____ Calculation of storage volume provided.
- _____ Calculation of restrictor size.
- _____ Hydrologic & Hydraulic Calculations for sizing storm sewer systems, which will be maintained by a public agency.
- _____ Hydrologic and Hydraulic calculations showing there will be no adverse impacts upstream or downstream of the proposed development.

Beyond the Saginaw County Public Works Commissioner Stormwater Design Requirements, the Developer must submit applications for permits with all agencies that regulate stormwater within the area of development. These may include Michigan Department of Transportation, Michigan Department of Environment, Great Lakes, and Energy, Saginaw County Public Works Commissioner (SESC), or the Saginaw County Road Commission.

INSPECTION REPORT FORM

PROJECT NAME:		WORK ORDER NO.:		
CONTRACTOR:		REPORT NO.:		
SUPERINTENDENT:		DATE:		
WEATHER (CLEAR, CLOUDY, RAIN, SNOW):		TEMPERATURE:	INSPECTOR:	
WORK FORCE ON SITE:	NUMBER:	TRADE:	NUMBER:	TRADE:
EQUIPMENT IN USE (Number and Type):				
WORK DONE (Location, Amount, and Type): (Be Specific)				
TYPE OF UTILITY INSTALLED (Water, Sewer, Pavement, Size, Class, Description, Source):				
GROUND CONDITIONS ENCOUNTERED (Clay, Sand, Wet, Dry, Good Poor, or Other & Detail Further):				
BACKFILL INSTALLED:				
EXISTING UTILITIES ENCOUNTERED:				
RELOCATION OF PROPOSED UTILITIES AND REASON NECESSARY:				
MATERIAL DELIVERED TO SITE (Size, Class, Description, Source):				
VISITORS TO WORK SITE (Name, Affiliation):				
REMARKS:				

NOTE: Complete in ink. Use reverse side if necessary. Inspectors using digital systems should provide a copy to SCPWC

By: _____ Date: _____

https://www.michigan.gov/documents/deq/wb-stormwater-ConstructionQA_248586_7.pdf

Once the project site is stabilized and has good vegetative cover, remember to fill out a project termination form on the MiWaters website.

Determine inspection responsibilities:

Make sure that SESC issues are an agenda item at the pre-bid meeting and at the pre-construction meeting. Do not just put a note on the plans that SESC is the contractor's responsibility; make sure they are fully aware of their site responsibilities. Remember that the owner of the project is ultimately the responsible party, the EGLE or enforcing agency will be fining them.

**SOIL EROSION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES
PROCEDURE**

A general procedure for Soil Erosion and Sediment Control (SESC) and NPDES permits to discharge stormwater from construction sites:

There have been changes in the permitting for construction sites for contractors, developers, municipalities, and other public agencies. These rules took effect at the date listed below; everyone must adhere to these changes and be aware of them.
EFFECTIVE DATE – MARCH 10, 2003

General procedure to follow:

Site has a soil disturbance of 1 to <5 acres:

Apply for Soil Erosion Sediment Control permit from either the County Enforcement Agency (CEA) or Municipal Enforcement Agency (MEA). The Saginaw County Public Works Commissioner is the County Enforcement Agency.

The following site offers a direct link to the Soil Erosion and Sedimentation Control Permit:

http://www.saginawcounty.com/Docs/publicworks/FillInForms/Permit_Application_SESC.pdf

The NPDES discharge permit for this site is covered by the "permit by rule"; no permit or application needs to be filled out for the state. A certified stormwater operator is also required to inspect the site weekly and within twenty-four (24) hours of a rain event resulting in a discharge of stormwater from the site.

Note: If the client is an APA (Authorized Public Agency for soil erosion and sediment control) they still must follow the permit by rule, they do not need a SESC Permit as they have procedures approved by EGLE. The rules are at the following site:

http://www.michigan.gov/documents/deq/wb-sw-Construction-Rules-1to5acres_264064_7.pdf

Site has a soil disturbance of 5 or more acres:

Apply for Soil Erosion Sediment Control permit from either the county enforcement agency (CEA) or municipal agency (MEA) first. Then fill out the NPDES Notice of Coverage form for discharges from the construction site on the MiWaters website.

To apply, renew, or terminate permit coverage, go the MiWaters website at <https://miwaters.deq.state.mi.us> and log into your account. If you don't already have an account, view the tutorial on how to establish your account. Once you have an account established, you may:

- apply for permit coverage by searching for Notice of Coverage Application,
- renew by searching for Notice of Coverage Renewal, or
- terminate your permit by searching for Notice of Termination.

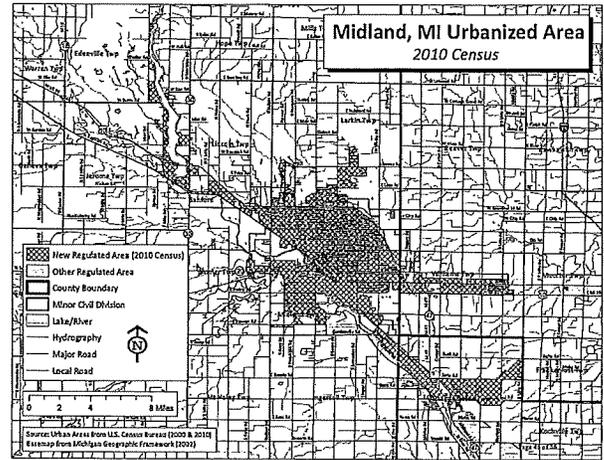
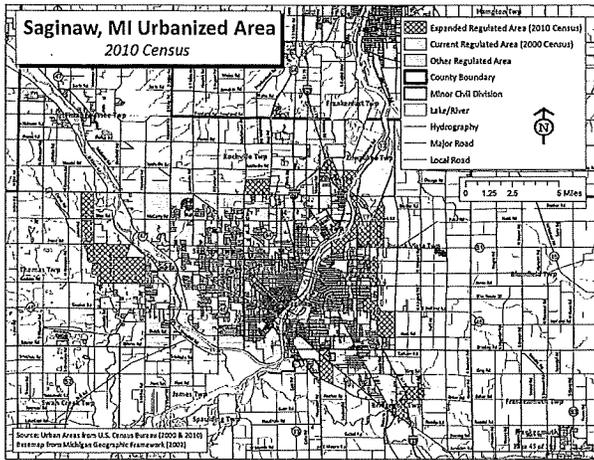
Once the state receives the form, the site is covered.

Note: If client is an APA (authorized public agency for soil erosion and sediment control) they still must obtain and fill out the NPDES Notice of Coverage to discharge stormwater from a construction site; they do not need SESC Permit as they have procedures approved by MDEQ.

**SAGINAW COUNTY
DETENTION AND RESTRICTION FLOW
FINAL INSPECTION REPORT FORM**

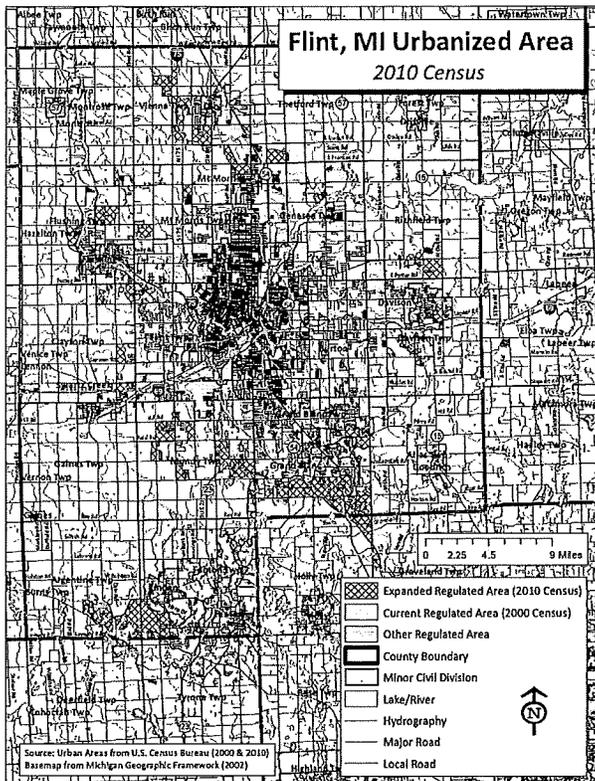
Name of Site Development:	
Planning Commission Approval Number:	
Location:	
Type of Development:*	
Size of Restrictor:	
Type of Restrictor:**	
Location of Restrictor:	
Required Detention (R ³):	
Type of Detention:***	
Location of Detention:	
Do As-Built Conform To Present Site Conditions?	
Inspection Comments:	
Date of Inspection:	
Inspector's Name and Affiliation:	

* - Residential, Commercial, Subdivision, Etc.
 ** - Orifice in Outlet Pipe, Metering Outlet Pipe, Square Orifice, Etc.
 *** - Parking Lot Ponding, Detention Basin, Underground Detention, Etc.



APPENDIX B

1. MICHIGAN DEPARTMENT OF TRANSPORTATION PERMIT APPLICATION FOR USE OF RIGHT-OF-WAY
2. MICHIGAN DEPARTMENT OF TRANSPORTATION STORMWATER DISCHARGE PERMIT APPLICATION
3. MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY JOINT PERMIT APPLICATION



To assure that all agency forms are as up to date as possible Onekama Township has provided the following website addresses that various forms may be attained at for use by developers and design engineers.

APPENDIX C

1. MICHIGAN DEPARTMENT OF TRANSPORTATION PERMIT APPLICATION FOR USE OF RIGHT-OF-WAY, is available through the MDOT Permit Gateway. More information and link to the MDOT Permit Gateway can be found at:

https://www.michigan.gov/mdot/0,4616,7-151-9623_26662_26679_27267_48606-182161--,00.html

2. MICHIGAN DEPARTMENT OF TRANSPORTATION STORMWATER DISCHARGE PERMIT APPLICATION, through the MDOT Permit Gateway. More information and link to the MDOT Permit Gateway can be found at:

https://www.michigan.gov/mdot/0,4616,7-151-9623_26662_26679_27267_48606-331000--,00.html

3. MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY JOINT PERMIT APPLICATION is available on the MiWaters website. More information and link to MiWaters can be found at:

http://www.michigan.gov/deq/0,1607,7-135-3307_29692_24403--,00.html

1. MAINTENANCE PLAN AND AGREEMENT

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OPERATION & MAINTENANCE PLAN FOR STORMWATER DRAINAGE SYSTEMS, STRUCTURAL & VEGETATIVE BEST MANAGEMENT PRACTICES (BMPs)

< Please insert name of site >
< Location >

This Operation & Maintenance Plan is to be completed for development or re-development of all commercial, industrial, subdivision and condominium developments that disturb at least one or more acres, including projects less than an acre that are part of a larger common plan of development or sale and require the operation and maintenance of stormwater drainage systems and/or structural and vegetative best management practices and/or structural stormwater controls.

I. Responsibility for Maintenance:

- A. **During Construction:** <name of site> (contractor) has the responsibility to perform the maintenance.

- B. **Following Construction:** <name of site> is responsible to perform the maintenance.

1. Routine maintenance of the stormwater facilities must be completed on a scheduled basis by the owner or lessee. All catchbasins/manholes/rear yard basins, detention basins, flow restrictors, or other stormwater structures must be maintained and inspection on a scheduled basis.
2. Any structural and/or best management practices (BMPs) must be installed and implemented properly to meet the performance standards.
3. If the site is notified by the local DPW, zoning administrator, County Engineer or municipal engineer, either verbally or in writing, within ten (10) calendar days of this notification action is required, unless other acceptable arrangements are made with the County Engineer or responsible authority. Emergency maintenance (when there is endangerment to public health, safety or welfare) shall be performed immediately upon receipt of verbal or written notification. If the <name of site> fails to act within these timeframes, the responsible local township or municipality, or successors may perform the needed maintenance and assess the cost against the <name of site>, plus an administrative fee of 25%.

II. Funding:

The <name of site> is required to pay for all continued maintenance activities.

III. Maintenance Tasks and Schedule:

A. During Construction:

1. Properly plug and abandon existing storm sewer to prevent any sediment from entering the existing system.
2. Establish and maintain 'BMP's to prevent sediment from leaving the site.

B. Post-Construction:

1. Perform scheduled semi-annual inspections and inspections following major storm events to check for floatables and debris within the system. Remove floatables and debris as required.

2. Annually inspect for sediment within the catch basin sumps. Removal of sediment is required if within 12 inches of an inlet or outlet pipe in the structure.
3. Every two (2) years inspect the structural elements of the storm system (restrictor, catch basins, etc.) noting any failures. Correct as needed.
4. If catch basin inserts are in place, inspect every 6 months and replace screens, filters or cloth as necessary for the particular type of insert.
5. Mow detention basins on a regular basis; no cattails, Phragmites, or other plants can grow unrestricted in these basins.
6. Ensure long-term operation and maintenance of all structural and vegetative best management practices installed and implemented.

Note: Update and revise as necessary. Include all structural stormwater controls and the appropriate maintenance and schedule for each.

IV. Records:

- A. The <name of site> shall keep a written log of both preventive and corrective maintenance activities. At minimum, the log shall contain the date of the inspection, the reason for the inspection, the conditions encountered and the resulting activities and any photographs taken for documentation purposes. The log shall be available for review at the request of the SCPWC.
- B. If a site is sold to another, this Operation and Maintenance agreement must be transferred to the new owner and the SCPWC must be informed of the change in ownership within fourteen (14) days of the sale.
- C. Annually, a compliance statement must be sent to <insert tracking site>. The owner or operator of the site will at minimum provide the date of inspection(s) and any maintenance performed, if applicable. This can be accomplished via email to the email address listed below of the responsible party.
- D. If the owner or operator of the site does not respond to the compliance statement with verification of site inspection and maintenance of stormwater structural controls and best management practices within fourteen (14) days from the day of receiving the email, the responsible local township or municipality, or representative for the responsible local township or municipality, will perform an inspection and an administrative fee will be charged to the owner or operator.

V. Site Access:

- A. If there is a drainage issue/problem on a site that has to do with the storm drainage system, best management practices, or is discharging too much stormwater or water that does not appear to meet water quality standards, the owner must let the responsible local township or municipality, or designee, onto the property for the following:
 1. Inspect the structural or vegetative best management practice(s), drainage issue/problem, or discharge problem.
 2. Perform the necessary maintenance or corrective actions neglected by the BMP owner or operator. The responsible local township or municipality has the option to obtain a contractor to complete the work and charge the owner/developer for costs incurred plus a 25% surcharge for administrative fees.
- B. Any and all necessary maintenance or correction actions that the responsible local township or municipality must perform will be charged to the owner or operator of <name of site>.

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APPENDIX D

VI. Spills:

- Identify key spill response personnel and train employees on who they are.
- Store and maintain appropriate spill cleanup materials in a clearly marked location near storage areas; and train employees to ensure familiarity with the site's spill control plan and/or proper spill cleanup procedures.
- Locate spill cleanup materials, such as absorbents, where they will be readily accessible (e.g. near storage and maintenance areas).
- If a spill occurs, notify the key spill response personnel immediately. If the material is unknown or hazardous, the local fire department may also need to be contacted.
- If the spill gets into the storm drainage system, contact the Saginaw County Public Works Commissioner, or appropriate agency depending on amount of material spilled.
- If safe to do so, attempt to contain the material and block the nearby storm drains so that the area impacted is minimized. If the material is unknown or hazardous wait for properly trained personnel to contain the materials.
- Spills or leaks from vehicles in parking lots such as oils, antifreeze, or fuels should be addressed immediately when noticed by staff working at the site. The spill **MUST** be cleaned up using adsorbent materials such as Oil Dry or even kitty litter and then swept up and properly disposed of. **DO NOT** hose down and wash into the storm drain system, these systems drain directly to rivers in our area and eventually the Great Lakes.

VII. Operation and Maintenance Verification:

I have read this document and agree to implement the operation and maintenance procedures listed for this site to protect stormwater quality leaving this site and to ensure best management practices are installed and being implemented. I agree to update this document as necessary when there is a change to the site regarding any structural stormwater controls and provide an updated copy to the County within fourteen (14) calendar days.

Authorized Signature _____ Date _____

Email address of responsible party: _____

NOTE: Any change in email address must be provided to the SCPWC or local municipality within 5 business days from the change of responsible parties.

1. RUNOFF COEFFICIENTS TABLE

TABLE 1. Runoff Coefficients

Description of area	Runoff coefficients
Impervious Areas	
Pavement, Roofs, Buildings	0.90
Water	1.00
Park/Playground/Cemetery Area	0.30
Lawn Area	0.17
Woodland Area	0.45
Pasture Area	0.40
Cultivated Area	0.60

Note: The coefficients in this tabulation are applicable for storms of 5-year to 10-year frequencies. Less frequent higher intensity storms will require the use of higher coefficients because infiltration and other losses have a proportionally smaller effect on runoff. The coefficients are based on the assumption that the design storm does not occur when the ground surface is frozen.

APPENDIX E

1. BEST MANAGEMENT PRACTICES

Best Management Practices

Best Management Practices recommended by the County can be obtained from the County Engineer or Designee by requesting the BMP manual appropriate to a commercial or industrial activity from the *BMP Guidance Series*.

The standard BMP Guidance series to utilize within Saginaw County can be found in the following sources:

- Guidebook of Best Management Practices for Michigan Watersheds, published by the Michigan Department of Environmental Quality – Water Division.
http://www.michigan.gov/documents/deq/deq-wb-nps-Intro_250601_7.pdf
- Soil Erosion and Sedimentation Control Guidebook, February 2003, from the Michigan Department of Management and Budget's – Infrastructure Services Design and Construction Division.
- Michigan Department of Transportation – Drainage Manual, Chapter 9 – Best Management Practices found at the following web site.
<http://www.michigan.gov/stormwatermtg/0,1607,7-205--93193--00.html>
- Any recommended or required BMPs that are established in Watershed Management Plans written for the Upper Saginaw, Lower Tittabawassee, Lower Cass Rivers, or Swan Creek.
- Storm Water Management For Construction Activities, published by the United States Environmental Protection Agency.
<http://nepis.epa.gov/Exe/ZyPDF.cgi/2000461J.PDF?Dockey=2000461J.PDF>
- NPDES Best Management Practices Guidance Document, published by the Environmental Protection Agency Office of Water Enforcement and Permits NPDES Technical Support Branch.
<http://nepis.epa.gov/Exe/ZyPDF.cgi/9100FCSA.PDF?Dockey=9100FCSA.PDF>



Saginaw County Parks & Recreation Commission



COUNTY SERVICES



111 S. Michigan Ave LL012, Saginaw, MI 48602
www.saginawcounty.com/parks

Ruth Averill
Chair
Amy Davis-Comstock
Vice Chair
Brian Wendling
Secretary
Delena Spates-Allen
Darwin Baranski
Tim Courtney
John Sangster
Chuck Stack
Demond Tibbs
Azola Williams

Brian Keenan-Lechel
Director
Jordan Beal
Operations Supervisor
Tonya Huber
Outdoor Recreation & Event Coordinator
Jeanette Stewart
Program Coordinator
Tom Kowalski
Parks Foreman
Fred Raymond
Parks Specialist
Cheryl Rytlewski
Office Manager

Phone
(989) 790-5280

Fax
(989) 790-5284

Saginaw County Parks

- Imerman Memorial Park*
- Price Nature Center*
- Ringwood Forest*
- Saginaw Valley Rail Trail*
- Veterans Memorial Park*
- William H. Haithco Recreation Area*



November 24, 2020

Charles Stack, Chairman
County Services Committee
111. S. Michigan Ave.
Saginaw, MI 48602

Re: Additional Fund Balance Request for Haithco Recreation Area Splash Pad and Playground

Chair Stack and the County Services Committee,

The Saginaw County Parks and Recreation Commission respectfully requests approval to utilize an additional \$100,000 from the Parks and Recreation Commission's fund balance account in the 2021 budget. The funding will be utilized to enhance the development of a splash pad and playground installation at William H. Haithco Recreation Area scheduled for 2021 construction.

Additional project funds include grants from the Michigan Natural Resources Trust Fund and the Saginaw Community Foundation.

I will be present at the December 1st, 2020 County Services Committee meeting to answer any questions the committee may have.

Respectfully,

Brian Keenan-Lechel
Director

12-15-5

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 NOV 25 AM 10:46



Finance and Accounting

910 North Walnut Street
Bay City, Michigan 48706

Tel: (989) 686-9700
Fax: (989) 266-8203

SAGINAW COUNTY SERVICES

October 27, 2020

12-15-6

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 NOV -2 PM 2:18

Saginaw County Board of Commissioners
111 S. Michigan
Saginaw, MI 48603

To Whom It May Concern:

Enclosed is a copy of a resolution of the Board of education of the School District of the City of Bay City, whereby the Board, pursuant to statute, has determined to impose a summer tax levy on all school district property.

As per our prior agreement, the Board of Education requests that Saginaw County Treasurer's collect the districts' summer school property taxes levied upon property collected within the School District of the City of Bay City.

If there are any questions, please feel free to call me at (989) 671-8111.

Sincerely,

Jolene L. Compton, CPA
Director of Finance & Accounting

Enc.

THE SCHOOL DISTRICT OF THE CITY OF BAY CITY,
BAY AND SAGINAW COUNTIES

A regular meeting of the Board of Education of said school district was held in said school district on the 11th day of May, 2020, at 7:00 p.m.

The meeting was called to order by President Rademacher.

Present: Welch, Sepeda, Teske, Baird, Papajesk, Felan, Rademacher

Absent: None.

The following preamble and resolution were offered by Member Baird
and supported by Member Papajesk:

WHEREAS, this Board of Education by resolution of January 26, 1983, determined to impose a summer property tax levy on one-half (1/2) of the total of its annual school property taxes, including debt service, upon property located within said school district situated in whole or in part in the Townships of Beaver, Frankenlust, Hampton, Kawkawlin, Merritt, Monitor, Portsmouth, Williams, Buena Vista, Kochville and Tittabawassee and the Cities of Midland and Auburn, for the school property tax year of July 1, 1983, through January 30, 1984, and for the school years thereafter determined to impose a summer property tax levy of the total of its annual school property taxes, including debt service, upon the property located within said school district including the Townships of Beaver, Frankenlust, Hampton, Kawkawlin, Merritt, Monitor, Portsmouth, Williams, Buena Vista, Kochville and Tittabawassee, and the Cities of Midland and Auburn, and continuing from year to year thereafter until specifically revoked by the Board of Education, and further determined to impose a summer property tax levy, including debt service, upon property located within said school district situated in whole or in part in the City of Bay City, beginning with the school property tax year of July 1, 1983, through June 30, 1984, and continuing from year to year until specifically revoked by this Board of Education.

NOW, THEREFORE BE IT RESOLVED THAT:

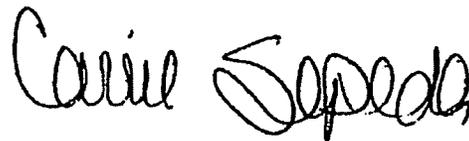
1. This Board of Education, pursuant to 1982 PA 333, hereby invokes for 2020-2021 its previously adopted ongoing resolution imposing a summer property tax levy of ALL 100% of school property taxes, including debt service, upon property located within the school district.
2. That the Board of Education Resolution of January 26, 1983, shall also apply to the annexed property located in Zilwaukee Township.

3. The Superintendent and/or Director of Finance and Accounting are authorized and directed to forward to the governing body of each city and/or township in which this school district is located a copy of this Board's resolution imposing a summer property tax levy on an ongoing basis, and a copy of this resolution requesting that each such city and/or township agree to collect the summer tax levy for 2020 in the amount as specified in this resolution. Such forwarding of the resolutions and the request to collect the summer tax levy shall be sent so that they are received by the appropriate governing bodies before January 1, 2021.
4. Pursuant to and in accordance with Section 1613(1) of the School Code, the Superintendent and/or Director of Finance and Accounting are authorized and directed to negotiate on behalf of this school district with the governing body of each city and/or township in which the school district is located for the reasonable expenses for collection of the school district's summer property tax levy that the city and/or township may bill under MCLA 280.1611 or MCLA 280.1612. Any such proposed agreement shall be brought before this Board for its approval or disapproval.
5. If no agreement can be reached between this board and any city or township within the time limits set forth in said Act 333, this Board shall then take such further action as is in accordance with, required and/or permitted under said Act 333.
6. All resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution be and the same are hereby rescinded.

Ayes: Felan, Welch, Sepeda, Jeske, Baird
Papajesk, Rademacher

Nays: None.

Resolution declared adopted.



Secretary, Board of Education



Birch Run Township

8425 Main Street • P.O. Box 152 • Birch Run, MI 48415
Phone: (989) 624-9773 • Fax: (989) 624-1177

COUNTY SERVICES

November 6, 2020

Saginaw County Board of Commissioners
111 S. Michigan Ave.
Saginaw, MI 48602

RE: DDA Special Meeting Notice

Saginaw County Board of Commissioners,

Below is the meeting notice for the Birch Run Township Downtown Development Authority where they will be holding an informational session for the public. This meeting is open to the public.

If you have any questions, please feel free to contact the Birch Run DDA at PO Box 152, Birch Run, MI 48415.

NOTICE OF A DDA SPECIAL MEETING

Notice is hereby given that the Birch Run Township Downtown Development Authority will hold a Special Meeting on Wednesday, December 9, 2020 @ 8:00 a.m. This Special Meeting will be held at the Birch Run Township Government Room, 11935 Silver Creek Dr., Birch Run, MI 48415.

The purpose of this special meeting will be to discuss and take action on the following items:

- Public informational meeting
- Appointment of new members & officers
- Streetscape project update

THIS MEETING IS OPEN TO ALL MEMBERS OF THE PUBLIC UNDER MICHIGAN'S OPEN MEETINGS ACT.

This notice is posted in compliance with the Open Meetings Act, Public Act 267 of 1976, as amended, (MCL 41.72a(2)(3)).

Sincerely,

Corey Trinklein
Birch Run Township Clerk
Birch Run Township DDA Secretary

12-15-7

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 NOV 12 AM 9:53



Village of Birch Run
12060 Heath Street
PO Box 371
Birch Run, Michigan 48415
Ph # (989) 624-5711 Fax # (989) 624-9681

**COUNTY
SERVICES**

November 3, 2020

12-15-8

Mr. Michael Webster, Chair
Saginaw County Board of Commissioners
111 South Michigan
Saginaw, MI 48602

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 NOV 12 AM 9:53

Re: Village of Birch Run DDA – Informational Meeting Notice

Dear Chairman Webster:

In accordance with Public Act 57 of 2018, the Birch Run Downtown Development Authority (DDA) will be having an informational meeting during its regular DDA meeting on Thursday, December 17, 2020. The meeting will begin at 7:30am. If you have any questions, I may be reached by email at pmoore@villageofbirchrun.com or at the telephone numbers listed above.

Sincerely,

Paul T. Moore, CPM
DDA Director -Village Manager

cc: Lisa Duffett, DDA Secretary-Village Treasurer

AGENDA

SPECIAL

COUNTY SERVICES COMMITTEE

111 S. Michigan Ave., Room 200, Saginaw MI 48602

Tuesday, December 15, 2020 - 3:30 p.m.

VIA TELECONFERENCE PER PA 228 of 2020

Members: Charles Stack – Chair, Cheryl Hadsall – Vice-Chair, Kyle Harris, Dennis Krafft, Michael Webster
Others: Robert Belleman, Civil Counsel, Koren Thurston, Jennifer Broadfoot, Board Staff,
Media

***The County Services Committee meeting will be held via Zoom online meeting platform.
As the County Building is closed to the public except by appointment, the meeting is open remotely
to the public to follow along and participate during the public portion of the meeting, as follows:***

County of Saginaw is inviting you to a scheduled Zoom meeting.

Topic: [See Agenda below](#)

Date/Time: [December 15, 2020 3:30 PM EST](#)

Join Zoom Meeting: <https://zoom.us/j/8024441727> Meeting ID: [802 444 1727](#)

INSTRUCTIONS using ZOOM audio conferencing:

Dial: 1 (877) 853-5257 or 1 (888) 475-4499 and enter Meeting ID: [802 444 1727](#)

- I. Call to order
- II. Welcome
- III. Public Comment (*Speakers limited to 3 minutes*)
- IV. Agenda
 1. **Kelly Suppes, Purchasing/Risk Manager, re:**
 - **12-15-22** Requesting approval of a recommendation from the Evaluation Committee that reviewed responses to a Request for Qualification (RFQ) for Construction Management Services for the Saginaw County Animal Care & Control Resource Center and award of the contract to Granger Construction
 - **12-15-23** Requesting approval of a recommendation from the Evaluation Committee that reviewed responses to a Request for Qualification (RFQ) for Construction Management Services for the Dow Event Center Capital Projects and award of the contract to Spence Brothers; further, requesting approval of a proposed Resolution that assigns general oversight and management of the renovation of the Dow Event Center Capital Improvement Project to the Saginaw County Building Authority (*Attached*)
- V. Miscellaneous
- VI. Adjournment



COUNTY OF SAGINAW

OFFICE OF COUNTY CONTROLLER

111 SOUTH MICHIGAN AVENUE
SAGINAW, MICHIGAN 48602

COUNTY SERVICES

ROBERT V. BELLEMAN
Controller/Chief Administrative Officer
rbelleman@saginawcounty.com

December 8, 2020

Michael Webster, Chairman
Saginaw County Board of Commissioners
111 S. Michigan Ave.
Saginaw, MI 48602

12-15-22

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 DEC 10 PM 4:08

RE: Selection of Construction Manager-SCACCRC

Dear Chairman Webster:

A Request for Qualification (RFQ) was advertised and submitted to local contractors for Construction Management (CM) Services for the Saginaw County Animal Care and Control Resource Center on October 29, 2020. The RFQ-CM consisted of two (2) components. The two components are Technical proposal and Cost proposal. A (5) member Evaluation Committee consisting of Robert Belleman, Controller/CAO; Bonnie Kanicki, SCACCRS Director; Tim Novak, County Treasurer and Building Authority representative; Annette Taylor, Interim Maintenance Manager; and Kelly Suppes, Purchasing/Risk Manager were assigned to review and evaluate the Technical proposals in five areas. The five areas include Firm Qualifications (15 points), Personnel Qualifications (10 Points), Project Management (15 points), Safety and Health Performance (10 Points), and Experience (25 points). Once the Technical Proposal scores were turned in and averaged, the Cost Proposals (25 points) were opened via Zoom. The process used is the same process being proposed under the Responsible Contractor Policy.

The top 2 scoring CM Firms Spence Brothers and Granger Construction were invited to a Presentation/Interview on Friday, December 4th via Zoom.

Based upon the final scores, the committee recommends the Construction Management contract be awarded to Granger Construction. The decision is based upon their experience with constructing an animal shelter. Granger recently completed the Ingham County Animal Control facility and renovation to the MSU School of Veterinary Medicine. The Committee considered this direct experience with these projects that elevated Granger to the forefront. Other CM Firms that submitted proposals were R.C. Hendricks and Spence Brothers.

The finalized budget for the project will be presented to the Board of Commissioners in January.

I have attached a Spreadsheet that outlines the Qualifications, Cost Proposal and Interview scores.

If you should have any questions, please feel free to contact me.

Sincerely,

Kelly Suppes

Kelly M. Suppes, Purchasing/Risk Manager

**SAGINAW COUNTY
CONSTRUCTION MANAGER-SAGINAW COUNTY ANIMAL CARE AND CONTROL RESOURCE CENTER
QUALIFICATIONS/COST PROPOSAL/INTERVIEW EVALUATION RESULTS
12/7/2020**

QUALIFICATIONS & EXPERIENCE		Spence Brothers	RC Hendricks	Granger
Firm Qualifications	0-15	14.40	12.40	14.40
Personnel Qualifications	0-10	9.80	8.20	9.80
Project Management	0-15	13.80	13.60	14.20
Safety and Health Performance	0-10	9.40	3.40	9.80
Experience	0-25	21.80	17.80	24.00
SUBTOTAL	0-75	69.20	55.40	72.20
Fee Structure (low cost/your cost * 25)	0-25	20.65	25.00	18.86
Proposed Fee		\$641,250	\$529,800	\$702,301
Total Points before Interview	100	89.85	80.40	91.06
Interview Points (Average)	25	18.20	N/A	22.40
TOTAL POINTS	125	108.05		113.46

Evaluation Team:
 Robert Belleman, Controller
 Bonnie Kanicki, Director of Animal Control
 Tim Novak, Building Authority
 Annette Taylor, Interim Maintenance Dir
 Kelly Suppes, Purchasing/Risk Mgr



COUNTY OF SAGINAW

OFFICE OF COUNTY CONTROLLER

111 SOUTH MICHIGAN AVENUE
SAGINAW, MICHIGAN 48602

COUNTY SERVICES

December 8, 2020

ROBERT V. BELLEMAN
Controller/Chief Administrative Officer
rbelleman@saginawcounty.com

Michael Webster, Chairman
Saginaw County Board of Commissioners
111 S. Michigan Ave.
Saginaw, MI 48602

12-15-23

RECEIVED
SAGINAW COUNTY
BOARD OF COMMISSIONERS
2020 DEC 10 PM 4:08

RE: Selection of Construction Manager-Dow Event Center Capital Projects

Dear Chairman Webster:

A Request for Qualification (RFQ) was advertised and submitted to local contractors for Construction Management (CM) Services for the Dow Event Center Capital Projects on October 29, 2020. The RFQ-CM consisted of two (2) components. The two components are Technical proposal and Cost proposal. A (5) member Evaluation Committee consisting of Robert Belleman, Controller/CAO; Jon Block, General Manager-the Dow Event Center and Huntington Bank Park; Tim Novak, County Treasurer and Building Authority representative; Annette Taylor, Interim Maintenance Manager and Kelly Suppes, Purchasing/Risk Manager were assigned to review and evaluate the Technical proposal in five areas. The five areas include Firm Qualifications (15 points), Personnel Qualifications (10 points), Project Management (15 points), Safety and Health Performance (10 points), and Experience (25 points). Once the Technical Proposal scores were turned in and averaged, the Cost Proposals (25 points) were opened via Zoom. The process used is the same process being proposed under the Responsible Contractor Policy approved by the Board of Commissioners.

The committee recommends the Construction Management contract be awarded to Spence Brothers. The recommendation is due to their vast experience with prior renovations and construction projects at the Dow, their experience with constructing parking structures and ice facilities. Other CM Firms that submitted proposals were R.C. Hendricks and Three Rivers Construction. Upon approval of the contract by the Board of Commissioners, the project will be turned over to the Saginaw County Building Authority for project management.

I have attached a Spreadsheet that outlines the Qualifications and Cost Proposal scores.

If you should have any questions, please feel free to contact me.

Sincerely,

Kelly M. Suppes, Purchasing/Risk Manager

**SAGINAW COUNTY
CONSTRUCTION MANAGER-DOW EVENT CENTER CAPITAL PROJECTS
QUALIFICATIONS/COST PROPOSAL EVALUATION RESULTS (AVERAGES)
11/25/2020**

QUALIFICATIONS & EXPERIENCE		Spence Brothers	RC Hendricks	Three Rivers
Firm Qualifications	0-15	14.40	12.80	12.40
Personnel Qualifications	0-10	9.60	8.40	8.20
Project Management	0-15	13.40	13.80	13.60
Safety and Health Performance	0-10	9.40	4.00	9.60
Experience	0-25	24.40	22.00	22.60
SUBTOTAL	0-75	71.20	61.00	66.40
Fee Structure (low cost/your cost * 25)	0-25	20.55	25.00	18.53
Proposed Fee (Zoom 11/24/2020)		\$950,000	\$780,800	\$1,052,270
Total Points	100	91.75	86.00	84.93

Evaluation Team:
 Robert Belleman, Controller
 Jon Block, GM of Dow Event Center
 Tim Novak, Building Authority
 Annette Taylor, Interim Maintenance Dir
 Kelly Suppes, Purchasing/Risk Mgr

RESOLUTION “ ___ ”

**COUNTY OF SAGINAW
STATE OF MICHIGAN**

At a regular session of the Saginaw County Board of Commissioners, held the ___ day of _____, 202__, at the Saginaw County Courthouse, 111 S. Michigan Avenue, Saginaw, Michigan 48602.

PRESENT: _____

Commissioner _____ offered the following resolution and moved its adoption. The motion was seconded by Commissioner _____.

WHEREAS the Saginaw County Board of Commissioners has approved going forward on the construction of:

Necessary renovation of the Dow Event Center and related environs including the adjacent parking ramp as described in the Request for Proposals prepared by the County (the Project)

WHEREAS, since 1972, when Saginaw County incorporated its Building Authority¹, it has assisted Saginaw County in the siting, purchase, construction and/or renovation of various construction projects initiated by the County, when the County; and

WHEREAS the Saginaw County Building Authority has, with the approval of the Board of Commissioners provided satisfactory construction oversight and management of the various projects assigned to it, thereby relieving the County Board of Commissioners of daily oversight of the projects; and

WHEREAS the Saginaw County Board of Commissioners desires that the Project be completed in the most efficient manner possible resulting is a quality result for the citizens of the County; and

WHEREAS the Saginaw County Board of Commissioners has, subject to finalization of an acceptable contract, selected a contracting firm to design, manage, and/or construct the Project.

NOW, THEREFORE, IT IS HEREBY RESOLVED that the Board of County Commissioners of the County of Saginaw assigns general oversight and management of the renovation of the Dow Event Center Capital Improvement Project to the Saginaw County Building Authority, and directs the Building Authority to interface with all stakeholders, including but not limited to affected staff, architects and approved contractors with a goal to renovate the facility, according to the plans approved and within a budget approved by the Saginaw County Board of Commissioners for the construction and outfitting of the Project. Further, the County Controller is hereby directed to receive and remit payment for construction and other services as approved by the Saginaw County Building Authority.

¹ pursuant to Act No. 31, Public Acts of Michigan, 1948 (first extra session), as amended (hereinafter referred to as “Act 31”)

All resolutions and parts of resolutions insofar as they may be in conflict herewith are rescinded.

Yeas: _____

Nays: _____

TOTAL: _____

A sufficient majority having voted therefor, the Resolution was _____.

STATE OF MICHIGAN)
) SS
COUNTY OF SAGINAW)

I, the undersigned, the duly qualified and acting County Clerk of the County of Saginaw, do hereby certify that the foregoing is a true and complete copy of a resolution adopted by a majority vote of the members elect at a regular meeting of the Saginaw County Board of Commissioners, held on _____, _____ 202__, the original of which is on file in my office. I further certify that notice of the meeting was given in accordance with the Open Meetings Act.

County Clerk

¹ pursuant to Act No. 31, Public Acts of Michigan, 1948 (first extra session), as amended (hereinafter referred to as "Act 31")