



**REGULAR MEETING OF THE
CHARTER TOWNSHIP OF COMSTOCK TOWNSHIP
BOARD**

**WEDNESDAY, AUGUST 19, 2026 at 6:00 PM
NOTICE AND AGENDA
5858 KING HIGHWAY
KALAMAZOO, MI 49048**

I. Call to Order

II. Pledge of Allegiance to the Flag of the United States of America

III. Approval of Agenda

- Motion to Approve Agenda

IV. Public Comment(s) on Agenda Items Only

A citizen may state their name and address and may speak only one time, for no more than three (3) minutes. This time may not be given to another citizen to extend their time. The person speaking has the floor and no other citizen shall speak during someone else's time. During this time, you will be making statements to the Board, without discussion from the Board members, but you are welcome to make an appointment with the Supervisor to discuss your comments further (their contact information is located by the door). Please keep comments clean and respectful.

Approved by the Township Board on February 24, 2025.

V. Announcements for Departments/Boards/Commissions

VI. Consent Agenda

The purpose of the Consent Agenda is to expedite Business by grouping non-controversial items together to be dealt with in one Board Motion without discussion. Any member of the public, board, or staff may ask that any item of the Consent Agenda be removed and places elsewhere on the agenda for full discussion. Such requests will be automatically respected. Approval of all of the items on the Consent Agenda shall be accomplished by a single majority vote.

A. Approval Of:

- Meeting Minutes from July 13, 2026
- Meeting Minutes from July 20, 2026
- Bills Payable: August 18, 2026

VII. Presentation(s)

VIII. Business

Fire & Rescue

Planning & Zoning

Clerk

Treasurer

Resignation of Nicole Beauchamp, Township Clerk

Appointment of Clerk for Charter Township of Comstock

Resignation of Kristie Cherry, Township Trustee

Resignation of Bob Pratt, Township Trustee

Resignation of Terry McIver, Township Trustee

Planning Commission Actions & Updates

Second Reading of Ordinance 571 - Zoning Ordinance Amendment for Planned Unit Development

Quotes For Forensic Audit & Investigation

Trustee

Supervisor

Water Pumping Stations Nos. 25 & 39 Land Management Planning

Sheriff Contract & Possible Action

Website Proposal & Possible Action

Purchase Agreement for 55 School Street & Possible Action

Parking Lot Quotes

MSHDA Homeowner Rehabilitation Partnership Presentation and Possible Action

Planning Commission Appointment

EGLE Compost Approval Letter

Employee Manual Update & Action

Supervisor Salary & Action

Requesting Letters of Interest & Resumes For Township Trustees- Due August 31, 2026
EOD

Finance

IX. Reports

- Recognition from the City of Parchment
- July 2026 KABA Reports
- July 20 Sheriff's Reports
- Planning & Zoning Admin Report
- July 2026 Fire Department Incident Report

- Bills Paid: July 22, 2026- August 13, 2026
- August 4, 2026 Election Report

X. Informational/Future Action Items

XI. Public Comment(s) on Agenda and Non-Agenda Items

A citizen may state their name and address and may speak only one time, for no more than three (3) minutes. This time may not be given to another citizen to extend their time. The person speaking has the floor and no other citizen shall speak during someone else's time. During this time, you will be making statements to the Board, without discussion from the Board members, but you are welcome to make an appointment with the Supervisor to discuss your comments further (their contact information is located by the door). Please keep comments clean and respectful.

Approved by the Township Board on February 24, 2025.

XII. Members Comments

XIII. Adjournment



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Nicole Shook, Clerk Assistant/Deputy Clerk
Re: Meeting Minutes from July 13, 2026

Please see attached.

Attachments:
[Draft July 13, 2026 Joint Meeting.pdf](#)

**MINUTES OF THE REGULAR JOINT TOWNSHIP BOARD &
PARKS COMMISSION
KALAMAZOO COUNTY, MICHIGAN
JULY 13, 2026**

CALL TO ORDER

Attendee Name	Title	Status
Ben Martin	Supervisor	Present
Nicole Beauchamp	Clerk	Absent
Sandy Bloomfield	Treasurer	Present
Jerry Amos	Trustee	Present
Kristie Cherry	Trustee	Absent
Terry McIver	Trustee	Absent
Bob Pratt	Trustee	Present
Rob Thall	Attorney	Absent

Parks Board Members: Katie Bush, Parks Director; Teresa Young, Chairperson; Marc Rizzolo, Vice Chairperson; Judith Joling, Treasurer; Partick McVerry, Commissioner; Bret Padgett, Secretary.

The meeting was called to order at 6:00 pm. Approximately 22 people were in attendance.

PLEDGE OF ALLEGIANCE TO THE FLAG OF THE UNITED STATES OF AMERICA

The Pledge of Allegiance was recited.

APPROVAL OF AGENDA

Treasurer Sandy Bloomfield made a motion to approve the agenda as presented.

RESULT:	PASSED [UNANIMOUS]
MOVER:	Treasurer Sandy Bloomfield
SECONDER:	Trustee Bob Pratt
AYES:	Supervisor Ben Martin, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Bob Pratt
ABSENT:	Clerk Nicole Beauchamp, Trustee Kristie Cherry, Trustee Terry McIver

BUSINESS

Parks Emergency Funding & Possible Action

Supervisor Ben Martin turned this over to the Parks Commission.

Ordinance Official & Possible Action

The Parks Commission sought guidance from the Township Board. Dakota Szczepanski provided a brief overview of current ordinance enforcement matters and related concerns at Robert Morris. Supervisor Ben Martin mentioned a panel discussion.

Treasurer Sandy Bloomfield made a motion that the Township Board move forward with posting and hiring another full-time ordinance officer.

RESULT: **PASSED [UNANIMOUS]**
MOVER: Treasurer Sandy Bloomfield
SECONDER: Trustee Jerry Amos
AYES: Supervisor Ben Martin, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Bob Pratt
ABSENT: Clerk Nicole Beauchamp, Trustee Kristie Cherry, Trustee Terry McIver

Treasurer Sandy Bloomfield made a motion that we create a panel to write the job description and hire and post for the ordinance officer full-time position.

AMENDED MOTION: Treasurer Sandy Bloomfield amended the motion for the panel to include Katie Bush, Parks Director; Ben Martin, Supervisor; and Dakota Szczepanski, Ordinance Officer for the panel.

RESULT: **PASSED [UNANIMOUS]**
MOVER: Treasurer Sandy Bloomfield
SECONDER: Trustee Jerry Amos
AYES: Supervisor Ben Martin, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Bob Pratt
ABSENT: Clerk Nicole Beauchamp, Trustee Kristie Cherry, Trustee Terry McIver

General Joint Board Member Discussion

A discussion took place between the Township Board and the Parks Commission regarding staffing needs and ongoing operations. It was agreed that work on the job description could begin this week, with the position of being posted in Indeed to facilitate broader public outreach and expedite the hiring process.

Address Public Comment from July 6th Township Board Meeting

Supervisor Ben Martin noted that a member of the public had requested clarification regarding the Township's trespassing order and how it is administered. A discussion followed between the Township Board, the Parks Commission, and the Parks Director. Parks Director Katie Bush addressed the three questions raised during public comment, providing explanation. She also requested guidance from the Township Board regarding how it would like to proceed.

BOARD MEMBER COMMENT

Board members comments were heard.

ADJOURNMENT

The meeting was adjourned at approximately 7:55 pm.

Minutes signatures

Attested:

Nicole Beauchamp, Township Clerk

Ben Martin, Township Supervisor



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Nicole Shook, Clerk Assistant/Deputy Clerk
Re: Meeting Minutes from July 20, 2026

Please see attached.

Attachments:
[DRAFT_Minutes_07-20-2026.pdf](#)

**MINUTES OF THE REGULAR MEETING OF THE
CHARTER TOWNSHIP OF COMSTOCK TOWNSHIP BOARD
KALAMAZOO COUNTY, MICHIGAN
JULY 20, 2026**

CALL TO ORDER

Attendee Name	Title	Status
Ben Martin	Supervisor	Present
Nicole Beauchamp	Clerk	Present
Sandy Bloomfield	Treasurer	Present
Jerry Amos	Trustee	Present
Kristie Cherry	Trustee	Present
Terry McIver	Trustee	Present
Bob Pratt	Trustee	Present
Rob Thall	Attorney	Present

The meeting was called to order at 6:00 pm. Approximately 40 people were in attendance.

PLEDGE OF ALLEGIANCE TO THE FLAG OF THE UNITED STATES OF AMERICA

The Pledge of Allegiance was recited.

APPROVAL OF AGENDA

Supervisor Ben Martin requested to add a Clean Earth Service Agreement to the agenda after the EPS Security update under Supervisor.

Clerk Nicole Beauchamp made a motion to approve the agenda as amended.

RESULT: PASSED [UNANIMOUS]
MOVER: Clerk Nicole Beauchamp
SECONDER: Treasurer Sandy Bloomfield
AYES: Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt

PUBLIC COMMENT(S) ON AGENDA ITEMS ONLY

Nine members of the public spoke during public comment.

ANNOUNCEMENTS FOR DEPARTMENTS/BOARDS/COMMISSIONS

Sean McBride, Executive Director of Metro Transit, shared an update on the August transit millage ballot proposal and highlighted Metro Transit's community participation. He also recognized Nicole Beauchamp and Jerry Amos for their longtime service on the KCTA and CCTA boards.

CONSENT AGENDA

Clerk Nicole Beauchamp made a motion to approve the Consent Agenda as presented.

RESULT: PASSED [UNANIMOUS]
MOVER: Clerk Nicole Beauchamp
SECONDER: Trustee Bob Pratt
AYES: Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt

- Budget Adjustments
- Bills Payable July 21, 2026
- Meeting Minutes from July 06, 2026

PRESENTATION(S)

No presentations at this time.

BUSINESS

No business at this time.

FIRE & RESCUE

New Station 9-3 Construction Bid Approval Request

Fire Chief Matt Beauchamp recommended awarding the Fire Station 9-3 construction contract to CSM Group based on the highest evaluation score. The recommendation includes two alternatives for total approval amount of up to \$11,146,057, which also accounts for minor revisions identified before the meeting.

Trustee Terry McIver made a motion that the board accept the CSM Group as the primary contractor for the new station 9-3.

WITHDRAWN MOTION: Trustee Terry McIver withdrew his motion.

Clerk Nicole Beauchamp made a motion to recommend approval of Fire Station 9-3 construction bid from the CSM Group for up to \$11,146,057.

RESULT: PASSED [5 TO 2]
MOVER: Clerk Nicole Beauchamp
SECONDER: Trustee Kristie Cherry
AYES: Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt
NAYS: Supervisor Ben Martin, Trustee Jerry Amos

New Station 9-3 - Phase 3 Architectural Services

Fire Chief Matt Beauchamp requested approval for an architectural services agreement with JPR for \$111,760. The agreement includes construction administration, contract oversight, submittal reviews, and project closeout services.

Trustee Bob Pratt made a motion to authorize as a board, concerning the new station 9-3 that the chief moves ahead with Phase 3 Architectural Services for the amount of \$111,760 with JPR.

RESULT: PASSED [6 TO 1]
MOVER: Trustee Bob Pratt
SECONDER: Clerk Nicole Beauchamp
AYES: Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt
NAYS: Trustee Jerry Amos

Requesting approval for the Fire Department to join the Kalamazoo Technical Rescue Team.
Fire Chief Matt Beauchamp requested approval to participate in the Southwest Michigan Regional Technical Rescue Team through existing mutual aid agreements. This provides access to specialized regional resources and supports Michigan mutual aid accreditation for technical rescue incidents.

Treasurer Sandy Bloomfield made a motion for the approval of the Fire Department to join the Kalamazoo Technical Rescue Team.

RESULT: PASSED [UNANIMOUS]
MOVER: Treasurer Sandy Bloomfield
SECONDER: Clerk Nicole Beauchamp
AYES: Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt

Tentative approval for a Mobile Barrier and Chassis for over \$566,000.00 through the State of Michigan Appropriations Request - Senator Sean McCann's Office
Chief Matt Beauchamp provided an update that the department received approval for \$566,000 State of Michigan appropriations request, submitted through Senator Sean McCann's office, to purchase a mobile barrier vehicle. Funding is expected in October and will improve traffic control and responder safety.

Sincere Appreciation for Joint Response from Kalamazoo Township Fire Department Technical Rescue Incident - July 3, 2026

Fire Chief Matt Beauchamp shared a letter of appreciation from Comstock Township Fire Department recognizing the department's assistance during a July 3rd technical rescue in Parchment. He noted the incident highlighted the importance of regional mutual aid and technical rescue partnerships in responding to complex emergencies.

PLANNING & ZONING
No business at this time.

CLERK
August 4th Primary Election Report

Clerk Nicole Beauchamp reminded voters that absentee ballots are available through Michigan.gov/vote or the Clerk's Office. Precinct 3 voters should plan for construction near Kalamazoo Christian Reformed Church, and the Clerk's Office will be open Saturday, August 1, from 9:00 am to 5:00 pm to assist voters.

TREASURER
Cell Tower Proximity to Fire Station

Treasurer Sandy Bloomfield presented a request for board input regarding a proposed cell tower at 67 Van Bruggen St, adjacent to Fire Station 9-3. She asked whether board

members believed the tower could affect the future sale of the fire station property.

First Reading of Ord 571 - Zoning Ordinance Amendment for Planned Development (PUD)

Attorney Rob Thall presented the first reading of a proposed Planned Development ordinance to replace the current PUD regulations. The amendment would provide developers with greater design flexibility while requiring both Planning Commission review and Township Board approval. Two minor revisions were also recommended before adoption.

Clerk Nicole Beauchamp made a motion to approve First Reading of Ordinance 571- Zoning Ordinance Amendment for Planning Unit Development with the revision of last sentence of C1 be removed which is on page three appendix A and number N on page four appendix B.

RESULT:	PASSED [UNANIMOUS]
MOVER:	Clerk Nicole Beauchamp
SECONDER:	Trustee Bob Pratt
AYES:	Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt

TRUSTEE

No business at this time.

SUPERVISOR

Casper Street Traffic Calming Study

Dean Rockwell Deputy Supervisor presented an update on the Casper Street Traffic Calming Study. Based on Road Commission recommendations, the Board was asked to consider funding the Township's share of the proposed traffic calming improvements so the project can move forward.

Trustee Kristie Cherry made a motion to move forward with the Casper St. Traffic Calming Project to utilize the funds from this year's fiscal budget and funds from the new fiscal year's budget to make up the difference of \$37,000.

RESULT:	PASSED [UNANIMOUS]
MOVER:	Trustee Kristie Cherry
SECONDER:	Treasurer Sandy Bloomfield
AYES:	Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt

Appointment of Wellhead Protection Ordinance Administrators

Supervisor Ben Martin presented information appointing the Planning and Zoning as the Wellhead Protection Ordinance Administrator and designated the Ordinance Enforcement Officer for enforcement responsibilities. The appointments were made to provide flexibility for future staffing changes.

Clerk Nicole Beauchamp made a motion to appoint the Zoning Administrator and Ordinance Enforcement Officer as Wellhead Protection Ordinance Administrators.

RESULT: PASSED [UNANIMOUS]
MOVER: Clerk Nicole Beauchamp
SECONDER: Trustee Kristie Cherry
AYES: Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt

Resolution #2026-11 to Adopt Millage Ballot Language

Attorney Rob Thall provided information on Resolution #2026-11 to place the renewal of the law enforcement millage on the November 2026 ballot. The proposal renews the existing millage at the rolled back rate of 0.9920 mills for four years to maintain current funding, with approval required to meet the election filing deadlines.

Clerk Nicole Beauchamp made a motion to approve Resolution #2026-11 to Adopt Millage Ballot Language.

RESULT: PASSED [UNANIMOUS]
MOVER: Clerk Nicole Beauchamp
SECONDER: Treasurer Sandy Bloomfield
AYES: Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt

Sheriff Contract & Possible Action

The board discussed renewing the Kalamazoo County Sheriff's contract, including its support of ordinance enforcement, contract terms, and termination provisions. The Township Attorney Rob Thall also recommended a correction to the contract before approval.

EPS Security Update

Supervisor Ben Martin spoke on an EPS security update, noting existing remote panic buttons would remain functional while exploring additional wired security measures. He also discussed reviewing emergency procedures and training with Trustee Jerry Amos.

Clerk Nicole Beauchamp made a motion to approve the EPS Security Agreement to add panic and lockdown features.

RESULT: PASSED [UNANIMOUS]
MOVER: Clerk Nicole Beauchamp
SECONDER: Trustee Jerry Amos
AYES: Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt

Clean Earth Service Agreement

Supervisor Ben Martin provided an update on the Township Hall's shared sewer line, including needed repairs, a future maintenance agreement, and a service agreement for ongoing upkeep.

Clerk Nicole Beauchamp made a motion to authorize the Supervisor to work with Clean Earth and Roto-Rooter as needed.

RESULT: PASSED [UNANIMOUS]
MOVER: Clerk Nicole Beauchamp
SECONDER: Treasurer Sandy Bloomfield
AYES: Supervisor Ben Martin, Clerk Nicole Beauchamp, Treasurer Sandy Bloomfield, Trustee Jerry Amos, Trustee Kristie Cherry, Trustee Terry McIver, Trustee Bob Pratt

FINANCE

No business at this time.

REPORTS

- Cash Summary by Fund - June 2026
- Cash Summary by Bank Account - June 2026
- Quarterly Investment Report - 2nd Quarter 2026
- June 2026 Sheriff's Reports
- June 2026 KABA Reports
- Bills Paid July 21, 2026

INFORMATIONAL/FUTURE ACTION ITEMS

- FOIA Requests

PUBLIC COMMENT(S) ON AGENDA AND NON-AGENDA ITEMS

eight members of the public spoke during public comment.

MEMBERS COMMENTS

Board members comments were heard.

ADJOURNMENT

The meeting was adjourned at 8:27 pm.

Minutes signatures

Attested:

Nicole Beauchamp, Township Clerk

Ben Martin, Township Supervisor



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Nicole Shook, Clerk Assistant/Deputy Clerk
Re: Bills Payable: August 18, 2026

Please see attached.

Attachments:

[Bills Payable August 17 2026.pdf](#)

INVOICE DISTRIBUTION REPORT FOR CHARTER TOWNSHIP OF COMSTOCK

EXP CHECK RUN DATES 08/18/2026 - 08/18/2026

POSTED AND UNPOSTED OPEN AND PAID

BANK ACCOUNTS: GEN - GENERAL (COMMON) DISBURSEMENTS - CHECK TYPE: PAPER CHECK

GL Number	Invoice Line Desc	Vendor Name	Invoice Description	Amount	Check Number
Fund: 101 GENERAL FUND					
Department: 253 TREASURER					
101-253-731.000	SUPPLIES/EQUIPMENT - OPERA SUPERIOR PRINTING, INC		DIGITAL CHECK TELLERSCAN	993.93	165104
			Total Department 253 TREASURER	993.93	
Department: 265 MAINTENANCE					
101-265-731.000	SUPPLIES/EQUIPMENT - OPERA GRAINGER, INC.		TILE PROBE WITH CROSS	114.92	165102
101-265-731.000	SUPPLIES/EQUIPMENT - OPERA GRAINGER, INC.		HIPERFORMANCE SCREWDRIVER	29.94	165102
			Total Department 265 MAINTENANCE	144.86	
Department: 301 ORDINANCE ENFORCEMENT					
101-301-731.000	SUPPLIES/EQUIPMENT - OPERA GRAINGER, INC.		BLEEDING CONTROL KIT,	169.90	165102
			Total Department 301 ORDINANCE ENFORCEMENT	169.90	
			Total Fund 101 GENERAL FUND	1,308.69	
Fund: 206 FIRE OPERATING FUND					
Department: 000 GENERAL					
206-000-930.000	LAND/BUILDING REPAIRS AND R.W. LAPINE INC.		REFRIGERENT PRESSURE CHECK	325.46	165103
206-000-932.000	VEHICLE REPAIRS AND MAINTENANCE EMERGENCY VEHICLE PRODUCT		CHECK ENGINE LIGHT SCAN	313.04	165101
206-000-932.000	VEHICLE REPAIRS AND MAINTENANCE EMERGENCY VEHICLE PRODUCT		LABOR ROTATED TIRES	143.38	165101
206-000-932.000	VEHICLE REPAIRS AND MAINTENANCE EMERGENCY VEHICLE PRODUCT		DOOR GORTITE DOOR & TRACK ASSY.	4,036.14	165101
			Total Department 000 GENERAL	4,818.02	
			Total Fund 206 FIRE OPERATING FUND	4,818.02	
Fund: 211 FIRE CAPITAL IMPROVEMENT FUND					
Department: 000 GENERAL					
211-000-970.000	CAPITAL OUTLAY	WEST MICHIGAN INTERNATIONAL	REMOVE HARDWARE FOR REFINISHING LIGHTS	3,693.95	165105
			Total Department 000 GENERAL	3,693.95	
			Total Fund 211 FIRE CAPITAL IMPROVEMENT FUND	3,693.95	

INVOICE DISTRIBUTION REPORT FOR CHARTER TOWNSHIP OF COMSTOCK

EXP CHECK RUN DATES 08/18/2026 - 08/18/2026

POSTED AND UNPOSTED OPEN AND PAID

BANK ACCOUNTS: GEN - GENERAL (COMMON) DISBURSEMENTS - CHECK TYPE: PAPER CHECK

GL Number	Invoice Line Desc	Vendor Name	Invoice Description	Amount	Check Number
--- TOTALS BY FUND ---					
		101	GENERAL FUND	1,308.69	
		206	FIRE OPERATING FUND	4,818.02	
		211	FIRE CAPITAL IMPROVEMENT FUND	3,693.95	
		Total For All Funds:		9,820.66	



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Resignation of Nicole Beauchamp, Township Clerk



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Appointment of Clerk for Charter Township of Comstock



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Resignation of Kristie Cherry, Township Trustee



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Resignation of Bob Pratt, Township Trustee



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Resignation of Terry McIver, Township Trustee



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor
Re: Planning Commission Actions & Updates



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Sandy Bloomfield, Treasurer

Re: Second Reading of Ordinance 571 - Zoning Ordinance
Amendment for Planned Unit Development

Seeking approval of second reading of Ordinance 571 - Zoning Ordinance Amendment for Planned Unit Development.

First reading was approved by the Township Board on July 20th.

A public hearing was held by the Planning Commission on April 23, 2026. The Planning Commission is recommending approval of this ordinance.

Attachments:

[571 PUD Ord Amendment.pdf](#)

CHARTER TOWNSHIP OF COMSTOCK

ORDINANCE 571

ADOPTED: _____

EFFECTIVE: EIGHT DAYS AFTER PUBLICATION AFTER ADOPTION

An Ordinance to amend the Comstock Charter Township Zoning Ordinance to entirely replace its Planned Unit Development regulations with new regulations; to provide for severability; to repeal all ordinances or parts of ordinances in conflict therewith; and to provide an effective date.

**CHARTER TOWNSHIP OF COMSTOCK
KALAMAZOO COUNTY, MICHIGAN**

ORDAINS:

**SECTION I
ZONING ORDINANCE AMENDMENT
ARTICLE 3 – ZONING DISTRICTS
SECTION 3.24 - PLANNED UNIT DEVELOPMENT**

Section 3.24 of the Comstock Charter Township Zoning Ordinance titled “Planned Unit Development” is hereby amended in its entirety to read as follows:

3.24 Planned Unit Development (PUD) District.

- A. **Purpose and Intent.** The provisions of this Article are intended to offer an alternative to conventional development and traditional zoning standards and to permit flexibility in the development or redevelopment of areas through the authorization of Planned Unit Development (PUD) districts. The standards in this Article are intended to promote and encourage creativity and flexibility in the development or redevelopment of land that are suitable in size, location, and character for the uses proposed. It is also the intent of this Article to ensure compatibility with adjacent land uses, the Charter Township of Comstock Master Plan, and where applicable, existing natural features.

In certain instances, the application of the strict requirements of this Ordinance may result in developments less in the interest of public health, safety, and welfare than if some degree of flexibility were permitted. The purpose of a PUD, therefore, is to permit the development of planned areas for various compatible uses allowed by the zoning ordinance and for other uses not so provided. PUDs are also intended to enhance flexibility in building placement, height, bulk, and other standards in order to achieve a recognizable and commensurate benefit that furthers Township goals and the public interest.

B. Objectives and Qualifying Conditions.

1. The degree to which the following objectives are satisfied shall be considered by the Planning Commission and the Township Board in their review of a PUD in order to realize the advantages of coordinated, flexible, and comprehensive planning that are afforded through the use of Planned Unit Developments. The objectives of PUDs are:
 - a. To encourage the provision and protection of open spaces, cultural and/or historic resources, the development of recreational amenities, and, where necessary, other support facilities within a reasonable distance of dwelling units;
 - b. To encourage developers to use a more creative and imaginative approach in the development or redevelopment of property in the Township;
 - c. To promote flexibility in design and to permit planned diversification in the location of structures;
 - d. To allow for market-driven development or redevelopment in places most conducive to accommodating additional activity;
 - e. To facilitate economic development through the permission of mixed uses and/or varied building types and forms;
 - f. To create walkable developments with pedestrian-oriented buildings that are well-integrated into the Township and connect to nearby destinations and/or neighborhoods;
 - g. To provide for the adaptive re-use of significant or historic buildings;
 - h. To allow phased construction with the knowledge that subsequent phases will be approved as originally planned and approved by the Township.
 - i. To promote the efficient use of land to facilitate a more economic arrangement of buildings, circulation systems, land use, and utilities;
 - j. To minimize adverse traffic impacts and to accommodate safe and efficient pedestrian access and circulation;
 - k. To provide for the redevelopment of sites and/or buildings that are under-developed or have fallen into disrepair; and
 - l. To combine and coordinate architectural styles, building forms, and building relationships.

2. Qualifying Conditions.

- a. Ownership. The tract of land for which a PUD application is received must be either in 1 ownership or have written approval of the owners of all affected properties.
- b. Minimum Acreage. The gross area of a tract of land to be developed as a residential PUD shall be a minimum of 5 acres. There shall be no minimum area for non-residential and mixed-use PUDs.
- c. Utilities. All PUDs shall be connected to public water and public sanitary sewer service, where available.
- d. Master Plan. The applicant shall demonstrate that the proposed PUD is consistent with the adopted Charter Township of Comstock Master Plan.

C. **Legacy PUDs.**

Prior to the effective date of this Ordinance, Planned Unit Developments were reviewed and approved in the Charter Township of Comstock under a prior Zoning Ordinance. Because these developments are fully constructed, the Township has determined that it would be most efficient and beneficial to regulate them as follows. Accordingly:

1. Unless expressly identified as PUDs on the Charter Township of Comstock Zoning Map adopted on or after the effective date of this Ordinance, the PUDs that were approved prior to the effective date of this Ordinance shall be deemed "Legacy PUDs" and shall be regulated pursuant to this Section.
2. Existing uses and structures within Legacy PUDs shall be considered to be permitted by right and shall not be considered nonconforming if the development, along with its individual components, remains in compliance with the approved PUD documents and any approved amendments thereto.
3. The approval of a Legacy PUD, including applicable findings of fact, site development plans, any conditions of approval, and related actions shall remain in full force and effect.
4. Amendments to a Legacy PUD shall be processed in accordance with the standards and procedures for site plan amendments pursuant to Article 6 Section 6.1. Any proposed modifications to the site or the existing use must be in compliance with the standards for the zoning district in which the Legacy PUD is located.

Any PUD (regardless of the date of its original approval) that is identified as a PUD on the Charter Township of Comstock Zoning Map adopted on or after the effective date of this Ordinance shall not be considered a Legacy PUD, shall continue to be governed by the terms of its applicable approval documents, and may be amended only as provided in Sub-Section N.

D. Permitted Uses and Residential Density.

1. The following uses may be permitted in a PUD:

- a. Uses permitted by right or by special land use in the underlying zoning district;
- b. Any use that is determined to be consistent with the Township Master Plan;
- c. A combination of uses that are compatible with existing and adjacent land uses and the Charter Township of Comstock Master Plan;

Only those uses approved for the PUD shall thereafter be permitted within the PUD.

- 2. For PUDs containing a residential component but located in a non-residential district, the maximum number of dwelling units permitted in a PUD shall be determined by the Planning Commission in consideration of the Master Plan, existing and future surrounding land uses, the capacity of public utilities and services, and other applicable factors.
- 3. For PUDs containing a residential component and located in a residential zoning district, the permitted density shall not exceed that permitted by the underlying zoning district, unless a density bonus is permitted pursuant to subsection 5 below. If the PUD lies in more than one zone district, then the number of dwelling units shall be calculated on a proportionate basis.
- 4. The maximum density permitted by subsection 3 above shall be determined using a parallel plan. A parallel plan shall be submitted by the applicant and shall illustrate the maximum number of dwelling units that could be feasibly developed on the property under conventional application of the underlying zoning district requirements, including any requirements for off-street parking, internal streets, and stormwater management facilities. Parallel plans are intended for comparison only and do not require the same level of detail as is required for site plans submitted for development approval.
- 5. Density Bonus. For PUDs containing a residential component and located in a residential zoning district, a density bonus of up to 25% over what is allowed by the underlying zoning district may be granted at the discretion of the Planning Commission and Township Board if the PUD provides substantive additional amenities, preserves substantive additional open space, or otherwise results in a substantial and recognizable benefit to the Charter Township of Comstock. By way of example, a "substantial and recognizable benefit" may consist of public gathering spaces, usable open space beyond the minimum requirements, non-motorized connections to adjacent properties, tree-lined streets, public amenities, public art, and similar features that are consistent with the existing or desired character of the Charter Township of Comstock.

E. Non-Residential or Mixed-Use PUDs.

- 1. All uses shall be integrated into the design of the project with similar architectural and site development elements, such as signs, landscaping, etc.

2. A mix of residential and non-residential uses may be permitted only if they will not materially alter the character of the neighborhood and/or the PUD, and if the mixed-use development is consistent with the Charter Township of Comstock Master Plan.
3. When a PUD contains a mix of residential and non-residential uses, buildings designed for non-residential uses shall be constructed according to the following requirements:
 - a. If the entire PUD contains fewer than 20 dwelling units, 75% of these units must be constructed prior to the establishment or occupancy of any non-residential use.
 - b. If the PUD contains more than 20 dwelling units, 50% of these units shall be constructed prior to the establishment or occupancy of any non-residential use.

F. Design Standards.

1. Deviations from Minimum Requirements. In approving a PUD, the Township may permit deviations from the lot area and width requirements, parking requirements, required buffers, building setback requirements, height limitations, and other similar dimensional requirements of the zoning ordinance in accordance with the following standards:
 - a. The applicant shall identify, in writing, the nature and extent of any proposed deviation from the requirements of the underlying zoning district.
 - b. Deviations from minimum requirements may be permitted if they will result in a higher quality of development or better integration of the proposed use(s) within the vicinity.
 - c. Deviations from the minimum requirements shall also satisfy at least 1 of the following criteria:
 - i. The proposed deviations shall preserve any ecologically significant natural features of the site;
 - ii. The proposed deviations shall create, maintain, or improve habitat for wildlife;
 - iii. The proposed deviations shall create, maintain, or improve open space, walkability, safety, or otherwise improve the quality of the development for its residents;
 - iv. The proposed deviations shall constitute an adaptive re-use or redevelopment of buildings and/or property; and/or
 - v. The proposed deviations shall be necessary for the development or redevelopment of property that would not be feasible without the deviations.

vi. The proposed deviations shall be consistent with the Charter Township of Comstock Master Plan.

2. Other Requirements.

- a. All electric, cable, internet, and telephone transmission wires within the PUD shall be placed underground.
- b. Signs are permitted in accordance with the zone district in which the proposed uses are permitted.

3. Conditions. The Township Board may impose conditions with the approval of a PUD that are necessary to ensure compliance with the standards for approval stated in this Section and any other applicable standards contained in this Article. Such conditions shall be considered an integral part of the PUD approval and shall be enforceable by the Zoning Administrator.

G. Open Space.

The Planning Commission may require an applicant to provide open space if deemed necessary to preserve important natural features on the site. Situations in which the Planning Commission may require the applicant to provide open space include but are not limited to the following:

1. If the open space would provide, enhance, or restore natural resources such as slopes, wetland areas, viewsheds, etc.
2. If the open space would aid in the preservation or restoration of a cultural or historic site or structure.
3. If the open space would allow for the development of community features, non-motorized trail connections, recreational amenities.
4. If the open space would result in a more efficient pattern of development, consolidation, and planning of unusually dimensioned property or land with challenging topography.
5. If the open space would aid in the mitigation of adverse impacts on public facilities and services, such as a more efficient network of streets, public utilities, or a superior design of stormwater management systems.

If open space is required or provided in the PUD, it shall meet the following considerations and requirements:

1. Open space may be established to separate uses within the PUD.
2. Open space areas shall be large enough and of proper dimensions so as to constitute a contiguous useable area, with adequate access, through easements or other similar

arrangements, such that all properties within the entire PUD may reasonably utilize the available open space and that the open space contributes significantly to the purpose and objectives of the PUD.

3. Evidence shall be given that satisfactory arrangements will be made for the maintenance of open space to relieve the Township of the future maintenance thereof.
4. Open space may be provided where significant natural features may be preserved and/or be used for passive or active recreation.
5. All land set aside as open space shall be deed-restricted to ensure that the open space remains undeveloped in perpetuity. The form of such restriction shall be subject to the review and approval of the Township Attorney.
6. All open space shall be in joint ownership of the property owners within the PUD or some other responsible entity approved by the Township. Such joint ownership or entity shall take responsibility for the maintenance of the open space.
7. The maintenance requirements of dedicated open space may include regular clearing and mowing or other active maintenance. Maintenance shall also include the removal of any accumulation of trash or waste material within the dedicated open space, cleanup of storm damage, removal of diseased plant materials, and similar activities.

H. General Application Procedures.

1. The following steps, which are outlined in Sub-Sections I-M, shall govern all applications for PUD approval, whether residential, non-residential, or mixed use:
 - a. Pre-application Conference. The applicant shall attend a pre-application conference with Township staff to determine general compliance with PUD eligibility and design requirements, and to identify issues of significance regarding the proposed application.
 - b. Conceptual Planning Commission Review. A conceptual plan shall be submitted to the Planning Commission for initial review. The applicant shall also attend a pre-application review of the proposed PUD Plan with the Planning Commission.
 - c. PUD Preliminary Plan and PUD Rezoning.
 - i. The Planning Commission shall review the PUD Preliminary Plan and PUD rezoning application, hold a public hearing (if required), and make a written recommendation to the Township Board
 - ii. The Township Board shall review the PUD Preliminary Plan and PUD rezoning application, the written recommendation and findings from the Planning Commission, hold a public hearing, and make a final decision.
 - d. PUD Final Site Plan Review. The Planning Commission and other applicable

Township personnel shall review the PUD final site plan in accordance with Sub-Section M of this Section.

2. Either concurrently with the PUD Preliminary Plan application, or upon approval by the Township Board (with or without conditions), the applicant may apply for preliminary plat approval, condominium or site condominium approval, private road approval, and other approvals as applicable. Unless specifically stated, approval of a PUD shall not constitute approval of a preliminary plat, condominium, site condominium, or private road and shall not obviate the need for the applicant to obtain such approvals.
3. Approval of a PUD pursuant to this Article shall constitute an amendment to the Comstock Township Zoning Ordinance and Zoning Map to include the approved PUD.

I. Pre-application Conference.

Prior to the submission of an application for PUD, the applicant shall meet with the Zoning Administrator, Township Planner, Engineer, and any other staff or consultants as deemed appropriate. The purpose of the pre-application meeting is to determine general compliance with PUD eligibility and design requirements and to identify issues of significance regarding the proposed application. If the applicant proceeds with the PUD application, a summary of the pre-application meeting may be forwarded to the Planning Commission. No formal action shall be taken at the pre-application conference. The applicant shall present a sketch plan of the Planned Unit Development, and the following information:

1. A legal description of the property in question;
2. The total number of acres to be included in the project;
3. A statement of the approximate number of residential units and/or the approximate number, type, and square footage of non-residential units;
4. The approximate number of acres to be occupied and/or devoted to or by each type of use;
5. The number of acres to be preserved as open space or recreation space; and
6. All known natural resources and natural features on the site.

J. Conceptual Planning Commission Review.

1. Following the pre-application conference, preliminary plans of the proposed PUD shall be submitted for review to the Planning Commission prior to submission of an application for a PUD. The purpose of the meeting is to allow discussion between an applicant and the Planning Commission and to inform the applicant of the acceptability of proposed plans prior to incurring extensive engineering and other costs which will be

necessary for PUD review.

2. As part of the pre-application review, the applicant shall submit a copy of a sketch plan for the proposed PUD that shows the property location, boundaries, significant natural features, vehicular and pedestrian circulation, the proposed number and arrangement of lots or units with building envelopes, proposed open spaces, location of proposed buildings, and proposed land use(s) for the entire site.
3. The Planning Commission shall advise the applicant in general terms whether the proposed sketch plan complies with the purpose and intent of this Article and if it qualifies for PUD rezoning pursuant to the objectives and qualifying conditions of Sub-Section B.
4. Formal action shall not be taken at a preliminary Planning Commission review. Statements made at the pre-application conference or review by the Planning Commission shall not be considered binding commitments or an approval (implied or otherwise) of the PUD.

K. Procedures for PUD Preliminary Plan and PUD Rezoning.

1. Required Information. Following the conceptual review in Sub-Section J, the applicant shall submit a completed application form for PUD rezoning, the required application fee, and 1 hard copy and a PDF of the PUD Preliminary Plan to the Zoning Administrator at least 45 days prior the next Planning Commission meeting.

The PUD Preliminary Plan shall be professionally prepared by a licensed engineer, surveyor, architect, and/or landscape architect and shall be drawn to a scale of not less than 1 inch = 100 feet. The PUD Preliminary Plan shall, at a minimum, contain the following information, unless specific items are determined to be not pertinent to the application by the Planning Commission or Zoning Administrator:

a. General Information.

- i. Name and firm address of the professional individual responsible for preparing the preliminary plan and their professional seal.
- ii. Name and address of the property owner or petitioner.
- iii. Scale, north arrow, and date.
- iv. Acreage (gross and net).
- v. Zoning of adjacent properties.
- vi. Legal property description.

b. Existing site conditions:

- i. Boundary survey lines and setbacks.
- ii. Location sketch showing site, adjacent streets, and properties within 200 feet or as otherwise directed.
- iii. Location, width, and purpose of all existing easements and lease areas, including cross-access.
- iv. Abutting street right(s)-of-way and width.
- v. Topography with contour intervals of no more than 2 feet.
- vi. Natural features such as wooded areas, surface water features, floodplains or floodways, wetlands, slopes exceeding 15%, lakes, rivers, creeks, county drains, and other significant site features, including the area of such features.
- vii. Existing buildings, structures, paved surfaces and areas, installed landscaping, and other significant physical infrastructure.
- viii. Size and location of existing utilities and status, where applicable.

c. Proposed Development:

- i. Layout of proposed buildings, structures, driveways, parking lots, streets, landscaped areas, and other physical infrastructure, as applicable, including the area and height of these improvements.
- ii. Recreation areas, common use areas, dedicated open space, and areas to be conveyed for public use.
- iii. Layout of sidewalks and/or pathways, both internal to the development and along the main road frontage.
- iv. Layout and typical dimensions of building envelopes, proposed lots.
- v. Parking, stacking, and loading calculations, if applicable.
- vi. Phasing plan, if applicable.
- vii. Preliminary plan for the provision of public water and public sanitary sewer services.
- viii. Preliminary grading plan.
- ix. Preliminary stormwater plan.

x. Proposed building types, including building elevations and footprints.

d. Additional Information.

i. A written narrative shall be provided, which shall describe the proposed PUD, the proposed timeframe of development, the zoning district(s) in which it will be located, the overall residential density of the project (if applicable), and documentation indicating how the objectives and qualifying conditions in Sub-Section B and the standards of Sub-Section L are met. By way of example, the written narrative may address the following, along with other topics deemed relevant:

1. How the proposed PUD is meeting a need in the marketplace.
2. How the proposed PUD will benefit the Charter Township of Comstock.
3. The overall vision for the property and the development.
4. Justification for any requested deviations from the underlying zoning district.

ii. A written list of all requested deviations as specified in Sub-Section F(1) shall be provided at the time of the application but may be supplemented or modified at any time during the PUD approval process if the applicant or the Township determines that the proposed plans require additional deviations beyond those originally noted.

iii. The Planning Commission may require additional information from the applicant and may allow supplementation or modification of submitted materials as needed to better assist in the determination of PUD qualification. Additional information may include, but is not limited to, market studies, fiscal impact analyses, parking studies, traffic impact studies, and environmental reports.

2. Planning Commission Review.

- a. The Planning Commission shall review the PUD Preliminary Plan at a regular or special meeting. A public hearing shall be held by the Planning Commission for an application for a new PUD. For an amendment to an existing PUD, a public hearing by the Planning Commission is not required, but may be held at the discretion of the Planning Commission. If a public hearing is held, legal notice shall be given.
- b. The Planning Commission shall review the PUD Preliminary Plan in consideration of public comments, technical reviews from Township staff and consultants (if requested), and other applicable standards and requirements. Within a reasonable

timeframe, the Planning Commission shall recommend approval, approval with conditions, or denial of the PUD Preliminary Plan and PUD rezoning to the Township Board. The Planning Commission's recommendation shall be documented with findings to justify its recommendation.

- c. In order to recommend approval of the PUD Preliminary Plan and PUD rezoning, the Planning Commission shall find that the standards of Sub-Section L are satisfied.

3. Township Board Review and Required Public Hearing.

- a. Following receipt of a recommendation from the Planning Commission on the PUD Preliminary Plan and PUD rezoning, the Township Board shall hold a public hearing on the proposed PUD. Legal notice of the hearing shall be given.
- b. After the public hearing, the Township Board shall review the application in consideration of the Planning Commission's written recommendation, public hearing comments, technical reviews from Township staff and consultants, and other applicable standards and requirements. Within a reasonable time, the Township Board shall approve, approve with conditions, or deny the PUD Preliminary Plan and PUD rezoning. The Township Board's decision shall be documented with written findings to justify its decision.
- c. In accordance with the Michigan Zoning Enabling Act, as amended, the Township Board may place reasonable conditions on the approval of a PUD Preliminary Plan. Conditions attached to the approval shall be incorporated into the ordinance adopting the PUD Preliminary Plan and PUD rezoning.
- d. Approval of the PUD Preliminary Plan and PUD rezoning by the Township Board shall be incorporated into an ordinance amending the zoning ordinance and map. Such rezoning and PUD plan approval shall become effective after notification and publication as required by the Michigan Zoning Enabling Act, as amended.

- 4. Development Agreements. Prior to the issuance of any building permits or commencement of construction on any portion of the PUD, the Township Board may require the applicant to enter into a development agreement with the Township in recordable form acceptable to the Township Attorney, setting forth the applicant's obligations with respect to the PUD. The agreement shall describe all improvements to be constructed as part of the PUD and shall incorporate, by reference, the final PUD site plan with all required revisions, other documents which comprise the PUD, and all conditions of approval imposed by the Township Board. The agreement shall also establish the remedies of the Township in the event of default by the applicant in carrying out the PUD, and shall be binding on all successors in interest to the applicant. All documents shall be executed and recorded in the office of the Kalamazoo County Register of Deeds.

L. PUD Preliminary Plan and Rezoning Standards of Approval.

In order to approve a PUD Preliminary Plan and PUD rezoning, the Planning Commission and Township Board shall find that all of the following standards are met:

1. The proposed PUD complies with the purpose, objectives, and qualifying conditions of Sub-Sections A and B.
2. The uses conducted within the proposed PUD, the PUD's impact on the community, and other aspects of the PUD are consistent with, the policies of, the adopted Charter Township of Comstock Master Plan.
3. The proposed PUD shall be designed, constructed, operated, and maintained in a manner harmonious with the character of adjacent property, the surrounding uses of land, the natural environment, and the capacity of public services and facilities affected by the development.
4. The proposed PUD shall not be hazardous to adjacent property or involve uses, activities, materials, or equipment that will be detrimental to the health, safety, or welfare of persons or property through the excessive production of traffic, noise, smoke, fumes, or glare.
5. The proposed PUD shall not place demands on public services and facilities more than current or anticipated future capacity.
6. The proposed PUD shall satisfy all applicable local, state, and federal laws, rules, and regulations.

M. PUD Final Site Plan.

1. Either concurrently with the submission of the PUD Preliminary Plan, or within one year of the approval of the PUD Preliminary Plan and PUD rezoning by the Township Board, a minimum of 1 copy and a PDF of the PUD final site plan for at least one phase of the PUD shall be submitted by the applicant in accordance with Article 6 Section 6.1 of this Ordinance. After the first phase is granted PUD final site plan approval, subsequent phases need not be submitted within one year.
2. All PUD final site plans subsequently submitted shall conform to the approved PUD Preliminary Plan (subject to minor revisions) and all conditions attached to its approval, the ordinance adopting the PUD Preliminary Plan and PUD rezoning, and the requirements of this Article.
3. If the PUD final site plan substantially conforms to the approved PUD Preliminary Plan subject to minor revisions and all conditions attached to its approval, the PUD adoption ordinance, and the requirements of this Article, and if such PUD final site plan is otherwise compatible with the master plan, then the Planning Commission shall approve

the PUD final site plan.

4. Unless otherwise required by subsection 6 below, PUD final site plans shall be reviewed by the Planning Commission and any other applicable Township personnel.
5. For land uses within the PUD subject to additional special land use requirements, such uses shall comply with all such required conditions, unless deviations were approved pursuant to this Article.
6. For land uses within the PUD that require special land use approval, or for PUDs that contain private roads, subdivisions, or elements that require Planning Commission approval, such uses shall be reviewed and approved in accordance with all other applicable sections of the Zoning Ordinance and other adopted ordinances of the Charter Township of Comstock. These review processes may occur concurrently with the process for PUD plan review and PUD rezoning.

N. Approved PUDs.

1. Phased Projects. Where a project is proposed for construction in phases, the project shall be designed so that each phase, when completed, shall be capable of standing on its own in terms of the presence of services, facilities, and open space, and shall contain the necessary components to ensure the protection of natural resources and the health, safety, and welfare of the users of the PUD and residents of the Township. Each phase of a PUD shall require the submittal of a site plan as outlined in Sub-Section M.
2. Amendments to an Approved PUD. An amendment to an approved PUD shall be reviewed and approved by the Planning Commission and Township Board pursuant to Sub-Section K(2) & (3), except that the Zoning Administrator may review and approve minor amendments to the PUD, or refer minor amendments to the Planning Commission for a decision. Minor amendments include, but are not limited to, the following:
 - a. Reduction of the size of any building, building envelope, or sign.
 - b. Movement of buildings or signs in a way that does not alter the overall layout, density, or other significant characteristics of the PUD.
 - c. Changes requested by the Township for safety reasons.
 - d. Changes that will preserve natural features of the land without changing the basic site layout.
 - e. Changes in the boundary lines of lots or condominium units that do not change the overall density of the development or that do not change the average lot or unit width throughout the development.
 - f. Modifications of the landscape plan or landscape materials, or replacement of

plantings approved in the landscaping plan, provided that the amount of landscaping provided is not substantially decreased.

- g. Alterations to the internal parking layout of a parking lot, provided that the total number of spaces or means of ingress and egress do not change in a manner that significantly alters the viability of the PUD.
- h. Other changes proposed to be made to the configuration, design, layout, or topography of the site plan which are deemed by the Zoning Administrator to be not material or significant in relation to the entire site and which the Zoning Administrator determines would not have a significant adverse effect on the development on adjacent or nearby lands or the public health, safety, and welfare.

3. Expiration.

- a. A PUD (or at least the first phase of a PUD) shall be under meaningful construction of proposed improvements consistent with the approved PUD final site plan within 1 year after the date of approval of the PUD final site plan, which shall proceed diligently to completion.
- b. Upon expiration of the time period for: (a) submitting a PUD final site plan as required by Sub-Section M or; (b) commencing meaningful construction as required by subsection A above, all PUD approvals previously granted shall automatically become null and void and all rights of development based on any approved plan shall terminate.
- c. The Township Board may approve extensions of up to 2 years at a time, if requested in writing by the applicant. In requesting an extension, the applicant shall provide the reason(s) it is requesting the proposed extension.
- d. Upon expiration of a PUD Preliminary Plan or PUD final site plan, the Planning Commission may conduct a public hearing and make a recommendation to rezone the property to its original designation or another district as deemed appropriate.
- e. If the Planning Commission does not rezone the property from PUD to another zoning district, the property shall remain in the PUD zoning district, but no development in furtherance of the expired PUD, or a new PUD, shall occur on the property. Approval of a PUD Preliminary Plan and PUD Final Site Plan shall be required pursuant to Sub-Sections L and M, except that rezoning to PUD shall not be required.

4. Appeals and Variances. Because an approved PUD has been reviewed and approved by the Planning Commission and Township Board, the Zoning Board of Appeals shall not have jurisdiction to consider variances from the requirements of this Article, nor may decisions related to a PUD be appealed to Zoning Board of Appeals.

5. Performance Guarantees. The Planning Commission and/or Township Board may

require the applicant for PUD rezoning to furnish a performance guarantee.

SECTION II
ZONING ORDINANCE AMENDMENT
USE MATRIX

The Use Matrix of the Township Zoning Ordinance is hereby amended by deleting “Planned unit developments” from the list of uses.

SECTION III
ZONING ORDINANCE AMENDMENT
ARTICLE 3 – ZONING DISTRICTS
SECTION 3.1.A – AGR AGRICULTURE-RESIDENTIAL

Section 3.1.A of the Township Zoning Ordinance titled “AGR Agriculture-Residential” is hereby amended to replace subsection 3.x. to read as follows:

“x. Reserved for future use.”

SECTION IV
ZONING ORDINANCE AMENDMENT
ARTICLE 3 – ZONING DISTRICTS
SECTION 3.1.C – R1-A SINGLE-FAMILY RESIDENTIAL

Section 3.1.C of the Township Zoning Ordinance titled “R1-A Single-Family Residential” is hereby amended to replace subsection 3.p. to read as follows:

“p. Reserved for future use.”

SECTION V
ZONING ORDINANCE AMENDMENT
ARTICLE 3 – ZONING DISTRICTS
SECTION 3.1.D – R1-B SINGLE-FAMILY RESIDENTIAL

Section 3.1.D of the Township Zoning Ordinance titled “R1-B Single-Family Residential” is hereby amended to replace subsection 3.p. to read as follows:

“p. Reserved for future use.”

SECTION VI
ZONING ORDINANCE AMENDMENT
ARTICLE 3 – ZONING DISTRICTS
SECTION 3.1.E – R1-C CLUSTER HOUSING

Section 3.1.E of the Township Zoning Ordinance titled “R1-C Cluster Housing” is hereby amended to replace subsection 3.v. to read as follows:

“v. Reserved for future use.”

SECTION VII
ZONING ORDINANCE AMENDMENT
ARTICLE 3 – ZONING DISTRICTS
SECTION 3.1.F RM MULTIPLE-FAMILY RESIDENTIAL

Section 3.1.F of the Township Zoning Ordinance titled “RM Multiple-Family Residential” is hereby amended to replace subsection 3.y. to read as follows:

“y. Reserved for future use.”

SECTION VIII
ZONING ORDINANCE AMENDMENT
ARTICLE 3 – ZONING DISTRICTS
SECTION 3.1.Q – OW OPEN WETLANDS

Section 3.1.Q of the Township Zoning Ordinance titled “OW Open Wetlands” is hereby amended to replace subsection 4.n. to read as follows:

“n. Reserved for future use.”

SECTION IX
ZONING ORDINANCE AMENDMENT
ARTICLE 3 – ZONING DISTRICTS
SECTION 3.1.R – OSP OPEN SPACE PRESERVATION OVERLAY

Section 3.1.R of the Township Zoning Ordinance titled “OSP Open Space Preservation Overlay” is hereby amended to replace subsection 4.b. to read as follows:

“b. **Access.** Access to the dwelling units within the residential cluster may be in the form of a public road or private road, with any private road adhering to the standards under Section 3.24 Planned Unit Development District.”

SECTION X
SEVERABILITY

The provisions of this ordinance are hereby declared to be severable. If any clause, sentence, word, section or provision is hereafter declared void or unenforceable for any reason by a court of competent jurisdiction, it shall not affect the remainder of such ordinance which shall continue in full force and effect.

SECTION XI
EFFECTIVE DATE/REPEAL

This Ordinance shall take effect eight days after publication. All ordinances or parts of ordinances in conflict with this Ordinance are hereby repealed.

Nicole Beauchamp, Clerk
Comstock Charter Township
5858 King Highway,
Kalamazoo MI 49048
269-381-2360
www.comstockmi.gov
clerk@comstockmi.gov



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor
Re: Quotes For Forensic Audit & Investigation



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Water Pumping Stations Nos. 25 & 39 Land Management Planning

To be discussed at the meeting.

Attachments:

[2026 WPS-25 Comstock Twp - Deer Management Plan.pdf](#)

[Draft WPS-25 Campbell Lake - tree harvest access & harvest phases.pdf](#)

[Exhibit A - Deer Management Area \(DMA-39\) 2026.pdf](#)

**2026 Deer Management Plan
Campbell Lake
Comstock Township
Water Pumping Station #25**

Wellhead Protection Program

City of Kalamazoo, Department of Public Services, Water Resources Div.

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Figure 2 - Campbell Lake, Comstock Township Wellfield #25 Map

Figure 3 - Campbell Lake, Comstock Township Water Pumping Station #25 Map

Figure 4 - Fred McLinden Nature Trail Map

Figure 5 - Deer Management Areas at WPS-25 (DMA-25) Map

Appendices

Appendix A - Forest Stewardship Plan, Campbell Lake, Comstock Township Property

Appendix B - 2022 *Comprehensive Deer Management Program – Report and Recommendations* (CDMPRR)

Appendix C - Bowhunter’s Creed

Appendix D - City’s Archery Hunting Permit Application Process



Campbell Lake, Comstock Township Water Pumping Station #25 (WPS-25) 2026 Deer Management Plan

City of Kalamazoo, Department of Public Services, Water Resources Division

As part of the City of Kalamazoo, Department of Public Services (City,) Public Water Supply System and Wellhead Protection Program Plan (WSSN: 33520), comprehensive land management goals have been established for the City's wellfield as outlined below. This document establishes the land management goal in Section 3.0 Natural Resources Protection – Water Quality Impacts for Deer Management Planning at wellfield WPS-25.



Forested Areas

Prairie openings



1.0 Comprehensive Land Management of City Wellfields

The City considered existing uses and practices for all the wellfields to create the five following objectives of comprehensive land management.

- i. Management of Water Pumping Systems including Utilities
- ii. Emergency Planning
- iii. Resource Protection by Preventive Measures
- iv. Passive Recreation Use for Local Communities
- v. Maintaining Natural Features: water resources, forests, plains & animal and plant life

Below is a generalized outline of the land management goals established for all the City's wellfields.

1) Land Use

- Water pumping stations: wells, well condos, piping, pumps, boosters, bleeders
- Farmed portions of the land with limited chemical treatment and tilling practices
- Passive recreation – hiking & biking trailways
- Active recreation – hunting, fishing & trapping

2) City Operations

- Municipal water system/operations & maintenance: buildings, pumps, other
- Chemical storage and management
- Hydrogeology and aquifer management
- Emergency planning

3) Natural Resources Protection – Water Quality Impacts

- Pollution prevention
 - Wellhead Protection Ordinance & Performance Standards
 - Site Plan Review Processes
 - Stormwater management
 - Watershed plans
- Forest Stewardship Plans: tree trimming, harvests & planting
- Habitat protection & creation
- Invasive plant and insect species controls: prevention & elimination treatments
- **Animal overpopulation and damage: deer management**
- Surface water protection: proper runoff drainage, erosion control

4) Educational Outreach Collaboration

- Stakeholders
- Outreach Tactics & Strategies

2.0 WPS-25 Deer Management Planning

2.1 Background

The Campbell Lake, Comstock Township water pumping station #25 is an active wellfield at the northeast intersection of East H Avenue and North 28th Street, specifically 7275 East H Avenue. It consists primarily of northern flat farmed parcels, southern forested hills and ravines with lower elevations culminating at an area of wetlands surrounding North Comstock Creek, the eastern central portion. Campbell Lake adjoins the property on the east side and discharges into North Comstock Creek. The creek is a county drain that traverses westward through the property, then southward through a culvert at East H Avenue. The creek then traverses southwest along the east side of a 16-acre City-owned parcel south of East H Avenue. The land immediately surrounding the Creek is designated FEMA Flood Zone A and there is only one small patch of freshwater wetlands.

Most of the parcels comprising the “property” were purchased in 1969. The total acreage of the property is 398 acres. There is considerable relief difference from higher flat areas of the north parcels to the lower flat area to the south. The northern 150-acre parcels are farmed, the southwestern area comprises the wellfield and station building, and the southeaster area the Fred McLinden Nature Trails. Refer to **Figure 1** Campbell Lake, Comstock Township Property – Kalamazoo County GIS Map, and **Figure 2** Wellfield #25 Map showing water pumping station, production wells and the portion of the property leased for farming.

Consumers Energy has an electric power line on the property servicing the pumping station and two poles at the City’s parking lot off East H Avenue. A water main located on East H Avenue and connects to the City’s pumping station. There are no sanitary or storm sewer lines on the property. The pumping station has a septic tank and tile field.

In 2023, the City initiated land management planning for its wellfield properties by contracting Michigan Registered Forester, Mark P. Janke of Michigan Consulting Forester, LLC to conduct a Forest Stewardship Plan (FSP) for the WPS-25 property. The FSP was finalized in 2024 and the property enrolled in the United States Forest Service (USFS), Forest Steward Program, established to guide landowners in forest management practices. The FSP encourages non-industrial private forest landowners to actively manage their forest in accordance with their own personal goals. The City’s goals are to manage the property under the FSP with the assumption it will be developed as a wellfield eventually as outlined in the City’s Wellhead Protection Program Plan (WHPPP) revised in 2024. Refer to **Appendix A** Forest Stewardship Plan, Campbell Lake/Comstock Township Property.

The FSP for WPS-25 is a comprehensive report which includes detailed analyses of the forest and wetland conditions, as well as the animal and plant species. ***This document specifically focuses on the MDNR’s field observations on the overpopulation of deer on the wellfield property in conjunction with the FSR, and the need for the establishment of deer population control using limited bow archery hunting.***

2.2 WPS-25 Comprehensive Land Management

The following are the existing items/factors related to WPS-25 that are pertinent to the City's land management goals:

1) Land Use

- Water pumping stations: wells, well condos, piping, pumps, boosters, bleeders
 - Production wells and one USGS monitor well
 - Continuous pumping & chemical treatment of the water supply
 - Continuous monitoring & surveillance
 - Continuous operation & maintenance (O&M) & upgrades
 - Wellfield development potential
 - Service roads, trailways & a public parking lot
 - Utilities: electricity, water mains, natural gas, & cellular antenna
 - Septic system and waste holding tank
 - Backup electrical supply: Diesel above ground tank
 - Culverts for Comstock Creek
- Farming portions of the land with limited chemical treatment and tilling practices
 - Northern parcels of WPS-25
 - Farm lease for restricted land and chemical usage
- Passive recreation
 - Campbell Lake Land Preserve
 - Fred McLinden Nature Trails for hiking
 - Maintenance agreement with Comstock Township for the Nature Trails
 - Kalamazoo trailway GIS map
- Easement holders
 - Consumers Energy natural gas and electric - routine maintenance

2) City Operations

- Municipal water system/operations & maintenance: buildings, pumps, assets
 - Dept of Public Services, Water Resources Division
 - Asset management
 - Distribution
 - Environmental consultants for well installations, pump testing and O&M
 - Public parking lot maintenance
 - Comstock Township
- Chemical storage and management
 - Fluoridation for dental hygiene
 - Disinfection
 - Corrosion control

- Hydrogeology and aquifer management
 - Various City aquifer/pump testing reports 1973 & 1990
 - Airborne Electromagnetic Survey 2025
 - Michigan Geological Survey well mapping project
 - Western Michigan University source water isotope research
- Emergency planning
 - Federal, State, and County
 - City of Kalamazoo
 - Comstock Township
 - City of Kalamazoo Spill Response Packet
 - Spill Containment Plan and spill response equipment & containment

3) Natural Resources Protection – Water Quality Impacts

- Pollution prevention
 - Comstock Township Wellhead Protection Ordinance & Performance Standards
 - Drain Commissioner
 - Kalamazoo River Watershed Council
 - Watershed Management Plan 2015 – Pollution and erosion prevention
- Forest Stewardship Plans (FSP) – tree trimming, harvests & planting
 - Michigan Forester
 - FSP completed 2024: American Tree Farm designation 2024
 - Tree harvest planned 2026
 - Ongoing forest maintenance: tree harvest every 10-15 years
 - Plantings
 - Kalamazoo’s Public Works’ Tree Ordinance and Manual
 - Support from Michigan Dept. of Environment, Great Lakes & Energy (EGLE) Forest to MI Faucet Program, Southwest MI Land Conservancy
- Habitat protection as outlined in FSP
 - Tree harvest planned 2026, habitat creation
 - Tree planting potential
- Invasive plant and insect species controls: prevention & elimination treatments
 - Invasive species as outlined in the FSP, GIS mapping needed
- Animal damage & overpopulation – Deer Management Plan (DMP) 2026
 - Support from MI Dept. of Natural Resources (MDNR) and EGLE
 - MDNR field visit confirmed excessive deer over-populations
 - MDNR-funded deer exclosure educational display
 - [Antlerless Deer Hunt 2026 MDNR Deer Management Assistance Permits](#)
 - Hunters Against Hunger program options

- Surface water protection – proper runoff drainage, erosion control
 - Support from the Four Townships Water Resources Council
 - Support from Kalamazoo River Watershed Council
 - Support from MDNR’s Forest to Michigan Faucet for source water protection (groundwater), woodland conservation & education
 - Active beaver and culvert maintenance support from Kalamazoo County Drain Commissioner for Comstock Creek

4) Educational Outreach Collaboration

- Stakeholders
 - Comstock Township
 - Kalamazoo County Drain Commissioner
 - Local users and supporters – residents, farmer, local groups
 - Environmental groups
 - Water customers
- Property Land Management signage
- Outreach tactics
 - Kalamazoo’s main website KalamazooCity.org, Facebook
 - EGLE Wellhead Protection Source Water Annual Grant
 - Kalamazoo’s ProtectYourWater.net educational website
 - Social Media advertising, Facebook & Instagram
 - Radio advertising and Radio Station’s Social Mentions
 - Streaming TV
 - Online Programmable Radio
 - Movie theater advertising
 - High school source water protection video contests
 - Kalamazoo WHP Educational Presentations
 - EGLE and MI-AWWA conferences - frequent contributors
 - Girl Scouts day camps
 - Boy Scout service projects
 - Farmers Market booths
 - Public Services Week events
 - Township & Neighborhood meetings/events

3.0 Forest Stewardship Plan - Deer Management Goals

White-tailed deer (*Odocoileus virginianus*) are one of the most recognizable and charismatic species of wildlife, but they are the cause of a growing wildlife management problem not only in the City of Kalamazoo but in the City's large properties (wellfields) outside of the City limits. Deer are generalist herbivores that exist in rural, suburban, and some urban areas throughout much of North America. White-tailed deer often shift locations according to different food sources available.

During early spring, open canopy vegetation provides herbaceous forage, during summer deer may browse in wetland areas, and in autumn deer often prefer hardwood forests if a mast crop is available (McCullough, 1984). For these reasons, the white-tailed deer is a species that often thrives in the transition between forest and open canopy vegetation, or edge habitat (Alverson, 1988). White-tailed deer thrive on disturbance and fragmented habitats and their populations grow rapidly due to several factors currently existing at WPS-25:

- 1) Lack of natural predators,
- 2) Patchy habitats (scattered woodlots),
- 3) Abundant food resources, and
- 4) Increased offspring survival.

Based on the FSP, tree regeneration can be browsed heavily by white tailed deer and in some instances the successional trend of trees may be impacted by deer, and/or invasive species and therefore forest management treatments were recommended. The City's goals are largely to promote and influence the successional trend going forward.

One of the recommendations of the FSP is selective tree harvesting to improve the quality of the forest, and by doing so, benefit the quality of the surface water and groundwater as Wellhead Protection measures. After a tree harvest, "slash" is left on the ground. Slash is typically known as the tops of the trees left on the ground that are too small in diameter and not straight enough to be useable as sawlogs, or logs damaged in the logging process. An important beneficial outcome of tree harvesting is the resultant slash left in place which becomes an important part of the local ecosystem. Slash provides protective cover for small mammals from predators, as well as protective cover for the natural regeneration of trees from deer browsing. Slash is also an especially important part of nutrient cycling for long term forest health.

Another recommendation of the MDNR is the initiation of active deer population control measures. This is consistent with the City's 2022 *Comprehensive Deer Management Program – Report and Recommendations* (CDMPRR) conducted by the Neighborhood Association Ad Hoc Committee to address the urban deer population in the City of Kalamazoo. Refer to **Appendix B** for a copy of the report. The purpose of the CDMPRR was to provide the City of Kalamazoo's

City Commission, along with City staff, strategic guidance through the committee's fact- and research-based information and data gathering. The guidance goals were:

- 1) To share with our city leaders the biology, ecology, and lifestyle of urban white-tailed deer, and
- 2) To understand how humans and deer can harmoniously and safely co-exist with each other.

Since WPS-25 is not within the City boundaries, the main recommendation directly applies to deer management at WPS-25 is the development and implementation of a comprehensive short-, medium-, and long-term deer management program for the health and safety of the City's property ecosystem, deer, and human populations. However, the wellfield properties are protected by the City's Wellhead Protection Program Plan where land use limitations are taken into account. One of these is the restricted use of chemicals to deter deer. For these reasons, this report relies heavily on the MDNR as a major resource for discussions related to education and advice; including MDNR's regional Wildlife Biologist, Don Poppe, and MDNR research. The research conducted by MDNR included the 2009 Michigan Deer Management Plan, and the 2016 Review of Deer Management Report. For details, refer to the **Reference Section** of this document.

The MDNR identified six principal goals relating to deer that were identified through the report's public input process: (MDNR, 2016, p.1)

- 1) Manage Deer Populations at Levels that do not Degrade the Vegetation Upon Which Deer and Other Wildlife Depend,
- 2) Promote Deer Hunting to Provide Quality Recreational Opportunities, as the Primary Tool to Achieve Population Goals, and as an Important Social and Cultural Activity,
- 3) Manage Habitat to Provide for the Long-Term Viability of White-Tailed Deer in Michigan while Limiting Negative Impacts to the Habitats of Other Wildlife Species,
- 4) Reduce Conflict Between Humans and Deer,
- 5) Reduce the Threats and Impacts of Disease on the Wild Deer Population and on Michigan's Economy, and
- 6) Enhance Public Engagement in, and Awareness of, Deer Management Issues and Knowledge of Deer Ecology and Management.

MDNR website recommendation: for "Kalamazoo it is preferred to stabilize the deer population to maintain recreational opportunities. Currently there are 16,000 antlerless tags available on private lands and 1,000 on public lands. It's recommended to maintain the 16,000 tags for antlerless deer on private lands and increasing to 1,200 antlerless tags on public lands. Goals are to decrease the deer population to reduce human-deer conflicts and to mitigate future disease spread probability."

Because a deer management program should outlast the tenure of the people making decisions when the program is initiated, it is valuable to have a written management plan. Such a plan provides an opportunity for the community to document their decision-making process and reasoning and establish guidance for future decisions.

3.1 Selected Deer Management Treatments

The City's Department of Public Services, Water Resources Division, has determined that two viable deer management actions are appropriate for WPS-25 at this time:

1) **Selective Tree Harvesting** followed by,

2) **Limited Archery Hunting.**

Note: There is the potential for the City to also initiate trapping and fishing programs at WPS-25. These programs are appropriate for the natural resources at the property and implementation could take place similarly and simultaneously to a deer management program.

3.1.1 Selective Tree Harvesting

Per the FSR, and after stakeholders' approval, the initial tree harvest will be contracted in 2026 or 2027 for the portions of WPS-25 located north of East H Avenue, excluding the southwest portion where the pumping station and production wells operate. The phases of harvesting will be completed under supervision of the City's contracted forester and author of the FSP, Mark P. Janke, to ensure the Wellhead Protection objectives are aligned with the City's WHPPP and properly implemented as required in the harvest contract. Copies of the Phases of tree harvest contracts will be available upon request.

Note: The potential for organizing tree plantings to develop the tree understory will be considered after successful implementation of limited bow archery hunting.

3.1.2 Limited Bow Archery Hunting

Controlled hunting is the application of legal, regulated deer hunting methods in combination with more stringent controls or restrictions as dictated by landowners or government officials. Regulated hunting has proven to be an ecologically sound, socially beneficial, and fiscally responsible method of managing rural deer populations. This method, when used in a safe manner, is often the most cost-effective method for managing rural, urban and suburban deer populations. The primary hunting methods used to safely harvest deer during regulated hunting timeframes typically includes archery and crossbows. The low cost of regulated hunting is one of the more attractive features of this solution to deer conflicts. After consultation with MDNR, the City chose to pursue bow archery hunting as an initial means of lethal deer population reduction at WPS-25.

The City follows its 2022 *Comprehensive Deer Management Program – Report and Recommendations* as it applies to WPS-25 located outside the City's limits. The Program will also rely heavily on MDNR resources and recommendations for implementation. Refer to the **Reference section** of this document.

Hunts are to be specifically designed to improve safety precautions and accelerate the reduction of present and future deer numbers, and includes limiting hunter numbers, while restricting days or times to hunt. To maximize the effectiveness of the deer reduction, other factors may be incorporated into the number of permits, and the type of deer to target: young vs. old, antlers vs. antlerless, doe vs. buck, etc.

There are two phases for a limited Bow Archery Hunting Program.

1) Initial Reduction Phase: Used to remove large numbers of deer from an overabundant herd during a short period of time to achieve desired deer densities.

2) Maintenance Phase: Assuming the Initial Reduction Phase is successful in meeting the City's objectives, the long-term efforts to maintain deer densities at target levels will continue.

Because deer management is a long-term undertaking, periodic evaluation of the program is an important component. Evaluations should incorporate as much diversity of stakeholder anticipation as did the initial planning process. Progress toward the program goals should be assessed and a determination made on whether modifications to the program are needed. Such modifications may be stimulated by lessons learned during program implementation, data gathered through monitoring, technological advancements, shifts in community priorities, or other causes. In most cases, programs run more smoothly after the first year or two as surrounding residents become accustomed to the management activities and begin to see results. However, controversy can still resurface, and if periodic evaluations and modifications are not conducted, over time the program may become out of sync with the stakeholders' needs and desires.

3.1.3 Venison Donation Programs

The by-product of any deer hunting program is the availability of venison (deer meat). Venison is lean meat that is low in fat and high in protein, comparing favorably with the nutritional qualities in chicken breasts. Such meat could be distributed to needy communities after processing. Increasing numbers of people are looking for organically produced, free-range sources of meat, such as from free-ranging game species (including deer) as an alternative to supporting practices typically associated with existing livestock husbandry and processing.

4.0 Deer Management Program (DMP) - Hunting is Privilege, Not a Right

4.1 PLAN FOR PUBLIC ENGAGEMENT

Step 1

In 2026, the Public Services Director and City Engineer, James Baker P.E., provided the land management issues and actions being taken at WPS-25 to the Comstock Township as part of the City's public outreach to its stakeholders.

Step 2

Once the DMP is acceptable to the Public Services Director, the next step in the process is to engage the City Attorney and City Management in this next element of land management planning. Considerations for the stakeholder's acceptance of limited bow archery hunting will be prepared and finalized such that the City can implement the plan.

Step 3

Once City Management is in agreement with the Deer Management Plan, holding a township or neighborhood workshop and/or annual or semi-annual public meetings to update the community on the hunting progress can be considered.

Step 4

After community acceptance, the DMP budget and funding shall be obtained, the DMP process organized and staffed move to the implementation phase.

Step 5

The City will maintain a hunting information page on our community's municipal or educational websites regarding the DMP. It will be important to keep the public apprised of changes to the programs, progress towards the City's goals and objectives, and having a plans or monitoring to clearly identify the successfulness of the programs. (The City's webpage for hunting is <https://protectyourwater.net/protectyourwater-net-resources-hunting/>)

4.2 BUDGET

The following is the City's Archery Hunting Program estimated costs:

- Webpage on Protectyourwater.net – no cost (Completed)
- Phone ap for onsite location mapping and registration – no cost
- Outreach / education via postings, social media, and publications – \$2000
- Staff time estimated 20 hours - \$ _____
- If venison processing is offered by the City for 10 deer - \$ _____
- DMAP permits at \$10/each from MDNR, estimated 10 hunt tags in 2026 at WPS-25, maximum deer 2/hunter - \$200

4.3 TIMETABLE

The following is the timetable for the various components of the deer management plan:

- ✓ Q1 2026 - Stakeholder outreach, City approval of DMP, and established funding sources (active tree harvesting occurred on south side of creek).
- ✓ Q2-Q3 2026 - Finalize staff and responsibilities, forms, permit process, data collection, outreach, and apply for a MDNR Deer Management Assistance Permits.
- ✓ Q3 2026 - Open City's permit application process to select hunters, and if necessary publicize the DMP using available opportunities, add signage and flagging to the property, update website, and process permit applications.
- ✓ Q3-Q4 2026 – Active hunting allowed north of East H Avenue, excluding the southwest portion where the pumping station and production wells operate. The Phase I tree harvesting is planned for Q3 2026 or 2027.
- ✓ Q1 2027 – Deer harvest reports from the hunters will be collected and analyzed.
- 2027 and onward– Continue the City's permit application process to hunters, publicize the DMP using available opportunities, update webpage(s), process permit applications.
 - Plan for routine tree harvesting every 10-15 years.

4.4 RESPONSIBILITIES

For each activity included in a DMP, someone or some entity will be identified as the responsible party for carrying out the program. **DMP staff roles anticipated are:**

DMP Project Leader & MDNR Authorized designee, Public Services staff (2)

- Stakeholder Communicator for outreach/affiliations coordination
- Funding Coordination
- Permit Approver
- Media Outreach Coordination including webpage updates
- Hunter selection, information packets, hunting tags, and overall hunt management
- Liability forms for hunters
- Program Monitor for data collection and annual City reporting
- (optional: Food Distribution for carcass butchering and meat donations)

Geographic Information System (GIS) Specialist support

- Create mapping application
- Data collection

Property Management Support, Public Services and/or Public Works staff

- Boundary markings
- ADA accessible entrance and parking lot
- Trailway maintenance and improvements (refer to Figure 4 – Fred McLinden Trail Map)

4.5 GOALS AND METRICS

4.5.1 Permits Options

All important information on hunting in Michigan is provided in the MDNR's current **Deer Hunting Regulations Summary** on their website at <https://www.michigan.gov/dnr/managing-resources/laws/regulations/deer>. To become a MDNR **Licensed Hunter** a **base license** must first be purchased. This ranges from \$6 to \$151. Secondly, the hunter must purchase a **deer license** specific to how many deer they want to hunt (i.e., antlerless or antlered).

Deer can be categorized as:

Antlerless - Adult Doe or Fawn Doe, or Adult Bucks that shed their antlers

These are deer without antlers, or antlers extending less than 3 inches or more above the skull.

Antlered – Buck or Fawn Buck

These are deer having at least one antler that extends 3 inches or more above the skull.

The City has chosen to focus primarily on harvesting antlerless deer as a means of reducing the deer population. **The following are several permit processes considered.**

1) Universal Antlerless Tags

Universal antlerless tags are available to the general public allowing hunters to harvest antlerless deer in any area open to antlerless deer hunting (public or private land). A universal antlerless deer tag, which permits hunters to kill doe, can be purchased for residents, and nonresidents of all ages for \$20. Hunters are restricted to either one single or combo kill tag per season, but the MDNR allows the purchase of up to 10 universal antlerless deer tags.

2) Deer Management Assistance Permit (DMAP)

DMAP permits are specifically designed for private landowners (or groups of landowners) to manage deer populations on their properties, often to address issues like deer density or agricultural damage. The DMAP program is intended for special circumstances where significant antlerless harvest is necessary to reduce future damage by removing many deer on a property where universal antlerless tags have not been successful. DMAP fosters positive relationships between landowners, hunters, and wildlife agencies by providing a framework for collaborative deer management.

Antlerless Archery Hunting is allowed at Water Pumping Station 25 (WPS-25) in select areas referred to as DMA-25 (refer to **Figure 5**). Please note the Fred McLinden Nature Trails are located on the south half of DMA-25, and the railway system will remain open during the hunting seasons. Although DMA-25 consists mainly of farmed and forested vacant parcels, the City maintains its water pumping station and production wells on the west portion of property. This area and its service roads are EXCLUDED from DMA-25. NO HUNTING is allowed in this area.

Note: DMAP licenses can be used by a “Licensed Hunter” as a supplement to the use of hunter antlerless and antler licenses available over the counter. DMA permits are not stand-alone licenses. The daily limit and season limit shall be 1 deer per DMAP.

DMAP application are due no later than October 31 and mailed to Plainwell DNR Customer Service Center – DMA permit, 621 N 10th Street, Plainwell, MI 49080. These permits will cost \$10 per tag and may not be sold, traded, or bartered for. You must purchase a minimum of 5 tags per transaction. Permittees (the City) report by January 15 to the wildlife management unit supervisor the name and address of all hunters and the number of deer harvested under the authority of DMA permits. Approvals will be mailed back with the number of eligible permits to purchase from an MDNR retail license dealer.

The first five years are expected to be “declining years” denoted by a decline in deer herds and hunter successes. Afterword’s the Maintenance Phase is expected where the deer herd and hunters’ successes will stabilize. Success for the City is defined as maintaining the herds at a low level to maximize other land management goals such as planting and re-establishment of quality trees, growth of a healthy forest underbrush, and reducing damaged trees.

The more hunters you cycle through in a season, the more likely you are to harvest more deer. For example, if your limit is 10 hunters for the whole season, October 1 to January 1, they may have a higher success rate, say 30%, but that is only 3 deer. If, however, 100 hunters cycle through the whole season even with a lower success rate, say 20%, you would harvest far more deer (20 deer).

As such, the City of Kalamazoo will take advantage of the DMAP program options to develop the best strategic tactic for the Deer Management Plan. If needed to increase the deer harvest rates, additional programs can be considered.

3) Hunter Access Program (HAP)

In conjunction with the DMAP program, the City could follow the HAP model with lottery drawings for hunting permits within the MDNR’s seasonal hunting periods. In this case the state pays the landowner up to \$25.00 per acre based on acreage enrolled, type(s) of land cover, and type(s) of hunting allowed. Up to \$5/acre is available for land enrolled in USDA Conservation Reserve Program, Wetlands Reserve Easements, or actively implementing a forest management plan. The City would lease the property to the state for 2 years from September 1 to May 31. The type of hunting is determined by the landowner. Landowners are free from liability if enrolled in the HAP under Public Act 451 of 1994. The conservation district will do all of the leg work: post signs, promote the program and maintain HAP registrations stations.

There are advantages under the HAP program. For the DHA area available at WPS-25 (~200 acres total), the following MDNR hunting draws per season are anticipated but may be altered:

1. October 16-30 (draw 10 hunters)
2. November 1-14 (draw 10 hunters)
3. November 16-30 (draw 0 hunters, no hunting allowed)

4. December 1-15 (draw 10 hunters)
5. December 16-January 1 (draw 10 hunters)

An alternative HAP model for future use consideration is the “**Open All Seasons**” model which is essentially the MDNR State Game Area concept. It requires following MDNR regulations while reducing the amount of management by the City. It cycles through more hunters in a season and can result in greater harvests and hunting pressure. The drawback is that it requires using a registration box at the Property and although the MDNR administers the harvest, the landowner would have continued property management obligations throughout the seasons.

Additionally, for large tracts of land, harvests can be restricted to “designated plats” within a DHA. This concept is utilized by Kellogg Forest and Pierce Cedar Creek.

4) Earn-Your-Buck (EYB)

The EYB program has proven to be desirable among hunters without reducing the buck population to undesirable levels. If the antlerless deer populations are significantly reduced the EYB program, it can be temporarily suspended as needed to meet the harvest goals. However, the MDNR has indicated that to initiate the DMP, the City would benefit from the unlimited antlerless hunting program until the City’s DMP is well established. The EYB program will be considered by the City in the future as a strategic tactic if needed to achieve harvest goals.

4.5.2 Harvest Areas

The City’s Campbell Lake property in Comstock Township is within the MDNR’s Deer Management Unit referred to as DMU 312 (Branch, Kalamazoo and St. Joseph counties). The City has one Designated Harvest Areas (DHA) as shown on the WPS-25DMA-25 Map as shown on **Figure 5**. Access to the northern parcels is off North 28th St and access to the southern parcels is from the parking lot off East H Avenue. The DHA takes into account Comstock Creek which naturally crosses the property and has a land bridges (culvert) over it. The only way to access the City’s entire DHA is by crossing the creek at the land bridge. Note: Appropriate land use/hunting signage for the property boundaries will be installed prior to the harvest.

4.5.3 Venison Donation Programs

The MDNR oversees “The Hunters Feeding Michigan” program which is a perfect way for hunters to share their harvest by donating their deer to a participating meat processor. Each deer donated will provide an estimated 160 high-protein and nutritious meals. In addition, anyone can make a monetary donation. More information is available at <https://www.michigan.gov/dnr/about/get-involved/hunters-feeding-michigan>.

Another option is the Michigan Sportsman Against Hunger Program (MSAH) established in 1991. It is an all-volunteer, 501c3 nonprofit organization, that coordinates participating licensed game processors throughout the state as drop off locations for whitetail deer harvested by hunters and farmers during the hunting season, and deer harvested through deer management practices. Additional information is at <https://www.sportsmenagainsthunger.org/>.

4.5.4 Firearm Deer Hunting

Although not a consideration at this time by the City, firearm antlerless deer hunting in the late season, December 16 to January 1, can result in higher antlerless harvest. The City's Campbell Lake property could be safely firearm hunted per the MDNR.

4.6 PLAN FOR HARVEST MONITORING

4.6.1 MDNR Reporting

Mandatory harvest reporting to the MDNR is required by all hunters. The most current MDNR Hunting Digest will be strictly followed for all hunters on City-owned property (refer to the **Section 7.0 References** for more details).

Hunters can report a harvest to MDNR using the following website link:

<https://www.michigan.gov/dnr/things-to-do/hunting/deer/harvest-reporting>. The MDNR's customer service center is also available if issues are encountered during reporting. Refer to <https://www.michigan.gov/dnr/about/contact/csc>.

Mandatory deer harvest reporting.

Report your deer within 72 hours of harvest or before you transfer possession. Learn more about deer harvest reporting requirements at [Michigan.gov/Deer](https://www.michigan.gov/Deer).

Report your deer harvest at [Michigan.gov/DNRHarvestReport](https://www.michigan.gov/DNRHarvestReport).

If you have questions about reporting your harvest or need assistance, please call 517-284-WILD (9453) or your local DNR Customer Service Center (see pg 5) during normal business hours.

NOTE: Hunters who wish to submit a deer head for TB or CWD testing must first report their harvest. Heads will not be accepted without a harvest report. For more questions and answers specific to deer harvest reporting see page 74.

4.6.2 City of Kalamazoo Reporting

Additional to MDNR reporting, the City will develop a list of the indicators for monitoring to assess progress towards achieving the City's objectives. The City will collaborate with the MDNR to determine the best indicators for hunters to report back to the City. These indicators will be revised over time to determine the success in reducing the deer population at each of its DHAs.

Hunters will be required to fill in Harvest Sheets which may include data on deer removal, conditions of the deer when shot, signs of disease, etc. The City encourages hunters to take pictures of the harvest and may opt to have them posted on the City website(s) or other media.

5.0 Implementation of the Program

Archery hunting is a popular and important recreational activity. Hunters will play a significant role in deer management at WPS-25 for data collection associated with fluctuations in population size and health, mitigation and browsing damage. The Campbell Lake property will offer a limited bow archery hunting opportunity on over half of the 398 acres.

It is the goal of the City's hunting program to reduce the deer population to sustainable numbers that will result in healthier forests and improve surface water and groundwater quality. Hunters will be required to provide data on deer removal, as described in **Section 4.6**. The program will enable City Staff to keep hunters informed about upcoming management, or educational events. City Staff will monitor who accesses the property and insure the safest experience possible for them.

Step 1

The City will first apply for MDNR Deer Management Assistance Permits (DMAP) which is intended for special circumstances where significant antlerless harvest is necessary to reduce future damage by removing many deer on your property where universal antlerless tags have not been successful. Applicants may purchase up to 10 universal antlerless deer licenses, with no application required for hunting in the lower peninsula. As indicated in **Section 4.5**, DMAPs should supplement or support the use of hunter antlerless and antler licenses available over the counter.

By entering the DMAP program the City would agree to comply with the program regulations, authorized hunters-issued permits, and deer harvest report requirements including:

- The desired number of permits to control the deer population on the property.
- These permits will cost \$10 per tag and may not be sold, traded, or bartered for. The applicant must purchase a minimum of 5 tags per transaction.
- Property identification numbers or property descriptions for each property where the tags will be used. Copies of property tax information or additional sheets may be provided if necessary.
- DMA permit tags issued will only be legal to use on the properties indicated on your application.
- Tracking of all authorized licensed hunters, issued permits, and deer harvest confirmation numbers.
- When active and acute horticultural damage is being caused by the antlered deer, the DMA permit may be valid for the taking of deer with antlers extending 3 inches or more above the skull with permission.
- Submittal of an application no later than October 31st, mail to Plainwell MDNR.

Upon receipt of the application, the MDNR will send it to the appropriate wildlife biologist(s). They will review and evaluate the number of tags requested. The City would be notified if

denied, or more information such as a site visit is needed to evaluate the eligibility of the application. If the application is approved, the permittee will receive the permit authorization filled in on the form with the number of eligible permits to purchase by the City from a MDNR retail license dealer or online.

Step 2

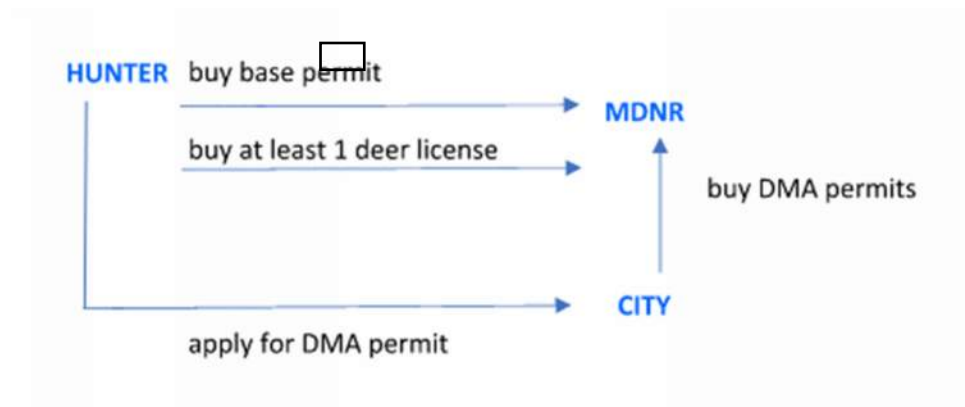
Due to the anticipated tree harvesting in 2026 in select areas of the property, hunters will be limited to a select group in 2026. In the future, the process may be open to the public and conducted as a lottery to offer DMA permits to “Licensed Hunters” .

What is a licensed hunter? *A licensed hunter is someone who has purchased their base hunting license and at least one deer license for the current season prior to using a DMAP permit tag.*

All Licensed Hunters shall have appropriate deer licenses from the MDNR for the season(s) in which they are hunting. The City would promote (but not require) hunters to purchase universal antlerless deer license per the current MDNR Hunting Digest requirements. (DMA permits do not count against a hunter’s license purchase limit.) A universal antlerless deer license allows one kill tag valid for one antlerless deer only.

What is a universal antlerless deer license? *A universal antlerless deer license entitles residents and nonresidents, to take an antlerless deer on public or private land in any deer management unit open to antlerless deer hunting in all deer seasons. No application is needed to purchase a universal antlerless deer license. Hunters of any age may purchase universal antlerless deer licenses, including youth hunters licensed under the Mentored Youth Hunting Program.*

Each season hunters can gain site access and hunt by applying for a **free City of Kalamazoo Archery Hunting Permit**. The City will utilize the most current annual MDNR Hunting Digest for guidance. Permit applications will be accepted from August 1st through 31st. Hunters may apply for the annual permit as an individual or a hunting group (up to 3 people). If applying as a group, only one application is necessary for submittal. All City-approved applicants in 2026 will be limited to a select group. Permits/Licenses through the City will be in accordance with the current MDNR Hunting Digest and be strictly followed.



Allowable licenses for WPS-25 are:

- License types include Youth age 9 and under, Youth age 10-16, Resident age 17-64 years and Resident senior age 65+ years.
- Hunters 9 years old and younger are licensed through the Mentored Hunting Program and accompanied by a qualified mentor.
- Youth 10-16 years old with a bow regardless of licensed used: single deer, deer comb or antlerless deer.

The MNDR Bag Limit, Area, and Seasonal Dates for hunting can change each year. The following is from the 2025 MDNR Hunting Digest:

SEASON	AREA	SEASON DATES
Archery - Early Season	Statewide	Oct. 1 - Nov. 14
Archery - Late Season	Statewide	Dec. 1 - Jan. 1

Step 3

Once the lottery is conducted by September 15th, the City will provide these DMA permits to the selected licensed hunters for use only on the property listed on the City's permit. Lottery winners will be notified no later than September 30th.

Hunters will be provided packets from the City which will include the annual permit, parking pass, armbands, harvest sheets, maps, and other important information as necessary. The potential for a phone app allowing the hunter to navigate themselves on the DHAs may be available.

Hunters will be required to comply with the following per the DMAP:

- Permits may not be sold, traded, or bartered for.
- Authorized licensed hunters using your permits must review and comply with the complete list of regulations under Wildlife Conservation Order 5.80.
- Licensed hunters may take one ANTLERLESS deer per permit during OPEN deer seasons according to the regulations for that season. Please check the current MDNR Hunting Regulation Guide, or online at <http://www.michigan.gov/deer> for season dates and eligible hunting equipment for the permit area.
- If the authorized hunter is unsuccessful, they must return the DMA permit.
- The DMA permit may then be used by one of other eligible licensed hunters.
- Hunters are required to complete Harvest Sheets while hunting as part of the hunting program at WPS-25. The Harvest Sheets must be submitted to the City's Public Services Director at the end of the season.
- Registration is required DAILY when hunting at WPS-25 using the City's instructions provided in the packet (i.e., phone app or phone call, etc.).
- Hunters can only hunt during times specified in the current Michigan Hunting Regulation Summary for each day of the hunting season. DMUs in Kalamazoo County are within the MDNR's Eastern Time Zone B which means hunting is allowed "½ hour before sunrise to ½ hour after sunset, plus 6 minutes".
- All hunters must wear appropriate hunter orange.
- Hunters must follow the City's hunting, tree stand and other policies.
- ABSOLUTELY NO FIREARMS are permitted on City of Kalamazoo-owned properties.

Photos of harvests are encouraged and may be included in the City's media outreach programs.

WPS-25 hunters will be required to comply with all MDNR rules and requirements, including obtaining and displaying a license and submitting any samples for collection. Anyone found in violation of the DMP, or other applicable law in conjunction with participation of a hunt at WPS-25, may lose their eligibility to participate in the hunt in the current and/or upcoming season(s).

All bow hunters will follow the Bowhunter's Creed provided in **Appendix C**.

Data collected may be shared with MDNR, other educational institutions and state and federal partners to help promote important wildlife management and research.

Please refer to the City's Archery Hunting Permit Application Process in **Appendix D** for additional information regarding important dates, permit fees and related terms and conditions.

6.0 Acronyms

CDMPRR - Comprehensive Deer Management Program – Report and Recommendations, 2022
(City of Kalamazoo)

City - City of Kalamazoo, Department of Public Services

DHA - Designated Harvest Areas (City of Kalamazoo)

DMA – Deer Management Assistance (MDNR)

DMAP - Deer Management Assistance Permit (MDNR)

DMP - Deer Management Program (City of Kalamazoo)

EYB - Earn-Your-Buck (City of Kalamazoo)

FSR - Forest Stewardship Plan (City of Kalamazoo)

HAP - Hunter Access Program (MDNR)

MDNR - Michigan Department of Natural Resources

WPS – Water Pumping Station (City of Kalamazoo)

WHPPP - Wellhead Protection Program Plan (City of Kalamazoo)

USFS - United States Forest Service

7.0 References – Wildlife Habitat

Kalamazoo 2022 Comprehensive Deer Management Program – Report and Recommendations - <https://www.kalamazoocity.org/Community/Sustainability-Our-Environment/Urban-Deer-in-Kalamazoo>

MDNR 2025 Deer Hunting Regulations Summary - <https://www.michigan.gov/dnr/managing-resources/laws/regulations/deer>

2024 (or current) Michigan Hunting Regulation Summary, Michigan Department of Natural Resources (MDNR), Wildlife Division - <https://www.michigan.gov/dnr/-/media/Project/Websites/dnr/Documents/LED/digests/deer%20regs%20summary.pdf?rev=5ee29d84d89742be89deecdda6f1e924&hash=1EE65FAA54CD5272C870007BC3A7BB06>

The MDNR Wildlife Division has an excellent publication on managing wildlife habitat at www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/Landowners%20Guide/index.htm

MDNR Wildlife Conservation Regulations and Legal Descriptions - <https://www.michigan.gov/dnr/managing-resources/laws>

MDNR Wildlife Division – www.Michigan.gov/Wildlife

MDNR Regulation Book - <https://www.mdnr-elicense.com/>

MDNR Deer Website - <https://www.michigan.gov/dnr/things-to-do/hunting/deer>

MDNR Hunter Safety Education - <https://www.michigan.gov/dnr/education/hunter-rec-edu-safety>

Results of the 2023 DuLuth City Bowhunt, February 2024, Arrowhead Bowhunters Alliance.

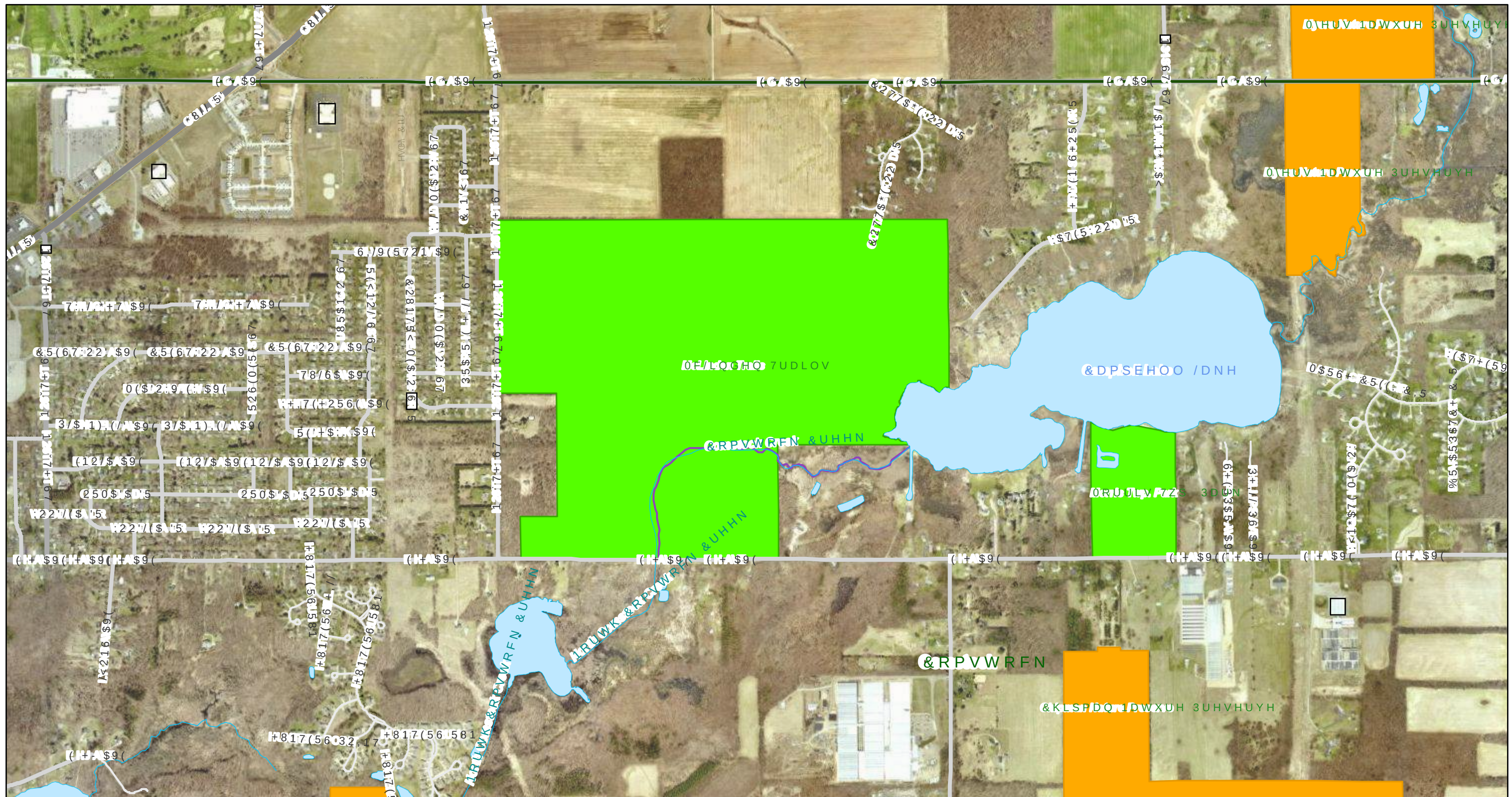
Michigan United Conservation Clubs - <https://mucc.org>

Quality Deer Management Association – www.qdma.com

Figures

**Figure 1 – Campbell Lake, Comstock Township Property
(Kalamazoo County GIS Map)**

FIGURE 1 - : 36 ~ & DPSEHOO /DNH 3URSHUW\ .DODPD]RR &R



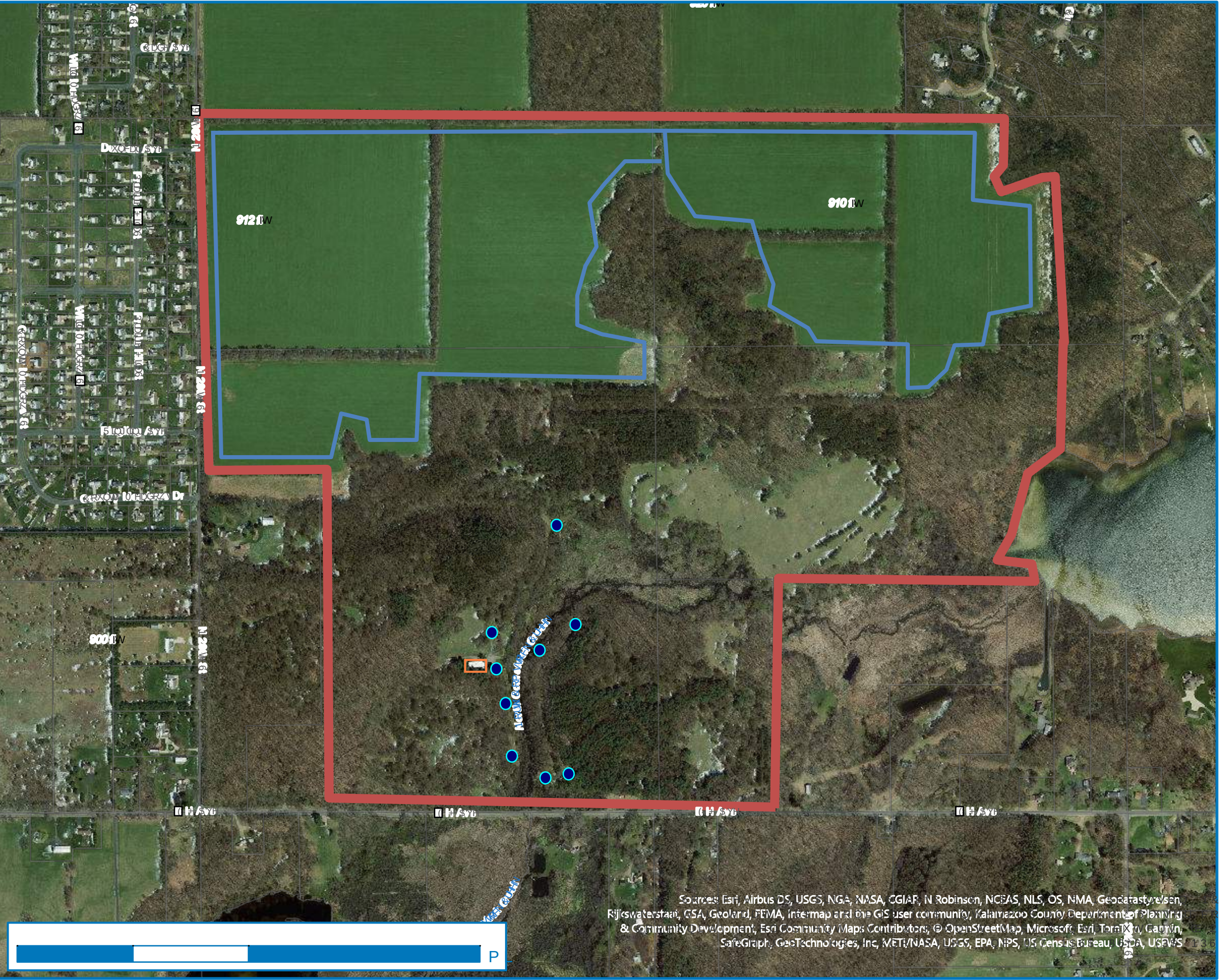
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Figure 2 - Campbell Lake, Comstock Township Wellfield #25 Map

FIGURE 2 - WELLFIELD MAP



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Production Well 5<

Water Pumping Station

Leased Farm Land

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SHQ6WUHHWDS OLFURVRIW (VUL 7RP7RP *DU
136 86 &HQVXV %XUHDX 86'\$ 86):6

**Figure 3 - Campbell Lake, Comstock Township Water Pumping Station #25
Map**

FIGURE 3

Water Pumping Station 25 Agricultural Use Lease Extension Agreement

LEGEND

-  Production Well
-  City of Kalamazoo Property Boundary
-  2000' Well Permit Isolation Boundary
-  Area of Leased Parcels
-  1 Year Time-of-Travel Capture Zone
-  10 Year Time-of-Travel Capture Zone

January 2008



0 250 500 1,000
 Feet

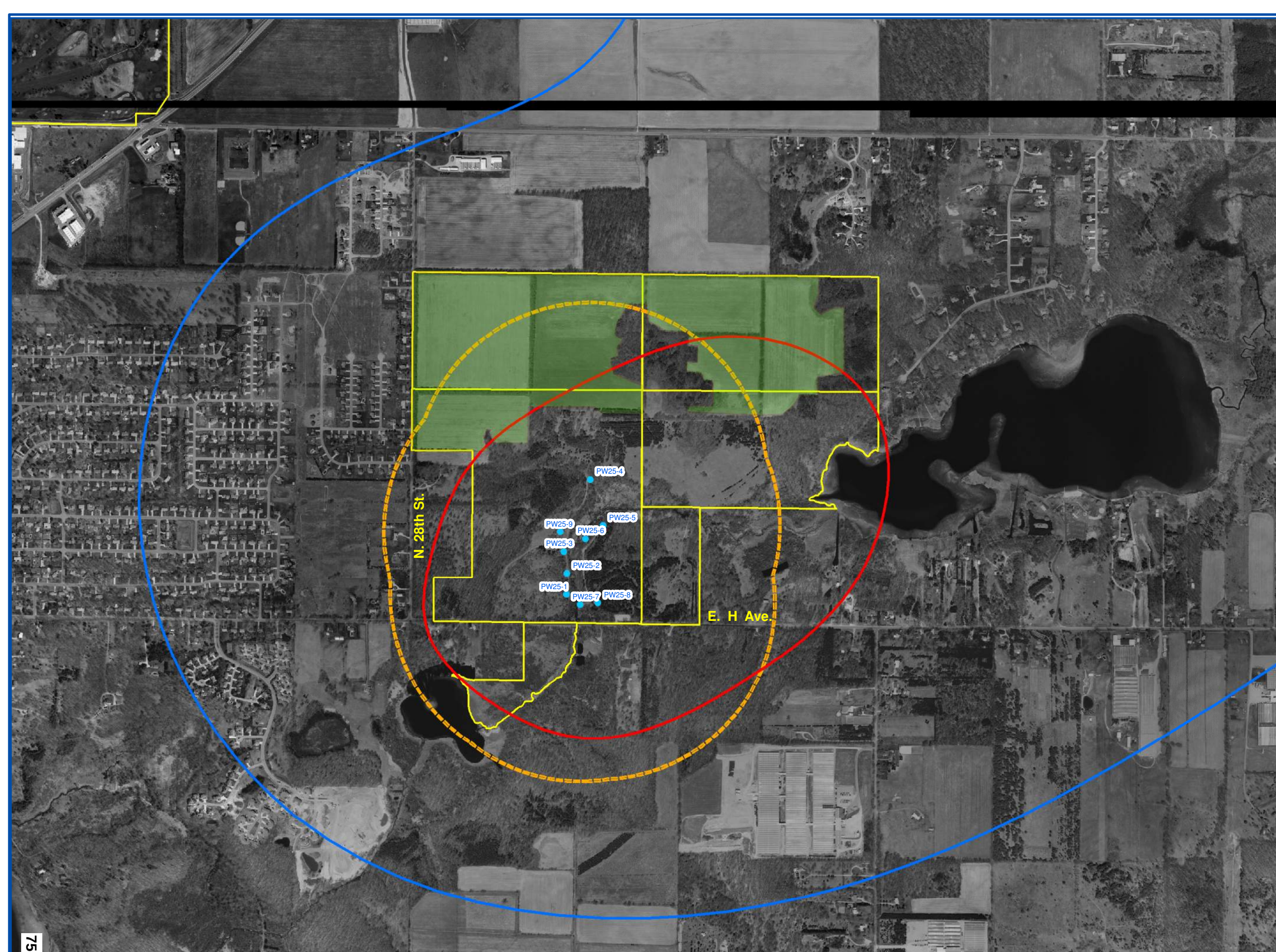


Figure 4 - Fred McLinden Nature Trail Map

FIGURE 4

Fred Mc Linden Nature Trails 1 D V

N 200' 61

N 200' 61

North Central Gulf

/HJHQG

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n

Figure 5 - Deer Management Areas at WPS-25 (DMA-25) Map

FIGURE 5

Deer Management Area-25 (DMA-25) 2026

City of Kalamazoo, Campbell Lake Property

"WPS-25" @ 7275 East H Avenue

County: Kalamazoo

Township: Comstock

Size in Acres: ~200

Hunt types Allowed: Bow archery, antlerless

Hunting Permits Allowed: 10



Access & Parking



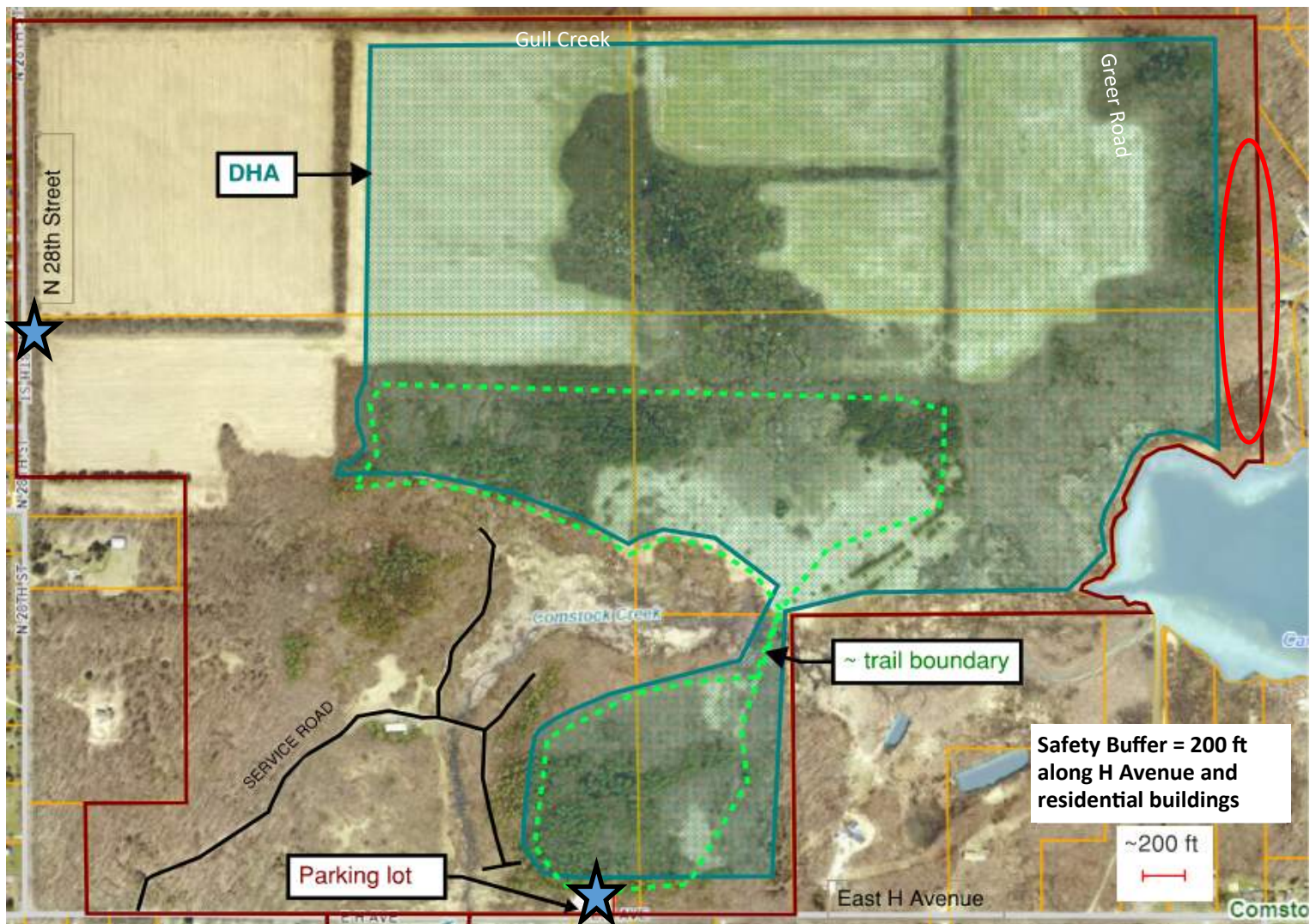
Property Boundary



Designated Harvest Areas (DHA)



Safety Zone—houses/structures



For more information scan the QR code (left) with you smartphone OR visit:

<https://protectyourwater.net/protectyourwater-net-resources-hunting/>

HUNTER SAFETY ZONES are enforced at ALL TIMES

- 200 feet around all buildings / structures

- 100 feet from Property boundaries.

Be aware of all property boundaries; Do not trespass onto adjacent lands.

Appendices

Appendix A - Forest Stewardship Plan, Campbell Lake, Comstock Township

Forest Stewardship Plan



Prepared for the City of Kalamazoo
Environmental Programs & Water Resources Division

Plan Prepared by Mark P. Janke
Mark P. Janke, Consulting Forester, LLC, Registered Forester #545

Plan Duration: 10 years (2024-2033)



The Forest Stewardship Program is funded by the United States Forest Service
and administered by the Michigan Department of Natural Resources.

www.Michigan.gov/ForestStewardship

Landowner Contact Information		Plan Writer Contact Information	
Name: City of Kalamazoo-Environmental Programs & Water Resources Division Ross Township Parcel		Name: Mark Janke (President) Mark P. Janke, Consulting Forester, LLC	
Address: 241 W South Street, Kalamazoo, MI 49007		Address: 2676 111 th Ave., Allegan, MI 49010	
Phone: (269) 337-8583		Phone: (269)-330-0347	
Email: talandaj@kalamazoocity.org		Email: mark@michiganforester.com	
Property Information			
Total Acres: 214	Forested Acres: 160	Acres in Plan: 214	Tax ID: See list below
Town: 2S	Range: 10W	Township: Comstock	County: Kalamazoo
Property Legal Description (Quarter Section, Section, Town, Range, Township, County: 365 acres in the South 2/3 of Section 4, Comstock Township, Kalamazoo County, Michigan. PARCEL(S) 07-04-405-010 & 07-04-255-010 & 07-04-155-010 & 07-04-380-010			
Landowner's Goals for this Forest Stewardship Plan			
1) Actively manage the forest for recreation, aesthetics, forest health, sustainable timber production, soil resources, and education. 2) Prepare for sustainable commercial timber harvest in the future. 3) Protect forest from pests and diseases and protect threatened and endangered species. 4) Protect water quality and wetlands areas. 5) Enhance educational opportunities for Natural Resources at the institution.			
Michigan's Stewardship Ethic			
Stewardship is an ethic recognizing that the land and its natural inhabitants have an inherent worth and that we have a responsibility to consider the land as we protect, manage, utilize, and enjoy the forest. Stewardship guides us to conduct our activities to the utmost of our abilities, to ensure the future health, productivity, diversity, and well-being of the land, its natural communities, and species, and to provide opportunities to our successors that are at least equal to ours to use and enjoy the land and its resources.			
Signatures of Approval from Landowner, Plan Writer, and DNR Service Forester			
This plan describes my goals and objectives for my forest. Participation in the Forest Stewardship Program is voluntary and only indicates my intent to practice sustainable forest management. I understand that enrolling forestland into separate property tax programs like the Commercial Forest Program or the Qualified Forest Program requires my compliance with an approved forest management plan in exchange for the reduction in property taxes.			
Landowner:		Date:	
Plan Writer: Mark P Janke, CF, ACF		3-20-2024	
DNR Service Forester:		Date:	

After review and approval by the Landowner, the Plan Writer will submit the entire Plan to the nearest DNR Service Forester for their review. **Electronic submission of the Plan is encouraged by emailing a Word document or pdf file to the Service Forester.** The DNR Service Forester will return a hard copy or pdf of the final signature page to the Plan Writer after approval.

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Introduction

Forest Stewardship Program

The purpose of the Forest Stewardship Program is to encourage nonindustrial private forest landowners to actively manage their forest to accomplish their own personal goals for their land. The voluntary Program provides landowners with professional planning from private sector foresters and wildlife biologists to develop and implement their Forest Stewardship Plan. The United States Forest Service (USFS) started the Forest Stewardship Program in 1991 because only 5% of family forest owners had a written plan to guide their forest management activities. The USFS supplies funding and partners with each state forester to provide professional planning and technical assistance to private landowners in their state. The Department of Natural Resources (DNR) administers the Forest Stewardship Program in Michigan. About 5,000 landowners in Michigan have developed a Forest Stewardship Plan to help them protect, manage, and enjoy their unique forest. See www.michigan.gov/foreststewardship for more info.

Landowner's Goals

The City of Kalamazoo owns several properties that have important water producing wells that they manage for the people of Kalamazoo. This property is referred to as the “Campbell Lake Preserve” property” and is an approximately 365-acre property of primarily forest, successional openings, Riparian areas along Campbell Lake and Comstock Creek along with about 136 acres of cropland. The property has nine (9) essential water wells that provide a large percentage of the water supply for the city of Kalamazoo and a very well used area known as “Fred McLinden Nature Trails”. The City’s primary goal is to protect the property and underlying groundwater reservoir as a source of the city’s municipal drinking water supply. In addition, the city is interested in good overall environmental stewardship so that a constant supply of high-quality water is available for the residents of Kalamazoo and that the city is a good steward of the land entrusted to its care. It was suggested by one of the neighbors of the Ross Township Property that active forest management would likely be compatible with the City’s goals for the property as healthy forests help protect water quality while at the same time, they can produce other important outcomes such as timber, improved wildlife habitat and recreational values. In most cases, the goals for the landowner reflect their preferences, the attributes of the forest, and the desired future conditions for the land. The primary goal is to manage long term sustainability and forest health by demonstrating active stewardship and sound management for the multiple uses of timber, wildlife, water quality, and recreation. The landowners have identified the following goals with their forester:

1. Sustainable production of high-quality water for the City of Kalamazoo.
2. Sustainable production of high-quality timber and the production of an economic return from periodic harvest activity is consistent with maintaining high water quality and improved forest health.
3. Maintain high quality wildlife habitat through active management.
4. Protect soil and water resources.
5. Address forest health concerns such as invasive species.
6. Protect the land from non-authorized use or degradation of the resource by trespassers.
7. Create a legacy for the residents of the City Kalamazoo and Kalamazoo County to enjoy.

In many circumstances, various management strategies can be designed to achieve multiple long-term goals that can enhance the benefits that landowners find desirable from the property. By conducting appropriate forest management practices now, such as the prescribed timber harvests, it will help future generations of the land to be part of the legacy. Wise sustainable forest management not only considers present forest condition, but also applies scientific principles of forestry management to insure sustained health and increased productivity of the forest over the long term.

General Property Description

The “Campbell Lake Preserve” property is situated in central Kalamazoo County, just east of the Comstock School along East “H” Avenue and south of East “G” Avenue. The south half of the property is used heavily by the public for hiking and is known as the “Fred McLinden Nature Trails”. The property’s proximity to Kalamazoo makes it a great option for a nature experience close to where Kalamazoo residents work and reside. The northern portion of the property is rented agricultural land and the neighbor to the north, a large entity known as Zoetis LLC., which owns a large farm enterprise. A high-end housing development exists on the northeast side of the ownership which exists along the north side of Campbell Lake. The property has 9 very important water wells that are actively managed by the City. The forest areas are a mix of old conifer plantations, mixed deciduous forest along with successional openings and wetland/riparian areas. The property has about a ¼ mile undeveloped riparian frontage along Campbell Lake. Campbell Lake outlets into an important stretch of Comstock Creek which eventually flows into the Kalamazoo River. The properties significance as a multiple use forest area cannot be overstated. A great opportunity exists for this area to become a key location to educate the public about the importance of forest stewardship and the role of forests in protecting the water quality which affects everyone. Throughout this plan, we have divided the property into 5 separate management units or “stands”. A stand is a forestry term for an area of land containing a similar cohort of trees according to species, age class, site conditions, or management practices.

Ownership Map

Figure 1. Map of the City of Kalamazoo- General property map overview:



This aerial map of Comstock, Michigan, displays five distinct planning areas, each identified by a number and a color. The areas are distributed across the town, with some overlapping. Area 1 (brown) is located in the central and eastern parts. Area 2 (tan) is in the western and southern parts. Area 3 (yellow) is in the northern and central parts. Area 4 (light green) is in the southern part. Area 5 (dark green) is in the northern part. The map also shows the 'CITY OF KALAMAZOO' boundaries, 'Comstock Creek', and several streets including 'W' and 'E'. Other labels include 'HAMILTON MARY F', 'AL-OTEIBY ANN M', 'SHAW JEFFREY B', and various street numbers like 3698, 7405, 7533, 7717, 7909, 7921, 7987, 8033, 8035, 8037, 8039, 8041, 8043, 8045, 8047, 8049, 8051, 8053, 8055, 8057, 8059, 8061, 8063, 8065, 8067, 8069, 8071, 8073, 8075, 8077, 8079, 8081, 8083, 8085, 8087, 8089, 8091, 8093, 8095, 8097, 8099, 8101, 8103, 8105, 8107, 8109, 8111, 8113, 8115, 8117, 8119, 8121, 8123, 8125, 8127, 8129, 8131, 8133, 8135, 8137, 8139, 8141, 8143, 8145, 8147, 8149, 8151, 8153, 8155, 8157, 8159, 8161, 8163, 8165, 8167, 8169, 8171, 8173, 8175, 8177, 8179, 8181, 8183, 8185, 8187, 8189, 8191, 8193, 8195, 8197, 8199, 8201, 8203, 8205, 8207, 8209, 8211, 8213, 8215, 8217, 8219, 8221, 8223, 8225, 8227, 8229, 8231, 8233, 8235, 8237, 8239, 8241, 8243, 8245, 8247, 8249, 8251, 8253, 8255, 8257, 8259, 8261, 8263, 8265, 8267, 8269, 8271, 8273, 8275, 8277, 8279, 8281, 8283, 8285, 8287, 8289, 8291, 8293, 8295, 8297, 8299, 8301, 8303, 8305, 8307, 8309, 8311, 8313, 8315, 8317, 8319, 8321, 8323, 8325, 8327, 8329, 8331, 8333, 8335, 8337, 8339, 8341, 8343, 8345, 8347, 8349, 8351, 8353, 8355, 8357, 8359, 8361, 8363, 8365, 8367, 8369, 8371, 8373, 8375, 8377, 8379, 8381, 8383, 8385, 8387, 8389, 8391, 8393, 8395, 8397, 8399, 8401, 8403, 8405, 8407, 8409, 8411, 8413, 8415, 8417, 8419, 8421, 8423, 8425, 8427, 8429, 8431, 8433, 8435, 8437, 8439, 8441, 8443, 8445, 8447, 8449, 8451, 8453, 8455, 8457, 8459, 8461, 8463, 8465, 8467, 8469, 8471, 8473, 8475, 8477, 8479, 8481, 8483, 8485, 8487, 8489, 8491, 8493, 8495, 8497, 8499, 8501, 8503, 8505, 8507, 8509, 8511, 8513, 8515, 8517, 8519, 8521, 8523, 8525, 8527, 8529, 8531, 8533, 8535, 8537, 8539, 8541, 8543, 8545, 8547, 8549, 8551, 8553, 8555, 8557, 8559, 8561, 8563, 8565, 8567, 8569, 8571, 8573, 8575, 8577, 8579, 8581, 8583, 8585, 8587, 8589, 8591, 8593, 8595, 8597, 8599, 8601, 8603, 8605, 8607, 8609, 8611, 8613, 8615, 8617, 8619, 8621, 8623, 8625, 8627, 8629, 8631, 8633, 8635, 8637, 8639, 8641, 8643, 8645, 8647, 8649, 8651, 8653, 8655, 8657, 8659, 8661, 8663, 8665, 8667, 8669, 8671, 8673, 8675, 8677, 8679, 8681, 8683, 8685, 8687, 8689, 8691, 8693, 8695, 8697, 8699, 8701, 8703, 8705, 8707, 8709, 8711, 8713, 8715, 8717, 8719, 8721, 8723, 8725, 8727, 8729, 8731, 8733, 8735, 8737, 8739, 8741, 8743, 8745, 8747, 8749, 8751, 8753, 8755, 8757, 8759, 8761, 8763, 8765, 8767, 8769, 8771, 8773, 8775, 8777, 8779, 8781, 8783, 8785, 8787, 8789, 8791, 8793, 8795, 8797, 8799, 8801, 8803, 8805, 8807, 8809, 8811, 8813, 8815, 8817, 8819, 8821, 8823, 8825, 8827, 8829, 8831, 8833, 8835, 8837, 8839, 8841, 8843, 8845, 8847, 8849, 8851, 8853, 8855, 8857, 8859, 8861, 8863, 8865, 8867, 8869, 8871, 8873, 8875, 8877, 8879, 8881, 8883, 8885, 8887, 8889, 8891, 8893, 8895, 8897, 8899, 8901, 8903, 8905, 8907, 8909, 8911, 8913, 8915, 8917, 8919, 8921, 8923, 8925, 8927, 8929, 8931, 8933, 8935, 8937, 8939, 8941, 8943, 8945, 8947, 8949, 8951, 8953, 8955, 8957, 8959, 8961, 8963, 8965, 8967, 8969, 8971, 8973, 8975, 8977, 8979, 8981, 8983, 8985, 8987, 8989, 8991, 8993, 8995, 8997, 8999, 9001, 9003, 9005, 9007, 9009, 9011, 9013, 9015, 9017, 9019, 9021, 9023, 9025, 9027, 9029, 9031, 9033, 9035, 9037, 9039, 9041, 9043, 9045, 9047, 9049, 9051, 9053, 9055, 9057, 9059, 9061, 9063, 9065, 9067, 9069, 9071, 9073, 9075, 9077, 9079, 9081, 9083, 9085, 9087, 9089, 9091, 9093, 9095, 9097, 9099, 9101, 9103, 9105, 9107, 9109, 9111, 9113, 9115, 9117, 9119, 9121, 9123, 9125, 9127, 9129, 9131, 9133, 9135, 9137, 9139, 9141, 9143, 9145, 9147, 9149, 9151, 9153, 9155, 9157, 9159, 9161, 9163, 9165, 9167, 9169, 9171, 9173, 9175, 9177, 9179, 9181, 9183, 9185, 9187, 9189, 9191, 9193, 9195, 9197, 9199, 9201, 9203, 9205, 9207, 9209, 9211, 9213, 9215, 9217, 9219, 9221, 9223, 9225, 9227, 9229, 9231, 9233, 9235, 9237, 9239, 9241, 9243, 9245, 9247, 9249, 9251, 9253, 9255, 9257, 9259, 9261, 9263, 9265, 9267, 9269, 9271, 9273, 9275, 9277, 9279, 9281, 9283, 9285, 9287, 9289, 9291, 9293, 9295, 92

Legend	Acres	Activity
Land 1: Mixed Conifer (MC)	55	2024: Commercial Timber 2034: Commercial Timber
Land 2: Mixed Deciduous (MD)	65	2024: Commercial Timber 2034: Commercial Timber
Land 3: Non-Commercial/ Exotic (I)	40	2024: Commercial Timber 2034: Commercial Timber
Land 4: Openings (G)	27	Annual Mowing/ Tree Pl
Land W: Wetlands (W)	27	Protection
TOTAL	214	
Land 5: Farmland	151	None

7 | Page

TRACT SUMMARY

8.22.23

TRACT INFO

5 STANDS

ACRES 160.0

52 PTS

STATISTICAL ANALYSIS

Confidence Interval	90%	BA	TPA	DBH	MHT	MBF	VOLUME PER ACRE	CORDS
Average		135.0	161.0	12.4	47.3	8.70	26.60	
Sampling Error		9.7%	16.8%			20.7%	14.0%	
Probable Lower Limit		121.9	133.9			6.89	23.13	
Probable Upper Limit		148.1	188.1			10.50	30.07	

SPECIES COMPOSITION

	BA	TPA	AVG DBH	AVG MHT	MBF	VOLUME PER ACRE	CORDS	TOTAL TRACT VOLUME	CORDS
	135.0	161.0	12.4	47.3	8.70	26.60		1,391.76	4,255.85
black cherry	24.2 17.9%	24.3	13.5	50.2	1.57	3.77		251.92	603.30
northern red oak	23.5 17.4%	10.7	20.1	63.7	3.08	2.73		492.45	436.68
white pine	16.9 12.5%	15.5	14.1	53.5	1.34	3.94		214.79	629.87
red pine	13.5 10.0%	25.9	9.8	46.6	0.12	4.45		18.51	711.43
black oak	11.2 8.3%	10.6	13.9	53.8	0.97	1.51		155.23	240.82
Austrian pine	9.6 7.1%	12.8	11.8	53.4		3.69			590.61
black locust	9.2 6.8%	25.3	8.2	32.3		1.87			298.42
pignut hickory	5.8 4.3%	5.1	14.4	59.2	0.50	0.70		79.32	112.64
Sooty pine	3.1 2.3%	5.4	10.2	38.0		0.89			142.94
black walnut	2.7 2.0%	3.7	11.5	54.9	0.28	0.31		44.38	49.13
boxelder	2.3 1.7%	6.5	8.1	32.0		0.46			73.83
bigtooth aspen	1.9 1.4%	3.0	10.9	33.6		0.44			70.12
American basswood	1.9 1.4%	3.4	10.2	46.4	0.09	0.29		14.42	46.47
white oak	1.9 1.4%	0.9	19.6	64.0	0.24	0.17		38.01	27.82
Norway spruce	1.5 1.1%	2.0	12.0	48.0		0.56			90.09
red maple	0.8 0.6%	1.6	9.4	48.0	0.03	0.15		5.00	23.30
American elm	0.8 0.6%	1.4	10.1	44.0	0.04	0.11		5.69	17.42
bitternut hickory	0.8 0.6%	0.2	25.8	76.0	0.14	0.06		21.75	10.05
hackberry	0.8 0.6%	1.2	10.7	44.0	0.05	0.11		8.08	18.04
silver maple	0.4 0.3%	0.1	26.0	64.0	0.07	0.07		11.55	11.12
sugar maple	0.4 0.3%	0.5	12.0	40.0		0.09			13.85
eastern cottonwood	0.4 0.3%	0.1	28.0	72.0	0.06	0.04		9.85	6.91
shagbark hickory	0.4 0.3%	0.3	16.0	48.0	0.03	0.04		4.62	6.06
northern pin oak	0.4 0.3%	0.1	26.0	64.0	0.05	0.05		8.40	8.09
honeylocust spp.	0.4 0.3%	0.1	22.0	48.0	0.03	0.06		4.55	9.67

Mark P Janke, Consulting Forester LLC
 Michigan Registered Forester #545
 2676 111th Ave.
 Allegan, MI 49010



Terrain map

Figure 3. Map of the terrain on site:



Resource Descriptions

Resources Common to the Entire Property

The following natural resource elements are applicable to the entire property. Additional resources will be described in more detail for each stand.

Threatened and Endangered Species. The Michigan Natural Features Inventory (MNFI) and The Department of Natural Resources (DNR) report that there are threatened, or endangered species present in the area.

- *Speyeria idalia*, Regal fritillary, last observed 1963, Endangered (Legally protected)
- *Acris blanchardi*, Blanchards cricket frog, Threatened (Legally protected)
- *Lithobates palustris*, Pickerel frog, last observed 2005, Special Concern (Rare or Status uncertain: not legally protected)
- *Scutellaria elliptica*, Hairy skullcap, last observed 1947, Special Concern; not legally protected)

Archeological, Cultural, and Historic Sites. There are NO KNOWN special sites or Archeological sites located on the property. The State Historic Preservation Office database does NOT indicate the presence of historical sites in this section of the Township (www.Michigan.gov/Archaeology). Standard Seven of the American Tree Farm System is Protect Special Sites- “Special sites are managed in ways that recognize their unique historical, archeological, cultural, geological, biological, or ecological characteristics”. Special sites also include unique natural communities, but there are no unique natural communities on this property (mnfi.anr.msu.edu/communities).

Forests of Recognized Importance. This property is not located within a “Forest of Recognized Importance” (FORI), which in Michigan are forests along the Great Lakes coastline, forests along Natural or Wild and Scenic Rivers, rare forest types (old growth), or forests that provide important wildlife habitat (>500 contiguous acres in the southern Lower Peninsula are required habitat for threatened or endangered species statewide). Landowners within a FORI should manage their forest to protect the ecological integrity of that larger important ecosystem.

Management Access. Access to the property for forest management activities will be from Greer Drive and North 37th St to the east or from the corner of 36th and East FG Avenue at the southwest corner of the property.

Wildlife. This diverse property provides especially important wildlife habitat for many species. The diversity provides stable food sources, shelter and nesting habitat, foraging areas, thermal cover, and nesting areas. Forest management activities will improve the wildlife habitat by creating brush piles, leaving cavity trees, and creating a mosaic of conditions across the landscape. Continuing forest management in the future will lead to a more productive forest and better quantity of wildlife species. The list below provides highlights of some of the key species that are present on the property. This list does not include every species as many more are likely present.

Bird Species:

American Robin	Northern Cardinal	Common Grackle
House Finch	American Goldfinch	Baltimore Oriole
Scarlet tanager	White Breasted Nut Hatch	Mallard Duck
Ovenbird	Northern Flicker	Black Capped Chickadee
Wild Turkey	Veery	Bald Eagle
Great Horned Owl	Pileated Woodpecker	Red Bellied Woodpecker
Downy Woodpecker	Scarlet Tanager	Crow

Mammals:

Raccoon	Opossum	Woodchuck
Squirrel	Rabbit	Coyote
Fox	White-tail deer	

Reptiles:

Eastern Gartner Snake	Painted Turtle	Green Frog
Butler's Gartner Snake	Bull Frog	Western Chorus Frog
Northern Ribbon Snake	Eastern American Toad	Eastern Massasauga Snake

Insects:

Honeybees	Butterflies	Multicolored Asian Lady Beetle
Wasps	Ants	Spiders

General Process of Commercial Timber sales

Timber Sale Process: Consulting foresters play a critical role in all areas of forest management. Forest management often involves the harvest of timber to accomplish silvicultural goals. Foresters help by streamlining the entire process including the selection of proper trees based on science, experience, and the stated landowner goals and objectives. In addition, timber sales set up by professional consulting foresters make sure that poor-quality trees are included in the timber sale offering along with some better trees. Prices paid for timber sales offered to the marketplace by consulting foresters often yield higher returns than timber sold by a landowner directly to a timber buyer. There are five basic steps in the timber sale process. The timber sale process can take six to eighteen months, so start planning a year before the desired time of harvest. Spring is often a good time to start preparing for a fall or winter harvest.

Step One: A forest inventory measures the attributes of the forest to determine how to proceed with the sale. This Forest Stewardship Plan does not include this inventory, but the visual stand assessment helps determine when stands are ready for a harvest.

Step Two: The inventory data is used to decide which trees to sell by applying silvicultural methods appropriate for that forest type in accordance with the landowner's goals. The forester should determine which trees to sell, paint those trees at stump and breast height, measure approximate volume, and determine approximate current market value. It is important that the landowner knows the location of their property corners and property lines so that all trees included in the sale are within their property lines. If necessary, a professional boundary survey that locates property corners and marks a few points along property lines is a particularly good investment. This practice minimizes

any conflict with neighbors and avoids unintended timber trespass. Surveyors are expensive, but they are a lot cheaper than lawyers.

Step Three: The forester should advertise your timber sale. The true market value of the trees marked for sale is determined by marketing a prospectus to multiple buyers. The forester would write a prospectus describing the trees for sale and will send it to reputable timber buyers to invite them to inspect the trees for sale prior to bidding.

Step Four: The fourth step is to negotiate a timber sale contract between the landowner and the timber buyer. You and your consulting forester should select the best buyer together based on price and other factors (reputation, timing of the harvest, equipment to be used, etc.), check references of the winning bidder, write a unique contract, collect a performance bond, verify liability and workman's compensation insurance. Full payment is collected for the landowner PRIOR to harvest for a lump sum sale of standing timber. The contract period should include two or even three winters to allow loggers enough time to perform the harvest in suitable conditions. The contract will specify that the harvest is to occur when soil conditions are suitable to minimize potential impacts.

Step Five: The forester should also supervise the timber harvest to ensure the contract is followed. Together with the forester, you and the buyer can determine the best location for skid trails and log landings to accommodate log trucks and harvesting equipment. Consider placing the landing area and skid trails in areas that can be used to service future timber harvests or provide better access for recreational pursuits. Your forester should make visits to the harvesting site during timber harvest to verify performance and help answer questions that the logger may have that arise during the logging. At the end of the harvest the forester will refund the performance bond back to the purchaser after all the conditions of the timber sale contract have been successfully met.

Timber Harvest Methods: Foresters use two categories of timber harvest methods; even-aged and uneven-aged methods. Even-aged methods create a whole new cohort of trees with a similar age throughout the entire stand while uneven-aged methods preserve a large variation in age classes in the stand. Even-aged harvest methods include “shelter-wood” and “clear-cuts” – both of which favor the regeneration of shade intolerant species, such as Aspen, Oak, Cherry or Black walnut that require lots of sunlight for reproduction and survival. Even-aged methods are also used in plantation forestry. Uneven-aged harvest methods include “single tree selection” or “group selection” – both of which favor the regeneration of shade tolerant species like Sugar maple and American beech that can reproduce and survive under full shade. Uneven-aged silvicultural methods will be used on the majority of the units to maintain the diverse age classes and species composition of the forest.

Figure 4: Demonstrates the differences between an even-aged and uneven-aged forest.

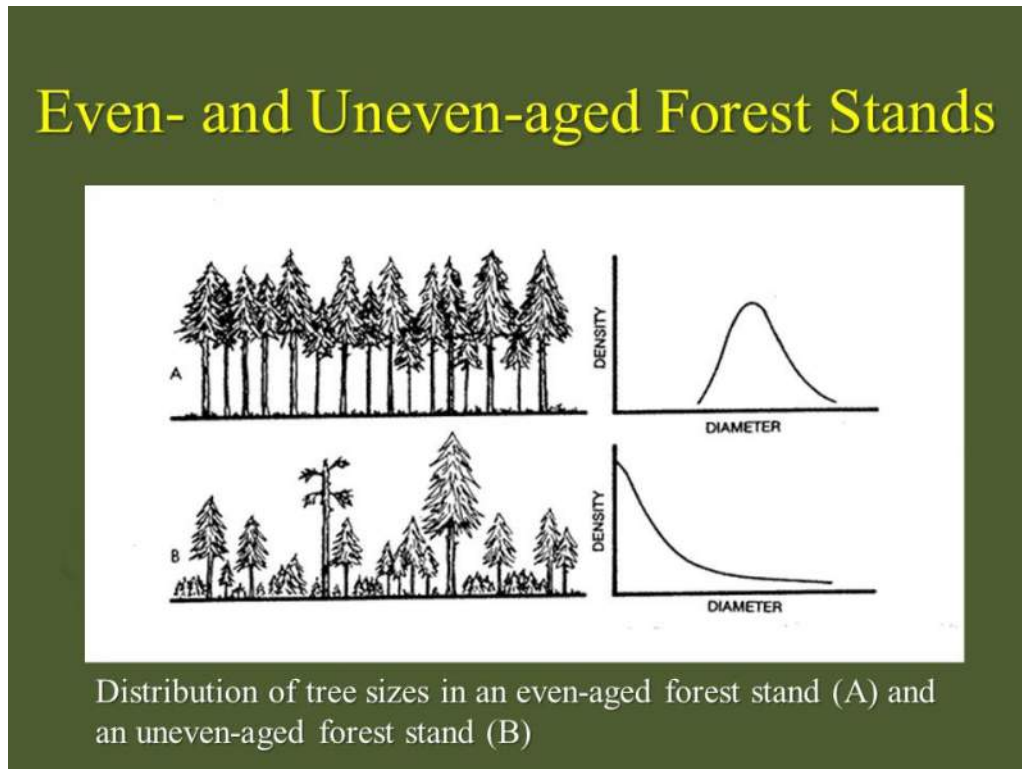


Figure 5: Diagram demonstrating single tree selection.

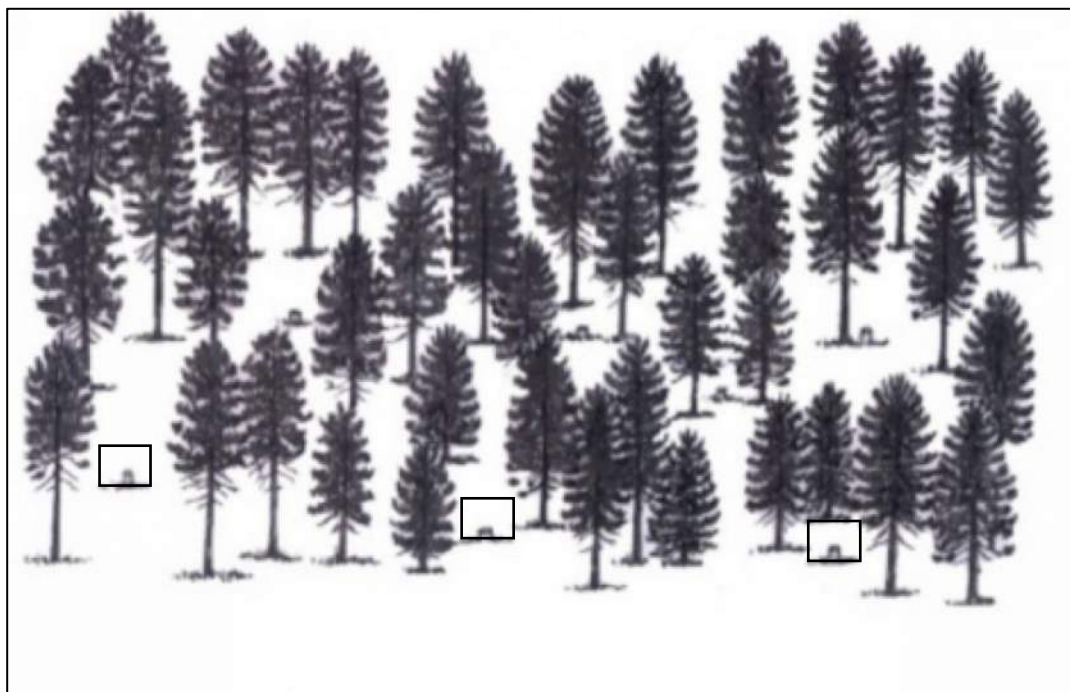
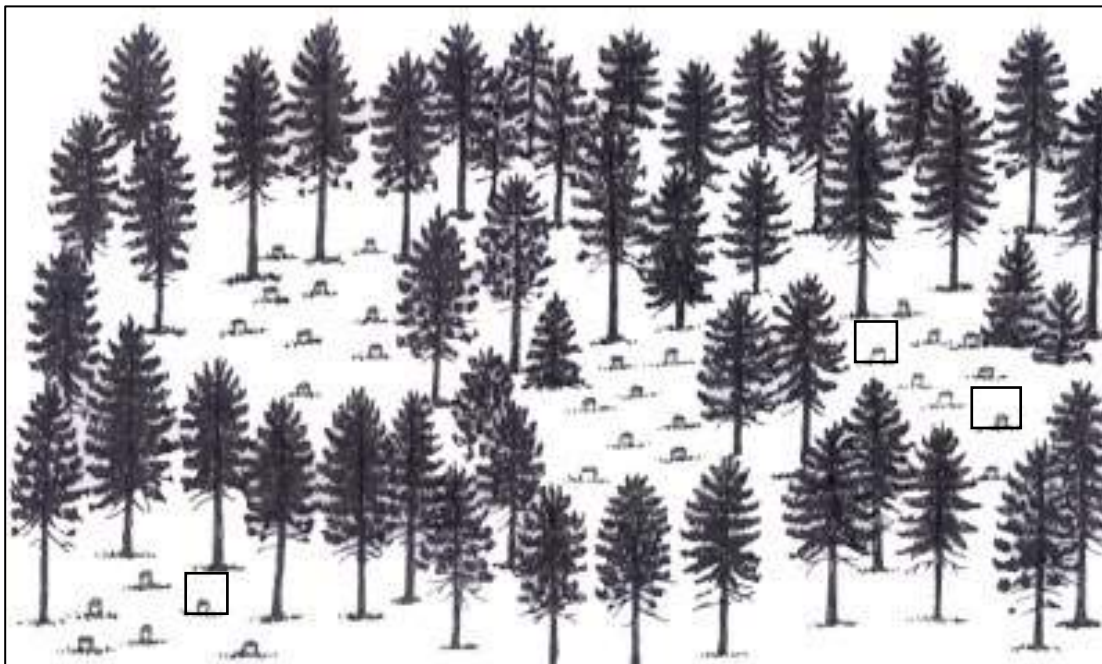


Figure 6: Diagram demonstrating group selection.



Wetlands

According to the National Wetlands Inventory Map Viewer (www.fws.gov/wetlands/data/mapper) there are wetlands present on the property. There are both freshwater emergent wetlands as well as forested wetlands, freshwater ponds, and a riverine included in this parcel.

A permit is not required for typical forest management activities, but a permit is required for filling, dredging, draining, or development. See (www.michigan.gov/deqwetlands) for more information. Any forest management activity near these wetlands should closely follow the “Sustainable Soil and Water Quality Practices on Forest Land.” (Best Management Practices www.michigan.gov/dnr).

Wetlands Map: Figure 7:
(www.fws.gov/wetlands/data/mapper)

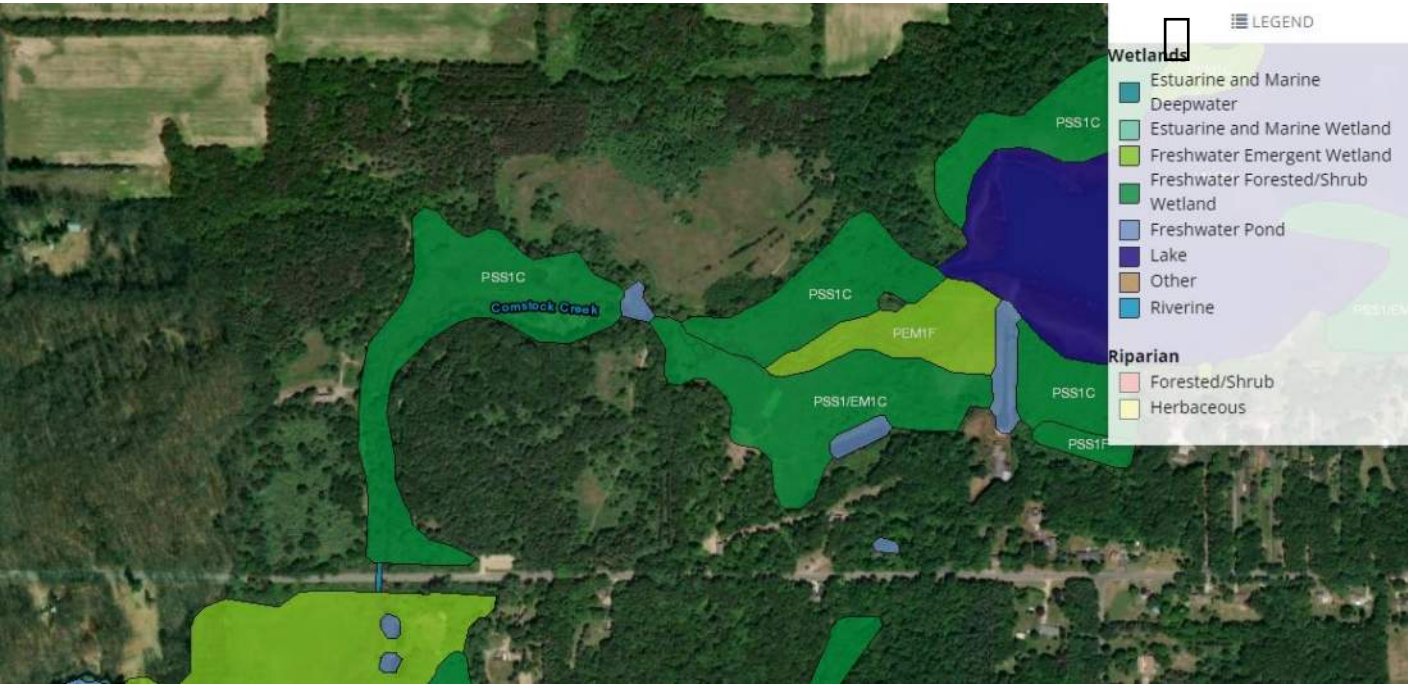


Figure 8: Kalamazoo County website – wetlands designation map:



*Green areas indicate wetlands 27 AC RES

Riparian Management Zone

Riparian management zone (RMZ) is an important consideration for this ownership and should always be adhered to when conducting forest management activities. This property has a natural drain way (Comstock Creek) which flows out of Campbell Lake and eventually discharges into the Kalamazoo River. This is not to mention the importance of the 9 municipal water wells on the property and the influence of surface water to ground water quality. Water quality is the number one objective for the City of Kalamazoo on this ownership. Generally, a 50'-100' buffer zone of untreated or lightly treated vegetation should be maintained on both sides of the natural drainage and important wetland areas. The RMZ helps protect water quality by helping to minimize erosion and run off from heavy rain events. The RMZ is generally narrower on flat terrain and is wider with steeper terrain.



Figure 9- Picture of Campbell Lake and the importance of Riparian zones to protect wetlands.

Soil Map

Figure 10: Soil map:



(Image Source: USDA Web Soil Survey at www.websoilsurvey.nrcs.usda.gov)

Table 2 (A). Legend for Forest Soil Types:

Soil Map—Kalamazoo County, Michigan

City of Kalamazoo- Campbell Lake
Preserve

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HgtahA	Houghton muck, 0 to 1 percent slopes	28.6	7.5%
Hs	Houghton and Sebawa soils, ponded	6.2	1.6%
KaB	Kalamazoo loam, 2 to 6 percent slopes	175.6	46.2%
KaC	Kalamazoo loam, 6 to 12 percent slopes	48.6	12.8%
OsC	Oshemo sandy loam, 6 to 12 percent slopes	19.6	5.2%
OsD	Oshemo sandy loam, 12 to 18 percent slopes	29.3	7.7%
OsE	Oshemo sandy loam, 18 to 35 percent slopes	71.9	18.9%
W	Water	0.2	0.1%
Totals for Area of Interest		380.2	100.0%

Soil

Series Description

NOTE: The various soil types on the property determine the vegetation, economic productivity, potential for wind throw, susceptibility to erosion, and suitability for heavy equipment in active forest management. All management activities should take caution to protect the soil from rutting or erosion into the creek or nearby lake. Utilize Best Management Practices described in the “Sustainable Soil and Water Quality Practices on Forest Land” to protect soil and water quality (www.michigan.gov/PrivateForestLand). The following soil information is adapted from the soil maps and reports on the USDA Web Soil Survey at (www.websoilsurvey.sc.egov.usda.gov)

Oshtemo Sandy Loam: The Oshtemo series consists of very deep, well drained soils formed in stratified loamy and sandy deposits on outwash plains, valley trains, moraines, and beach ridges. Slope ranges from 0 to 35 percent. Most areas are cultivated. Principal crops are small grains, soybeans, corn, and hay. The remainder is in forest or permanent pasture. Native vegetation is hardwood forest of oak, hickory, basswood, and sugar maple.

Houghton Muck: The Houghton series consists of very deep, very poorly drained soils formed in herbaceous organic materials more than 130 cm (51 inches) thick in depressions and drainageways on lake plains, outwash plains, ground moraines, end moraines, till plains, and floodplains. The slope ranges from 0 to 2 percent. This series consists of very little woody vegetation averaging less than 15 percent per control section.

Kalamazoo Loam: The Kalamazoo series consists of very deep, well drained soils formed in loess-influenced loamy outwash overlying sand, loamy sand, or sand and gravel outwash on outwash plains, terraces, valley trains, and low-lying moraines. Slope ranges from 0 to 18 percent. Saturated hydraulic conductivity is moderately low to moderately high in the loamy materials and high in the sandy materials. A large part is cropped to corn, wheat, soybeans, and hay. A small part is in pasture. Some areas adjacent to the larger sites are idle cropland. Native vegetation is forest consisting of Northern red oak, White oak, Black oak, Sugar maple, Black cherry, American basswood, Tulip tree, Red maple, Black walnut, Pignut hickory, and Shagbark hickory.

Table 2 (B: Forest Site Productivity by soil type- Site Index:

Tables – Forest Productivity (Tree Site Index): northern red oak (Schnur 1937 (820)) – Summary By Map Unit				
Summary by Map Unit – Kalamazoo County, Michigan (MI077)				
Map unit symbol	Map unit name	Rating (feet)	Acres in AOI	Percent of AOI
HgtahA	Houghton muck, 0 to 1 percent slopes		28.6	7.5%
Hs	Houghton and Sebewa soils, ponded		6.2	1.6%
KaB	Kalamazoo loam, 2 to 6 percent slopes		175.6	46.2%
KaC	Kalamazoo loam, 6 to 12 percent slopes		48.6	12.8%
OsC	Oshtemo sandy loam, 6 to 12 percent slopes		19.6	5.2%
OsD	Oshtemo sandy loam, 12 to 18 percent slopes	72	29.3	7.7%
OsE	Oshtemo sandy loam, 18 to 35 percent slopes	72	71.9	18.9%
W	Water		0.2	0.1%
Totals for Area of Interest			380.2	100.0%
Description – Forest Productivity (Tree Site Index)				
The "site index" is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands.				
This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this attribute, only the representative value is used.				
Rating Options – Forest Productivity (Tree Site Index): northern red oak (Schnur 1937 (820))				
Units of Measure: feet				
Tree: northern red oak				
Site Index Base: Schnur 1937 (820)				
Aggregation Method: Dominant Component				
Component Percent Cutoff: None Specified				
Tie-break Rule: Higher				
Interpret Nulls as Zero: No				

Stand 1- MC Mixed Conifer (50 acres) – green outlined areas.



Narrative Description: Stand 1 is comprised of mixed conifer plantations of various ages. Many of these plantings were done on very rugged, and highly erodible land in an effort to slow down erosion that is very apparent throughout this site. Each of these areas have a slightly different species compositions but in general the species that are present in this unit are Scotch pine, Red pine, Eastern white pine, Austrian Pine, White spruce and Norway spruce. Of these species, only two, Eastern white pine and Red pine, are native to southwest Michigan. Scotch pine, Austrian pine and Norway spruce are all Exotic species. There appears to have been no prior forest management treatment performed in these areas since they were planted, and they are now very much overrun with a heavy invasive species understory component and are in various stages of decline. In total this unit consists of about 50 acres in total. There are volunteer native hardwoods that are now mixed into these mixed-conifer areas. This has increased the area's value for wildlife, increased overall diversity and erosion has been significantly mitigated. The mixed-conifer component represents primarily an even-aged

forest condition as these pockets were planted on open, likely farm or pasture land and to help mitigate soil erosion.

Successional Trend: The successional trend of this stand is toward a gradual conversion to native hardwood species along with invasive brush. The hardwood species mixed into these mixed-conifer areas consist of Black locust, Black oak, Red maple, Black cherry, Boxelder, Hickory, Red oak, White oak, Sugar maple, Cottonwood, Aspen, American elm, Honey locust, Hackberry and Norway maple. The brush species consists primarily of autumn olive, honeysuckle, multiflora rose, barberry and oriental bittersweet. Most of the conifer species are in various stages of decline and there are large numbers of dead and dying trees of all conifer species except the Eastern white pine. The primary reason for this is that Eastern white pine is a shade tolerant species and can tolerate the dense conditions that the unmanaged conifer plantings are in. Also, Eastern white pine is a native species in southwest Michigan, while the other conifer species are exotic species that are non-native and have many insect and disease issues. Also, Red pine, Scotch pine and Austrian pine are INTOLERANT of shade. With the shade intolerant species, as the trees grow in diameter, they require increasingly more space and thinning should be done. Since this did not happen, these entire stands have been under stress for so long that salvage is about the only option. Therefore, the focus should be on removing most of the conifers, except for the Eastern white pine, controlling invasive species elements and regenerating native hardwood species. This will be a challenge due to very rugged terrain, the amount of deadwood and debris on the forest floor, the amount of heavy invasive brush species combined with primary use of this City property being the City of Kalamazoo's water supply and the area being part of the highly used Fred McLinden Nature Trails.

Objective: The objective for this management unit is for the multiple values of WATER, recreation, wildlife and finally for the production of timber and sequestration of carbon. These are extremely high use areas, and the goal should be to move in the direction of sustainable forest management and away from the past idea of benign neglect and an appearance of resource protection. These areas are sick and need to be restored.

Soil and Water: This stand is located on loamy sand which is well-drained and well suited for forestry activities. Slopes range from 6 to 35 percent. Some of this unit will need to serve as a filter strip between active forest management activities such as timber harvesting and the more fragile wetland areas that are adjacent to portions of this stand. Best Management Practices (BMP) guidelines should be adhered to when setting up any land management activity.

Timber: The various pockets referred to as Stand 1 are primarily even-aged mixed conifer plantations with diameter distributions of 0 to 26" DBH. The stand is presently in an overstocked condition which is limiting forest growth and overall forest health. Economics aside, a professionally administered timber harvest should be done to salvage these declining areas and to work toward regenerating native mixed hardwoods. Maintaining some of the Eastern white pine will add to the diversity of the stand and increase the aesthetic quality of these areas.

Tree Size Class: Average 12” DBH of primarily pole sized mixed conifers with some pockets of larger diameter white pines.

Stand Density: The stand density (Basal Area) is 189 ft²/acre. 70-90 ft²/acre is optimum.

Forest Health: The overall health of this stand is very poor. This is due to the amount of invasive brush species and the fact that these conifer plantations haven’t been managed and are declining rapidly. There are various oak species in this stand, but Oak-wilt was not observed in this stand. The abundance of invasive species on this entire ownership is incredible and unfortunate. Invasive species is the primary forest health concern on many Southwest Michigan forests and Oriental bittersweet is the most pressing forest health issue to address and it is found throughout this until along with Honeysuckle, Multiflora rose & Autumn olive.

Figure 11: Diameter Distribution of Stand 1 Timber:

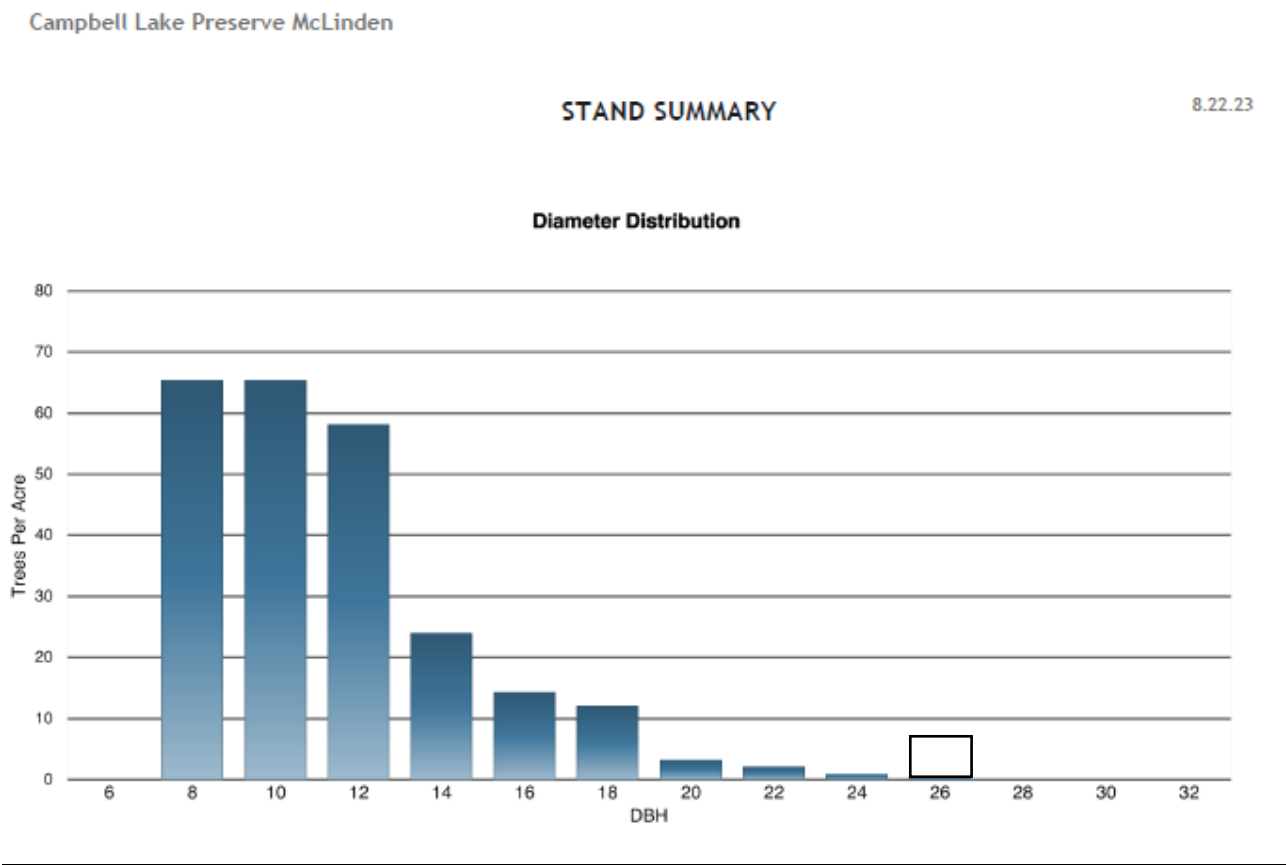
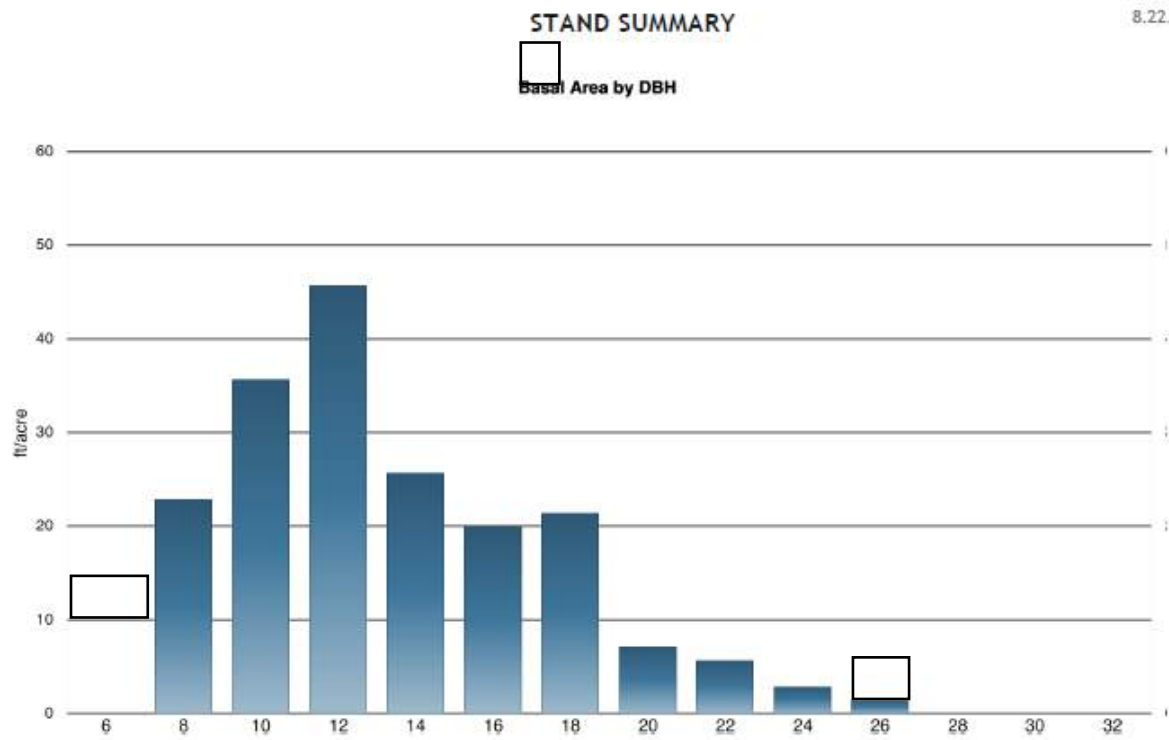
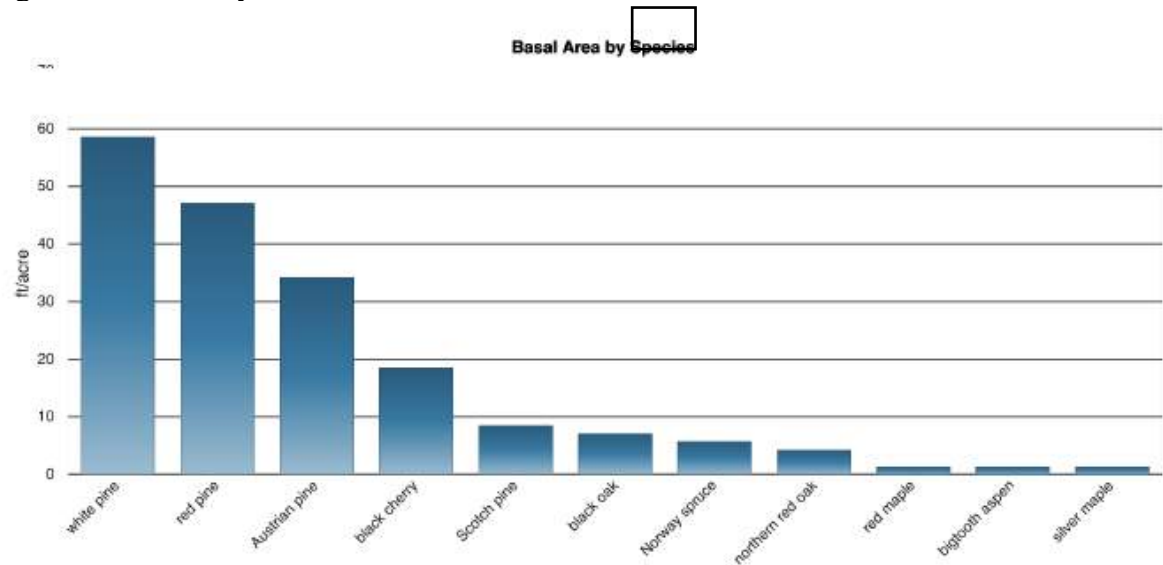


Figure 12: Summary of Stand 1 Basal Area:



Stand #1 Forest Inventory information:

Campbell Lake Preserve McLinden

STAND SUMMARY

8.22.23

STAND 1 MC upland mixed conifer

ACRES 50.0

STATISTICAL ANALYSIS

Confidence Interval	90%	BA	TPA	DBH	MHT	VOLUME PER ACRE			
						MBF	CORDS		
Average		188.6	246.4	11.8	49.8	6.56	42.93		
Sampling Error		13.2%	23.2%			40.2%	17.5%		
Probable Lower Limit		163.7	189.3			3.92	35.41		
Probable Upper Limit		213.4	303.6			9.20	50.44		

SPECIES COMPOSITION

	BA		TPA	AVG DBH	AVG MHT	VOLUME PER ACRE		TOTAL STAND VOLUME	
						MBF	CORDS	MBF	CORDS
	188.6		246.4	11.8	49.8	6.56	42.93	328.16	2,146.39
white pine	58.6	31.1%	55.6	13.9	53.5	3.60	11.03	179.86	551.37
red pine	47.1	25.0%	92.9	9.6	47.0	0.30	12.50	15.05	625.09
Austrian pine	34.3	18.2%	46.0	11.7	53.7		10.44		521.78
black cherry	18.6	9.8%	14.9	15.1	56.0	1.70	2.49	84.76	124.53
Sooty pine	8.6	4.5%	13.5	10.8	37.3		2.08		104.02
black oak	7.1	3.8%	7.5	13.3	44.8	0.41	1.14	20.33	56.92
Norway spruce	5.7	3.0%	7.3	12.0	48.0		1.64		81.90
northern red oak	4.3	2.3%	5.2	12.3	45.3	0.26	0.78	13.12	38.83
red maple	1.4	0.8%	1.8	12.0	56.0	0.09	0.18	4.55	9.02
bigtooth aspen	1.4	0.8%	1.3	14.0	56.0		0.46		22.84
silver maple	1.4	0.8%	0.4	26.0	64.0	0.21	0.20	10.50	10.11

Stand 1- Management Recommendations

Activity 1-1: We recommend a commercial salvage/ conifer timber harvest to remove exotic component which is in decline and to improve conditions for the regeneration and release of native hardwood species, while maintaining as much of the viable Eastern white pine component as possible. This is primarily a salvage operation, and the appearance post-harvest will be dramatically changed with so many of the trees needing to be removed. It will be important to treat invasive species prior to the harvest and plan on repeated follow-up treatments. The invasive elements need to be dealt with in conjunction with the salvage harvest to truly improve these areas for the long term. Viable and native hardwood species such as oak, hickory, maple and cherry exist in these stands should be maintained and post-harvest supplemental tree planting is also recommended.

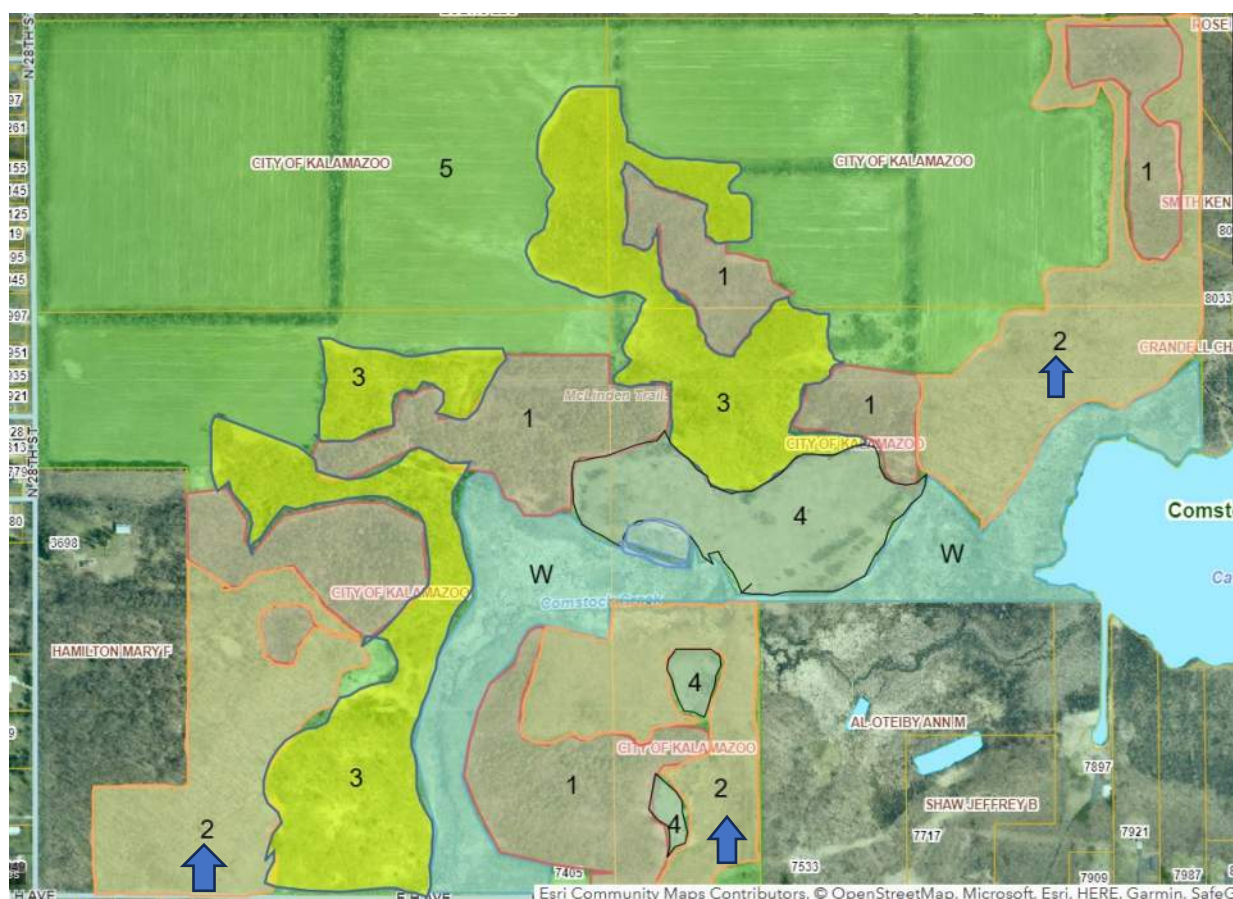
Timber Harvest Objectives: The primary objective for any timber sale is to improve the forest, as defined according to the values of the landowner and the attributes of the forest. A timber sale should improve the species composition and growing conditions of remaining trees for future timber sales. One of the many benefits of managing a forest for sustainable timber production is that it is very compatible with other goals such as wildlife management, forest health, etc. Due to the extreme and undesirable condition that these mixed conifer pockets are in, the focus should be on salvaging the usable conifers and re- establishing a new mix of native hardwoods and Eastern white pines in their place. This will not be an easy task as the “stand conditions” are extreme, the quality of the material to salvage is very low and markets for the mixed conifers (soft wood) are sparse or nonexistent. One of the problems is that the softwood markets that do exist in Michigan are well over 100 miles to the north, so freight costs are often prohibitive and the mechanized crews that can do this kind of work rarely come this far south. Even if this type of harvest becomes feasible, the large amount of deadwood and possibly certain species types such as the Scotch pine would remain. The means that additional mechanized equipment might need to be contracted to mulch up the downed and unusable material. Typically, these are large skid-steer machines with a “Fecon type” attachment that mulches up the otherwise unable woody material where it can be disbursed on the ground which improves soil quality and improves access for follow up forest management activities as well as for recreation. As foresters, our priority is to improve the forest composition by implementing treatments that encourage native species types and to keep healthy, quality trees in the forest. A salvage Timber sale will improve wildlife habitat, improve recreational access, improve forest health, and allow for regeneration to occur. In this instance, we need to start over with these areas, but I recommend trying to maintain the native oaks and hardwoods that have volunteered that can be saved along with the viable Eastern white pines that can be left and then supplementing with planting hardwoods in the understory. Invasive species control will need to be a part of this strategy as will using tree shelters for the planted trees to protect them from deer and also mark the tree locations for periodic maintenance for the first several years after establishment until the trees are “free to grow” Tree species to plant should be a diverse mixture of Black walnut, Red oak, White oak, Sugar maple, Red maple, Tulip poplar and Hickory.

Timber Sale Timing: I recommend this stand is harvested within the next year as with more time will be more tree mortality. Also, the sooner the salvage work can be done, the sooner the stand will be able to recover from the harvest disturbance and new trees established and/or released. This salvage Mixed-conifer harvest should be done consistent with this plan and should be marked, set up

and administered by a consulting forester that can best represent the interests of the City of Kalamazoo and with a knowledge of timber harvesting systems and their implementation.

Activity 1-2: Tree establishment. Following the timber harvest, a crop-tree spacing of approximately 20' by 20' should be the target. Interplanting the sparsely stocked areas with native seedlings/transplants should be considered after the invasive component is dealt with. At this spacing, approximately 100 crop trees per acres would result. Planting 10-20% more trees than the recommendation would be wise to account for losses of planted trees due to a variety of causes such as drought, deer damage, equipment, etc. Species to plant should be mixed with 50% being of the oak variety and 50% all other species types.

Stand 2 – MD- Mixed Deciduous



Narrative Description: Stand 2 is a 65-acre (MD) Mixed Deciduous that is extremely mixed in terms of species composition, density, terrain, and age. The diameter distribution of this stand ranges from sapling sized trees to well over 32". This stand is in a very mature condition and has stand densities that are well beyond the recommended range for a healthy forest. Economically, this stand has the highest value trees and greatest potential for long term forest management of any on the Campbell Lake Preserve ownership. The unit includes areas that have likely always been forest along with areas that have grown into forests from openings/pasture or farm fields that were abandoned well over 50

years ago. There has been no apparent prior forest management in this stand and over mature trees dominate. The primary species are Red oak, Black cherry, Hickory, Red maple and a mix of other species including a small amount of Black walnut. Invasive species occupy virtually all the understory with Japanese Barberry and Honeysuckle being the most common species. Hiking trails are common throughout much of this stand and the stand has high value for many wildlife species. There are many dead trees in this stand, and some have fallen and are obstructing the hiking trails and restricting access. With the over mature condition of this stand, this situation will continue to get worse with time and timber value is being lost. From a carbon sequestration perspective, dead trees that are not utilized release carbon into the atmosphere as they deteriorate. Utilizing the usable wood by putting the wood into products, locks up the carbon for many years. The site index is 72 for Red oak which means this is a good quality site for growing hardwood timber.

Successional Trend: The successional trend for this stand is a gradual conversion to the more shade-tolerant maple and hickory genus as far as trees are concerned. This means the dominant oak presence will continue to decrease over time, especially in absence timber harvesting that opens the forest floor to allow the sun loving oaks a chance to regenerate. Also, Invasive species, which are also shade tolerant, have been allowed to flourish and are absolutely “out of control”. It is not an overstatement to note that many of these areas are nearly impenetrable to access for most humans. If the trails were not maintained in this stand, parts of it may not be accessible at all. Human forest management intervention is needed to alter the trajectory of the declining condition of this stand with good forest management potential.

Objective: The primary objective for this stand is to manage a healthy and sustainable stand of high-quality hardwoods on a sustainable basis that also meet the city’s goals for water production and recreation. The best way to accomplish this is by periodic harvest of the mature and overmature trees and timber stand improvement activities with a big emphasis on controlling the tremendous number of invasive species. The stand is currently overstocked with a density of 125 sq. ft. per acre, so timber harvest is recommended to bring the stand back into the recommended range of 70-90 sq. ft. per acre. As a forester, seeing the need for invasive species control, my recommendation is to put revenue from a timber sale into an account to fund other forest management work such as treating invasive species, mulching downed wood and invasive elements, application of approved pesticides and supplemental tree planting.

Soil and Water: The primary soil type for this stand is Oshtemo sandy loam with slopes ranging from 18 to 35 percent. This soil composition is well suited for timber harvesting activities during much of the year, however caution should always be exercised to avoid harvest operations during unseasonably wet periods such as late winter thaw or during periods when heavy spring rains are common, especially since this stand has some rather steep terrain.

Timber: Stand 2 is a previously unmanaged mixed deciduous (MD) stand which consists primarily Red oak along with an assortment of other hardwood species such as Black cherry, Black walnut Hickory, and Red maple. The stand is an uneven-aged stand with diameters ranging from 6 to over 32 DBH. The current basal area of this stand is about 125 feet²/acre which illustrates that the stand is presently in an overstocked condition. Generally, once trees reach 20-22” DBH, they are at their peak for productivity and then trees begin a slowdown in growth rates. The Optimum density for maximum productivity for an uneven-aged timber stand, and to maintain overall forest health, is between 70-90

feet²/acre This site will continue to produce high quality mixed hardwoods with Forest management practices being employed, as long as it is sustainably managed on a periodic basis and the treatment is set up, marked and administered by a Registered Forester, who has the best interest of the City of Kalamazoo’s objectives in mind.

Tree Size Class: 6”-32” DBH with many trees presently considered overmature.

Stand Density: 125 feet²/acre.

Figure 13: Diameter Distribution of Stand 2 Timber:

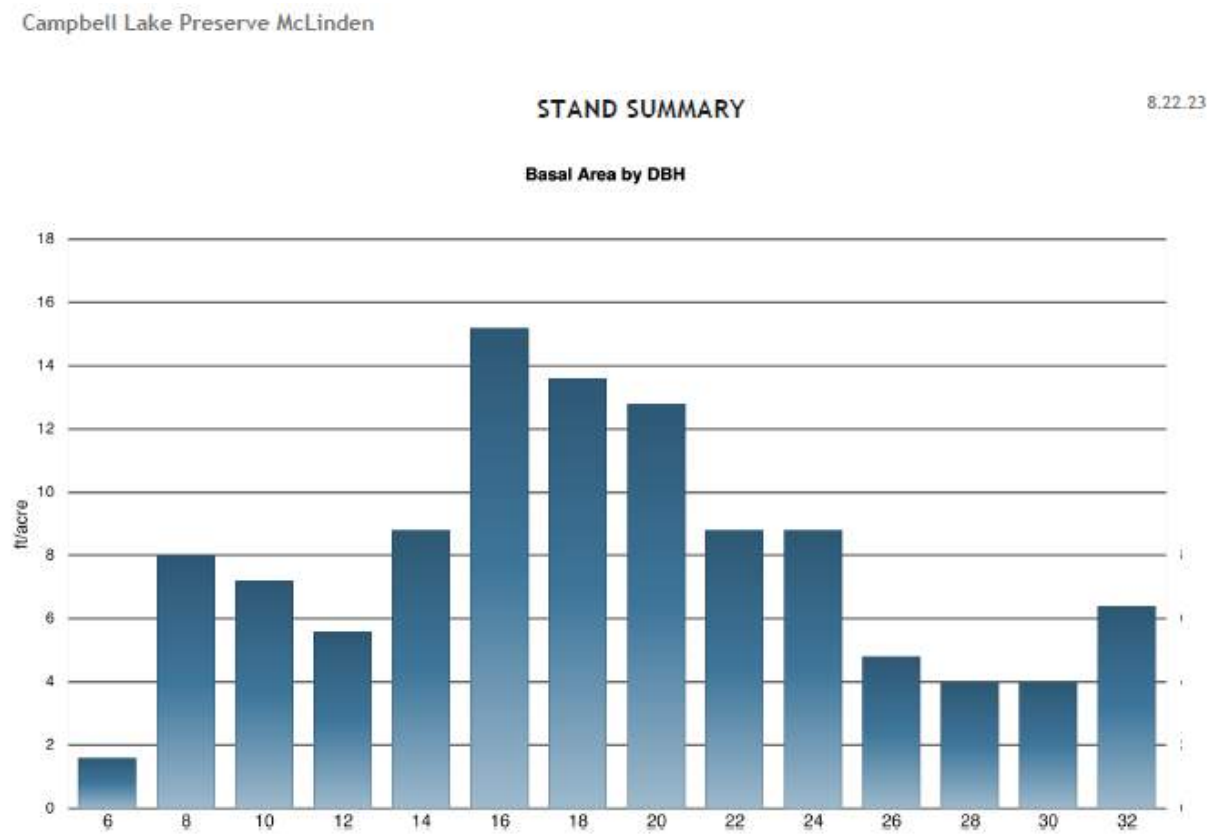
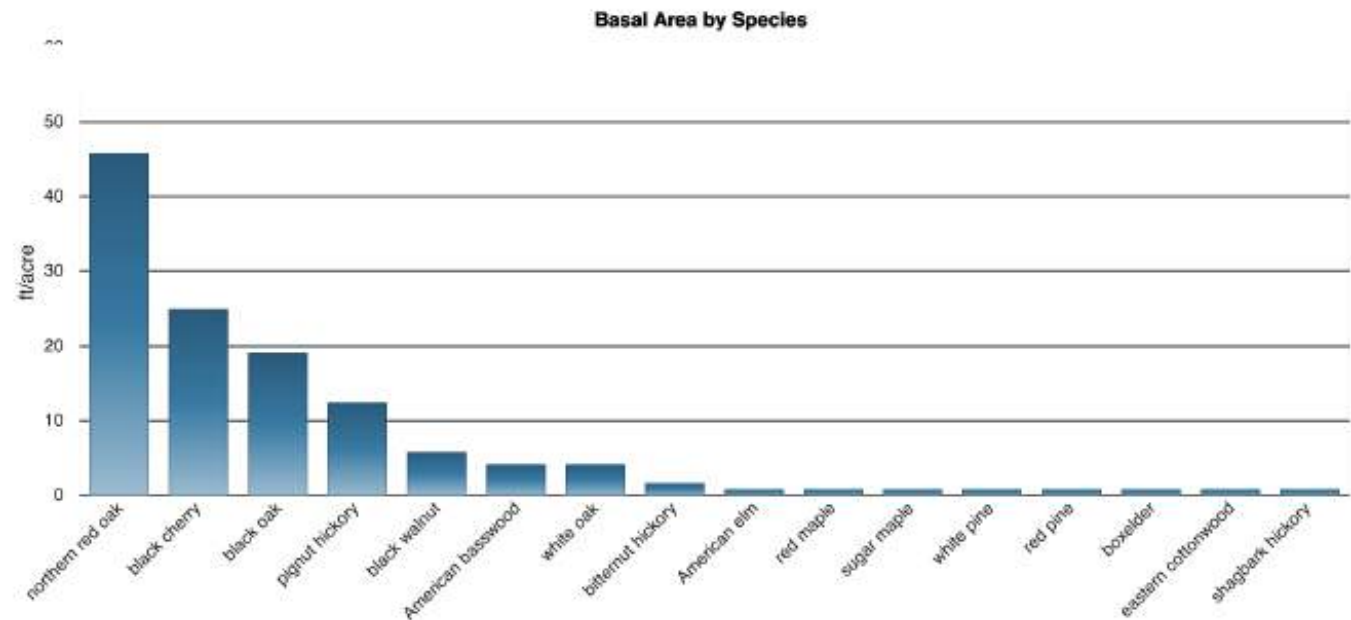


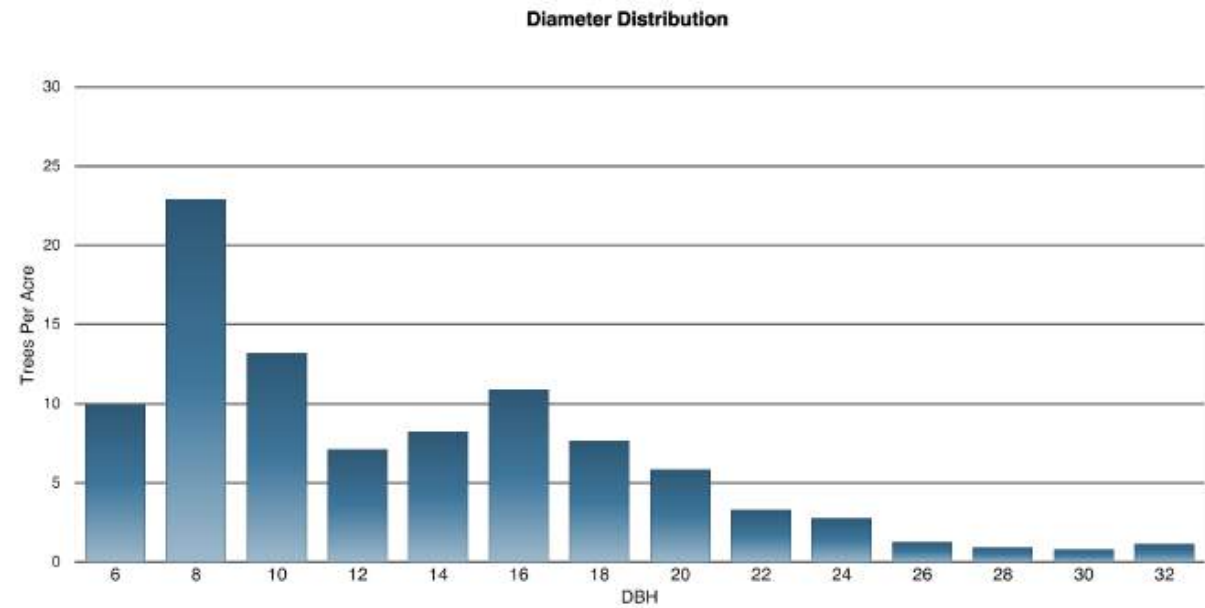
Figure 14: Summary of Stand 2 Basal Area:



Campbell Lake Preserve McLinden

STAND SUMMARY

8.22.23



Stand 2- Management Recommendations

Activity 2-1: Selective Timber Harvest

Timber Harvest Objectives: A selective harvest is recommended for this stand which would remove some of the largest diameter trees that are declining in health and are considered overmature. These trees are taking up valuable growing space from intermediate sized trees that can are healthier and are able to grow higher quality timber at a faster rate. Red oak, Black cherry, Hickory, Black walnut and a mix of other varieties should be included in this harvest. As Foresters, we would remove over mature trees along with trees with defect and signs of decline and leave the healthiest and high-quality specimens for the future. A sustainable harvest now, leaving the most desirable growing stock of primarily 6-22" DBH trees at a proper density will improve the forest for timber, wildlife, recreation, aesthetics, and long-term ecological sustainability.

Activity 2-2: Timber Stand Improvement (TSI)

Invasive species control: This will be a very important component of the long-term sustainability and health of the entire Campbell Lake Preserve property. Invasive species treatments usually involve the use of registered pesticides and along with mechanical control as well. With the production of water from the city wells being paramount, the use of effective chemicals to control invasives may be severely limited. City officials will need to employ the best science to determine what materials can be used to manage these aggressive invasive species. Alternate biological controls may need to be investigated but are not easily employed. I understand some are experimenting with Goats to control invasive species, but they may also consume the native desirable elements and I am not sure how practical this would be on such a high-use public property. Dealing with invasive species will be a long-term issue and it would be unwise to rely on a single treatment or technique as a cure-all. These aggressive Invasive species are sadly here to stay and needs to be integrated into the management of all of the city properties.

Stand #2 Forest Inventory Information

Campbell Lake Preserve McLinden

STAND SUMMARY

8.22.23

STAND 2 MD mixed Deciduous

ACRES 65.0

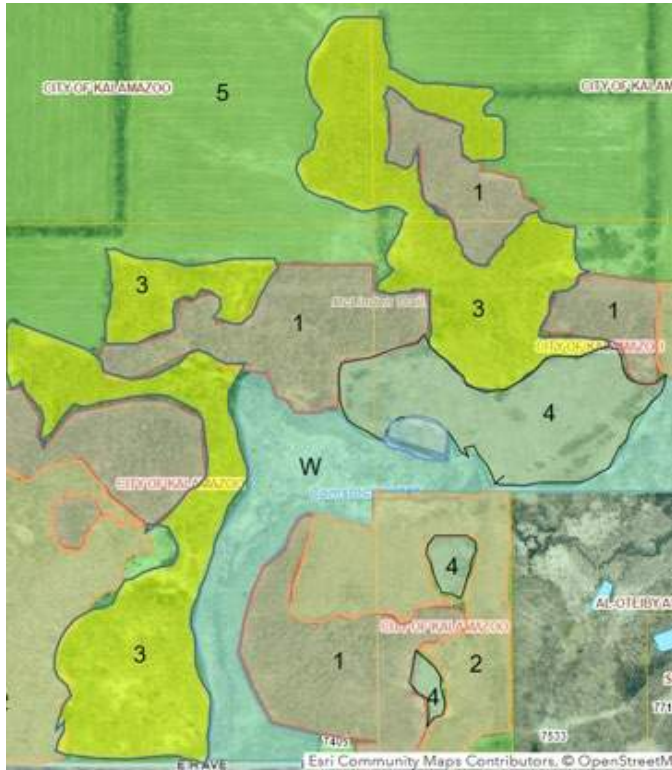
STATISTICAL ANALYSIS

Confidence Interval	90%	BA	TPA	DBH	MHT	VOLUME PER ACRE	
						MBF	CORDS
Average		125.0	101.8	15.0	55.0	14.28	17.31
Sampling Error		12.2%	21.7%			18.0%	12.8%
Probable Lower Limit		109.7	79.7			11.72	15.09
Probable Upper Limit		140.3	123.8			16.84	19.52

SPECIES COMPOSITION

	BA		TPA	AVG DBH	AVG MHT	VOLUME PER ACRE		TOTAL STAND VOLUME	
						MBF	CORDS	MBF	CORDS
	125.0		101.8	15.0	55.0	14.28	17.31	928.15	1,124.90
northern red oak	45.8	36.7%	16.8	22.4	65.6	7.27	5.52	472.58	358.80
black cherry	25.0	20.0%	29.1	12.5	52.8	1.64	4.14	106.59	269.38
black oak	19.2	15.3%	18.1	13.9	55.7	1.94	2.65	126.24	172.57
pignut hickory	12.5	10.0%	11.1	14.4	59.2	1.22	1.73	79.32	112.64
black walnut	5.8	4.7%	8.1	11.5	54.9	0.68	0.76	44.38	49.13
American basswood	4.2	3.3%	7.3	10.2	46.4	0.22	0.71	14.42	46.47
white oak	4.2	3.3%	2.0	19.6	64.0	0.58	0.43	38.01	27.82
bitternut hickory	1.7	1.3%	0.5	25.8	76.0	0.33	0.15	21.75	10.05
American elm	0.8	0.7%	0.6	16.0	56.0	0.09	0.08	5.69	5.09
red maple	0.8	0.7%	2.4	8.0	40.0		0.21		13.38
sugar maple	0.8	0.7%	1.1	12.0	40.0		0.21		13.85
white pine	0.8	0.7%	0.6	16.0	56.0	0.07	0.12	4.68	7.59
red pine	0.8	0.7%	1.1	12.0	48.0		0.24		15.53
boxelder	0.8	0.7%	2.4	8.0	24.0		0.15		9.63
eastern cottonwood	0.8	0.7%	0.2	28.0	72.0	0.15	0.11	9.85	6.91
shagbark hickory	0.8	0.7%	0.6	16.0	48.0	0.07	0.09	4.62	6.06

Stand 3 - Local Use (Various non-commercial or exotic 40 acres.



Narrative Description: Stand 3 is 40 acres of extremely varied forest land with a mix of species types, ages, conditions and that is of very low quality for the most part. These areas were extensively disturbed in years past and are thick with invasive species such as Oriental bittersweet, Honeysuckle, Autumn olive as well as a good amount of non-native tree species such as Black locust, Scotch pine, and Austrian pine. In addition, a mixture of common native species that are generally of early successional nature came into the more open conditions that existed many years ago such as Black cherry, Northern Red oak, Black oak and Aspen and Boxelder. We rarely see Boxelder, except in highly disturbed sites such as in municipalities, excavated sites and sometimes growing on lower ground that was previously farmed and then abandoned. This management unit has the lowest value and much of it would be considered non-commercial from the forest products perspective. Much of this unit is quite steep in terrain with extensive evidence of erosion that has been mitigated naturally by the aggressive growth of species known to occupy these eroded areas such as Black locust. Some of the areas are quite open with open grown multiple stemmed Black cherry. These are of very low value, due to form and defect. Other parts of this unit are transition areas that lie along the wetland type (W) or next to the planted conifers or more mature Mixed deciduous (Stands 1 & 2). Some of these open areas contain widely spaced Black walnut growing in a grassier environment where the Ash trees have all been wiped out from Emerald Ash Borer in the last 10 years. The topography of this stand ranges from 0-35%, so is highly variable. The average stocking level has the Basal area at over 100ft² per acre but varies widely. The Site index for this management unit is 72 for Red oak, so good potential exists with proper management and a lot of expense controlling invasive species and doing non-commercial and site rehabilitation work in this stand.

Successional Trend: Much of this stand is considered early successional forest that is gradually moving into a more advanced stage of development with more native species. This site was extensively disturbed and may have been pastured many years ago which may have led to the large amount of erosion that followed the pasturing. When pasturing was curtailed, the site gradually became vegetated by whatever seed was carried or blown in. The species that invaded this site were predominantly Black cherry, a very sun living variety, along with a mix of other species that are listed in the inventory data. The introduction and expansion of invasive species into the area made for a perfect storm of forest management obstacles that are not easily corrected. This coupled with the explosion of white-tailed deer numbers have radically altered the ecosystem of this stand, but also the entire Campbell Lake Preserve ownership.

Objective: The primary objective for Stand 3 long term is to improve its overall vegetative composition to native mixed hardwood species such as Northern red oak, Hickory, Walnut, Black cherry, etc. and work to control the large invasive species component. This is going to be a huge challenge and is likely only possible with the extensive use of Registered pesticides, mechanical control measures in combination with improvement harvest and replanting of preferred native species such as White oak, Red oak, Hickory and Black walnut. These efforts will gradually help bring these areas back into a more sustainable and aesthetically desirable part of the ownership. Long term, the recommendation is to maintain these stands in the 70-90 sq. ft. per acre basal area range and to do selective harvests at about 10-15-year intervals. In addition, the group selection technique is appropriate to purposefully create more open conditions in pockets where oaks are present. The Oak Genus requires a great amount of sunlight. Invasive species control should be a component of any management treatment as additional sunlight will also stimulate these unwanted species.

Soil and Water: The soils of this stand are made up of primarily Oshtemo and Kalamazoo loam soils and a mix of slopes from 0-35%. These soils have favorable characteristics for forest management activities and the use of heavy mechanical equipment during much of the year, however caution should always be exercised to avoid harvest operations during unseasonably wet periods such as late winter thaw or during periods when heavy spring rains are common, especially since this stand has some rather steep terrain.

Timber: This extremely varied forest stand is comprised of a mix of species including Northern red oak, Black locust, Black cherry, Hickory, Walnut, Boxelder, Aspen and a mix of others. The oak species should be favored in this stand as much as possible. The present quality of Timber is very low due to the high percentage of open grown Cherry and oak along with exotic species such as Black locust and undesirable noncommercial species such as Boxelder. The diameter distribution ranges from about 12 inches in diameter to about 32. However, there is a significant gap in the distribution with no trees sampled from 20 – 24 inches in diameter. The stand is dominated by white oak and red oak with smaller sugar maple and red maples in the understory. There is also a significant presence of intermediate sized white pine in the area.

Tree Size Class: Diameter distribution ranges from 6" to 24"

Stand Density: Basal area is estimated at about 100 ft²/acre.

Forest Health: The overall health of this stand is very poor due to a huge invasive species component found throughout. Invasive species is the primary forest health concern on many Southwest Michigan forests and Oriental bittersweet seems to be the most pressing forest health issue to address along with Honeysuckle, Multiflora rose & Autumn olive.



Figure 15 Oriental Bittersweet in understory and winding up into the canopy.

Figure 16: Diameter Distribution of Stand 3 Timber:

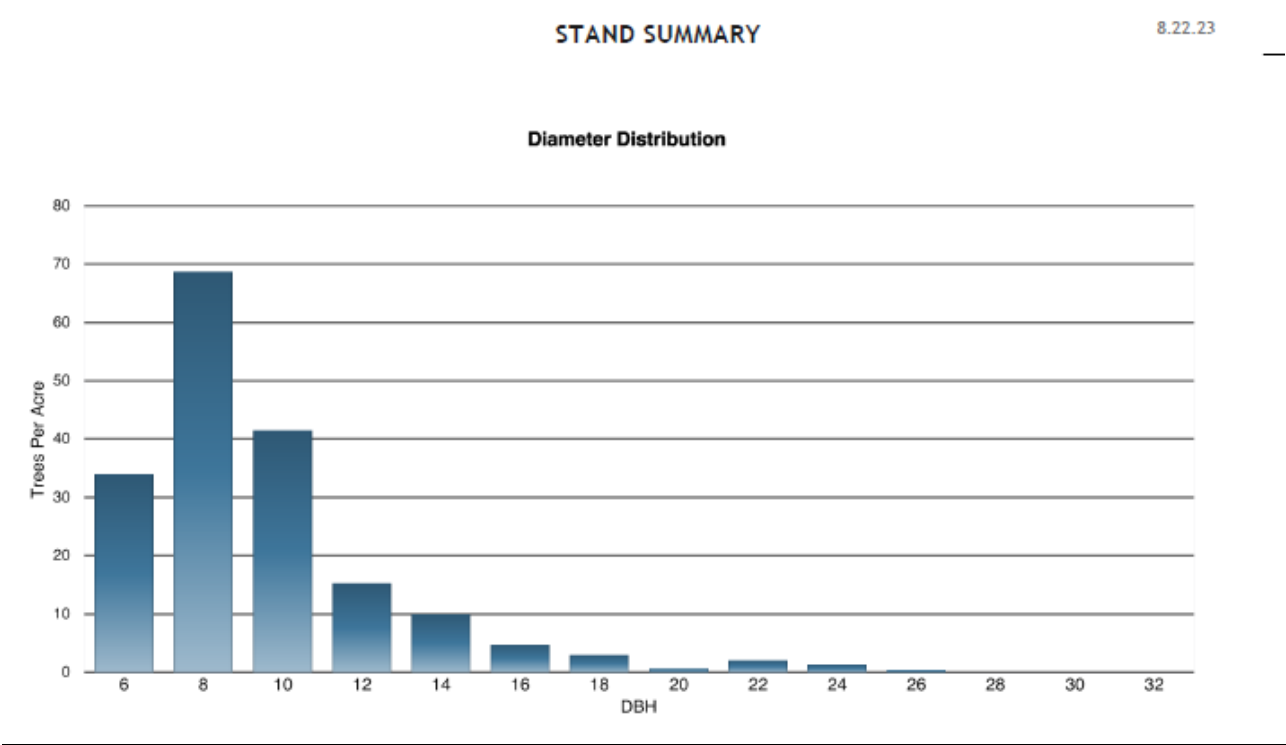
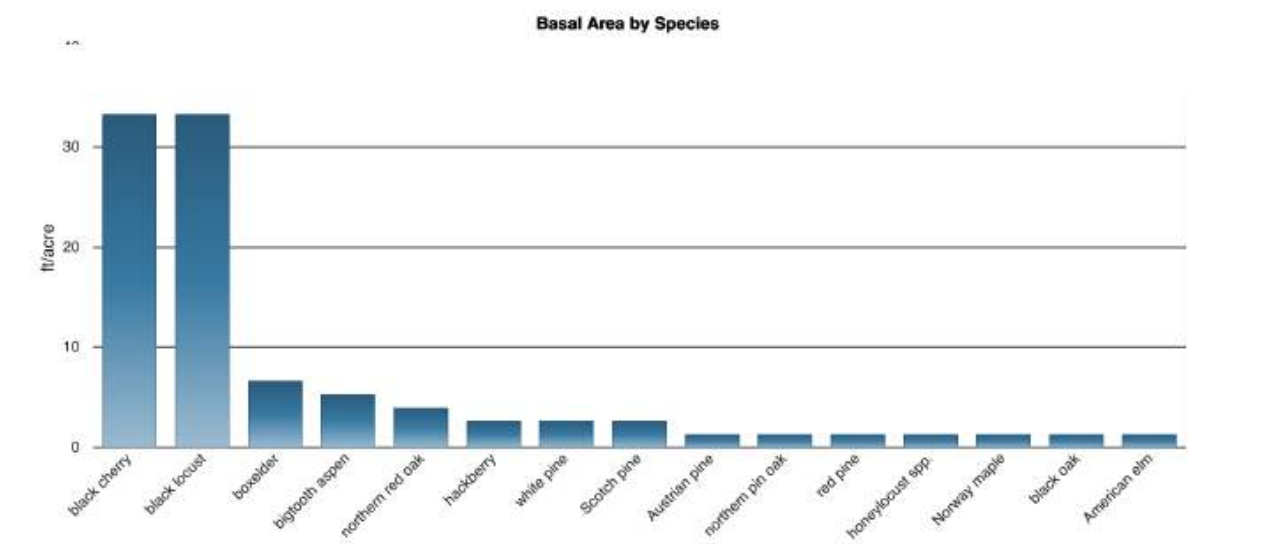


Figure 17: Summary of Stand 3 Basal Area:



Stand 3- Management Recommendations

Activity 3-1: Non-Commercial salvage /Commercial Selection and Group Selection Timber Harvest to make way for an establishment of a younger native stand to be established. The treatment will focus on leaving viable oak, hickory, walnut, maple and other native hardwood species and removing

the undesirable, defective or overmature trees. The residual basal area will be widely variable from 20- 80 ft² per acre, removing a mix of mature, overmature and declining trees to favor the healthiest trees for the long-term management of the forest and allowing for open areas to reforest with desirable native species.

Timber Harvest Objectives: The primary objective for any timber sale is to improve the forest, as defined according to the values of the landowner and the attributes of the forest. A timber sale should improve the species composition and growing conditions of remaining trees for future timber sales. In this instance we are wanting to focus management efforts on the growth and regeneration of all oak species along with Hickory, Red maple, Black Cherry and White pine. Over time, shade tolerant species such as the Red maple, Hickory and White pine can overtake the important oaks that are the most important species in this forest community. Forest management efforts should focus on creating openings or pockets in the canopy that will allow shade intolerant species such as Red and White oak to have an opportunity to prosper and regenerate. Timber harvests also improve the area for many species of wildlife and provide food, cover and a more diverse vegetative condition.

Timber Sale Timing: We recommend this stand is harvested within the next year or two in conjunction with Stands 1 and 2 if possible as it would be very difficult to market trees in this stand on its own. Any harvest should be done consistent with this plan and should be marked, set up and administered by a consulting forester that can best represent the interests of the City of Kalamazoo.

Stand #3 – Forest Inventory Information

Campbell Lake Preserve McLinden

STAND SUMMARY

8.22.23

STAND 3 I non-commercial/Exotic

ACRES 40.0

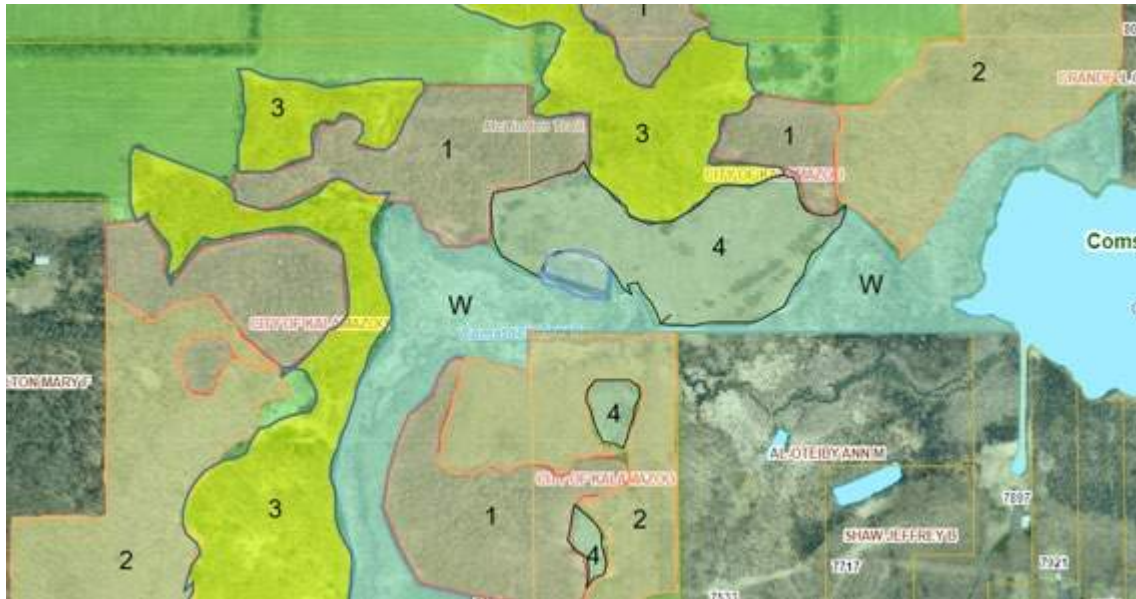
STATISTICAL ANALYSIS

Confidence Interval	90%	BA	TPA	DBH	MHT	VOLUME PER ACRE	
						MBF	CORDS
Average		100.0	181.6	10.0	35.9	2.47	19.80
Sampling Error		17.5%	31.5%			35.9%	17.7%
Probable Lower Limit		82.5	124.3			1.58	16.30
Probable Upper Limit		117.5	238.8			3.36	23.30

SPECIES COMPOSITION

	BA	TPA	AVG DBH	AVG MHT	VOLUME PER ACRE		TOTAL STAND VOLUME	
					MBF	CORDS	MBF	CORDS
	100.0	181.6	10.0	35.9	2.47	19.80	98.81	792.08
black cherry	33.3 33.3%	37.7	12.7	41.9	1.29	6.10	51.64	243.84
black locust	33.3 33.3%	90.1	8.2	32.6		7.30		291.98
boxelder	6.7 6.7%	18.7	8.1	33.6		1.50		59.92
bigtooth aspen	5.3 5.3%	9.0	10.4	28.0		1.05		42.00
northern red oak	4.0 4.0%	5.4	11.7	48.0	0.13	0.82	5.07	32.82
hackberry	2.7 2.7%	4.2	10.7	44.0	0.19	0.42	7.54	16.84
white pine	2.7 2.7%	1.0	21.7	52.0	0.29	0.37	11.44	14.72
Sooty pine	2.7 2.7%	6.3	8.8	40.0		0.67		26.62
Austrian pine	1.3 1.3%	1.2	14.0	48.0		0.39		15.54
northern pin oak	1.3 1.3%	0.4	26.0	64.0	0.20	0.19	7.84	7.55
red pine	1.3 1.3%	1.2	14.0	32.0	0.05	0.19	1.82	7.75
honeylocust spp.	1.3 1.3%	0.5	22.0	48.0	0.11	0.23	4.25	9.02
Norway maple	1.3 1.3%	1.2	14.0	40.0	0.08	0.17	3.02	6.69
black oak	1.3 1.3%	0.8	18.0	56.0	0.15	0.13	6.18	5.27
American elm	1.3 1.3%	3.8	8.0	32.0		0.29		11.51

Stand 4- Openings (G)



Narrative Description: This management unit is dominated by Grassy openings (G). This area consists of about 27 acres in total, with one larger opening of about 23 acres and 2 very small opening of about 2 acres each. There has been expressed interest in tree planting and these areas are the most logical areas to reforest. That said, the grasses, exotics and other competing vegetation would need to be controlled before planting and there needs to be a plan for controlling competing vegetation for 2-3 years following the planting to increase the success of the planting effort. The selection of species to consider planting should be matched to the soil type and preferences of the City of Kalamazoo. I would recommend native species such as Northern Red oak, White oak, Bur oak, Swamp white oak, Hickory, Sugar maple and Tulip poplar. Some Eastern white pine could be planted as well to add an element of species diversity. The larger opening might be the best opportunity for tree planting, while a consideration for the smaller 2 openings would be to plant them to pollinator habitat (wildflowers) or warm or cool season grasses. This would nicely break up the property and provide excellent wildlife habitat. I think the larger unit may also be broken up to include several tree plantings scheduled over several years with about 25% of the total area to be planted and maintained as grasses/pollinator habitat.

Successional Trend:

The natural successional trend is for these openings to become established with the early successional species that are shade intolerant such as Black cherry, Aspen, Tulip poplar, Black locust along with various oak species. In fact, this process is already happening as the openings are gradually filling in with an assortment of invasive species, brush and a mix of natural hardwoods. These species will compete for sunlight and fill open space in the openings over the course of several decades. There is an abundant seedbank along the entire perimeter of the openings. Over time, more shade tolerant species varieties may filter into these areas but that is a long way off. At the current time, working to control invasive species elements is key to improving the productivity

of this important 27-acre unit. Invasive species control, along with the restoration, replanting and maintenance efforts will improve the trajectory of long-term sustainability of this area going forward. With that being said, the importance of maintaining some of the openings as openings will add to the overall diversity of the property. This may include the establishment of native grasses and shrubs along deciduous and conifer trees that are well suited to the site conditions at the Campbell Lake Preserve. The successional trend will be accelerated by tree plantings that will take place in the following years.

Objective: The primary objective for this stand is reforestation of native species such as white oak, black oak, red oak, black cherry, hickory, and other suitable primarily hardwood varieties. While natural regeneration will continue to occur as a part of natural plant succession, the City of Kalamazoo is committed to plant trees on its properties to protect water quality and as an offset against hazard trees within the City limits that need to be removed for various reasons. The tree varieties that are selected must be indigenous species that are well matched with the Kalamazoo Loam soil type. From the research and from our experience, a wide variety of trees species such as with Northern red oak, White oak, Black oak, Sugar maple, Black cherry, American basswood, Tulip poplar, Red maple, Black walnut, and Hickory are good options and a mix of 4-8 species in a planting block is very desirable. These planting sites will need to be prepped for planting by mowing and by controlling competing vegetation prior to the actual planting and at least annual mowing between the rows of trees for another 2 to 3 years is recommended. These measures give the trees an advantage and help them to compete with unwanted or invasive vegetation that is well adapted to the site. Invasive species will need to be controlled as well. Applying herbicide to undesirable vegetation and invasive woody shrubs will be needed for seedlings to eventually become “free to grow” when they reach 4-6’ in height. The tree planting process should include protection against deer browsing as well. This can be in the form of tree shelters that are placed around the trees at the time of planting or possibly a deer repellent called *TriCo Pro*, that research has determined may provide control for up to six months of control and is essentially very safe form of sheep fat... In addition, lethal means of deer control are highly recommended. Finally, deer fences or deer exclosures might be a consideration if all other methods are unsuccessful. This option is very expensive and may be very hard to maintain based on the amount of public recreation that this site receives.

Soil and Water:

The soil in this stand is comprised of Kalamazoo Loam with lesser amounts of Houghton Muck. The Kalamazoo soil series consists of very deep, well drained soils formed on loamy outwash overlying sand, gravel outwash etc. This soil series is well drained but there is a moderate potential for surface runoff depending on slope gradients. A large component of this soil series is cropped to corn, wheat, soybeans, and hay. The native vegetation is forest stocked with Northern red oak, White oak, Black oak, Sugar maple, Black cherry, American basswood, Tulip poplar, Red maple, Black walnut, and Hickory. The site index for Black oak is 68 with an expected yield to be produced of 50 ft³/ac/yr.

The Houghton soil series consists of very deep, very poorly drained soils formed in herbaceous organic materials more than 51 inches thick. The majority of these soils are used in cropland or pasture. Common crops are onions, lettuce, potatoes, mint, and corn. The native vegetation is primarily marsh grasses, sedges, reeds, buttonbush, and cattail, with some water-tolerant trees near

the margins. No site index or annual growth is available for Houghton soil types. No tree planting is recommended on this soil type.

Timber: Following tree planting it will take several decades for this stand to produce merchantable timber.

Stand 4- Management Recommendations

Activity 4-1: Tree Planting (2024)

Reforestation (Tree Planting): The primary objective for tree planting is to find what species are best suited to the site by considering the owner's objectives and the overall site conditions. In some cases, the best way to determine this is by conducting soil samples and considering what is already seeding into the site naturally and what the topographic conditions are. Soil samples can give an idea of how well these soils are drained and what nutrients and organic material are present. In the end, the soils information along with other mentioned factors will aid in determining which species are conducive to growing well in these areas.

We recommend the initial tree planting to be approximately 5 acres in the eastern-most portion of the 23-acre opening. We recommend an 8' by 8' spacing, which is about 680 trees to be planted per acre or about 3,400 trees altogether. This part of the 23-acre opening is closest to Comstock Lake and it has wetland soil types to the south and to the east. The tree planting will help protect water quality and be an excellent land use. Realistically, spring 2024 should involve site preparation activities with the goal of planting trees in the fall of 2024. We recommend ordering and planting about 5-7 species types depending on availability. We would target 3 species of oak along with 2-3 other mixed hardwood species and one conifer species (Eastern white pine).

Activity 4-2: Tree Planting (2025)

Reforestation (Tree Planting)

We recommend the 2nd tree planting to be approximately 5 acres, just west of the first planting in the eastern-most portion of the 23-acre opening. We recommend an 8' by 8' spacing, which is about 680 trees to be planted per acre or about 3,400 trees altogether. Realistically, fall of 2024 should involve site preparation activities with the goal of planting trees in the Spring of 2025. We recommend ordering and planting about 5-7 species types depending on availability. We would target 3 species of oak along with 2-3 other mixed hardwood species and one conifer species (Eastern white pine).

Activity 4-3: Tree Planting (2026)

Reforestation (Tree Planting)

We recommend the 3rd tree planting to be approximately 5 acres in the western-most portion of the 23-acre opening. We recommend an 8' by 8' spacing, which is about 680 trees to be planted per acre or about 3,400 trees altogether. Realistically, fall of 2025 should involve site preparation activities with the goal of planting trees in the Spring of 2026. We recommend ordering and planting about 5-

7 species types depending on availability. We would target 3 species of oak along with 2-3 other mixed hardwood species and one conifer species (Eastern white pine).

Activity 4-4: Tree Planting assessment

Evaluate planting objectives and success. Fill in the first 3 blocks with trees that are damaged or did not survive. Also consider the remaining area to be maintained as openings/ grasslands. Begin site preparation activities for the next round of tree planting or grassland establishment.

Stand 5- Wetland(s)



Narrative Description: This 27-acre Management Unit is considered Wetlands, which is the most important feature of this unique property. In fact, writing a forest management plan to address the importance of forests in the protection of water quality cannot be overstated. Forest lands described in this plan completely border all portions of this diverse unit. This unit includes important drainages including Campbell Lake and its outlet to Comstock Creek which flow southward to Shoonover Lake. Comstock Creek and Campbell Lake are immensely important and are near the City of Kalamazoo. Also, the high recreational use of the property and the primary use as a water wellfield is a unique attribute that is rarely considered in a Forest Management plan that deals with trees and vegetation above the surface. The relationships between surface water quality and the water quality of the drinking water produced at the Campbell Lake (Fred Linden Nature Preserve) wellfield is critical and the importance of forests protecting surface water quality is only recently being more understood. The city is taking a lead role with its properties and is a model of connecting forest stewardship with protecting water quality, both at the surface and underground. Forest management prescriptions and treatments will prioritize the protection of water quality and limiting soil erosion by employing the Michigan Department of Natural Resources - Best Management Practices for water quality. Wetlands provide several other benefits including incredible wildlife habitat and enriching the diversity of the adjacent forest lands covered in this plan. This is a forestry

plan so, as foresters, our specialty and expertise are not in managing the wetlands themselves, but in recognizing their importance and prescribing management practices that help protect and sustain these most important and most fragile parts of the ecosystem.

Objective: Due to the fragile nature of this unit, no forest management treatments are appropriate, and “PROTECTION” of this valuable resource is our objective as foresters and indeed that of the City of Kalamazoo.

Soil and Water: The soil in this management unit are exclusively Houghton series soils which are flat and mostly inundated by water the year around.

Timber: N/A

Stand 5- Management Recommendations: N/A

Desired Future Conditions

Forestry management activities are meant to accomplish the landowner’s goals for that stand and to bring about desired future conditions for the forest. The goals for the entire property include recreation, maintaining aesthetics, conducting sustainable timber harvests, maintaining excellent wildlife habitat, and protecting soil and water quality.

General Activities for the Entire Property

Activity 0-1: Consider joining American Tree Farm System and Michigan Forest Association.

The American Tree Farm System (www.treefarmssystem.org) provides forest “certification” to verify that forests are sustainably managed. Certified forest products sometimes have a higher retail price, but do not often generate higher prices for the forest owner. The minimum requirements are ten acres of forest, a current written management plan, compliance with the eight principles of the American Tree Farm System (listed in the Appendix), and a free inspection by a certified Tree Farm Inspector. There is no additional cost for you after this Forest Stewardship Plan is written.



You may also want to consider joining other forest landowner groups. According to USFS research, only 4% of non-industrial, private forest owners have a written forest management plan (Butler, 2008). Your investment in this management plan puts you into an elite group of forest owners! I believe that you may enjoy spending time with other active and involved forest owners. The Michigan Forest Association (MFA) is an organization of private forest owners in Michigan and costs around \$40 in annual dues (www.michiganforests.com). MFA provides useful forest management information (magazines, newsletters, emails) and opportunities for networking with other landowners (annual conferences, workshops, and field days).

Activity 0-2: Monitor Forest Health Annually

Forest health is an issue of moderate concern with Emerald ash borer already present and a potential for Oak wilt. I recommend monitoring the forest regularly (each year and during different seasons) for changes that may indicate additional insect or disease problems. The “Forest Health Highlights”

publication about forest insects and diseases is a great resource updated annually and available at www.michigan.gov/foresthealth. There are several new insects and diseases that are not yet present in Michigan but are in nearby states, so landowners should monitor their forest and report any unusual problems to the DNR for an early response (Asian longhorn beetle for maple, Thousand cankers of walnut, etc.). To report an unusual insect or disease in your forest, please contact Roger Mech, the DNR Forest Health Monitoring Specialist, at MechR@michigan.gov, or 517-243-0300.

Integrated Pest Management (IPM) should be practiced protecting soil and water. IPM requires correctly identifying pests, setting an economic or action threshold, and then implementing the best method to control the pest. IPM actions may include cultural, mechanical, biological, and chemical controls. Chemical pesticides are a useful tool but should not be the first or only choice to control pests. For example, the best way to prevent Oak wilt is the cultural practice of not wounding oaks between April and July. If Oak wilt does become established, the primary action is a mechanical control of severing roots to prevent the spread of the fungus through root grafts.

Asian longhorn beetle on maple trees: This disease is not in Michigan yet but because Sugar maple and red maple populations are present on the ownership it is a good idea to be aware of this potential forest health issue.

Emerald ash borer: The Emerald ash borer (EAB) is an exotic pest that is attracted to both healthy and dying ash trees. All living ash trees ≥ 16 " DBH should be included in the next timber sale. Harvest smaller diameter ash trees for firewood. This County is within the Level One Quarantine Area so logs or firewood cannot legally leave the Lower Peninsula. Girdled trees could be left standing to provide tall snags for wildlife, but ash crowns quickly become brittle and fall apart. See www.emeraldashborer.info for more information about EAB.

Oak wilt: Oak wilt is caused by a fungus that can be transported by bark beetles, but more commonly is spread by root grafts. The Red oak group of oaks (Red oak, Black oak, Pin oak) is more susceptible to oak wilt than the White oak group of oaks (White oak, Bur oak, Swamp white oak, Chinkapin oak). It is a better option to work toward preventing Oak wilt in the first place than it is to treat a stand after infection. One preventative measure that the Michigan DNR recommends is to avoid harvest activity during the three-month period when the beetles are most active. The beetles that can spread the disease are typically most active from April to July when the trees are most actively growing. Ideally, Timber sales that are conducted in the fall or winter months are best, but this is not always possible due to wet soils, timber markets or other competing uses of the forest. Oak wilt incidences vary across the State of Michigan. There are many oak areas in Michigan where Oak wilt has not been confirmed and Oak wilt transmission risk would be extremely low. However, treating oak stands near where there are confirmed Oak wilt incidences, it would be particularly important to avoid pruning or wounding to oak trees during the three-month window previously stated. <http://na.fs.fed.us/fhp/ow/>. (See appendix for a map of Oak wilt distribution in the state)

Beech bark disease: Beech bark disease (BBD) is initiated by a scale insect that attaches to the tree and feeds on its sap. The tiny scale (~1 mm) secretes a white, wooly, waxy covering and the trunks look like they are covered in white powder. The scale feeding damage allows a fungus to invade the tree, which inhibits the flow of sap, which causes a general decline in tree health and eventually kills the tree. Controlling the natural spread of BBD is not feasible because both the scale and fungus are moved by the wind. If the scale is not in your forest, consider reducing the amount of

beech in your forest so that beech is <20% of the stand basal area. If beech scale is already present, harvest the infected trees. Do not move infested firewood as this will spread the scale and fungus that causes beech bark disease. See <http://na.fs.fed.us/fhp/bbd/>. (See appendix for a map of BBD distribution in the state)

Forest Health: Invasive species such as autumn olive, oriental bittersweet, honeysuckle and multiflora rose can quickly overtake this stand limiting growth and regeneration of native species. More information on invasive species can be found at: <https://mnfi.anr.msu.edu/publications/best-control-practice-guides>.

Summary Table

The previously recommended activities are summarized in Table 1. This table includes space for you to make notes about your management decisions over the next twenty years. See the descriptions above for the proper season to conduct management activities. The timing of timber sales should be based primarily upon biological considerations like stand age, density, and forest health issues, but timing can be modified by several years according to other factors including economics (timber prices, income needs, and taxes) or landowner preferences.

Table 2. Summary of Recommended Management Activities for the Next Twenty Years

Stand	#	Acres	Activity Description	Dates		Silvicultural System
				Planned	Complete	
Entire Forest	0-1		Join Tree Farm	2024		
Entire Forest	0-2		Monitor Forest Health	Annual		
Entire Forest	0-3	187	Invasive species Control	ASAP		
1	1-1	121	Timber harvest	2024-6		Selective/ group selection
2	2-1	4	Timber harvest	2024-6		Selective/ group selection
3	3-1	29	Timber harvest	2024-6		Selective/ group selection
4	4-1	5	Tree planting	2024		8' by 8' spacing 6 species (3400 trees)
4	4-2	5	Tree Planting	2025		8' by 8' spacing 6 species (3400 trees)
4	4.3	5	Tree Planting	2026		8' by 8' spacing 6 species (3400 trees)
4	4-4	8	Evaluate Planting - fill in	2027		
5	5	27	PROTECTION	2024-2033		

After the Harvest

After a commercial timber harvest has occurred there will be slash left behind on the ground. [Slash is typically the tops of trees that are too small in diameter to be usable as sawlogs, are not straight enough to saw or are damaged in the logging process- this is region/mill/logger specific]. To some people this slash could look unappealing, but to natural resource professionals slash is an important part of the local ecosystem. The slash will provide protective cover for small mammals from predators as well as protective cover for natural regeneration from deer. Slash is also an especially important part of nutrient cycling for the forest.

Monitoring

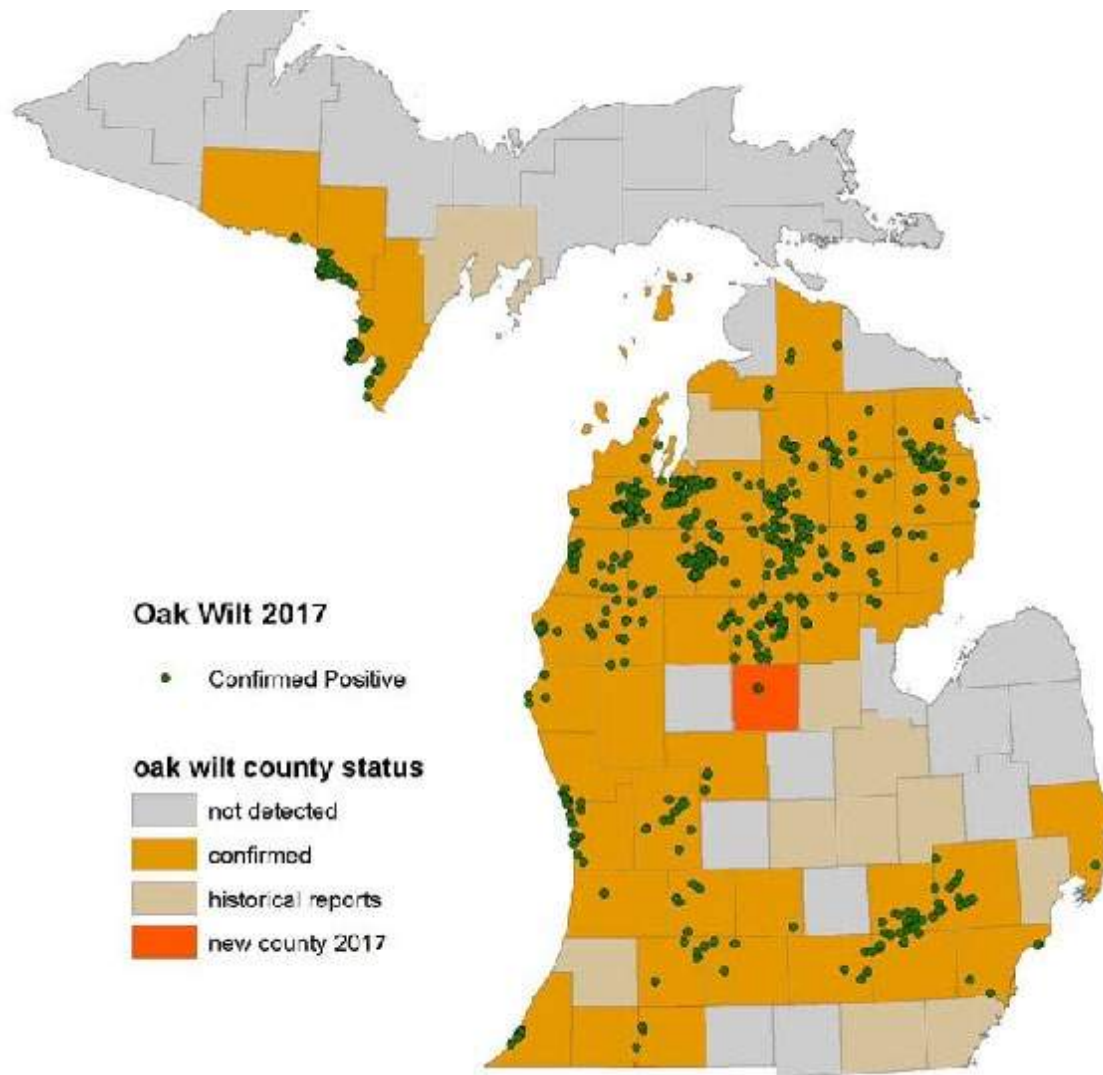
The successful implementation of this Forest Stewardship Plan is dependent upon frequent monitoring by the landowner. The landowner or their agent (consulting forester) should walk the entire forest at least annually to inspect the forest for changes and to evaluate the success of earlier management activities. Monitoring for forest health issues should occur more frequently, at least two or three times a year, to look for signs and symptoms of insects or disease during different seasons. All Forest Stewardship Plans should also be adaptable and flexible enough to accommodate changes in landowner goals or forest resources over the ten to twenty-year planning period. Plans for the Commercial Forest Program must allow for record keeping of silvicultural practices and amendments due to unexpected events or natural disasters. Please use the table at the end of this plan to record notes and make modifications to this plan as needed.

Appendix – General Forestry Information

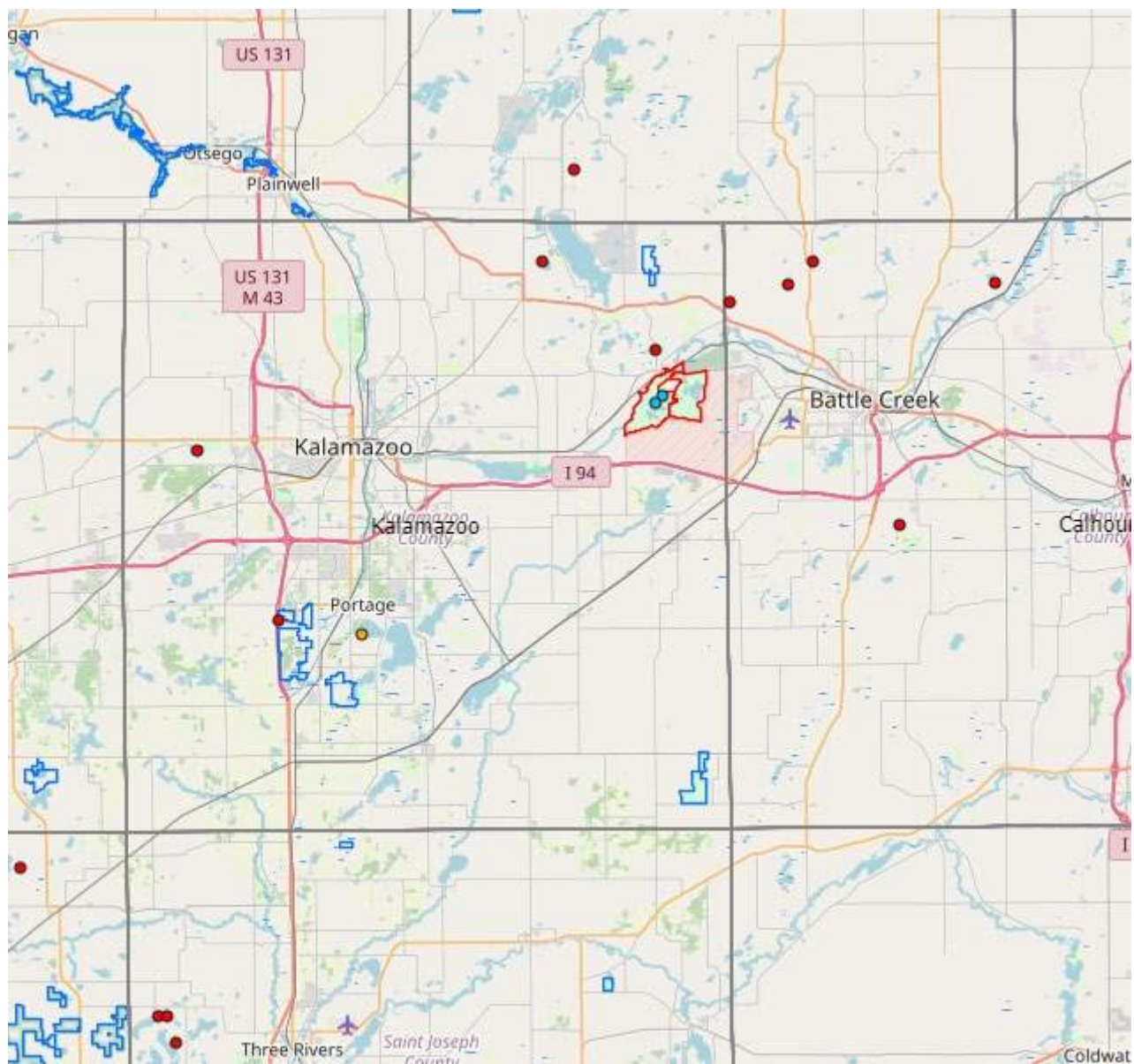
*Maps of Oak Wilt Distribution **

This map shows the distribution of Oak wilt by county in 2017. For more information of Oak wilt go to www.michiganoakwilt.org. An interactive map (Oak wilt viewer) is at the bottom of the web page. There are no confirmed cases of Oak wilt in Van Buren County at this time, but annual monitoring is encouraged.

<https://midnr.maps.arcgis.com/apps/webappviewer/index.html?id=aa4075c218ad4b968f15f14f84b37387>



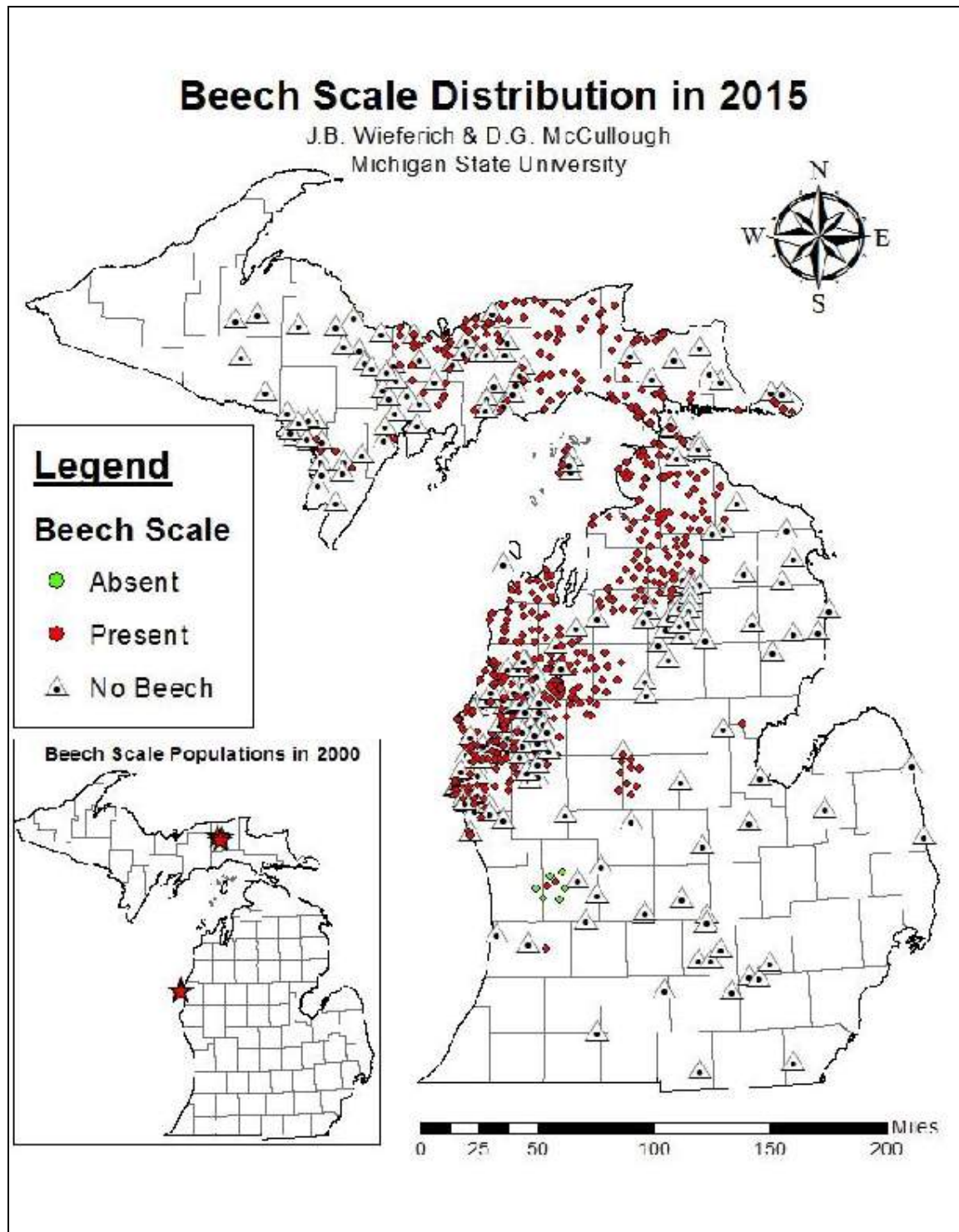
This map shows Kalamazoo County: Oak Wilt incidences 2024.



*Oak wilt has been confirmed in the Richland Area of Kalamazoo County and near Austin Lake.

Map of Beech Bark Disease Distribution

***NO BEECH BARK DISEASE IN KALAMAZOO COUNTY**



Glossary of Common Forestry Terms

The following glossary is adapted from www.dnr.state.md.us/forests/gloss.html.

Agroforestry: a land-use system that combines both agriculture and forestry in one location. Alley

Cropping: widely spaced rows of trees with annual crops growing in between the rows.

Basal Area (of a Tree): the cross-sectional area of a tree trunk at 4.5 feet off the ground and expressed in units of square feet (ft²).

Basal Area (of a Forest): the basal area of all trees on an acre of land is summed up for the basal area of a forest and expressed in ft²/acre; used as a measure of forest density.

Biomass: harvesting and using whole trees or parts of trees for energy production

Board Foot: a measure of volume 1 foot by 1 foot by 1 inch or 144 cubic inches of wood.

Bolt: 8-foot-long log

Browse: parts of woody plants, including twigs, shoots, and leaves, eaten by forest animals.

Carbon Cycle: the bio-geochemical cycle to exchange carbon between the biosphere and atmosphere by means of photosynthesis, respiration, and combustion.

Clear-cut: the harvest of all the trees in an area to reproduce trees that require full sunlight.

Co-dominant Tree: a tree that extends its crown into the canopy and receives direct sunlight from above but limited sunlight from the sides.

Commercial Forestland: forest capable of producing 20ft³ of timber per acre per year.

Commercial Treatments: timber stand improvements that generate income from sale of trees.

Cord: a unit of wood cut for fuel that is equal to a stack 4 x 4 by 8 feet or 128 cubic feet

Cordwood: small diameter or low-quality wood suitable for firewood, pulp, or chips.

Crop Tree: a young tree of a desirable species with certain desired characteristics.

Crown: the uppermost branches and foliage of a tree.

Crown Classes: see dominant, co-dominant, intermediate, and suppressed.

Crown Cover or Crown Closure: the percentage of a given area covered by tree crowns.

Crown Ratio: the ratio of the leaved portion of a tree's height to its total height.

Cruise: a forest survey used to obtain inventory information and develop a management plan.

Cull: a sawtimber size tree that has no timber value because of poor shape or damage. Diameter at

Diameter Breast Height (DBH): measurement of the tree trunk diameter taken at 4 1/2 feet.

Diameter-Limit Sale: a timber sale in which all trees over a specified DBH may be cut. A Diameter-limit sale often results in high grading the woodlot and is a poor forestry practice.

Dominant Trees: trees that extend their crown above surrounding individuals.

Even-Aged Stand: a stand in which the age difference between the oldest and youngest trees is minimal, usually no greater than ten to twenty years.

Forest Farming: cultivating high value specialty crops in the shade of natural forests.

Forest Stand Improvement (FSI): any practice that increases the health, composition, value, or rate of growth in a stand. Also called Timber Stand Improvement when focused on timber.

Forest Types: associations of tree species that have similar ecological requirements.

Group Selection: a process of harvesting patches of trees to open the forest canopy and encourage the reproduction of uneven aged stands.

Habitat: the ecosystem in which a plant or animal lives and obtains food and water.

Hardwoods: a general term encompassing broadleaf, deciduous trees.

High Grading: to remove all good quality trees from a stand and leave only inferior trees.

Intermediate Tolerance: a characteristic of certain tree species that allows them to survive, though not necessarily thrive, in relatively low light conditions.

Intolerance: a characteristic of certain tree species that does not permit them to survive in the shade of other trees.

Landing: a cleared area within a timber harvest where harvested logs are processed, piled, and loaded for transport to a sawmill or other facility.

Log Rule: a method for calculating wood volume in a tree or log by using its diameter and length. Scribner, Doyle and the International 1/4-inch rule are common log rules.

Lump-Sum Sale: a timber sale in which an agreed-on price for marked standing trees is set before the wood is removed (as opposed to a mill tally or unit sale).

Mast: nuts and seeds such as acorns, beechnuts, and chestnuts that serve as food for wildlife.

Merchantable Height: the point on a tree stem to which the stem is salable.

Over-mature: trees that have declined in growth rate because of old age and loss of vigor.

Overstocked: the situation in which trees are so closely spaced that they compete for resources and do not reach full growth potential.

Over-story: forest canopy that includes dominant, co-dominant, and intermediate trees.

Overtopped: a tree cannot sufficiently reach the over-story and receive direct sunlight.

Pole Timber: trees 4 to 10 inches DBH.

Pre-Commercial Operations: cutting to remove wood too small to be sold.

Prescribed Fire: an intentional and controlled fire used as a management tool used to reduce hazardous fuels or unwanted understory plants (invasive, undesirable species, etc.).

Pulpwood: wood suitable for use in paper manufacturing.

Range: cattle grazing in natural landscapes.

Regeneration: the process by which a forest is reseeded and renewed.

Regeneration Cut: a timber harvest designed to promote natural establishment of trees.

Release: to remove overtopping trees that competes with understory or suppressed trees.

Residual Stand: the trees remaining intact following any cutting operation.

Riparian Forest Buffers: strips of land along stream banks where trees, shrubs and other vegetation are planted and managed to capture erosion from agricultural fields.

Salvage Cut: the removal of dead, damaged, or diseased trees to recover value. Sapling - a tree at least 4 1/2 feet tall and between 1 inch and 4 inches in diameter.

Saw-bolt: an 8-foot-long sawlog.

Saw-log: log large enough to be sawed economically, usually >10" diameter and 16' long.

Saw-timber stand: a stand of trees whose average DBH is greater than 11 inches.

Sealed-Bid Sale: a timber sale in which buyers submit secret bids.

Seed Tree: a mature tree left uncut to provide seed for regeneration of a harvested stand.

Seed Tree Harvest: the felling of all the trees in an area except for a few desirable individuals that provide seed for the next forest.

Selection Harvest: the harvest of individual trees or small groups at regular intervals to maintain an uneven-aged forest.

Shelter-wood Harvest: the harvest of all mature trees in an area in a series of two or more cuts, leaving enough trees of other sizes to provide shade and protection for forest seedlings.

Silvo-pastures: trees and improved forages to provide suitable pasture for grazing livestock.

Silviculture: the art and science of growing forest trees.

Site: the combination of biotic, climatic, topographic, and soil conditions of an area.

Site Index: a measure of the quality of a site based on the height of dominate trees at a specified age (usually fifty years), depending on the species.

Site Preparation: treatment of an area prior to reestablishment of a forest stand.

Skidder: a rubber-tired machine with a cable winch or grapple to drag logs out of the forest.

Skidding: the act of moving trees from the site of felling to a leading area or landing.

Slash: branches and other woody material left on a site after logging.

Snag: a dead tree that is still standing. Snags provide important food and cover for a wide variety of wildlife species.

Softwood: any gymnosperm tree including pines, hemlocks, larches, spruces, firs, and junipers.

Stand: a group of forest trees of sufficiently uniform species composition, age, and condition to be considered a homogeneous unit for management purposes.

Stand Density: the quantity of trees per unit area, usually evaluated in terms of basal area, crown cover and stocking.

Stocking: the number and density of trees in a forest stand. Stands are often classified as understocked, well-stocked or overstocked.

Stumpage Price: the price paid for standing forest trees.

Succession: the natural replacement of one plant (or animal) community by another over time in the absence of disturbance.

Suppressed: a tree condition characterized by low growth rate and low vigor as a result of competition with overtopping trees. See overtopped.

Sustained Yield: an ideal forest management objective in which the volume of wood removed equals growth within the total forest.

Thinning: a partial cut in an immature, overstocked stand of trees used to increase the stand's value growth by concentrating on individuals with the best potential.

Threatened Species: a species or subspecies whose population is so small or is declining so rapidly that it may become endangered in all or a significant portion of its range.

Tolerance: the capacity of a tree species to grow in shade

Under-stocked: a stand of trees so widely spaced, that even with full growth potential realized, crown closure will not occur.

Understory: the level of forest vegetation beneath the canopy.

Uneven-Aged Stand: Three or more age classes of trees represented.

Unit Sale: a timber sale in which the buyer makes regular payments based on mill receipts.

Veneer Log: a high-quality log of a desirable species suitable for conversion to veneer.

Well-Stocked: the situation in which a forest stand contains trees spaced widely enough to prevent competition yet closely enough to utilize the entire site.

Wildlife Habitat: native environment of an animal that includes food, water, cover and space.

Windbreaks: rows of trees to provide shelter for crops, animals, or farm buildings

Federal and State Laws Related to Forest Management

- USA - Federal Insecticide, Fungicide, and Rodenticide Act, 1947
- USA - National Historic Preservation Act, 1966
- USA - Clean Water Act, 1948 and 1972
- USA - Endangered Species Act, 1973
- MI - Michigan Pesticide Control Act, Public Act 171 of 1976
- MI - Natural Resources and Environmental Protection Act, Public Act 451 of 1994
- MI - Right to Forest Act, Public Act 676 of 2002

Best Management Practices

Best Management Practices (BMPs) are guidelines published by the State of Michigan to protect Michigan's water resources from non-point source pollution and erosion while working on forest land. BMPs are now called "Sustainable Soil and Water Quality Practices on Forest Land" and the document is online at www.Michigan.gov/PrivateForestLand. BMPs include proper location and construction of logging roads, the use of riparian management zones, installation of culverts and other stream crossings, proper use of pesticides and other chemicals, and site preparation for planting. BMPs also include the proper seasonal timing of activities to minimize the spread of insects or disease. Any forest management activities should minimize soil erosion near wetlands and surface water. Tree Farm certification requires compliance with best management practices.

Forest Health

The DNR publishes the annual "Forest Health Highlights" that has information about the forest insect and disease problems in Michigan. See www.Michigan.gov/ForestHealth for a pdf of the most recent edition. To report an unusual insect or disease in your forest, please email several photos to DNR-FRD-Forest-Health@Michigan.gov.

DNR Forest Health - www.Michigan.gov/ForestHealth

DNR Invasive Species Info - www.Michigan.gov/InvasiveSpecies

MDARD Exotic Forest Pests – www.Michigan.gov/ExoticPests

USFS Forest Health - <http://fhm.fs.fed.us/>

Wildlife Habitat

The DNR Wildlife Division has an excellent publication on managing wildlife habitat at www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/Landowners_Guide/index.htm.

DNR Wildlife Division – www.Michigan.gov/Wildlife

Michigan United Conservation Clubs - <https://mucc.org>

Quality Deer Management Association – www.qdma.com

Audubon Society - www.MichiganAudubon.org

Foresters for the Birds – <http://vt.audubon.org/foresters-birds>

Ruffed Grouse Society - www.RuffedGrouseSociety.org

National Wild Turkey Federation - www.nwtf.org

Michigan Trout Unlimited – www.MichiganTU.org

US Fish and Wildlife Service - www.fws.gov/partners

Forest Economics

Capital Gains Tax Information. Profits from timber sales are taxed as capital gains, rather than ordinary income, if you own the timber for more than twelve months. Expenses, including the cost of a management plan or a consulting forester's fees for a timber sale, can be deducted from profits. There are many great tax related resources available on www.TimberTax.org, including the most recent edition of the annual "Tax Tips for Forest Landowners."

American Tree Farm System- Standards of Sustainability

I recommend that you join the American Tree Farm System to certify your exemplary and sustainable forest management. A free inspection from one of the 145 Tree Farm Inspecting Foresters is required to enroll. This Forest Stewardship Plan complies with the Farm System's eight Standards of Sustainability listed below. See www.TreeFarmSystem.org for information about the Tree Farm program, forest certification, and the full Standards of Sustainability.

1. **Commitment to Practicing Sustainable Forestry.** Forest owner demonstrates commitment to forest vitality by developing and implementing a sustainable forest management plan.
2. **Compliance with Laws.** Forest management activities comply with all relevant federal, state, and local laws, regulations, and ordinances.
3. **Reforestation and Afforestation.** Forest owner completes timely restocking of desired species of trees on harvested sites and non-stocked areas where tree growing is consistent with land use practices and the forest owner's management objectives.
4. **Air, Water, and Soil Protection.** Forest management practices maintain or enhance the environment and ecosystems, including air, water, soil, and site quality.
5. **Fish, Wildlife and Biodiversity.** Forest management activities contribute to the conservation of biodiversity.
6. **Forest Aesthetics.** Forest management plans and management activities recognize the value of forest aesthetics.
7. **Protect Special Sites.** Special sites are managed in ways that recognize their unique historical, archeological, cultural, geological, biological, or ecological characteristics.
8. **Forest Product Harvests and Other Activities.** Forest product harvests and other management activities are conducted in accordance with the management plan and consider other forest values.

Qualified Forest Program

The Qualified Forest Program (Public Acts 42 and 45 of 2013, as amended) exempts forest owners from paying local millage taxes up to 18 mills in each tax jurisdiction (township). Landowners must have between 20 and 640 acres, a forest management plan, and agree to comply with their forest management plan. Landowners must report harvests to the Michigan Department of Agriculture and Rural Development after they occur. A Forest Stewardship Plan is accepted by the Qualified Forest program. See www.Michigan.gov/QFP for information and enrollment forms. The application deadline is September 1 for tax benefits in the following year.

Commercial Forest Program

The Commercial Forest Program offers a specific property tax of \$1.25 per acre (Parts 511 & 512 of Public Act 451, 1994, as amended). Landowners must have at least 40 acres of forest, a forest management plan, conduct commercial harvests as prescribed in the plan, and allow public foot access for hunting and fishing. Landowners must notify the DNR before they harvest forest products. A Forest Stewardship Plan is accepted by the Commercial Forest program. For more information and enrollment forms, see www.Michigan.gov/CommercialForest. The application deadline is April 1 for tax benefits in the following year.

Financial Assistance Programs

The Natural Resources Conservation Service (NRCS) administers several programs such as the Environmental Quality Incentives Program (EQIP) or Conservation Stewardship Program (CSP) that may provide financial assistance to forest owners to implement “conservation practices” to address “resource concerns” on their land. Landowners must have an approved forest management plan prior to enrolling. Forest Stewardship Plans are accepted by the NRCS when applying for EQIP funding, although they do not require the same level of detail as NRCS conservation activity plans. Work with your NRCS District Conservationist and forester to fill out supplemental “Job Sheets.” See www.mi.nrcs.usda.gov/technical/forestry.html for info.

Some of the recommended activities in this plan have potential for financial assistance. NRCS forestry “conservation practices” include forest trails and landings, stream crossings, riparian forest buffers, stream habitat improvement, forest stand improvement, tree and shrub establishment, brush management, early succession habitat, wetland wildlife habitat, and upland wildlife habitat. NRCS conservation practices address “resource concerns” (environmental problems) like soil erosion, soil quality, water quality degradation, plant productivity, habitat fragmentation, invasive plants, forest health, etc. Contact your local NRCS Service Center to apply for financial assistance (see www.nrcs.usda.gov/wps/portal/nrcs/main/mi/contact/local).

Notes and Modifications.

[illegible]

Appendix B - 2022 Comprehensive Deer Management Program – Report and Recommendations (CDMPRR)

APPENDIX B



ADDRESSING THE URBAN DEER POPULATION IN KALAMAZOO

**Neighborhood Association Ad Hoc Committee:
Comprehensive Deer Management Program - Report and Recommendations**

February 1, 2022

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EXECUTIVE SUMMARY

Our committee, and this report, was initiated and developed in response to over three years of resident feedback and complaints to our many Neighborhood Associations (and the City) regarding an increase in quality of life, health, and safety challenges to both humans and deer. Our committee is solely made up of board members or officially designated representatives of our respective Neighborhood Associations.

We note that three Neighborhood Plans within “Imagine Kalamazoo 2025” include action items to pursue an approach to maintaining the deer population at a safe level for both the deer and residents.

Purpose of our Report

To provide the City of Kalamazoo’s City Commission, along with city staff, strategic guidance through our committee’s fact- and research-based information, data, and recommendations to:

- 1) Share with our city leaders the biology, ecology, and lifestyle of urban white-tailed deer, and
- 2) To understand how humans and deer can harmoniously and safely co-exist with each other

Goals of our Report

- 1) **Demonstrate there is a growing deer population in Kalamazoo** creating multiple issues that affect the health and safety of both residents and deer in many neighborhoods, not one or two
- 2) **Show that deer live within Kalamazoo in multiple herds** of varying sizes that impact each neighborhood differently; therefore they can and should be managed as such
- 3) **Identify and detail the many health and safety issues** brought forth by our neighborhoods that indicate the city’s growing deer population is impacting both residents and the deer themselves
- 4) **Provide the initial, fundamental considerations** required to develop, implement, monitor, and maintain an effective short-, medium-, and long-term Deer Management Program for the City by:
 - Providing the initial data that illustrates many city residents have been impacted by deer, have concerns, and want action taken to address the issue of our urban deer
 - Detailing ways to further evaluate community issues with white-tailed deer, and
 - Recommending “next steps” for city government to take that will address conflicts with deer by developing a comprehensive, practical, effective, science-based, humane, and community-supported deer management plan.

Our committee believes we have accomplished these goals – and believes that the result of creating and implementing a deer management plan will create a community that is more knowledgeable and better equipped to co-exist with deer and other wildlife within our full urban ecosystem..

Method of Data Gathering and Analysis

Our committee utilized *fact-based research and guidance* from known and trusted resources who have proven knowledge and experience in deer management techniques and planning. Sources included:

- 1) Michigan Department of Natural Resources (MDNR)
- 2) Over 20 State and city-based deer management plans
- 3) Seven Michigan city-based deer management/deer culling plans
- 4) Local research resources:
 - Kalamazoo Nature Center
 - Kalamazoo College
 - Kalamazoo Christian High School
- 5) Citywide resident survey (**1,616 responses received**; see **Appendix D** for full survey results)
 - Developed via referencing surveys from seven professional deer management plans, a review by our full committee and senior city staff, and professional marketing help
 - One survey question stands out: *Generally, what are your thoughts about deer in Kalamazoo?*
 1. **“I enjoy the presence of deer, but I worry about problems (damage, disease, etc.) they may cause” - 48.4%**
 2. **“I do not enjoy the presence of deer and regard them as a nuisance” - 22.7%**

(Note: All survey data throughout this report is represented in bold and in brown)

Overview of Findings

- A. Our committee examined all areas of multiple objective, fact-based, professional, and comprehensive urban deer management programs:
- 1) Understanding *urban* white-tailed deer (behaviors, range, diet, reproduction, etc.)
 - 2) Examining the MDNR's mission, goals, and philosophy of managing urban deer:
 - The MDNR *"advises community leaders, assists in the development of deer management plans, participates on local task forces, speaks at public meetings, conducts disease testing, and provides permits for lethal harvest, but lacks a defined process that can be implemented consistently across the State..."*
 - ***...Successful resolution of urban/suburban deer issues requires that community leaders and DNR staff work together with stakeholders to gain acceptance of proven methods and utilize them to successfully reduce human-deer conflicts***". (MDNR, 2016, p.26)
 - 3) Understanding the root causes of conflicts between deer and people in Kalamazoo:
 - We have identified nine safety issues that go well beyond "my hostas are being eaten", including increasing cases of deer/vehicle collisions (DVCs), Lyme Disease, and Chronic Wasting Disease (CWD)
 - 4) Reasons for, and how to create and implement, a successful deer management program
 - 5) Investigating many urban deer management options, tools, and techniques; both non-lethal and lethal
- B. There are three types of deer "carrying capacity" (biological, ecological, and social) to consider when evaluating the management of an urban deer population. ***"An effective and appropriate management of deer populations must consider [all] carrying capacities"***. (MDNR, 2009, p.7)
- C. *Deer management can be less about management of deer than about managing the issues created by deer-human interactions and differences in stakeholder tolerances regarding those interactions.* (MDNR, 2009, pp.9-12)

Recommendations

(Note: All committee notes and recommendations throughout this report are represented in red)

Based on our findings and research our committee is **recommending a two-phase approach** to managing Kalamazoo's urban deer population:

Phase 1

Develop and implement:

- 1) Ongoing public education program and resource website for residents regarding urban deer
- 2) Deer carcass removal program
- 3) Review and modify (if necessary) the fence ordinance to allow higher residential fencing
- 4) Effective way(s) the city can help support and report violations of the state's "no feeding" law

Phase 2

Work with the MDNR and other wildlife experts to:

- 1) Lead the research and budgeting (of funding and personnel) to gather deer population data
- 2) Develop and implement a comprehensive short-, medium-, and long-term deer management program for the health and safety of our city's ecosystem, deer, and human populations

NOTE: Our research and recommendations reflect our desire to identify an appropriate balance among the biological needs of the species, the benefits deer provide to some segments of society, the costs they impose on others, and the acceptability and feasibility of the differing management methods.

Our committee is not advocating for deer eradication or the elimination of wildlife watching opportunities, but rather to manage our urban deer safely and effectively for both residents and the deer themselves..

INTRODUCTION

Committee History, Formation, and Makeup

Our committee, and this report, was initiated and developed in response to over three years of resident feedback and complaints to our many Neighborhood Associations, as well as City staff, along with frequent neighborhood Facebook posts filled with concerns regarding an increase in safety, health, and quality of life challenges to both humans and deer. These included:

- 1) Deer damage to private property
- 2) Concerns regarding the increase and spreading of Lyme Disease among humans and Chronic Wasting Disease (CWD) among deer
- 3) Increase in deer/vehicle collisions
- 4) Lack of a governmental response (and taking responsibility for) helping residents safely and efficiently remove deer carcasses from their property
- 5) Damage to the natural ecosystems within Kalamazoo's parks and land preserves
- 6) Concern about the health and safety of Kalamazoo's deer population
- 7) Increase in dangerous deer/human and pet interactions

In response, **city staff encouraged a group of Neighborhood Association leaders along with other relevant association leaders** to form a citizen ad hoc committee to collaborate with them to research this issue and develop a roadmap to an acceptable and effective deer management plan to address these challenges.

NOTE: *ALL Kalamazoo Neighborhood Associations were contacted and invited to designate a representative to serve on this committee. One of our main goals was always to be as inclusive as possible, and to gather as many perspectives from as many viewpoints as possible. We also invited and included representatives from neighborhoods without formal Associations, such as Westnedge Hill, Hillcrest, Parkwyn Village, and Stewards of Kleinstuck.* (A list of participating neighborhoods can be found in **Appendix A**).

Some neighborhoods informed us that they did not want to participate, while others did not respond to our repeated attempts to contact and include them. Nevertheless, we continued to communicate and inform those neighborhoods of our progress, as well as invited them to reach out and keep their residents informed, and to join in on all feedback methods we employed, including our citizen survey.

NOTE: *Three Neighborhood Plans within the "Imagine Kalamazoo 2025" Master Plan include action items to pursue an approach to maintaining the deer population at a safe level for both deer and residents.*

A critical component of our recommendations was the solicitation and incorporation of as many Neighborhood Associations and citizen points of view as was possible, given our time, personnel, and budget constraints.

Committee Deer Research: Methodology

Our committee utilized *fact-based* research and guidance from known and trusted resources who have proven knowledge and experience in deer management techniques and planning; more than we could hope to amass as a citizen ad hoc committee. Sources included:

NOTE: *All applicable research sources are cited at the beginning of each section.*

- 1) **Michigan Department of Natural Resources (MDNR)**
MDNR was a major resource which we relied on for discussions relating to education and advice; including our regional Wildlife Biologist, Don Poppe, and MDNR research; specifically, their 2009

Michigan Deer Management Plan, and their 2016 Review of Deer Management Report.

2) **Other Deer Management Plans - National**

Urban deer management is not a new issue in the United States. There are many cities across the US which have already completed their own research to develop their own comprehensive plan, of which much of their background information and research is universal to urban/suburban deer.

- Our committee studied over 20 of these plans and have included relevant information and research from them in this report

3) **Other Deer Management Plans – Michigan Cities**

- Our committee also researched deer management plans from seven Michigan cities that chose to institute a culling program. (A summary of their deer management programs, *along with their issues and concerns*, can be found in **Appendix B**)

4) **Supplemental Local Research**

Although not peer-reviewed scientific papers, two local school science classes provided us research that proved very helpful to our committee, in that they both presented strong anecdotal evidence that Kalamazoo has an over-abundance of deer in some areas

- Kalamazoo Christian High School
Their environmental science class, led by their Life Sciences teacher Steve Dyk, produced both a 2017 and 2020 Winchell/Asylum Lake Deer Survey
- Kalamazoo College
A 2020 Senior Individualized Research paper focused on Monitoring of White-tailed Deer Population using Citizen Scientists (by employing the “iNaturalist” citizen reporting app) in many Kalamazoo neighborhoods. A second, 2021 study by different Kalamazoo College students, is currently in progress

5) **Resident Survey** (1,616 responses; See **Appendix D** for full results)

- During March and April 2021, our committee developed a citizen deer survey to supplement our other research with local data
- We used as our guide surveys from seven professional deer management plans, professional marketing help, and a review by our full committee and senior city staff
- With the help of Community Planning and Development, we distributed our survey online in mid-May via the city’s website, as well as to all Neighborhood Associations, who promoted it and made it available through each of their own communication channels
- We **closed the survey in mid-June 2021 and received 1,616 responses** from residents in 24 neighborhoods (as well as 70 non-residents who identified themselves as working in Kalamazoo). Selected survey results will be found throughout this report

NOTE: *Our committee fully understands that although our response rate was high, this survey was never intended to justify final deer management decisions. Rather, our goal for the survey was to begin to understand the observations, experiences, and attitudes of residents about our deer population to guide the “next steps” of developing a comprehensive deer management program for Kalamazoo.*

PURPOSE AND GOALS OF THIS REPORT

The purpose of this report is to provide the City of Kalamazoo’s City Commission, along with city staff, strategic guidance through our committee’s fact- and research-based information, data, and recommendations to:

- 1) Educate our city leaders on the biology, ecology, and lifestyle of urban white-tailed deer, and
- 2) To learn how we can harmoniously and safely co-exist with each other

The goals of this report are to:

- 1) **Demonstrate that there is a growing deer population in Kalamazoo**, creating multiple issues that affect many neighborhoods, not just one or two
- 2) **Identify and detail the health and safety issues** brought forth by our neighborhoods that indicate the growing city's deer population is impacting both residents and the deer themselves
- 3) **Show that deer within the city live within multiple herds** of varying sizes that impact each neighborhood differently; therefore can and should be managed as such
- 4) **Provide the initial, fundamental considerations** required to develop, implement, monitor, and maintain an effective short-, medium-, and long-term deer management program for the City of Kalamazoo by:
 - Providing initial data from our survey that illustrates that many of our city residents have concerns and have been impacted by deer and want action taken to address the issue of our urban deer population
 - Detailing ways to further evaluate community issues with white-tailed deer, and
 - Recommending "next steps" for city government to take that will address conflicts with deer by developing a comprehensive, practical, effective, science-based, humane, and community-supported Deer Management Plan.

NOTE: *Our committee believes we have accomplished these goals – and believes the result of putting a deer management plan in place will create a community that is more knowledgeable and better equipped to co-exist with deer and other wildlife.*

MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MDNR): DEER MANAGEMENT

(Michigan Deer Management Plan, MDNR, 2016, pp.1, 11-33)

This report has closely followed the MDNR's mission, goals, and philosophy for deer management in guiding our committee's research and recommendations.

1) MDNR Deer Management - MISSION

The mission of the MDNR regarding deer throughout Michigan is to *maintain a healthy white-tailed deer population*: (MDNR, 2016, p.1)

- Using sound scientific management
- Maximizing recreational opportunities
- Minimizing negative impacts on ecosystems and other wildlife species
- Without creating undue hardship to private interests

2) MDNR Deer Management - GOALS

The MDNR has identified six principal goals relating to deer identified through their public input process: (MDNR, 2016, p.1)

NOTE: *Based on the results of our citizen deer survey, we have discovered numerous trends that indicate further action is needed for Kalamazoo to work with the MDNR (and other experts) to have our city fulfill all six goals of the MDNR, which reflect the public's desires to create the best and most appropriate management effort for deer herds and for the people of Michigan (and Kalamazoo).*

1. Manage Deer Populations at Levels that do not Degrade the Vegetation Upon Which Deer and Other Wildlife Depend

The percentage of survey respondents who were "concerned to very concerned" about the following issues include:

- **"Deer preventing the natural regrowth of native plants" - 65.7%**
- **"Disruption of our city's ecosystem" – 64.2%**
- **"Over-browsing of natural habitats (on public and/or private lands)" - 63.4%**

2. **Promote Deer Hunting to Provide Quality Recreational Opportunities, as the Primary Tool to Achieve Population Goals, and as an Important Social and Cultural Activity**

NOTE: Although our survey showed that 81.9% are personally “not interested” in hunting deer as a sport the MDNR considers hunting (i.e. – the killing of deer by humans) their primary tool to achieve deer population goals. The MDNR states that the natural predators of deer in Michigan are effectively absent from the ecosystem, so humans must take over that role in some capacity to successfully manage deer population levels.

3. **Manage Habitat to Provide for the Long-Term Viability of White-Tailed Deer in Michigan while Limiting Negative Impacts to the Habitats of Other Wildlife Species**

The percentage of survey respondents who were “concerned to very concerned” about the following issues include:

- “Loss of deer habitat, leading to their increased population” – 73.1%
- “Loss of plant or animal diversity in your neighborhood/city” – 64.2%
- “Decreased bird populations due to deer-related habitat loss” – 60.3%

4. **Reduce Conflict Between Humans and Deer**

The percentage of survey respondents who were “concerned to very concerned” about the following issues include:

- “Injury to you or family members from a deer-vehicle collision” – 64.5%
- “Deer threatening or harming people or pets” – 29.8%

NOTE: Many resident comments included accounts of their pets have been attacked or charged at by deer, mainly during “rutting” season (October – November).

5. **Reduce the Threats and Impacts of Disease on the Wild Deer Population and on Michigan’s Economy**

The percentage of survey respondents who were “concerned to very concerned” about the following issues include:

- “Chronic Wasting Disease (CWD) spreading among local deer” – 71.0%
- “You or those close to you getting a tick-borne disease (such as Lyme Disease)” – 70.0%

6. **Enhance Public Engagement in, and Awareness of, Deer Management Issues and Knowledge of Deer Ecology and Management**

The percentage of survey respondents who were:

- Not interested in feeding deer, or “concerned to very concerned about fellow neighbors feeding deer” – 82.8%
- “Learning more about deer management actions” – 73.9%

NOTE: In addition to citizen responses that directly correlate to the MDNR’s six primary goals, the following survey results and local data are also relevant to understanding the need to manage Kalamazoo’s deer population in relation to the MDNR’s Deer Management Philosophy:

3) **MDNR Deer Management Philosophy**

The MDNR supports deer management in urban/suburban areas to help address the following five issues:

1. **Damage to Ecosystems**

As stated above, 64.2% of survey respondents are “concerned or very concerned” about this issue, a *Strategic Vision Goal (Environmental Responsibility)* of our Master Plan.

2. High Deer-Vehicle Crash (DVC) Incidence Rate

As the following data indicates, deer/vehicle crashes within Kalamazoo have been trending up since 2014 (data from Kalamazoo City Engineer and Michigan Traffic Crash Facts (MTCF)):

Year	# DVCs
2014	42
2015	53
2016	57
2017	58
2018	87
2019	72

Average # DVCs from 2014-19 = 61/year

In addition, 2019 deer-vehicle crash data from the Office of Highway Safety Planning (OHSP) shows that out of the 84 Michigan Counties, Kalamazoo ranked:

- 3rd in persons injured
- 7th in local street crashes
- 12th in total crashes

3. Damage to Residential Landscaping and Gardens

The percentage of survey respondents who were “concerned to very concerned” about “Deer damage to trees, shrubs, plantings & gardens around [their] home” – 66.6%

NOTE: This was the second-highest concern among respondents, and generated the most comments among those who left comments

4. Public Act 451 of 1994

The Wildlife and their habitats of the state are valuable public natural resources held in trust by the state, and the state has a duty as trustee to manage its wildlife and their habitats effectively for the use and enjoyment of present and future residents and for the protection of the environment.

Survey respondents indicate residents who:

- **Have “seen an increase in deer” in the last three years:**
 - **At their home: 60.7%**
 - **In their neighborhood: 62.9%**
 - **In the city at-large: 49.1%**
- **“Enjoy the presence of deer, but worry about problems (damage, disease, etc.) they may cause” – 48.4%**
 - **Believe the deer population should “decrease/decrease a lot”- 63.7%**
 - **Believe it is “important or very important” that the size of the deer population change – 56.7%**

NOTE: As pointed out from survey data results, a vast majority of respondents are looking to Kalamazoo government to protect our city’s ecosystem and manage the rising deer population

5. Natural Resources Commission Policy #2007

The Department’s goal is to manage the deer herd using management practices based on scientific research to:

- Maintain healthy animals and keep the deer population within limits dictated by the carrying capacity of the range

- Limit effects on native plant communities, agricultural, horticultural, and silvicultural crops, and public safety

Our resident survey also indicated that 63.4% respondents have “personally been affected” by problems #1 - 5 listed above.

Currently, the MDNR “advises community leaders, assists in the development of deer management plans, participates on local task forces, speaks at public meetings, conducts disease testing, and provides permits for lethal harvest, but lacks a defined process that can be implemented consistently across the State. **Successful resolution of urban/suburban deer issues requires that community leaders and DNR staff work together with stakeholders to gain acceptance of proven methods and utilize them to successfully reduce human-deer conflict**”. (MDNR, 2016, p.26)

NOTE: It is precisely for this reason that our committee recommends the City of Kalamazoo takes the initiative and lead in researching, developing, and implementing a comprehensive short-, medium-, and long-term deer management plan for the health and safety of its ecosystem and deer & human populations.

To develop a deer management program based on scientific research, further study will need to be taken by Kalamazoo government by means of engaging with the MDNR and other experts, and dedicating resources to the effort.

UNDERSTANDING WHITE-TAILED DEER

(A Review of Deer Management in Michigan, MDNR, 2009, p.1,2 - 29,30)

NOTE: Our survey indicated that deer are important to the people of Kalamazoo. The expectations, concerns, and values associated with deer by Kalamazoo residents are diverse and complex and will make successful management of this natural resource challenging, but necessary.

Background

White-tailed deer (*Odocoileus virginianus*) are one of the most recognizable and charismatic species of wildlife, but they are the cause of a growing urban wildlife management problem not only in Kalamazoo but many metropolitan areas throughout the United States. Deer are generalist herbivores that exist in rural, suburban, and some urban areas throughout much of North America. White-tailed deer often shift from open canopy vegetation to forested cover seasonally and according to different food availability.

During early spring, open canopy vegetation provides herbaceous forage, during summer deer may browse in wetland areas, and in autumn deer often prefer hardwood forests if a mast crop is available (McCullough, 1984). **For these reasons, the white-tailed deer is a species that often thrives in the transition between forest and open canopy vegetation, or edge habitat.** (Alverson, 1988).

The forest/open canopy edge also occurs at the forest transition to **areas such as landscaped suburban yards, parks, or playing fields** where low intensity residential development is spreading into once rural farmed or forested areas. **As land use shifts** from forest, agricultural fields, and pasture to single family dwellings and recreational areas such as golf courses and playing fields, **so too must our perception and management of deer habitat.**

Marked increases in forest fragmentation with only slight increases in human population density have had large effects on edge habitat. This creates a suite of conditions that supports deer and **often protects them from sources of mortality such as predation and hunting** (Vogelman J., Assessment of forest fragmentation in southern New England using remote sensing and geographic information systems technology. 1995, p. 439-449).

As urban development increases, the natural habitat required by many wildlife species disappears, but white-tailed deer adapt to urban environments and human activity. **White-tailed deer populations grow rapidly in urban areas due to:**

- 1) Lack of natural predators
- 2) Patchy habitats (scattered woodlots)
- 3) Abundant food resources
- 4) Increased offspring survival

“White-tailed deer thrive on disturbance and fragmented habitat. It is possible to get very large deer populations in suburban areas, especially where there are tracts of trees between houses for cover”. (The Truth About Deer and Urbanization, Realtree.com, Dr. Joe Caudell, deer biologist, Indiana Department of Natural Resources, 2019).

Reproduction

(A Review of Deer Management in Michigan, MDNR, 2009, p.29, 30)

Deer productivity rates (fawns produced per doe) are generally highest in regions with an abundance of nutritious food. Deer living in areas with low annual snow accumulation tend to be more productive than those living in regions where snow covers available food for months at a time and inhibits deer movement to food sources. In southern Michigan, where winter conditions are relatively mild, a high percentage of fawns and almost all yearling and adult does breed each year.

Deer are highly adaptable; they adjust easily and quickly to changing environmental conditions. In lean years, deer tend to have just one fawn or none, reabsorbing their embryos when their nutritional status is poor. When their food supply is good, twins or triplets may be born.

In Michigan, the deer mating season typically occurs during late October through December. Peak mating activity is in November. Gestation is about 200 days, and the peak of fawn drop is mid-May to mid-June. For the first couple of weeks, does leave their fawns in a hiding place for several hours at a time, returning briefly to nurse them. This strategy reduces the likelihood of predators locating the newborn fawn. Fawns begin to follow their mother on her foraging trips at about 4 weeks of age. White-tailed deer fawns are nursed for 8 to 10 weeks before they are weaned.

In southern lower Michigan, where habitat for deer is excellent and winters are relatively mild, about 30 to 50 percent of females breed as fawns and produce a fawn themselves when 1-year old.

Pregnancy rates for does two years and older typically are very high, ranging from 80 to 95 percent. Pregnant one-year old does usually produce a single fawn, whereas older does usually produce twins, with singles or triplets possible depending upon their age and nutritional status.

Food Habits

The diet of white-tailed deer changes with the seasons. Succulent herbaceous plants, such as hostas, sedums, asters, and chard are preferred by deer during the summer months. ***Favorite winter “browse” species in Michigan are white cedar, maple, birch, aspen, dogwood, and sumac, as well as many shrubs.***

Causes of Mortality

A deer’s life expectancy in Michigan is influenced greatly by **hunting pressure and hunting regulations**. This obviously has an impact in rural areas but not in urban settings.

Deer-vehicle collisions (DVC’s) are another major source of deer mortality in the state.

According to State Farm Insurance research, Michigan ranks **5th in the nation** for DVC’s; drivers have a 1-in-54 chance of a collision. (State Farm, 2020)

- On an annual basis, DVCs cost Michiganders upwards of \$130 million in damage, a AAA news release said. In 2018, 14 people died in deer crashes in Michigan; nine of those were motorcycle-deer crashes, the release said. There was a total of 53,464 vehicle-deer crashes in the state that year, which was up from 50,949 in 2017. (MLive.com, October 31, 2019)
- **Crashes occurred most often in Michigan's southern, heavily populated counties**
(Note – Kalamazoo County population ranks 8th of 84 counties)
Vehicle-deer crashes occur during all months of the year, but they are especially prevalent during autumn (October-December) when roadways offer the last green forage of the season, corn fields are being harvested, the deer mating season ("rut") is in progress, and daily commute occurs around dawn and dusk, when deer are most active.

Behavior

Deer **leap as high as 10 feet** in a single bound. Although they are great jumpers, **fences that are 8 feet or higher typically deter them**. (Solving Problems with Deer, Humane Society of the United States (HSUS), p.3)

Current Population Status and Range in Michigan

(Michigan Deer Management Plan, MDNR, 2016, p.10)

In our southwestern lower peninsula, deer populations are highly productive, with many factors working together to produce a challenging management scenario. *The **abundance of food** in the form of available agricultural crops combined with the more than **adequate cover** of scattered woodlots and idle fields provide near perfect white-tailed deer habitat.*

In addition, relatively mild winter conditions, **the near elimination of natural predators**, and **limited hunting access on private land** (including numerous parcels where no deer hunting occurs at all) contribute to the growth of these populations.

Urban Deer Range

The size and shape of a deer's home range varies with deer density, sex, landscape conditions, habitat quality, and seasons. **Non-migratory deer in the southern lower peninsula have an estimated annual home range size of 0.2–2.9 square miles**. Males generally have larger home ranges than females. Research has shown yearling bucks in southern Michigan travel about 6 miles on average (Pusateri 2003). **Female resident deer have a home range of .48 to .83 square miles**.

Influential landscape variables included distance to forest, roads, and urban development. *Deer occupying better habitats can fulfill all their necessary requirements (suitable food and cover) in smaller areas*. (Emerging Issues in White-tailed Deer Management and Conservation, Purdue University, 2009, p.20)

The relatively small annual home ranges of deer may be attributed to:

- Land ownership patterns (scattered woodlots)
- Quality of the habitat provided by stakeholders
- The positive values stakeholders have for deer

Following are three Kalamazoo studies that indicate the prevalence of deer throughout the city:

- 1) A **WMU-led study** map of deer travel corridors demonstrates this perfectly within the **Oakwood-Parkview Hills/Parkwyn Village/Oakland Drive-Winchell area**. Situated between two nature preserves, and home to wooded areas, streams, natural wildlife corridors, and abundant "transition" areas, this area is an ideal deer habitat and **the home to most Kalamazoo deer**:



- 2) A **2017 and 2020 Winchell-Asylum Lake Deer Survey** conducted by Kalamazoo Christian High School's 2017 and 2020 Environmental Science Classes. In both studies they observed the same Oakland Drive/Winchell Neighborhood boundary, a 1.34 mi² area, which as noted above, is an average range size for multiple, separate deer herds.

Their results found:

- In 2017 they observed **547 deer tracks** which they interpreted to correlate to **266 deer - 199 deer/mi²**
- In 2020 they observed **1677 deer tracks** which they interpreted to correlate to **108 deer - 81 deer/mi²** (p.18)
- One of their main conclusions in both studies was, *"The one piece of indisputable information is that the raw data illustrated pockets of high densities of deer among neighborhoods and in pockets of wooded areas"*. (p.15)

Below is a map of the KCHS 2020 deer/deer track sightings:



NOTE: Our committee understands the disparity between the 2017 and 2020 numbers and realizes that these students have done the best research they can with limited resources. But even accounting for their lowest estimates, it is clear this neighborhood has an abundance of deer that live and travel amongst it.

- 3) **Monitoring of White-Tailed Deer Population using Citizen Scientists in Kalamazoo Neighborhoods**, a 2021 Senior Individualized Research paper by Kalamazoo College students (their research was supervised by the Kalamazoo Nature Center and the Kalamazoo College Department of Biology)
 - The group used “citizen science” via the free iNaturalist app to collect their data. iNaturalist uses a tracking system linked with Google Earth, and anyone who has a phone with a camera was eligible to submit photos and help with the deer’s tracking. The application automatically detects what type of animal or plant is in the photo taken and pins the photo’s location to a map of Kalamazoo using Google Earth, which tracks the photo’s location and time studied (p.6)
 - The location of this project was in the City of Kalamazoo and recorded observations were made in 12 of the city’s 21 named neighborhoods: Arcadia, Burke Acres, Colony Farm, Edison, Hill N’ Brook, Oakland-Winchell, Oakwood, Parkview Hills, South Westnedge, Westnedge Hill, West Main Hill, and Westwood (p.6)
 - Their results indicated: (p.18)
 - There was **a total of 14 different herds** throughout Kalamazoo’s neighborhoods
 - **The majority of the sightings came from the Oakland-Winchell neighborhood**, with 40 different sightings

- This neighborhood was one of the largest sustainable living areas for deer in Kalamazoo (p.25)
- Of the 14 herds, four came from the Oakland-Winchell neighborhood
- A direct correlation between the abundance of deer to plentiful water sources and forest/woodlands areas. Again, Oakland-Winchell has more of these types of natural areas than any other neighborhood

NOTE: Again, our committee understands the inexact science here, and the limitations imposed by voluntary data collectors, the need to use the iNaturalist application on a smart phone, and the incomplete public awareness of the study. But direct observation and data shows us that deer are prevalent within the city and specifically, their counts vary drastically depending on the neighborhood.

These cited studies within the city, along with our resident survey, indicate that residents also observe many deer on a regular basis in these other neighborhoods:

- **Arcadia** - has the most readily available parks (Kalamazoo College Study, 2021, p.24)
- **Bronson/Parker-Duke** - Woods Lake to Whites Lake through the Kalamazoo Country Club
- **Burke Acres** - has one of the most extended stretches of woodland area and water sources of all the neighborhoods (Kalamazoo College Study, 2021, p.24)
- **Parkview Hills** – Adjacent to Asylum Lake Preserve and includes numerous streams, mill ponds, and Lake Hill-n-Brook
- **Westnedge Hill** - Crane Park to Bryant Pond/Portage Creek areas

NOTE: This researched data and the student-led studies premised our committee to work from the basic assumption that Kalamazoo has multiple herds of does and fawns, so some neighborhoods will be more severely affected by our deer population than others, depending on which neighborhoods have an environment that are more ecologically likely (those that transition between forest and open canopy vegetation, or edge habitat) to support deer. A Kalamazoo deer management program needs to take this into account.

DEER MANAGEMENT WITHIN URBAN AREAS

(Michigan Deer Management Plan, MDNR, 2016, p.1), (HSUS, p.4)

(Deer Management Within Suburban Areas, Creacy, 2006, pp.1,2)

Root Causes of Conflict Between Deer and People

NOTE: Our committee agrees with and supports the premise that the goal of deer control measures is not deer eradication or the elimination of wildlife watching opportunities, but rather to manage our urban deer safely and effectively for the health and safety of both our residents and the deer.

Eight root causes of conflicts between deer and people in urban and suburban areas have been identified, which create obstacles for effectively managing their population levels:

1) Conflicting Social Attitudes and Perceptions: Human Values Placed on Deer

The public may view high deer numbers differently depending on a variety of factors. Some considerations include:

- Health and safety risks
- Fear of disease transmissions
- Concerns about animal health
- Economic costs

“Controlling deer populations within residential areas involves numerous stakeholders. These stakeholders often present disparate views and opinions regarding control measures”. (HSUS, p.4)

2) **Suburban Development**

Conversion of farmland and forest to suburbs brings people and deer together in an environment where both species thrive, inviting conflict. Golf courses, parks, grassy lawns and tree-lined or hedge borders, and the flowers, ornamentals, bird feeders and vegetable gardens in suburban backyards *provide more food for deer in suburbia* than mature woods, where most vegetation is out of reach in the forest canopy.

For the deer, this leads to good nutrition, which means excellent physical condition and a high reproductive rate. ***This highly fragmented landscape is the preferred habitat structure of white-tailed deer.***

Residential developments also possess a variety of planted trees and shrubs, creating a large quantity of food. *This enhanced landscape provides year-around stable living conditions for deer, as opposed to fluctuations in forage availability on natural ranges.*

3) **Aesthetics**

Many people enjoy wildlife watching within their neighborhoods. Although white-tailed deer are often viewed as an aesthetically pleasing addition to many homeowners in urban communities, ***they can cause ecological, social, and economic problems when they become overabundant and unmanaged.***

4) **Wildlife feeding**

Safe from harassment and hunting, suburban and urban deer can quickly lose their fear of people and pets and make themselves at home in backyards and on playing fields. ***Intentional backyard feeding emboldens them even more, concentrating deer and worsening conflicts.***

NOTE: The State of Michigan has banned feeding or baiting deer anywhere in the lower peninsula.

5) **Lack of Natural Predators**

Another factor leading to suburban deer overabundance is the scarcity of predators within these habitats. Modern deer populations on natural ranges are maintained at suitable levels largely by fawn predation. The reduction of predators within less natural, suburban habitats contributes to unusually high fawn survival rates.

Additionally, recreational hunting is not allowed within most residential areas. In rural areas across the United States where deer predators have been eliminated, recreational hunting has served to create a balance between deer populations and their available habitats.

6) **Safety and Liability Concerns**

Harvesting or capturing animals within populated areas may create safety concerns for residents. While many safety concerns are only perceived, rather than real, special safety precautions must be addressed before deer control measures are initiated.

7) **Hunting and/or Firearm Restrictions**

Local ordinances and/or policies regarding hunting and the discharge of firearms may be obstacles to implementing deer control measures.

NOTE: Kalamazoo Ordinance § 7-9; Hunting and trapping states: "No person shall hunt or trap wildlife at any time within the City limits, except with the approval of the City Manager or Chief of Public Safety, nor shall any person carrying a firearm or hunting weapon trespass upon the land of another in the City without the landowner's consent".

8) **Public Relations Concerns**

Appointed decision makers within city governments, community associations, or development organizations are often hesitant to make controversial or divisive decisions.

Suburban deer overabundance presents unique challenges and circumstances. While the biological constraints of deer herds are commonly considered when managing rural deer populations, **suburban deer overabundance is usually solely a reflection of human values. When deer numbers approach or exceed human tolerance levels, they may be considered overabundant.** (Creacy, 2006, p.1)

The percentage of survey respondents who have “seen more deer now than 3 years ago” – 58.0%

Carrying Capacity: Biological, Cultural/Social, Ecological

(A Review of Deer Management in Michigan, MDNR, 2009, pp.9-12)

(Deer Management, Whitetails Unlimited, 2018, pp.5-6)

There are three types of deer population “carrying capacities” to take into account when considering management of a wildlife population. ***“An effective and appropriate management of deer populations must consider ALL carrying capacities”.*** (MDNR, 2009)

1) Biological Carrying Capacity (BCC)

This is referred to as the number of animals that a given area can support in good condition over an extended period. *BCC is determined by the quality and quantity of food, water, and cover in an area. When the environment cannot meet the needs of the herd, mortality from starvation, disease, parasites, or reproductive failure is imminent or is occurring and there is a dramatic population decline, and surviving animals are in poor health. Biological carrying capacity for deer is a moving target in that it changes yearly and seasonally. Zones containing a large percentage of public land and minimal human conflict are generally managed based on BCC, not the typical definition of an urban area. Therefore, BCC is often not relevant in an urban setting.*

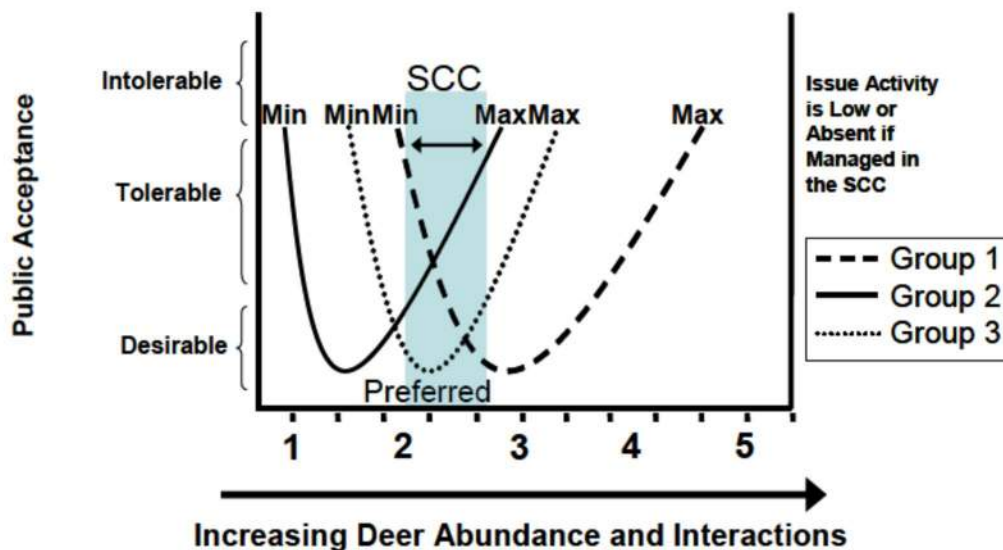
2) Cultural/Social Carrying Capacity (CCC or SCC)

This is the maximum number of deer that *can coexist compatibly* with local human populations (Ellingwood and Spignesi, 1986). This level is dependent on human tolerance, land use, availability of natural foods, local values, and other factors, and can vary from area to area. The SCC/CCC is the point where conflicts between deer and human populations become a problem. ***The cultural carrying capacity can be exceeded without exceeding the biological carrying capacity over a geographic area,*** because different communities have different tolerance levels of deer numbers, and it and is not easily correlated with specific deer densities.

Deer in urban and suburban areas do not exhibit the typical flight behavior seen in rural areas. Urban deer accustomed to human presence essentially have lost fear of humans and no longer view them as a threat, which *increases the probability that a negative human-deer interaction will occur.*

Deer management can be less about management of deer than about managing the issues created by deer–human interactions and differences in stakeholder tolerances regarding those interactions. “A SCC for deer is defined by the level of abundance and interactions acceptable to enough stakeholders such that there is a low level of deer-related issues”. (MDNR, 2009, pp.9-12)

There is no question that there is a tremendous amount of variation in determining the “right” SCC. It is a subjective figure which can vary widely depending on which interest group(s) are surveyed. The overlap of the example of the three interest groups on the next page defines a CCC; that is, it suggests a level of deer abundance and interactions that would be acceptable to most members of the three hypothetical stakeholder groups. (MDNR, 2009, p.12)



3) Ecological Carrying Capacity (ECC)

This is when the ecosystem starts to become damaged because the herd is eating faster than the plants can regenerate. **Deer remain healthy, but as the habitat degrades, the deer may move on.** Reducing the number of deer can restore overall ecological health.

As the MDNR states, ***“Rather than a discussion regarding overall deer numbers or densities, a focus on impacts related to the local deer population should be emphasized and monitored.** This can include constituent surveys sent out every couple of years to measure changing attitudes regarding deer numbers, monitoring deer-vehicle collisions, or conducting simple regeneration surveys in natural areas”.* (MDNR, 2016, p.1)

The choices all depend on the overall goals of a deer management program. Focusing on a set number of deer for a management plan may not resolve some of the concerns that were intended to be reversed or stabilized by initiating deer management.

For example: ~20 deer/square mile has generally been cited as an appropriate level to ensure healthy regeneration/bird communities, etc. pertaining to forest management. However, if a forest has been severely over-browsed for years, yielding little to no regeneration, a population under 20 deer/sq mile could still hypothetically have an impact on regeneration as their numbers are still high enough to suppress a vegetative response in a denuded landscape. (East Lansing, City Council Questions re: Deer Management, 2015)

NOTE: Our committee believes that the various Carrying Capacities make up a complex and variable concept; they are very specific to each area within the city where deer live. **Further study is warranted to:**

1. **Determine accurate deer counts** (and number of herds) within Kalamazoo at-large, beginning the focus of study on the individual neighborhoods that report more deer sightings and issues than others
2. **Measure and track** citizen conflicts and impacts, deer-vehicle crashes, and vegetation regeneration (or lack of) by each affected area
3. **Survey** citizen tolerance and attitudes

REASONS TO DEVELOP A KALAMAZOO DEER MANAGEMENT PROGRAM

Introduction

(A Review of Deer Management in Michigan, MDNR, 2009, p.29-30)

As white-tailed deer have expanded in number and adjusted to living in and around urban areas, they have taken up permanent or semi-permanent residence in many Michigan communities. ***With adequate cover and food available*** deer successfully navigate sidewalks, traffic, and backyard fences, and ***appear quite comfortable with daily interactions involving humans, barking dogs and vehicles***. Management of urban/suburban deer populations can be difficult. As deer populations increase and conflicts with deer arise, different expectations, concerns, and values make addressing these conflicts problematic.

Similarly, as deer populations increase and conflicts with deer arise, different expectations, concerns, and values make addressing these conflicts problematic. As stated previously, ***deer management can be less about management of deer than about managing the issues created by deer-human interactions and differences in stakeholder tolerances regarding those interactions***.

NOTE: Our committee understands that many stakeholder groups and individuals often have differing views and needs regarding deer management. A deer management plan should take all views into consideration but still “follow the science” to insure the best course of action for the health, safety, and quality of life of both the deer herds and residents.

Our research and recommendations reflect efforts to identify an appropriate balance among the biological needs of the species, the benefits deer provide to some segments of society, the costs they impose on others, and the acceptability and feasibility of the differing management methods.

Identified Issues in Kalamazoo

Based on public statistics and data, our citizen survey, and multiple neighborhood's resident feedback over the last several years, **the main, identified issues associated with Kalamazoo's urban deer population include:**

The percentage of our survey respondents “personally affected by the problems [below]” – 63.4%

1) Deer-Vehicle Collisions (DVCs)

- The data indicates that DVCs within Kalamazoo have been trending up since 2014 (*data from City Engineer and MTCF*):

Year	# DVCs
2014	42
2015	53
2016	57
2017	58
2018	87
2019	72

Average # DVCs from 2014-19 = 61/year

- **Michigan DVC Statistics:**

(A Review of Deer Management in Michigan, MDNR, 2009, p.34)

- As deer populations increase and development encroaches upon rural environments, **DVCs have become more prevalent**. As many as half of all DVCs go unreported (Marchoux, 2005). During 2008, there were 61,010 reported DVCs in Michigan (MTCF, 2008).

- While Michigan's two million deer are most active in spring and fall, vehicle-deer crashes are a year-round problem. Each year, there are nearly 50,000 reported vehicle-deer crashes in Michigan. (Michigan.gov/MSP [Michigan State Police], 2021)
- The average repair bill when a person hits a deer is about \$2,100 (MSU Extension, 2012)
- On an annual basis, deer crashes cost Michiganders upwards of \$130 million in damage, per a AAA news release
- In 2018, 14 people died in deer crashes in Michigan; nine of those were motorcycle-deer crashes, the release said. *There was a total of 53,464 vehicle-deer crashes in the state that year, which was up from 50,949 in 2017.* (MLive.com, 2019)

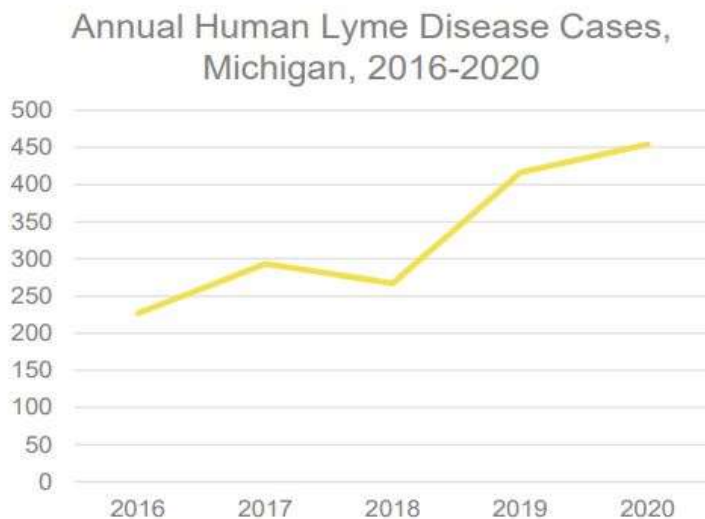
2) Lyme Disease

(Ticks and Your Health, MDHSS, MDNR, MSU, 2019)

Lyme disease is an illness caused by the spirochete bacterium *Borrelia burgdorferi*. In the midwestern and eastern US, this disease is transmitted to people and animals by the bite of an infected blacklegged tick (*Ixodes*).

The percentage of our survey respondents who were “concerned to very concerned” about “You or those close to you getting a tick-borne disease (such as Lyme Disease)” – 70.0%; the #1 concern among respondents

- *Lyme disease is the most common vector-borne disease in Michigan*
- In Michigan, the first official reported human case of Lyme disease was in 1985
Cases have now been reported in both the upper and lower peninsula and in most of Michigan's 83 counties and is rapidly trending up
- *It is anticipated that the number of cases reported will continue to increase:*



Source: MI Dept. Health & Human Services, 2020

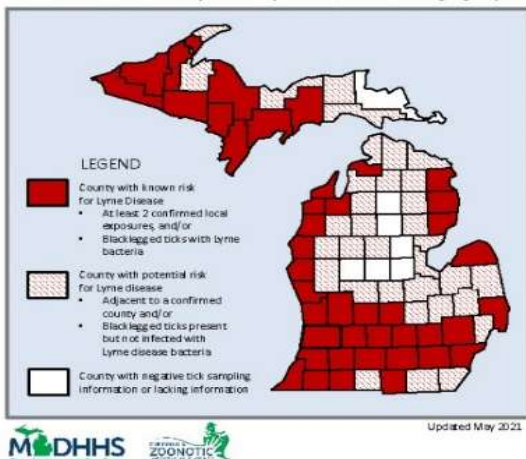
White-tailed deer are the primary hosts for adult black-legged ticks, or deer ticks (*Ixodes*). These ticks are responsible for transmitting the causative agent of Lyme disease to humans. *Research has shown increased tick abundance and more human disease occurrences in areas with high deer densities, and that tick populations decline by controlling the deer population* (Deer Reduction Is a Cornerstone of Integrated Deer Tick Management, Sam R Telford, III, Journal of Integrated Pest Management, Volume 8, Issue 1, January 2017, p. 25)

2021 Michigan Lyme Disease Risk Map

Lyme disease is an emerging disease transmitted by the blacklegged tick in Michigan. Local risk for Lyme disease varies depending on whether infected ticks are in the area. Several local and state agencies partner to conduct surveillance for Lyme disease in people and animals. The below map classifies risk based upon field collected and infected ticks and reported human cases of Lyme disease in Michigan (see the legend for specific criteria). The map is updated as new information becomes available.



For more information about Lyme disease prevention, visit www.michigan.gov/lyme



NOTE: In a July 30, 2020 news release the Kalamazoo County Health & Community Services Department made residents and healthcare providers aware of an increasing number of confirmed and probable Lyme disease cases in Kalamazoo County. They also noted that **Lyme disease cases were five times higher than they were in 2015.**

3) Other Tick-borne Diseases Spread in Michigan (Ticks and Your Health, MDHSS, MDNR, MSU, 2019)

Ticks may transmit numerous other diseases to people and pets and although they are less common than Lyme disease, it is just as important to protect yourself from:

- Powassan Encephalitis (Deer Tick virus)
- Rocky Mountain spotted fever
- Anaplasmosis
- Ehrlichiosis
- Babesiosis
- Tularemia

4) Landscape and Garden Damage

The percentage of our survey respondents who were “concerned to very concerned” about “Deer damage to trees, shrubs, plantings & gardens around [their] home” – 66.6%

NOTE: This was the second-highest concern among respondents

Many trees, shrubs, vines, and herbs planted within residential landscapes are highly preferred by white-tailed deer. Of course, severity of landscape damage is directly proportional to deer population density. It has been estimated that residential landscape damage in the US may exceed \$250 million per year (Conover 2002).

5) Ecosystem Damage - Private and Public Lands; Over-Browsing & Habitat Degradation (A Review of Deer Management in Michigan, MDNR, 2009)

The percentage of our survey respondents who were “concerned to very concerned” about the following issues include:

- “Deer preventing the natural regrowth of native plants” - 65.7%
- “Disruption of our city’s ecosystem” – 64.2%
- “Loss of plant or animal diversity in your neighborhood/city” – 64.2%
- “Over-browsing of natural habitats (on public and/or private lands)” - 63.4%
- “Decreased bird populations due to deer-related habitat loss” – 60.3%

Excessive deer densities are known to cause long-term damage to wildlife habitats. Parks and land preserves must serve as protected areas for all plant and animal species. Impacts on native plant communities have cascading effects on associated wildlife species.

Overabundant deer herds can:

- Eradicate preferred and native plant species
- Alter or eliminate habitat ecosystems of other animals
- Disrupt the natural succession of plant communities

Deer may also facilitate the introduction and spread of invasive species through preferential foraging on certain plant species and serving as dispersal conduits along the trails they use.

There is already evidence of damage to Kalamazoo's parks and land preserves ecosystems by deer over-browsing, as noted by local biologists and naturalists:

- Our parks and land preserves support ecosystem services, protect water quality, and provide wildlife habitats
- Preferred native forage plants (oak, cedar, trillium, bloodroot, and trout lily) can require *up to 10 years to regenerate*

6) **Declining Deer Herd Health: Chronic Wasting Disease (CWD) and Other Diseases**
(Michigan.gov/DNR [Deer Management], 2021)

The percentage of our survey respondents who were “concerned to very concerned” about “Chronic Wasting Disease (CWD) spreading among local deer” – 71.0%

- **CWD is a highly contagious and lethal neurological disease** that affects deer, elk, and moose. It causes a degeneration of the brain resulting in emaciation, abnormal behavior, loss of bodily functions and death. **CWD is fatal; once an animal is infected there is no recovery or cure.** To date, there is no evidence that CWD can be naturally transmitted to humans or to other animals.

It is caused by a normal protein, called a prion, that folds incorrectly and can infect other deer. It is transmitted through direct animal to animal contact or by contact with saliva, urine, feces, blood, carcass parts of an infected animal or infected soil. Prions are extremely resistant in the environment and can stay infectious for years.

Since May 2015 when the first CWD deer was found in Michigan, CWD has been confirmed in several Lower Peninsula counties. CWD was found in October 2018 in Dickinson County, in August 2018 at a Kent County deer farm facility, and in January 2017 in two captive deer from a deer farm facility in Mecosta County. (Michigan.gov/DNR [Deer Management], 2021)

- **Other diseases deer can contract:**
(East Lansing, City Council Questions re: Deer Management, 2015)
 - Epizootic hemorrhage disease (EHD)
 - The SLP has had sporadic outbreaks of EHD at varying intensities *that have impacted deer populations for several years*. EHD is an acute, infectious, often fatal viral disease of some wild ruminants. (MDNR, 2016, p.5)
 - Bovine tuberculosis
 - Blue tongue virus – lethal among deer
 - Deer warts - can be lethal to deer; affected areas should not be consumed
 - Parasitic worms & Arterial worms & Nasal bots
 - Brain abscess – meat not edible
 - Mange – contagious to other deer

7) **Loss of Deer Habitat Leads to an Unhealthy and Unsafe Ecosystem for Deer**

As deer populations overutilize available resources, herd health inevitably declines. Increased parasite loads and declines in body weight, antler production, and fawn recruitment are **often followed by large-scale deer “die-offs”**.

The percentage of our survey respondents who were “concerned to very concerned” about the loss of deer habitat leading to an increased deer population” – 58.8%

8) **Other Public Health Concerns (not including Lyme’s Disease)**

(MDNR, September 2020; Michigan Emerging Disease Issues, 2021)

- **SARS-Co-2 (COVID-19)**

(aphis.usda.gov/aphis/, July 28, 2021;

<https://www.nytimes.com/2022/02/07/health/coronavirus-deer-animals.html>)

In July 2021, the US Department of Agriculture’s Animal and Plant Health Inspection Service (APHIS) released the news that a survey of wild deer populations has found that large numbers of the animals seem to have been exposed to SARS-CoV-2, the virus that causes COVID-19. **67% of the deer tested in Michigan have been exposed to it.**

APHIS is working closely with federal and state partners, including the Department of the Interior, the CDC, and the Association of Fish and Wildlife Agencies, to determine next steps. Results from this surveillance effort are currently being prepared for publication in a peer-review journal.

- **Deer Droppings (scat)**

(Nicholas Martin, entomologist; Entomology and Nematology Department, University of Florida, Institute of Food and Agricultural Sciences, Feb. 2021)

- Zoonotic diseases associated with deer feces, urine, or other biological fluids include E. coli, Leptospirosis, Listeria, Cryptosporidium, Q fever (Coxiella burnetti), and tuberculosis
- E. coli can be easily transmitted between species through fecal to oral contact. In 2011, 15 people in Oregon became ill and one died from E. coli 0157:H7 contaminated strawberries grown on a field with deer scat. E. coli poses a threat to dogs as well as people. Dogs with E. coli can then transmit it to their owners
- Scientists have not ruled out fecal to oral transmission of CWD from deer to humans, although no cases of this type of transmission have been reported
- There is no evidence at this time that the CWD pathogen is transmissible to people from consuming deer or elk meat, but both the CDC and the Game Commission state that if a harvested animal tests positive for CWD, you should not eat it

The percentage of our survey respondents who have “seen deer pellets (poop)” – 66.3%

NOTE: Many of our survey respondents commented on the nuisance, sanitary concerns, and health hazards of regularly finding abundant amounts of deer scat in their yards, in parks, and in school playgrounds.

9) **Public Safety**

The percentage of our survey respondents who were “concerned to very concerned” about the following issues include:

- **“Injury to you or family members from a deer-vehicle collision” – 64.5%**
- **“Loss of [natural] deer habitats, leading to their increased population [within suburban areas]” – 58.8%**
- **“Deer threatening or harming people or pets” – 29.8%**

NOTE: Many resident comments included accounts of their pets being attacked or charged at by deer (and themselves being threatened), mainly during mating/“rutting” season (October – November)

Many suburban communities, including Kalamazoo, are experiencing overabundant deer populations, urban sprawl, and limited natural resources. These scenarios lead to an unhealthy environment for humans and deer to coexist in. **Consequently, some form of deer management becomes a requirement, not an option.**

DEVELOPING AND CREATING A SUCCESSFUL DEER MANAGEMENT PROGRAM

Planning Considerations

NOTE: Our committee recognizes that many other cities throughout the US, as well as cities in Michigan, have faced, and will continue to face, this complex issue. The good news, however, is that many cities who have addressed this issue head on have developed and created strategies and tools (and successes) to lead the way for Kalamazoo’s efforts.

1) MDNR Publications

- Managing Deer Within Suburban Communities – First Steps, 2020
- Urban Deer Management: First Steps and Options for Communities, 2020

2) Local Resources

- Kalamazoo Nature Center: Deer culling program; 2001-present (phone conversation with Ryan Koziatek, KNC Stewardship Director, February 2020)
- Summary of other Michigan cities deer management/culling programs (2015-20)
(Can be found in **Appendix B**)

3) Other Resources

- Community-based deer management (CBDMD): Cornell University
 - <https://deeradvisor.dnr.cornell.edu/cbmdm-process>
- Solving Problems with Deer, HSUS, 2018

Comprehensive Deer Management Strategy

(A Review of Deer Management in Michigan, MDNR, 2009, p.33)

- 1) **Choosing which actions to implement** is the most difficult and time-consuming part of the planning process for many communities.
 - MDNR staff can help by providing information on deer biology and management options
- 2) **Bringing in a trained facilitator** to guide discussions may also be useful and even necessary.
 - Deer management can become a contentious and controversial issue, as community members may have widely varying perspectives on deer and be passionate about their opinions and priorities
- 3) It’s important to **thoroughly publicize planning** efforts to ensure that all members of the community have an opportunity to participate and voice their perspectives.
 - Insufficient outreach increases the likelihood of negative backlash from groups or individuals who disagree with a plan that was formulated without their participation
- 4) **An inclusive process** provides valuable information to community leaders on deer impacts and stakeholder opinions, allows stakeholders to increase mutual understanding by educating each other on their differing perspectives, and establishes a strong foundation for defending deer management decisions and actions in the event of a subsequent challenge.
 - *A high level of communication and transparency should be maintained throughout program implementation to keep community members informed and engaged*

- 5) **Because deer management is a long-term undertaking, *periodic evaluation* of the program is an important component.**
 - Evaluations should incorporate as much diversity of stakeholder participation as did the initial planning process
 - Progress toward the program goals should be assessed and a determination made on whether modifications to the program are needed. Such modifications may be stimulated by lessons learned during program implementation, data gathered through monitoring, technological advancements, shifts in community priorities, or other causes
 - In most cases, programs run more smoothly after the first year or two as residents become accustomed to the management activities and begin to see results. However, controversy can still resurface, and ***if periodic evaluations and modifications are not conducted, over time the program may become out of sync with the community's needs and desires***
- 6) Because a deer management program should outlast the tenure of the people making decisions when the program is initiated, ***it is valuable to have a written management plan***. Such a plan provides an opportunity for the community to document their decision-making process and reasoning and establish guidance for future decisions

URBAN DEER MANAGEMENT OPTIONS, TECHNIQUES, AND TOOLS

(Solving Problems with Deer, HSUS, 2018)

Deer Management Options

(Deer Management Handbook for Communities in New York, 2018, p.12)

Options communities have to reduce deer-related impacts fall into ***two broad approaches***:

- 1) Reduce resident's vulnerability to the negative effects of deer
- 2) Reduce deer populations

NOTE: Our committee believes full consideration of both of the above approaches will maximize the likelihood of success and will engage all residents in the impact reduction effort.

Deer Management Techniques

(Deer Management Within Suburban Areas, Creacy, 2006, p.3)

- 1) When addressing suburban deer problems, the advantages and disadvantages of **all available deer management tools must be evaluated**. Differing circumstances among suburban communities will result in varied approaches to solving the problem
- 2) Furthermore, it is likely that a **combination of management tools** will be necessary to achieve desired results
- 3) Deer control measures require **community input**, as well as considerable long-term planning and commitment
- 4) The costs of suburban deer management should always be compared to potential benefits such as reduced deer/vehicle accidents, improved human safety, and decreased landscape/garden damage.
- 5) It is important for communities to **develop measurable long-term goals and objectives** as part of a comprehensive deer management plan before implementing deer control measures:
 - Objectives based on deer abundance can be evaluated with standard deer survey techniques such as:
 - Survey transects or time/area counts
 - Indicators such as frequency of deer/vehicle collisions
 - Number of reported deer complaints
 - Predetermined reductions in landscape damage

*Stakeholders should understand that the total elimination of the problem (or the deer herd) is neither practical nor achievable. Rather, **the goal should be related to the reduction of deer-human conflicts to an acceptable level.***

Deer Management Tools

NOTE: Our committee has carefully researched and listed every option we could identify and reviewed each and every one for the City's evaluation and consideration.

1) Education Programs for Citizens

(A Review of Deer Management in Michigan, MDNR, 2009;
Howard County, MD Dept. of Recreation and Parks, Deer Management Plan, 2002, p.6-7)

Public information is an important part of the management of deer-human conflicts. A lack of understanding of deer biology and ecology can be compounded by a lack of knowledge, misinformation, and misconception regarding available management options.

Educational activities can range from formal presentations for large groups to ad hoc, one-on-one conversations. Content includes educating the public, deer committee members, and city officials about the aspects of urban deer management.

NOTE: Our committee recommends that the following specific educational tools be developed and implemented by the City as soon as possible:

- Deer management educational and informational-based website, to:
 - Disseminate deer-related (biology, habits, etc.) information
 - **Inform** about:
 - The latest management activities and policies
 - Other resources and information regarding deer-related issues
 - Be a **resource** for:
 - Deer resistant plants
 - Non-lethal deterrents
 - Hazing and scare tools
 - *Comments and inquiries from residents should also be received*
 - *Create effective tools to report and manage:*
 - *Deer-feeding violations*
 - *Deer carcasses for city removal*
- Educational programs and informational brochures covering deer biology, carrying capacities, diseases, etc.
- Media plan to provide timely and relevant information to residents
- Informational brochures
- Hold regular informational meetings
- Annual update on deer management activities
- Partner with public health agencies to increase awareness about Lyme Disease, CWD, and other public health safety issues

2) Non-Lethal Deer Management Techniques

(A Review of Deer Management in Michigan, MDNR, 2009, p.30-33; Deer Management Within Suburban Areas, Creacy, 2006, p.3; Deer Management Handbook for Communities in New York, 2018, p.20; Urban Deer Technical Guide, Indiana Division of Fish & Wildlife, 2013, pp.11-14)

*Non-lethal management techniques are generally well accepted by the public. However, **limited effectiveness and high cost** may prevent success when used exclusively to resolve human-deer conflicts; they are best used to **supplement, not replace**, deer population management.*

NOTE: Our committee has identified the following non-lethal methods of urban deer management for the City's research, review, and consideration. We recommend the City also be an educational resource for this information.

1. **Ban on Deer Feeding**

Many people enjoy feeding deer in urban/suburban areas to increase viewing opportunities. This may attract deer to unwanted areas, especially during winter months. *Feeding deer can also lead to crowding and increased potential for disease transmission*, and also induce deer to cross roadways, increasing the potential of vehicle accidents. **Strong, consistent enforcement is a must for this to be effective.**

NOTE: The State of Michigan has banned the feeding of deer in the lower peninsula, therefore, our committee strongly recommends the following measures:

- 1) The City establishes an anonymous method for residents to report deer feeding
- 2) The City works with MDNR to establish an effective way of enforcing the deer-feeding ban

2. **Unpalatable Landscape Plants**

While deer feed readily on a variety of plants, some varieties are less palatable than others, and a wide variety of native and cultivated plants are available. Careful plant selection for home and business landscapes, combined with the selective use of repellents may minimize damage due to deer browsing and make areas less attractive to deer. However, as deer densities increase, preferred foods become less available, resulting in less desirable plants also being browsed to a greater extent.

3. **Repellants**

Repellants are commonly used to reduce a plant's attractiveness and palatability to browsing deer.

- Use of repellants is often expensive, labor intensive, and its effects temporary due to being diluted or washed off by rain and acclimation by deer
- Repellants work best in small orchards, gardens and on ornamental plants when an alternative food source is readily available
- Repellants are more effective on less palatable plant species than for those that are highly preferred

Repellents also work by reducing the attractiveness and palatability of treated plants to a level lower than that for other available forage. **Repellents don't reduce or control deer numbers but do have the potential to increase human tolerance to deer.**

4. **Fencing**

"Deer-proof" fencing (8 to 10-foot-high woven wire) is effective at excluding deer from specific locations to prevent or reduce deer access. (Solving Problems with Deer, HSUS, 2018, p.3)

- Fencing does not directly reduce deer numbers. Rather, it can prevent damage, which in turn has the potential to some extent to increase tolerance to deer by those directly impacted.
- Locations where landscape or horticultural damage is an issue are good candidates for fencing as are airports and along roads where deer-vehicle collisions are common
- The initial cost for fencing materials and installation can be substantial but will provide years of protection if properly maintained

The percentage of our survey respondents who found it "acceptable to very acceptable" for the City to "allow "deer" fences to keep them away from yards, gardens, etc." – 66.2%

NOTE: Our committee recommends that the City review and modify, if needed, its current fencing ordinance (§ 6.3 Screening and Fences) to allow for approved “deer-proof” fencing **up to 10 feet high** to allow residents to keep deer out of their yards. § 6.3 currently limits fence height to 4 feet in front yards and 7 feet for side and rear yards. We also recommend the City consider allowing the use of electric fencing / tape in certain locations as an option to control deer damage.

5. Deterrents

- Hazing and frightening techniques
 - Hazing or frightening deer using **motion-activated devices** that use sound, light or spraying water can be an effective method for keeping deer out of specific areas. *However, deer can quickly become accustomed to these repetitive sounds or sights over time unless a variety of methods are used and changed often.*
- Approaches for minimizing DVCs include:
 - Roadside reflectors
 - Warning (Deer Crossing) signs
 - Wildlife warning whistles
 - Vegetation management
 - Reduced speed limits
 - Efforts to raise public awareness
 - Construction of barrier fencing, or wildlife overpasses/underpasses may be effective for addressing specific problem areas but can be expensive to construct. *This is not a practical option in Kalamazoo.*

These have all been used to attempt to decrease the incidence of deer-vehicle collisions without much documented success.

6. Dogs

Use of dogs, located within invisible fencing systems has been *used effectively to deter deer from damaging crops*. Success varies with the size of the area and the number and aggressiveness of the dogs. Dogs with restricted movement, such as on a chain, are not effective.

7. Trap (live capture) and Relocate

(A Review of Deer Management in Michigan, MDNR, 2009, pp.31-32)

Capturing and moving deer from one area to another is often requested by people opposed to lethal techniques. However, ***it is not a reasonable option, and has been demonstrated to be:***

- Impractical (there are few places available to release excess deer)
- The procedure of capture and release is very expensive
- Relocating deer results in significant levels of stress, injury, and mortality to them
- ***Presents risk of spreading diseases***

NOTE: Due to these disease concerns, MDNR will not issue a permit to translocate deer.

3) Lethal Deer Management Techniques

(Deer Management Within Suburban Areas, Creacy, 2006, p.3) & (Anthony J. DeNicola, *Managing white-tailed deer in suburban environments*. A technical guide, January 2000)

NOTE: Based on our resident survey results, our committee fully understands and appreciates that employing lethal methods as part of a Kalamazoo urban deer management program is a controversial approach, as many residents have very strong feelings both for and against the culling of deer.

However, to dismiss any/all lethal methods without fully researching the local situation to see if lethal methods are warranted and necessary as one part of a comprehensive approach to managing the

deer population in Kalamazoo is not looking at the full picture to support the long-term health and safety of both our residents and our deer.

Therefore, **our committee strongly recommends that the City “follow the science” and wildlife experts to determine the most effective methods (both non-lethal and lethal) to manage our urban deer population, and to employ methods recommended by the professional deer managers.**

Lethal tools are more effective than others but may be unacceptable if social or safety concerns are an issue. **Applying a combination of several techniques specifically tailored for each situation should prove to be more successful than utilizing a single tool.**

Lethal techniques face several challenges in many urban/suburban areas, including:

- Real or perceived safety concerns
- Conflicting social attitudes and perceptions about wildlife
- Hunting and firearm discharge restrictions
- Liability or public relations concerns

Lethal deer population management techniques are not always well accepted by some portions of the public. However, when successfully implemented, they can be safe, relatively inexpensive, and highly effective at reducing deer populations.

As the MDNR states in their 2016 Michigan Deer Management Plan (p.26):

“Perhaps the most challenging aspect in all of white-tailed deer management is the issue of how to best manage deer in these urban/suburban areas where use of lethal control as a management tool is frequently unavailable and community members often have highly polarized views and values regarding deer management.

Successful resolution of urban/suburban deer issues requires that community leaders and MDNR staff work together with stakeholders to gain acceptance of proven methods and utilize them to successfully reduce human-deer conflicts”.

“Currently, the DNR:

- advises community leaders
- assists in the development of deer management plans
- participates on local task forces
- speaks at public meetings
- conducts disease testing, and
- provides permits for lethal harvest but
- **lacks a defined process that can be implemented consistently across the State”.**

NOTE: Our committee recommends that if it is determined by professional deer managers and experts that lethal method(s) should be employed to manage a demonstrated overabundant deer population in Kalamazoo, it should be accomplished in two phases:

- **Initial Reduction Phase**
Used to remove large numbers of deer from an overabundant herd during a short period of time to achieve desired deer densities.
- **Maintenance Phase**
This includes long-term efforts to maintain deer densities at target levels.

NOTE: Most importantly, our committee believes and recommends that Kalamazoo have a long-term deer management plan in place before initiating any deer herd reduction operations.

See **Appendix B** for a table identifying other Michigan cities that, after careful research and consideration, have employed lethal methods as a part of their deer management programs.

NOTE: *The Kalamazoo Nature Center, although rural in nature, has held numerous deer culls since 2001. Their research and shared experiences to our committee have been invaluable in understanding this method first-hand. Our committee recommends, if a cull is warranted, that the City works with them to gain further insight.*

(A Review of Deer Management in Michigan, MDNR, 2009 p.30-33);
(Deer Management Handbook for Communities in New York, 2018, p.20);
(Urban Deer Technical Guide, Indiana Division of Fish & Wildlife, 2013, pp.9-14)

1. **Regulated Hunting**

Controlled hunting is the application of legal, regulated deer hunting methods in combination with more stringent controls or restrictions as dictated by landowners or government officials. Regulated hunting has proven to be an ecologically sound, socially beneficial, and fiscally responsible method of managing *rural* deer populations. However, hunting has limited application in some urban/suburban areas because of safety considerations, competing land-use priorities, legal constraints, or social values.

This method, when used in a safe manner, is often the most cost-effective method for managing urban-suburban deer populations. The primary hunting methods used to safely harvest deer during regulated hunting in urban environments typically includes archery and crossbows. The low cost of regulated hunting is one of the more attractive features of this solution to deer conflicts.

NOTE: *Due to the lack of strict management control over licensed hunters at-large, especially in our urban setting, our committee does not recommend this method be employed by the City.*

2. **Controlled/Managed Hunting**

These are *specialized hunts that incorporate the benefits of regulated hunting but add restrictions* designed to meet the needs and objectives of landowners experiencing conflicts with deer.

Restrictions typically are imposed by the municipality during controlled hunts and specifically are *designed to improve safety precautions* or accelerate the reduction of present and future deer numbers, and include limiting hunter numbers, restricting days or times to hunt, requiring shooting proficiency tests, strategically disbursing hunters on property experiencing deer conflicts, etc.

NOTE: *Again, due to the lack of strict management control over licensed hunters at-large, even with additional regulations placed on them, especially in our urban setting, our committee does not recommend this method be employed by the City.*

3. **Sharpshooting (either with firearms and/or archery)**

Lethal harvest of deer by sharpshooting through the employment of highly trained, experienced professional sharpshooters, ***generally employed by municipalities through the U.S. Department of Agriculture's Wildlife Services (USDA), can be a very effective technique.*** A variety of techniques (shooters using night vision goggles, suppressed weapons, limited locations and times, etc.) can be used in sharpshooting programs to maximize safety, humaneness, discretion, and efficiency.

This technique, while effective in reducing deer population, is *generally more expensive than controlled hunting* based upon several factors (size and scope of the project, approachability

of deer, seasonal or timing restrictions, level of involvement of professionals in processing of culled deer, etc.) as well as requiring the service of trained professionals (through the USDA), which increases the cost significantly over regular hunting options. *However, costs are much lower (\$600-700/deer) than methods such as capture and sterilize; see 4) 1.below.* Further, like virtually all forms of deer management options, sharpshooting **requires year-to-year repetition to be successful.** (Deer cull by sharpshooters approved in Muskegon despite some citizen opposition - mlive.com, January 14, 2020)

NOTE: If a lethal method is determined by experts to be an effective piece of successfully managing the deer population (for the benefit of humans and overall deer herd health and safety), our committee recommends that only this lethal method be employed by the City.

- **Venison Donation Programs**

An obvious by-product of any deer reduction program is the availability of venison (deer meat). Venison is a lean meat that is low in fat and high in protein, comparing favorably with the nutritional qualities in chicken breasts. Such meat is in desperate need by many. Additionally, an increasing number of people are looking to organically produced, free-range sources of meat, such as from free-ranging game species (including deer) as an alternative to supporting practices typically associated with existing livestock husbandry and processing.

NOTE: Our committee further recommends that any deer reduction effort by the City encourages, promotes, and employs a **Venison Donation Program** as a valuable public service. Our committee has identified local and regional processors who have previously offered their services for processing and venison donation distribution at no, or reduced, cost to those in need. **Local food banks identified include Loaves & Fishes, Gospel Mission, Ministry with Community, as well as several Neighborhood Association food banks.**

- 4. **Trap and Euthanasia**

This method is seldom used but is an option in areas where lethal techniques have been approved but hunting or sharpshooting are not possible due to safety concerns. *It is a labor-intensive, inefficient, and expensive method* as it is difficult to trap deer. The deer are euthanized by gunshot, penetrative captive bolt, or by pharmacological agent. The effects of capture stress are key in assessing the humaneness of this option. The longer a deer is trapped, the greater its stress level and the less humane the management option. This also poses danger to the people involved with the process.

NOTE: Due to the understood costs, difficulties, and unnecessary trauma inflicted on deer using this process our committee does not recommend this method be employed by the City, unless recommended by experts as being both humane for the deer and cost-effective for the City.

- 4) **Experimental Deer Management Techniques**

(A Review of Deer Management in Michigan, MDNR, 2009 p.30-33),
(HSUS, 2018, p.17, Appendix H),
(Urban Deer Technical Guide, Indiana Division of Fish & Wildlife, 2013, pp.11-14)

- 1. **Deer Fertility Control**

There has been a significant amount of research focusing on alternative, non-lethal population control techniques. Specifically, researchers have sought an effective, affordable immune-contraceptive that would be useful in areas where traditional hunting methods are not a safe or socially acceptable option.

NOTE: Most of these tools are still in experimental phases, and thus are not currently available for general use.

- **Immuncontraception** (a vaccine to block reproduction)
Most immunocontraception options have had limited use due to the substantial costs, labor, and special requirements needed to successfully implement such programs:
 - Most must be administered via a hand injection, project costs are typically high due to the need for traps, restraint equipment, specialized personnel, and possibly immobilization drugs.
 - It is believed that 70 to 90 percent of the females in a specific area need to be treated to effectively limit the population growth
 - A 2021 New York study conducted on suburban, free-ranging deer estimated that the minimal annual time commitment per deer for reproductive control was approximately **20 person-hours and a cost of \$700 to \$1,550 per deer**
 - In general (depending on the specific vaccine used) this method can be 80-100% effective for 2-5 years, then re-treatment is necessary

- **Surgical Sterilization**
 Involves surgically removing female reproductive organs or interrupting the fertilization pathway. (DeerFriendly.com, 2018)
 - Spaying can be expensive; \$1,200 per deer because of high labor costs. Sterilization is typically 97 to 100 percent effective and only needs to be done once, but *may result in the death or injury of some deer*
 - This field surgery requires more supplies and equipment than contraception so easier access to deer also becomes an issue
 - **In 2018 Ann Arbor attempted this with much controversy and concern:**
<https://www.bridgemi.com/michigan-environment-watch/no-joke-ann-arbor-removing-deer-ovaries-lawmakers-arent-laughing>
 - This technology *does not overcome the intensive effort involved with treating a substantial proportion of deer to prevent population growth* and assessing deer movements in and out of the area in which management is being applied

Unfortunately, the lack of public education regarding the availability and practicality of fertility control has caused unnecessary delays in the implementation of effective management programs because fertility control has been perceived as the ideal solution.

NOTE:

- 1) **MI Public Act 390 of 2018 currently prohibits until April 1, 2022, the MDNR from issuing any permits to authorize the sterilizing of deer**
- 2) **A December 20, 2020 MDNR Preliminary Report on Sterilization of Game in Michigan found that the MDNR is *not yet able to evaluate* how much of deer decline may be attributable to the combined sharpshooting and sterilization efforts, or attributable to other factors. The final MDNR report is due March 31, 2022**

Due to the described concerns with these methods (effectiveness, cost, stress/injury/death to deer), as well as their status as experimental (and sterilization currently prohibited under Michigan law), our committee does not recommend any of these fertility methods be employed by the City.

2. Reintroduction of Predators

(Deer Management Handbook for Communities in New York, 2018, p.20)

This is not ecologically or socially feasible in areas with high human density and no large blocks of natural habitat.

NOTE: *Due to the highly urban nature of Kalamazoo, and for the safety of our citizens (and pets), our committee does not recommend this method be employed by the City.*

3. NO ACTION

Per the MDNR's Review of Deer Management in Michigan, 2009, pp.32-33:

*"Implementing urban/suburban deer management is a difficult, costly, and time-consuming undertaking. Communities may be tempted to ignore human-deer conflicts until the problem has escalated and become severe in nature. **The eventual cost for taking no action will likely be much greater than if the problem had been addressed when conflicts first surfaced.** Deer populations, as well as frustration levels of residents, will likely grow to the point where finding a successful solution becomes very difficult".*

The percentage of our survey respondents who found it "not acceptable to not acceptable at all" for the City to "let nature take its course without human interference" – 92.1%

When asked their "general thoughts about deer in Kalamazoo"

- "I enjoy the presence of deer, but I worry about problems (damage, disease, etc.) they may cause" - 48.4%
- "I do not enjoy the presence of deer and regard them as a nuisance" – 22.7%
- "I enjoy the presence of deer, and I do not worry about problems they may cause" – 26.8%

NOTE: Based on our resident survey results, as well as the many comments, complaints, and concerns voiced to many of our Neighborhood Associations over the years (especially in the last 2-4 years), as well as our report's demonstrated deer population issues our committee is **strongly against the City taking a "no action" approach to our urban deer population.**

CONCLUSIONS AND RECOMMENDATIONS

Our committee's deer management recommendations are based on the best biological science available to us; however, all decisions must also be considered within a social context where stakeholder values and priorities must be addressed. *The integration of social considerations into scientific examination is necessary to move wildlife management recommendations and actions forward.*

NOTE: Our committee understands that proper research and implementing effective and acceptable solutions will take time. Due to the complexity of the issue, as well as the additional research needed to make scientifically based decisions, our committee recommends this issue be addressed in TWO PHASES, employing the following tools:

A) PHASE 1 - Develop and Implement:

1) Public Education Program and Resident Resource Website

- Public information is an important part of the management of deer-human conflicts. A lack of understanding of deer biology and ecology can be compounded by a lack of knowledge, misinformation, and misconception regarding available management options.

Our committee recommends the City develops and maintains an up-to-date, comprehensive deer education program to include educational programs, literature, dedicated website, in-person educational events, public informational displays, and hold regularly scheduled meetings with residents and neighborhoods to keep them informed and educated on responsible deer management techniques

2) Deer Carcass Removal Program

- Although not asked in our survey, **many neighborhood associations and residents have indicated over the years their frustration and disappointment that no local**

governmental body will take responsibility for removing deer carcasses. The only “solutions” offered to-date include either “drag it into the woods” or “dump it in a trash bin”. Both are completely unacceptable

*Our committee **strongly recommends** the city develops an efficient and safe program for residents to have deer carcasses removed from their property, as well as from parks and roadways.*

3) **Modified Fence Ordinance and/or Allow Higher Fencing**

- It has been demonstrated that “deer-proof” fencing (8-10-foot-high woven wire) is effective at excluding deer from specific locations to prevent or reduce deer access. Additionally, electric tape in some locations should be considered
- Although fencing does not directly reduce deer numbers it can prevent damage, which in turn has the potential to some extent to increase the tolerance to deer by those directly impacted.

4) **Support Enforcement of Michigan’s “No Feeding” Law**

- Address illegal deer feeding by:
 - Educating residents of the state’s current “no feeding” law
 - Creating an effective and efficient process for residents to report illegal feeding
 - **Implementing an effective way to enforce this ban via education and/or penalties to violators**

B) PHASE 2 - *Develop and Implement:*

1) **Further City-led Research**

As stated earlier, the MDNR **advises** community leaders, **assists** in the development of deer management plans, **participates** on local task forces, speaks at public meetings, **conducts** disease testing, and **provides** permits for lethal harvest, *but lacks a defined process that can be implemented consistently across the State.* (MDNR, 2009, p.26)

*It is precisely for this reason our committee **recommends** the City of Kalamazoo takes the initiative and lead in researching, developing, and implementing a comprehensive short-, medium-, and long-term deer management program for Kalamazoo for the health and safety of its ecosystem and the deer and human populations.*

- Our data and resident survey indicate that Kalamazoo has multiple herds of does and fawns, the deer population seems to be increasing, and some neighborhoods are more severely affected by our deer population than others
 - Our committee **strongly recommends** that the deer management program takes this into account, and **looks at this issue from each affected neighborhood**, based on their geography and topography
- Carrying Capacity is a complex and variable concept; very specific to each area/range/herd where deer live. Our committee **recommends** further study to:
 - Determine accurate deer counts within Kalamazoo
 - Begin the focus of study on those individual neighborhoods that have reported more deer sightings and issues than others
 - Measure citizen tolerance, deer-vehicle crashes, and vegetation regeneration by each affected area

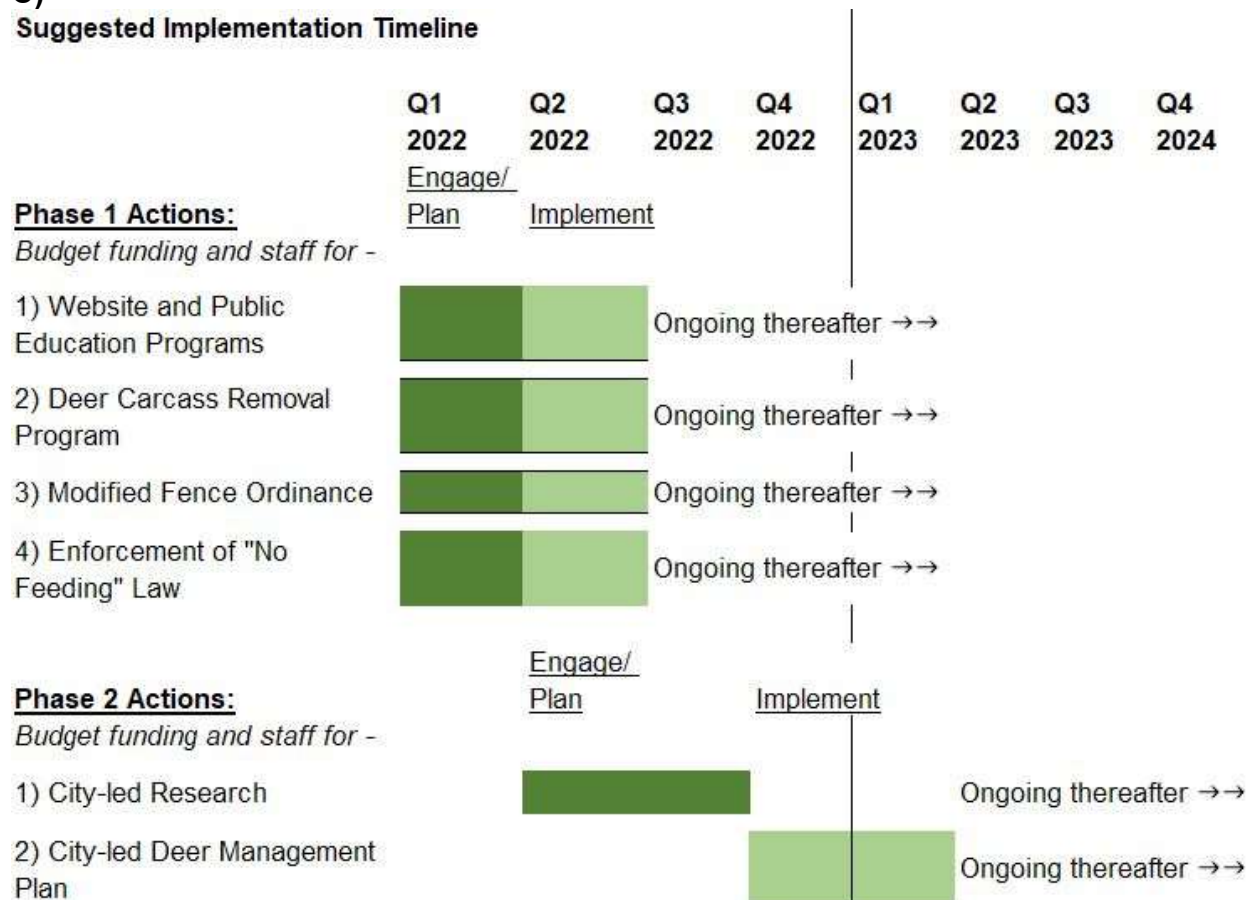
2) City-led Deer Management Plan

*Our committee recommends the City **develop and authorize a budget now**, as well as **adequate staff resources now**, to:*

- 1) Comprehensively research the issues brought forth in this report, working with experts from MDNR, as well as regional and local environmental, biological, and health experts
- 2) Include Western Michigan University (WMU) in the discussions and research process. As the landowner of two of the largest natural open spaces in Kalamazoo that house our urban deer (Asylum Lake Preserve and Kleinstuck Preserve) WMU's input and cooperation will be crucial in successfully planning and implementing any deer management plan
- 3) Utilize that research to develop a comprehensive short-, medium-, and long-term deer management program for Kalamazoo that is ongoing in nature
- 4) Let the research, science, and evidence dictate the best course of action(s) that works to protect the health and safety of both our residents and the deer herd

C)

Suggested Implementation Timeline



APPENDIX A: COMMITTEE ROSTER

Neighborhood Association Ad Hoc Deer Management Committee

<u>Association</u>	<u>Name</u>	<u>Title</u>
Arcadia NA	Jeff Carroll	Past President
Bronson Neighborhood	Mary Balkema	Representative
Edison NA	Tammy Taylor	Executive Director
Hillcrest Neighborhood	Vicky Kettner	FB Administrator
Milwood NA	John Hillard	President
Oakland Dr./Winchell NA	Peter Kushner (Chair)	President
Oakwood NA	David Nesius	Board Representative
Parker/Duke NA	Bill Hughes	President
Parkview Hills NA	Rick Schmitt	Board Representative
Parkwyn Village	Les Tung	President
Vine NA	Steve Walsh	Executive Director
Westnedge Hill	Natalie Patchell	Representative
Stewards of Kleinstuck	Heather Ratliff	Treasurer
Environmental Concerns Committee	Jim Melliush	Member
Environmental Concerns Committee	Gail Walter	Member
<u>Advisors</u>		
Kalamazoo Nature Center	Jen Meilinger	Community Science Director
MDNR	Don Poppe	Wildlife Biologist
City of Kalamazoo	Rebekah Kik	Director, CPED

APPENDIX B: MICHIGAN CITIES THAT HAVE IMPLEMENTED DEER CULLING PROGRAMS

1) Summary: Deer Cull/Management Programs – Issues and Concerns

MI Cities Holding Culls:

Ann Arbor	2015-2020
East Lansing	2020
Lansing	2017
Jackson	2008-2017
Muskegon	2019
Tecumseh	2018-2019
Manistee	2019
Meridian Twp.	2010-present
Kal. Nature Center	2001-present

2) Reasons Municipalities Decided to Control their Deer Population

Ann Arbor:

Began its deer cull program in 2016 for three primary reasons:

- 1) Residents stated herds of deer were eating virtually all landscaping as soon as it was planted.
- 2) Multiple nature areas and parks in the city were being depleted of flowers and tree seedlings, resulting in reduced biodiversity, and depriving wooded areas of young trees.
- 3) Car collisions with deer were increasing.

East Lansing:

1) *"This [isn't] about whether gardens are being destroyed. It [is] about proper wildlife management".*

3) Survey of under 200 residents: about 60% of residents supported a professional deer cull; 39% opposed it

4) Another survey indicated that about 54% of respondents "strongly supported" a lethal deer cull:

- *"We're not here to eliminate deer in East Lansing. This is about managing the population"*
- *"Overpopulation is an issue and, at least from what I've been hearing, residents want something to be done".*

Lansing:

1) Over-population

- A MDNR-funded culling effort removed 113 deer over seven nights in 2017. As a result, more than 3,300 lbs. of venison was donated to Volunteers of America

Meridian Township:

1) Have been culling since 2010. A 2020 survey indicated 81% of residents approved

2) 2020: 350 deer culled, and 7,000 pounds of venison was donated to a five-county area.

Jackson:

1) MDNR study said the deer population in the area was very high

2) A high number of car crashes due to deer

Muskegon:

1) Nuisance

2) Worried about the spread of deer ticks and tick-borne illnesses, such as Lyme disease. (There were no signs that Lyme disease was spreading in Muskegon County at that time (2019))

Tecumseh:

1) Destruction to their gardens from browsing deer

2) Car-deer collisions

3) Spread of diseases such as Lyme Disease in the city

Manistee:

1) "Overrun with deer"

Kalamazoo Nature Center (rural environment):

1) Malnutrition / chronic wasting / tick-borne illnesses

APPENDIX C: TECHNICAL CONSULTANTS AND OTHER EXPERT SUPPORT

- 1) Michigan Department of Natural Resources (MDNR): Don Poppe; Wildlife Biologist
- 2) Kalamazoo Nature Center: Jen Meilinger, Community Science Director and Ryan Koziatsek, Stewardship Director
- 3) Kalamazoo Christian High School: Life Sciences Class
- 4) Kalamazoo College: Department of Biology

APPENDIX D: AD HOC COMMITTEE CITIZEN SURVEY RESULTS

Neighborhood Association Ad Hoc Committee:
Citizen Survey - May 2021

Total number of responses: 1,616

What evidence have you seen of deer in the city the past 3 years? (Check all that apply.)

Saw deer	97.2%
Saw deer pellets (poop)	66.3%
Saw deer feeding	74.5%
Saw evidence of where deer had been feeding	66.8%

In your opinion over the past 3 years, what trend have you seen in the number of deer around your house/neighborhood/city?

More deer now than 3 years ago	58.0%
Fewer deer now than 3 years ago	4.1%
About the same number of deer now as 3 years ago	29.1%
No deer seen at all	1.3%
Don't Know	7.2%

The following is a list of interests that people may have regarding deer. Please indicate how interested you are in doing each of the following.

Watching or photographing deer near your home? - Not interested - 1	35.3%
Watching or photographing deer near your home? - 2	10.2%
Watching or photographing deer near your home? - 3	18.4%
Watching or photographing deer near your home? - 4	12.0%
Watching or photographing deer near your home? - Very interested - 5	23.0%
Feeding deer near your home? - Not interested - 1	78.9%
Feeding deer near your home? - 2	3.9%
Feeding deer near your home? - 3	6.9%
Feeding deer near your home? - 4	2.8%
Feeding deer near your home? - Very interested - 5	5.6%
Learning more about deer management actions? - Not interested - 1	17.3%
Learning more about deer management actions? - 2	7.5%
Learning more about deer management actions? - 3	19.7%
Learning more about deer management actions? - 4	17.2%
Learning more about deer management actions? - Very interested - 5	37.1%
Hunting deer? - Not interested - 1	79.0%
Hunting deer? - 2	3.0%
Hunting deer? - 3	5.3%
Hunting deer? - 4	2.4%
Hunting deer? - Very interested - 5	8.5%

The following is a list of possible problems that people may have regarding deer. Please indicate how concerned you are about each in Kalamazoo

Injury to you or family members from a deer-vehicle collision - Not concerned - 1	20.3%
Injury to you or family members from a deer-vehicle collision - 2	14.0%
Injury to you or family members from a deer-vehicle collision - 3	17.2%
Injury to you or family members from a deer-vehicle collision - 4	16.8%
Injury to you or family members from a deer-vehicle collision - Very concerned - 5	30.4%
Deer threatening or harming people or pets - Not concerned - 1	57.4%
Deer threatening or harming people or pets - 2	7.3%
Deer threatening or harming people or pets - 3	10.6%
Deer threatening or harming people or pets - 4	7.3%
Deer threatening or harming people or pets - Very concerned - 5	11.9%
Deer damage to trees, shrubs, plantings & gardens around your home - Not concerned - 1	21.6%
Deer damage to trees, shrubs, plantings & gardens around your home - 2	9.7%
Deer damage to trees, shrubs, plantings & gardens around your home - 3	10.4%
Deer damage to trees, shrubs, plantings & gardens around your home - 4	12.3%
Deer damage to trees, shrubs, plantings & gardens around your home - Very concerned - 5	43.9%
Over-browsing of natural habitats (on public and/or private lands) - Not concerned - 1	22.6%
Over-browsing of natural habitats (on public and/or private lands) - 2	7.8%
Over-browsing of natural habitats (on public and/or private lands) - 3	12.4%
Over-browsing of natural habitats (on public and/or private lands) - 4	14.3%
Over-browsing of natural habitats (on public and/or private lands) - Very concerned - 5	36.8%
Deer preventing the natural regrowth of native plants - Not concerned - 1	19.9%
Deer preventing the natural regrowth of native plants - 2	9.8%
Deer preventing the natural regrowth of native plants - 3	13.1%
Deer preventing the natural regrowth of native plants - 4	16.0%
Deer preventing the natural regrowth of native plants - Very concerned - 5	36.6%
Loss of plant or animal diversity in neighborhood/city - Not concerned - 1	21.5%
Loss of plant or animal diversity in neighborhood/city - 2	8.3%
Loss of plant or animal diversity in neighborhood/city - 3	16.5%
Loss of plant or animal diversity in neighborhood/city - 4	15.0%
Loss of plant or animal diversity in neighborhood/city - Very concerned - 5	32.7%
You or those close to you getting a tick-borne disease (such as Lyme) - Not concerned - 1	18.5%

You or those close to you getting a tick-borne disease (such as Lyme) - 2	8.5%
You or those close to you getting a tick-borne disease (such as Lyme) - 3	11.8%
You or those close to you getting a tick-borne disease (such as Lyme) - 4	15.7%
You or those close to you getting a tick-borne disease (such as Lyme) - Very concerned - 5	42.5%
Disruption of our city's ecosystem - Not concerned - 1	20.5%
Disruption of our city's ecosystem - 2	9.4%
Disruption of our city's ecosystem - 3	17.7%
Disruption of our city's ecosystem - 4	15.8%
Disruption of our city's ecosystem - Very concerned - 5	30.6%
Decreased bird populations due to deer-related habitat loss - Not concerned - 1	20.5%
Decreased bird populations due to deer-related habitat loss - 2	10.3%
Decreased bird populations due to deer-related habitat loss - 3	17.2%
Decreased bird populations due to deer-related habitat loss - 4	15.9%
Decreased bird populations due to deer-related habitat loss - Very concerned - 5	27.2%
Chronic Wasting Disease (CWD) spreading among local deer - Not concerned - 1	14.5%
Chronic Wasting Disease (CWD) spreading among local deer - 2	7.4%
Chronic Wasting Disease (CWD) spreading among local deer - 3	14.3%
Chronic Wasting Disease (CWD) spreading among local deer - 4	18.1%
Chronic Wasting Disease (CWD) spreading among local deer - Very concerned - 5	36.8%
Loss of deer habitat, leading to their increased population - Not concerned - 1	11.0%
Loss of deer habitat, leading to their increased population - 2	6.1%
Loss of deer habitat, leading to their increased population - 3	14.4%
Loss of deer habitat, leading to their increased population - 4	18.6%
Loss of deer habitat, leading to their increased population - Very concerned - 5	40.2%
Have you personally been affected by any of the problems listed previously?	
Yes	63.4%
No	36.0%
Generally, what are your thoughts about deer in Kalamazoo?	
I enjoy the presence of deer, and I do not worry about problems they may cause.	26.8%
I enjoy the presence of deer, but I worry about problems (damage, disease, etc.) they may cause.	48.4%
I do not enjoy the presence of deer and regard them as a nuisance.	22.7%
I have no specific feelings about deer in Kalamazoo	1.4%

Please indicate the extent to which you believe the following events have increased, decreased, or stayed the same in your local area over the last 3 years.

Number of deer you see around your home - Decreased a lot - 1	2.5%
Number of deer you see around your home - 2	2.3%
Number of deer you see around your home - No change - 3	29.8%
Number of deer you see around your home - 4	19.6%
Number of deer you see around your home - Increased a lot - 5	41.2%
Number of deer you see in your neighborhood - Decreased a lot - 1	2.3%
Number of deer you see in your neighborhood - 2	2.4%
Number of deer you see in your neighborhood - No change - 3	27.8%
Number of deer you see in your neighborhood - 4	20.2%
Number of deer you see in your neighborhood - Increased a lot - 5	42.6%
Number of deer you see city-wide - Decreased a lot - 1	2.0%
Number of deer you see city-wide - 2	1.7%
Number of deer you see city-wide - No change - 3	29.8%
Number of deer you see city-wide - 4	23.3%
Number of deer you see city-wide - Increased a lot - 5	25.9%
Amount of deer damage to plants around your home - Decreased a lot - 1	2.9%
Amount of deer damage to plants around your home - 2	1.7%
Amount of deer damage to plants around your home - No change - 3	32.2%
Amount of deer damage to plants around your home - 4	17.1%
Amount of deer damage to plants around your home - Increased a lot - 5	39.5%
Amount of deer damage to natural plants and forests in parks, undeveloped land, etc. - Decreased a lot - 1	2.5%
Amount of deer damage to natural plants and forests in parks, undeveloped land, etc. - 2	1.4%
Amount of deer damage to natural plants and forests in parks, undeveloped land, etc. - No change - 3	28.5%
Amount of deer damage to natural plants and forests in parks, undeveloped land, etc. - 4	12.9%
Amount of deer damage to natural plants and forests in parks, undeveloped land, etc. - Increased a lot - 5	19.6%
Number of deer-vehicle collisions (roadside carcasses) - Decreased a lot - 1	2.7%
Number of deer-vehicle collisions (roadside carcasses) - 2	1.9%
Number of deer-vehicle collisions (roadside carcasses) - No change - 3	29.2%
Number of deer-vehicle collisions (roadside carcasses) - 4	20.7%
Number of deer-vehicle collisions (roadside carcasses) - Increased a lot - 5	18.7%

How do you believe the size of the deer population should change?

Decrease a lot - 1	36.2%
2	27.5%
Stay the same - 3	23.6%
4	1.9%
Increase a lot - 5	2.2%

Based on your previous answer, How important is it to you that the size of the deer population change?

Not important - 1	15.3%
2	6.1%
3	14.4%
4	18.4%
Very important - 5	38.2%

Listed below are actions that have been used for managing deer in other communities. Some are actions individuals might take on their own property; others require collective community action. How acceptable to you personally is each action for managing deer in Kalamazoo?

Ongoing deer surveying (drone, trail cameras, etc.) - Not acceptable at all - 1	6.6%
Ongoing deer surveying (drone, trail cameras, etc.) - 2	4.3%
Ongoing deer surveying (drone, trail cameras, etc.) - 3	10.5%
Ongoing deer surveying (drone, trail cameras, etc.) - 4	14.3%
Ongoing deer surveying (drone, trail cameras, etc.) - Very acceptable - 5	58.0%
Allow "deer" fences to keep them away from yards, gardens, etc. - Not acceptable at all - 1	8.0%
Allow "deer" fences to keep them away from yards, gardens, etc. - 2	6.9%
Allow "deer" fences to keep them away from yards, gardens, etc. - 3	11.9%
Allow "deer" fences to keep them away from yards, gardens, etc. - 4	15.5%
Allow "deer" fences to keep them away from yards, gardens, etc. - Very acceptable - 5	50.7%
Sterilization (live trap, sterilize, release) - Not acceptable at all - 1	17.6%
Sterilization (live trap, sterilize, release) - 2	7.8%
Sterilization (live trap, sterilize, release) - 3	10.8%
Sterilization (live trap, sterilize, release) - 4	12.6%
Sterilization (live trap, sterilize, release) - Very acceptable - 5	43.2%
Contraception (birth control) – effective for up to 3 years - Not acceptable at all - 1	15.3%
Contraception (birth control) – effective for up to 3 years - 2	6.6%
Contraception (birth control) – effective for up to 3 years - 3	10.5%
Contraception (birth control) – effective for up to 3 years - 4	12.8%
Contraception (birth control) – effective for up to 3 years - Very acceptable - 5	47.1%

Use firearms - regulated sharpshooters to kill deer and donate the deer meat to food banks. - Not acceptable at all - 1	35.7%
Use firearms - regulated sharpshooters to kill deer and donate the deer meat to food banks. - 2	8.3%
Use firearms - regulated sharpshooters to kill deer and donate the deer meat to food banks. - 3	10.3%
Use firearms - regulated sharpshooters to kill deer and donate the deer meat to food banks. - 4	9.7%
Use firearms - regulated sharpshooters to kill deer and donate the deer meat to food banks. - Very acceptable - 5	9.7%
Use archery - regulated sharpshooters to kill deer and donate the deer meat to food banks - Not acceptable at all - 1	31.6%
Use archery - regulated sharpshooters to kill deer and donate the deer meat to food banks - 2	30.8%
Use archery - regulated sharpshooters to kill deer and donate the deer meat to food banks - 3	7.7%
Use archery - regulated sharpshooters to kill deer and donate the deer meat to food banks - 4	10.0%
Use archery - regulated sharpshooters to kill deer and donate the deer meat to food banks - Very acceptable - 5	9.8%
Allow licensed archery hunting by licensed hunters (vs. sharpshooters) to control the deer population. - Not acceptable at all - 1	37.6%
Allow licensed archery hunting by licensed hunters (vs. sharpshooters) to control the deer population. - 2	44.0%
Allow licensed archery hunting by licensed hunters (vs. sharpshooters) to control the deer population. - 3	10.5%
Allow licensed archery hunting by licensed hunters (vs. sharpshooters) to control the deer population. - 4	8.0%
Allow licensed archery hunting by licensed hunters (vs. sharpshooters) to control the deer population. - Very acceptable - 5	7.0%
Allow licensed firearms hunting by licensed hunters (vs. sharpshooters) to control the deer population. - Not acceptable at all - 1	25.6%
Allow licensed firearms hunting by licensed hunters (vs. sharpshooters) to control the deer population. - 2	54.3%
Allow licensed firearms hunting by licensed hunters (vs. sharpshooters) to control the deer population. - 3	11.4%
Allow licensed firearms hunting by licensed hunters (vs. sharpshooters) to control the deer population. - 4	6.4%
Allow licensed firearms hunting by licensed hunters (vs. sharpshooters) to control the deer population. - Very acceptable - 5	4.8%
Stricter enforcement of current "no deer feeding" ordinance - Not acceptable at all - 1	18.1%
Stricter enforcement of current "no deer feeding" ordinance - 2	8.4%
Stricter enforcement of current "no deer feeding" ordinance - 3	6.7%
Stricter enforcement of current "no deer feeding" ordinance - 4	11.5%
Stricter enforcement of current "no deer feeding" ordinance - Very acceptable - 5	10.9%
Educate people about how to co-exist with deer - Not acceptable at all - 1	55.4%
Educate people about how to co-exist with deer - 2	8.2%
Educate people about how to co-exist with deer - 3	6.2%
Educate people about how to co-exist with deer - 4	12.3%
Educate people about how to co-exist with deer - Very acceptable - 5	11.4%

Let nature take its course without human interference - Not acceptable at all - 1	57.0%
Let nature take its course without human interference - 2	35.1%
Let nature take its course without human interference - 3	15.5%
Let nature take its course without human interference - 4	15.8%
Let nature take its course without human interference - Very acceptable - 5	7.7%
Use chemical repellents to keep deer away from plants. - Not acceptable at all - 1	19.4%
Use chemical repellents to keep deer away from plants. - 2	30.6%
Use chemical repellents to keep deer away from plants. - 3	15.5%
Use chemical repellents to keep deer away from plants. - 4	15.3%
Use chemical repellents to keep deer away from plants. - Very acceptable - 5	10.5%
Capture and kill deer by lethal injection. - Not acceptable at all - 1	54.6%
Capture and kill deer by lethal injection. - 2	9.3%
Capture and kill deer by lethal injection. - 3	7.0%
Capture and kill deer by lethal injection. - 4	4.0%
Capture and kill deer by lethal injection. - Very acceptable - 5	16.2%
A combination of any of the above approaches - Not acceptable at all - 1	17.0%
A combination of any of the above approaches - 2	7.0%
A combination of any of the above approaches - 3	17.2%
A combination of any of the above approaches - 4	12.4%
A combination of any of the above approaches - Very acceptable - 5	27.5%
Generally, when you think about all aspects of living with deer, how would you weigh the benefits and disadvantages of having deer in your area?	
The benefits of deer in my local area exceed the disadvantages	28.3%
The disadvantages of deer in my local area exceed the benefits	43.6%
The disadvantages and benefits of deer in my local area are about an even tradeoff	26.4%

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Appendix C - Bowhunter's Creed

APPENDIX C

Bowhunters Creed

I firmly resolve, without reservations or equivocation, to uphold the following bowhunting principles.

- That I will support national, state and provincial regulatory agencies and conservation organizations in the propagation and management of all game.
- That I will at all times actively support and promote hunting with a bow.
- That I will abide by current game regulations and at all times conduct myself as a sportsman so as not to bring discredit to the bowhunting fraternity.
- That I will respect landowner's rights.
- That I will assist all bowhunters in locating places to hunt, but i will not impose myself knowingly on another bowhunter.
- That I will enjoy the challenge of the hunt and will study the habits of the game I hunt.
- That I will use legal archery equipment and will search long and diligently to track down and recover any wounded game.

Appendix D - City's Archery Hunting Permit Application Process



APPENDIX D

City of Kalamazoo, Campbell Lake Property “WPS-25” @ 7275 North H Avenue

Antlerless Archery Hunting Overview 2026

Hunting this property is a privilege, not a right.

Archery hunting is a popular and important recreational activity. Hunters play a significant role in deer management at WPS-25 by collecting data on the fluctuations in population size, overall health, and mitigating browsing damage. Antlerless Archery Hunting is allowed at the Campbell Lake Property (WPS-25) in select areas only referred to as DMA-25 (refer to Exhibit A).

The goal of the City’s Department of Public Services (“City”) hunting program is to reduce the antlerless deer population to sustainable numbers that will result in healthier forests and a healthy deer herd. City Staff will monitor people accessing the property to ensure a safe & enjoyable experience for everyone.

Hunters will be required to comply with all MDNR rules and regulations, including obtaining a base license, one MDNR permit/tag, and submitting any requested samples for collection.

The City has obtained MDNR Deer Management Assistance Permits (DMAPs) that allow limited antlerless archery hunting on designated properties. The City’s permits are open to the public through an application lottery. Informational Hunting Packets are provided by the City.

1) Hunters must apply for the City’s Archery Hunting Permit each year, August 1st to 31st. Hunters may apply as an individual or as a hunting group (up to 3 people per application).

2) MDNR Base Licenses and at least one tag must be purchased separately by the hunter through the current MDNR permit application process.

(<https://www.michigan.gov/dnr/things-to-do/hunting/deer>) and the MDNR Hunting Digest must be followed. All MDNR rules & regulations apply.

Allowable licenses for WPS-25 are for Youth age 9 and under, Youth age 10-16, Resident age 17-64 years and Resident senior age 65+ years.

Hunting Packet: Includes a City hunting permit, DMAP License (kill tag), liability form, parking pass, tree stand card, harvest data sheets/QR code, maps, and other important information.

Reporting to the City

Hunters will be required to provide data after deer removal, such as the condition of the deer when harvested, etc. The harvest report must be submitted to the City at the end of the season, no later than January 15th. Tasteful photos of your harvest are encouraged and may be included in the City’s media outreach. Data collected may be shared with MDNR, local, state and federal partners to help promote important wildlife management and research.

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Harvest observation sheets can be submitted anytime by:

- 1) emailing HuntingPermits@kalamazoocity.org, or
- 2) mailing to COK WPS-25 Hunting Program, 1415 N. Harrison St., Kalamazoo, MI 49007

IMPORTANT: City harvest reporting does not relieve the hunter of the obligation to report deer harvests to the MDNR as required.

Reporting to the MDNR

Deer hunters are required to report a successful harvest to the MDNR within 72-hours or before transferring possession of the deer (to another person, a processor or taxidermist). To report, go to <https://www.mdnr-elicense.com/harvestreport> or use the QR code below.

Hunters MUST use the City's designated **DMA License number** and **DATE of BIRTH, 1-1-1918** to report a harvest. This is provided on all City deer permits and tree stand cards.

When reporting harvests to MDNR be prepared to also report the unique kill tag license number that was attached to the deer, the township (Comstock), the type of deer harvested (fawn, antlered, adult, or doe), and date of harvest. In addition, some hunters will be asked additional management-related questions.

Reference Information

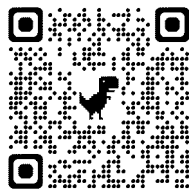
Refer to the City's A [Antlerless Archery Hunting Permit Application Process](#) (page 3) for important at <https://protectyourwater.net/protectyourwater-net-resources-hunting/>.

QR Codes are provided below for easy access to information referenced in this packet.

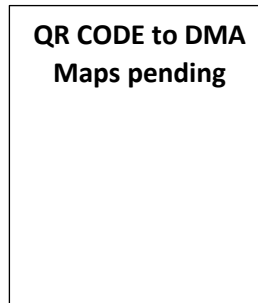
City Website



MDNR Reporting



QR CODE to DMA
Maps pending



Important Deadlines

August 1 to 31	Apply for the City's Archery Hunting Permit each season
Sept. 1	Starting this date, City applications will be processed and awarded
Sept. 13 to Jan 1	City-allowed Regular Hunting Season
January 15	City Deer Harvest Reports Due
March 1	Tree Stand Removal Deadline

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Meat Processing

The City is not currently participating in any deer harvest donation program but may choose to do so in the future. Hunters are responsible for using the City's DMAP License number and birth date when tagging the deer and taking their harvest to a meat processor.

Liability Form

The City requires all applicants to sign a Release of Liability and Covenant not to Sue Form along with the application for a City Archery Hunting Permit. The liability form is provided as Exhibit B.

APPENDIX D

City of Kalamazoo, Campbell Lake Property “WPS-25” @ 7275 North H Avenue

Antlerless Archery Hunting Permit Application Process

The DMA-25 for the Campbell Lake Property (WPS-25) is approximately half the total 365 acres (Exhibit A).

For 2026, hunters will be limited to a select group only. Applications for each season allowed by the City are available online from **August 1st to 31st** at

<https://protectyourwater.net/protectyourwater-net-resources-hunting/>. Applications are specific to available Deer Harvest Areas (DHAs) each season.

City-allowed Regular Season Hunting dates are based on the MDNR seasons (pending potential 2026 changes):

- **Liberty hunt:** Sept. 13 – 14, 2025. Open to eligible youth and hunters with disabilities. One antlered deer or antlerless deer per license/permit.
- **Early antlerless firearm:** Sept. 20 –21, 2025 (hunters must **wear orange**)
Archery equipment can be used during this season, but NO FIREARMS are allowed.
- **Independence hunt:** Oct. 16 – 19, 2025 hunters with disabilities.
- **Archery:** Oct. 1 – Nov. 14, 2025 and Dec. 1, 2025 – Jan. 1, 2026
(hunters must **wear orange in December - January**)

City Website



Archery Hunting Permit Application Requirements

- 1) Read the Hunting and Tree Stand Policy (page 6)
- 2) Submit a signed copy of the City’s Hunting Permit Application Form (page 8)

***** City Hunting Permits are NO COST to applicants *****

Submit the Application by:

- 1) emailing HuntingPermits@kalamazoo-city.org, or
- 2) mailing to COK WPS-25 Hunting Program, 1415 N. Harrison St., Kalamazoo, MI 49007

Questions?

Visit our website at <https://protectyourwater.net/protectyourwater-net-resources-hunting/>

Email HuntingPermits@kalamazoo-city.org

Text 269-370-1939

Call 311 (from inside the City) or (269) 337-8000 (if outside the City).

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Hunting Packet

Applications will be processed and awarded starting Sept. 1st. All applicants will be notified of awards via the contact information listed on the application. Hunters may only apply once per year and can request to be wait-listed on the application. Hunters whose names appear on more than one application will be disqualified.

Hunters will attend a **mandatory in-person meeting** on (Date)_____ from (Time)_____ at (Location)_____ to receive their Hunting Packet of materials. Some exceptions may be allowed to receive materials digitally via email or mail. Signed liability release forms are required before hunting and can be submitted by:

- 1) emailing HuntingPermits@kalamazoocity.org, or
- 2) mailing to COK WPS-25 Hunting Program, 1415 N. Harrison St., Kalamazoo, MI 49007

Hunting Packet: Includes a City hunting permit; DMAP License, liability form, parking pass, tree stand card; harvest data sheets and QR code; maps; and other important information.

***** Only hunters who submit harvest sheets will be eligible to hunt the next season. *****

Use and Restrictions

- 1) The parking pass must be prominently displayed on the vehicle dashboard while hunting.
- 2) The unused City Hunting Permit must be carried by the hunter while hunting on City-owned property. Copies of Permits are NOT permitted.
- 3) The Permit is for the sole use of the hunter(s) named and can only be used by a person listed as part of the hunter's group (1 or 2 others) on the application. The hunter shall present the City tag/permit, photo ID, and base hunting license upon the request of a law enforcement officer or designated City Staff to verify they are the hunter(s) named on the permit.
- 4) Field dressing is allowed at the kill and tag location.
- 5) Tree stand markers must be placed on all tree stands.

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City of Kalamazoo, Campbell Lake Property “WPS-25” @ 7275 North H Avenue

Hunting & Tree Stand Policies

Hunting Policy

*** **ABSOLUTELY NO FIREARMS are permitted on City of Kalamazoo-owned properties.** ***

- **DAILY Registration is required when hunting** by text to 269-370-1939 or email to HuntingPermits@kalamazoocity.org. The INFORMATION REQUIRED includes the City’s DMAP license # (i.e. WPS-25-1) and names of each hunter.
- Per the City’s Permit, hunters are only allowed to hunt in the assigned hunting Deer Management Area (i.e. DMA).
- Motorized vehicles are not allowed except in designated parking areas. When parking, DO NOT block gates, roadways, or access drives. Vehicles found to be in violation may be TOWED at the owner’s expense.
- Property lines will be marked by the City. NO HUNTING is allowed in Safety Zones designated as being within 200 ft of any building on off-site property, or within 100 ft of the property boundary.
- NO BAITING is allowed.
- Only temporary blinds may be used. Please review the TREE STAND POLICY before using a tree stand.
- Field dressing is allowed at the kill and tag location.
- Only a minimum of branches may be removed, using hand pruners, to improve shooting lanes. Branches cannot be cut with saws or loppers or torn by hand.
- Report suspicious activity to the Kalamazoo County Sheriff's Office at (269) 488-8911.
- Deer harvests must be registered with the MDNR per the Hunting Regulation Guide.
- The City’s Harvest Report is required and can be submitted anytime but no later than January 15th using by:
 - 1) emailing HuntingPermits@kalamazoocity.org, or
 - 2) mail to COK WPS-25 Hunting Program, 1415 N. Harrison St., Kalamazoo, MI 49007
- All other State Regulations apply.

Tree Stand Policy

Tree Stand vs. Tree Blind? A tree stand is an elevated platform that a hunter uses to sit or stand while hunting. A tree blind or elevated box blind is a fully enclosed ground-level structure.

- AS REQUIRED BY STATE LAW, only temporary portable stands or platforms can be used on City property. Stands cannot be affixed or attached to any tree by nails, screws, or bolts. Stands and blinds cannot be placed on City-owned properties any earlier than

APPENDIX D

Sept. 13th and must be removed by March 1st. Stands and blinds left on City-owned properties outside of these dates will be deemed abandoned and may be disposed of by the City per its discretion.

- Hunter or Group ID must be prominently displayed on the stand or platform.
- Stands / tree steps cannot cause excessive damage to trees. No screw-in steps allowed.
- Stands cannot be placed in black cherry, oak, or walnut trees; it is the responsibility of the hunter to identify tree species.
- Stands must not be visible from the main roads (N. 28th Street or E. H Avenue), and cannot be located within 200 feet of any building on off-site properties.

***** Any hunter harassment by other hunters, visitors, or dogs on or off a leash, should be promptly reported to Public Services management at 269-337-8000. *****

Reporting Deer Kill/Harvest

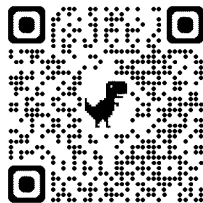
- AS REQUIRED in the City's Archery Hunting Overview and the MDNR Deer Hunting Regulation Summary.

Other Policies

WPS-25 consists of various terranes including forested areas, wetlands, steep slopes and rolling prairie areas. It is important to note the following.

- 1) The eastern farmed fields **ARE** within the Designated Hunting Area (DHA), but the two western farmed fields located directly off N 28th Street are **NOT**;
- 2) The southwestern portion of the property with active water pumping operations and service roads is **NOT** within the DHA, and
- 3) The southeastern areas (including McLinden Nature Trails) **ARE** within the DHA.

DMA Maps



City Website



Acronyms

City - City of Kalamazoo, Department of Public Services

DHA - Designated Harvest Areas (City of Kalamazoo)

DMA - Deer Management Assistance Permit (MDNR)

MDNR - Michigan Department of Natural Resources

WHPPP - Wellhead Protection Program Plan

USFS - United States Forest Service



City of Kalamazoo, Campbell Lake Property
"WPS-25" @ 7275 North H Avenue

City Bow Hunting Application (must be returned before permit awarded)

Date _____ Signature _____

Full Name(s) _____

Street Address _____

(line 2) _____

City, State & Zip Code _____

Phone _____ Other _____

Email _____

An MDNR Base License is required to qualify, no exceptions.

License number _____

Have you signed the City's Release of Liability and Covenant Not to Sue form?

Yes / No

What is the best way for the City to contact you? _____

If not awarded permit, do you want to be wait-listed? _____

In-person meeting is mandatory (pg 5). Other arrangement? _____

Did you read the Hunting & Tree Stand Policy? _____

How to Submit the Application

Email HuntingPermits@kalamazoocity.org

Mail to COK DMA-25 Deer Hunting Program, 1415 N. Harrison St., Kal., MI 49007

Questions?

Call 269-370-1939

More information?

ProtectYourWater.net/Resources/Hunting

City Website





City of Kalamazoo, Campbell Lake Property
"WPS-25" @ 7275 North H Avenue

City Harvest Report (must be returned by January 15th)

Date _____

First and Last Name _____

City Permit number _____

Number and type of deer harvested (fawn/antlered/adult/doe)

Comments:

Conditions of Deer (healthy, diseased, injured, other)

Comments:

Do you hunt with a bow or crossbow? _____

Other comments to share with the City? _____

Comments:

Would you return to hunt at this location again? _____

Overall, did you enjoy your hunt at this location? _____

How to Submit the Harvest Report to the City of Kalamazoo:

Email to HuntingPermits@kalamazoocity.org

Text 269-370-1939

Mail to COK DMA-25 Deer Hunting Program, 1415 N. Harrison St., Kal., MI 49007

Exhibit A

Deer Management Area-25 (DMA-25) 2026

City of Kalamazoo, Campbell Lake Property

"WPS-25" @ 7275 East H Avenue

County: Kalamazoo

Township: Comstock

Size in Acres: ~200

Hunt types Allowed: Bow archery, antlerless

Hunting Permits Allowed: 10



Access & Parking



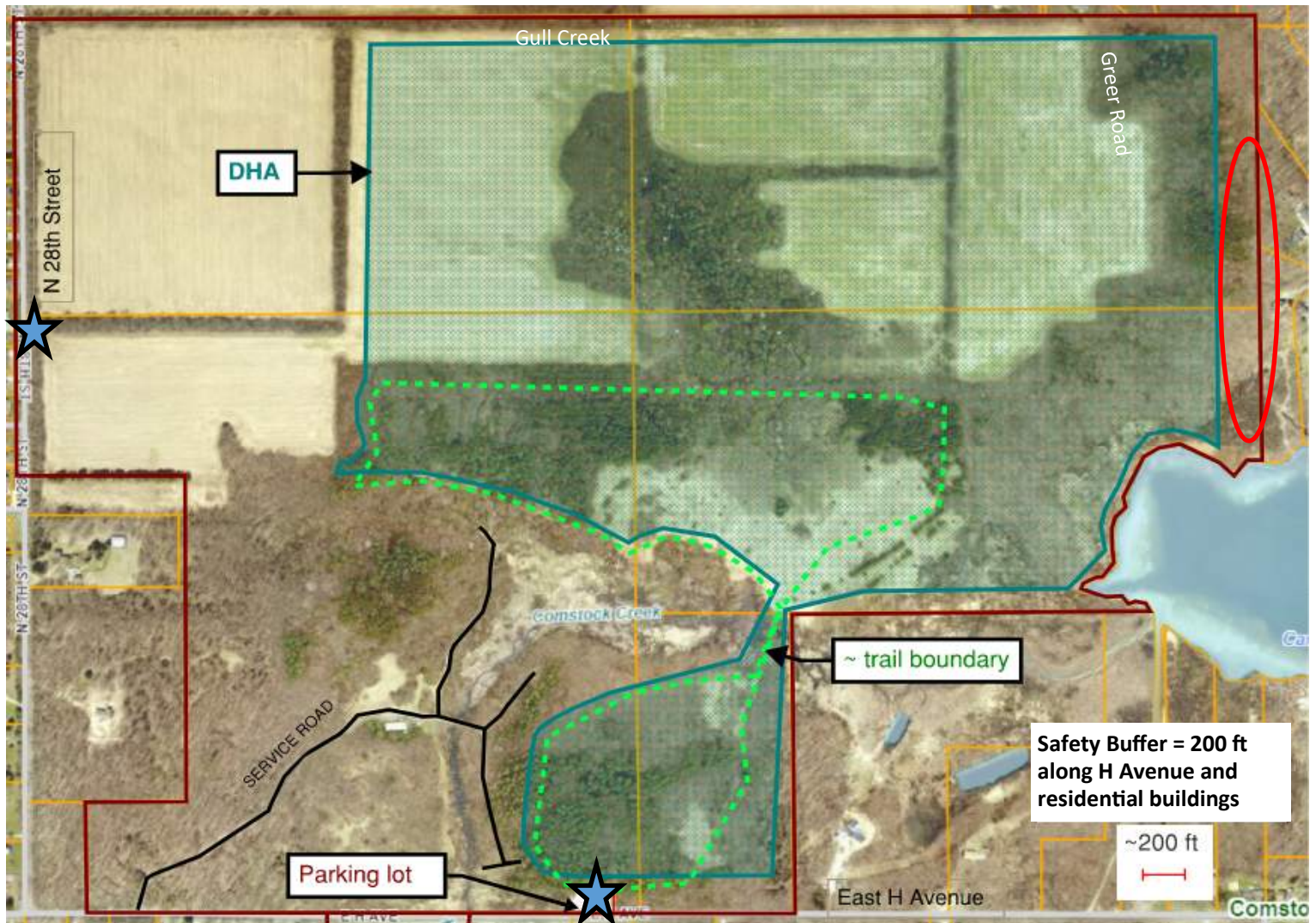
Property Boundary



Designated Harvest Areas (DHA)



Safety Zone—houses/structures



For more information scan the QR code (left) with you smartphone OR visit:

<https://protectyourwater.net/protectyourwater-net-resources-hunting/>

HUNTER SAFETY ZONES are enforced at ALL TIMES

- 200 feet around all buildings / structures

- 100 feet from Property boundaries.

Be aware of all property boundaries; Do not trespass onto adjacent lands.



City of Kalamazoo Deer Archery Hunting Release

RELEASE OF LIABILITY AND COVENANT NOT TO SUE

Please read carefully before signing

This is a release of liability and waiver of certain legal rights

In consideration for being permitted to participate in a "Deer Archery Hunting Program" and related archery hunting activities (the "Hunting Activities") at the City of Kalamazoo property known as **WPS-25 @ Campbell Lake, 7275 East H Avenue, Comstock Township, Kalamazoo County**. I agree to the following Release of Liability and Covenant Not to Sue (the "Release"):

1. **Acknowledgment and Assumption of Risks.** I understand that the Hunting Activities are inherently dangerous and involve significant risks of personal injury, death, and property damage. I hereby assume and accept responsibility for all risks of personal injury, death, and property damage which might be associated with my participation in the Activities whether known or unknown and whether attributable to my actions or inactions or the actions or inactions (including negligence) of anyone else.

2. **Release of Liability and Covenant not to Sue.** I hereby release and discharge the CITY of Kalamazoo, Michigan and its commissioners, officers, volunteers, members, employees, and agents (the "Released Parties") from any and all responsibility, liability, claims, damages, costs, attorneys' fees, expenses, and from any and all causes of action either known or unknown, relating to or arising out of my participation in the Hunting Activities. Further, I hereby covenant not to sue or assert any claim of any nature against the Released Parties relating to or arising out of my participation in the Hunting Activities.

3. **Indemnity.** I agree to pay the Released Parties for any and all claims, costs, expenses, or liability (including attorneys' fees), attributable to personal injury or death, or to damage or destruction of property relating to or arising out of my participation in the Hunting Activities. I attest I have health insurance. If I am signing this Release on behalf of a minor, I agree to pay the Released Parties for any and all claims, costs, expenses, or liability (including attorneys' fees), attributable to personal injury or death, or to damage or destruction of property relating to or arising out of the participation in the Hunting Activities by the minor on whose behalf I am signing this Release (to include health coverage).

4. **Representations.** I represent that: (i) I am 18 years old or older; (ii) I know of no reason, medical or otherwise, which would prevent me from participating in the Activities; (iii) I understand and agree that this Release is binding upon me, and my heirs and assigns; and (iv) if I am signing this Release on behalf of a minor, I represent that I have full legal authority to do so and realize the binding effect of this Release on them, as well as on myself.

5. **Consent to Medical Treatment.** If I, or the minor on whose behalf I am signing this Release, is injured or becomes ill, I consent to and authorize the provision of emergency first aid or medical treatment.

6. **Notice – Intent to Hunt.** I agree to notify the Dept. of Public Services, Water Resources Division, of my intent to hunt prior to entering the WPS-25 property by calling (269) 337-8874.

I, THE UNDERSIGNED, HAVE CAREFULLY READ THIS RELEASE OF LIABILITY AND COVENANT NOT TO SUE, I FULLY UNDERSTAND ITS TERMS AND I UNDERSTAND THAT I HAVE GIVEN UP SUBSTANTIAL RIGHTS BY SIGNING IT. I HAVE SIGNED IT FREELY AND VOLUNTARILY WITHOUT ANY INDUCEMENT, ASSURANCE OR GUARANTEE BEING MADE TO ME AND I INTEND MY SIGNATURE TO BE A COMPLETE AND UNCONDITIONAL RELEASE OF RELEASED PARTIES TO THE GREATEST EXTENT ALLOWED BY LAW FOR SAID HUNTING ACTIVITY.

Print Name of Participant _____ Age of Participant _____

Signature _____ Date: _____

If Participant Is Under 18 Years Old:

Print Name of Parent or Guardian _____

Signature _____ Date: _____

Print Name of Participant _____ Age of Participant _____

**ADOPTION AND APPROVAL OF THE 2026 DEER MANAGEMENT PLAN, CAMPBELL LAKE,
COMSTOCK TOWNSHIP**

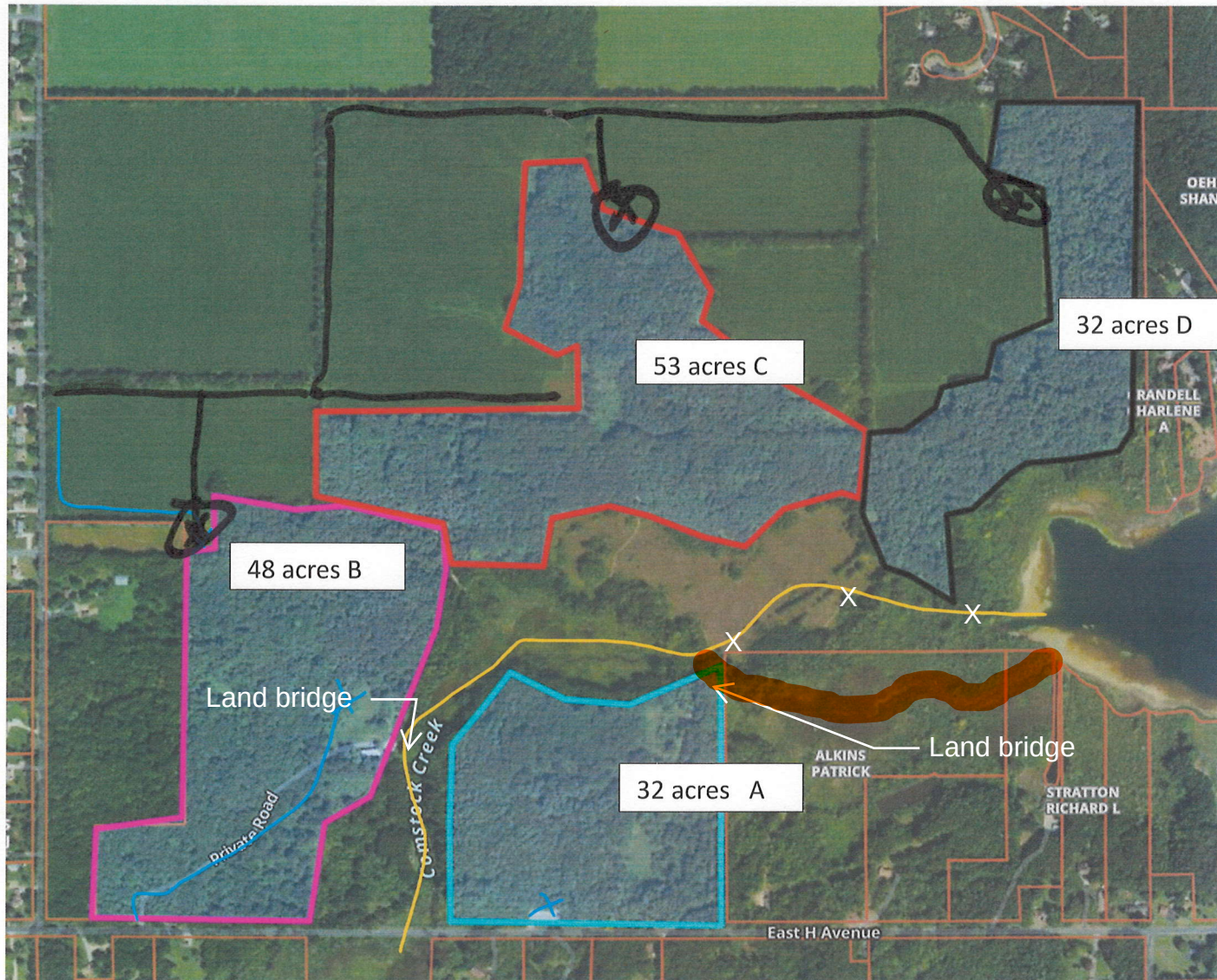
Approved:

CITY OF KALAMAZOO, MICHIGAN

By: _____ Date: _____
Name: Malcolm Harkins, ICMA-CM

Its: City Manager

Campbell Lake – Mc Linden PROPOSED CUTTING UNITS



Campbell Lake – Mc Linden

- A. 32 ACRES
- B. 48 ACRES
- C. 53 ACRES
- D. 32 ACRES
- 165 ACRES

Deer Management Area (DMA-39) 2026

City of Kalamazoo, Morrow Lake, Comstock Township Property

“WPS-39” @ 8801 Miller Rd, Galesburg, MI

County: Kalamazoo

Township: Comstock

Size in Acres: 63

Hunt types Allowed: Bow archery, antlerless

Hunting Permits Allowed: 5



Access & Parking



Property Boundary & Designated
Harvest Areas (DHA)



Safety Zone—buildings & road



For more information scan the QR code (left) with you smartphone OR visit:

<https://protectyourwater.net/protectyourwater-net-resources-hunting/>

HUNTER SAFETY ZONES are enforced at ALL TIMES

- 100 feet around all buildings / structures

- 100 feet from Property boundaries.

Be aware of all property boundaries; Do not trespass onto adjacent lands.



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Sheriff Contract & Possible Action

Attachments:

[Comstock 2027 Sheriff.docx](#)

POLICE PROTECTION AGREEMENT

This Agreement is made this ____ day of ____ December ____, 2026, by and between the County of Kalamazoo, hereinafter designated "County"; the Sheriff of Kalamazoo County, Michigan, hereinafter designated "Sheriff"; and Comstock Township, hereinafter designated "The Township." pursuant to MCL 124.501 et. Seq., hereinafter referred to as the "Urban Cooperation Act of 1967).

WITNESSETH:

WHEREAS, the Township desires to contract with the County and the Sheriff for the performance of the law enforcement services set forth herein; and

WHEREAS, the County and the Sheriff are agreeable to rendering such services on the terms and conditions set forth herein; and

WHEREAS, the Township and the COUNTY are both "local governmental units" as defined in MCL §124.502(b) and wish to jointly exercise certain powers as set forth herein and as authorized by the Urban Cooperation Act of 1967;

NOW, THEREFORE, in consideration of the promises, covenants, and conditions hereinafter contained, IT IS HEREBY AGREED by and between the parties hereto as follows:

1. The parties, under the authority of MCL §124.502, hereby agree that the County, through the Sheriff, shall provide police protection and enforcement of state and local laws and ordinances of the Township, subject to the terms and conditions hereinafter contained. Within the limitations of available personnel, the Sheriff hereby covenants and agrees to furnish police protection under the terms and conditions set forth.
2. For the 3-year time period of January 1st, 2027, through December 31st, 2029, the County, through the Sheriff agree to provide the equivalent of four (4) full-time Uniformed Services Section Deputies, with appropriate experience, to service the Township with police protection and to provide the necessary hours for overtime in relation to the routine duties of those officers.
 - a. In addition, the County, through the Sheriff, agree to provide necessary associated personnel, equipment, and services, and other various indirect and associated costs in support of the above.
 - b. The parties may extend this 3-year Agreement for up to two additional one-year periods by mutual agreement.

3. Sheriff's obligations under this Agreement shall include the enforcement of laws and ordinances, apprehension of offenders, protection of life and property, preservation of peace, and orderly conduct.
4. The parties acknowledge that the compensation structure outlined herein reflects a shared "true cost of services" model, intended to more equitably allocate the full cost of providing professional law enforcement services.

For the performance of the above-described services, the Township agrees to pay:

- Wages as established under the applicable collective bargaining agreement for assigned personnel and set forth in Exhibit 1. These wages are subject to change during contract negotiations between Kalamazoo County and the Kalamazoo County Sheriff's Deputies Association. The rate schedule may be adjusted during the term of this Agreement to reflect any changes resulting from a newly ratified Collective Bargaining Agreement. Compensation shall be based on the wage step of the assigned Deputy, Sergeant, or Detective Sergeant, and include any applicable shift differential, township overtime, and fringe benefit cost.
- Fuel cost as determined by Fuel Card Audits performed monthly and billed to the township quarterly for the specific vehicles assigned to the Township.
- Each quarterly invoice shall include an administrative fee equal to ten percent (10%) of the above-mentioned costs (wage calculations and fuel costs). This administrative fee supports the broader costs associated with providing contracted law enforcement services and may be used for, including but not limited to, fleet replacement and maintenance, equipment, technology, training, onboarding, fleet insurance, Liability insurance, and administrative support necessary for service delivery.

The Sheriff's Office shall submit an itemized quarterly invoice detailing the direct costs associated with providing police protection services, including the days and hours worked by each assigned position.

For informational purposes, actual costs of police services have been attached hereto as Exhibit 3.

Payment shall be made within ten (10) days of receipt of the invoice.

5. **Backfill Coverage for Contracted Deputies.** The Sheriff's Office shall not be obligated to automatically backfill a contracted Deputy's absence due to vacation, extended medical leave, military leave, or any other approved leave of absence unless directed to do so by the Township. Upon the Township's request, the Sheriff's Office will make reasonable efforts to provide backfill coverage to maintain

the agreed-upon level of police protection services. Any costs associated with such backfill coverage, including wages, overtime, fringe benefits, or other personnel-related expenses incurred by the Sheriff's Office, shall be the financial responsibility of the Township. These costs will be itemized and reflected on the Township's quarterly invoice.

6. The Sheriff will provide reports through the Sheriff's Liaison or Command Officer assigned to the township. The reports will reflect the call volume, and type of calls monitored. The report will show trends and tracking related to the township. The reports described in this section may include, but shall not be limited to, an Annual Report; Monthly Statistical Reports; and Year-to-Date Statistical Reports.
7. If the township intends to extend this Agreement it will notify the County and the Sheriff's Office in writing on or before October 1st of the year in which the Agreement initially expires, or as may be first extended, and submit a request describing the police services desired. As soon as practicable after receiving a request, the County and the Sheriff will provide the township with a written statement of the costs for such services. The parties will work in good faith to enter into a new Agreement for the subsequent year(s).
8. The contracted officers will work principally within the boundaries of the township and will not be deployed by the Sheriff outside of said boundaries, except in case of general public emergencies, riots, or civil disturbances, or general inter-municipal cooperation in a search and apprehension in a general inter-municipal cooperative law enforcement effort. The Sheriff's Office will inform the Kalamazoo County Consolidated Dispatch Authority of the stipulations of this paragraph.
9. The normal Sheriff's police protection will be continued within the township and will not be reduced as a result of this Agreement or as a result of additional police service provided hereunder. Patrol officers assigned to the township under this Agreement will enforce local ordinances as well as State law and County ordinances. The officers will not be utilized for functions or duties other than those related to law enforcement or police protection.
10. All patrol officers will be deputy sheriffs and directly accountable to the Sheriff.
11. The County will provide insurance for the motor vehicle(s) used in the performance of the services described in this Agreement, as well as the liability and workers' compensation insurance coverage for any personnel assigned to duty in the township. "Insurance", insofar as vehicles and personnel are concerned, means the

coverage provided by the County as of the effective date of this Agreement. If such coverage is discontinued for any reason, the County will notify the township immediately.

- 12.** It is expressly understood and agreed by the parties hereto that the requirements of this Agreement will not be construed as in any way affecting the collective bargaining agreement covering the personnel assigned to the township under this Agreement including, but not limited to, the addition of provisions thereto or subtraction of provisions therefrom.
- 13.** In carrying out the terms of this Agreement, the parties will adhere to all applicable Federal, State and local laws, regulations and policies prohibiting discrimination. The parties, as required by law and/or policy will not discriminate against persons to receive services under this Agreement or against an employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, sexual orientation, gender identity, disability that is unrelated to the individual's ability to perform the duties of a particular job or position, height, weight, marital status or political affiliation or beliefs. Breach of this covenant will be regarded as a material breach of this Agreement.
- 14.** No failure or delay on the part of any of the parties to this Agreement in exercising any right, power or privilege hereunder will operate as a waiver thereof nor will a single or partial exercise of any right, power or privilege preclude any other or further exercise of any other right, power or privilege.
- 15.** This Agreement is not intended to be a third-party beneficiary contract and confers no rights on anyone other than the parties hereto.
- 16.** This Agreement contains all the terms and conditions agreed upon by the parties hereto, and no other agreements, oral or otherwise, regarding the subject matter of this Agreement or any part thereof will have any validity or bind any of the parties hereto and any prior agreements will be null and void.
- 17.** If any clause or provision of this Agreement is rendered invalid or unenforceable because of any State or Federal statute or regulation or ruling by any tribunal of competent jurisdiction, that clause or provision will be null and void, and any such invalidity or unenforceability will not affect the validity or enforceability of the remainder of this Agreement. It will be considered to be deleted, and the remainder

of this Agreement will not be affected thereby. Where the deletion of the invalid provision would result in the illegality and/or unenforceability of this Agreement, this Agreement will be considered to have terminated as of the date in which the provision was rendered invalid or unenforceable.

- 18.** This Agreement will be subject to and construed in accordance with the laws of the State of Michigan. In the event any disputes arise under this Agreement, it is understood and agreed that any legal or equitable action resulting from such disputes will be in Michigan Courts whose jurisdiction and venue will be established in accordance with the statutes and Court Rules of the State of Michigan. In the event any action is brought in or is moved to a federal court the venue for such action will be the Federal Judicial District of Michigan, Western District, Southern Division.
- 19.** This Agreement may be terminated by either party hereto delivering to the other parties, a written notice of the party's intent to terminate this Agreement; 90 days after delivery of such written notice, this Agreement will end and be null and void thereafter. This Agreement may also be terminated pursuant to the provisions of Section 6 of this Agreement if The Township or the County indicates their unwillingness to continue the Agreement for another calendar year. In the event of early termination, any amount paid or due on the monthly installment(s) will be prorated on a daily basis to the effective date of the termination.
- 20.** Neither party may assign any part of this Agreement to a third party without written consent of the other party.
- 21.** This Agreement may be executed in several counterparts, each of which shall be original, and which shall constitute one and the same instrument.
- 22.** The Individuals signing on behalf of the parties hereto certify by their signatures that they are duly authorized to sign this Agreement on behalf of said parties and that this Agreement has been authorized by said parties
- 23.** All notices or demands required to be given under this Agreement shall be in writing and either delivered by hand, sent by electronic mail, or sent by first class mail postage prepaid through the United States postal system and addressed to the parties to be affected as follows:

As to City/Township/Village

Address
City/state/Zip

Attn: Corporation Counsel
201 W. Kalamazoo Ave
Kalamazoo, MI 49007

As to the County
As to the Sheriff
1500 Lamont Ave
Kalamazoo, MI 49048

- 24.** The Individuals signing on behalf of the parties hereto certify by their signatures that they are duly authorized to sign this Agreement on behalf of said parties and that this Agreement has been authorized by said parties.

IN WITNESS WHEREOF, the authorized representatives of the parties hereto have executed this Agreement the day and date first above written.

Comstock Township

Name (Print): _____
Signature: _____ Date: _____
Title: _____

County of Kalamazoo

Name (Print): Jennifer A. Strebs
Signature: _____ Date: _____
Title: Chairperson, County Board of Commissioners

Sheriff of Kalamazoo County

Name (Print): Richard C. Fuller III
Signature: _____ Date: _____
Title: Sheriff

EXHIBIT 1

*2026 Deputy Hourly Wage Scale	Hourly Rate	Overtime 10%	Allocation 54%	Total Hourly Rate	Total Cost
D19 - A Step	\$28.31	\$ 2.83	\$ 16.82	\$ 47.96	\$ 99,746.62
D19 - B Step	\$29.91	\$ 2.99	\$ 17.77	\$ 50.67	\$ 105,389.89
D19 - C Step	\$31.51	\$ 3.15	\$ 18.72	\$ 53.38	\$ 111,033.16
D19 - D Step	\$33.11	\$ 3.31	\$ 19.67	\$ 56.09	\$ 116,676.43
D19 - E Step	\$34.69	\$ 3.47	\$ 20.61	\$ 58.77	\$ 122,246.41
D19 - F Step	\$36.32	\$ 3.63	\$ 21.57	\$ 61.52	\$ 127,962.97
D19 - G Step	\$37.92	\$ 3.79	\$ 22.52	\$ 64.23	\$ 133,606.24
D19 - H Step	\$42.13	\$ 4.21	\$ 25.03	\$ 71.37	\$ 148,447.31

***Estimated cost - Not yet vetted through Finance**

*2026 Sergeant / Det. Sergeant Hourly Wage Scale	Hourly Rate	Overtime 10%	Allocation 54%	Total Hourly Rate	Total Cost
E22 - A Step	\$32.65	\$ 3.26	\$ 19.39	\$ 55.30	\$ 115,027.42
E22 - B Step	\$34.54	\$ 3.45	\$ 20.52	\$ 58.51	\$ 121,696.74
E22 - C Step	\$36.44	\$ 3.64	\$ 21.65	\$ 61.73	\$ 128,402.71
E22 - D Step	\$38.32	\$ 3.83	\$ 22.76	\$ 64.92	\$ 135,035.38
E22 - E Step	\$40.23	\$ 4.02	\$ 23.89	\$ 68.14	\$ 141,741.34
E22 - F Step	\$42.10	\$ 4.21	\$ 25.01	\$ 71.32	\$ 148,337.37
E22 - G Step	\$44.01	\$ 4.40	\$ 26.14	\$ 74.56	\$ 155,079.98
E22 - H Step	\$47.01	\$ 4.70	\$ 27.92	\$ 79.63	\$ 165,640.68

***Estimated cost - Not yet vetted through Finance**

*2027 Deputy Hourly Wage Scale	Hourly Rate	Overtime 10%	Allocation 54%	Total Hourly Rate	Total Cost
D19 - A Step	\$29.16	\$ 2.92	\$ 17.32	\$ 49.39	\$ 102,739.02
D19 - B Step	\$30.81	\$ 3.08	\$ 18.30	\$ 52.19	\$ 108,551.59
D19 - C Step	\$32.46	\$ 3.25	\$ 19.28	\$ 54.98	\$ 114,364.16
D19 - D Step	\$34.11	\$ 3.41	\$ 20.26	\$ 57.78	\$ 120,176.72
D19 - E Step	\$35.74	\$ 3.57	\$ 21.23	\$ 60.54	\$ 125,913.80
D19 - F Step	\$37.41	\$ 3.74	\$ 22.22	\$ 63.37	\$ 131,801.86
D19 - G Step	\$39.06	\$ 3.91	\$ 23.20	\$ 66.16	\$ 137,614.43
D19 - H Step	\$43.39	\$ 4.34	\$ 25.78	\$ 73.51	\$ 152,900.73

***Estimated cost - Not yet vetted through Finance**

*2027 Sergeant / Det. Sergeant Hourly Wage Scale	Hourly Rate	Overtime 10%	Allocation 54%	Total Hourly Rate	Total Cost
E22 - A Step	\$33.62	\$ 3.36	\$ 19.97	\$ 56.96	\$ 118,478.25
E22 - B Step	\$35.57	\$ 3.56	\$ 21.13	\$ 60.26	\$ 125,347.65
E22 - C Step	\$37.53	\$ 3.75	\$ 22.30	\$ 63.58	\$ 132,254.79
E22 - D Step	\$39.47	\$ 3.95	\$ 23.45	\$ 66.87	\$ 139,086.44
E22 - E Step	\$41.43	\$ 4.14	\$ 24.61	\$ 70.19	\$ 145,993.58
E22 - F Step	\$43.36	\$ 4.34	\$ 25.76	\$ 73.46	\$ 152,787.49
E22 - G Step	\$45.33	\$ 4.53	\$ 26.93	\$ 76.79	\$ 159,732.38
E22 - H Step	\$48.42	\$ 4.84	\$ 28.76	\$ 82.02	\$ 170,609.90

***Estimated cost - Not yet vetted through Finance**

EXHIBIT 2

Community Policing Officers (CPOs) will focus on proactive engagement, crime prevention, and strengthening the relationship between law enforcement and residents. Their primary role will be separate from general call-taking officers and traffic enforcement, allowing them to concentrate on building community trust, addressing localized issues, and maintaining a visible presence in high-density residential areas and business districts. Focusing on these primary responsibilities will still lead to generating calls for service and preliminary and follow-up investigations.

CPO Primary Responsibilities:

Community Engagement: Building relationships with residents, business owners, and community leaders.

Event Coordination: Organizing and participating in township events, neighborhood watch meetings, and safety presentations.

Problem-solving: Addressing recurring issues such as trespassing, vandalism, panhandling, homelessness, or other concerns raised by residents.

Coverage & Shifts:

Shift Structure: 12-hour rotating shifts, providing coverage seven days a week from 8 a.m. to 8 p.m. This ensures coverage during weekends, when community events are more likely to occur, and during early morning and evening hours.

- Week 1 A.) M, T, F, S
 B.) Su, W, Th
- Week 2 A.) Su, W, Th
 B.) M, T, F, S

Recommended Coverage: One officer primarily focused on high-density housing and the other on business districts, with flexibility to adjust based on seasonal or event-based demands.

Comstock Township and KCSO will remain open to schedule discussions throughout to one year contract based on the needs of the Township and the staffing ability of KCSO. No schedule modifications or changes will occur unless both parties discuss and agree to the changes.

Detective Sergeant Primary Responsibilities:

Investigation Oversight: Lead investigations related to crimes within Comstock Township, ensuring timely follow-up and resolution.

Community Rapport: Build and maintain relationships with local business owners, housing managers, and residents to foster cooperation during investigations.

Data-Driven Policing: Develop heat maps, identify crime trends, and propose prevention strategies in coordination with patrol units and township leaders.

Traffic and Safety Concerns: Evaluate and recommend solutions for traffic-related issues within the township, particularly in areas of high-density traffic.

Collaboration: Coordinate with other law enforcement agencies for cross-jurisdictional crime investigations and information sharing.

Board Reporting: Present crime data, trends, and prevention strategies to the Township Board as requested.

Reporting: The Sheriff's Office will provide the township with monthly reports on Calls for Service data. These reports will include but are not limited to, specific trends in Uniform Crime Reporting (UCR) crimes and traffic-related incidents, which are pre-approved by the Sheriff. The following special reports may be provided by the Comstock Det./Sgt. monthly or as requested by the township board.

- CFS Heat maps
 - All CFS
 - Specific incident-type heat map
 - Month-to-month comparison heat map
 - Traffic accident heat maps.
- Comstock Township Deputies
 - Venue of reports taken (in/out of the Twp.)
 - Explanation of out-of-area activity.
- Traffic Car Activity
 - Citation Report
- Township Alarms Report
- Criminal Case Submissions
 - Approval / Denied stats.
 - Felony / Misdemeanor submissions with approved/denied.
- Behavioral Health Closures / pick up orders. (data only, no names)



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Website Proposal & Possible Action

Our website is due for an upgrade, including becoming ADA compliant. The attached proposal is from Schumaker Group, which is our current web administrator.

Attachments:

[Website proposal.pdf](#)



Comstock Township Proposal

Apr 9, 2026

WEBSITE DEVELOPMENT

PROPOSAL



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Cover Letter

On behalf of Shumaker Technology Group, I am pleased to submit our proposal to help create a modern, visually appealing, easy to navigate, and ADA compliant website. We are excited about the opportunity to provide your residents, staff, and elected officials with an accessible, secure, and customizable website solution.

With over 18 years of experience in designing and hosting websites for local governments and public-sector clients, our team is well-equipped to deliver modern, accessible websites that are easy to use, scalable, and supported by reliable infrastructure and outstanding customer service. We understand the diverse range of client sizes and budgets, and our flexible pricing models are specifically designed to accommodate these differences while providing long-term value. It is our goal to make each website as unique as the municipality it represents.

Our approach combines our extensive knowledge and experience working with hundreds of municipal clients with our robust technical capabilities and exceptional customer support, including extensive training for township staff and responsive support and maintenance services.

We believe that our expertise, commitment to service, and shared dedication to supporting local government position us as the ideal partner for your website initiative. Thank you for considering our proposal. We look forward to the opportunity to collaborate with you in advancing your digital presence and communication capabilities.

Sincerely,



Kyle P. Shumaker, President

The Shumaker Technology Group LLC

Phone: (517) 325-3121 | Email: kyle@shumakergroup.com.

Scope of Work

The below steps outline how we generally approach each project from the discovery phase to ongoing support after the site launch.

- **Discovery:** To kick off the project, an introductory meeting will be scheduled to outline the objectives, requirements, and deadlines for the new website.
- **Planning & Design:** During this phase, we will collaborate with key stakeholders to brainstorm ideas and gather input that guides the layout, visual style, and content structure of the website. Based on this plan, Shumaker Group will construct an initial prototype or visual of the website. We will then work closely with you to refine the prototype into a Website that you and your community will be proud of.
- **Development & Content Migration:** Using WordPress, a widely trusted and user-friendly content management system, we will build the prototype into a fully functional, mobile-friendly, and accessible website. During this phase, we will also insert or migrate existing content (such as documents, forms, and meeting minutes) and ensure that all interactive and embedded features are fully operational.
- **Accessibility & Testing:** Once development is complete, our experts will conduct both automated and manual testing of the site. All websites will meet the ADA requirements and conform to WCAG 2.1, Level AA accessibility guidelines upon launch to ensure inclusivity and compliance.
- **Launch:** We will coordinate with you to establish a launch window and publish the website to the Internet using the domain name(s) chosen.
- **Training & Support:** Shumaker Group will provide personalized training to ensure municipal officials and staff can confidently make updates to their site. Ongoing tech support is available via support ticket, email, phone, or remote support session. For clients enrolled in a maintenance plan, we offer access to our help desk who can make ongoing site updates for you in the event that you don't wish or don't have time to manage the site yourself.

EXPERIENCE & QUALIFICATIONS

Shumaker Tech Group has been in business since 2007 and has extensive experience designing, building, and maintaining over 300 government websites. We proudly serve townships, cities, villages, counties, police/fire/EMS, public utilities, and more throughout the midwest and beyond.

We are proud to serve municipalities as small as a few hundred residents and are large as tens of thousands of residents. We have completed case studies on several of our past projects which are included for your reference in [Appendix A: Municipal Website Case Studies](#). Given both the number of years we've been developing municipal websites as well as the number of websites completed, we truly believe that a great deal of the value we bring to the table isn't just taking care of the design and technical details to build the site, but having the knowledge and expertise to truly consult with municipalities on what they can and should have on their website, as well as best practices, legal issues affecting websites, and more. We are continuously improving our knowledge base by attending educational events such as the Michigan Townships Association, Ohio Township Association, Michigan Association of Municipal Clerks, Michigan Downtowns Association, County Road Association of Michigan, and many more.

In [Appendix B: Topic Planner](#), our team will guide each municipality through the top 50+ pages we commonly see on a website so that each municipality can easily decide if a similar page would be appropriate for them or not. Of course, for each page in the online version of our page planner, we also link to several example layouts for that page to give the client ideas for content, style, and layout. Many firms can build a great Website, but we truly do believe that our experience is our greatest value add.

One of our favorite recent projects is Oakland Township (oaklandtwpmi.gov). Oakland Township is located on the outskirts of Metro Detroit in northern Oakland County, MI. In addition to being a fairly recent project, it is also for a larger township with a population just over 20,000 residents. The completed site features around 70 pages, including a micro site for their Parks & Recreation Dept. and their Historical District Commission. It also features aerial drone photography completed by Shumaker Group's Part 107 licensed commercial drone pilots.

We enjoy working with municipalities both large and small. Some of our recent projects for smaller communities include: cityofstclairmi.gov, boynevalleymy.gov, keelertownshipmi.gov, and parmatwp.gov. We believe all municipalities, regardless of size, deserve a great website, and are confident that both our pricing model and dedication to customer support reflect that.

In addition to working with hundreds of municipalities directly, our extensive knowledge of local government has been aided by working with various associations that support local government. In 2022, we rebuilt the Michigan Townships Association (MTA) Website which consists of many complex integrations, member login functionality, advanced search functionality, and thousands of pages and posts worth of content (behind the member login) that have helped us learn more about local government. You can learn more about MTA's experience working with Shumaker Group on this project on Pages 1 and Pages 14-15 of Focus Magazine at michigantownships.org/wp-content/uploads/November-2022-Township-Focus.pdf. We believe it also speaks

volumes that 8 out of 9 of the township officials that served on MTA's committee for the website project were existing clients and/or have switched their township website over to The Shumaker Group.

In addition to our growing presence throughout the midwest, The Shumaker Group was also selected to develop the website for the [National Association of Towns and Townships](#) (NATaT) in 2022.

Our team consists of a wide variety of talents and college degrees ranging from Computer Science, User Experience & User Interface (UI/UX), Graphic Design, Security, Technical Support, and more. These various specialties allow us to have all of the expertise needed to successfully manage a large quantity of government websites efficiently. It is also important to note that we perform all technical and design work in-house with the only exception being that our hosting servers are located in a third-party data center for redundancy. It is our goal to have all the resources our clients need, while not having so much overhead that we become inaccessible to our clients in terms of either price or quality of support.

WEBSITE DESIGN

Our preferred platform for website design is WordPress. WordPress is known to be the most popular content management system (CMS) in the world and is estimated to power approximately 43% of all websites and approximately 61% of all content management system based websites. Of course, it would not have achieved this popularity if it were not user-friendly. In addition to its popularity, WordPress is open-source software meaning that our clients are not tied to Shumaker Group or to any proprietary systems or software. If there were ever a need or desire, this would allow a municipality to easily migrate their Website to a different host or different developer.

Last, but not least, given the popularity of WordPress, there are thousands of plugins that allow it to integrate with most other web-based services, and it can be customized if a need arises that hasn't already been met by a pre-existing feature or plugin. It's even entirely possible some municipal officials are already familiar with it from other jobs or websites that they may work with.

WEBSITE HOSTING

We recognize that for a website to be valuable, it has to be functioning correctly, and therefore offer an extremely robust hosting architecture. We have dedicated servers in a professional data center located in Lansing, MI and employ third-party uptime monitors that will alert both our internal team at The Shumaker Group and our data center team of any issues that may arise.

- Company servers are located in an SSAE-22 Compliant Data Center that is staffed 24x7x365 to intervene in the case of a server outage. This data center is served by multiple redundant tier 1 bandwidth providers, as well as battery backups and electrical generators capable of powering the data center in an emergency.

- Company servers utilize BOTH Web Host Manager's account level backups as well as image-based Acronis Cyber Backups to backup our servers multiple times throughout the day. Daily backups are stored off-server. Weekly backups are archived in other locations in the United States for greater redundancy in the event of a localized disaster.
- WordPress updates and security patches are monitored and installed automatically via the MainWP Control Panel (mainwp.com) to make sure each site in our portfolio stays up-to-date.
- We utilize both a robust Web Application Firewall (WAF) as well as intrusion detection systems to keep our servers secure.
- The Shumaker Group recommends and will provide the license for Solid Security Pro (solidwp.com/security) to provide customizable site level security.
- Our company recommends the use of multi-factor authentication for all website administrator accounts.
- We encourage the use of .gov domain names, as recommended by the Cybersecurity & Infrastructure Security Agency (CISA).
- We have been in business since 2007 and our servers maintain an average 99.99% uptime.

ONGOING MAINTENANCE

Shumaker Group recognizes that there is no "one size fits all" approach to website support & maintenance. For an affordable annual rate detailed in the pricing breakdown, all clients receive our website hosting + backup + security + support package. Our support package includes having The Shumaker Group update the WordPress Content Management System, as well as any supported themes and plugins. Technical support is available by support ticket, email, phone, or support session should a client have difficulty with anything website related.

For those who also desire ongoing assistance with day-to-day site content maintenance such as posting meeting minutes, calendar entries, etc., we are well known for our "Fully Managed" option where you can just send your updates to our helpdesk and we will complete them for you. To be clear, we will always provide clients with free technical support on "how" to do things, however, the fully managed package would be for those clients that wish to have us actually make content changes for them after the site is live. We've found smaller municipalities with a limited staff often greatly appreciate this option, as well as those clients who may need additional help during their busy times.

TRAINING & SUPPORT

We recognize that in order to be a useful tool, a Website must be easy to learn and maintain. This is one of the reasons that we love WordPress and especially the Elementor Pro drag-and-drop editor included with each site. In addition to receiving written documentation, all clients will receive a personalized 1-on-1 training session either right before or right after their new site launches. This training will be recorded for the client's reference. A prerecorded preview of this training can be previewed at shumakergroup.com/training.

As described in the "Ongoing Maintenance" section above, all clients receive unlimited technical support for as long as they are our client. Technical support is available via support ticket, email, phone, or remote support session. Those who do not desire to make content updates to their own site have a variety of maintenance plans to choose from where The Shumaker Group will conduct work (such as site content updates) for them.

The timeliness and quality of support are critical. At The Shumaker Group, we have a separate helpdesk team to ensure that current clients get great support without taking a back seat to new projects that we're working on. We respond to all emergency requests (such as a site being down) within 1 business hour and all standard requests within 1-2 business days depending on the nature of the request. Larger project based work (such as site redesigns or implementation of new features) is scheduled out at mutually convenient times. While every company feels like they offer great support, we feel that the best way to get a feel for our extraordinary level of support would be to speak with some of our clients and references. We are happy to connect with you with as many as needed in order to feel comfortable with the quality of our support. Additionally, you can get a feel for our commitment to customer service from our [Google Reviews](#), showing an average of 4.9 Stars.

ADA COMPLIANCE

Shumaker Technology Group is very familiar with the Web Content Accessibility Guidelines (WCAG) Version 2.1, Level AA that become mandatory on the following dates

- April 24, 2026 (for municipalities with 50,000 or more residents)
- April 26, 2027 (for municipalities with fewer than 50,000 residents).

We work with our clients to ensure compliance with the Americans with Disabilities Act (ADA) requirements for government websites by implementing accessible design principles that meet or exceed these standards. Specifically, this is accomplished by integrating features such as screen reader compatibility, keyboard navigability, text alternatives for non-text content, and proper color contrast to accommodate users with visual, auditory, and mobility impairments. The Shumaker Group also conducts regular accessibility audits and user testing with assistive technologies to identify and resolve potential barriers, ensuring inclusive digital experiences for all users. Through these proactive measures, we support municipalities in maintaining legal compliance and promoting equal access to public digital services.

In some cases, for example if a municipality is unable to provide critical documents digitally and desires that Shumaker Group retype and reproduce those documents for them, there may be an additional charge detailed in the "Optional Services and Associated Costs" section below. We have listed this as an add-on because in our experience there may be municipalities that need hundreds of pages of ordinances re-typed or forms reproduced while other municipalities may already have everything digitally.

Last but not least, Shumaker Group has been trusted by organizations like the Michigan Townships Association, Michigan Municipal League, Ohio Townships Association, & County Road Association of Michigan to help educate their members on the new Website ADA Requirements. Videos of some of these presentations can be found at stgmunicipal.com/ada. Supporting slideshow can be found in [Appendix C: Presentation Slide](#).

Shumaker Group has presented the following sessions/classes on Website ADA Compliance:

- April 2025 [Michigan Townships Association Annual Conference & Expo](#) (with attorney Michael Bila)
- August 2025 Michigan Michigan Municipal League Webinar (with attorney Michael Bila)
- February 2026 Ohio Townships Association Winter Conference
- February 2026 [Article in MTA Township Focus Magazine](#) (with attorney Michael Bila)
- March 2026 Michigan Townships Association Webinar
- March 2026 County Road Association of Michigan
- April 2026 Michigan Townships Association Annual Conference & Expo (with attorney Michael Bila)

CUSTOMIZATION & INTEGRATION

As we hinted at in the "Website Design" section above, Shumaker Group recommends WordPress, partly due to the fact that it is fully customizable and already has tens of thousands of plug-ins in existence for integration with third-party services. With WordPress having 43% market share, if a third-party service wants to integrate with Websites, WordPress is usually the platform they would start with first. Shumaker Group also has many qualified programmers on staff to assist with any custom integrations that may be needed. We frequently work with custom integrations with various payment processors, assessing software, email/text blast providers, and more. For some of our clients, we even develop gated "intranet" sites where staff and officials can access various internal forms, dashboards, portals, etc.

COMPANY PROFILE

18+

Years of continuous
business years serving a
diverse and growing client
base

350+

Clients from a diverse range
of sizes and industries

30+

Years of combined website
development experts

CORE VALUES

Professionalism: We believe professional web development requires a team of specialists. From front end to back end, we hire highly qualified experts who hold relevant degrees and pursue ongoing education and certifications to ensure every project meets the highest standards. Our dedicated UI/UX experts help make sure your website meets accessibility requirements.

Flexibility: Whether you have an exact plan or need the guidance to know how your website operates, we offer full-service support or just a little help getting started. The Shumaker Group adapts to your needs. We can manage everything or hand off control—whatever works best for you.

Reliability: Since 2007, we've earned our clients' trust by delivering dependable service and long-term support. Our specialized team includes experts at every stage of the process, ensuring a smooth and high-quality experience from start to finish. We also invest in top-tier hosting and proactive monitoring to catch and resolve issues quickly, often before you even notice.

Affordability: We believe every organization deserves an exceptional website regardless of budget. As a small business ourselves, we understand the importance of balancing quality with cost. By managing a high volume of projects and maintaining an in-house team of project managers, web developers, and designers, we're able to offer custom, high-quality websites at a cost that works for a wide range of clients.

LEADERSHIP



President

KYLE SHUMAKER

Kyle built his first freelance Website as a high school student in 2002 and continued doing freelance Website Development throughout high school and while attending Michigan State University and studying Computer Science. Kyle officially founded Shumaker Technology Group in 2007 and has helped design, build, and manage hundreds of Websites for both public and private sector entities.



Web Developer

A.J. SKIDMORE

A.J. develops websites and web applications, while utilizing his creative background to help design them. A.J. started off as an intern with a small amount of experience in creating websites, but now has an arsenal of tools to effectively create websites and contribute to the STG team. A.J.'s degree in Experience Architecture from Michigan State University gives him a thorough background in UX/UI Design which informs the way he approaches each challenge at STG.



Graphic Designer

JAMES O'BRIEN

James has worked in the creative field for over a decade and holds a degree in Graphic Communications & Art from Lansing Community College. At the Shumaker Group, he has applied his skillset across a wide range of private and public sector projects. His expertise spans graphic design, illustration, video production, product design, and web design.

COMPANY STRUCTURE

Management

Oversees the business operations and team coordination

Sales

Guides new clients to ensure they get the best possible value

Design

Transforms client visions into detailed plans and designs

Development

Builds websites using the latest technologies and standards

Helpdesk

Provides post-launch support and ongoing website maintenance



Our Experience

MUNICIPAL FOCUS

The Shumaker Technology Group is proud to serve and support hundreds of municipalities across the United States. Our in-house experts have developed and streamlined the Shumaker Group experience over the past 18 years to deliver the most robust and seamless experience at every stage of the website building process.



REFERENCES

Allendale Township

Jody Hansen, Clerk

clerk@allendalemi.gov

Phone: (616) 892-3111

Website: allendalemi.gov

Oakland Township

Julie Schoenherr, Communications Specialist

JSchoenherr@oaklandtownship.org

Phone: (248) 651-4440

Website: oaklandtwpmi.gov

Addison Township

Pauline Bennett, Clerk

clerk@addisontwp.org

Phone: (248) 628-5409 ext 216

Website: addisontownshipmi.gov

Charlevoix Township

J.B. Hoyt, Trustee & Planning Commissioner

trusteehoyt@charlevoixtownship.gov

Phone: (231) 547-4611

Website: charlevoixtownship.gov

Charter Township of Comstock

Scott Hess, Superintendent

superintendent@comstockmi.gov

Phone: (269) 381-2360 ext. 121

Website: comstockmi.gov

Central Lake Township

Judy Kosloski, Clerk

clerk@centrallaketownship.com

Phone: (231) 544-6687

Website: centrallaketownshipmi.gov

TESTIMONIALS



"Shumaker developed a totally new website for our township and redeveloped our email system. They were easy to work with, offering ideas and suggestions readily. During the development process we had multiple updates a week... sometimes even overnight. Our ongoing support has been very responsive and effective. We strongly recommend STG! The project was delivered on time and on budget."

J.B. Hoyt, Trustee
Charlevoix Township
charlevoixtownship.gov



"Shumaker Group designed our site (chocolay.gov) and assisted in converting our email addresses from .org to .gov. We went live last year with the new site, and are able to tweak our own site as we need to (postings, pages, etc.). Absolutely great to work with, and their technical support is outstanding."

Dale Troenle, Planning Director
Chocoley Township
chocolay.gov



Otsego Lake Township

"Shumaker Technology Group is the best to work with. They are always willing to help and no questions asked. They get the job done. They also make the best web designs. If you need changes made they are only a phone call away and willing to help. Kyle & AJ are the best in this field. Thank you guys !!!!!!"

Jerry Brown, Treasurer
Otsego Lake Township
otsegolaketownship.org



"We went with Shumaker Group and we are very happy. They are great to work with and they trained our Clerk to be able to do the managing of our site. They are there for any issues or questions that she might have."

Kevin Young, Treasurer
 Pokagon Township
pokagontownshipmi.gov



Central Lake Township

"Shumaker Group is fantastic and easy to work with. They are highly recommended by MTA . You will not be disappointed at all."

Judy Kosloski, Clerk
 Central Lake Township
centrallaketownshipmi.gov



**GRAYLING
 CHARTER TOWNSHIP**

"I just wanted you to know how much we are enjoying our website. The fact that I can add and remove items with such ease is a huge blessing. And your training covered everything so very well. I am glad that you are a part of our team. "Thank you" is not enough to express my appreciation for all of your hard work and dedication to our project."

Nancy Davis, Deputy Clerk
 Grayling Township
twp.grayling.mi.us



"I personally wanted to thank you for a WONDERFUL job on the Morton Township website. It looks terrific, and I have heard many rave reviews of how nice looking it is and its ease of navigation. We are all proud of the work that you have done for us. Great job."

"It has been a real pleasure working with your team. Thank you so much for making us stress free and successful!"

Ann McFeggan, PMP
 Morton Township
mortontownship.org



MICHIGAN
TOWNSHIPS
ASSOCIATION

"If you use Lansing-based Shumaker Technology Group (STG) for your township's website work, you now have that in common with your MTA association website. After soliciting proposals and quotes from several leading Michigan and Washington, DC website developers, MTA selected STG based on several factors—not the least of these were STG's long relationship with MTA and more than 250 of our member townships. Their understanding of our needs, familiarity with our other connected services (for example, our membership and education systems), and expertise in guiding us into independently using the leading website management system sealed the deal. MTA's positive experience led your national townships association, the National Association of Town and Townships, to also select STG this year with a similarly excellent outcome. STG is a long-time MTA exhibitor and sponsor; we thank them for their knowledgeable support of our work."

Michigan Townships Association

Excerpt from Neil Sheridan, [Township Focus Article](#), November 2022 Edition
michigantownships.org



"We are so pleased with our board decision to move our web presence to Shumaker. Having a site that looks good and functions well for our residents was a major concern, along with customer service. Shumaker Tech Group has far surpassed our goals. I get immediate support from STG on any changes needed on our site and the staff are great to work with."

Jerome Township

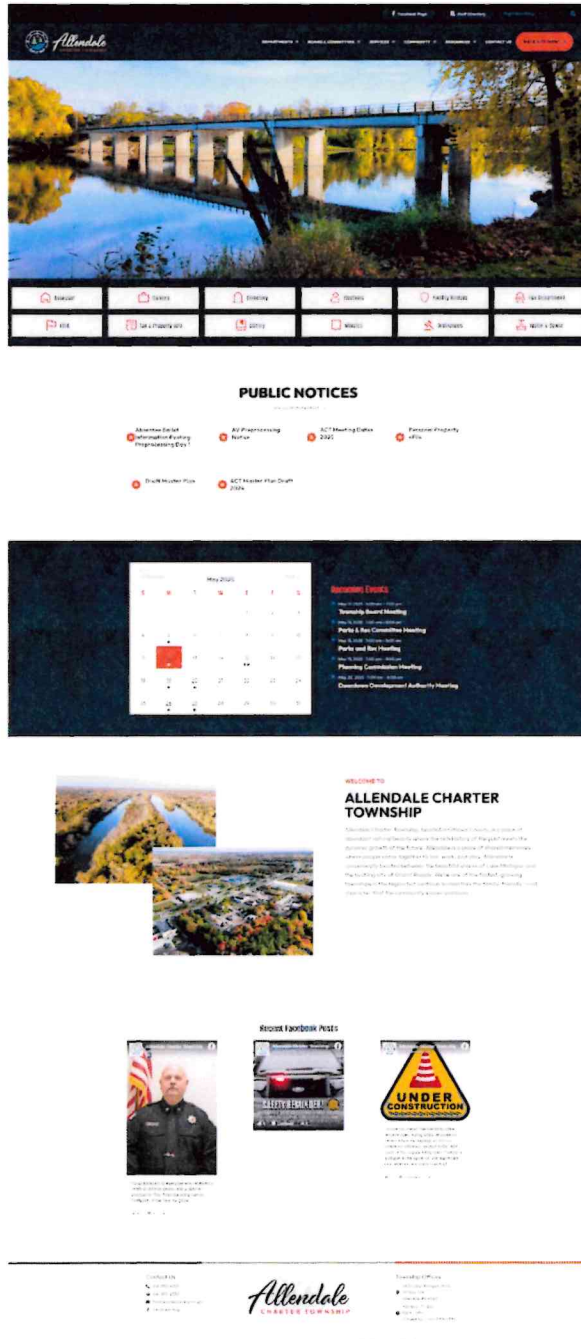
Gil Bernier
jerometownship.org



"I really appreciate that I was contacted this late at night! My apologies for not remembering the gentleman's name that I spoke to, but he was very polite, helpful and understanding and because he took care of this for the City, we were in compliance with the Open Meetings Act, so thank you again!!"

City of Montrose

Christina Rush
cityofmontrose.us



FEATURED PROJECT

Allendale Charter Township

Project completed: 2024

Allendale Township, located in western Michigan, sought to redesign its municipal website to better serve residents and reflect the community's ongoing growth. The previous site was outdated, difficult to navigate, and lacked proper structure, making it challenging for users to quickly access essential information.

Our team collaborated closely with township officials to create a modern, WordPress-based platform focused on usability and accessibility. We implemented a clean, responsive design; reorganized content to prioritize high-traffic areas; and added interactive tools such as public notices and an event calendar. Our design team also crafted a custom logo that visually represents the local area, and built content that would help promote transparency between the government and the public.

Since its launch, the website has been a strong success, significantly improving how Allendale Township communicates with its residents. We believe Allendale Township's site sets a benchmark for what a modern municipal website should strive to be. For additional featured projects, see [Appendix A: Municipal Website Case Studies](#)

"I am very happy to be one of your clients. You and your team are amazing and have been fantastic throughout this entire process. I look forward to continuing to work with you."

Jody Hansen, Clerk

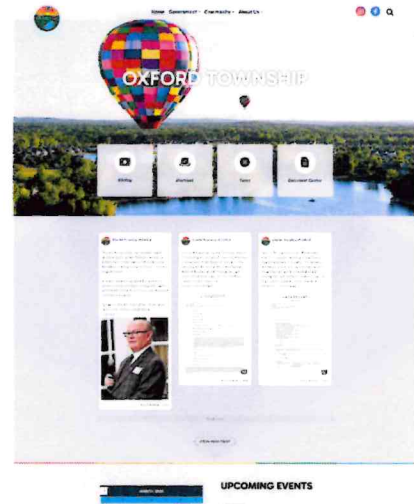
PORTFOLIO SAMPLES



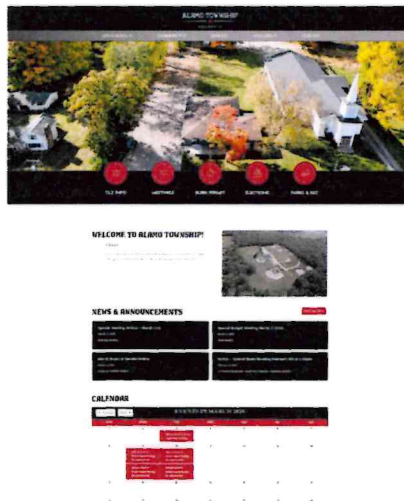
Michigan Townships Association
michigantownships.org



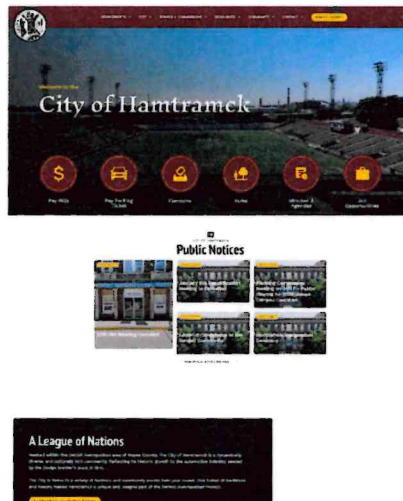
Oakland Township
oaklandtwpmi.gov



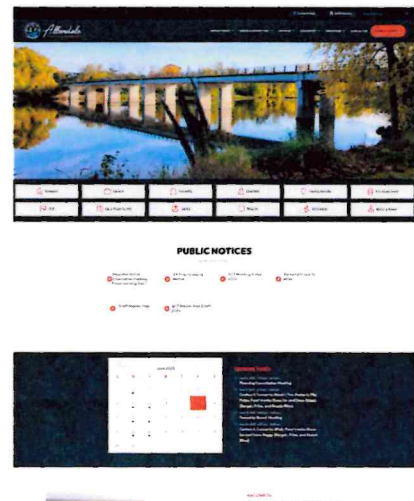
Oxford Township
oxfordtwpmi.gov



Alamo Township
alamotownshipmi.gov



City of Hamtramck
hamtramckcity.gov



Allendale Township
allendalemi.gov

Pricing Breakdown

ONE TIME SETUP COSTS

Choose from three packages designed to help define the scope and features of your new website, or contact us for a custom quote that meets your exact needs.



Platinum Package.....\$3,995

The platinum package is our most comprehensive offering, designed for medium to large townships seeking maximum functionality and user engagement. It supports an extensive number of pages/documents, and allows for a more custom and advanced set of features.

Items	Platinum
Content Migration From Existing Site	Up To 75 pages
Documents	Up to 500 documents
Digital Forms Included (Additional as add-ons)	10
Training & Documentation	✓
.Gov Domain Assistance	✓
Attention to ADA compliance guidelines	✓
Enhanced Security	✓
Website Analytics & Reporting	✓
Links to Third-Party Online Services or Social Media	✓
Standard Search Functionality	✓
Events Calendar	✓
Contact Form	✓
Fully Custom Layout & Design	✓
Login-Gated Pages	✓
Surveys, Polls & Form Builder Tools	✓
Advanced Custom Search Functionality	✓
Embedded (API) Social Media Integration	✓
Language Translation Tools	✓
Drone Photo and Video Session	✓
Free Design Refresh & Modernization after 3 years	✓

RECURRING MAINTENANCE AND HOSTING FEES

Maintenance Plan.....\$1,295/year

All STG Websites come with training to learn how to update and maintain the Website, we find that some clients would prefer to contract with us to make the day-to-day changes for them. With our Maintenance Plan, whether it's posting your meeting minutes, helping create new pages, or more, we've got you covered.

OPTIONAL SERVICES & ASSOCIATED COSTS

The following services may compliment your website but are also not strictly necessary for all municipalities. They are offered as optional add-ons.



Email Blasts.....Starting at \$20/month

Send email newsletters, alerts, and community updates to residents with automated delivery and easy sign-up on your township website. Monthly cost depends on the total number of subscribers.



Text Message Blasts.....Per Package/Annually

Keep your community connected. Send instant updates directly to your resident's phones, ensuring they stay informed with the latest news.

- **Core Package:** \$750.00 Annually, 12,000 credits
- **Plus Package:** \$1,250.00 Annually, 25,000 credits
- **Boost Package:** \$1,750.00 Annually, 50,000 credits

**Each credit consists of an incoming or outgoing text message of up to 163 characters.*



Accessible Document Conversion.....\$30/Per Hour

If pre-existing documents/forms don't meet accessibility standards, The Shumaker Group can help you recreate those documents in an accessible manner.



Brand Design.....\$85/Per Hour

Work with our team of designers to create a logo that's unique to your township.



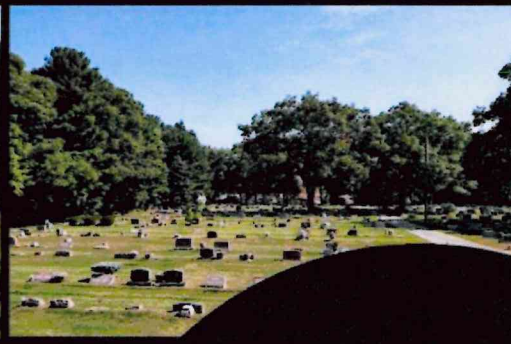
Email Accounts.....\$60 Per Account/Annually + \$100 Email Setup Fee

Email accounts provided through Microsoft 365. Other email platforms available upon request. We also offer Optional Third-Party Email Backup for \$50 Per Account/Annually.



Aerial Drone Photo and Video.....\$400

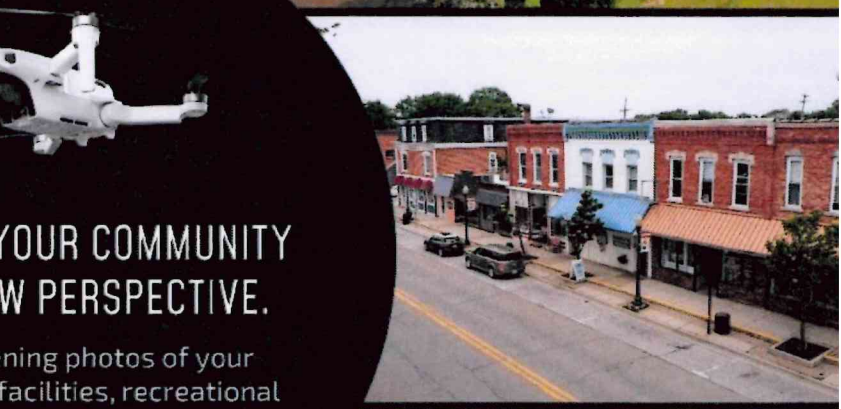
Show off your community from a new perspective with engaging photos captured from our aerial drone. (Included in Platinum Package)



SHOWCASE YOUR COMMUNITY FROM A NEW PERSPECTIVE.

Capture stunning photos of your
governmental facilities, recreational
areas and public spaces.

Ask Today!



Major Milestones & Deliverables



Milestone 1: Planning

- Define project objectives
- Discuss website design, layout & content preferences
- Design, review, and adjust website prototype[3]



Milestone 2: Development

- Replicate prototype into a fully functional website
- Migrate existing content and documents
- Review and make final adjustments[3]



Milestone 3: Deployment

- Establish window and launch website
- Set up additional services and provide final deliverables, such as email accounts and logo designs.
- Provide website training and/or access to our help desk.

Payment for the site development and first year's hosting is due within 30-days of the site launch.

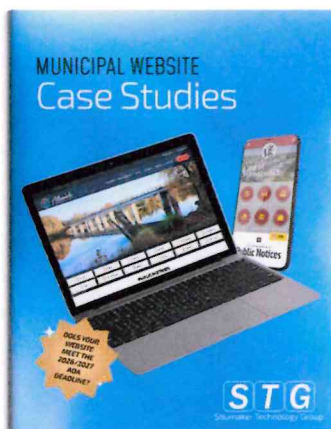
Terms & Conditions

[1] With every website we build, you retain 100% ownership. You'll have full administrative access to make edits and changes just like we do, even if we're managing it on your behalf.

[2] We guarantee your complete satisfaction. If at any point (prior to 30 days after the launch of the site) you aren't happy with our work, you can cancel and owe nothing.

[3] In order to meet our delivery milestones, it is important that the client be engaged in the process and provide timely feedback when requested. While we understand that everyone gets busy, if significant delays occur while waiting for client feedback, the delivery dates may be pushed back.

Appendix



[\[Appendix A\]](#)

[Municipal Website Case Studies](#)



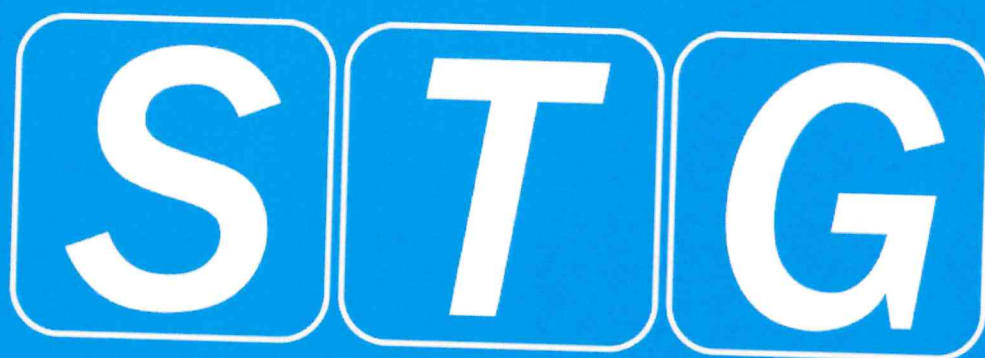
[\[Appendix B\]](#)

[Topic Planner](#)



[\[Appendix C\]](#)

[Access Granted: What You Need To Know About The New ADA Website Requirements" Presentation Slides](#)



SHUMAKER TECHNOLOGY GROUP



PHONE

(517) 325-3121



WEBSITE

stgmunicipal.com



PORTFOLIO

stgportfolio.com



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Purchase Agreement for 55 School Street & Possible Action

Attachments:

[School Property Purchase Agreement.doc](#)

[55 school street record card.pdf](#)

PURCHASE AGREEMENT

This Purchase Agreement (the "Agreement") is entered into on _____, 2026 between 26TH STREET PROPERTIES LLC, Michigan limited liability company whose address is 2915 E Grand River Ave, Howell, MI 48843 (the "Buyer") and the Charter Township of Comstock, a Michigan municipal corporation whose address is 5858 King Highway, Kalamazoo, MI 49048 (the "Seller") upon the terms and conditions set forth below.

1. **Purchase & Sale.** The Seller agrees to sell and the Buyer agrees to purchase the real property addressed as 55 School Street within the Township, identified as Parcel ID No. 07-18-480-052, legally described as follows:

SEC 18-2-10 BEG ON E LI SEC 18 294.62 FT
N OF SE COR SD SEC TO POB,
TH CONT N ALG SD LN 68.88FT, TH W 242 FT
THE N 82DEG W 562.1 FT, TH S 1DEG 04MIN W
300 FT TO NLY LN OF MCRR RR, TH ESTRLY
ALG SD NLY LN OF MCRR RR 544.5 FT, TH N
3DEG 07MIN E 176.3 FT, TH E 184.46 FT TO
POB
2004 SPLIT TO 18 480 051PARENT & 18 480
052 CHILD

together with all improvements thereon (the "property").

2. **Purchase Price and Remediation.** The Seller has determined that the property is presently in a state of disrepair and contaminated with debris such that it constitutes a threat to the public health, safety, and welfare of the public. The Seller has further determined that the cost to remediate the property and clear the contamination/debris would be prohibitively expensive. The Buyer has agreed to take ownership of the property for a monetary purchase price of Zero Dollars (\$0.00), but subject to the terms of remediation in this Agreement.

The Buyer shall be required to clean up and remediate the property such that it becomes capable of use and development appropriate to the area and in compliance with local zoning regulations. Specifically, the Buyer agrees to safely remove and dispose of all trash, junk, debris, contaminants, hazardous materials,

and any other similar items from the property. The Buyer shall conduct this remediation at their sole expense.

3. **Terms of Payment and Remediation.** The Buyer shall complete the remediation of the property within [six months] of the date of transfer of ownership by quit claim deed. Remediation shall be deemed complete when the property has reached a state of repair and capability of use reasonably similar to the surrounding area. Remediation shall not require that the property be completely devoid of small items of trash which may be commonly found on similar properties through no fault of the property owner. The parties agree to work in good faith to determine when the property has been sufficiently remediated to satisfy the terms of this Agreement. In the event of a substantial disagreement between the parties regarding remediation which cannot be resolved by informal discussion, the parties agree to share in the cost of submitting the question to a neutral third-party mediator whose decision shall be binding and unappealable. If the Buyer fails to complete the remediation as required herein the property will revert to the Seller. The remediation requirements herein shall survive the closing on the property.
4. **Survey.** No survey shall be provided as part of this Agreement.
5. **Title Insurance.** No title insurance shall be required as part of this conveyance.
6. **Inspections.** Buyer agrees to accept the property “as is” and recognizes that the very nature of this Agreement identifies the property as being in a state of disrepair subject to remediation.
7. **Property Taxes.** Buyer shall be responsible for paying any delinquent property taxes, and the current year’s property taxes.
8. **Conveyance.** Upon performance of Buyer of the closing obligation specified in Section 15, below, Seller shall convey the title to the property to Buyer by quit claim Deed.

Seller Agrees to grant Buyer at closing the right to make -0- divisions under Section 108(2), (3) and (4) of the Michigan Land Division Act (if no number is inserted, the right to make divisions stays with any remainder of the parent parcel retained by Seller). If the sale will create a new division, Seller’s obligations under this Agreement are contingent upon Seller’s receipt of municipal approval of the proposed division to create the property.

9. **Warranties of Buyer.** Except as otherwise provided or acknowledged in this Agreement, Buyer represents and warrants to Seller as follows:

- a. The performance of the obligations of Buyer under this Agreement will not violate any contract, statute, ordinance, judicial or administrative order or judgment applicable to Buyer.
 - b. There is no litigation or proceedings pending, or to the Buyer's knowledge threatened, against or involving the Buyer and the Buyer does not know or have reason to know of any ground for any such litigation or proceeding, which could have an adverse impact on Seller or Seller's interests under this Agreement.
10. **Warranties of Seller.** Except as otherwise provided or acknowledged in this Agreement, Seller represents and warrants to, and agrees with Buyer as follows:
- a. Seller's interest in the property shall be transferred to Buyer on the closing date by quit claim deed as is.
 - b. The performance of the obligations of Seller under this Agreement will not violate any contract, statute, ordinance, judicial or administrative order or judgment applicable to Seller or the property.
 - c. There is no litigation or proceeding pending or to the Seller's knowledge threatened, against or involving the property, and the Seller does not know or have reason to know of any ground for any such litigation or proceeding which could have an adverse impact on Buyer or Buyer's title to and use of the property, before or after closing.
- Closing.** The closing shall be held on or before _____ and as promptly as practical after all necessary documents have been prepared.
11. **Remediation Inspection.** The Buyer grants the Seller, or any authorized agent, the authority to enter onto the Buyer's Property upon reasonable notice for the purpose of inspecting the process of remediation, up until the completion of remediation.
12. **Hold Harmless.** The Buyer hereby agrees to indemnify and hold harmless the Seller and its officers, employees, contractors, subcontractors, representatives and agents from and against any and all liability and costs, including attorney fees, for personal injury, property damage, and/or any and all injuries and damages resulting from remediation inspections.
13. **Possession.** Seller shall tender to Buyer possession of the property upon completion of the closing. Upon Seller's acceptance, Buyer shall have the right to enter upon property during reasonable business hours for purposes of inspections.
14. **Seller's Closing Obligations.** At closing, Seller shall deliver the following to Buyer:

- a. The quit claim deed required by this Agreement.
 - b. Any other documents required by this Agreement to be delivered by Seller.
15. **Buyer's Closing Obligations.** At closing, Buyer shall deliver to Seller the following:
- a. A signed copy of this Agreement which specifically acknowledges the terms of the purchase and remediation as a form of payment.
 - b. Any other documents required by this Agreement to be delivered by Buyer.
16. **Notices.** Unless otherwise stated in this Agreement, a notice required or permitted by this Agreement shall be sufficient if in writing either delivered personally or by certified mail or other form of documentable delivery addressed to the parties at their addresses and any notices given by mail shall be deemed to have been given as of the date of the post mark.
17. **Additional Acts.** Buyer and Seller agree to execute and deliver such additional documents and to perform such additional acts as may become necessary to effectuate the transfer contemplated by this Agreement.
18. **Entire Agreement.** This Agreement contains the entire agreement of the parties with respect to the sale of property. All contemporaneous or prior negotiations have been merged into this Agreement. This Agreement may be modified or amended only by written instrument signed by the parties to this Agreement. This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan.
19. **Environmental risks.** There are environmental risks associated with this property, which are in part the reason for this Agreement. The Buyer recognizes that federal, state, or local law may impose liability upon the Buyer for remediation of the contamination even though the buyer did not cause it, and such contamination may now or in the future restrict the ability of the Buyer to develop and utilize the property. The Buyer understands that it is prudent to seek legal and technical counsel from environmental professionals in order to effectuate remediation and evaluate environmental risks associated with this transaction.

(Signatures on next page)

SELLER
CHARTER TOWNSHIP OF COMSTOCK

Date: _____

By: Benjamin Martin
Its: Supervisor

BUYER
26TH STREET PROPERTIES LLC

Date: _____

By: James Sutton
Its: Owner and Sole Member

07/31/2026

Grantor	Grantee	Sale Price	Sale Date	Inst. Type	Terms of Sale	Liber & Page	Verified By	Prcnt. Trans.			
COMSTOCK CHARTER TOWNSHIP	COMSTOCK CHARTER TOWNSHIP	0	11/11/2003	WD	21-NOT USED/OTHER	2003-084667	PROPERTY TRANSFER				
Property Address		Class: RESIDENTIAL-IMPRO		Zoning: CC		Building Permit(s)		Date	Number	Status	
55 SCHOOL ST		School: COMSTOCK PUBLIC SCHOOLS									
Owner's Name/Address		P.R.E. 0%									
COMSTOCK CHARTER TOWNSHIP FOOTBALL FIELD PO BOX 449 COMSTOCK, MI 49041		MAP #: FOOTBALL FIELD									
		2027 Est TCV Tentative									
		Improved	X	Vacant	Land Value Estimates for Land Table 30422.30422 DOWNTOWN RES. SD#39030						
		Public Improvements		* Factors *							
		Dirt Road Gravel Road Paved Road Storm Sewer Sidewalk X Water X Sewer Electric Gas Curb Street Lights Standard Utilities Underground Utils.		Description	Frontage	Depth	Front	Depth	Rate %Adj. Reason	Value	
				FRONTAGE 1	68.33	562.10	1.0000	0.0000	0 100*	00	
				DOWNTOWN RES			04.085 Acres	6,881	100.000	28,108	
				* denotes lines that do not contribute to the total acreage calculation.			Total Est. Land Value =			28,108	
Tax Description											
SEC 18-2-10 BEG ON E LI SEC 18 294.62 FT N OF SE COR SD SEC TO POB, TH CONT N ALG SD LN 68.88FT, TH W 242 FT THE N 82DEG W 562.1 FT, TH S 1DEG 04MIN W 300 FT TO NLY LN OF MCRR RR, TH ESTRLY ALG SD NLY LN OF MCRR RR 544.5 FT, TH N 3DEG 07MIN E 176.3 FT, TH E 184.46 FT TO POB 2004 SPLIT TO 18 480 051PARENT & 18 480 052 CHILD											
Comments/Influences		Topography of Site									
GIFT FROM COMSTOCK SCHOOLS 2004 LOT LINE		Level Rolling Low High Landscaped Swamp Wooded Pond Waterfront Ravine Wetland Flood Plain									
		who	when	what	Year	Land Value	Building Value	Assessed Value	Board of Review	Tribunal/Other	Taxable Value
					2027	Tentative	Tentative	Tentative			Tentative
					2026	EXEMPT	EXEMPT	EXEMPT			EXEMPT
					2025	0	0	0			0
					2024	0	0	0			0



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Parking Lot Quotes

Attached are quotes to have the parking lot repaired.

Attachments:

[Tustins full quote.pdf](#)

[Tustins.pdf](#)

P.O. Box 301
Plainwell, MI 49080



"We're on top of things!"

(269) 685-7325
(855) 685-7325
Fax (269) 685-1122
Email: office@tustins.com

Estimate

Proposal Submitted To:

Phone:

Date:

Ben Martin

(269) 207-0821

8/5/2026

Company Information:

Job Location:

Contract Number:

Comstock Charter Township

Comstock Charter Township

C44250

P.O. Box 449

5858 King Highway.

Comstock, MI 49048

Comstock, MI 49048

We hereby submit specifications and estimates for the above-name jobs:

SURFACE PREPARATION:

1. Edge grass bordering pavement where needed.
2. The pavement shall be thoroughly cleaned to remove all dirt and debris.

SURFACE PREP: \$0.00

APPLICATION OF SEALER:

Apply 1 Coat commercial grade sealer which meets and exceeds all the requirements of the Federal Government specifications R-P-355E and ASTM D-332074T. Includes Modified Latex hardening agent.

Price based on one trip add \$150.00 for each additional

First Coat: 753 Gallons

2-4 lbs. of silica sand added per gallon of material. Sand to be included in all coats.

37,661 sq. ft. @ \$0.097 = \$3,655.00

SEAL COAT: \$3,655.00

CRACK REPAIR:

Blow clean all specified cracks, excluding alligated areas. Cracks will then be banded with rubber using a 2" applicator sealing cracks from water penetration.

4,675 Lineal Feet @ \$0.68 = \$3,180.00

CRACK REPAIR: \$3,180.00

STRIPING:

Parking lines to be restriped to include: 85 Stalls 3 Handicap Stalls
205 Lineal feet of Stripe 3 Hash-outs = \$615.00

STRIPING: \$615.00

DRAIN REPAIR:

Saw cut and remove 8' x 8' x 8" area around drain, Rebrick as Necessary.

Install new Concrete, Apply broom finish.

3 Drains @ \$1,550.00 = \$4,650.00

DRAIN REPAIR: \$4,650.00

Previous estimate was to only repair the West lot

This estimate is to seal & stripe the entire lot assuming all the repairs are completed in the West lot prior

Estimate Total: \$12,100.00

We Propose to complete the work in accordance with above specifications, for the sum of:

Twelve thousand one hundred and no hundredths

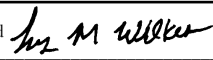
\$12,100.00

Payment to be made in CASH UPON COMPLETION OF WORK UNLESS OTHERWISE STATED BELOW

Please note that there will be a 3% convenience fee for credit card payments

All material is guaranteed to be as specified. All work to be completed in a workperson-like manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements are contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by workman's compensation Insurance.

Authorized
Signature:



Troy M. Wilkes

This proposal may be withdrawn by us if not accepted within 30 days.

Acceptance of Estimate

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above. Legal fees and court costs incurred in the collection of monies owed according to this contract will be borne by the customer.

Signature: _____

P.O. Box 301
Plainwell, MI 49080



"We're on top of things!"

(269) 685-7325
(855) 685-7325
Fax (269) 685-1122
Email: office@tustins.com

Estimate

Proposal Submitted To:		Phone:	Date:
Ben Martin		(269) 207-0821	8/5/2026
Company Information:		Job Location:	Contract Number:
Comstock Charter Township		Comstock Charter Township	C44250
P.O. Box 449		5858 King Highway.	
Comstock, MI 49048		Comstock, MI 49048	

We hereby submit specifications and estimates for the above-name jobs:

SURFACE PREPARATION:

1. Edge grass bordering pavement where needed.
2. The pavement shall be thoroughly cleaned to remove all dirt and debris.

APPLICATION OF SEALER:
Apply 1 Coat commercial grade sealer which meets and exceeds all the requirements of the Federal Government specifications R-P-355E and ASTM D-332074T. Includes Modified Latex hardening agent.
Price based on one trip add \$150.00 for each additional
First Coat: 753 Gallons
2-4 lbs. of silica sand added per gallon of material. Sand to be included in all coats.
37,661 sq. ft. @ \$0.097 = \$3,655.00

CRACK REPAIR:
Blow clean all specified cracks, excluding alligated areas. Cracks will then be banded with rubber using a 2" applicator sealing cracks from water penetration.
4,675 Lineal Feet @ \$0.68 = \$3,180.00

STRIPING:
Parking lines to be restriped to include: 85 Stalls 3 Handicap Stalls
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Saw cut and remove 8' x 8' x 8" area around drain, Rebrick as Necessary.
Install new Concrete, Apply broom finish.
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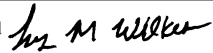
Item	Amount
SURFACE PREP:	\$0.00
SEAL COAT:	\$3,655.00
CRACK REPAIR:	\$3,180.00
STRIPING:	\$615.00
DRAIN REPAIR:	\$4,650.00
Estimate Total:	\$12,100.00

We Propose to complete the work in accordance with above specifications, for the sum of:
Twelve thousand one hundred and no hundredths \$12,100.00

Payment to be made in CASH UPON COMPLETION OF WORK UNLESS OTHERWISE STATED BELOW

Please note that there will be a 3% convenience fee for credit card payments

All material is guaranteed to be as specified. All work to be completed in a workperson-like manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements are contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by workman's compensation Insurance.

Authorized Signature: 
Troy M. Wilkes

This proposal may be withdrawn by us if not accepted within 30 days.

Acceptance of Estimate
The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.
Legal fees and court costs incurred in the collection of monies owed according to this contract will be borne by the customer.

Signature: _____



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

**Re: MSHDA Homeowner Rehabilitation Partnership Presentation and
Possible Action**

To be presented at the meeting.



MEMO

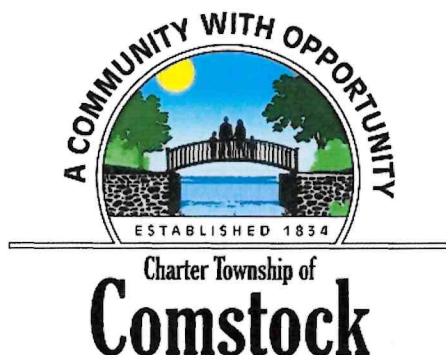
Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Planning Commission Appointment

Attachments:

[Keith Wilcher.pdf](#)



APPLICATION TO SERVE ON A BOARD OR COMMISSION

A separate application is required for each board or commission you wish to be considered for appointment. Applications remain active for one year from the date of submittal. Resumes are encouraged and may be attached to your application.

Name of Board or Commission for which you are applying: <u>Planning</u>	
Name: <u>Keith Wilcher</u>	
Home Address: <u>[REDACTED]</u>	Work Address: <u>139 Vanbruggen St.</u>
<u>[REDACTED]</u>	<u>Galesburg, MI</u>
Home Phone: <u>[REDACTED]</u>	Work Phone: <u>[REDACTED]</u>
Cell Phone: <u>cc ↑ c1</u>	Email: <u>Kwilcher@comstockmi.gov</u>
Please note your preferred method(s) to be contacted: <u>cell #1</u> <u>email #2</u>	
Residency is required for most boards and commissions. ☒ I am a resident. If so, for how many years? <u>5</u>	

Describe any experiences that led to your desire to serve the community.

Project manager for hotel construction 25 yrs.
Manager for multi-million local bus. 10 yrs.

Provide a brief biography including your skills, background and expertise, as well as involvement in the community, professional or other nonprofit organizations that are specifically applicable to this board or commission.

Vice Chair DPA - Board - Comstock MI.
Superintendent of Construction (Plumbing) 25 yrs.
Plot planning for new business acquisitions 10 yrs

Employment: List your three most recent employment experiences.

Dates of Employment	Company Name/Location	Position	Job Description
2016 - 2024	Linde Gas & Equip Galesburg	Branch manager	Management
2014 - 2016 1990 - 2016	Hospitality Plumbing.	Job Superintend 7	management planning.

Education: List your most recent educational experiences.

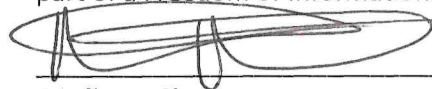
Educational Institution/School	Certificate/Degree Received	Area(s) of Study
ITW Technical	masters	Welding/Metallurgical Studies.

Supplemental Information: Please review the document "Planning Commission, Zoning Board of Appeals & Downtown Development Authority Board Roles, Responsibilities and the Appointment Application Process" for more information about the various boards and commission. **Initial here to indicate that you have read the document and understand the time commitment necessary to serve on a board or commission.** _____

Some boards and commissions are a mix of citizens with certain qualifications and others are citizens representing the general public. Everyone is encouraged to apply as the community needs citizens with diverse backgrounds on its boards and commissions.

Important Public Records Information: All information submitted in this application is public information and subject to disclosure in response to a public records request made pursuant to the Freedom of Information Act. Please contact the Township Clerk at (269) 381-2360 if you have any questions or concerns about the disclosure of specific information.

Truth and Accuracy: I certify that the information contained on this form is accurate and complete to the best of my knowledge. I understand that the information disclosed on this form will be publicly available as part of a Freedom of Information Act request.



Applicant Signature

8-17-2024

Date

Return completed forms to: Comstock Township Supervisor (or, drop it off at the Township Hall)
PO Box 449
Comstock, MI 49041



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: EGLE Compost Approval Letter

Attachments:

[EGLE COMPOST APPROVAL.pdf](#)



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
MATERIALS MANAGEMENT DIVISION



PHILLIP D. ROOS
DIRECTOR

August 18, 2026

VIA EMAIL

Ben Martin
Charter Township of Comstock
6604 East Main Street
Kalamazoo, Michigan 49048

Dear Ben Martin:

SUBJECT: 2026 Application for Compost Facility Registration; Charter Township of Comstock, Kalamazoo County; Waste Data Systems Number 491714

Staff of the Department of Environment, Great Lakes, and Energy (EGLE), Materials Management Division (MMD), received your application for a registration for the composting facility located at 6604 E. Main St., Kalamazoo, Michigan 49048. Your issued registration is attached.

Michigan's solid waste law was amended, effective March 29, 2023. Under the new law, compost facilities must report the amount of material managed at the facility during that state fiscal year in [ReTrac](#) by November 15 of each year.

If you have questions regarding your obligations under the new law, please contact Noah Rubio at 616-370-3287 or by email at RubioN@Michigan.gov

Sincerely,

Nathan Whitmyer
Acting District Supervisor
Kalamazoo District
Materials Management Division

Attachment

cc: Rachel Jondle, DPA Kalamazoo County
Nathan Whitmyer, EGLE
Michelle Oberlin, EGLE
Amy Karana, EGLE



Composting Facility Registration

Department of Environment, Great Lakes, and Energy, Materials Management Division

Showing data collected for: 2026

This composting facility registration is issued under Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, to register a composting facility in the state of Michigan. Compliance obligations can be found in 115(55) and 115(68). This registration does not obviate the necessity of obtaining other authorizations as may be required by law. For additional information, contact the Michigan Department of Environment, Great Lakes, and Energy; Materials Management Division, Solid Waste Section, at EGLE-MMD-SW@Michigan.gov or 517-899-5594.

FACILITY INFORMATION	
Legal Name of Company:	Charter Township of Comstock
Site Specific Name:	Charter Township of Comstock Transfer Station
WDS Number:	491714
Michigan Corportate ID Number:	Municipality
Mailing Address:	5885 Kings Highway, Kalamazoo, Michigan 49048
Physical Address:	6604 e main, Kalamazoo County, Michigan 49048 (Kalamazoo)
Latitude:	42.302707
Longitude:	-85.5007010450233
Facility Owner Name:	Charter Township of Comstock
Facility Contact Name:	Ben Martin
Property Owner Name:	Charter Township of Comstock
OPERATING INFORMATION	
Composting Method:	Windrow
Facility accepts food waste:	From the public
Date Facility began accepting compostable material:	Jun 15, 2026
Area of composting facility where active composting activities are occuring (Acres):	2.0
Total area of composting facility, including the area not involved in composting operations (Acres):	53.0
FOR DEPARTMENT USE	
Date of Issuance:	Aug 18, 2026
Expiration Date of Registration:	Aug 18, 2031



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor
Re: Employee Manual Update & Action



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Supervisor Salary & Action



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Supervisor Ben Martin, Supervisor

Re: Requesting Letters of Interest & Resumes For Township
Trustees- Due August 31, 2026 EOD

Attachments:
[Letters of interest.doc](#)

Ben Martin, Supervisor
, Clerk
Sandy Bloomfield, Treasurer



Jerry Amos, Trustee
, Trustee
, Trustee
, Trustee

August 18, 2026

Comstock Charter Township is seeking qualified residents interested in serving on the Township Board of Trustees. There are currently three vacant Trustee positions to be filled by appointment.

The Township will accept resumes from interested candidates and will conduct interviews as part of the appointment process.

Residents interested in serving their community are encouraged to submit a resume and letter of interest to the Charter Township of Comstock board and submitted to the Township Supervisor for consideration as part of the interview and appointment process.

Submissions may be delivered to 5858 Kings Highway, Kalamazoo, MI 49048 or submitted electronically to the township supervisor. Supervisor@comstockmi.gov

Qualified candidates will be contacted regarding the interview process.

Sincerely,

Ben Martin
Township Supervisor

Office: 5858 King Highway, Kalamazoo, Michigan 49048
Mailing: P. O. Box 449, Comstock, Michigan 49041-0449
Phone (269) 381-2360 ♦ FAX (269) 381-4328



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Kerrie Beauchamp, Executive Assistant

Re: Recognition from the City of Parchment

Attachments:
[Recognition.pdf](#)



Presented to

Comstock Fire & Rescue

in grateful recognition of exceptional leadership and courageous service
during the eight-hour rescue on July 3, 2026

on behalf of the

City of Parchment

Mayor Robert D. Britigan, III



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Clerk Nicole Beauchamp, Township Clerk

Re: July 2026 KABA Reports

Attachments:

[Comstock Township July 2026 Residential Permit List.pdf](#)

[Comstock Township July 2026 Special Permit \(Owner Request\).pdf](#)

[Comstock Township July 2026 Special Permit \(Property Maintenance\).pdf](#)

[July 2026 & YTD Permits & Revenue by Jurisdiction.pdf](#)

Res Building

Permit #	Job Address	Parcel Number	Owner	Contractor	Issue Date	Fee Total	Const. Value
PB26-07-252	6585 WHITEHORSE AVE	07-05-420-160	MITCHELL BRADLEY S & J	Raber Patio	07/23/2026	\$231.00	\$6,174
Work Description: 14' x 13'6" sunroom enclosure per plans.							
PB26-07-297	480 SARAH ST	07-23-280-170	CRANDALL SUZANNE R	Milestone Senior Serv	07/10/2026	\$108.00	\$0
Work Description: Temporary wheelchair ramp per plans.							
PB26-07-348	5789 E ML AVE	07-30-280-016	HAVLOCK BILLY & JENI		07/07/2026	\$81.00	\$0
Work Description: 24' diameter above ground swimming pool. ELECTRICAL PERMIT REQUIRED FOR POOL PUMP BRANCH CIRCUIT							
PB26-07-351	5679 SUSAN AVE	07-18-252-100	MCCURLEY LYNETTE E	Blackberry Systems	07/09/2026	\$231.00	\$18,837
Work Description: Remove front and rear decks and construct 9' x 22' front deck and 20' x 20' rear deck per plans.							
PB26-07-353	9996 E HJ AVE	07-12-305-012	BETZ SHAWN M & SANI	KCH Homes LLC	07/09/2026	\$236.00	\$60,480
Work Description: New 30' x 48' post frame detached accessory structure with 10' x 48' roof overhang per plans. Perma column post anchors to be embedded into footings. FOOTINGS ON OVERHANG SIDE OF STRUCTURE TO BE MINIMUM 22" DIAMETER.							
PB26-07-354	1955 RIVER ST	07-30-205-070	ELLWOOD RORY		07/09/2026	\$81.00	\$0
Work Description: Install 16' diameter inflatable pool kit per plans. ELECTRICAL PERMIT REQUIRED IF ADDING BRANCH CIRCUIT FOR PUMP. REQUIRED INSPECTIONS: 1. FINAL							
PB26-07-358	565 COLLETTE AVE	07-18-452-301	Cameron Esman		07/08/2026	\$182.00	\$0
Work Description: Replacing subfloor and some joists in bedrooms, dining and living rooms							

PB26-07-360	8053 E ML AVE	07-27-165-030	REISTERER ZACHARY &	07/10/2026	\$443.00	\$113,719
Work Description: 24' x 16' 1 story kitchen/living addition on conditioned crawlspace, demo existing garage and reconstruct on existing foundation and alter floor plan in existing portion of dwelling per plans.						
PB26-07-374	502 S 35TH ST	07-24-154-120	ZIGTERMAN KARI & KU	07/22/2026	\$182.00	\$0
Work Description: Remove wall and closets between 2 bedrooms and create 1 bedroom and new closet per plans.						
PB26-07-386	5291 E MICHIGAN AVE	07-18-376-020	MOORE RANDALL L & I	07/29/2026	\$182.00	\$0
Work Description: Rebuild front porch						

Total Permits For Type: 10

Total Fees For Type: \$1,957.00

Total Const. Value For Type: \$199,210

Report Summary

Population: All Records
 Permit.DateIssued Between
 7/1/2026 12:00:00 AM AND
 7/31/2026 11:59:59 PM AND
 Permit.BasicUsage = Residential
 AND
 GovernmentUnitList.UnitCode =
 7
 AND
 Permit.PermitType = Building OR
 Permit.PermitType = Res Building
 OR
 Permit.PermitType = Com

Grand Total Fees: \$1,957.00

Grand Total Permits: 10

Grand Total Const. Value: \$199,210

Monthly Special Permit - Owner Request

08/03/2026

Special Permit

Permit #	Job Address	Parcel Number	Owner	Date Entered	Fee Total
PS26-07-088	5455 LUCERNE AVE	07-18-202-380	MULILI ESTHER & EMN	07/08/2026	\$60.00
Work Description:	For inspection of state required hand rail on exterior step (Adult Foster Care)				
Inspections:	07/09/2026	Final Inspection	Approved		

Total Permits For Type: 1

Total Fees For Type: \$60.00

Report Summary

Grand Total Fees: \$60.00

Grand Total Permits: 1

Population: All Records

Permit.DateIssued Between 7/1/2026 12:00:00 AM AND 7/31/2026 11:59:59 PM AND
GovernmentUnitList.UnitCode = 7
AND

Permit.Category = Meter Socket Inspection OR

Permit.Category = Hood Suppression OR

Permit.Category = Special Permit OR

Permit.Category = Owner Request

Property Maintenance Inspections

Comstock

08/03/2026

268

Special Permit

Permit #	Job Address	Parcel Number	Owner	Contractor	Date Entere	Fee Total Due
PS26-07-093	5285 E H AVE	07-06-380-044	COMSTOCK LDHALP		07/20/2026	<u>100.00</u>
Work Description: Property maintenance request from Comstock Property Maintenance Inspectio Completed: <u>07/28/2026</u>						
PS26-07-100	3079 LEIGH AVE	07-07-105-220	KNOTT JEFFREY L		07/30/2026	<u>100.00</u>
Work Description: Property maintenance request from Comstock Property Maintenance Inspectio Completed: <u>07/31/2026</u>						

Total Permits: 2

Total Fees Due: \$200.00

Population: All Records

GovernmentUnitList.UnitCode = 7 AND

Permit.PermitType = Special Permit AND

Permit.Status = HOLD (FEE) AND

Permit.Category = Jurisdiction Request AND

Inspection.DateTimeCompleted in <Previous month> [07/01/26 - 07/31/26]

2026 MONTHLY PERMITS BY JURISDICTION

MONTH OF JULY 2026

JURISDICTION	PERMIT CATEGORY	# PERMITS	PERMIT REVENUE
COMSTOCK	BUILDING	10	1,957.00
COMSTOCK	ELECTRICAL	12	2,815.00
COMSTOCK	MECHANICAL	14	2,046.00
COMSTOCK	PLUMBING	7	1,214.00
COMSTOCK	SPECIAL - JURISDICTION	2	200.00
COMSTOCK	SPECIAL - HOMEOWNER	1	60.00
TOTAL COMSTOCK		46	\$ 8,292.00
KALAMAZOO	BUILDING	29	6,031.00
KALAMAZOO	ELECTRICAL	20	2,504.00
KALAMAZOO	MECHANICAL	38	6,578.65
KALAMAZOO	PLUMBING	16	2,048.00
KALAMAZOO	SPECIAL - JURISDICTION	8	600.00
KALAMAZOO	SPECIAL - HOMEOWNER	6	360.00
TOTAL KALAMAZOO		117	\$ 18,121.65
PARCHMENT	BUILDING	0	-
PARCHMENT	ELECTRICAL	0	-
PARCHMENT	MECHANICAL	1	140.00
PARCHMENT	PLUMBING	0	-
PARCHMENT	SPECIAL - JURISDICTION	0	-
PARCHMENT	SPECIAL - HOMEOWNER	0	-
TOTAL PARCHMENT		1	\$ 140.00
PINE GROVE	BUILDING	0	-
PINE GROVE	ELECTRICAL	8	1,182.00
PINE GROVE	MECHANICAL	7	1,015.00
PINE GROVE	PLUMBING	1	125.00
PINE GROVE	SPECIAL - JURISDICTION	0	-
PINE GROVE	SPECIAL - HOMEOWNER	0	-
TOTAL PINE GROVE		16	\$ 2,322.00
RICHLAND	BUILDING	9	5,813.00
RICHLAND	ELECTRICAL	17	2,599.00
RICHLAND	MECHANICAL	23	3,449.00
RICHLAND	PLUMBING	4	1,016.00
RICHLAND	SPECIAL - JURISDICTION	0	-
RICHLAND	SPECIAL - HOMEOWNER	0	-
TOTAL RICHLAND		53	\$ 12,877.00
RICHLAND VILLAGE	BUILDING	2	606.00
RICHLAND VILLAGE	ELECTRICAL	0	-
RICHLAND VILLAGE	MECHANICAL	3	426.00
RICHLAND VILLAGE	PLUMBING	0	-
RICHLAND VILLAGE	SPECIAL - JURISDICTION	0	-
RICHLAND VILLAGE	SPECIAL - HOMEOWNER	0	-
TOTAL RICHLAND VILLAGE		5	\$ 1,032.00
TOTAL		238	\$ 42,784.65

REVENUE	REVENUE
JULY 2025	% PREV YEAR MONTH
\$ 233,033.50	18.4%

PERMITS	PERMITS
JULY 2025	% PREV YEAR MONTH
342	69.6%

2026 MONTHLY PERMITS BY JURISDICTION

YEAR TO DATE AS OF: JULY 2026

JURISDICTION	PERMIT CATEGORY	# PERMITS	PERMIT REVENUE
COMSTOCK	BUILDING	91	23,251.00
COMSTOCK	ELECTRICAL	92	19,012.00
COMSTOCK	MECHANICAL	117	26,732.00
COMSTOCK	PLUMBING	47	7,285.00
COMSTOCK	SPECIAL - JURISDICTION	11	1,050.00
COMSTOCK	SPECIAL - HOMEOWNER	2	120.00
TOTAL COMSTOCK		360	\$ 77,450.00
KALAMAZOO	BUILDING	146	34,217.00
KALAMAZOO	ELECTRICAL	130	23,203.00
KALAMAZOO	MECHANICAL	202	33,277.65
KALAMAZOO	PLUMBING	98	14,300.00
KALAMAZOO	SPECIAL - JURISDICTION	71	6,950.00
KALAMAZOO	SPECIAL - HOMEOWNER	22	1,400.00
TOTAL KALAMAZOO		669	\$ 113,347.65
PARCHMENT	BUILDING	9	1,490.00
PARCHMENT	ELECTRICAL	7	1,035.00
PARCHMENT	MECHANICAL	17	2,650.00
PARCHMENT	PLUMBING	5	888.00
PARCHMENT	SPECIAL - JURISDICTION	4	500.00
PARCHMENT	SPECIAL - HOMEOWNER	0	-
TOTAL PARCHMENT		42	\$ 6,563.00
PINE GROVE	BUILDING	20	8,183.00
PINE GROVE	ELECTRICAL	28	4,747.00
PINE GROVE	MECHANICAL	35	6,181.65
PINE GROVE	PLUMBING	10	1,829.00
PINE GROVE	SPECIAL - JURISDICTION	0	-
PINE GROVE	SPECIAL - HOMEOWNER	2	120.00
TOTAL PINE GROVE		95	\$ 21,060.65
RICHLAND	BUILDING	76	37,917.00
RICHLAND	ELECTRICAL	95	21,108.00
RICHLAND	MECHANICAL	124	22,699.00
RICHLAND	PLUMBING	121	20,902.00
RICHLAND	SPECIAL - JURISDICTION	7	700.00
RICHLAND	SPECIAL - HOMEOWNER	0	-
TOTAL RICHLAND		423	\$ 103,326.00
RICHLAND VILLAGE	BUILDING	9	2,193.00
RICHLAND VILLAGE	ELECTRICAL	7	1,484.00
RICHLAND VILLAGE	MECHANICAL	14	2,212.00
RICHLAND VILLAGE	PLUMBING	2	380.00
RICHLAND VILLAGE	SPECIAL - JURISDICTION	0	-
RICHLAND VILLAGE	SPECIAL - HOMEOWNER	0	-
TOTAL RICHLAND VILLAGE		32	\$ 6,269.00
TOTAL KABA	YTD	1621	328,016.30

REVENUE	REVENUE
YTD - JULY 2025	% 2025 - YTD
\$ 619,379.80	53.0%

REVENUE
% 2026 YTD BUDGET
69%

PERMITS	PERMITS
YTD - JULY 2025	% 2025 - YTD
1831	88.5%

2026 MONTHLY CUMULATIVE TOTALS			
# PERMITS	REVENUE		
187	\$	37,595.00	JAN
197	\$	37,690.00	FEB
178	\$	43,826.65	MAR
193	\$	49,746.00	APR
273	\$	55,313.00	MAY
355	\$	61,061.00	JUN
238	\$	42,784.65	JUL
-	\$	-	AUG
-	\$	-	SEP
-	\$	-	OCT
-	\$	-	NOV
-	\$	-	DEC
1,621	\$	328,016.30	TOTAL



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Clerk Nicole Beauchamp, Township Clerk

Re: July 20 Sheriff's Reports

Attachments:

[July - CFS by Call Source and Venue.pdf](#)

Dispatched CFS by Call Source & Venue

Description: This report shows all Law Enforcement events dispatched by the Kalamazoo County Consolidated Dispatch Authority within the specified township(s) for the specified month.

Call Source / Call Type Description	COMSTOCK
Citizen Initiated	724
Suspicious	73
Trouble with Subject	58
Check Welfare	51
911 Hangup/Misdial	46
Retail Fraud	40
PD Accident	34
Assist Person	30
Assault/DV	28
Alarm	27
Trespassing	25
Larceny	20
Traffic Hazard	15
Follow up	15
Vehicle Theft (UDAA)	13
Disturbance/Fight	12
B&E/Larceny From Veh	11
Assist Other Department	11
MDP	10
Peace Officer	10
Panhandler/Vagrant/Solicitor	10
Directed Patrol	10
Suicide/Attempt	9
Civil Calls	9
Burglary/Illegal Entry	9
Fraud	9
Fireworks	8
Hit & Run Accident	8
Motorist Assist	7
Known PI Accident	6
Noise Complaint	6
Priority 2 Medical	6
Abandoned Vehicle	6
Accident with Unknown Injuries	6
Abandoned Vehicle-Private Property	5
Service For Department	5
Harassing TX/Texts	5
Missing Person	5
Warrant Service	4
Traffic Stop	3
Road Commission/MDOT Notify	3
VRDL/TICKETS	3
BOL	3
Death Investigation	3
OWI/OUID	3
Behavioral Health Petition	3
Lost/Found Property	3
Community Policing/Crime Prev	2
Drugs/VCSA	2



Harrassment/Misc Criminal	2
Parking Complaint	2
Shots Fired	2
Animal Complaint	2
Obs Justice	2
Weapons	2
Assist Fire Dept	2
Structure Fire - Residential	1
Traffic Mishap/Accidental Damage	1
Priority 1 Medical	1
CSC	1
Structure Fire - Commercial/Multi-Family	1
>Choose Call Type<	1
Health & Safety	1
Disorderly	1
Counterfeit/Forgery/U&P	1
ECHO Priority Medical	1
Arson	1
Special Service	1
Child Abuse/Neglect	1
Vehicle Inspection	1
Runaway	1
Juvenile Mischief	1
R&O/Fleeing	1
Priority 3 Medical	1
Property Check - Commercial	1
Natural Gas Leak - Outside	1
Officer Initiated	397
Traffic Stop	242
Follow up	37
Suspicious	32
Directed Patrol	25
Motorist Assist	11
Service For Department	5
Retail Fraud	4
Warrant Service	4
Check Welfare	4
Misd Traffic (DWLS)	4
Abandoned Vehicle	3
R&O/Fleeing	3
Drugs/VCSA	2
Behavioral Health Petition	2
Assist Person	2
Community Policing/Crime Prev	2
Assault/DV	1
Assist Other Department	1
Larceny	1
OWI/OUID	1
Property Check - Commercial	1
Traffic Hazard	1
Known PI Accident	1
Trouble with Subject	1
>Choose Call Type<	1
Arrest On Warrant (Other Dept)	1
Priority 1 Medical	1
Panhandler/Vagrant/Solicitor	1



CSC	1
Parking Complaint	1
PR/PRB/PRS	1
Other	48
Alarm	17
Larceny	5
Fireworks	4
Lost/Found Property	3
Fraud	3
Retail Fraud	2
Trespassing	2
B&E/Larceny From Veh	2
Follow up	1
Assist Other Department	1
Warrant Service	1
Harassing TX/Texts	1
Traffic Mishap/Accidental Damage	1
Indecent Exposure/Peeping	1
VRDL/TICKETS	1
Civil Calls	1
Abandoned Vehicle	1
Burglary/Illegal Entry	1
Top 10 Calls for Service Types	



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Clerk Nicole Beauchamp, Township Clerk
Re: Planning & Zoning Admin Report

For the Board's FYI

Attachments:

[Comstock Board Report - July 2026.pdf](#)



Monthly Report – Planning & Zoning

TO: Comstock Charter Township, Board of Trustees
FROM: Kyle Mucha, AICP, Principal Planner/Township Planning Consultant
DATE: August 5, 2026
SUBJECT: July 2026 Report

REVIEWS

Planning/Zoning staff reviewed the following non-residential applications:

Jul-26		
Number	Address	Review Type
1	5315 Wynn Road	Site Plan
2	6536 G Avenue – Church	Admin. Site Plan

PLANNING COMMISSION

The Planning Commission met and discussed the following items:

July 9:

1. Preliminary review of 5441 E ML Avenue for accessory structure. Application tabled until additional information can be provided.
2. 67 Van Bruggen – wireless telecommunication facility (cellular tower). Preliminary review, with request for supplemental information.
3. Code enforcement discussion with ordinance officer, detailing perceived shortcomings of the ordinance and provisions that need further review and revision.
4. UpJohn Institute Housing Study: Commission approved the adoption of portions of the plan.

July 23:

1. 67 Van Bruggen: approved special land use and site plan, with condition that decommissioning/financial bond be approved by the Township Legal Counsel.
2. Swan Energy / Cygnet Energy: preliminary presentation by the applicant to overview the proposed battery energy storage system project on approximately 40 acres of land, located on East Michigan Avenue.

ZONING BOARD OF APPEALS

The Zoning Board of Appeals did not meet due to a lack of agenda item(s).



ADDITIONAL TASKS / ITEMS / COMMUNICATIONS

The following general tasks were undertaken during the month. This list is not exhaustive, as daily needs by Township stakeholders, residents and interested parties may vary in such a manner that quantifying discussions into list format is challenging. Should the Board have questions on any of these items, you may contact me directly.

- Staff coordinates and collaborates with prospective applicants and property owners regarding land use regulations and development standards.
- Weekly response to planning & zoning inquiries via telephone and email communication was undertaken.
- Residential permit review for additions, expansions and new construction took place. Given the nature of these permits, a separate tracking system has not been established – planning staff encourages the Board to review the KABA report for building permit issuance.
- Coordination with the Township Engineering staff regarding online mapping capabilities and other logistics / administrative taskings was enacted.
- Collaboration with the Township Enforcement Officer regarding zoning violations.

Respectfully Submitted,
McKenna

Kyle Mucha, AICP
Principal Planner - Kalamazoo Office Lead
Township Planning Consultant



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Kerrie Beauchamp, Executive Assistant

Re: July 2026 Fire Department Incident Report

Attachments:

[Incident Type Report-July 2026.pdf](#)



Incident Type Report - July 2026

DISPATCH TYPE	NUMBER OF CALLS
Accident with Unknown Injuries	16
Brush/Grass Fire - No Exposure	1
Carbon Monoxide - No Symptoms	4
Choose Call Type	1
ECHO Priority Medical	3
Fire Alarm - Commercial	8
Fire Alarm - Residential	4
Known PI Accident	6
Natural Gas Leak - Outside	1
Outside Fire - with Exposure	1
Priority 1 Medical	79
Priority 2 Medical	35
Special Service	40
Structure Fire - Commercial/Multi-Family	5
Structure Fire - Residential	5
Tech Rescue - Confined Space	2
Unk Accident - Crash Notify	5
Vehicle Fire	6
(NULL)	0
Total	222



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Nicole Shook, Clerk Assistant/Deputy Clerk
Re: Bills Paid: July 22, 2026- August 13, 2026

Please see attached.

Attachments:
[Approved Bills_08-17-2026.pdf](#)

INVOICE DISTRIBUTION REPORT FOR CHARTER TOWNSHIP OF COMSTOCK

EXP CHECK RUN DATES 07/22/2026 - 08/13/2026

POSTED AND UNPOSTED OPEN AND PAID

BANK ACCOUNTS: GEN - GENERAL (COMMON) DISBURSEMENTS - CHECK TYPE: PAPER CHECK

GL Number	Invoice Line Desc	Vendor Name	Invoice Description	Amount	Check Number
Fund: 101 GENERAL FUND					
Department: 000 GENERAL					
101-000-727.000	OFFICE SUPPLIES/EQUIPMENT	ZEMLICK OFFICE PRODUCTS	OFFICE SUPPLIES- BOARDS	90.63	165006
101-000-733.000	SUPPLIES/EQUIPMENT - FACIL	CINTAS	FIRST AID/ MED SUPPLIES	59.20	164986
101-000-801.000	CONTRACTED SERVICES	BURNHAM & FLOWER AGENCY	QUARTERLY HSA FEES: 2ST QTR 2026	171.00	164984
101-000-801.000	CONTRACTED SERVICES	CINTAS CORP	OFFICE MATS	186.67	164987
101-000-801.000	CONTRACTED SERVICES	DALE W. HUBBARD, INC.	DRAIN CLEANING SERVICE CALL	246.95	164989
101-000-801.000	CONTRACTED SERVICES	EPS SECURITY	25% DEPOSIT EQUIPMENT PURCHASE AGREEM	537.50	165016
101-000-801.000	CONTRACTED SERVICES	D.L. GALLIVAN	CONTRACT USAGE 5/3/2026 TO 8/2/2026	454.84	165047
101-000-801.000	CONTRACTED SERVICES	KNIGHT WATCH	MONITORING AGREEMENT- AUG THRU OCT.	147.00	165066
101-000-801.000	CONTRACTED SERVICES	DATA GUARDIAN	CONTAINER FEE	165.00	165049
101-000-801.000	CONTRACTED SERVICES	CINTAS CORP	OFFICE MATS	186.67	165042
101-000-801.000	CONTRACTED SERVICES	SKILLQUEST	EMPLOYEE DRUG PANEL	100.00	165073
101-000-801.000	CONTRACTED SERVICES	EPS SECURITY	CONTROL AGREEMENT 09/01/26- 11/30/26	296.52	165091
101-000-801.000	CONTRACTED SERVICES	EPS SECURITY	VIDEO SERVICE AGREEMENT 09/01/26- 11/	109.20	165091
101-000-805.000	INSURANCE	ACCIDENT FUND INSURANCE CO	POLICY AF WCP 1000147847	1,556.34	165007
101-000-806.000	ENGINEERING SERVICES	PREIN & NEWHOF	PROFESSIONAL SERVICES AUG	2,735.25	165099
101-000-815.000	TECHNOLOGY SERVICES	HI-TECH	ZULTYS PREMIUM USER LICENSE- TWP	446.00	165054
101-000-815.000	TECHNOLOGY SERVICES	HI-TECH	WINDOWS SERVER IT MANAGED SERVICES-TW	950.00	165055
101-000-815.000	TECHNOLOGY SERVICES	INFOSAFE/SITECH	BACKUP AS A SERVICE	365.00	165059
101-000-815.000	TECHNOLOGY SERVICES	APEX SOFTWARE	ANNUAL MAINT. RENEWAL 9/1/26- 9/1/27	858.00	165081
101-000-850.000	COMMUNICATIONS	METRONET	FIBER INTERNET	424.95	165097
101-000-900.000	PRINTING & PUBLISHING	MLIVE MEDIA GROUP	NEWSPAPER POSTINGS	59.92	165068
101-000-925.000	UTILITIES	CITY OF KALAMAZOO TREASURE	WATER UTILITIES 04/17/2026- 05/16/202	196.06	165087
101-000-930.000	LAND/BUILDING REPAIRS AND	DALE W. HUBBARD, INC.	DRAIN CLEANING	550.00	165011
101-000-932.000	VEHICLE REPAIRS AND MAINTENANCE	DORRANCE FORD	CUT & PROGRAM PATS KEY/INSPECTION	77.42	165014
101-000-932.000	VEHICLE REPAIRS AND MAINTENANCE	DORRANCE FORD	IPATS 90 DEG KEY	54.94	165015
Total Department 000 GENERAL				11,025.06	
Department: 172 ADMINISTRATIVE SERVICES					
101-172-725.000	FRINGE BENEFITS - ADMIN	BLUE CARE NETWORK OF MICHIGAN HEALTH INSURANCE	PREMIUM FOR: 08012026	(2,580.71)	164983
101-172-725.000	FRINGE BENEFITS - ADMIN	MUTUAL OF OMAHA	STD-LTD FOR PERIOD 08-01-2026- 08-31-	(87.91)	165023
101-172-725.000	FRINGE BENEFITS - ADMIN	BLUE CARE NETWORK OF MICHIGAN HEALTH INSURANCE	PREMIUMS 09/01/26- 0	889.23	165084
101-172-725.000	FRINGE BENEFITS - ADMIN	MEDMUTUAL LIFE	LIFE INSURANCE PERIOD 09-01-2026- 10/	(68.80)	165096
Total Department 172 ADMINISTRATIVE SERVICES				(1,848.19)	
Department: 209 FINANCE DEPARTMENT					
101-209-725.000	FRINGE BENEFITS - FINANCE	MUTUAL OF OMAHA	STD-LTD FOR PERIOD 08-01-2026- 08-31-	(73.52)	165023
101-209-725.000	FRINGE BENEFITS - FINANCE	MEDMUTUAL LIFE	LIFE INSURANCE PERIOD 09-01-2026- 10/	(30.19)	165096
Total Department 209 FINANCE DEPARTMENT				(103.71)	
Department: 215 CLERK'S DEPARTMENT					
101-215-725.000	FRINGE BENEFITS - CLERK	BLUE CARE NETWORK OF MICHIGAN HEALTH INSURANCE	PREMIUM FOR: 08012026	2,283.75	164983
101-215-725.000	FRINGE BENEFITS - CLERK	MUTUAL OF OMAHA	STD-LTD FOR PERIOD 08-01-2026- 08-31-	121.02	165023
101-215-725.000	FRINGE BENEFITS - CLERK	BLUE CARE NETWORK OF MICHIGAN HEALTH INSURANCE	PREMIUMS 09/01/26- 0	2,283.75	165084
101-215-725.000	FRINGE BENEFITS - CLERK	MEDMUTUAL LIFE	LIFE INSURANCE PERIOD 09-01-2026- 10/	17.43	165096
101-215-960.000	EDUCATION & TRAINING	NICOLE SHOOK	PARKING REIMBURSEMENT MAMC	85.00	164998
101-215-961.000	MEMBERSHIPS	MICHIGAN ASSOC. MUNI. CEME	2026 MEMBERSHIP	45.00	165098
Total Department 215 CLERK'S DEPARTMENT				4,835.95	
Department: 253 TREASURER					
101-253-961.000	MEMBERSHIPS	APT US&C	MEMBERSHIP RENEWAL SEPT 30, 27	299.00	165082

INVOICE DISTRIBUTION REPORT FOR CHARTER TOWNSHIP OF COMSTOCK

EXP CHECK RUN DATES 07/22/2026 - 08/13/2026

POSTED AND UNPOSTED OPEN AND PAID

BANK ACCOUNTS: GEN - GENERAL (COMMON) DISBURSEMENTS - CHECK TYPE: PAPER CHECK

GL Number	Invoice Line Desc	Vendor Name	Invoice Description	Amount	Check Number
Fund: 101 GENERAL FUND					
Department: 253 TREASURER					
			Total Department 253 TREASURER	299.00	
Department: 257 ASSESSING					
101-257-801.000	CONTRACTED SERVICES	APPRAISALS PLUS GROUP LLC	MONTHLY ASSESSING SERVICES AUG 2026	9,540.00	165036
			Total Department 257 ASSESSING	9,540.00	
Department: 265 MAINTENANCE					
101-265-725.000	FRINGE BENEFITS - MAINTENA	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREIUM FOR: 08012026	2,316.53	164983
101-265-725.000	FRINGE BENEFITS - MAINTENA	MUTUAL OF OMAHA	STD-LTD FOR PERIOD 08-01-2026- 08-31-	57.67	165023
101-265-725.000	FRINGE BENEFITS - MAINTENA	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREMIUMS 09/01/26- 0	2,316.53	165084
101-265-725.000	FRINGE BENEFITS - MAINTENA	MEDMUTUAL LIFE	LIFE INSURANCE PERIOD 09-01-2026- 10/	58.11	165096
101-265-731.000	SUPPLIES/EQUIPMENT - OPERA	SHARP SHOP	TUNE UP PARTS FOR CHAINSAW	124.98	165072
101-265-801.000	CONTRACTED SERVICES	CD LAWN MAINTENANCE	PARKS & CEMETERY MOWING	6,185.00	165037
101-265-931.000	EQUIPMENT REPAIRS AND MAIN	KALAMAZOO LAWN & GARDEN	TRACTOR TIRE REPAIR	71.99	164995
			Total Department 265 MAINTENANCE	11,130.81	
Department: 301 ORDINANCE ENFORCEMENT					
101-301-725.000	FRINGE BENEFITS - ORDINANC	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREIUM FOR: 08012026	1,552.11	164983
101-301-725.000	FRINGE BENEFITS - ORDINANC	MUTUAL OF OMAHA	STD-LTD FOR PERIOD 08-01-2026- 08-31-	62.17	165023
101-301-725.000	FRINGE BENEFITS - ORDINANC	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREMIUMS 09/01/26- 0	1,552.11	165084
101-301-725.000	FRINGE BENEFITS - ORDINANC	MEDMUTUAL LIFE	LIFE INSURANCE PERIOD 09-01-2026- 10/	5.04	165096
101-301-801.000	CONTRACTED SERVICES	KABA	PB26-07-386- PERMIT 5291 E MICHIGAN A	182.00	165062
101-301-801.000	CONTRACTED SERVICES	VANDAM & KRUSINGA, INC	EMERGENCY SERVICE SECURE STRUCTURE	1,255.30	165076
101-301-801.000	CONTRACTED SERVICES	CD LAWN MAINTENANCE	ORDINANCE MOWING	260.00	165038
101-301-801.000	CONTRACTED SERVICES	KABA	PROP MAINT. 5285 E H & 3079 LEIGH	200.00	165094
			Total Department 301 ORDINANCE ENFORCEMENT	5,068.73	
Department: 528 RUBBISH COLLECTION/DISPOSAL					
101-528-731.000	SUPPLIES/EQUIPMENT - OPERA	J & J LOCKSMITHS	PADLOCKS & KEY TRANSFER STATION	118.73	165020
101-528-801.000	CONTRACTED SERVICES	ENTECH	TIRE DISPOSAL	388.00	165051
101-528-801.000	CONTRACTED SERVICES	BEST WAY DISPOSAL	TRANSFER STATION	7,039.62	165083
			Total Department 528 RUBBISH COLLECTION/DISPOSAL	7,546.35	
Department: 567 CEMETERIES					
101-567-801.000	CONTRACTED SERVICES	CD LAWN MAINTENANCE	PARKS & CEMETERY MOWING	3,580.00	165037
101-567-801.000	CONTRACTED SERVICES	CD LAWN MAINTENANCE	BRUSH HOG TREE LINE	2,258.30	165040
101-567-925.000	UTILITIES	CITY OF KALAMAZOO TREASURE	WATER UTILITIES 04/17/2026- 05/16/202	38.14	165087
101-567-930.000	LAND/BUILDING REPAIRS AND	CD LAWN MAINTENANCE	FOUNDATION/ HEADSTONE REPAIR	741.00	165085
			Total Department 567 CEMETERIES	6,617.44	
Department: 703 COMMUNITY DEVELOPMENT					
101-703-255.099	PROJECT ESCROW - RW LAPINE	PREIN & NEWHOF	PROFESSIONAL SERVICES AUG	155.00	165099
101-703-255.101	PROJECT ESCROW - SWAN/CYGN	MLIVE MEDIA GROUP	NEWSPAPER POSTINGS	275.78	165068
101-703-255.101	PROJECT ESCROW - SWAN/CYGN	PREIN & NEWHOF	PROFESSIONAL SERVICES AUG	620.00	165099
101-703-255.104	PROJECT ESCROW - NORTHEAST	PREIN & NEWHOF	PROFESSIONAL SERVICES AUG	310.00	165099
101-703-255.105	PROJECT ESCROW - CT ELECTR	PREIN & NEWHOF	PROFESSIONAL SERVICES AUG	310.00	165099
101-703-255.106	PROJECT ESCROW - VAN BRUGG	PREIN & NEWHOF	PROFESSIONAL SERVICES AUG	155.00	165099
101-703-255.107	PROJECT ESCROW - ANIMAL RE	PREIN & NEWHOF	PROFESSIONAL SERVICES AUG	4,645.25	165099
101-703-725.000	FRINGE BENEFITS - PLANNING	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREIUM FOR: 08012026	(661.69)	164983
101-703-725.000	FRINGE BENEFITS - PLANNING	MUTUAL OF OMAHA	STD-LTD FOR PERIOD 08-01-2026- 08-31-	(81.98)	165023
101-703-725.000	FRINGE BENEFITS - PLANNING	MEDMUTUAL LIFE	LIFE INSURANCE PERIOD 09-01-2026- 10/	(11.86)	165096
101-703-801.000	CONTRACTED SERVICES	MCKENNA	PROFESSIONAL SERVICES JUNE 1, 2026, T	13,412.50	164996

INVOICE DISTRIBUTION REPORT FOR CHARTER TOWNSHIP OF COMSTOCK

EXP CHECK RUN DATES 07/22/2026 - 08/13/2026

POSTED AND UNPOSTED OPEN AND PAID

BANK ACCOUNTS: GEN - GENERAL (COMMON) DISBURSEMENTS - CHECK TYPE: PAPER CHECK

GL Number	Invoice Line Desc	Vendor Name	Invoice Description	Amount	Check Number
Fund: 101 GENERAL FUND					
Department: 703 COMMUNITY DEVELOPMENT					
Total Department 703 COMMUNITY DEVELOPMENT				19,128.00	
Department: 751 PARKS & RECREATION DEPARTMENT					
101-751-607.000	BASEBALL/SOFTBALL FEES	SYDNEY SHELDON	FALL SOFTBALL REFUND (I'D HIT THAT)	295.00	165075
101-751-652.000	PARK PERMIT FEES	KATHERINE BROWN	REFUND FOR MP PAVILION RENTAL	90.00	165063
101-751-725.000	FRINGE BENEFITS - PARKS &	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREIUM FOR: 08012026	3,118.92	164983
101-751-725.000	FRINGE BENEFITS - PARKS &	MUTUAL OF OMAHA	STD-LTD FOR PERIOD 08-01-2026- 08-31-	184.78	165023
101-751-725.000	FRINGE BENEFITS - PARKS &	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREMIUMS 09/01/26- 0	3,118.92	165084
101-751-725.000	FRINGE BENEFITS - PARKS &	MEDMUTUAL LIFE	LIFE INSURANCE PERIOD 09-01-2026- 10/	36.75	165096
101-751-731.000	SUPPLIES/EQUIPMENT - OPERA	UNITED WHOLESALE GROCERY	WENKE CONCESSIONS	350.19	165005
101-751-731.000	SUPPLIES/EQUIPMENT - OPERA	CLARA ROBINSON	STAFF SHIRTS	324.00	165009
101-751-731.000	SUPPLIES/EQUIPMENT - OPERA	GORDON FOOD SERVICE, INC	WENKE CONCESSIONS	171.06	165018
101-751-731.000	SUPPLIES/EQUIPMENT - OPERA	UNITED WHOLESALE GROCERY	CONCESSIONS	188.23	165032
101-751-731.000	SUPPLIES/EQUIPMENT - OPERA	SHERWIN-WILLIAMS COMPANY	MASKS	24.49	165030
101-751-733.000	SUPPLIES/EQUIPMENT - FACIL	NELSON HARDWARE OF PORTAGE	WENKE FIELD CHALK	783.34	165052
101-751-733.000	SUPPLIES/EQUIPMENT - FACIL	EPS SECURITY	RMP CAMERA	86.04	165091
101-751-733.000	SUPPLIES/EQUIPMENT - FACIL	EPS SECURITY	RMP ALARM	226.41	165091
101-751-801.000	CONTRACTED SERVICES	AMY GORDON	14.5 GAMES TOTAL + UIC PAY	435.00	164981
101-751-801.000	CONTRACTED SERVICES	DONNA BEATTY	3 GAMES TOTAL	90.00	164991
101-751-801.000	CONTRACTED SERVICES	JOHN HUTCHINSON	3 GAMES TOTAL	90.00	164994
101-751-801.000	CONTRACTED SERVICES	ALLEN NOGA	4 GAMES TOTAL	120.00	164980
101-751-801.000	CONTRACTED SERVICES	DALE W. HUBBARD, INC.	RMP SEPTIC TANK	172.00	165012
101-751-801.000	CONTRACTED SERVICES	AMY GORDON	27.5 GAMES TOTAL + UIC PAY	825.00	165008
101-751-801.000	CONTRACTED SERVICES	JOHN HUTCHINSON	18 GAMES TOTAL	540.00	165021
101-751-801.000	CONTRACTED SERVICES	DONNA BEATTY	9 GAMES TOTAL	270.00	165013
101-751-801.000	CONTRACTED SERVICES	GREG'S TREE SERVICE	TREE REMOVAL- COOPER PARK	2,400.00	165053
101-751-801.000	CONTRACTED SERVICES	DONNA BEATTY	3 GAMES TOTAL	90.00	165050
101-751-801.000	CONTRACTED SERVICES	ALLEN NOGA	1 GAMES TOTAL	30.00	165034
101-751-801.000	CONTRACTED SERVICES	AMY GORDON	11.5 GAMES TOTAL + UIC PAY	345.00	165035
101-751-801.000	CONTRACTED SERVICES	AMY GORDON	12 GAMES TOTAL + UIC PAY	360.00	165080
101-751-801.000	CONTRACTED SERVICES	DONNA BEATTY	3 GAMES TOTAL	90.00	165090
101-751-801.000	CONTRACTED SERVICES	DAVE CALEY	2 GAMES TOTAL	60.00	165089
101-751-801.000	CONTRACTED SERVICES	JOHN HUTCHINSON	3 GAMES TOTAL	90.00	165093
101-751-801.000	CONTRACTED SERVICES	JASON ACKLEY	3 GAMES TOTAL	90.00	165092
101-751-801.000	CONTRACTED SERVICES	ALLEN NOGA	1 GAMES TOTAL	30.00	165079
101-751-801.000	CONTRACTED SERVICES	BEST WAY DISPOSAL	PARK DUMPSTERS	478.18	165083
101-751-805.000	INSURANCE	ACCIDENT FUND INSURANCE CO	POLICY AF WCP 1000147847	864.63	165007
101-751-850.000	COMMUNICATIONS	KATIE JUSTA	2ND QUARTER CELL PHONE REIMBURSEMENT	120.00	165065
101-751-850.000	COMMUNICATIONS	JOE GRABOWSKI	2ND QUARTER CELL PHONE REIMBURSEMENT	120.00	165061
101-751-850.000	COMMUNICATIONS	KATIE BUSH	2ND QUARTER CELL REIMBURSEMENT	120.00	165064
101-751-925.000	UTILITIES	CITY OF KALAMAZOO TREASURE	WATER UTILITIES 04/17/2026- 05/16/202	285.34	165087
101-751-931.000	EQUIPMENT REPAIRS AND MAIN	RICH AND SONS AUTO	PARKS TRUCK REPAIR	600.39	165070
Total Department 751 PARKS & RECREATION DEPARTMENT				17,713.67	
Total Fund 101 GENERAL FUND				90,953.11	
Fund: 204 MUNICIPAL STREET FUND					
Department: 000 GENERAL					
204-000-801.000	CONTRACTED SERVICES	ROAD COMMISSION OF KALAMAZ SARAH ST THRU CYNTHIA AT		3,626.51	165003
204-000-801.000	CONTRACTED SERVICES	ROAD COMMISSION OF KALAMAZ MIDLINK DR- SPRINKLE TO OLD CORK		2,437.41	165003

INVOICE DISTRIBUTION REPORT FOR CHARTER TOWNSHIP OF COMSTOCK

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GL Number	Invoice Line Desc	Vendor Name	Invoice Description	Amount	Check Number
Fund: 204 MUNICIPAL STREET FUND					
Department: 000 GENERAL					
204-000-801.000	CONTRACTED SERVICES	ROAD COMMISSION OF KALAMAZ M AVE-	33RD ST TO 35TH	16,670.89	165003
204-000-801.000	CONTRACTED SERVICES	ROAD COMMISSION OF KALAMAZ	LEENHOUTS ST THRU PICKARD ST	621.17	165003
204-000-801.000	CONTRACTED SERVICES	ROAD COMMISSION OF KALAMAZ	33RD ST-ML AVE TO 1320 N ML	8,967.50	165003
204-000-801.000	CONTRACTED SERVICES	ROAD COMMISSION OF KALAMAZ	MORROW ST-2012 S OF E MICH	10,128.48	165003
204-000-801.000	CONTRACTED SERVICES	ROAD COMMISSION OF KALAMAZ	LARCH AVE THRU RIPLEY ST	120.71	165003
204-000-801.000	CONTRACTED SERVICES	ROAD COMMISSION OF KALAMAZ	H AVE- 28TH ST TO 30TH ST	768.31	165003
204-000-801.000	CONTRACTED SERVICES	ROAD COMMISSION OF KALAMAZ	ML AVE- 35TH ST TO 36TH ST	23,316.50	165003
Total Department 000 GENERAL				66,657.48	
Total Fund 204 MUNICIPAL STREET FUND				66,657.48	
Fund: 206 FIRE OPERATING FUND					
Department: 000 GENERAL					
206-000-725.000	FRINGE BENEFITS - FIRE	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREIUM FOR: 08012026	24,063.15	164983
206-000-725.000	FRINGE BENEFITS - FIRE	MUTUAL OF OMAHA	STD-LTD FOR PERIOD 08-01-2026- 08-31-	1,212.73	165023
206-000-725.000	FRINGE BENEFITS - FIRE	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREMIUMS 09/01/26- 0	24,063.15	165084
206-000-725.000	FRINGE BENEFITS - FIRE	MEDMUTUAL LIFE	LIFE INSURANCE PERIOD 09-01-2026- 10/	266.79	165096
206-000-731.000	SUPPLIES/EQUIPMENT - OPERA	ERIN	MENS BOOTS REIMBURSEMENT	63.75	164993
206-000-731.000	SUPPLIES/EQUIPMENT - OPERA	NYE UNIFORM CO.	PLAF EMBLEM WHITE BORDER	149.20	164999
206-000-801.000	CONTRACTED SERVICES	ROSE PEST SOLUTIONS	CANINE INSPECTION RECURRING- FD 9-2	320.00	165027
206-000-801.000	CONTRACTED SERVICES	ROSE PEST SOLUTIONS	CANINE INSPECTION RECURRING- FD 9-1	320.00	165028
206-000-801.000	CONTRACTED SERVICES	ROSE PEST SOLUTIONS	CANINE INSPECTION RECURRING- FD 9-3	320.00	165029
206-000-801.000	CONTRACTED SERVICES	D.L. GALLIVAN	CONTRACT- KYOCERA FD	42.41	165010
206-000-801.000	CONTRACTED SERVICES	CD LAWN MAINTENANCE	FIRE STATION MOWING	732.50	165039
206-000-801.000	CONTRACTED SERVICES	EPS SECURITY	FIRE SYSTEM INSPECTIONS 09/01/26- 11/	343.20	165091
206-000-801.000	CONTRACTED SERVICES	KNOX COMAPNY	CLOUD LICENSE	721.00	165095
206-000-805.000	INSURANCE	EMC INSURANCE COMPANIES	ASSET INCREASE-FD	1,777.00	164992
206-000-805.000	INSURANCE	ACCIDENT FUND INSURANCE CO	POLICY AF WCP 1000147847	31,818.43	165007
206-000-815.000	TECHNOLOGY SERVICES	HI-TECH	10 HOURS PREPAID IT SUPPORT-FD	1,250.00	165056
206-000-815.000	TECHNOLOGY SERVICES	HI-TECH	MONTHLY MANAGED SERVICES-FD	540.00	165058
206-000-815.000	TECHNOLOGY SERVICES	EPS SECURITY	ACCESS CONTROL INSTALL	375.00	165091
206-000-850.000	COMMUNICATIONS	HI-TECH	ZULTYS PREMIUM USER LICENSE- FD	572.50	165057
206-000-925.000	UTILITIES	CITY OF KALAMAZOO TREASURE	WATER UTILITIES 04/17/2026- 05/16/202	2,128.63	165087
206-000-930.000	LAND/BUILDING REPAIRS AND	R.W. LAPINE INC.	BFP TEST/ FUEL SURCHARGE/ LABOR	375.00	165002
206-000-930.000	LAND/BUILDING REPAIRS AND	OVERHEAD DOOR OF KALAMAZOO	FURNISH AND INSTALL	2,477.00	165000
206-000-930.000	LAND/BUILDING REPAIRS AND	OVERHEAD DOOR OF KALAMAZOO	INSIDE LOCK, SECTIONAL DOOR, METAL ST	10,494.00	165000
206-000-930.000	LAND/BUILDING REPAIRS AND	HAZELHOFF BUILDERS	PROPOSAL AMOUNT 06/09/2026- FD	2,085.00	165019
206-000-930.000	LAND/BUILDING REPAIRS AND	SAHR BUILDING SUPPLY, INC.	TRI-MOUNT WITH COVER	163.58	165071
206-000-931.000	EQUIPMENT REPAIRS AND MAIN	BREATHING AIR SYSTEMS DIVI	SERVICE CALL	791.11	165074
206-000-960.000	EDUCATION & TRAINING	EVAN MCGRUDER	TRAVEL REIMBURSEMENT	112.79	165017
Total Department 000 GENERAL				107,577.92	
Total Fund 206 FIRE OPERATING FUND				107,577.92	
Fund: 211 FIRE CAPITAL IMPROVEMENT FUND					
Department: 000 GENERAL					
211-000-970.000	CAPITAL OUTLAY	ROE-COMM, INC.	CHANGE OUT RADIOS- FD	1,062.00	165026
211-000-970.000	CAPITAL OUTLAY	WEST MICHIGAN INTERNATIONAL	DENT REPAIR	3,000.00	165078
Total Department 000 GENERAL				4,062.00	
Total Fund 211 FIRE CAPITAL IMPROVEMENT FUND				4,062.00	

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GL Number	Invoice Line Desc	Vendor Name	Invoice Description	Amount	Check Number
Fund: 225 SEWER SYSTEM FUND					
Department: 000 GENERAL					
225-000-607.000	SEWER FACILITY CHARGE	COMMERCIAL MANAGEMENT COMP	REFUND SEWER FEES	2,000.00	165045
225-000-806.000	ENGINEERING SERVICES	PREIN & NEWHOF	PROFESSIONAL SERVICES AUG	2,387.50	165099
Total Department 000 GENERAL				4,387.50	
Total Fund 225 SEWER SYSTEM FUND				4,387.50	
Fund: 248 DOWNTOWN DEVELOPMENT AUTHORITY FUND					
Department: 000 GENERAL					
248-000-801.000	CONTRACTED SERVICES	CONSUMERS ENERGY	ANNUAL RENTAL BILLING FOR POLE ATTACH	182.28	164988
248-000-801.000	CONTRACTED SERVICES	LARRY RABBITT	TRASH REMOVAL	450.00	165022
248-000-801.000	CONTRACTED SERVICES	MOWCO	LANDSCAPE SERVICES	720.00	165069
248-000-970.000	CAPITAL OUTLAY	WEST SHORE SERVICES, INC.	NEW SIREN & CONTROL EQUIP	47,090.00	165033
Total Department 000 GENERAL				48,442.28	
Total Fund 248 DOWNTOWN DEVELOPMENT AUTHORITY FUND				48,442.28	
Fund: 271 LIBRARY FUND					
Department: 790 LIBRARY ADMIN					
271-790-725.000	BENEFITS - LIBRARY ADMIN	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREIUM FOR: 08012026	6,558.92	164983
271-790-725.000	BENEFITS - LIBRARY ADMIN	MUTUAL OF OMAHA	STD-LTD FOR PERIOD 08-01-2026- 08-31-	306.19	165023
271-790-725.000	BENEFITS - LIBRARY ADMIN	BLUE CARE NETWORK OF MICH	HEALTH INSURANCE PREMIUMS 09/01/26- 0	6,558.92	165084
271-790-727.000	OFFICE SUPPLIES/EQUIPMENT	DEMCO, INC.	BOOK COVERS	241.19	164990
271-790-801.000	CONTRACTED SERVICES	COMMERCIAL BLDG. SERVICES,	JANITORIAL	1,161.48	165044
271-790-801.000	CONTRACTED SERVICES	CORNERSTONE TECHNOLOGIES	COPIES & PRINTS	280.73	165046
271-790-801.000	CONTRACTED SERVICES	EPS SECURITY	ALARM MONITORING	599.16	165091
271-790-805.000	INSURANCE	ACCIDENT FUND INSURANCE CO	POLICY AF WCP 1000147847	345.85	165007
271-790-815.000	TECHNOLOGY SERVICES	READER ZONE	SUBSCRIPTION RENEWAL- LIBRARY	575.00	165025
271-790-815.000	TECHNOLOGY SERVICES	THE LIBRARY CORPORATION	ILS SERVER UPDATE	322.28	165031
271-790-815.000	TECHNOLOGY SERVICES	CLARK TECHNICAL SERVICES	IT SUPPORT	812.50	165088
271-790-900.000	PRINTING & PUBLISHING	PRINTEX	SRP T-SHIRTS	487.70	165001
271-790-900.000	PRINTING & PUBLISHING	PRINTEX	FALL CALENDARS	1,416.22	165100
271-790-925.000	UTILITIES	CITY OF KALAMAZOO TREASURE	UTLILITES- WATER & SEWER- LIB	350.98	165043
271-790-930.000	LAND/BUILDING REPAIRS AND	R.W. LAPINE INC.	HVAC MAINTENANCE- LIBRARY	500.00	165024
271-790-930.000	LAND/BUILDING REPAIRS AND	DALE W. HUBBARD, INC.	SINK & FAUCET INSTALL	312.95	165048
271-790-931.000	EQUIPMENT REPAIRS AND MAIN	CERTASITE, LLC	EMERGENCY LIGHTS & EXTINGUISHERS INSP	1,208.98	164985
271-790-963.000	CONTINGENCY	ARMADA FREE PUBLIC LIBRARY	LOST MEL BOOK	18.50	164982
Total Department 790 LIBRARY ADMIN				22,057.55	
Department: 792 LIBRARY - ADULT SERVICES					
271-792-731.000	BOOKS	CENTER POINT LARGE PRINT	LP BOOKS	300.84	165041
271-792-731.000	BOOKS	INGRAM LIBRARY SERVICES	YOUTH & ADULT BOOKS	2,000.58	165060
271-792-731.000	BOOKS	CENGAGE LEARNING INC.	LP BOOKS	273.60	165086
271-792-731.200	AUDIOVISUAL	MIDWEST TAPE	ADULT DVD	248.14	165067
271-792-801.000	CONTRACTED SERVICES	MIDWEST TAPE	HOOPLA BORROWS	15,000.00	164997
Total Department 792 LIBRARY - ADULT SERVICES				17,823.16	
Department: 793 LIBRARY - YOUTH SERVICES					
271-793-731.000	BOOKS	INGRAM LIBRARY SERVICES	YOUTH & ADULT BOOKS	862.45	165060
Total Department 793 LIBRARY - YOUTH SERVICES				862.45	
Total Fund 271 LIBRARY FUND				40,743.16	

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GL Number	Invoice Line Desc	Vendor Name	Invoice Description	Amount	Check Number
Fund: 365 PUBLIC WORKS PROJECTS DEBT					
Department: 538 GENERAL SEWER BONDS					
365-538-993.000	DEBT SERVICE - INTEREST	WEBSTER BANK	SEWER BOND PAYMENT	20,810.10	165077
			Total Department 538 GENERAL SEWER BONDS	20,810.10	
			Total Fund 365 PUBLIC WORKS PROJECTS DEBT	20,810.10	

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GL Number	Invoice Line Desc	Vendor Name	Invoice Description	Amount	Check Number
--- TOTALS BY FUND ---					
	101		GENERAL FUND	90,953.11	
	204		MUNICIPAL STREET FUND	66,657.48	
	206		FIRE OPERATING FUND	107,577.92	
	211		FIRE CAPITAL IMPROVEMENT FUND	4,062.00	
	225		SEWER SYSTEM FUND	4,387.50	
	248		DOWNTOWN DEVELOPMENT AUTHORITY FUND	48,442.28	
	271		LIBRARY FUND	40,743.16	
	365		PUBLIC WORKS PROJECTS DEBT	20,810.10	
	Total For All Funds:			383,633.55	



MEMO

Charter Township of Comstock Township Board August 19, 2026

From: Clerk Nicole Beauchamp, Township Clerk

Re: August 4, 2026 Election Report

We had a smooth election with a 30% voter turnout. 198 Comstock voters took advantage of Early Voting. 2278 voters voted absentee. 1599 voters voted in person at their precinct on Election Day. We want to thank our election workers, who work a very long day to ensure our elections are secure and accurate. A special thank you goes to resident Jill Erdodi, who chaired all nine days of early voting.