Heartwood Ecological Consulting

Initial Five-Year Community Forestry Management Plan

January 1, 2020 – December 31, 2024

-for-

Borough of Matawan,

Monmouth County, New Jersey

Mayor & Council:

The Honorable Joseph Altomonte	Mayor
Deana Gunn	Council Presiden
Stephanie Buckel	
Brett M. Cannon	Councilmember
John Lazar	Councilmember
Brian Livesey	Councilmember
Nicolas Reeve	

Prepared By: Michael LaMana, CF, LTE

For Heartwood Ecological Consulting, LLC

The Borough of Matawan First 5-Year Community Forestry Management Plan For Calendar Period 1/1/20 - 12/31/24

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1. Municipal /County Information Form

Municipality	The E	The Borough of Matawan		
County	<u>Monr</u>	nouth		
Address	<u>201 B</u>	Broad Street, Matawan, New Jersey 07747		
Contact Name and	d Title <u>Matth</u>	Matthew Schoffel, Chairman of Shade Tree Commission_		
Phone #		732-566-3898		
Fax # and E-mail	732-2	732-290-7585		
Organization Nan		Borough of Matawan Shade Tree Commission		
Mayor/County Freeholder's Sign				
Date of Managem Plan Submission		mber, 2020		
Time Period Cove Management Plan		ry 1, 2020 – December 31, 2024		
Community Stewardship Incer Program (CSIP) Practices Identifie Management Plan	ed in	CSIP #1 Training CSIP #2 Community Forestry Ordinance Establishment CSIP #3 Public Education and Awareness CSIP #4 Arbor Day CSIP #5 Tree Inventory CSIP #6 Hazard Tree Assessment CSIP #7 Storm Damage Assessment CSIP #8 Tree Maintenance and Removals CSIP #9 Insect and Disease Management CSIP #10 Wildfire Protection CSIP #11 Tree Planting CSIP #12 Tree Recycling CSIP #13 Sidewalk Maintenance Program CSIP #14 Storm Water Management CSIP #15 Other		
Official Use Only Certification	Forest Service. I am concluded that this p	named municipality/county has made formal application to the New Jersey vice. I am pleased to advise you that after our review, the NJ Forest Service has that this plan meets the standards set forth by the State and the NJ Community Forestry d is approved for the period covered.		
Signed	State Foreste	r Approved date		

2. Introduction

2.A. Scope

Recognizing the inherent value of the urban tree canopy to the quality of life of its residents, the Borough of Matawan ("Matawan" or "the Borough") seeks to protect and promote this important element of its infrastructure. The tree cover in Matawan provides multiple environmental, economic, and psychological benefits which accrue directly to the citizens of the Borough. The Borough also understands that trees are dynamic living organisms subject to changes in structural and biological condition as they mature and eventually decline. As such, Matawan is committed to exercising reasonable care in the management and maintenance of this resource.

In accordance with this awareness of the value existing in the municipal tree cover, Matawan has undertaken the development of this first 5-Year Community Forestry Management Plan ("CFMP"). It follows the New Jersey Community Forestry Program Guidelines¹, and will serve as a strategic baseline for vegetation management within the Borough. As no previous Community Forestry Management Plan has been developed for the Borough of Matawan, this document is designed to set specific initial goals and objectives for the period of January 1st, 2020 through December 31st, 2024 and to lay the groundwork for future CFMPs. The Borough anticipates benefits accruing to all of its residents through proactive management of their community Forest.

2.B. Mission Statement

The mission of the Borough of Matawan Community Forestry Program is to promote and costeffectively maintain a sustainable level of shade tree resources within the Borough, consistent with available resources and such that all community members may enjoy the full benefits provided by a healthy tree population.

2.C. Goals and Objectives

In keeping with the mission statement of the forestry program, the Borough of Matawan has identified the following goals and objectives for the five-year timeframe covered by this plan. The fulfillment of these goals will continue to be the focus of Matawan officials and residents, while simultaneously complying with all municipal ordinances and requirements of this CFMP, described as follows:

2.C.1 Goal: Cost effectively maximize the useful service life of Borough trees growing on public property via the following Objectives:

- a. As funds allow, plant a diversity of native trees on public property in order to offset tree loss and mortality; to reduce exposure to catastrophic tree loss, and to achieve a sustainable mix of age classes in the tree population;
- b. Continue to create an annual budget detailing reasonable planting goals, maintenance expenditures and operational strategies required to achieve an optimal level of sustainable

^{1.} NJDEP. 2017. The New Jersey Community Forestry Program, NJ Shade Tree & Community Forestry Assistance Act, revised Nov. 22, 2017

- public tree canopy;
- c. Pursue grants and/or donations to fund new plantings, hazard reduction, proactive maintenance and the beautification of Borough parks, including, but not limited to, Adopt-a-Tree, Sustainable New Jersey, and memorial garden programs;
- d. Educate and enlist the Public Works Department, the Matawan Borough residents, and the general public in the aftercare of new tree plantings;
- e. Maintain enforcement and compliance with existing tree-related ordinances and evaluate ordinance needs in response to new technical information, arboricultural threats, and management information, and;
- f. Increase public-tree stocking over reasonable timeframe.
- 2.C.2. Educate Brough citizens regarding the benefits supplied by the community forest and the need for proper stewardship thereof, via the following objectives:
 - a. Maintain and publicize *Tree City USA* status which has been maintained for 2 consecutive years;
 - b. Continue Arbor Day celebrations and activities;
 - c. Continue to engage the local schools for educational opportunities;
 - d. Continue to conduct annual Arbor Day plantings with the local schools;
 - e. Provide access to this Community Forestry Management Plan on the Borough website and in local library for the benefit of the public;
 - f. Adhere to the Sunshine Law² by notifying public and local newspapers of meetings as required;
 - g. Offer outreach and partnering opportunities to local garden clubs, environmental groups, youth organizations and the like, and;
 - h. Publish at least two tree-related articles per year in local paper and / or on the Borough website.
- 2.C.3. Continue Shade Tree Commission and Environmental Commission, as well as other municipal employee participation in forestry & arboricultural education and training, via the following objectives:
 - a. Maintain a minimum of two (2) municipal employees/volunteers in the Borough with CORE³ training;
 - b. Provide the proper training and encourage volunteers and municipal employees to attain a minimum of eight (8) CEU training credits⁴ annually;
 - c. Work with the Environmental Commission;
 - d. Appoint additional interested community representatives to the Shade Tree Commission,

² Open Public Meetings Act, N.J.S.A 10:4-6

^{3.} CORE Training http://www.state.nj.us/dep/parksandforests/forest/community/act.html

^{4.} Continuing Education Units http://www.state.nj.us/dep/parksandforests/forest/community/act.html

- while retaining and developing existing representatives;
- e. Ensure additional training in the assessment of trees, and;
- f. Encourage education through the use of on-line arboricultural resources by both municipal employees and Shade Tree Commission members.
- 2.C.4. Maintain enforcement and compliance with existing tree-related ordinances, and evaluate ordinance needs in response to new technical and logistical information, via the following objectives:
 - a. Enforce existing tree-related ordinances;
 - b. Have inspections of commercial properties and major subdivisions performed by a qualified Certified Forester, Arborist or NJ Certified Tree Expert, Planning and Engineering Department.
 - c. Monitor for new arboricultural threats and management information, and;
 - d. Create and/or modify tree-related ordinances in response to any new information or threats.
- 2.C.5. Conduct annual hazard identification and implement hazard mitigation as needed and appropriate to resource availability to minimize conflicts between trees and sidewalks, via the following objectives:
 - a. Provide or facilitate yearly hazard tree evaluation training for those Shade Tree Commission members and municipal employees with tree identification and / or maintenance responsibilities;
 - b. Maintain professional urban forester or Certified Arborist oversight of yearly assessment of hazard trees where possible;
 - c. Conduct annual hazard tree assessment of public properties during the late fall / early winter period (leaf-off conditions). Operation to be conducted as a visual survey from a vehicle (e.g. along ROW) or on foot (within parkland and other municipal properties) as resources allow, and;
 - d. Continue to encourage all volunteers and municipal employees to immediately report any observed hazardous conditions.
- 2.C.6. Develop a strategic tree inventory to encourage proper stewardship of the current forested areas and retention of the largest, older trees on both public and private property. Address the following Objectives:
 - a. Perform inventory of municipal landscape trees using employees from the Shade Tree Commission, supervised by the Borough Certified Tree Expert; use retained Certified Tree Expert to analyze inventory data, develop management recommendations and integrate into software database;
 - b. Maintain inventory data, track all tree removals and maintenance actions;
 - c. Modify planting, hazard, and maintenance programs based upon developed inventory data, and:

d. Identify prospective tree planting sites individually or by area.

2.D. Liability Statement

The Borough of Matawan recognizes the risk inherent in urban trees due to the frequency and density of potential targets when a tree failure occurs. The Borough also recognizes that this risk can be reduced, although not eliminated, through a proactive program of hazard identification and remediation. A premise of this management plan is that urban forest benefits can be maximized, and liabilities minimized, for the citizens of Matawan through a proactive approach to vegetation management. All goals and objectives in this plan support this concept. From identification of current hazards, to engaging and educating the public and encouraging appropriate replacement plantings, each goal works to reduce the exposure of the residents of the Borough of Matawan to tree-related risks.

3. Community Overview

3.A. The Borough of Matawan – Past and Present.

Originally settled by the Lenni Lenape people and later occupied by the Dutch and Scotch-Irish, Matawan currently appeals to a wide variety of residents due to its close proximity to New York City and the coast. Encompassing 2.41 square miles or approximately 1,542 acres, the Borough of Matawan was officially formed on June 28th, 1895 and currently has a population of approximately 8,840 residents (2010 census). One of nine municipalities within the Bayshore Region Strategic Plan⁵ as of 2006, the Borough has a strong commitment to both historic architecture and open space preservation.

3.B. Ecological Context of Matawan' Community Forest.

The Borough lies within the Inner Coastal Plain physiographic province of the state. Most of the materials on the Inner Coastal Plains in New Jersey are river and marine-deposited sedimentary sand, silt and clay overlain with later-derived glacial deposits from the Cretaceous period. The Woodbury, Magothy, Merchantville and Englishtown geologic formations underly Matawan and the associated soil series – "Keyport", "Freehold" and "Hammonton" are typical of the region, as well as other similar soil series – all acidic, fairly fertile, low to mid-range permeability and most associated with white and black oaks, as well as pines and tulip-poplar. The most distinctive geologic feature of the Borough is the two lakes, Lake Lefferts and Matawan Lake. These water bodies drain to the north into the Raritan Bay via the Matawan Creek. All waterbodies and associated creeks are classified as FW2-NT/SE1 waters under N.J.A.C.7:9B.

Street trees in town center are smaller trees in public right-of-ways, including red maple cultivars, thornless honey locust (*Gladitsia triacanthos*), London plane (*Platanus acerifolia*), zelkova (*Zelkova serrata*) and hybrid elm. In residential areas, observed were various oaks, spruces (Colorado, Norway) and other maples (silver, sugar, Norway) and assorted ornamentals.

The Borough of Matawan CFMP − 1/1/20 − 12/31/24 © 2020. Heartwood Ecological Consulting, LLC

⁵ The Bayshore Region Strategic Plan was developed by Monmouth County Planning Board to create a vision and planning strategy to spur economic development in the region in a manner that recognizes the importance of preserving the region's environmentally sensitive natural resources and beauty.

Because of its loamy, moderately permeable soils, and the influence of the two lakes and associated tributaries, the original forest cover in the area that was to become Matawan was likely dominated by white and black oaks. Human disturbance, development and past clearing done for agricultural purposes has resulted in a patchy presence of forested areas, mostly near lands associated with wetlands and the Lakes. These forested areas include black oak (*Quercus velutina*), white oak (*Q. alba*), blackgum (*Nyssa sylvatica*), red maple (*Acer rubrum*), black birch (*Betula lenta*), mockernut hickory (*Carya tomentosa*), American beech (*Fagus grandifolia*), red oak (*Q. rubra*), bitternut hickory (*C. cordiformis*) and sweetgum (*Liquidambar styraciflua*) in the tree canpoy, as well as a mix of various pines that were likely planted years ago.

The shrub layer observed is dominated by round leaf greenbrier (*Smilax rotundifolia*), lowbush and highbush blueberries (*Vaccinium* spp.), Japanese honeysuckle (*Lonicera japonica*), deerberry (*Gaylussacia* spp.), Japanese barberry (*Berberis thunbergii*), poison ivy (*Toxicodendron radicans*), spicebush (*Lindera benzoin*), Asiatic bittersweet (*Celastrus orbiculatus*), Virginia creeper (*Parthenocissus quinquefolia*) and foxgrape (*Vitis labrusca*). The herbaceous stratum includes a broad range of sedges, grasses and forbs, as well as sporadic ferns are also found in the stand's moister margins near intermittent drainage swales. Japanese stiltgrass (*Microstegium vimineum*) is established there and reasonably likely to expand in extent regardless of land use. There is also a large presence of the invasive Tree-of-Heaven (*Ailanthus altissima*).

Using the NJDEP 2012 Land Use/Land Cover dataset that is based on aerial images, it appears that of the 1,542 acres in the Borough of Matawan, approximately 165 acres are considered forested area, or 10% of the Borough. Wetlands accounted for approximately 230 acres, or 15% of the Borough and urban/developed land accounted for approximately 1,145 acres, or 75% of the Borough. While not accounted for in the urban acres by the NJDEP dataset, it is likely that a large portion of forest cover occurs within residential properties.

3.C. Community Forest Management in the Borough.

Throughout the history of Matawan, much of the original tree coverage was cut down to make room for the increasing population and development. To ensure the conservation of the remaining forest and trees tied up in privately owned land, the Borough created "Chapter 24, Protection of Trees". This Ordinance Chapter and Tree Protection Permit were created to regulate the cutting of trees in order to preserve the current tree resource by requiring a permit to cut down any trees. The Chapter addresses the process for obtaining such a tree removal permit. The ordinance also specifically protects significant specimen trees, which is defined as any tree or ornamental tree with a diameter a breast height (DBH) exceeding 75% of that of the largest similar tree listed in either of these references: Monmouth County's Largest Trees, prepared and annually updated by the Monmouth County Shade Tree Commission or New Jersey's Big Trees, prepared and updated biannually by the Division of Parks and Forestry of the New Jersey Department of Environmental Protection. It also specifically protects flowering dogwoods, American holly and native laurel that is above a specific DBH.

As previously discussed, the Borough of Matawan is one of nine municipalities that are part of the Bayshore Region Strategic Plan that was developed by the Monmouth County Planning Board.

Section 4 of this Plan discusses the Open Space Plan for this area and they have classified 57 acres of Matawan's open space as Critical Environmental Sites (CES). This Plan recognizes that natural resources and access to these natural resources should be preserved and protected. The plan highlights areas within Matawan and provides strategies to implement to ensure their protection.

The Shade Tree Commission of Matawan acts under the jurisdiction of the Mayor and Council. The Commission, which typically consists of five members appointed by the Mayor, has the ability to assist the governing body in any tree-related decisions by providing recommendations for action.

The community forest in Matawan has reportedly never been systematically surveyed, though it is a goal of this Plan to conduct a tree survey within this 5-year period. Because the tree cover of Matawan is found predominantly on private lands, management options will need to actively engage the public in order to take advantage of newer arboricultural knowledge and effectively respond to the biological threats posed by invasive pathogens and climatic changes.

In light of its continuing work to protect the Community's forest, Matawan has decided to obtain this first five-year CFMP. This CFMP should provide the means, map and tools needed for enhancing and improving the local tree cover in a manner consistent with existing regulations.

3.D. Integration with Municipal Master Plan and State Regulations.

The most recent Master Plan Reexamination and Update for The Borough of Matawan was completed in November of 2014. Conservation of the Borough's natural resources and preservation of environmentally sensitive lands became a major goal in a Master Plan update in 2003. All subsequent Master Plans and Updates continued to emphasize the importance of protecting open space and environmentally sensitive areas within the Borough. In 2006, the Master Plan was updated largely to incorporate a Storm Water Management Plan developed by the NJDEP and the Bayshore Region Strategic Plan. Among the stated Master Plan goals and improvements for land use are to:

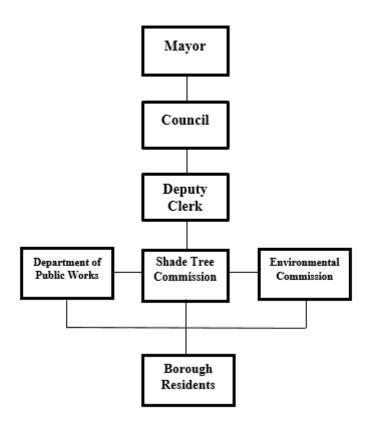
- Adhere to the recently implemented Storm Water Management Plan;
- Ensure the harmonious inter-relationship of the various land use activities throughout the Borough and with adjoining municipalities;
- Preservation and protection of environmentally sensitive lands;
- Provide open access to Matawan Creek wetlands, and;
- Review riparian corridors to identify acquisition sites and environmental sensitive areas.

Implementation of this CFMP is reasonably expected to support these goals by protecting and improving upon the Borough's natural resources and will further achieve an ideal balance between future development and preservation of the community forest. With this, the quality of life will be exponentially improved as healthy forest cover provides many benefits for both the Borough's environment and its people.

4. Community Forestry Program Administration and Implementation.

While the Borough's Public Works Department is the formal entity charged with overseeing the care of the Borough's tree resource it is, in reality, a cooperative effort of the Mayor, Council, Code Enforcement, along with the Environmental Commission, the Shade Tree Commission and the private sector which interact to effect the management of the Borough's Community Forest. The following chart depicts, in conceptual fashion, those involved in the oversight and management of the community forest in Matawan.

4.A. Organizational Chart



4.B. Organizational Responsibilities & Relationships

4.B.1. The Mayor and Council

- a. The Mayor, with consent of Council, is responsible for appointing the members of the Borough's Shade Tree Commission;
- b. The Mayor and Council review the policies and plans of the Borough of Matawan's Shade Tree Commission;

c. The Mayor and Council approve annual budgets for the Borough of Matawan's Shade Tree Commission.

4.B.2. The Deputy Clerk

- a. Residential calls and emails about any tree issues or tree permits are received by the Deputy Clerk.
- b. The Clerk sends all permits for review to the Shade Tree Commission.

4.B.3. The Shade Tree Commission

The Matawan Shade Tree Commission is the advisory agency for all community trees on municipal streets, rights-of-way, parks, or other properties. Their duties include:

- a. Recommend that the Mayor and Council adopt such ordinances and written rules and regulations as may be necessary, pursuant to statute, and for the proper interpretation of this section, administration and enforcement, provided that the ordinances and regulations do not conflict with this section and conform to the general standards;
- b. Exercise full and exclusive control over the regulation, planting and care of shade and ornamental trees and shrubbery now located, or which may hereafter be planted, in any public highway, park or parkway, except such as are excluded pursuant :1 § 2-32.5. Planting and Removal of Trees to Be a Lien. [1971 Code § 2-19.5] Except as hereinafter provided, the initial cost of all trees planted by the Commission, the cost of planting the same, the cost of the posts and boxes or guards used for their protection, and the cost of the removal of any tree or part thereof dangerous to public safety shall, if the Commission so determines, in accordance with rules and regulations for that purpose, be a charge upon the real estate in front of which the tree shall be planted or removed as an improvement. The cost, if it is so determined that it is to be paid by the owner shall, unless paid directly to the Commission, be certified to the Collector of Taxes and shall thereupon be a lien upon the real estate, and shall be included in the next tax bill rendered to the owner and collected in the same manner as other taxes against the property. to subsection 2-32.1, including the planting, trimming, spraying, care and protection thereof;
- c. Regulate and control the use of the ground surrounding the same, so far as may be necessary for their proper growth, care and protection;
- d. Move or require the removal of any tree, or part thereof, dangerous to public safety;
- e. Care for and control such parks and parkways; encourage arboriculture; make, alter, amend, and repeal, in the manner prescribed for the passage, alteration, amendment and repeal of ordinances by the Borough Council, any and all ordinances necessary or proper for carrying out the provisions hereof;
- f. Administer treatment to or remove any tree situated upon private property which is believed to harbor a disease or insects readily communicable to neighboring healthy trees in the care of the Borough and enter upon private property for that purpose, with the consent of the owner, provided the suspected condition is first confirmed by certificate issued by or on behalf of the New Jersey Department of Agriculture.

- g. Undertake a review and approval of all applications submitted under the provisions of Chapter 24 for the Protection of Trees, and;
- h. The Commission may adopt a written protocol whereby one of its members may be delegated to review and approve the application for tree removal for application of a minor event involving no more than five trees.

4.B.4. Department of Public Works

- a. Performs tree planting and smaller pruning and removal operations;
- b. Responsible for the upkeep of newly planted and young trees in Borough parks and at other public facilities, (ex watering, mulching, fertilizing, pruning).
- c. Inspects work performed by private contractors for the Borough;
- d. Maintains through public employees and private contractors all trees on public property.
- e. Inspect plantings for bond release;

4.B.5. Engineering Department/Code Enforcement

- a. Oversee landscape plans and suggestions submitted by developers, Council, and the Shade Tree/Environmental Commission;
- b. Inspects all work performed by the utility contractors on public properties;
- c. Helps review and revise all ordinances pertaining to Borough trees.
- d. Reviews all landscape plans before the Borough to determine if landscape plans comply with current ordinance.

4.B.6 Environmental Commission

a. Cooperates with the Shade Tree Commission in tree related projects.

4.B.7 Private Tree Contractors

Generally, most tree care and maintenance activities are done in-house by the Shade Tree Department/Department of Public Works but when difficult or large climbing jobs arise, private contractors may be deemed necessary on a case-by-case basis. Private contractors are responsible for the following:

- a. Provide proof of appropriate insurance, certifications and licenses as necessary to the appropriate department heads;
- b. Report prior to and following all work performed to the appropriate department supervisor;
- c. Complete all work in a safe and timely manner according to all applicable safety standards set by OSHA or ANSI, as they pertain to tree care operations;
- d. Follow all current arboricultural practices and recommendations;
- e. Report all hazards or problems directly to appropriate department head immediately.

4.B.8 Utility Contractors

- a. Must notify the Borough of Matawan Director of Shade Tree Commission or Engineering Department prior to the start of any non-emergency work in the Borough;
- b. Must follow all current arboricultural practices and recommendations;
- c. May assist Shade Tree Commission in clearing trees to a safe distance from their facilities when necessary.

4.B.9 General Public

- a. Continue to report all requests for planting, removal or maintenance to the appropriate municipal department;
- b. Assist in follow-up care to the newly planted trees on adjacent properties or in county or Borough rights-of-way.

4.B.10 Monmouth County Tree Crews

a. Responsible for maintaining trees on county roadways.

4.B.11 NJ DOT Tree Crews

a. Responsible for maintaining trees on state roadways.

4.C. Borough Service Request Process for Tree Protection Permit

Planting, removal, or pruning requests can be made by any department or individual residing in Matawan so long the proper permit is obtained. All requests must follow this procedure.

- a. Submit a Tree Removal Plan in sufficient detail to identify the nature and limits of all regulated activities including the location, species, diameter and estimated height of all tree removals and the limits of all existing or proposed principal or accessory structures in relation to any removals. For removals of five or fewer trees on a lot where the principal use is an existing single-family dwelling, the Tree Removal Plan may be provided using a legible sketch, a tax map reproduction, a copy of an existing survey or similar drawing with field measurements and dimensions provided by the property owner or the owner's agent. For other removals, the Tree Removal Plan shall be prepared by a qualified professional, acceptable to the Tree Conservation Officer;
- b. A narrative description of the property owner's reason for removing the trees, including a description of any alternate considered;
- c. A signed evaluation and recommendation from a tree expert, whose qualifications are acceptable to the Tree Conservation Officer, shall be provided if the reasons for the removal include the removal of dead or diseased trees or a horticulturally advantageous thinning or an overgrown area;

- d. A Tree Protection Permit application fee: (a) \$10 for applications proposing removal of five or fewer trees on a lot containing an existing single-family dwelling. (b) \$150 for other applications proposing removal of five or more trees; or (c) \$150 plus \$25 per tree removed, for all other applications. (d) Fees may be waived or modified by the Borough Council for charitable, public or quasi-public agencies or for eleemosynary institutions or in unusual and exceptional circumstances, i.e. disease, safety or under wires;
- e. The applicant will place or cause to be placed, in a highly visible manner, a one inch wide yellow ribbon, which may be obtained from the Tree Conservation Officer, around the § 24-6 § 24-6 :4 trunk of each tree to be removed, to aid the Borough in evaluating the proposed removals, and;
- f. The Tree Conservation Officer of Matawan may seek the advice of such Borough officials, agencies, committees, boards and commissions, as Tree Conservation Officer may believe necessary in evaluating a permit application. 8. After evaluation of an application, the Tree Conservation Officer, will take one of the following actions within the time set forth.

4.D. Shade Tree Commission Members as of September, 2020.

The Shade Tree Commission is comprised of five (5) members appointed by the Mayor. The current Membership of the Matawan Shade Tree Commission includes:

- Matthew Schoffel, Chairman
- Mary McMurray, Secretary
- Larry Magee, Tree Conservation Officer
- Guy Buckel
- Councilman Brian Livesey

5. Community Map

(see Section 11. Appendix.)

6. Training Plan – 1/1/20-12/31/24

As discussed, The Borough of Matawan is committed to protecting and enhancing the community forest and therefore recognizes the need to encourage professional development among individuals managing the resource. There are currently no CORE trained employees/volunteers in the Borough but it is a goal of this Plan to maintain 2 CORE trained members. The general training plan goals are to:

- a. Maintain a minimum of two municipal employees / Shade Tree Commission volunteers in the Borough with CORE training;
- b. Provide for a yearly minimum of 8 CEU training credits within the total community forestry program;
- c. Ensure additional training emphasis occurs for municipal employees in the identification and assessment of potential hazard trees; and
- d. Encourage knowledge acquisition through the use of free on-line arboricultural resources by both

municipal employees and Shade Tree Commission members.

During the span of this initial CFMP, it will be a focus of the current members and any new members to recognize and identify the signs of any tree diseases and pests that are currently effecting forest health throughout New Jersey. In this region, specifically these diseases and pests include;

- Emerald ash borer (EAB)
- Spotted lanternfly
- Gypsy moth
- Bacterial leaf scorch

More information can be found on the NJDEP Forest Service's website, under "Pests and Diseases". Information can obtained from this website and links to other websites provided by the NJDEP on how to identify these issues and what treatments or planning tactics are available and effective. The commission and its members will continue to monitor for any new pests or diseases through training that is typically provided through the programs for CORE training.

7. Public Education/Awareness/Outreach - 1/1/2020 - 12/31/2024

As a sustainable community forestry program is ultimately predicated upon the existence of strong public support, Matawan Borough views this component of the plan as vital to achieving success.

The Borough outreach goal for the current plan is to:

To educate Borough citizens regarding the benefits supplied by the community forest and the need for proper stewardship thereof.

In support of this goal the following objectives have been identified:

- Maintain and publicize *Tree City USA* status which has been maintained for 2 consecutive years;
- Continue Arbor Day celebrations and activities;
- Continue to engage the local schools for educational opportunities;
- Continue annual Arbor Day plantings with the local schools;
- Provide access to this Community Forestry Management Plan on the Borough website and in local library for the benefit of the public;
- Adhere to the Sunshine Law⁶ by notifying public and local newspapers of meetings as required;
- Continue to offer outreach and partnering opportunities to local garden clubs, environmental groups, youth organizations and the like, and;
- Publish at least two tree-related articles per year in local paper and / or on the Borough website.

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⁶ Open Public Meetings Act, N.J.S.A 10:4-6

Much like the training goals, it will also be a focus of the Borough of Matawan to keep the public informed of the signs of any pest or disease effecting forest health. The majority of forested land is held up in privately owned properties within the Borough so it is very important that the Shade Tree Commission encourage the public to identify any possible signs of some of the pests/tree diseases listed above and inform the Commission of the presence of the identified pest or disease.

8. Statement of Tree Budget 2019. The latest figures available for Matawan's tree budget (2019) are listed below.

Labor	# of instances	Cost
Pruning of Trees	12	\$4,800.00
Trees Removed	15	\$5,750.00
Emergency tree removal	8	\$750.00
Trees purchased	1	\$160.00
Arbor day expenses	Various	\$350.00
Commission projects	Various	\$3,069.00
Commission supplies	Various	\$317.00
Total		\$15,196.00
Equipment		
Repairs of Equipment		\$10,100.00
2019 Budget TOTAL		\$25,296.00

9. Statement of Plan Implementation

9.A. First Year – 2020

9.A.1. Goal Number 1. Cost effectively maximize the useful service life of Borough trees growing on public property.

It is the desire of the Borough to systematically address anticipated tree mortality and decline. It will be a focus in the first year of the CFMP to set the precedence for the years to come to assess and maintain hazardous trees to protect the public, while maintaining the ecological integrity of forested areas.

First Year Objectives:

- a. As funds allow, plant a diversity of native trees on public property in order to offset tree loss and mortality; to reduce exposure to catastrophic tree loss, and to achieve a sustainable mix of age classes in the tree population;
- b. Continue to create an annual budget detailing reasonable planting goals, maintenance expenditures and operational strategies required to achieve an optimal level of sustainable public tree canopy;

- c. Educate and enlist the Public Works Department, the Matawan Borough residents, and the general public in the aftercare of new tree plantings, and;
- d. Maintain enforcement and compliance with existing tree-related ordinances and evaluate ordinance needs in response to new technical information, arboricultural threats, and management information.
- 9.A.2. Goal Number 2. Educate Brough citizens regarding the benefits supplied by the community forest and the need for proper stewardship thereof.

First Year Objectives:

- a. Maintain and publicize Tree City USA status;
- b. Continue Arbor Day celebrations and activities;
- c. Continue to engage the local schools for educational opportunities;
- d. Continue to conduct annual Arbor Day plantings with the local schools;
- e. Provide access to this Community Forestry Management Plan on the Borough website and in local library for the benefit of the public;
- f. Adhere to the Sunshine Law by notifying public and local newspapers of meetings as required;
- g. Offer outreach and partnering opportunities to local garden clubs, environmental groups, youth organizations and the like, and;
- h. Publish at least two tree-related articles per year in local paper and / or on the Borough website.
- 9.A.3. Goal Number 3. Continue Shade Tree Commission and Environmental Commission, as well as other municipal employee participation in forestry & arboricultural education and training.

First Year Objectives:

- a. Train two (2) municipal employees/volunteers in the Borough with CORE training;
- b. Provide the proper training and encourage volunteers and municipal employees to attain a minimum of eight (8) CEU training credits annually;
- c. Work with the Environmental Commission;
- d. Appoint additional interested community representatives to the Shade Tree Commission, while retaining and developing existing representatives;
- e. Ensure additional training in the assessment of trees, and;
- f. Encourage education through the use of on-line arboricultural resources by both municipal employees and Shade Tree Commission members.
- 9.A.4. Goal Number 4. Maintain enforcement and compliance with existing tree-related

ordinances, and evaluate ordinance needs in response to new technical and logistical information.

Routine and consistent enforcement and oversight of the pertinent ordinances will continue during each year of the plan. Should new technical information regarding the proper care of trees or emerging pathogens become available, it is the intent of the Borough to evaluate the necessity of modified ordinances in response to these new variables.

First Year Objectives:

- a. Enforce existing tree-related ordinances;
- b. Have inspections of commercial properties and major subdivisions performed by a qualified Certified Forester, -Arborist or NJ Certified Tree Expert, Planning and Engineering Department.
- c. Monitor for new arboricultural threats and management information, and;
- d. Create and/or modify tree-related ordinances in response to any new information or threats.
- 9.A.5. Goal Number 5. Conduct annual hazard identification and implement hazard mitigation as needed and appropriate to resource availability to minimize conflicts between trees and sidewalks.

The Borough of Matawan is dedicated to reducing the inherent risk of injury and property damage associated with the presence of mature trees in close proximity to people. Hazard reduction is an ongoing process that requires systematic detection and prioritized intervention in order to be effective. The Borough recognizes that risk cannot be eliminated but it can be minimized through an approach that demonstrates reasonable care. This goal and the accompanying objectives are designed to address risk reduction.

First Year Objectives:

- a. Provide or facilitate yearly hazard tree evaluation training for those Shade Tree Commission members and municipal employees with tree identification and / or maintenance responsibilities;
- b. Maintain professional urban forester or Certified Arborist oversight of yearly assessment of hazard trees where possible;
- c. Conduct annual hazard tree assessment of public properties during the late fall / early winter period (leaf-off conditions). Operation to be conducted as a visual survey from a vehicle (e.g. along ROW) or on foot (within parkland and other municipal properties) as resources allow, and;
- d. Encourage all volunteers and municipal employees to immediately report any observed hazardous conditions.
- 9.A.6. Goal Number 6. Develop a strategic tree inventory to encourage proper stewardship of the current forested areas and retention of the largest, older trees on both public and private property.

A significant portion of the community forest on public property within the Borough of Matawan is

anticipated to consist of naturalized lowland hardwoods not subject to traditional arboricultural interventions. Additionally, the current street tree inventory is unknown and as time goes on, certain street trees need attention and/or replacement. An inventory assessment of the landscape trees would be critical to implementing proactive management. As such, the development of an inventory will be a focus of the Borough of Matawan's forestry plan during 2020-2024. An inventory of the community tree cover would allow the Borough to accurately determine the level of resources required to perpetuate and maximize the benefits associated with the community forest resource.

First Year Objectives:

- a. Designate employees from the Shade Tree Commission and obtain a Certified Tree Expert to begin to prepare the tree inventory process, and;
- b. Prepare a budget for the inventory.

9.B. Year Two through Year Four – 2021-2023

9.B.1. Goal Number 1. Cost effectively maximize the useful service life of Borough trees growing on public property.

Second-thru-Fourth Year Objectives:

- a. Continue to plant a diversity of native trees on public property in order to offset tree loss and mortality; to reduce exposure to catastrophic tree loss, and to achieve a sustainable mix of age classes in the tree population;
- b. Continue to create an annual budget detailing reasonable planting goals, maintenance expenditures and operational strategies required to achieve an optimal level of sustainable public tree canopy;
- c. Pursue grants and/or donations to fund new plantings, hazard reduction, proactive maintenance and the beautification of Borough parks, including, but not limited to, Adopta-Tree, Sustainable New Jersey, and memorial garden programs;
- d. Educate and enlist the Public Works Department, the Matawan Borough residents, and the general public in the aftercare of new tree plantings;
- e. Maintain enforcement and compliance with existing tree-related ordinances and evaluate ordinance needs in response to new technical information, arboricultural threats, and management information, and;
- f. Increase public-tree stocking over reasonable timeframe.
- 9.B.2. Goal Number 2. Continue to educate Borough citizens regarding the benefits supplied by the community forest and the need for proper stewardship thereof.

Second-thru-Fourth Year Objectives:

- a. Maintain and publicize Tree City USA status;
- b. Continue Arbor Day celebrations and activities;
- c. Continue to engage the local schools for educational opportunities;
- d. Continue to conduct annual Arbor Day plantings with the local schools;
- e. Adhere to the Sunshine Law by notifying public and local newspapers of meetings as required;
- f. Offer outreach and partnering opportunities to local garden clubs, environmental groups, youth organizations and the like, and;
- g. Publish at least two tree-related articles per year in local paper and / or on the Borough website.
- 9.B.3. Goal Number 3. Continue Shade Tree Commission and Environmental Commission, as well as other municipal employee participation in forestry & arboricultural education and training.

Second-thru-Fourth Year Objectives:

- a. Maintain a minimum of two (2) municipal employees/volunteers in the Borough with CORE training;
- b. Continue to provide the proper training and encourage volunteers and municipal employees to attain a minimum of eight (8) CEU training credits annually;
- c. Continue to work with the Environmental Commission;
- d. Appoint additional interested community representatives to the Shade Tree Commission, while retaining and developing existing representatives;
- e. Ensure additional training in the assessment of trees, and;
- f. Encourage education through the use of on-line arboricultural resources by both municipal employees and Shade Tree Commission members.
- 9.B.4. Goal Number 4. *Maintain enforcement and compliance with existing tree-related ordinances, and evaluate ordinance needs in response to new technical and logistical information.*

Second-thru-Fourth Year Objectives:

- a. Enforce existing tree-related ordinances;
- b. Have inspections of commercial properties and major subdivisions performed by a qualified Certified Forester, -Arborist or NJ Certified Tree Expert, Planning and Engineering Department.
- c. Monitor for new arboricultural threats and management information, and;
- d. Create and/or modify tree-related ordinances in response to any new information or threats.
- 9.B.5. Goal Number 5. Conduct annual hazard identification and implement hazard mitigation as

needed and appropriate to resource availability to minimize conflicts between trees and sidewalks.

Second-thru-Fourth Year Objectives:

- a. Continue to provide or facilitate yearly hazard tree evaluation training for those Shade Tree Commission members and municipal employees with tree identification and / or maintenance responsibilities;
- b. Maintain professional urban forester or Certified Arborist oversight of yearly assessment of hazard trees where possible;
- c. Pending the annual hazard tree assessment established within the first year, continue to conduct annual assessment of public properties during the late fall / early winter period (leaf-off conditions). Operation to be conducted as a visual survey from a vehicle (e.g. along ROW) or on foot (within parkland and other municipal properties) as resources allow, and;
- e. Continue to encourage all volunteers and municipal employees to immediately report any observed hazardous conditions.

9.B.6. Goal Number 6. Develop a strategic tree inventory to encourage proper stewardship of the current forested areas and retention of the largest, older trees on both public and private property.

After planning the tree inventory in the first year and contracting the necessary Certified Tree Expert, The Borough should be ready to conduct the tree inventory by 2021 or 2022, depending on available funds.

Second-thru-Fourth Year Objectives:

- a. Perform inventory of municipal landscape trees using employees from the Shade Tree Commission, supervised by the Borough Certified Tree Expert; use retained Certified Tree Expert to analyze inventory data, develop management recommendations and integrate into software database:
- b. Maintain inventory data, track all tree removals and maintenance actions;
- c. Modify planting, hazard, and maintenance programs based upon developed inventory data, and:
- d. Identify prospective tree planting sites individually or by area.

9.C. Year Five - 2024

9.C.1. Goal Number 1. Cost effectively maximize the useful service life of Borough trees growing on public property..

Fifth Year Objectives:

a. As funds allow, continue to plant a diversity of native trees on public property in order to offset tree loss and mortality; to reduce exposure to catastrophic tree loss, and to achieve a

- sustainable mix of age classes in the tree population;
- b. Continue to create an annual budget detailing reasonable planting goals, maintenance expenditures and operational strategies required to achieve an optimal level of sustainable public tree canopy;
- c. Utilize grant monies received in previous years for new planting plans.
- d. Continue to educate and enlist the Public Works Department, the Matawan Borough residents, and the general public in the aftercare of new tree plantings, and;
- e. Continue to maintain enforcement and compliance with existing tree-related ordinances and evaluate ordinance needs in response to new technical information, arboricultural threats, and management information.
- 9.C.2. Goal Number 2. Continue to educate Borough citizens regarding the benefits supplied by the community forest and the need for proper stewardship thereof.

Fifth Year Objectives:

- a. Maintain and publicize Tree City USA status;
- b. Continue Arbor Day celebrations and activities;
- c. Continue to engage the local schools for educational opportunities;
- d. Continue to conduct annual Arbor Day plantings with the local schools;
- e. Provide access to this Community Forestry Management Plan on the Borough website and in local library for the benefit of the public;
- f. Continue to adhere to the Sunshine Law by notifying public and local newspapers of meetings as required;
- g. Offer outreach and partnering opportunities to local garden clubs, environmental groups, youth organizations and the like, and;
- h. Publish at least two tree-related articles per year in local paper and / or on the Borough website.
- 9.C.3. Goal Number 3. Continue Shade Tree Commission and Environmental Commission, as well as other municipal employee participation, in forestry & arboricultural education and training.

Fifth Year Objective:

- a. Maintain a minimum of two (2) municipal employees/volunteers in the Township with CORE training;
- b. Continue to provide the proper training and encourage volunteers and municipal employees to attain a minimum of eight (8) CEU training credits annually;
- c. Appoint additional interested community representatives to the Shade Tree Commission, while retaining and developing existing representatives;

- e. Ensure additional training in the assessment of trees, and;
- f. Continue to encourage education through the use of on-line arboricultural resources by both municipal employees and Shade Tree Department members.
- 9.C.4. Goal Number 4. *Maintain enforcement and compliance with existing tree-related ordinances, and evaluate ordinance needs in response to new technical and logistical information.*

As this Plan comes to the end of its term, the Borough will review how past ordinances or newly created ordinances within the 1/1/2020 - 12/31/2024 timeframe made a difference on the management of Matawan's tree cover. Any modifications or new ideas regarding the enforcing of tree related ordinances will be discussed with the Forester while writing the new CFMP.

- a. Enforce existing tree-related ordinances;
- b. Have inspections of commercial properties and major subdivisions performed by a qualified Certified Forester, Arborist or NJ Certified Tree Expert, Planning and Engineering Department.
- c. Monitor for new arboricultural threats and management information, and;
- d. Create and/or modify tree-related ordinances in response to any new information or threats.
- e. Reach out to a qualified Forester to prepare the next five-year CFMP for the period of 1/1/25-12/31/29.
- 9.C.5. Goal Number 5. Conduct annual hazard identification and implement hazard mitigation as needed and appropriate to resource availability to minimize conflicts between trees and sidewalks.

Fifth Year Objectives:

- a. Continue to provide or facilitate yearly hazard tree evaluation training for those Shade Tree Commission members and municipal employees with tree identification and / or maintenance responsibilities;
- b. Maintain professional urban forester or Certified Arborist oversight of yearly assessment of hazard trees where possible;
- c. Conduct annual hazard tree assessment of public properties during the late fall / early winter period (leaf-off conditions). Operation to be conducted as a visual survey from a vehicle (e.g. along ROW) or on foot (within parkland and other municipal properties) as resources allow, and;
- d. Continue to encourage all volunteers and municipal employees to immediately report any observed hazardous conditions.
- 9.C.6. Goal Number 6. Develop a strategic tree inventory to encourage proper stewardship of the current forested areas and retention of the largest, older trees on both public and private property.

Fifth Year Objectives:

- a. If inventory has been completed, use retained Certified Tree Expert to analyze inventory data, develop management recommendations and integrate into software database;
- b. Maintain inventory data, track all tree removals and maintenance actions;
- c. Modify planting, hazard, and maintenance programs based upon developed inventory data, and:
- d. Continue to identify prospective tree planting sites individually or by area.

10. Community Stewardship Incentive Program (CSIP)

The fifteen (15) items listed below as a part of the Community Stewardship Incentive Program (CSIP) have been identified throughout this plan with current procedures or a recommended course of action.

<u>CSIP #1 Training</u>: The Borough of Matawan does not have CORE trained personnel. As detailed in the plan, it is expected that a minimum of two CORE trained personnel will be involved in the program at all times, and that at least eight CEU credits will be achieved each year. Training opportunities with respect to hazard awareness will be emphasized. Further information can be found in Section 6.

<u>CSIP #2 Community Forestry Ordinance Establishment:</u> The Borough established a Tree Protection Ordinance Chapter. This ordinance creates a permit mechanism that is designed to promote the protection and preservation of certain trees and shrubs. Continued enforcement of these initiatives is a priority in this Plan. Further information can be found in Sections 3 and 9.

<u>CSIP #3 Public Education and Awareness:</u> The Borough's Shade Tree Commission recognizes that public education and support is vital to maintaining a sustainable community forestry program. The Commission plans on continuing an annual Arbor Day celebration, continuing to apply for Tree City USA status and encouraging volunteer participation over the next five years in order to meet this objective. Further information can be found in Sections 7 and 9.

<u>CSIP #4 Arbor Day Activities:</u> The Shade Tree Commission will continue to annually implement an Arbor Day Celebration as it is a central key to maintaining public support. Further information can be found in Sections 3, 7, and 9.

CSIP #5 Tree Inventory: Matawan does not currently have a public tree inventory. The completion of this fundamental component of proactive management is viewed as a priority in the next four years. It is anticipated that this work will be undertaken by either utilizing the services of a paid consultant or utilizing trained volunteer staff depending on the tree budget that is created. Achieving appropriate and sustainable stocking levels of tree canopy in the Borough has been identified as an area of focus. Integration of the inventory data should provide a firmer basis for tree selection and required budget expenditures. Further information can be found in Sections 3 and 9.

<u>CSIP #6 Hazard Tree Assessment:</u> Tree hazard identification is a major area of concern for the Borough considering the overall density of the community and is currently addressed primarily through the use of in-house personnel. This Plan places a strong emphasis on the development of professional oversight of this assessment work and additional formal training of municipal staff. More information can be found in Sections 3, 6, and 9.

<u>CSIP #7 Storm Damage Assessment:</u> At present, tree emergencies are handled by county tree crews, utility tree crews or public works tree crews for downed trees. In the case of any large-scale tree emergencies, Matawan would follow plans developed by Monmouth County or the Office of Emergency Management. No future plans are being considered at this time, although the feasibility and need for such a plan will be evaluated after professional oversight of the hazard tree population. More information can be found in Section 3.

<u>CSIP #8 Tree Maintenance and Removals:</u> At this time, all tree maintenance is tended to by inhouse personnel and is addressed if a complaint is made by the public. Private tree removal requires the issuance of a Borough permit under the existing Tree Protection Ordinance. More information can be found in Section 4 and 9.

<u>CSIP #9 Insect and Disease Management:</u> No formal management plan exists for forest insect and disease management within the Borough. Should an outbreak occur, diagnosis and consultation would be sought from NJ State Department of Agriculture, Rutgers Cooperative Extension Service, or a Certified Tree Expert. In the event of an outbreak, state or federal assistance would be requested. This Plan emphasizes the need to move towards proactive management of insect and disease risk. The completion of the inventory will provide a more accurate assessment of the potential risk.

<u>CSIP #10 Wildfire Protection:</u> No formal Fire Management Plan exists for The Borough of Matawan but part of managing the Community forest is to reduce the overall fuel hazard of the Borough, which will help to protect the Community from potential wildfires. Further information can be found in Sections 3 and 9.

<u>CSIP #11 Tree Planting:</u> Achieving appropriate and sustainable stocking levels of tree canopy in the Borough has been identified as an area of focus. Pending the creation of any tree-related budget, integration of the inventory data should provide a firmer basis for tree selection and further required budget expenditures. Further information can be found in Sections 3 and 9.

<u>CSIP #12 Tree Recycling:</u> The Borough of Matawan has a recycling center and performs annual leaf pickup during the months of October through December. A second leaf pick-up occurs during the Spring in April – June. Recycling of Christmas trees by the Borough occurs in January.. More information can be found in Section 4.

<u>CSIP #13 Sidewalk Maintenance Program:</u> Sidewalk maintenance in the Borough is addressed under several ordinances and protocols, addressed in the Municipal Code. Their interaction with the Community Forestry Program is incorporated by reference.

<u>CSIP #14 Stormwater Management:</u> The Public Works Department of Matawan manages storm water at this time. Any Management that is done is in accordance with the NJDEP recommendations and requirements for storm water management in New Jersey. More information can be found in Sections 4 and 9.

<u>CSIP #15 Other:</u> No other management practices have been identified at the time of this writing. Upon approval by the Community Forestry Council, implementation of the plan will begin and this plan will be reviewed and revised as necessary in the year 2024.

11. Appendix. 4,400 Feet 1,100 2,200 Borough of Matawan boundary (approx.)