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PLANNING COMMISSION MEETING AGENDA REGULAR MEETING

Marianna Perakis, Chair, Lakshmi Malalahalli, Vice Chair
Toby Buechner, Carlton Faison, Tyler Fox, Michael W. Hutson, Tom Krent,
Dave Lambert and John J. Tagle

June 11, 2024

7:00 P.M.

Council Chambers

1. ROLL CALL
2. APPROVAL OF AGENDA
3. APPROVAL OF MINUTES – May 28, 2024
4. PUBLIC COMMENT – For Items Not on the Agenda

PRELIMINARY SITE PLAN APPROVAL

5. PRELIMINARY SITE PLAN APPROVAL (JPLN2024-0009) – Proposed Town Haven Site Condominium, 19 units, South of Wattles, West of Rochester (Parcels 88-20-22-226-023 and 88-20-22-226-024), Section 22, Currently Zoned R-1C (One-Family Residential) District.

OTHER ITEMS

6. PUBLIC COMMENT – For Items on the Agenda
7. PLANNING COMMISSION COMMENT
8. ADJOURN

NOTICE: People with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk by e-mail at clerk@troymi.gov or by calling (248) 524-3317 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations

Televised Live, Government Channel WTRY (10 WideOpenWest and 17 Comcast) Replayed Wednesdays 3:00 pm, 6:00 pm and 11:00 pm

Chair Perakis called the Regular meeting of the Troy City Planning Commission to order at 7:08 (7:06) p.m. on May 28, 2024, in the Council Chamber of the Troy City Hall. Chair Perakis and Vice Chair Malalahalli presented opening remarks relative to the role of the Planning Commission and procedure of tonight’s meeting.

1. ROLL CALL

Present:

Toby Buechner
Carlton M. Faison
Tyler Fox
Michael W. Hutson
Tom Krent
David Lambert
Lakshmi Malalahalli
Marianna Perakis

Absent:

John J. Tagle

Also Present:

R. Brent Savidant, Community Development Director
Salim Huerta Jr., Commercial Project Collaborator
Allan Motzny, Assistant City Attorney
Kathy L. Czarnecki, Recording Secretary

2. APPROVAL OF AGENDA

Resolution # PC-2024-05-027

Moved by: Faison

Support by: Fox

RESOLVED, To approve the agenda as prepared.

Yes: All present (8)

Absent: Tagle

MOTION CARRIED

3. APPROVAL OF MINUTES – May 14, 2024

Resolution # PC-2024-05-028

Moved by: Fox

Support by: Faison

RESOLVED, To approve the minutes of May 14, 2024 Regular meeting as amended.

Yes: Buechner, Faison, Fox, Hutson, Krent, Lambert, Perakis
 Abstain: Malalahalli
 Absent: Tagle

MOTION CARRIED

4. PUBLIC COMMENT – For Items Not on the Agenda

Walt Storrs, 5675 Martell; addressed concerns with existing flooding issues in the Sylvan Glen III subdivision.

PLANNED UNIT DEVELOPMENT

5. PLANNED UNIT DEVELOPMENT (File Number PUD 020 JPLN2023-0021) - CONCEPT DEVELOPMENT PLAN (CDP) AND PRELIMINARY DEVELOPMENT PLAN (PD) APPROVAL – The Village of Hastings PUD, East side of Livernois, North of Square Lake, PIN 88-20-03-301-088, -023, -024, -025 and 88-20-03-351-004, Section 3, Presently Zoned NN (Neighborhood Node “Q”) and R-1B (One Family Residential) Zoning Districts

Mr. Savidant presented a brief background of the Village of Hastings PUD application and addressed the revisions to the application since last reviewed by the Planning Commission at their April 9, 2024 meeting. He said the revised plan addresses concerns relating to the building design and architecture, EVA (Emergency Vehicle Access) access and signage, extension of sidewalks and inclusion of crosswalks and trash pickup arrangement.

In summary, Mr. Savidant asked the Planning Commission to discuss whether the current proposal is consistent with the Master Plan and whether it meets the Site Plan Review Design Standards and the PUD Standards.

Gary Abitheira was present and said he had nothing more to add to the presentation given by the administration.

There was discussion, some comments related to:

- Trash removal arrangement among different housing units.
- Potential to provide right and left hand turning lanes on Livernois.
- Favorable comments on the revised elevations, preservation of historic homes and the applicant’s dedication to work with the Planning Commission.

Mr. Savidant explained the review and approval process of a PUD application. He said the Planning Commission is a recommending body only and that the City Council has the final decision on the application. Mr. Savidant stated a PUD Agreement would be prepared prior to the City Council consideration of the application, noting it is a legal contract between the City and the developer.

Mr. Savidant said numerous email messages received from the public since the April 9 meeting date were provided to the Planning Commission either in the agenda packet or at their seat prior to the beginning of tonight's meeting.

A count was taken to determine the number of persons in the audience who were in support or in opposition of the proposed PUD application. There were 57 residents in opposition; one in support.

Mr. Fox cited data he researched on a U.S. Census survey relating to property values and home sales in communities with a mix of single family and multi-family homes in comparison to communities with only single family homes. The data signifies communities with a mix of single family and multi-family homes have higher property values and higher home sales. Mr. Fox said he is in support of the PUD application.

Resolution # PC-2024-05-029

Moved by: Fox
Seconded by: Malalahalli

WHEREAS, The applicant GFA Development, Inc. seeks Conceptual Development Plan (CDP) and Preliminary Development Plan (PDP) approval for the Village of Hastings Planned Unit Development (PUD), located on the east side of Livernois, north of Square Lake, in Section 3, approximately 6.05 acres in area; and

WHEREAS, The Village of Troy PUD features 3 detached single-family homes, 8 ranch style single family homes, 18 two-story attached homes and 4 single family duplex homes, for a total of 33 residential units; and

WHEREAS, The proposed development accomplishes a significant number of the Standards of Approval as per Section 11.03.B.

BE IT RESOLVED, That the Planning Commission recommends to City Council that Concept Development Plan Approval and Preliminary Development Plan Approval for the proposed Village of Hastings be granted.

Discussion on the motion on the floor.

There was discussion on whether to include a design consideration to have the Engineering Department look into providing left and right hand turning lanes.

Mr. Lambert said he would vote no on the motion to approve because he thinks the application does not meet enough of the PUD Standards.

Vote on the motion on the floor.

Yes: Buechner, Faison, Fox, Krent, Malalahalli, Perakis
 No: Hutson, Lambert
 Absent: Tagle

MOTION CARRIED

PRELIMINARY SITE PLAN APPROVAL

6. PRELIMINARY SITE PLAN APPROVAL (JPLN2023-0031) – Proposed Wattles Square Apartments, South side of Wattles and East of John R (PIN 88-20-24-100-039), Section 24, Zoned NN (Neighborhood Node “F”) Zoning District

Mr. Savidant presented a brief background on the Wattles Square Apartments application and addressed the revisions to the site plan since last considered by the Planning Commission at their April 23, 2024 meeting. He said the applicant has provided transparency calculations that meet the requirements, reconfigured the first level balconies and lower level egress windows to address concerns of safety and aesthetics, and added a bicycle rack on the southwest corner of the north building.

Mr. Savidant asked the Planning Commission to consider in its deliberations the following:

- Compliance with Site Plan Review Design Standards set forth in Section 8.06.
- Evaluation of the revised balcony and egress window design.
- How well the proposed project meets the overall site and building design standards of the Neighborhood Node district.

Some of the comments during discussion among the administration related to:

- Egress window, compliance with Building Code, facilitation of exit in emergencies.
- Dimensions of the lower level walkout area and egress window.
- Stormwater management on site; engineering review during final site plan approval.
- Elevations as relates to ground level and basement.

Present were Richard Atto and Landscape Architect Stacey Hadeed.

Mr. Atto addressed dimensions of the egress window and walkout area, compliance with building codes, and the use of a concrete step and fence gate to facilitate an exit should there be an emergency. He said he is quite comfortable with the safety features provided in case of emergencies. Mr. Atto explained there is drain tile around the whole building and stone and/or pea gravel to facilitate the management of stormwater to the underground parking lot.

There was discussion, some comments related to:

- Number of apartment units required to be compliant with American Disabilities Act (ADA).
- Building Code requirements for bedrooms located in basement/lower level of home.
- Dimensions of walkout area, egress window, step, and fencing.
- Landscape screening/buffering in relation to adjacent single family homes.

A count was taken to determine the number of persons in the audience who were in support or in opposition of the proposed site plan application. There were 61 in opposition; none in support.

Chair Perakis opened the floor for public comment.

The following residents spoke in opposition to the proposed site plan application. The majority of concerns expressed related to: not a fit for the neighborhood; safety, particularly school children; intent of the Zoning Ordinance; traffic congestion; noise and light pollution; loss of privacy; mail delivery; trash removal; walkability and lack of sidewalks; tree preservation; connection to adjacent residential homes; desire for single family homes; transiency of apartment residents; safety of emergency exits; lack of green space.

- Peter Wilkins, 3905 Wayfarer; submitted signed petition.
- Susan Kuhn, 2172 E. Wattles.
- Colleen Helmick, 4151 Washington Crescent.
- Fred Przybysz, 3842 Wayfarer.
- Paul Leitheiser, 3897 Wayfarer.
- Padmanabhan Karatha, 2042 Applewood.
- Thiago Podolsky, 3885 Sandpiper.
- Anuratha Battula, 3930 Macaw Drive.
- Sonny Quan, 3922 Macaw Drive.
- Karen Beard, 2034 Applewood.
- Mahesh Patil, 3931 Macaw Drive.
- Katharine Mitropoulos, 3912 Anvil.
- Raja Durairajan, 3911 Macaw Drive.
- Ravi Bhamidipati, 3886 Sandpiper; submitted signed petition.
- Jeff Zaleski, 3791 Wayfarer.
- Theresa Drauch, 4097 Colonial.
- Sushma Guduguntla, 3914 Macaw Drive.
- Jason Zhang, 3953 Wayfarer.
- James Sharland, 3921 Wayfarer.

Chair Perakis closed the floor for public comment.

Mr. Savidant stated the proposed development is permitted by right. He said neither State nor local law requires notification to the public of a proposed by-right development.

Mr. Fox again shared the data of the U.S. Census survey relating to property values and home sales in communities with a mix of single family and multi-family homes. He said it is a false perception that multi-family developments attract crime and unsafe conditions.

Discussion continued on:

- Stormwater management.
- Traffic concerns, consideration to provide a traffic study.
- Connectivity to adjacent single family homes.
- Compliance with Site Plan Review Design Standards; Section 8.06.
- Concerns with transiency of apartment residents.
- Public amenities.
- Intent of Neighborhood Node zoning district.
- By-right development.
- Compliance with photometric plan.

Resolution # PC-2024-05-030

Moved by: Fox

Seconded by: Faison

RESOLVED, That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed Wattles Square Apartments, located on the South side of Wattles, East of John R, Section 24, Zoned NN (Neighborhood Node “F”) Zoning District, be granted, subject to the following:

1. The applicant providing a six (6) foot high privacy fence along the south and east property lines.

Discussion on the motion on the floor.

Section 8.06, 1, b. of the Site Plan Review Design Standards, *Street fronts shall provide a variety of architectural expression that is appropriate in its context and prevents monotony*, was discussed.

Vote on the motion on the floor.

Yes: Faison, Fox, Lambert, Perakis

No: Buechner, Hutson, Krent, Malalahalli

Absent: Tagle

MOTION FAILED

Resolution # PC-2024-05-031

Moved by: Fox

Seconded by: Malalahalli

RESOLVED, That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed Wattles Square Apartments, located on the South side of Wattles, East of John R, Section 24, Zoned NN (Neighborhood Node “F”) Zoning District, be postponed, for a full board in attendance.

Yes: Buechner, Faison, Fox, Krent, Lambert, Malalahalli, Perakis
 No: Hutson
 Absent: Tagle

MOTION CARRIED

The Board members encouraged the applicant to provide a privacy fence on the south and east property lines, a general traffic study, a variety of architectural expression for the units that front Wattles, and a colored rendering.

Chair Perakis called for a recess at 9:45 p.m. The meeting reconvened at 9:58 p.m.

SPECIAL USE APPROVAL

- 7. PUBLIC HEARING - SPECIAL USE APPROVAL AND PRELIMINARY SITE PLAN REVIEW (SU JPLN2024-0006) – Proposed Jax Kar Wash, South side of Long Lake, East of Livernois (102 East Long Lake Road), Section 15, Currently Zoned NN (Neighborhood Node “M”) Zoning District

Mr. Lambert disclosed that his daughter is employed at the day care center east of the subject site. The Board members agreed there is no conflict of interest.

Mr. Savidant reviewed the Special Use Approval and Preliminary Site Plan application for a Jax Kar Wash. He addressed the number of vacuum spaces and stacking spaces, the proliferation of car washes in the City and the use of a water reclamation/recycling system.

Mr. Savidant referenced the applicant’s responses on the proposed number of vacuum stations, the use of a water reclamation/recycling system, and the proliferation of car washes in the City. He read into the record the applicant’s responses as cited on pages 5, 7 and 9 of the Planning Consultant Report dated May 21, 2024.

Mr. Savidant stated that while the subject property is still in the Neighborhood Node (NN) zoning district, the future land use for this site was removed from the Neighborhood Nodes in the newly adopted version of the Master Plan, and underlying zoning of those Neighborhood Nodes are to be determined.

Mr. Savidant asked the Planning Commission to consider in its deliberations the proposed use, consumer demand, and to consider any testimony heard at the public hearing. In summary, Mr. Savidant asked the Planning Commission to consider if the application is compliant with the Special Use and Site Plan Review Design Standards and to ask the applicant’s consideration to use a water reclamation/recycling system.

Some of the comments during discussion among the administration related to:

- Impact of car wash water on stormwater management.
- Administration encourages a water reclamation/recycling system as a condition to Special Use approval.
- Potential of noise pollution, specifically quality of sound.
- Future study by the Planning Commission to discuss underlying zoning for those Neighborhood Node districts eliminated from the Master Plan.

Present to represent Jax Kar Wash were Todd Gesund, Vice President and Director of Expansion; Jon Zimmerman, CEO; and Bruce Milen, second generation owner and Chairman of the Board. Also present was Civil Engineer Jim Butler of PEA.

In their presentation, the gentlemen collectively addressed:

- A brief history of the Jax Kar Wash.
- Unlimited club membership.
- Number of locations.
- Mitigation of noise pollution.
- Site circulation, stacking spaces and vacuum stations.
- Landscaping/buffer for residential.
- Operational hours and peak times.
- Projected number of cars washed daily.
- Traffic; not creating new traffic but complementary traffic.
- Detailed description of a water reclamation/recycling system.
- Bypass of water reclamation/recycling system, at peak times.
- Not one location closed to date in over 70 years of business.
- Stormwater management.

Ms. Malalahalli voiced concern that the proposed use is not compatible with neighboring residential, commercial, and retail uses. She said the car wash would cause traffic congestion and vehicular traffic could be compromised when pulling into the car wash because of the excessive speed of vehicular traffic on Long Lake. Ms. Malalahalli asked if the applicant has been in contact with the neighboring community.

Mr. Gesund replied they have not reached out to the neighboring community.

PUBLIC HEARING OPENED

- Shirley Evoe, 180 Belhaven, Treasurer of Belzair Homeowners Association; addressed concerns with stormwater run-off from car wash in relation to their neighborhood sewer system, asked for clarification of the height of proposed screening trees, asked if the vacuum storage room is soundproof.
- Jim Stevens, 175 Hampshire; voiced opposition, said the use is not compatible with the neighborhood, nor is it aesthetically pleasing, addressed safety concerns with the amount of traffic, freezing of water onto pavement in the winter.

- Esther Dusenberry, 175 Hampshire; addressed concerns with busy intersection, traffic congestion, and said she’s quite happy to drive 4 to 6 miles to the Rochester car wash location.
- Joan Porter, 396 Belhaven; expressed concerns that the use is not compatible with the neighborhood, suggested a use that would add charm to the neighborhood.
- Therese Dahmer, 5105 Somerton; said it is not a good fit for the neighborhood nor the vision of the neighborhood, would prefer a use more dedicated to the community.
- Mary Ann Tracey, 451 Beldale; addressed concerns with water runoff, would prefer a use that would be an attraction for the community.

PUBLIC HEARING CLOSED

Mr. Butler gave a detailed description of the stormwater management on site. He stated the proposed stormwater system is independent of the residential system. Mr. Butler said the residential buffer exists of a five-foot high concrete screen wall with 8-foot high evergreen trees planted on top of a 4-foot high berm.

Mr. Gesund said the room containing the vacuums is soundproof.

Several members shared their thoughts on the proposed use, as relates to autocentric use, traffic volume, potential noise pollution, screening/buffer from residential and commercial environment on Long Lake.

Resolution # PC-2024-05-032

Moved by: Faison
 Seconded by: Krent

RESOLVED, That Special Use Approval and Preliminary Site Plan Approval for the proposed Jax Kar Wash, South side of Long Lake, East of Livernois (102 East Long Lake), Section 15, Currently Zoned NN (Neighborhood Node “M”) District, be granted, subject to the following condition:

1. The applicant adding a water reclamation system.

Discussion on the motion on the floor.

Mr. Lambert said although he has mixed feelings on the proposed development, he will vote favorably because Jax Kar Wash has proven to be a good citizen, and he noted the subject property has been vacant for a very long time.

Chair Perakis said she also has mixed feelings. She said the applicant gave an impressive presentation, and it appears the homeowners’ association is okay with the use as long as their neighborhood stormwater system is not compromised.

Vote on the motion on the floor.

Yes: Buechner, Faison, Hutson, Krent, Lambert, Perakis
No: Fox, Malalahalli
Absent: Tagle

MOTION CARRIED

OTHER ITEMS

8. PUBLIC COMMENT – For Items on the Agenda

Deborah Louzecky, 6327 Donaldson, spoke on Agenda Item #5, The Village of Hastings PUD. She addressed a desire that the proposed development created more of a village-like or downtown environment.

9. PLANNING COMMISSION COMMENT

There were general Planning Commission comments, some comments related to:

- Planning Commission access to public comment.
- Progress on hotel development at I-75 and Rochester Road.
- Compaction of trash in multi-family residential development.
- Proposed development at former K-Mart Headquarters property; informal presentation by applicant in June.

Mr. Savidant announced that the City Council adopted the Master Plan at their May 20, 2024 meeting. He shared information on a Michigan Association of Planners (MAP) meetup site visit at Palmer Park and a nearby LGBTQ community in Detroit.

10. ADJOURN

The Regular meeting of the Planning Commission adjourned at 11:26 p.m.

Respectfully submitted,

Marianna J. Perakis, Chair

Kathy L. Czarnecki, Recording Secretary

ITEM #5

DATE: May 6, 2024

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: PRELIMINARY SITE PLAN APPROVAL (JPLN2024-0009) – Proposed Town Haven Site Condominium, 19 units, South of Wattles, West of Rochester (Parcels 88-20-22-226-023 and 88-20-22-226-024), Section 22, Currently Zoned R-1C (One-Family Residential) District.

The petitioner Tableau by Mondrian submitted the above referenced Preliminary Site Plan application for a 19-unit site condominium, comprised of one family detached homes. The Planning Commission is authorized to approve Preliminary Site Plans for site condominiums.

The attached report prepared by Carlisle/Wortman Associates, Inc. (CWA), the City's Planning Consultant, summarizes the project. CWA prepared the report with input from various City departments including Planning, Engineering, Public Works and Fire. City Management supports the findings of fact contained in the report and the recommendations included therein.

Attachments:

1. Maps
2. Report prepared by Carlisle/Wortman Associates, Inc.

PROPOSED RESOLUTION

PRELIMINARY SITE PLAN APPROVAL (JPLN2024-0009) – Proposed Town Haven Site Condominium, 19 units, South of Wattles, West of Rochester (Parcels 88-20-22-226-023 and 88-20-22-226-024), Section 22, Currently Zoned R-1C (One-Family Residential) District.

Resolution # PC-2024-06-

Moved by:

Support by:

RESOLVED, That Preliminary Site Condominium Approval, pursuant to Article 8 and Section 10.02 of the Zoning Ordinance, as requested for the proposed Town Haven Site Condominium 19 units/lots, South of Wattles, West of Rochester (Parcels 88-20-22-226-023 and 88-20-22-226-024), Section 22, approximately 8 acres in size, Currently Zoned R-1C (One Family Residential) District, be (granted, subject to the following conditions):

_____) or

(denied, for the following reasons: _____) or

(postponed, for the following reasons: _____)

Yes:

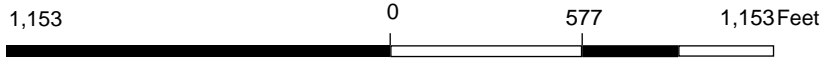
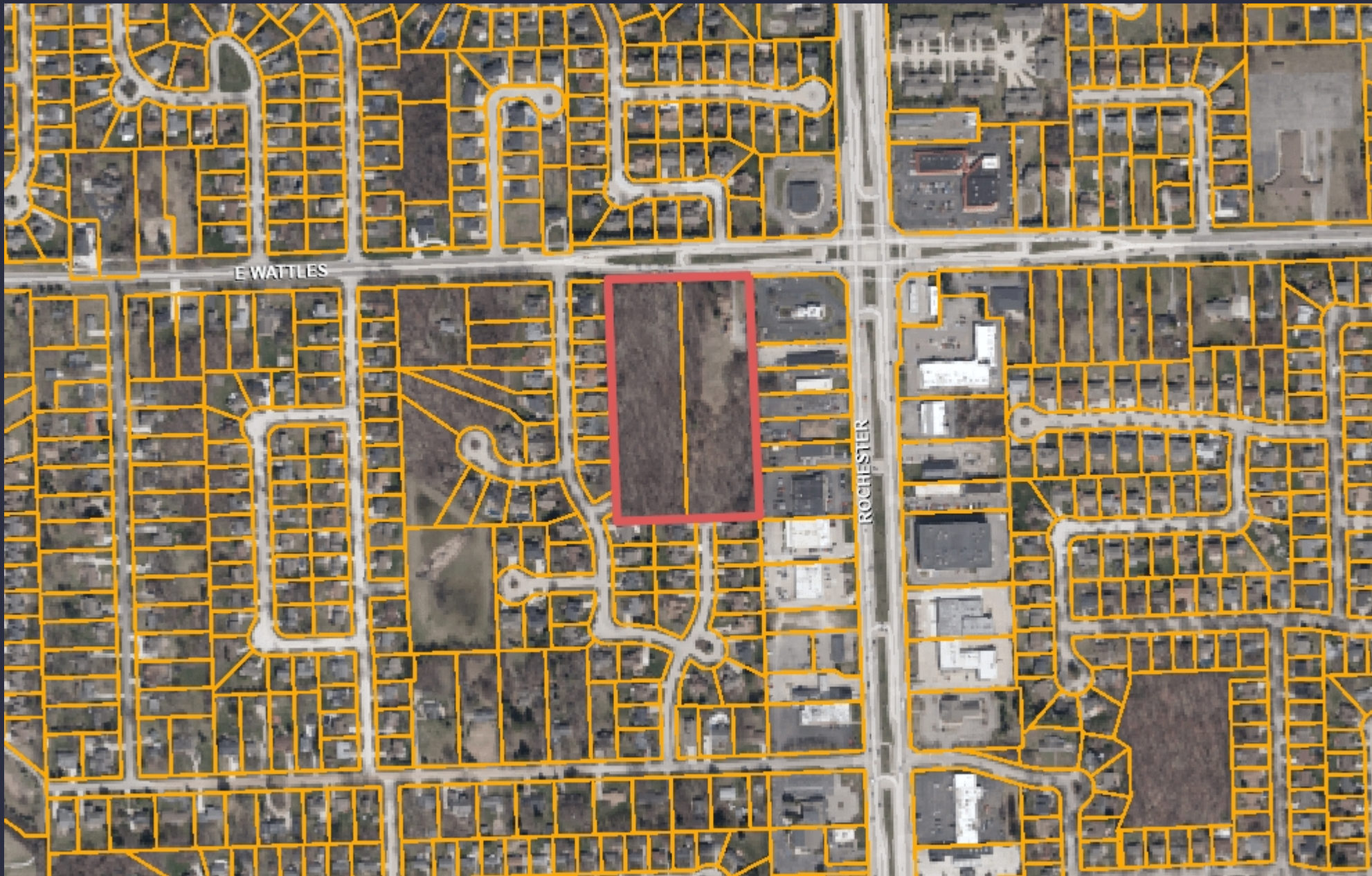
No:

Absent:

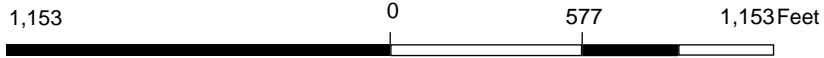
MOTION CARRIED



GIS Online



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.



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Date: April 16, 2024
May 13, 2024

Preliminary Site Plan Review For City of Troy, Michigan

Project Name:	Town Haven
Plan Date:	April 1, 2024
Location:	934 E Wattles Road
Zoning:	R-1C, One-Family Residential District
Action Requested:	Preliminary Site Plan Review

PROJECT AND SITE DESCRIPTION

An application has been submitted to develop nineteen (19) single-family homes across an 8-acre site in the R-1C Zoning District. The site is split between two (2) parcels with frontage on Wattles Road. The existing site is largely undeveloped and encumbered with wetlands and tree cover, with the exception of the northeast corner where there is one (1) single-family home. The existing home and most trees shall be removed for the new development.

The site is accessible via one (1) new public road off of Wattles which begins in the site's northeast corner and ends in a turnaround at the site's south end. Each of the nineteen (19) homes have frontage along the new internal road and a continuous sidewalk allows pedestrian access along the road. Four (4) different housing types are proposed, ranging from ranch style to colonial style homes. The remainder of the site includes a detention basin along the east lot line and trees along the site perimeter and perimeter of the internal road.

Location of Subject Site:



Size of Subject Property:

The site is roughly 8 acres, currently split between two (2) parcels.

Proposed Uses of Subject Site:

Nineteen (19) single-family homes.

Current Use of Subject Site:

The subject site is mostly undeveloped and encumbered with tree cover. One (1) single family residence exists in the site's northeast corner.

Current Zoning:

R-1C, One-Family Residential District.

Surrounding Property Details:

Direction	Zoning	Use
North	R-1C, One-Family Residential District	Single-family homes
South	R-1C, One-Family Residential District	Single-family homes
East	Neighborhood Nodes (“G”) GB- General Business District	Wendy’s A & A Auto Service Monro Brake-Tire Lady Jane’s Haircuts Luxury Kitchens Accounting & Tax Specialists Henderson Glass Apex Jiu-Jitsu Elaine’s Bagels Royal Indian Cuisine Ironclad Tattoo Co.
West	R-1C, One-Family Residential District	Single-family homes

NATURAL RESOURCES

Topography: A topographic survey has been provided on sheet P-1. The site is relatively flat with minor elevation changes.

Wetlands: The survey identifies two (2) wetlands at this site. Wetland “A” is .38 acres and lies in the site’s southeast corner. Wetland “B” is 1.25 acres and lies primarily in the northwest portion of the site. A wetland delineation provided by the applicant confirms that the wetlands on-site are not regulated by the Department of Environment, Great Lakes and Energy (EGLE) because they are less than 5 acres in total size and not within 500 feet of, or directly connected to, an inland lake or stream.

The site does not lie in a floodplain.

Woodlands: Most of the site is undeveloped and encumbered with tree cover. The tree inventory provided identifies almost 1,000 existing trees on site. Of those identified, 129 are Woodland trees and 8 are Landmark trees. The remainder are either invasive species or in poor condition, and shall be removed by the applicant. Tree replacement details are outlined in the table below.

Replacement Details		
Protected Tree	Inches Removed	Replacement Required
Landmark	146 inches	146 inches
Woodland	904 inches	452 inches
Preservation/Mitigation	Inches Preserved	Credit

Landmark	54 inches	108 inches
Woodland	188 inches	376 inches
Total	114 inches required for replacement.	

Items to be Addressed: None.

SITE ARRANGEMENT

The applicant proposes nineteen (19) single-family homes on an 8-acre lot. The minimum lot size is 10,500 square feet and the average lot size is 10,518 square feet. The applicant offers four (4) different housing types: the Halston, Homewood Ranch, Manhattan, and Manor Colonial. Which housing type ends up on each lot shall likely be determined by the purchaser, but this has not been confirmed.

The homes are accessible via a new public 28-foot wide road which begins at the site’s northeast corner. This new road is of cul de sac design, meaning it is a dead end. From its starting point in the northeast, the road turns westbound and then southbound until it reaches the end of the site, wherein a turnaround allows drivers to loop back around towards Wattles. The radius accommodates emergency vehicles. A continuous 5-foot wide concrete sidewalk is provided around the road. The nineteen (19) homes all have frontage along this road.

A detention basin measuring roughly 6,600 square feet is proposed along the east lot line. Trees are provided along the site perimeter and along the perimeter of the internal road.

Items to be Addressed: None.

AREA, WIDTH, HEIGHT, SETBACKS

Regulations for Site Condominium Projects are found in Section 10.02.

	Required	Provided	Compliance
Front	30 feet	30 feet	Complies
Side	10 feet	10 feet	Complies
Rear	40 feet	40 feet	Complies
Building Height	2.5 stories/30 feet	2 stories, less than 30 feet	Complies
Maximum % of Lot Area Covered by Buildings	30%	30%	Complies

Minimum Lot Size Per Dwelling Unit	85 feet wide/ 10,500 SF in area	77.5 feet wide/ 10,518 SF (on average)	Complies / See note below
Minimum Floor Area Per Unit	1,200 square feet	All samples exceed 1,200 sq/ft	Complies

Minimum Lot Size:

The R-1C, One-Family Residential District requires a minimum lot width of 85 feet; however, Section 10.01 of the Zoning Ordinance permits lot width to be reduced by no more than 10%, provided the average width of all lots is at least 10,500 square feet. The proposed lot width reduction to 77.5 feet is compliant with this standard.

Items to be Addressed: None.

SITE ACCESS AND CIRCULATION

Vehicular:

The development will be served by a new twenty-eight (28) foot wide road off of Wattles. The new road begins in the site’s northeast corner and extends to the site’s rear in the south. The road features two-way traffic and is a dead-end; a turnaround at the rear of the site allows drivers to turn around and head back towards Wattles.

One (1) grass paver access is proposed, allowing for access from the private road to the area of the detention basin.

Pedestrian:

The applicant proposes a five (5) foot wide concrete sidewalk along the perimeter of the private road.

Items to be Addressed: None.

STORMWATER

One (1) stormwater detention basin is proposed along the east lot line, measuring roughly 6,600 square feet.

Items to be Addressed: None.

LANDSCAPING

	Required	Provided	Compliance
<u>Greenbelt:</u> 1 deciduous tree per 30 lineal feet, or fraction thereof, of frontage abutting a public road right-of-way	Wattles: $454 \text{ LF}/30 = 15 \text{ trees}$	15 trees	Complies
<u>Internal Street Landscaping:</u> 1 tree per 50 lineal feet of internal public or private street	$2011 \text{ LF}/50 = 40 \text{ trees}$	40 trees	Complies
<u>Tree Replacement:</u> Woodland: for trees with DBH 6 inches or larger, 50% of the original DBH removed Landmark: 100% of original DBH removed	114 inches	114 inches	Complies

Stormwater Detention:

A detention basin measuring roughly 6,600 square feet is proposed along the site’s east lot line.

Items to be Addressed: None.

ELEVATIONS AND FLOOR PLANS

Floor Plans:

The Halston

The first floor of the Halston is 1,901 square feet. The front door and garage are accessed via the front façade and the first floor features a foyer area, mud room, laundry room, family room, kitchen, dining room, one (1) bedroom, two (2) restrooms, one (1) 12x15 “flex space” room, and a covered patio in the backyard. Dimensions are provided for some rooms and not for others; for example, the size of the garage is unclear.

Plans indicate that there are two (2) optional second floor plans for the Halston. Optional second floor plan #1 measures 475 square feet and includes a second bedroom, third restroom, and loft area. Optional second floor plan #2 measures 724 square feet and includes two (2) additional bedrooms, one (1) additional restroom, and loft area.

Homewood Ranch

The first floor of the Homewood Ranch is 1,990 square feet. The front door and 2-car garage are accessed via the front façade and the first floor features a foyer area, great room, kitchen/nook, laundry room, three (3) bedrooms, and three (3) restrooms. An optional second floor plan measures 523 square feet and features two (2) additional bedrooms, one (1) additional restroom, and one (1) walk-in closet.

The Manhattan

The Manhattan is a two-story home with 1,897 square feet on the first floor and 1,677 square feet on the second floor. The first floor features a foyer area, living room, dining room, great room, kitchen/nook, laundry room, great room, and one (1) restroom. A 3-car garage is also connected to the first floor. The second floor features four (4) bedrooms, three (3) restrooms, and multiple walk-in closets.

Manor Colonial

The Manor Colonial is a 2,900 square foot two-story home. The first floor measures 1,638 square feet and the second floor measures 1,350 square feet. The first floor features a foyer area, mud room, dining/living room, great room, laundry room, kitchen/nook, study, one (1) restroom, and a 2-car garage. The second floor features four (4) bedrooms, two (2) restrooms, and two (2) walk-in closets.

Elevations:

The applicant states that no building shall exceed two (2) stories in height. The proposed building height for each housing type is as follows:

- The Manhattan: 26 feet – 6 ½ inches
- Manor Colonial: 25 feet – 6 ½ inches
- Halston Ranch: 20 feet – 10 15/16 inches
- Homewood Ranch: 17 feet – 4 ½ inches

Building Materials:

Building materials are described as dimensional shingles, Hardie plank siding, brick, stone, and vinyl windows. The applicant states that “various colors” shall be used, but does not refer to any specific colors. We recommend the applicant provide colored renderings to present to the Planning Commission.

Items to be Addressed: Provide colored renderings to present to the Planning Commission.

SITE PLAN REVIEW STANDARDS

Section 8.06 outlines Site Plan Review Design Standards.

1. *Development shall ensure compatibility to existing commercial districts and provide a transition between land uses.*

- a. *Building design shall enhance the character of the surrounding area in relation to building and parking placement, landscape and streetscape features, and architectural design.*
 - b. *Street fronts shall provide a variety of architectural expression that is appropriate in its context and prevents monotony.*
 - c. *Building design shall achieve a compatible transition between areas with different height, massing, scale, and architectural style.*
2. *Development shall incorporate the recognized best architectural building design practices.*
- a. *Foster a lasting impact on the community through the provision of high quality design, construction, and detailing.*
 - b. *Provide high quality, durable materials, such as but not limited to stone, brick, glass, and metal. E.I.F.S. or material equivalent shall only be used as an accent material.*
 - c. *Develop buildings with creativity that includes balanced compositions and forms.*
 - d. *Design roofs that are appropriate to the architectural style of the building and create an appropriate visual exterior mass of the building given the context of the site.*
 - e. *For commercial buildings, incorporate clearly defined, highly visible customer entrances using features such as canopies, porticos, arcades, arches, wing walls, ground plane elements, and/or landscape planters.*
 - f. *Include community amenities that add value to the development such as patio/seating areas, water features, art work or sculpture, clock towers, pedestrian plazas with park benches or other features located in areas accessible to the public.*
3. *Enhance the character, environment and safety for pedestrians and motorists.*
- a. *Provide elements that define the street and the pedestrian realm.*
 - b. *Create a connection between the public right of way and ground floor activities.*
 - c. *Create a safe environment by employing design features to reduce vehicular and pedestrian conflict, while not sacrificing design excellence.*
 - d. *Enhance the pedestrian realm by framing the sidewalk area with trees, awnings, and other features.*
 - e. *Improve safety for pedestrians through site design measures.*

Items to be Addressed: *Planning Commission to consider if site plan standards have been met.*

Town Haven
May 13, 2024

RECOMMENDATIONS

The Planning Commission shall consider whether the proposed project meets the Site Plan Review Design Standards.

Sincerely,



CARLISLE/WORTMAN ASSOC., INC.
Benjamin R. Carlisle, AICP, LEED AP
President



CARLISLE/WORTMAN ASSOC., INC.
Shana Kot
Community Planner

INTRODUCING

Town Haven



March 28, 2024

Project Developer:

Tableau by Mondrian

50215 Schoenherr Road
Shelby Township, MI 48315

Attn: Joseph Maniaci
586-726-7350
jmaniaci@mondrianproperties.com

Development Team Consultant:

Civil Engineer:

PEA Group
John Thompson, PE
2430 Rochester Court
Troy, MI 48083
844-813-2949

Site Data:

Parcel Size:
8 Acres

Location:
South Side of Wattles, West of
Rochester Road within the City
of Troy, MI

TOWN HAVEN

Dear Members of the Planning Commission:

We are grateful for the opportunity to present Town Haven, comprising 19-unit single-family residential homes. As part of Mondrian Properties, the parent company of our evolved Tableau by Mondrian division, we take pride in our extensive experience and commitment to excellence. With a legacy of constructing over 50 communities, predominantly within the City of Troy, our dedication speaks volumes.

Our mission for this site is to collaborate closely with the local community while delivering a captivating new development. We are enthusiastic about this project and the chance to introduce innovative housing options to Troy's residents.

Our team at Tableau comprises seasoned professionals who understand the intricacies of such projects. With our collective expertise and unwavering dedication to quality, we are confident in managing this project with great respect, care, and integrity for the surrounding community. We remain committed to working alongside neighboring homeowners to ensure a smooth development and building process.

Sincerely,

Tableau by Mondrian

Fact Sheet:

- 8.00 +/- Acres Site
- Zoning R1-C, Cluster Option
- 19 Single Family Homes
- Lot Sizes Approximately 77' and 120'
- Ranch, Story & Half and Colonial Home Styles
- Sizes from 1900-2900 Square Feet
- Development Start Fall 2024
- 36 Month Construction Period
- Off Site Model Homes Initially
- Tree Replacement Plan
- 1.5 Acres (18%) of Open Space

**CITY OF TROY
PRELIMINARY SITE PLAN APPLICATION**

CITY OF TROY PLANNING DEPARTMENT
500 W. BIG BEAVER
TROY, MICHIGAN 48084
248- 524-3364
FAX: 248-524-3382
E-MAIL: planning@troymi.gov



PRELIMINARY SITE PLAN REVIEW FEE
\$1,000.00
ESCROW FEE
\$1,500.00
ADMINISTRATIVE SITE PLAN REVIEW FEE
\$300.00

REGULAR MEETINGS OF THE CITY PLANNING COMMISSION ARE HELD ON THE SECOND AND FOURTH TUESDAYS OF EACH MONTH AT 7:00 P.M. AT CITY HALL.

PLEASE FILE A COMPLETE PRELIMINARY SITE PLAN APPLICATION, TOGETHER WITH THE APPROPRIATE FEE, NOT LESS THAN THIRTY (30) DAYS PRIOR TO THE DATE OF THAT MEETING.

-
1. NAME OF THE PROPOSED DEVELOPMENT: Town Haven
2. ADDRESS OF THE SUBJECT PROPERTY: 934 E. Wattles Road
3. ZONING CLASSIFICATION OF THE SUBJECT PROPERTY: R-1C
4. TAX IDENTIFICATION NUMBER(S) OF SUBJECT PROPERTY: 20-22-226-024, 20-22-226-023
5. DESCRIPTION OF PROPOSED USE: Single Family Residential Homes

6. APPLICANT:	PROPERTY OWNER:
NAME <u>Joseph Maniaci</u>	NAME <u>(SAME AS APPLICANT)</u>
COMPANY <u>Tableau by Mondrian</u>	COMPANY _____
ADDRESS <u>50215 Schoenherr Road</u>	ADDRESS _____
CITY <u>Shelby Twp.</u> STATE <u>MI</u> ZIP <u>48315</u>	CITY _____ STATE _____ ZIP _____
TELEPHONE <u>586-726-7340</u>	TELEPHONE _____
E-MAIL <u>jmaniaci@mondrianproperties.com</u>	E-MAIL _____

7. THE APPLICANT BEARS THE FOLLOWING RELATIONSHIP TO THE OWNER OF THE SUBJECT PROPERTY:
SAME

8. SIGNATURE OF APPLICANT  DATE 3/28/24

9. SIGNATURE OF PROPERTY OWNER  DATE 3/28/24

PRELIMINARY SITE PLAN SUBMITTAL CHECKLIST

THE FOLLOWING INFORMATION AND MATERIALS ARE NECESSARY FOR SUBMISSION:

- REQUIRED FEE
- ONE (1) CD CONTAINING AN ELECTRONIC VERSION OF THE ENTIRE PRELIMINARY SITE PLAN APPLICATION (PDF Format)

ONE (1) HARD COPY OF THE FOLLOWING:

- COMPLETED CITY OF TROY PRELIMINARY SITE PLAN APPLICATION FORM
- CERTIFIED BOUNDARY SURVEY
- CERTIFIED TOPOGRAPHIC SURVEY

TWO (2) HARD COPIES OF THE FOLLOWING:

- PRELIMINARY SITE PLAN SHOWING PROPOSED SITE LAYOUT AND USES
- PRELIMINARY TREE PRESERVATION PLAN / TREE INVENTORY
- PRELIMINARY LANDSCAPE PLAN
- PRELIMINARY FLOOR PLANS
- PRELIMINARY ELEVATIONS
- PRELIMINARY GRADING PLAN
- PRELIMINARY LIGHTING PLAN
- WETLANDS DETERMINATION, IF REQUIRED

**ALL HARD COPY DRAWINGS SHALL BE FOLDED, STAPLED, SEALED AND SIGNED
BY A STATE OF MICHIGAN PROFESSIONAL ENGINEER, REGISTERED ARCHITECT,
REGISTERED LANDSCAPE ARCHITECT, OR PROFESSIONAL COMMUNITY PLANNER**

PLANNING COMMISSION AGENDAS ARE ELECTRONIC

April 19, 2024

Project Developer:

Tableau by Mondrian

50215 Schoenherr Road
Shelby Township, MI 48315

Attn: Joseph Maniaci
586-726-7350
jmaniaci@mondrianproperties.com

Development Team Consultant:

Civil Engineer:

PEA Group
John Thompson, PE
2430 Rochester Court
Troy, MI 48083
844-813-2949

Site Data:

Parcel Size:
8 Acres

Location:
South Side of Wattles, West of
Rochester Road within the City
of Troy, MI

TOWN HAVEN

Building Materials

Roof - Dimensional Shingles in Various Colors
Siding - Hardie Plank, Various Colors
Brick - General Shale, Various Colors
Stone - Veneer Stonework, Various Shades
Paint - Sherwin Williams, Various Colors
Windows - Vinyl windows, Various Vendors

Building Details

Halsen Ranch:

- First Floor - 1,901 sq. ft.
- Second Floor - Optional 475 - 724 sq. ft.
- Total Sq. Ft. - 1901 - 2625 sq. ft.
- Building Height - 20' - 10 15/16"

Homewood Ranch:

- First Floor - 1,990 sq. ft.
- Second Floor - Optional 523 sq. ft.
- Total Sq. Ft. - 1,990 - 2,513 sq. ft.
- Building Height - 17' - 4 1/2"

Manhattan Colonial:

- First Floor - 1,897 sq. ft.
- Second Floor - 1,677 sq. ft.
- Total Sq. Ft. - 3,574 sq. ft.
- Building Height - 26' - 6 1/2"

Manor:

- First Floor - 1,381 sq. ft.
- Second Floor - 1,507 sq. ft.
- Total Sq. Ft. - 2,988 sq. ft.
- Building Height - 25' - 6 1/2"



HALSTON



ELEVATION "A"



ELEVATION "B"



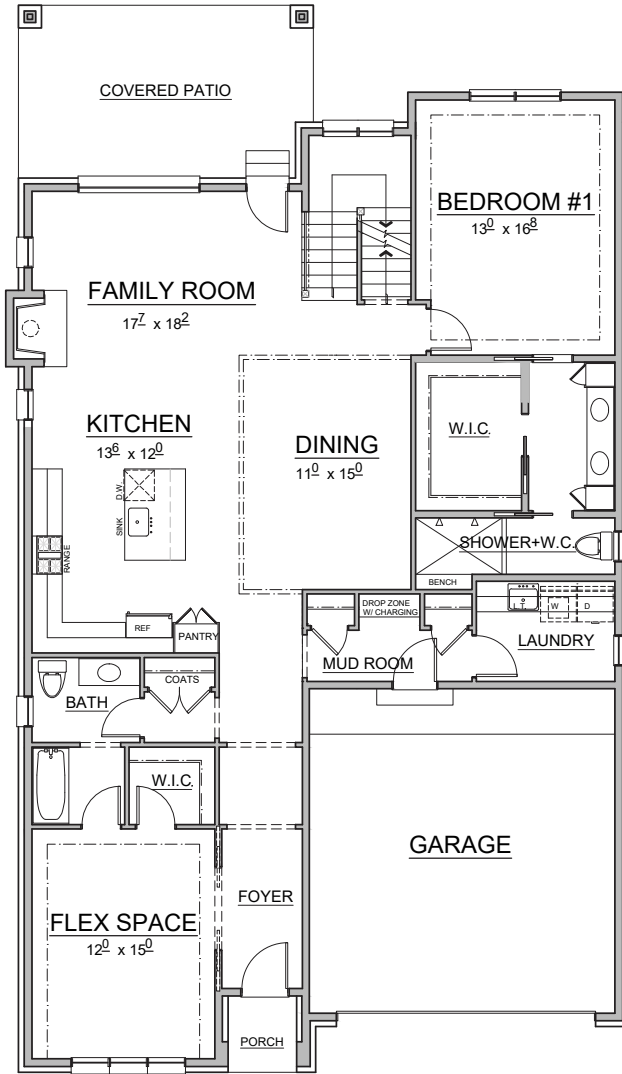
ELEVATION "C"

Builder reserves the right to make changes in prices, specification, materials, floor plans or elevations without notice. All dimensions are approximate. Garage sizes may vary per home site. All floor plans and elevations have copy rights. Renderings are conceptual and may vary. Revised 3.28.24



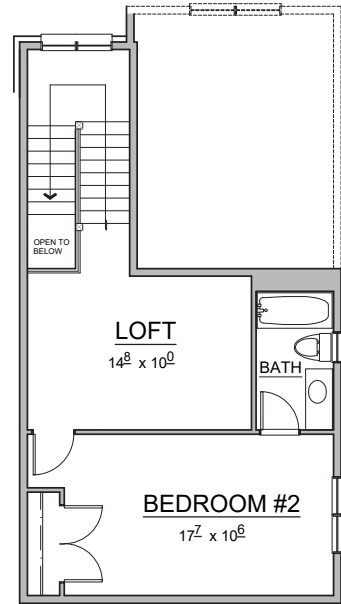
Tableau
by MONDRIAN

HALSTON



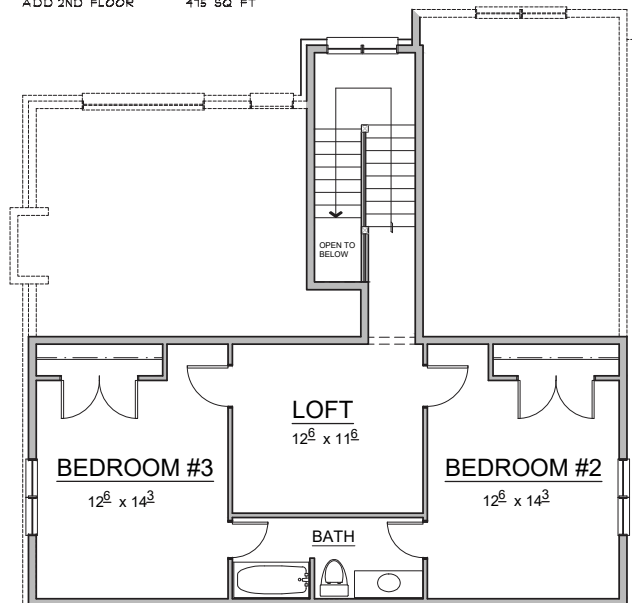
FIRST FLOOR PLAN

SQUARE FOOTAGE
1ST FLOOR 1,901 SQ. FT.



OPTIONAL SECOND FLOOR PLAN #1

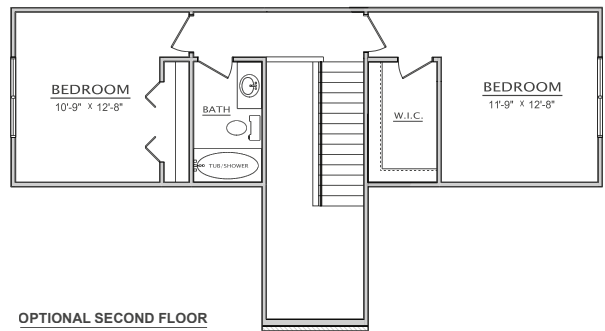
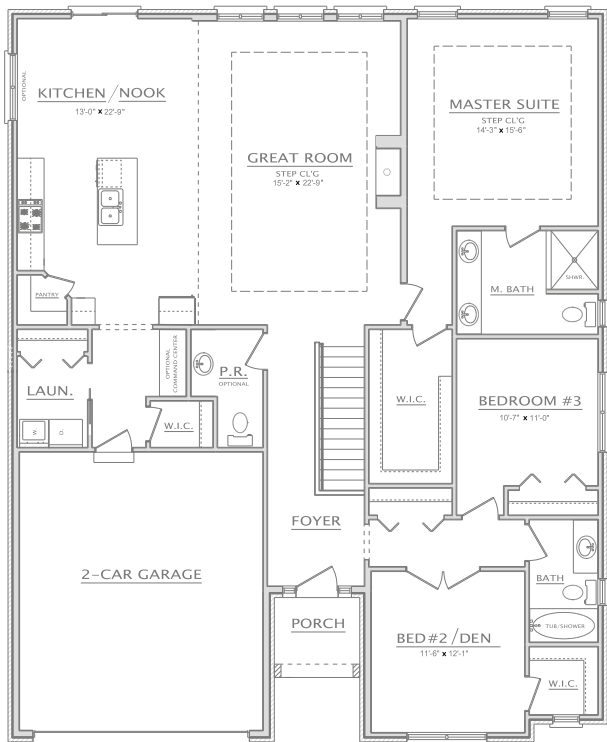
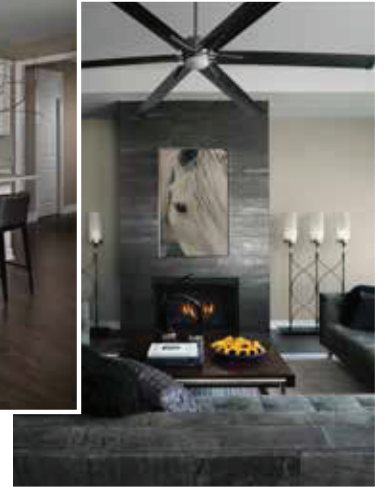
SQUARE FOOTAGE
ADD 2ND FLOOR 415 SQ. FT.



OPTIONAL SECOND FLOOR PLAN #2

SQUARE FOOTAGE
ADD 2ND FLOOR 124 SQ. FT.

Builder reserves the right to make changes in prices, specification, materials, floor plans or elevations without notice. All dimensions are approximate. Garage sizes may vary per home site. All floor plans and elevations have copy rights. Renderings are conceptual and may vary. Revised 3.28.24



HOMEWOOD

RANCH

1990 Sq. Ft.



Tableau

by MONDRIAN



HOMEWOOD RANCH

W/ OPTIONAL SECOND FLOOR
1990 SQFT.



Tableau
by MONDRIAN



Tableau
by MONDRIAN

THE MANHATTAN



FRONT ELEVATION #11



FRONT ELEVATION #12

Builder reserves the right to make changes in prices, specification, materials, floor plans or elevations without notice. All dimensions are approximate. All floor plans and elevations have copy rights. Renderings are conceptual and may vary. Revised 3.28.24



Tableau

by MONDRIAN

THE MANHATTAN



FRONT ELEVATION #13



FRONT ELEVATION #16

Builder reserves the right to make changes in prices, specification, materials, floor plans or elevations without notice. All dimensions are approximate. All floor plans and elevations have copy rights. Renderings are conceptual and may vary. Revised 3.28.24



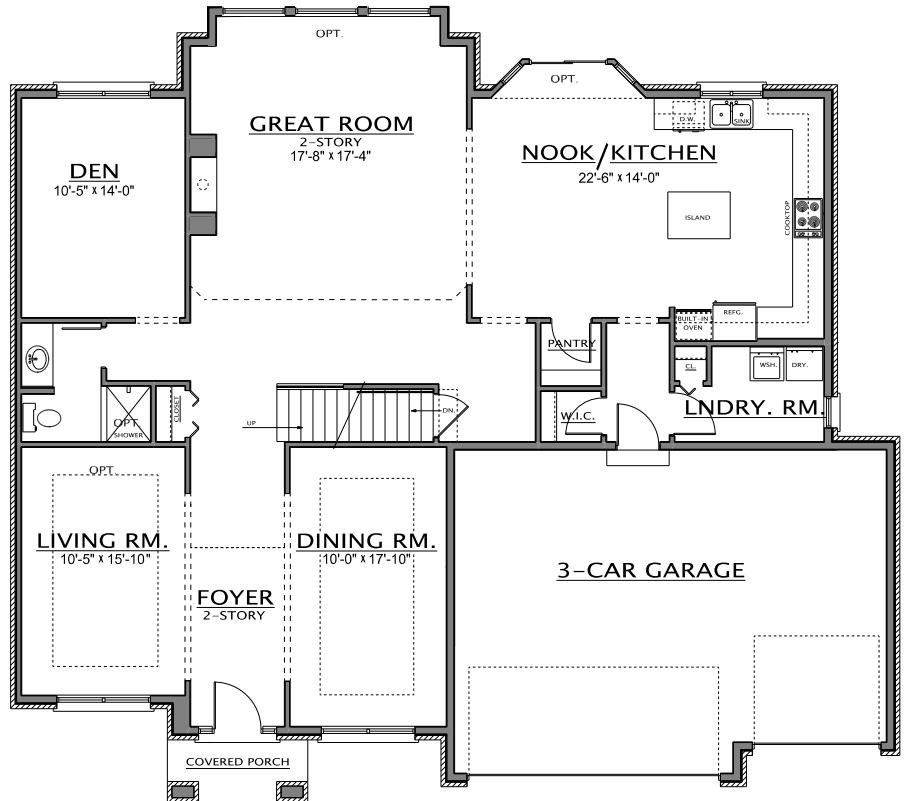
Tableau

by MONDRIAN

THE MANHATTAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN

Builder reserves the right to make changes in prices, specification, materials, floor plans or elevations without notice. All dimensions are approximate. Garage sizes may vary per home site. All floor plans and elevations have copy rights. Renderings are conceptual and may vary. Revised 3.3.24

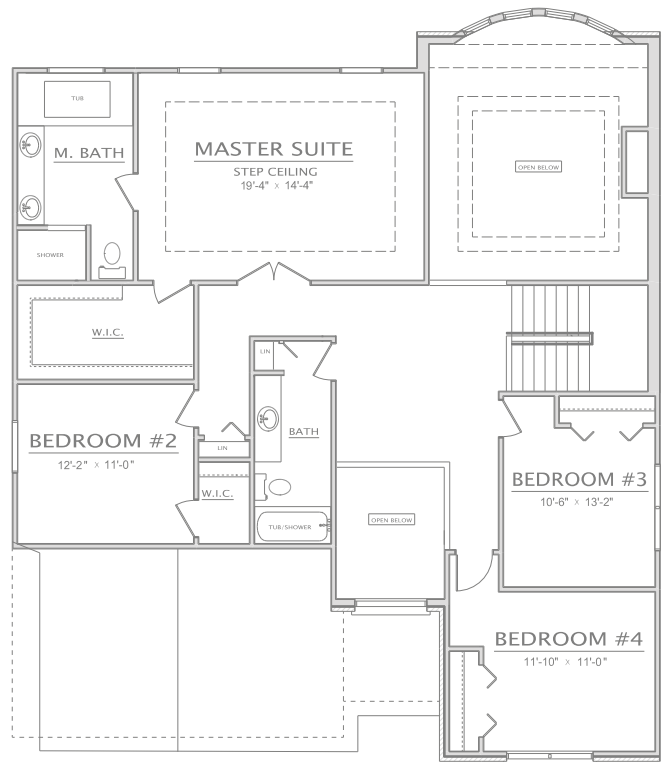
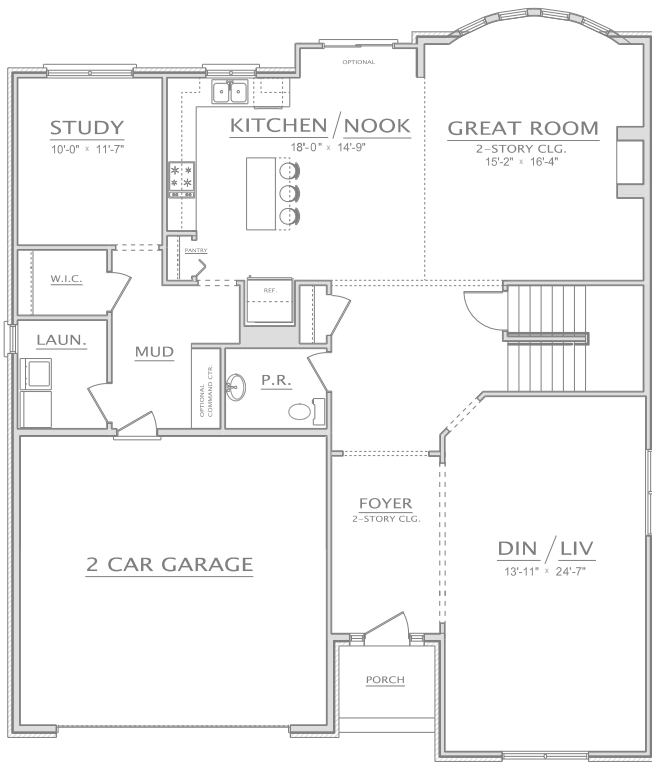
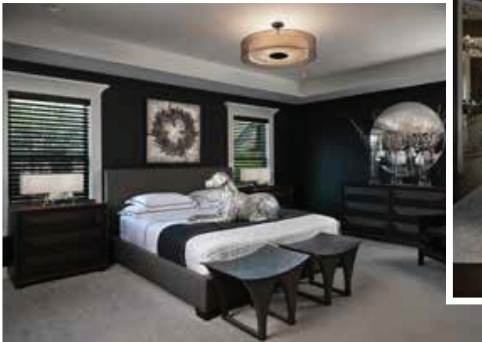
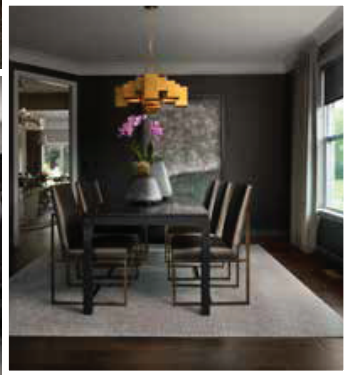
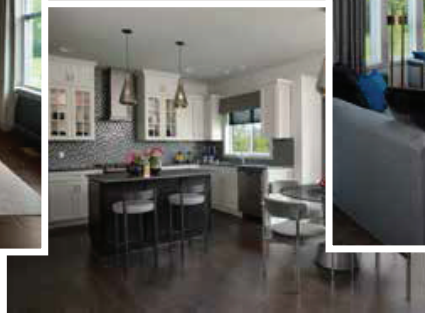


Tableau COLONIAL
 2900 sqft
 by MONDRIAN

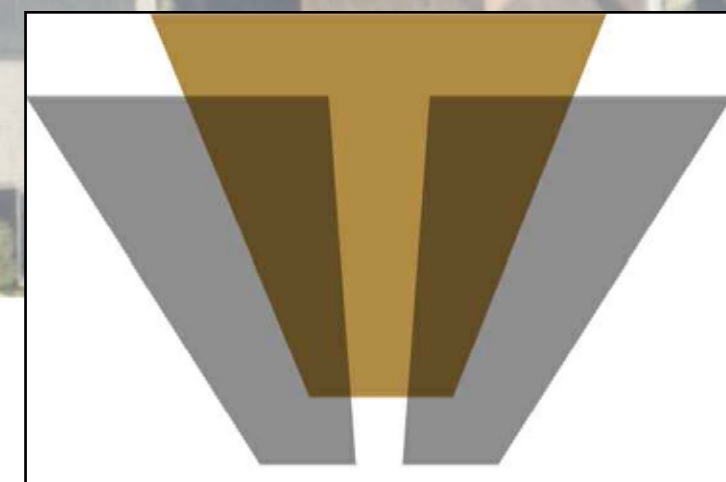
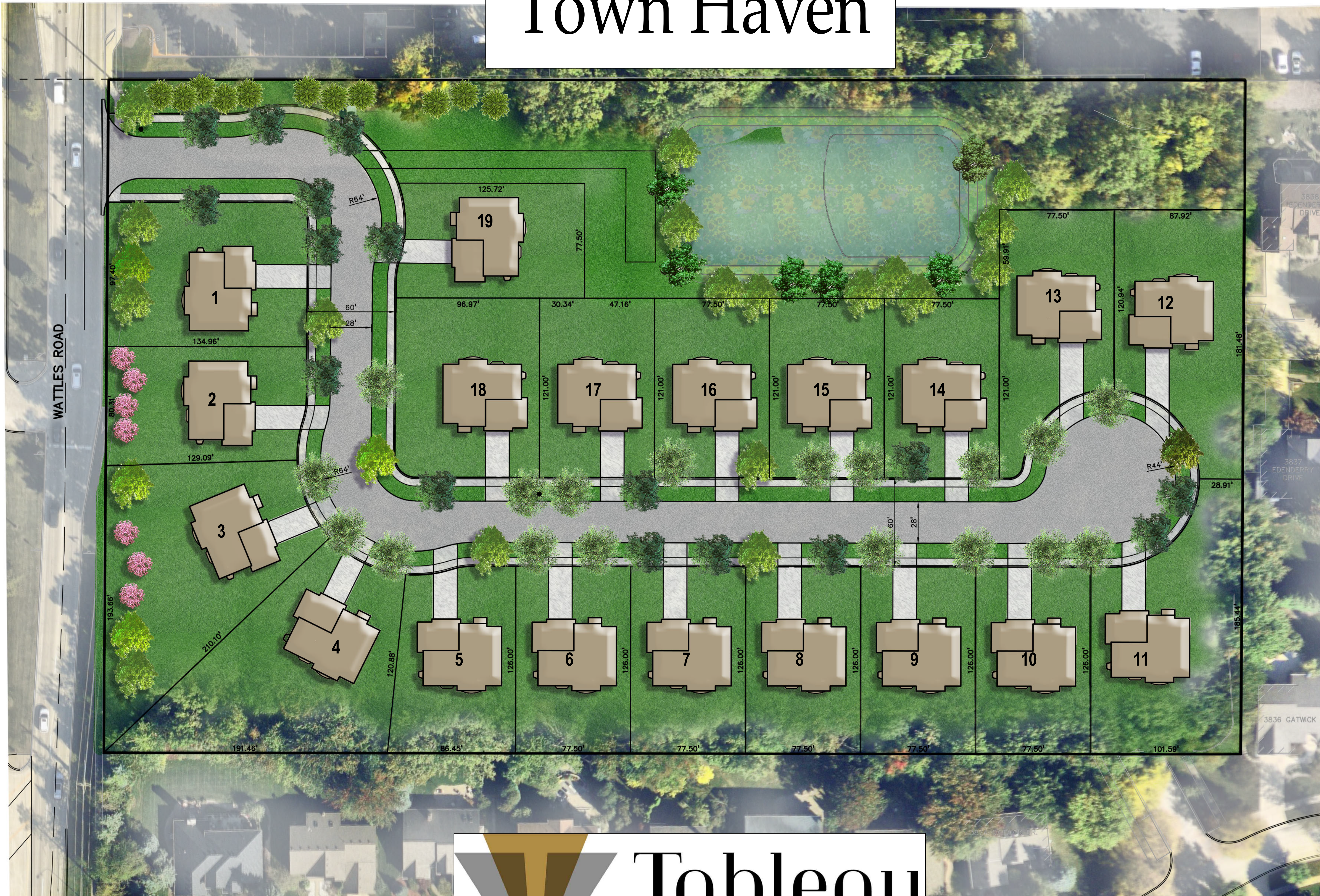
MANOR COLONIAL

2900 sqft



Tableau
by MONDRIAN

Town Haven



Tableau

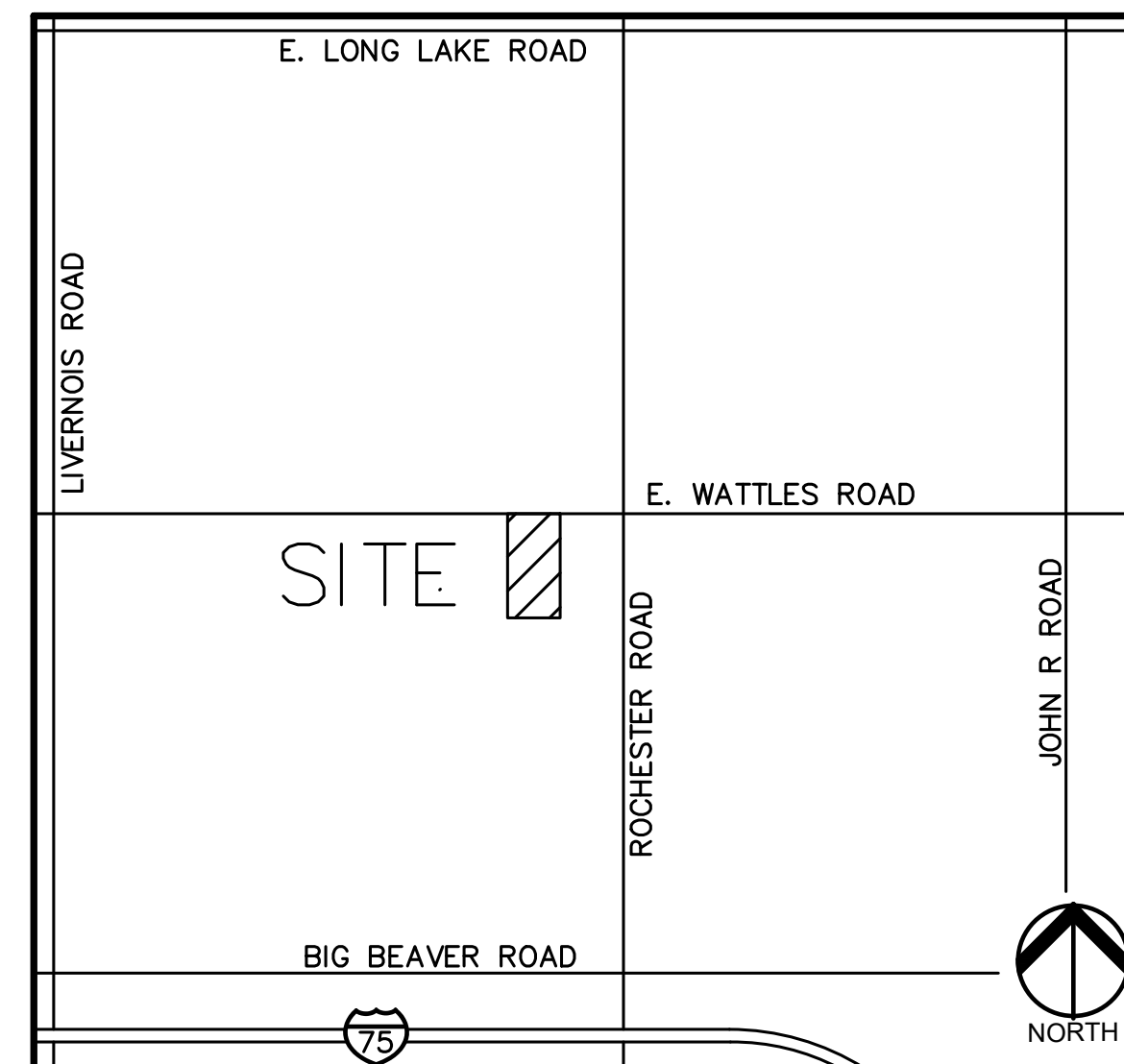
by MONDRIAN

PRELIMINARY SITE PLANS

TOWN HAVEN

934 E. WATTLES
TROY, OAKLAND COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL



LOCATION MAP
NO SCALE

INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
P-1	TOPOGRAPHIC SURVEY
P-2	PRELIMINARY SITE PLAN
P-3	PRELIMINARY GRADING PLAN
P-4	PRELIMINARY UTILITY PLAN
L-1.0	PRELIMINARY LANDSCAPE PLAN
L-1.1	LANDSCAPE DETAILS
T-1.1	TREE PRESERVATION PLAN
T-1.2	TREE PRESERVATION PLAN
T-1.3	TREE PRESERVATION PLAN
T-1.4	TREE PRESERVATION PLAN
T-1.5	TREE PRESERVATION PLAN

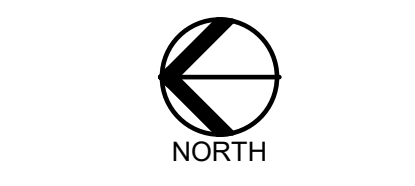
DESIGN TEAM

OWNER/APPLICANT/DEVELOPER	CIVIL ENGINEER
TABLEAU MONDRIAN 50215 SCHOENHERR SHELBY TWP., MI 48315 CONTACT: JOE MANIACI PHONE: 586.726.7350 EMAIL: JMANIACI@MONDRIANPROPERTIES.COM	PEA GROUP 1849 POND RUN AUBURN HILLS, MI 48326 CONTACT: JOHN B. THOMPSON, PE PHONE: 844.813.2949 EMAIL: JTHOMPSON@PEAGROUP.COM
	LANDSCAPE ARCHITECT
	PEA GROUP 7927 NEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: LYNN WHIPPLE, PLA PHONE: 844.813.2949 EMAIL: LWHIPPLE@PEAGROUP.COM



REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	3/29/2024
REVISED PER PLANNING REVIEW COMMENTS DATED 4/17/2024	4/26/2024





CAUTION!!
THE LOCATION AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

LEGEND:

- OH-ELEC—W—O— EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV— EX. U.G. CABLE TV & PEDESTAL
- UG-COMM— EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC— EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER MAIN BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND & BEEHIVE CATCH BASIN
- EX. YARD DRAIN, U.G. ROOF DRAIN & DOWNSPOUT
- EX. UNIDENTIFIED STRUCTURE
- EX. MAILBOX, SIGN, LIGHTPOLE & GUARD POST
- EX. FENCE
- EX. GUARD RAIL
- EX. DEC. TREE, CONIFEROUS TREE & SHRUB
- EX. TREE TAG & TREE LINE
- EX. SPOT ELEVATION
- EX. CONTOUR
- EX. WETLAND

- X IRON FOUND / SET
- NAIL FOUND / NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND / SET
- SECTION CORNER FOUND
- R M C RECORDED / MEASURED / CALCULATED

REFERENCE DRAWINGS:
EDENDERRY SUBDIVISION, MCS ASSOCIATES, INC. DRAWING P-94-523, DATED 4-21-94
ELECTRIC DTE ELECTRIC FACILITY MAP #322-394, DATED 7/17/2017
TELEPHONE AT&T SERVICE MAP PREPARED ON JUNE 21 2017
GAS CONSUMERS ENERGY QUARTER SECTION MAP NO. 02-61-22-1, DATED 05-27-16

LEGAL DESCRIPTION:

PARCEL 1:
(per ATA National Title Group, LLC, File No. 63-17551899-CLN, effective date August 14, 2017).
The land referred to in this commitment is situated in the City of Troy, County of Oakland, State of Michigan, as follows:
Lot 70, Northgate Subdivision, according to the plat thereof as recorded in Liber 44, Page 55 of Plats, Oakland County Records.

PARCEL 2:
(per First American Title Insurance Company, File No. 768617, Commitment date May 26, 2017).
The land referred to in this Commitment, situated in the County of Oakland, City of Troy, State of Michigan, is described as follows:
Lot 71, NORTHGATE SUB, according to the plat thereof as recorded in Liber 44 of Plat, Page 55 of Oakland County Records.

As Surveied:
(per PEA, Inc.)
A parcel of land situated in the City of Troy, Oakland County, State of Michigan, is described as follows:
Lots 70 and 71, "NORTHGATE SUB.", according to the plat thereof as recorded in Liber 44 of Plats, Page 55 of Oakland County Records being more particularly described as:
Part of the Northeast 1/4 of Section 22, Town 3 North, Range 11 East, City of Troy, Oakland County, Michigan; Commencing at the Northeast Corner of said Section 22, thence along the north line of said Section 22, N89°37'00"W, 380.95 feet to the northerly extension of the east line of said Lot 70; thence along said east line extension, S00°00'22"E, 60.00 feet to a point on the south line of Wattles Road (120' wide) and the northeast corner of said Lot 70 also being the Point of Beginning; thence along the east line of said Lot 70, continuing S00°00'22"E, 767.00 feet; thence N89°37'02"W, 454.95 feet; thence N00°02'52"E, 767.00 feet to the south line of said Wattles Road; thence along the south line of said Wattles Road N89°37'00"E, 454.23 feet to the Point of Beginning.
Containing 8.004 acres (348,663 square feet) of land, more or less.

BENCHMARKS
(CITY OF TROY DATUM - NAVD88)

BM #300/CITY OF TROY BM#0709
DIMPLED ARROW ON HYDRANT LOCATED ON THE SOUTH SIDE OF WATTLER ROAD, APPROX. 75± EAST OF THE CENTERLINE OF GATWICK DRIVE.
ELEV. = 673.455

BM #301
GEAR SPIKE IN THE SOUTHWEST FACE OF A POWER POLE LOCATED ON THE SOUTH SIDE OF WATTLER ROAD, APPROX 155± WEST OF THE WEST LINE OF ROCHESTER ROAD.
ELEV. = 669.10

BM #302
DIMPLED ARROW ON HYDRANT LOCATED ON THE SOUTH SIDE OF GATWICK DRIVE, APPROX. 130± NORTH OF THE CENTERLINE OF ISLAND COURT.
ELEV. = 671.44 (NOT SHOWN IN SURVEY)

BM #303
DIMPLED ARROW ON HYDRANT LOCATED ON THE NORTH SIDE OF DEERFIELD COURT, APPROX. 80± EAST OF GATWICK DRIVE.
ELEV. = 672.89

BM #304
DIMPLED ARROW ON HYDRANT LOCATED ON THE SOUTH OF INVERNESS COURT, APPROX. 205± WEST OF GATWICK DRIVE.
ELEV. = 674.18

BM #305
DIMPLED ARROW ON HYDRANT LOCATED ON THE EAST SIDE OF EDENDERRY DRIVE, IN FRONT OF HOUSE #3838 EDENDERRY DRIVE.
ELEV. = 674.16

CLIENT
Tableau
50215 SCHOENHERR
SHELBY TOWNSHIP, MI 48315

PROJECT TITLE
TOWN HAVEN
TROY, MICHIGAN

REVISIONS

REV	PER	COMMENTS	DATE
1	REV	PER COMMENTS 4/17/24	4/26/2024

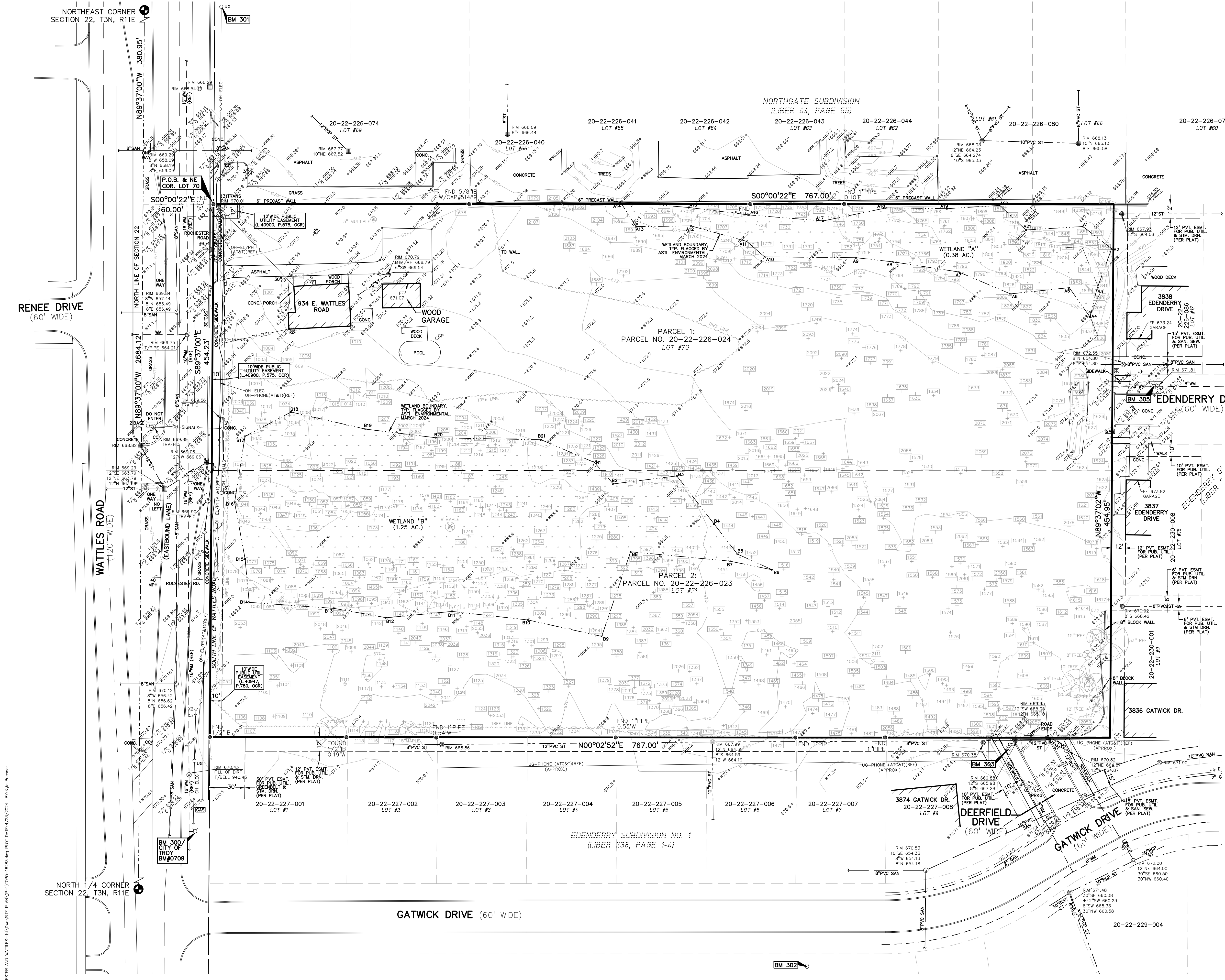
ORIGINAL ISSUE DATE:
MARCH 29, 2024

DRAWING TITLE
TOPOGRAPHIC SURVEY

PEA JOB NO.	16-283
P.M.	JBT
DN.	KMB
DES.	DSK
DRAWING NUMBER:	

NOT FOR CONSTRUCTION

P-1



NORTHEAST CORNER SECTION 22, T3N, R11E

N89°37'00"W 380.95'

BM 301

RENEE DRIVE (60' WIDE)

WATTLER ROAD (120' WIDE)

NORTH 1/4 CORNER SECTION 22, T3N, R11E

BM 300/CITY OF TROY BM#0709

EDENDERRY SUBDIVISION NO. 1 (LIBER 238, PAGE 1-4)

GATWICK DRIVE (60' WIDE)

DEERFIELD DRIVE (60' WIDE)

GATWICK DRIVE (60' WIDE)

20-22-226-074 LOT #69

20-22-226-041 LOT #65

20-22-226-042 LOT #64

20-22-226-043 LOT #63

20-22-226-044 LOT #62

20-22-226-080 LOT #66

20-22-226-072 LOT #60

20-22-226-087 LOT #68

20-22-226-001 LOT #1

20-22-227-002 LOT #2

20-22-227-003 LOT #3

20-22-227-004 LOT #4

20-22-227-005 LOT #5

20-22-227-006 LOT #6

20-22-227-007 LOT #7

20-22-229-004

3874 GATWICK DR 20-22-227-008 LOT #8

3838 EDENDERRY DRIVE

3837 EDENDERRY DRIVE

3836 GATWICK DR.

20-22-226-001 LOT #1

20-22-226-002 LOT #2

20-22-226-003 LOT #3

20-22-226-004 LOT #4

20-22-226-005 LOT #5

20-22-226-006 LOT #6

20-22-226-007 LOT #7

20-22-226-008 LOT #8

20-22-226-009 LOT #9

20-22-226-010 LOT #10

20-22-226-011 LOT #11

20-22-226-012 LOT #12

20-22-226-013 LOT #13

20-22-226-014 LOT #14

20-22-226-015 LOT #15

20-22-226-016 LOT #16

20-22-226-017 LOT #17

20-22-226-018 LOT #18

20-22-226-019 LOT #19

20-22-226-020 LOT #20

20-22-226-021 LOT #21

20-22-226-022 LOT #22

20-22-226-023 LOT #23

20-22-226-024 LOT #24

20-22-226-025 LOT #25

20-22-226-026 LOT #26

20-22-226-027 LOT #27

20-22-226-028 LOT #28

20-22-226-029 LOT #29

20-22-226-030 LOT #30

20-22-226-031 LOT #31

20-22-226-032 LOT #32

20-22-226-033 LOT #33

20-22-226-034 LOT #34

20-22-226-035 LOT #35

20-22-226-036 LOT #36

20-22-226-037 LOT #37

20-22-226-038 LOT #38

20-22-226-039 LOT #39

20-22-226-040 LOT #40

20-22-226-041 LOT #41

20-22-226-042 LOT #42

20-22-226-043 LOT #43

20-22-226-044 LOT #44

20-22-226-045 LOT #45

20-22-226-046 LOT #46

20-22-226-047 LOT #47

20-22-226-048 LOT #48

20-22-226-049 LOT #49

20-22-226-050 LOT #50

20-22-226-051 LOT #51

20-22-226-052 LOT #52

20-22-226-053 LOT #53

20-22-226-054 LOT #54

20-22-226-055 LOT #55

20-22-226-056 LOT #56

20-22-226-057 LOT #57

20-22-226-058 LOT #58

20-22-226-059 LOT #59

20-22-226-060 LOT #60

20-22-226-061 LOT #61

20-22-226-062 LOT #62

20-22-226-063 LOT #63

20-22-226-064 LOT #64

20-22-226-065 LOT #65

20-22-226-066 LOT #66

20-22-226-067 LOT #67

20-22-226-068 LOT #68

20-22-226-069 LOT #69

20-22-226-070 LOT #70

20-22-226-071 LOT #71

20-22-226-072 LOT #72

20-22-226-073 LOT #73

20-22-226-074 LOT #74

20-22-226-075 LOT #75

20-22-226-076 LOT #76

20-22-226-077 LOT #77

20-22-226-078 LOT #78

20-22-226-079 LOT #79

20-22-226-080 LOT #80

20-22-226-081 LOT #81

20-22-226-082 LOT #82

20-22-226-083 LOT #83

20-22-226-084 LOT #84

20-22-226-085 LOT #85

20-22-226-086 LOT #86

20-22-226-087 LOT #87

20-22-226-088 LOT #88

20-22-226-089 LOT #89

20-22-226-090 LOT #90

20-22-226-091 LOT #91

20-22-226-092 LOT #92

20-22-226-093 LOT #93

20-22-226-094 LOT #94

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20-22-226-099 LOT #99

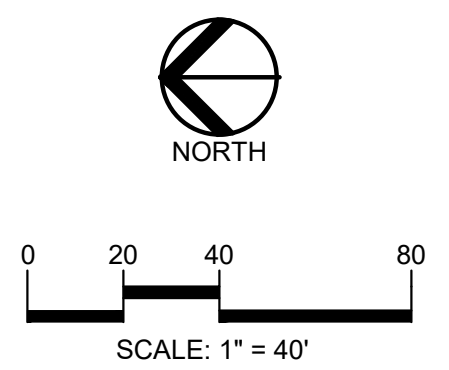
20-22-226-100 LOT #100

LEGEND:

	CONCRETE PAVEMENT
	ASPHALT PAVEMENT
	GRAVEL
	WETLAND
	CONCRETE CURB AND GUTTER
	REVERSE GUTTER PAN
	SETBACK LINE
	SIGN LIGHTPOLE
	FENCE
	GUARD RAIL

Parcel Area Table

PARCEL NO.	AREA (S.F.)
1	13,111
2	10,420
3	17,879
4	16,922
5	9,929
6	9,765
7	9,765
8	9,765
9	9,765
10	9,765
11	15,165
12	13,267
13	11,038
14	10,425
15	9,378
16	9,377
17	9,378
18	11,733
19	9,602
LOT AVG.	11,392



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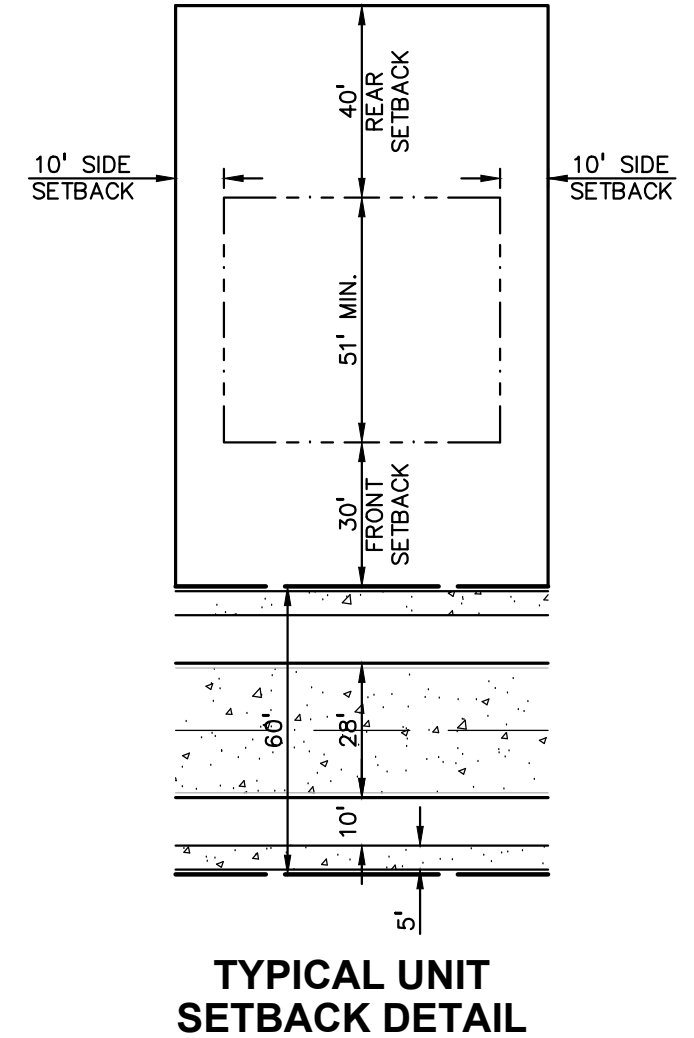
CLIENT
Tableau
50215 SCHOENHERR
SHELBY TOWNSHIP, MI 48315

PROJECT TITLE
TOWN HAVEN
TROY, MICHIGAN

REVISIONS
REV PER COMMENTS 4/17/24 4/26/2024

ORIGINAL ISSUE DATE:
MARCH 29, 2024
DRAWING TITLE
PRELIMINARY SITE PLAN

PEA JOB NO. 16-283
P.M. JBT
DN. KMB
DES. DSK
DRAWING NUMBER:



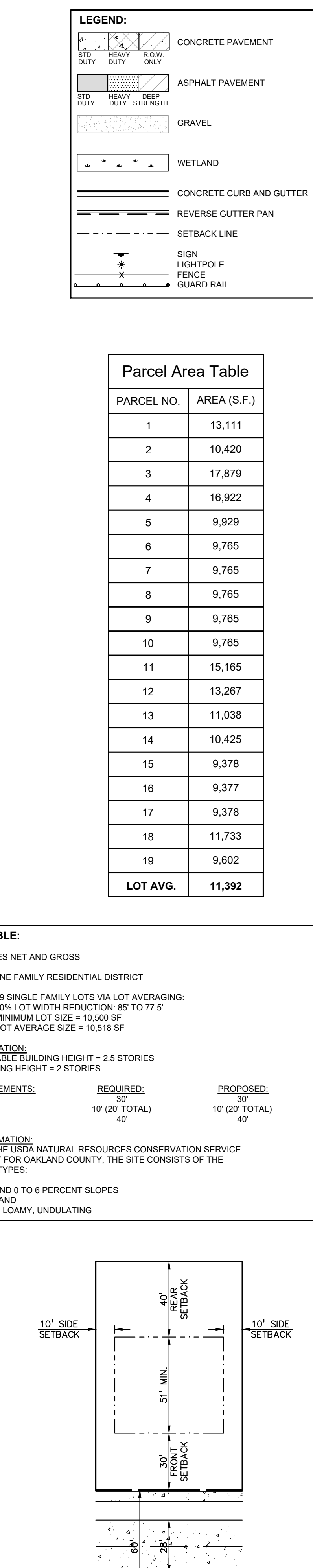
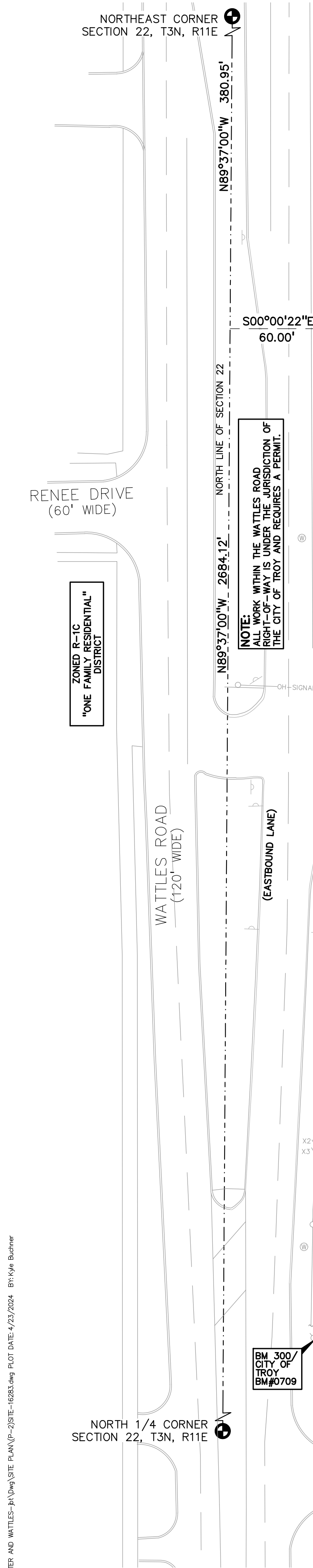
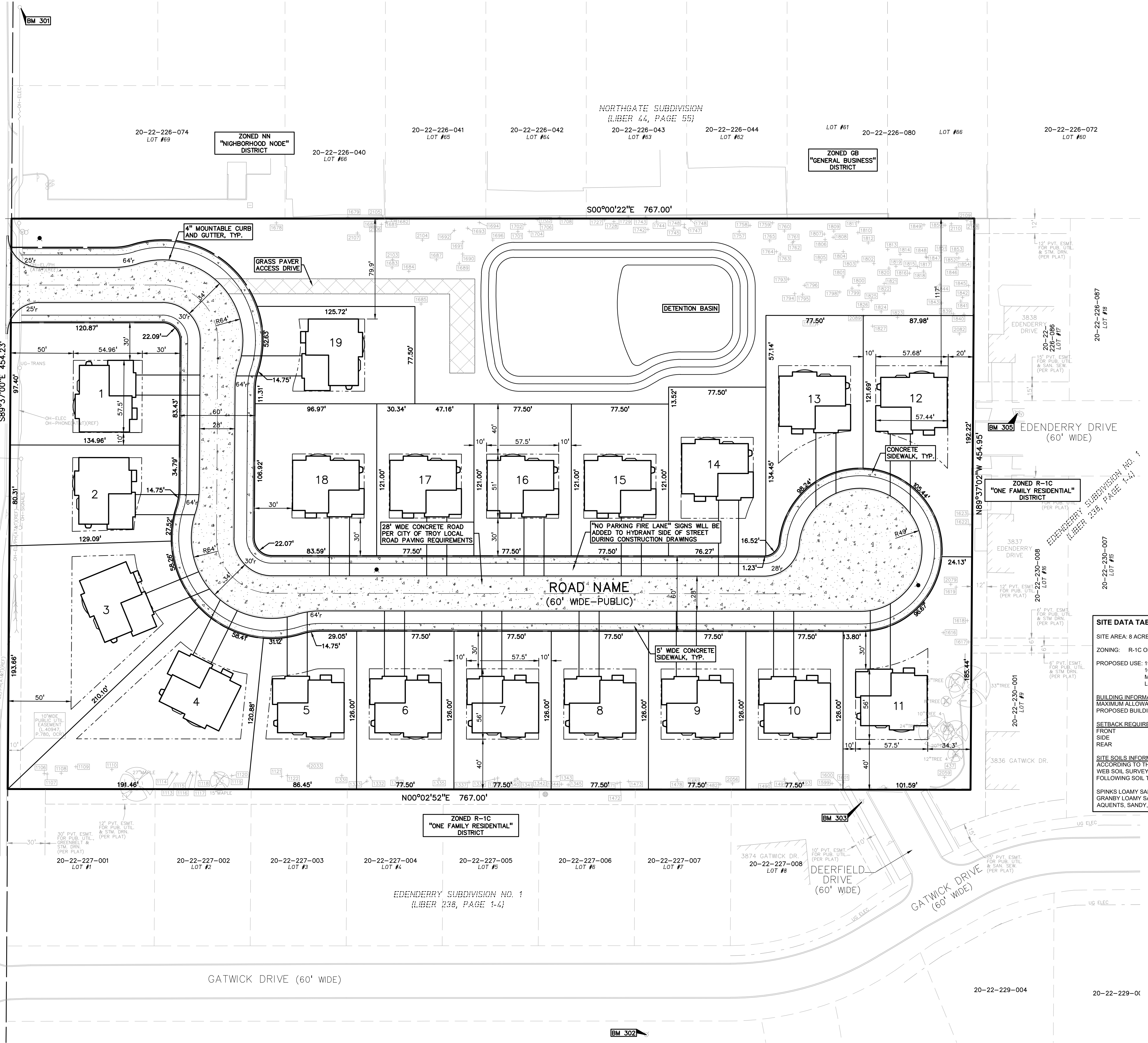
SITE DATA TABLE:

SITE AREA: 8 ACRES NET AND GROSS
ZONING: R-1C ONE FAMILY RESIDENTIAL DISTRICT
PROPOSED USE: 19 SINGLE FAMILY LOTS VIA LOT AVERAGING:
10% LOT WIDTH REDUCTION: 85' TO 77.5'
MINIMUM LOT SIZE = 10,500 SF
LOT AVERAGE SIZE = 10,518 SF

BUILDING INFORMATION:
MAXIMUM ALLOWABLE BUILDING HEIGHT = 2.5 STORIES
PROPOSED BUILDING HEIGHT = 2 STORIES

SETBACK REQUIREMENTS:	REQUIRED:	PROPOSED:
FRONT	30'	30'
SIDE	10' (20' TOTAL)	10' (20' TOTAL)
REAR	40'	40'

SITE SOILS INFORMATION:
ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR OAKLAND COUNTY, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:
SPINKS LOAMY SAND 0 TO 6 PERCENT SLOPES
GRANBY LOAMY SAND
AQUENTS, SANDY, LOAMY, UNDULATING



S:\PROJECTS\2016-2018-283_54 - ROCKESTER AND WATTLES SITE PLAN\0 - 2018-10-23\10031.dwg PLOT DATE: 4/23/2024 8:11:46 AM

NOT FOR CONSTRUCTION

P-2

NORTHEAST CORNER SECTION 22, T3N, R11E

BM 301

NORTHGATE SUBDIVISION (LIBER 44, PAGE 55)

GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

- TIC = TOP OF CURB
- T/P = TOP OF PAVEMENT
- T/S = TOP OF SIDEWALK
- T/W = TOP OF WALL
- B/W = BOTTOM OF WALL
- G = GUTTER GRADE
- FF = FINISH FLOOR
- FG = FINISH GRADE
- RM = RIM ELEVATION

PEA GROUP
t: 844.813.2949
www.peagroup.com

NORTH

0 20 40 80

SCALE: 1" = 40'

811 Know what's below. Call before you dig.

CAUTION!!
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CLIENT

Tableau
BY MORGAN

50215 SCHOENHERR
SHELBY TOWNSHIP, MI 48315

PROJECT TITLE

TOWN HAVEN
TROY, MICHIGAN

REVISIONS

REV PER COMMENTS 4/17/24 4/26/2024

ORIGINAL ISSUE DATE:
MARCH 29, 2024

DRAWING TITLE
PRELIMINARY GRADING PLAN

PEA JOB NO. 16-283

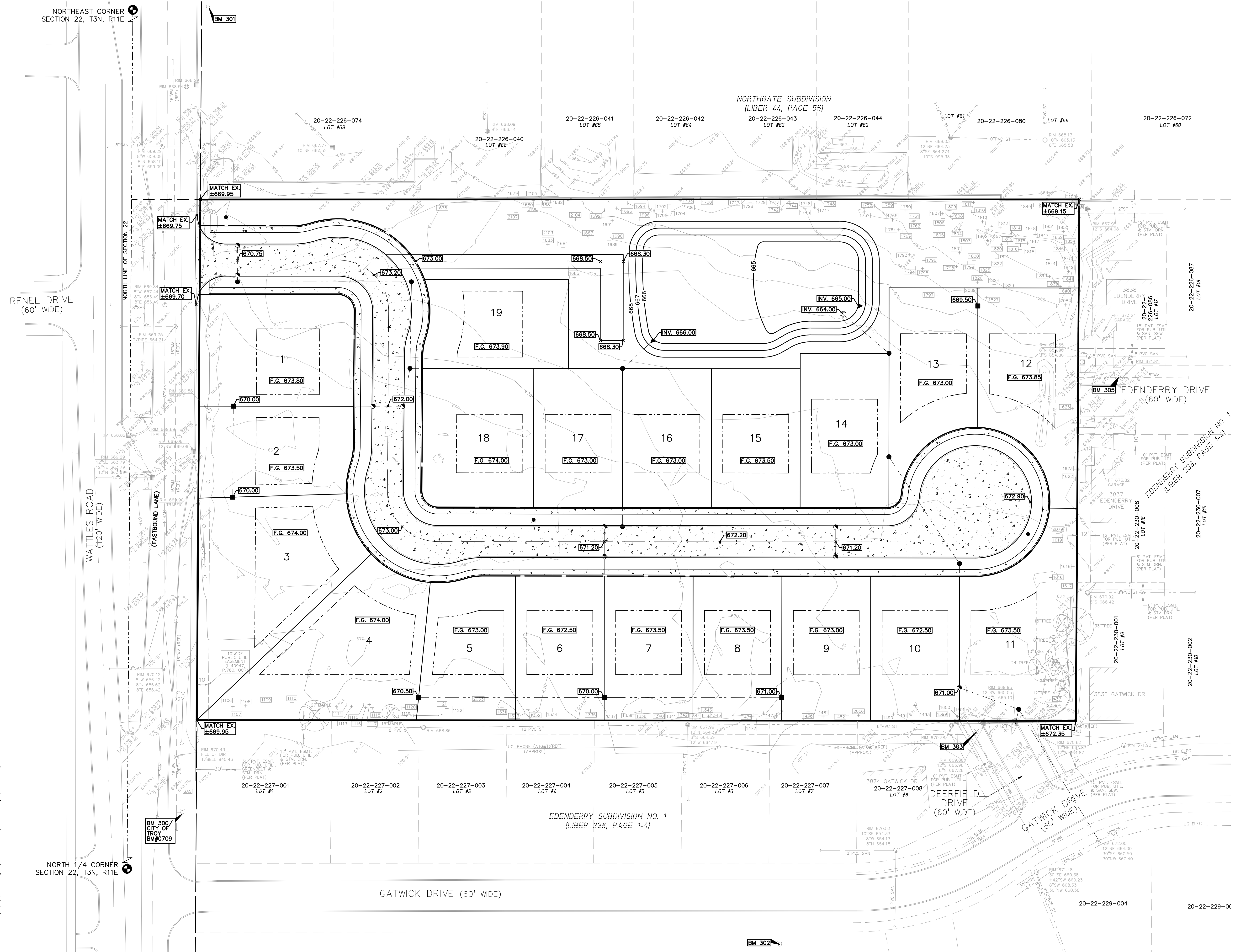
P.M. JBT

DN. KMB

DES. DSK

DRAWING NUMBER:

NOT FOR CONSTRUCTION **P-3**



RENEE DRIVE (60' WIDE)

WATTLES ROAD (120' WIDE)

NORTH LINE OF SECTION 22

(EASTBOUND LANE)

NORTH 1/4 CORNER SECTION 22, T3N, R11E

BM 300/ CITY OF TROY/ BM#709

EDENDERRY SUBDIVISION NO. 1 (LIBER 238, PAGE 1-4)

GATWICK DRIVE (60' WIDE)

DEERFIELD DRIVE (60' WIDE)

GATWICK DRIVE (60' WIDE)

BM 302

S:\PROJECTS\2016-2019-283_54 - ROOSEVELT AND WATTLES-PA\DWG\SITE PLAN\03-30\PADE-10283.dwg (LOT DATE: 4/27/2024) BY: KMB



SCALE: 1" = 40'



CAUTION!!
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CLIENT
Tableau by MORGAN
50215 SCHOENHERR
SHELBY TOWNSHIP, MI 48315

PROJECT TITLE
TOWN HAVEN
TROY, MICHIGAN

REVISIONS
REV PER COMMENTS 4/17/24 4/26/2024

ORIGINAL ISSUE DATE:
MARCH 29, 2024
DRAWING TITLE
PRELIMINARY UTILITY PLAN

PEA JOB NO. 16-283
P.M. JBT
DN. KMB
DES. DSK
DRAWING NUMBER:

UTILITY LEGEND:

- OH-ELEC-☐-○- EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV-☐- EX. U.G. CABLE TV & PEDESTAL
- UG-COMM-☐-○- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC-☐-○- EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- ⊗- EX. GAS VALVE & GAS LINE MARKER
- ⊕- EX. TRANSFORMER & IRRIGATION VALVE
- ⊕- EX. WATER MAIN
- ⊕- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- ⊕- EX. WATER VALVE BOX & SHUTOFF
- ⊕- EX. SANITARY SEWER
- ⊕- EX. SANITARY CLEANOUT & MANHOLE
- ⊕- EX. COMBINED SEWER MANHOLE
- ⊕- EX. STORM SEWER
- ⊕- EX. CLEANOUT & MANHOLE
- ⊕- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- ⊕- EX. YARD DRAIN & ROOF DRAIN
- ⊕- EX. UNIDENTIFIED STRUCTURE
- - - PROPOSED WATER MAIN
- ⊕- PROPOSED HYDRANT AND GATE VALVE
- ⊕- PROPOSED TAPPING SLEEVE, VALVE & WELL
- ⊕- PROPOSED POST INDICATOR VALVE
- ⊕- PROPOSED SANITARY SEWER
- ⊕- PROPOSED SANITARY CLEANOUT & MANHOLE
- ⊕- PROPOSED STORM SEWER
- ⊕- PROPOSED STORM SEWER CLEANOUT & MANHOLE
- ⊕- PROPOSED CATCH BASIN, INLET & YARD DRAIN

SANITARY SEWER BASIS OF DESIGN:
(Unit Factors Based on Oakland County Unit Assignment Factors)
Residential Dwelling

ULTIMATE DESIGN			
Number of Lots	19		
REU	19		
People / REU	3.5		
Population (P)	67 People		
Average Flow (150 GPCPD)	10,050 G.P.D.		
	0.016 C.F.S.		
	0.010 M.G.D.		
Design Max. Flow = (2*avg)	20,100 G.P.D.		
	0.031 C.F.S.		
	0.020 M.G.D.		

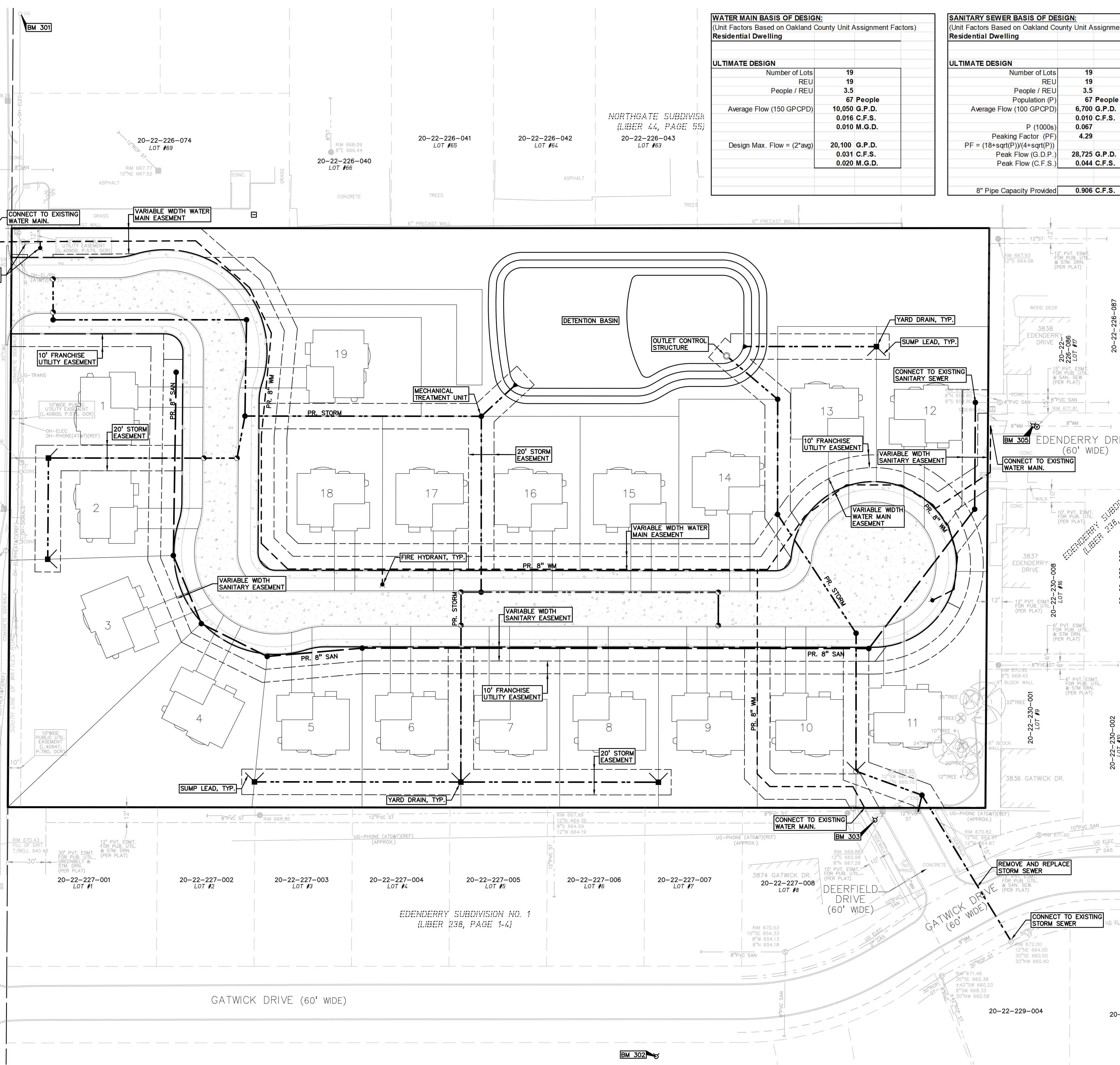
8" Pipe Capacity Provided	0.906 C.F.S.
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WATER MAIN BASIS OF DESIGN:
(Unit Factors Based on Oakland County Unit Assignment Factors)
Residential Dwelling

ULTIMATE DESIGN			
Number of Lots	19		
REU	19		
People / REU	3.5		
Population (P)	67 People		
Average Flow (150 GPCPD)	10,050 G.P.D.		
	0.016 C.F.S.		
	0.010 M.G.D.		
Design Max. Flow = (2*avg)	20,100 G.P.D.		
	0.031 C.F.S.		
	0.020 M.G.D.		

Site Drainage Data

Impervious Area:	2.50 acre	C = 0.95	
Greenbelt Area:	5.50 acre	C = 0.25	
Total Area (A):	8.00 acre		
Weighted Coefficient of Runoff (C):		0.47	
Pretreatment:		2,049 cf	
Forebay: V _f = (545)CA			
Mechanical Separator (Sized for 1-year peak flow)			
Time of Concentration (T _c)	15.0 min		
I ₁ = 30.2 / (T _c + 9.17) ^{0.81}	2.29 in/hr		
1-Year Peak Inflow (Q _{wq})	8.60 cfs		
Q _{wq} = C(I)(A)			
CPVC: Channel Protection Volume		17,743 cf	
V _{cpvc} = (4,719)CA			
CPRC: Channel Protection Rate Control Volume		25,933 cf	
V _{cprc} = (6897)CA (Extended Detention)			
100-Year Allowable Outlet Rate (Q _{allow})		0.68 cfs/ac	
Since 2-A < 100, Q _{100all} = A x (-0.207xln(A)+1.1055)			
Q _{100all} =			
100-Year Peak Allowable Discharge (Q _o)	5.40 cfs		
Q _o = Q _{allow} (A)			
Rainfall Intensity		6.31 in/hr	
Time of Concentration (T _c)	15.0 min		
I ₁₀₀ = 83.3 / (T _c + 9.17) ^{0.81}			
100-Year Peak Inflow (Q _i)	23.73 cfs		
Q _i = C(I)(A)			
100-Year Runoff Volume (V _r)	71,384 cf		
V _r = (18,985)CA			
Storage Ratio (V _r /V _s)	0.4281		
V _r /V _s = 0.206 - 0.15 x ln(Q _o /Q _i)			
100-Year Storage Volume (V _s)	30,557 cf		
V _s = V _r / Storage Ratio			
Design Requirements		Volume	
CPVC		17,743 cf	
CPRC		25,933 cf	
Flood Control		30,557 cf	
Detention Basin			
100-yr Storage Required:	30,557 - 2,049 =	28,508 cf	
100-yr Storage Elevation:	666.73		
CPRC Storage Required:	25,933 - 2,049 =	23,884 cf	
CPRC Storage Elevation:	666.50		
Elev. (ft)	Area (sf)	Vol. (cf)	Total Vol. (cf)
664	0	0	0
665	7,175	3,588	3,588
666	17,951	12,563	16,151
667	21,315	19,633	35,784



S:\PROJECTS\2024\2024-283_54 - ROCKESTER AND WATTLE ROAD\DATE PLOT PLAN\PLAN\PLAN - UTIL-1003.dwg PLOT DATE: 4/23/2024 8:11:44 AM burrow

NOT FOR CONSTRUCTION

P-4

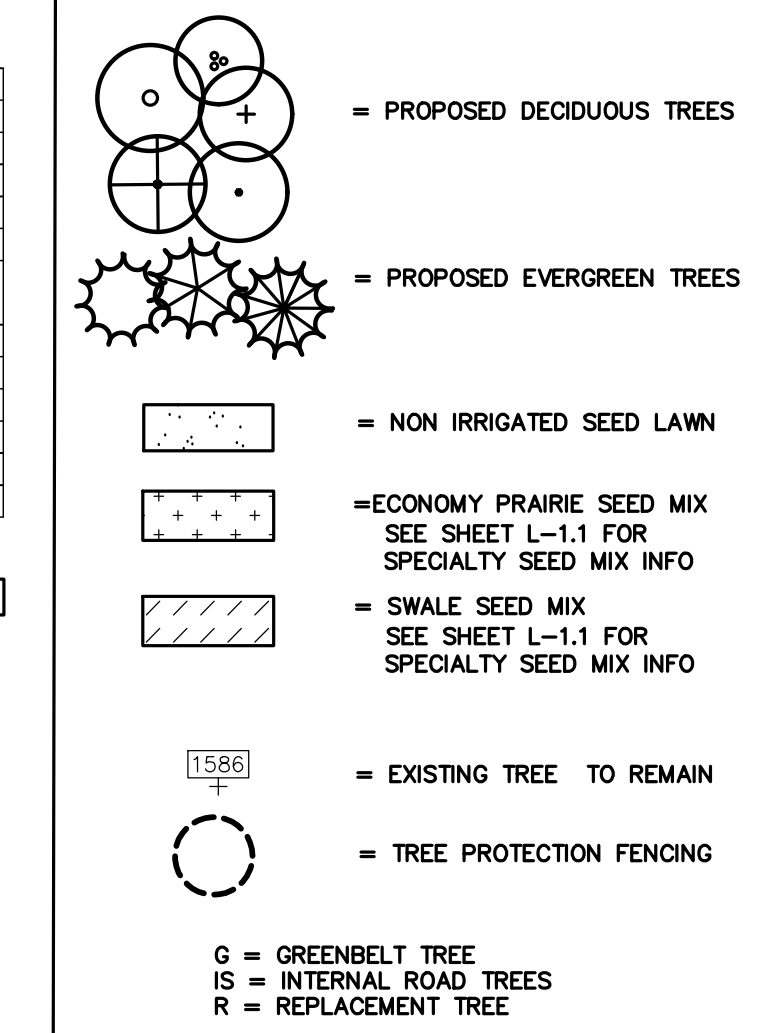
PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	DESIGNATION	REMARKS
DECIDUOUS TREES								
ARV2.5	7	ACER RUBRUM 'SUN VALLEY'	SUN VALLEY RED MAPLE	2.5" CAL.	B&B	PER PLAN	NATIVE	
BN10	5	BETULA NIGRA	RIVER BIRCH	10" HT.	B&B	PER PLAN	NATIVE	MULTI-TRUNK (3-5)
CA2.5	1	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2.5" CAL.	B&B	PER PLAN	NATIVE	
CE10	7	CERCIS CANADENSIS	EASTERN REDBUD MULTI-TRUNK	10" HT.	B&B	PER PLAN	NATIVE	
FG2.5	6	FAGUS GRANDIFOLIA	AMERICAN BEECH	2.5" CAL.	B&B	PER PLAN	NATIVE	
GB2.5	5	GINKGO BILoba	MAIDENHAIR TREE	2.5" CAL.	B&B	PER PLAN	NON-NATIVE	
GT2.5	5	GLEDITSIA TRIACANTHOS 'INERMIS' 'SKYCOLE'	SKYLINE HONEY LOCUST	2.5" CAL.	B&B	PER PLAN	NATIVE	
GD2.5	4	GYMNOCADUS DIOICA	KENTUCKY COFFEETREE	2.5" CAL.	B&B	PER PLAN	NATIVE	
QA2.5	4	QUERCUS ALBA	WHITE OAK	2.5" CAL.	B&B	PER PLAN	NATIVE	
QM2.5	4	QUERCUS MACROCARPA	BURR OAK	2.5" CAL.	B&B	PER PLAN	NATIVE	
QR2.5	5	QUERCUS RUBRA	RED OAK	2.5" CAL.	B&B	PER PLAN	NATIVE	
	53	SUBTOTAL:						
EVERGREEN TREES								
PG10	8	PICEA GLAUCA	WHITE SPRUCE	10' HT.	B&B	PER PLAN	NATIVE	
P08	3	PICEA OMORIKA	SERBIAN SPRUCE	8' HT.	B&B	PER PLAN	NON-NATIVE	
PS10	7	PINUS STROBUS	EASTERN WHITE PINE	10' HT.	B&B	PER PLAN	NATIVE	
PS8	3	PINUS STROBUS	EASTERN WHITE PINE	8' HT.	B&B	PER PLAN	NATIVE	
PM10	3	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	10' HT.	B&B	PER PLAN	NATIVE	
TT10	4	THUJA OCCIDENTALIS 'TECHNY'	TECHNY ARBORVITAE	10' HT.	B&B	PER PLAN	NATIVE	
T08	8	THUJA OCCIDENTALIS 'TECHNY'	TECHNY ARBORVITAE	8' HT.	B&B	PER PLAN	NATIVE	
TG10	4	THUJA STANDISHII X PLICATA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	10' HT.	B&B	PER PLAN	NATIVE	
	40	SUBTOTAL:						
91.40 % OF TREES ARE NATIVE								

TREE INVENTORY/PRESERVATION CALCULATIONS

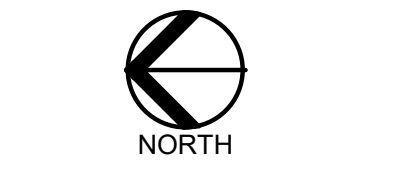
WOODLAND TREES	
WOODLAND TREES REMOVED:	111 (REPLACE AT 50% OF REMOVED DBH)
90" DBH x 0.5 =	452" REPLACEMENT
WOODLAND TREES SAVED:	18 (CREDIT OF 2X DBH)
188" DBH x 2 =	376" CREDIT
452 - 376 =	76
76" DBH REQUIRED FOR WOODLAND REPLACEMENT	
LANDMARK TREES	
LANDMARK TREES REMOVED:	7 (REPLACE AT 100% OF REMOVED DBH)
146" DBH x 1 =	146" REPLACEMENT
LANDMARK TREES SAVED:	2 (CREDIT OF 2X DBH)
54" DBH x 2 =	108" CREDIT
146 - 108 =	38
114" TOTAL DBH REQUIRED FOR REPLACEMENT	
SEE SHT. T-1.1-1.5 FOR TREE INVENTORY PLAN AND EXISTING TREE LIST	

KEY:



G = GREENBELT TREE
IS = INTERNAL ROAD TREES
R = REPLACEMENT TREE

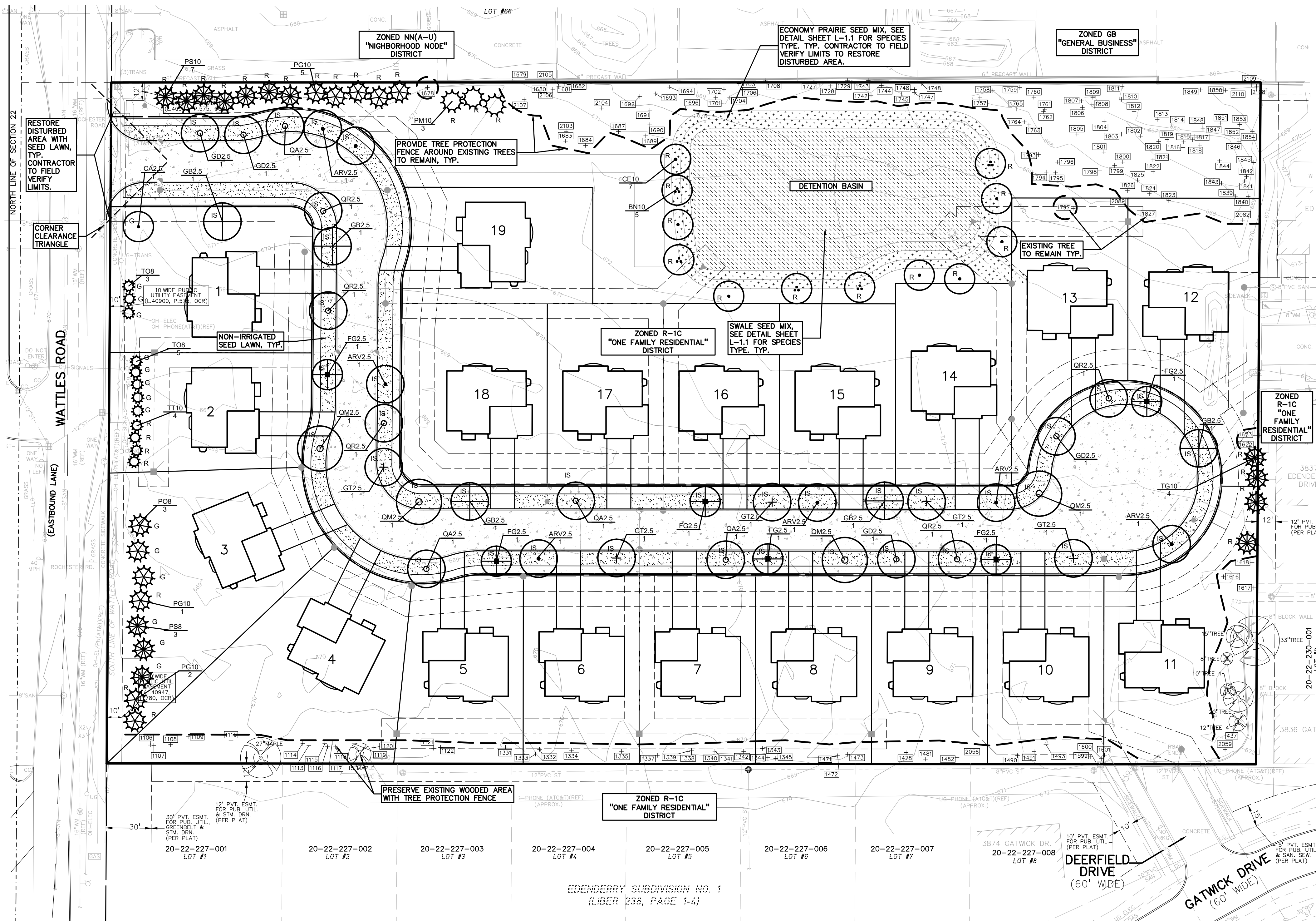
NOTE: TREES SHALL BE PLACED AT A MINIMUM OF 5' AWAY FROM UTILITY LEADS.



SCALE: 1" = 40'



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LANDSCAPE CALCULATIONS:

PER CITY OF TROY ZONING ORDINANCE: **R-1C ONE FAMILY RESIDENTIAL**

5.03 C-1a. = GENERAL SITE LANDSCAPE
REQUIRED: 15% OF SITE AREA SHALL BE LANDSCAPE MATERIAL
348,490 SF * 15% = 52,273 SQ FT REQUIRED

PROVIDED: 52,326 SQ FT LANDSCAPE

13.02 B. SCREENING BETWEEN USES
R-1C NO CONFLICTING LAND USES, SCREENING NOT REQUIRED.

13.02 D2. = GREENBELT/ ROW = G
REQUIRED: 1 TREE / 30 LF OF FRONTAGE TO PUBLIC RD.
WATTLES ROAD = 454 LF FRONTAGE / 30 = 15 TREES
PROVIDED: 15 TREES

PER CITY OF TROY ZONING ORDINANCE: **R-1C SOUTH END OF SITE**

INTERNAL PUBLIC ROADS STREET TREES = IS
REQUIRED: 1 TREE / 50 LF (BOTH SIDES RD.)
2011 LF / 50 LF = 40 TREES
PROVIDED: 40 TREES

TREE REPLACEMENT = R
SEE SHEET T-1.1-1.3 FOR TREE INVENTORY PLAN AND LIST

REQUIRED: 59" WOODLAND + 14" LANDMARK = 73" DBH REPLACEMENT REQ
114" / 3" = 38 3" TREES REQ.

PROVIDED: 38 REPLACEMENT TREES

GENERAL PLANTING NOTES:

- LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
- ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, NO. 1, GRADE.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
- THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
- ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
- ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
- ALL MULTI-STEM TREES SHALL BE HEAVILY BRANCHED AND HAVE SYMMETRICAL CROWNS. ONE-SIDED TREES OR THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED.
- ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
- ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS. TREES WITH SAND BALLS WILL BE REJECTED.
- NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES.
- ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL.
- IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
- ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH WITH PRE-EMERGENT. SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
- ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
- SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
- FOR NON-LAWN SEED MIX AREAS, AS NOTED ON PLAN, BRUSH MOW ONCE SEASONALLY FOR INVASIVE SPECIES CONTROL.
- CONTRACTOR SHALL NOT INSTALL PLANTS UNDER BUILDING OVERHANG AND SHALL NOTIFY LANDSCAPE ARCHITECT IF DRAWINGS CONFLICT WITH BUILDING OVERHANGS.
- TREES SHALL NOT CONFLICT/BLOCK PROPOSED REGULATORY/DIRECTION SIGNAGE, MONUMENT SIGNS, ADDRESS OR LIGHT POLES. SHIFT TREES AS NECESSARY TYP.

CLIENT
Tableau
50215 SCHOENHERR
SHELBY TOWNSHIP, MI 48315

PROJECT TITLE
TOWN HAVEN
TROY, MICHIGAN

REVISIONS
REV PER COMMENTS 4/17/24 4/26/2024

ORIGINAL ISSUE DATE:
MARCH 29, 2024

DRAWING TITLE
PRELIMINARY LANDSCAPE PLAN

PEA JOB NO. 16-283
P.M. JBT
DN. CAL
DES. LW
DRAWING NUMBER:

S:\PROJECTS\2024\2024-283-518 - ROOSTER AND WATTLES\SITE PLAN\1-10 LANDSCAPE PLAN-16283.dwg PLOT DATE: 4/29/2024 BY: Charlotte L. Espinosa



CAUTION!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE AS TO ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



PROJECT TITLE
TOWN HAVEN
TROY, MICHIGAN

REVISIONS
REV PER COMMENTS 4/17/24 4/28/2024

ORIGINAL ISSUE DATE:
MARCH 29, 2024
DRAWING TITLE
LANDSCAPE DETAILS

PEA JOB NO. 16-283
P.M. JBT
DN. CAL
DES. LW
DRAWING NUMBER:

FOR ALL SEED MIXES, PROVIDE EROSION MAT ON SLOPES AND AREAS OF WASH OUT TYP. INSTALL AND PREP PER MANUFACTURERS SPECIFICATIONS.

NATIVE SEED MIX, BY STANTEC NATIVE PLANT NURSERY, 574-586-2412, OR EQUAL SPECIES TO BE NATIVE TO COUNTY, NO INVASIVE SPECIES ALLOWED.

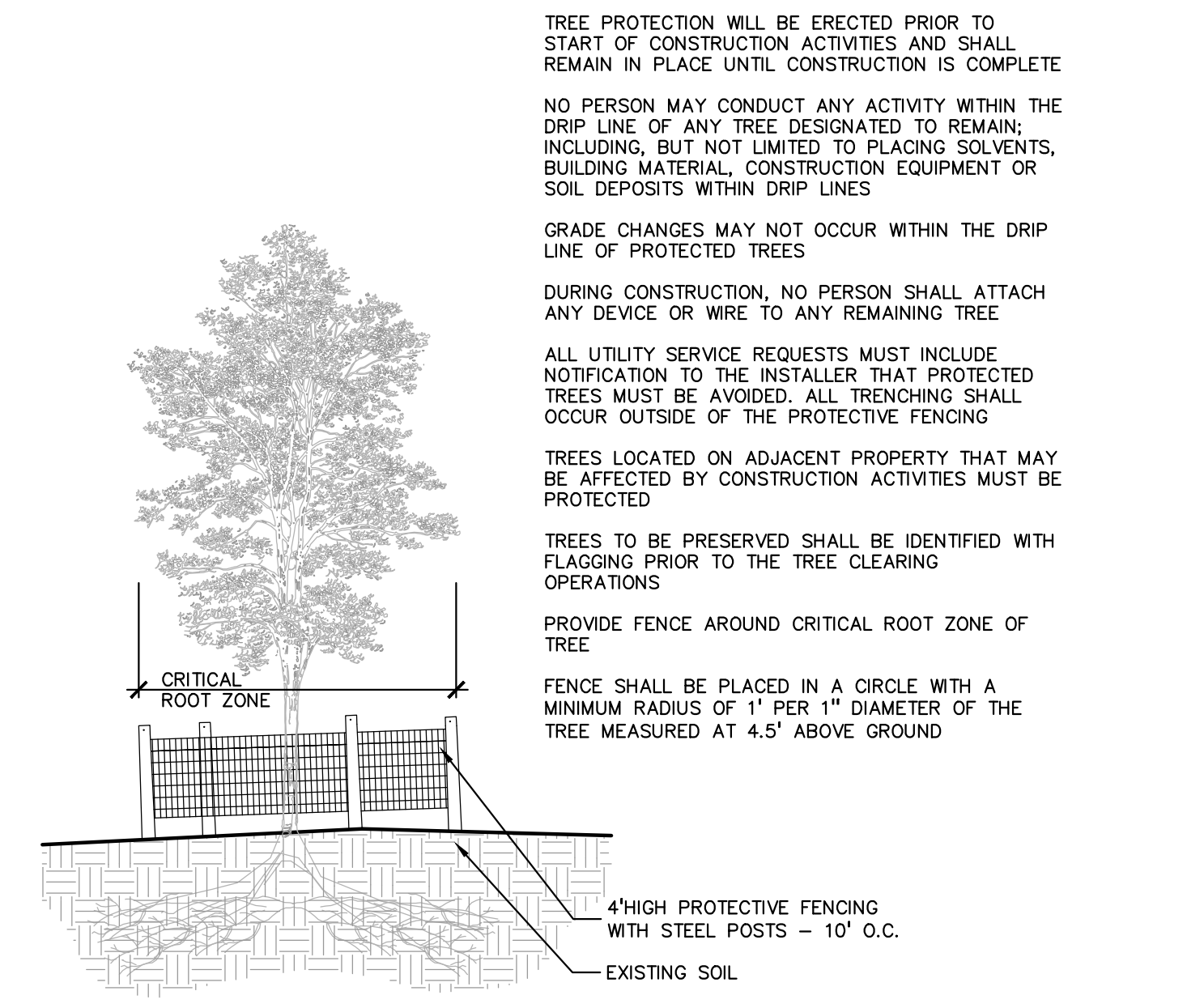
FOR ALL SEED MIXES, PROVIDE EROSION MAT ON SLOPES AND AREAS OF WASH OUT TYP. INSTALL AND PREP PER MANUFACTURERS SPECIFICATIONS.

Swale Seed Mix
Stantec Native Plant Nursery 574-586-2412
stantec.com/native-plant-nursery

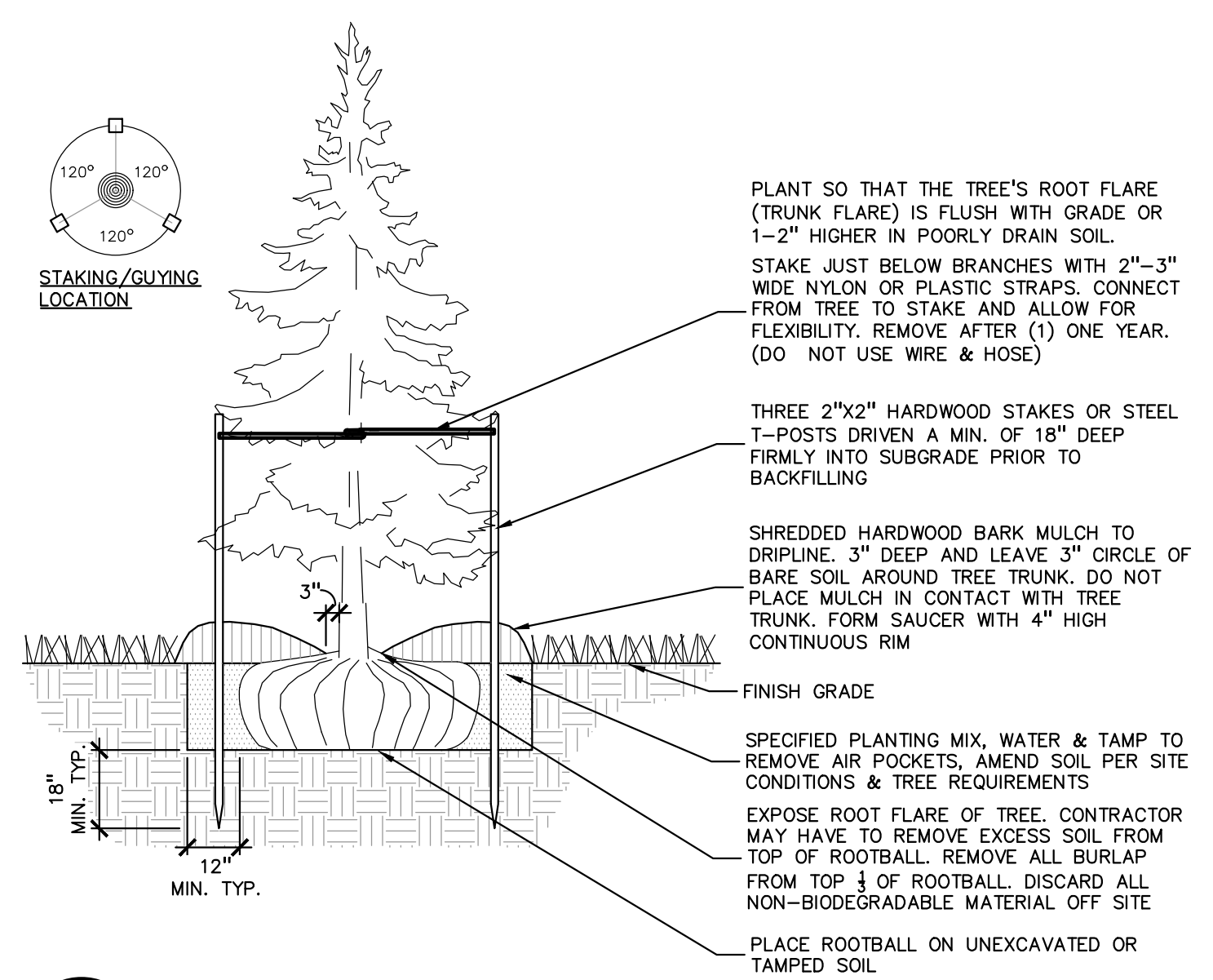
Botanical Name	Common Name
Permanent Grasses/Sedges:	
<i>Andropogon gerardii</i>	Big Bluestem
<i>Carex comosa</i>	Bristly Sedge
<i>Carex cristatella</i>	Crested Oval Sedge
<i>Carex lurida</i>	Bottlebrush Sedge
<i>Carex spp.</i>	Prairie Sedge Mix
<i>Carex vulpinoidea</i>	Brown Fox Sedge
<i>Elymus virginicus</i>	Virginia Wild Rye
<i>Glyceria striata</i>	Fowl Manna Grass
<i>Panicum virgatum</i>	Switch Grass
<i>Scirpus atrovirens</i>	Dark Green Rush
<i>Scirpus cyperinus</i>	Wool Grass
<i>Spartina pectinata</i>	Prairie Cord Grass
Temporary Cover:	
<i>Avena sativa</i>	Common Oat
<i>Lolium multiflorum</i>	Annual Rye
Forbs:	
<i>Alisma spp.</i>	Water Plantain (Various Mix)
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Coreopsis triptera</i>	Tall Coreopsis
<i>Eutrochium maculatum</i>	Spotted Joe-Pye Weed
<i>Iris virginica</i>	Blue Flag
<i>Liatris spicata</i>	Marsh Blazing Star
<i>Lobelia cardinalis</i>	Cardinal Flower
<i>Lobelia siphilitica</i>	Great Blue Lobelia
<i>Lycopus americanus</i>	Common Water Horehound
<i>Pycnanthemum virginianum</i>	Common Mountain Mint
<i>Rudbeckia triloba</i>	Brown-Eyed Susan
<i>Sagittaria latifolia</i>	Common Arrowhead
<i>Senna hebecarpa</i>	Wild Senna
<i>Silphium terebinthinaceum</i>	Prairie Dock
<i>Symphotrichum novae-angliae</i>	New England Aster
<i>Verbena hastata</i>	Blue Vervain
<i>Zizia aurea</i>	Golden Alexanders

Economy Prairie Seed Mix
Stantec Native Plant Nursery 574-586-2412
stantec.com/native-plant-nursery

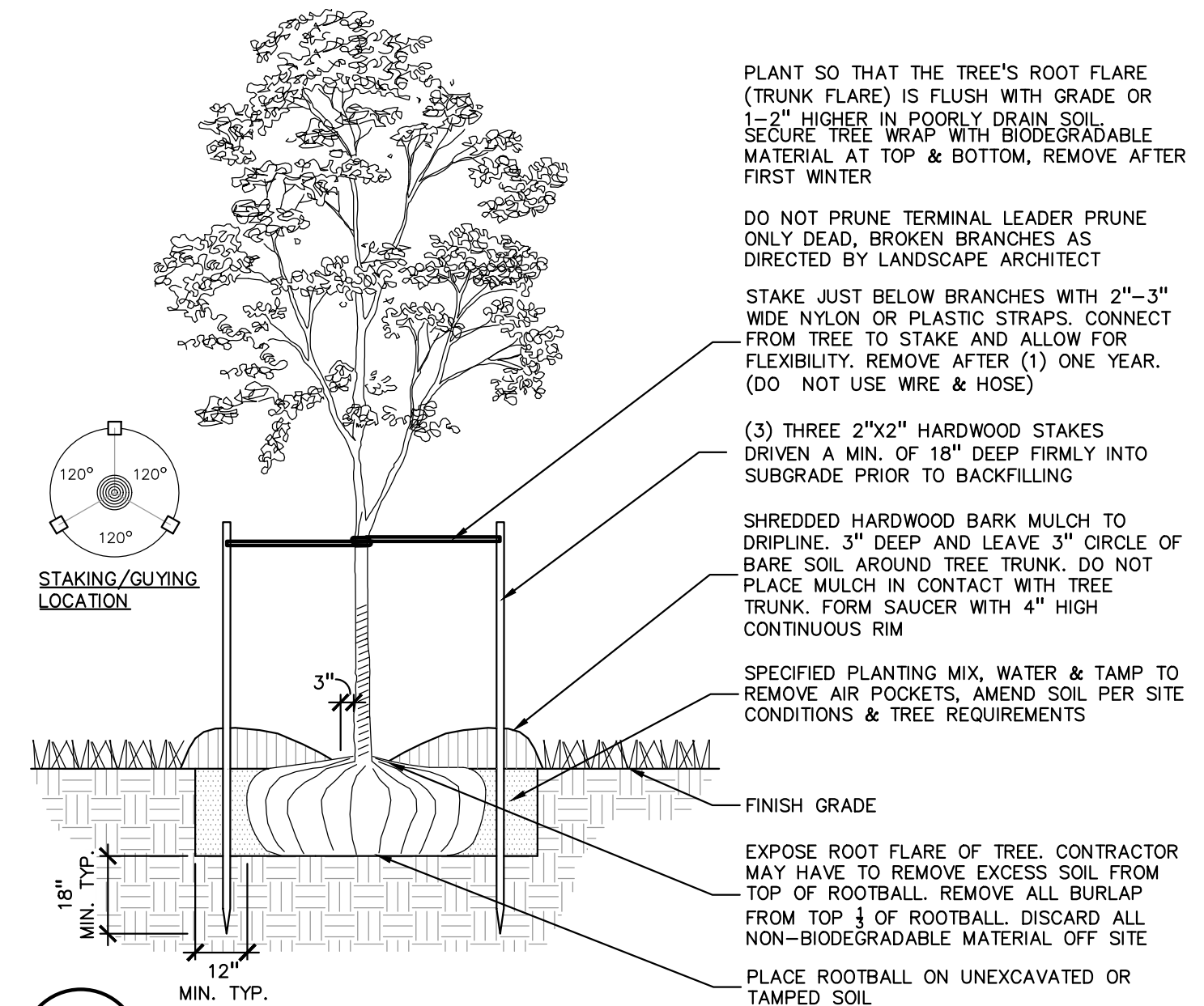
Botanical Name	Common Name
Permanent Grasses/Sedges/Rushes:	
<i>Andropogon gerardii</i>	Big Bluestem
<i>Bouteloua curtipendula</i>	Side Oats Grama
<i>Carex spp.</i>	Prairie Sedge Mix
<i>Elymus canadensis</i>	Canada Wild Rye
<i>Panicum virgatum</i>	Switch Grass
<i>Schizachyrium scoparium</i>	Little Bluestem
<i>Sorghastrum nutans</i>	Indian Grass
Temporary Cover:	
<i>Avena sativa</i>	Common Oat
<i>Lolium multiflorum</i>	Annual Rye
Forbs & Shrubs:	
<i>Asclepias syriaca</i>	Common Milkweed
<i>Asclepias tuberosa</i>	Butterfly Weed
<i>Chamaecrista fasciculata</i>	Partridge Pea
<i>Coreopsis lanceolata</i>	Sand Coreopsis
<i>Echinacea purpurea</i>	Broad-leaved Purple Coneflower
<i>Helopsis helianthoides</i>	False Sunflower
<i>Lupinus perennis</i>	Wild Lupine
<i>Monarda fistulosa</i>	Wild Bergamot
<i>Penstemon digitalis</i>	Foxglove Beard Tongue
<i>Pycnanthemum virginianum</i>	Common Mountain Mint
<i>Ratibida pinnata</i>	Yellow Coneflower
<i>Rudbeckia hirta</i>	Black-Eyed Susan
<i>Solidago speciosa</i>	Showy Goldenrod
<i>Symphotrichum laeve</i>	Smooth Blue Aster
<i>Symphotrichum novae-angliae</i>	New England Aster



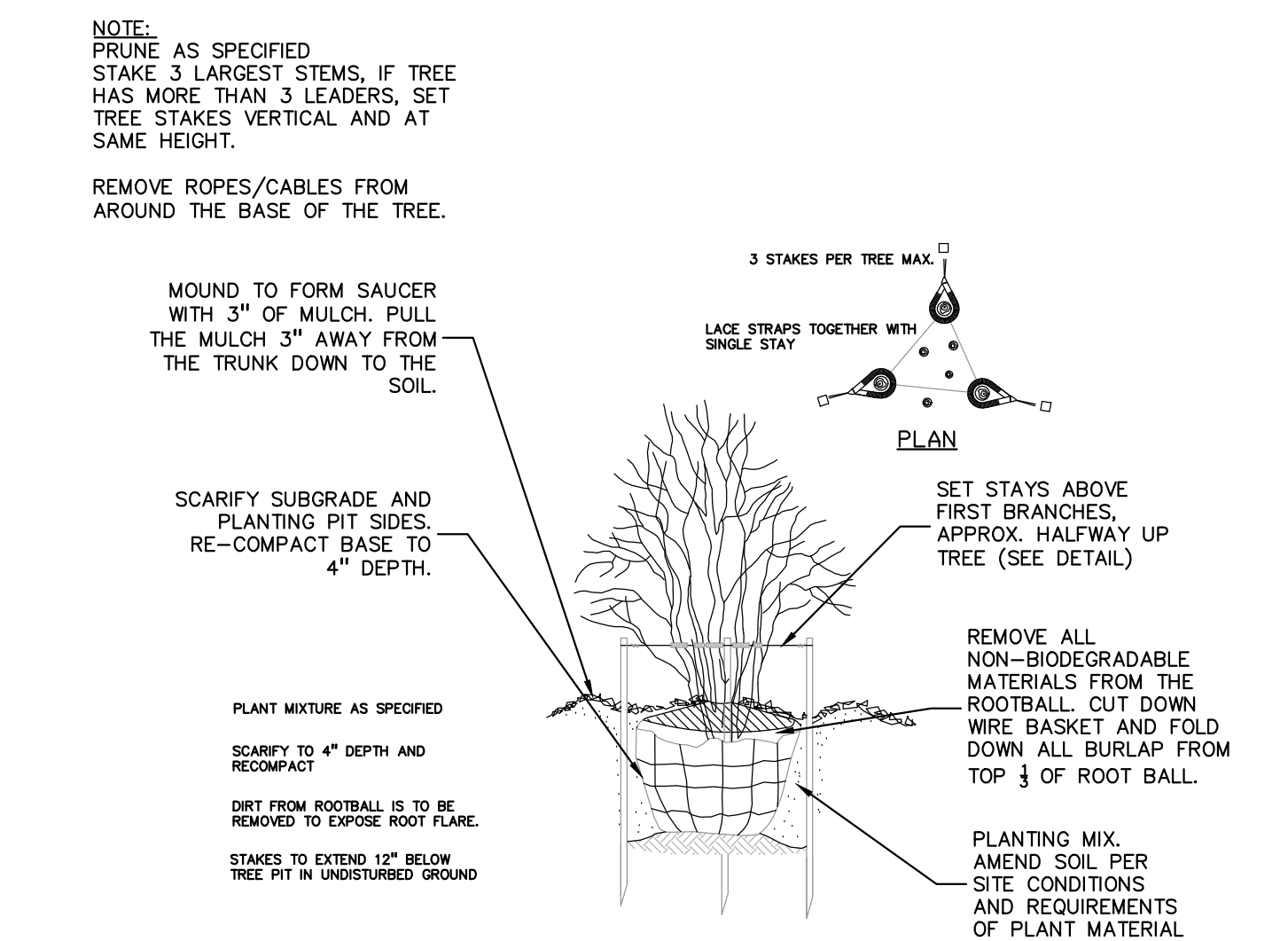
3 TREE PROTECTION DETAIL
SCALE: 1" = 3'-0"



2 EVERGREEN TREE PLANTING DETAIL
SCALE: 1" = 3'-0"



1 DECIDUOUS TREE PLANTING DETAIL
SCALE: 1" = 3'-0"



4 MULTI-STEM TREE PLANTING DETAIL
SCALE: 1" = 2'-0"



0 20 40 80
SCALE: 1" = 40'



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KEY:

- = EXISTING TREE TO REMAIN
- = EXISTING TREE TO BE REMOVED
- = TREE PROTECTION FENCE TO BE PLACED AT THE OUTER LIMITS OF THE DRIP LINE OF THE CANOPY.

TREE INVENTORY/PRESERVATION CALCULATIONS

WOODLAND TREES			
WOODLAND TREES REMOVED:	111	(REPLACE AT 50% OF REMOVED DBH)	
904" DBH x 0.5 =	452"	REPLACEMENT	
WOODLAND TREES SAVED:	18	(CREDIT OF 2X DBH)	
188" DBH x 2 =	376"	CREDIT	
452	-	376	= 76
76" DBH REQUIRED FOR WOODLAND REPLACEMENT			
LANDMARK TREES			
LANDMARK TREES REMOVED:	7	(REPLACE AT 100% OF REMOVED DBH)	
146" DBH x 1 =	146"	REPLACEMENT	
LANDMARK TREES SAVED:	2	(CREDIT OF 2X DBH)	
54" DBH x 2 =	108"	CREDIT	
146	-	108	= 38
114" TOTAL DBH REQUIRED FOR REPLACEMENT			

TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.

NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN, INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT OR SOIL DEPOSITS WITHIN DRIP LINES.

GRADE CHANGES MAY NOT OCCUR WITHIN THE DRIP LINE OF PROTECTED TREES.

DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE.

ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED, ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.

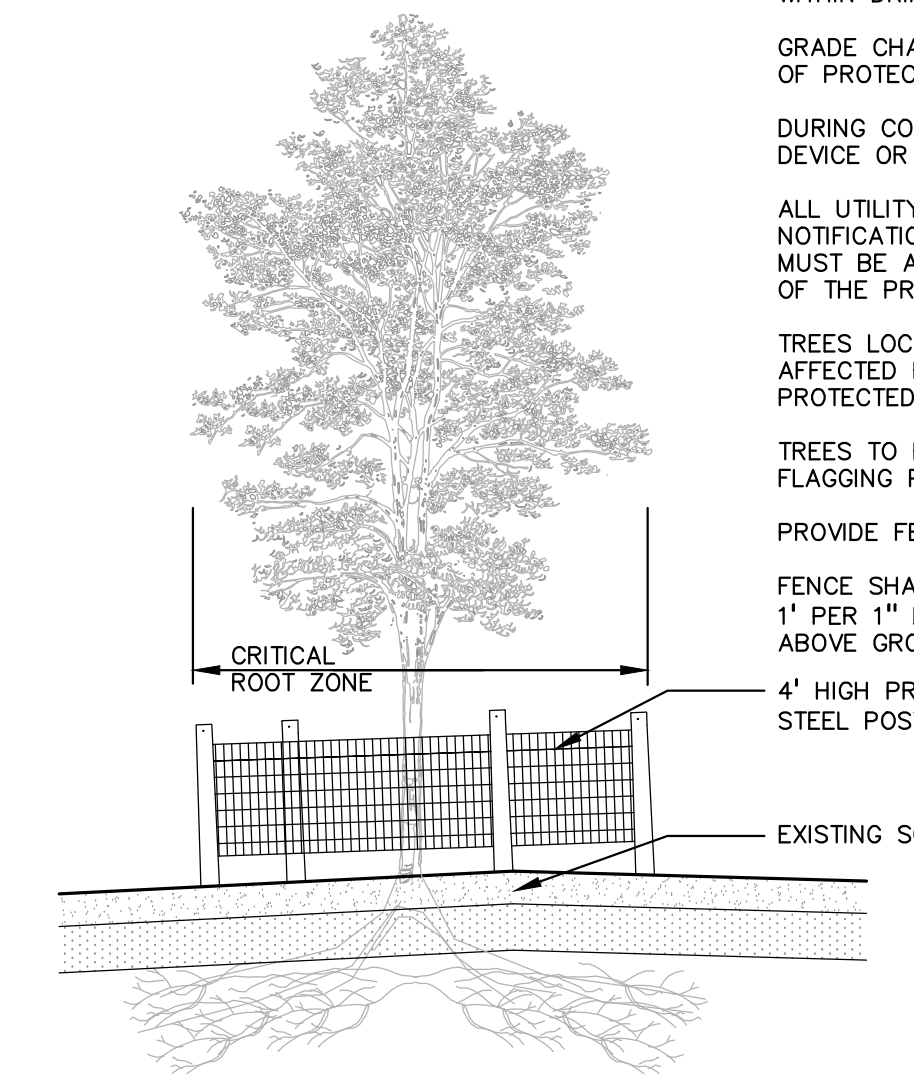
TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.

TREES TO BE PRESERVED SHALL BE IDENTIFIED WITH FLAGGING PRIOR TO THE TREE CLEARING OPERATIONS.

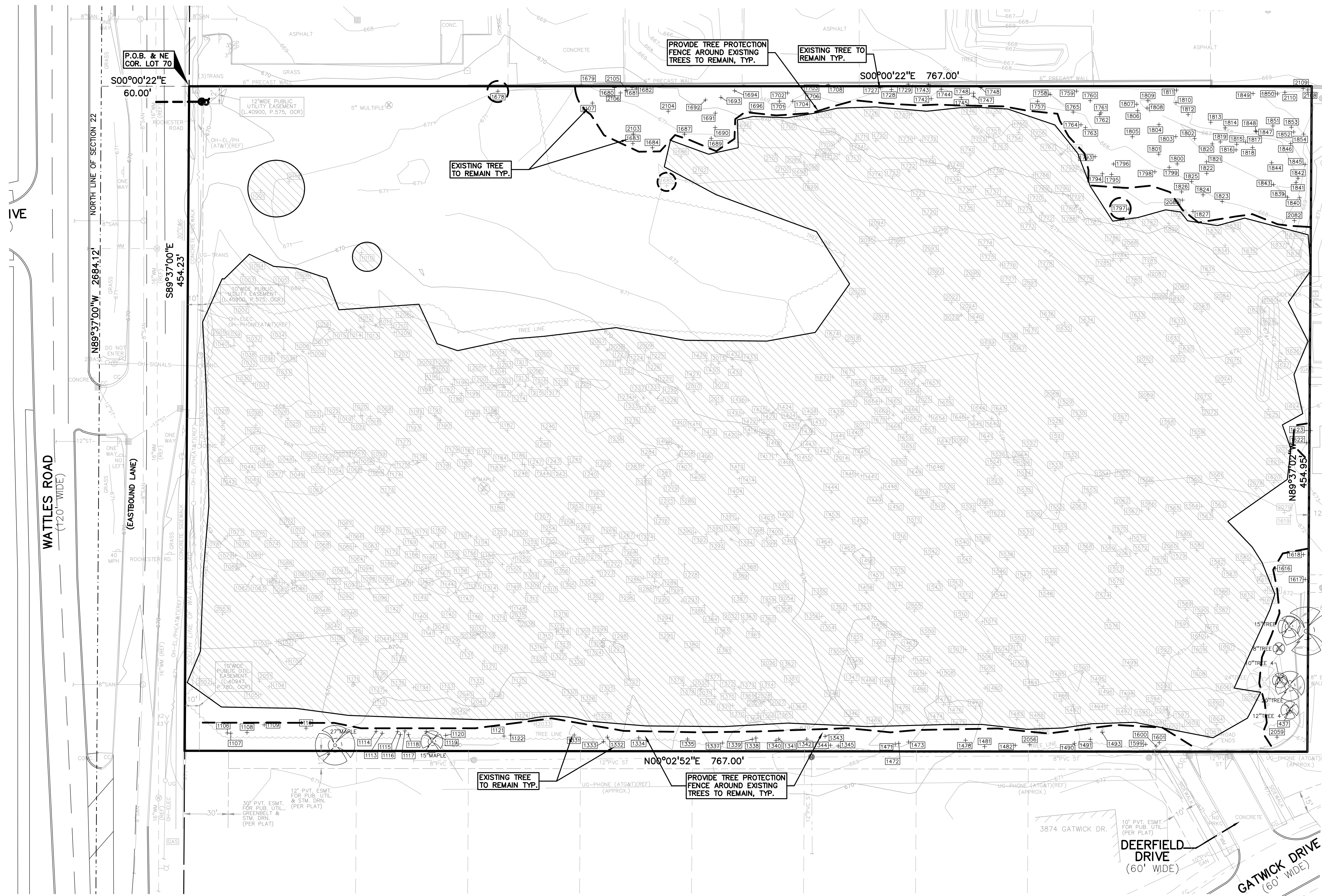
PROVIDE FENCE AROUND CRITICAL ROOT ZONE OF TREE.

FENCE SHALL BE PLACED IN A CIRCLE WITH A RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND.

4' HIGH PROTECTIVE FENCING WITH STEEL POSTS - 10' O.C.



TREE PROTECTION DETAIL
NOT TO SCALE



CLIENT
Tableau
50215 SCHOENHERR
SHELBY TOWNSHIP, MI 48315

PROJECT TITLE
TOWN HAVEN
TROY, MICHIGAN

REVISIONS
REV PER COMMENTS 4/17/24 4/26/2024

ORIGINAL ISSUE DATE:
MARCH 29, 2024

DRAWING TITLE

TREE PRESERVATION PLAN

PEA JOB NO. 16-283

P.M. JBT

DN. CAL

DES. LW

DRAWING NUMBER:

S:\PROJECTS\2016\0616-283_SJA - ROOSTER AND WATTLES PLANT PRESERVATION PLAN-10 TREE PRESERVATION PLAN-10 DATE: 4/29/2024 BY: Charlotte L. Espinosa

S:\PROJECTS\2016\2016-283\5.0 - ROOSTER AND INTILES\3\NATURE PLAN\1-10 TREE PRESERVATION PLAN.dwg DATE: 4/29/2024 BY: Christie L. Engstrom

Table with columns: TAG NO., DBH, COMMON NAME, LATIN NAME, COND., NOTES, CLASS, SAVE / REMOVE, ON-SITE, REPLACE. Rows 1001-1102.

Table with columns: TAG NO., DBH, COMMON NAME, LATIN NAME, COND., NOTES, CLASS, SAVE / REMOVE, ON-SITE, REPLACE. Rows 1103-1204.

Table with columns: TAG NO., DBH, COMMON NAME, LATIN NAME, COND., NOTES, CLASS, SAVE / REMOVE, ON-SITE, REPLACE. Rows 1205-1306.



t. 844.813.2949 www.peagroup.com



CAUTION! THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE DEPTHS OF ALL UTILITIES AS TO THE COMPLETION OF ACCURACY THROUGH THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



PROJECT TITLE: TOWN HAVEN TROY, MICHIGAN

REVISIONS: REV PER COMMENTS 4/17/24 4/26/2024

ORIGINAL ISSUE DATE: MARCH 29, 2024

TREE PRESERVATION PLAN

PEA JOB NO. 16-283 P.M. JBT DN. CAL DES. LW DRAWING NUMBER:

NOT FOR CONSTRUCTION

T-1.2



CAUTION!
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CLIENT

50215 SCHOENHERR
SHELBY TOWNSHIP, MI 48315

PROJECT TITLE
TOWN HAVEN
TROY, MICHIGAN

REVISIONS
REV PER COMMENTS 4/17/24 4/26/2024

ORIGINAL ISSUE DATE:
MARCH 29, 2024

DRAWING TITLE
TREE PRESERVATION PLAN

PEA JOB NO. 16-283

P.M. JBT

DN. CAL

DES. LW

DRAWING NUMBER:

TAG NO.	DBH	COMMON NAME	LATIN NAME	COND.	NOTES	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
2066	6	Wild Black Cherry	Prunus-serotina	Good		WOODLAND	R	Y	REPLACE
2066	6	Red Oak	Quercus-rubra	Good		WOODLAND	R	Y	REPLACE
2067	6	Wild Black Cherry	Prunus-serotina	Good		WOODLAND	R	Y	REPLACE
2068	6	Sassafras	Sassafras-albidum	Good		WOODLAND	R	Y	REPLACE
2069	8	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2070	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2071	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2072	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2073	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2074	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2075	7	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2076	7	White Mulberry	Morus-alba	Good		INVASIVE	R	Y	-
2077	6	Silver Maple	Acer-saccharinum	Good		INVASIVE	R	Y	-
2078	7	Silver Maple	Acer-saccharinum	Good		INVASIVE	R	Y	-
2079	6	American Elm	Ulmus-americana	Good		INVASIVE	R	Y	-
2080	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2081	7	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2082	7	Silver Maple	Acer-saccharinum	Good		INVASIVE	S	Y	-
2083	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2084	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2085	8	White Oak	Quercus-alba	Good		WOODLAND	R	Y	REPLACE
2086	6	Wild Black Cherry	Prunus-serotina	Good		WOODLAND	R	Y	REPLACE
2087	6	Silver Maple	Acer-saccharinum	Good		INVASIVE	R	Y	-
2088	6	American Elm	Ulmus-americana	Good		INVASIVE	R	Y	-
2089	6	Silver Maple	Acer-saccharinum	Good		INVASIVE	S	Y	-
2090	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2091	8	Red Oak	Quercus-rubra	Good		WOODLAND	R	Y	REPLACE
2092	6	Wild Black Cherry	Prunus-serotina	Good		WOODLAND	R	Y	REPLACE
2093	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2094	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2095	7	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2096	6	Black Walnut	Juglans-nigra	Fair		WOODLAND	R	Y	REPLACE
2097	6	Wild Black Cherry	Prunus-serotina	Fair		WOODLAND	R	Y	REPLACE
2098	6	Wild Black Cherry	Prunus-serotina	Fair		WOODLAND	R	Y	REPLACE
2099	6	Wild Black Cherry	Prunus-serotina	Fair		WOODLAND	R	Y	REPLACE
2100	6	Red Cedar	Juniperus-virginiana	Good		INVASIVE	R	Y	-
2101	6	Wild Black Cherry	Prunus-serotina	Fair		WOODLAND	R	Y	REPLACE
2102	6	Black Walnut	Juglans-nigra	Good		WOODLAND	R	Y	REPLACE
2103	6	Wild Black Cherry	Prunus-serotina	Fair		WOODLAND	S	Y	-
2104	6	Silver Maple	Acer-saccharinum	Fair		INVASIVE	S	Y	-
2105	6	Wild Black Cherry	Prunus-serotina	Fair		WOODLAND	S	Y	-
2106	6	Silver Maple	Acer-saccharinum	Fair		INVASIVE	S	Y	-
2107	8	Red Oak	Quercus-rubra	Good		WOODLAND	S	Y	-
2108	6	American Elm	Ulmus-americana	Good		INVASIVE	S	Y	-
2109	6	Box elder	Acer-negundo	Poor		INVASIVE	S	Y	-
2110	6	Box elder	Acer-negundo	Poor		INVASIVE	S	Y	-
2111	6	Silver Maple	Acer-saccharinum	Good		INVASIVE	R	Y	-
2112	6	White Cedar	Thuja-occidentalis	Good	x1	WOODLAND	R	Y	REPLACE
4000	24	Unknown	Unknown			LANDMARK	R	Y	REPLACE

NOT FOR CONSTRUCTION

T-1.5



Assessment • Remediation • Compliance
Restoration • Incentives

10448 Citation Drive, Suite 100
Brighton, MI 48116

800 395-ASTI
Fax: 810.225.3800

www.asti-env.com

Sent Via Email Only

March 26, 2024

Joe Maniaci
Mondrian Properties
50215 Schoenherr Road
Shelby Township, MI 48315

*RE: Wetland Delineation and Jurisdictional Assessment with GPS Survey
Proposed Town Haven Development
934 Wattles Road (Sidwell Nos. 20-22-226-023 & -024)
City of Troy, Oakland County, Michigan
ASTI File No. A24-0018.00*

Dear Mr. Maniaci:

On March 12, 2024, ASTI Environmental (ASTI) conducted a site investigation to delineate wetland boundaries on approximately ten acres of land at the above-referenced properties in Troy, Oakland County, Michigan ("Property"). Two wetlands previously confirmed to not be regulated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) were re-flagged on the Property (Figure 1 – *GPS-Surveyed Wetland Boundaries*). Wetland boundaries, as depicted on Figure 1, were located using a professional grade, hand-held Global Positioning System unit (GPS).

SUPPORTING DATA AND MAPPING

The USDA Web Soil Survey (WSS), the National Wetland Inventory Map (NWI), EGLE Wetlands Map Viewer web site, and digital aerial photographs were all used to support the wetland delineation and subsequent regulatory status determination. No reviewed data indicated the presence of wetland on the Property.

In addition, the WSS indicated the Property is comprised of the soils Spinks loamy sand (0-6% slopes) and Granby loamy sand. According to the WSS, Granby loamy sand is a hydric soil.

FINDINGS

ASTI investigated the Property for the presence of any lakes, ponds, wetlands, and watercourses. This work is based on *MCL 324 Part 301 (Inland Lakes and Streams)* and *Part 303 (Wetland Protection)*.

It should be noted that some municipalities have local wetland ordinances and natural features setbacks that may apply to this property. In addition, in some circumstances the US Army Corps of Engineers (ACOE) may also have jurisdiction of wetlands or



watercourses on the Property. If either is the case for your site, this information will also be noted in the wetland descriptions below.

The delineation protocol used by ASTI for this delineation is based on the US Army Corps of Engineers' *Wetland Delineation Manual*, 1987, the *Regional Supplement to the Corps of Engineer Wetland Delineation Manual: Northcentral/Northeast Region*, and related guidance/documents, as appropriate. Wetland vegetation, hydrology, and soils were used to locate the wetland boundaries.

Two wetlands were found on the Property, as discussed below.

Wetland A

Wetland A is a forested wetland 0.38 acres in size on-site located in the southeast portion of the Property (Figure 1). Vegetation within Wetland A was dominated by silver maple (*Acer saccharinum*), cottonwood (*Populus deltoides*), American elm (*Ulmus americana*), and European buckthorn (*Rhamnus cathartica*). Soils within Wetland A were comprised of loamy sands and are considered hydric because the criteria for depleted below dark surface were met. Indicators of wetland hydrology observed within Wetland A included surface water, saturated soils, and water-stained leaves.

Dominant vegetation observed within the upland adjacent to Wetland A included black cherry (*Prunus serotina*), red oak (*Quercus rubra*), honeysuckle (*Lonicera tatarica*), and black walnut (*Juglans nigra*). Soils in the adjacent upland were comprised of sandy loams and did not exhibit hydric soil indicators. No indicators of wetland hydrology were observed.

It is ASTI's opinion that Wetland A is not regulated by EGLE because it is less than five acres in total size and is not within 500 feet of, or directly connected to, an inland lake or stream as defined under Part 301. Additionally, EGLE confirmed that this wetland was not regulated in 2017 as part of a Level 3 Wetland Identification Program (WIP) evaluation (Wetland Identification Site Name: 63-934 East Wattles Road-Troy, Submission Number: HN7-S6SZ-CYM1C).

Wetland B

Wetland B is a forested wetland 1.25 acres in size located in the north central portion of the Property (Figure 1). Vegetation within Wetland B was dominated by silver maple, American elm, green ash, cottonwood, and European buckthorn. Soils within Wetland B were comprised of loamy sands and are considered hydric because the criteria for depleted below dark surface were met. Indicators of wetland hydrology observed within Wetland B included water marks, surface water, saturated soils, and water-stained leaves.

Dominant vegetation observed within the upland adjacent to Wetland B included black cherry, cottonwood, silver maple, honeysuckle, and European buckthorn. Soils in the adjacent upland were comprised of sandy loams and did not exhibit hydric soil indicators. No indicators of wetland hydrology were observed.



It is ASTI's opinion that Wetland B is not regulated by EGLE because it is less than five acres in total size and is not within 500 feet of, or directly connected to, an inland lake or stream as defined under Part 301. EGLE also confirmed that this wetland was not regulated in 2017 as part of the WIP evaluation.

Wetland Flagging

Wetland boundaries were marked in the field with day-glow pink and black striped flagging with the following flagging numbers:

Wetland A = A-1 through A-21

Wetland B = B-1 through B-22

SUMMARY

Based upon the data, criteria, and evidence noted above, it is ASTI's professional opinion that the Property includes two wetlands (Wetlands A and B) not likely regulated by EGLE under the Natural Resources and Environmental Protection Act (1994 P.A. 451), Part 303 Wetland Protection. EGLE has the final authority on the extent of regulated wetlands, lakes, and streams in the State of Michigan. As indicated, EGLE confirmed that these wetlands were not regulated as part of a Level 3 WIP evaluation completed in 2017 and ASTI believes that site conditions have not changed. However, because EGLE WIP evaluations expire after three years, an EGLE verification of the wetland regulatory status may be required prior to any wetland impacts.

Attached are Figure 1, which shows the GPS-surveyed locations of wetland flagging on the Property and completed US Army Corps of Engineers (ACOE) Wetland Data Forms. Please note that the data sheet numbers match the data collection sampling points shown on Figure 1. ASTI has also included the 2017 EGLE WIP for reference.

Thank you for the opportunity to assist you with this project. Please let us know if we can be of any further assistance in moving your project forward.

Cordially,

ASTI ENVIRONMENTAL

Kyle Hottinger
Wetland Ecologist
Professional Wetland Scientist #2927

Dana R. Knox
Wetland Ecologist
Professional Wetland Scientist #213

Attachments: Figure 1 – *GPS-Surveyed Wetland Boundaries*
Completed ACOE Wetland Data Forms
2017 EGLE WIP Report



Town Haven Development
20-22-226-023-, & -024)

934 Wattles Road,
Troy, Oakland Co., MI

0 50 100 200
Feet



Client: Mondrian Properties
Created by: RMH, March 14, 2024, ASTI Project A24-0118.00
Imagery: Michigan Best Available

Figure 1 - GPS-Surveyed Wetland Boundaries

Project/Site: Town Haven Development City/County: Troy - Oakland Co. Sampling Date: 3-12-24
 Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP1
 Investigator(s): ASTI-KAH Section, Township, Range: Sec 22 T2N R11E
 Landform (hillside, terrace, etc.): slight slope Local relief (concave, convex, none): slope Slope %: 2-4
 Subregion (LRR or MLRA): LRR L Lat: 42.575962 Long: -83.129948 Datum: NAD83
 Soil Map Unit Name: Spinks loamy sand (0-6% slopes) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
Remarks: (Explain alternative procedures here or in a separate report.) Upland adjacent to Wetland A	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: UP1

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Prunus serotina</u>	40	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>42.9%</u> (A/B)
2. <u>Acer saccharinum</u>	10	No	FACW	
3. <u>Ulmus americana</u>	20	Yes	FACW	
4. <u>Quercus palustris</u>	5	No	FACW	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>75</u> =Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>35</u> x 2 = <u>70</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>75</u> x 4 = <u>300</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>150</u> (A) <u>490</u> (B) Prevalence Index = B/A = <u>3.27</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Rhamnus cathartica</u>	15	Yes	FAC	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Prunus serotina</u>	10	Yes	FACU	
3. <u>Lonicera tatarica</u>	15	Yes	FACU	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>40</u> =Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Carex woodii</u>	10	Yes	FACU	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
2. <u>Rubus idaeus</u>	20	Yes	FAC	
3. <u>Carex blanda</u>	5	No	FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
<u>35</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ =Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)

SOILSampling Point UP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14	10YR 3/2	100					Sandy	
14-19	10YR 5/6	85	10YR 3/2	15	C	M	Sandy	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)
<input type="checkbox"/> Mesic Spodic (A17)	<input type="checkbox"/> Red Parent Material (F21) (outside MLRA 145)
(MLRA 144A, 145, 149B)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	
<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)	
<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)	
<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Marl (F10) (LRR K, L)	
<input type="checkbox"/> Red Parent Material (F21) (MLRA 145)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u> </u> none	Hydric Soil Present? Yes <u> </u> No <u> X </u>
Depth (inches): <u> </u>	

Remarks:

Project/Site: Town Haven Development City/County: Troy - Oakland Co. Sampling Date: 3-12-24
 Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP2
 Investigator(s): ASTI-KAH Section, Township, Range: Sec 22 T2N R11E
 Landform (hillside, terrace, etc.): plain Local relief (concave, convex, none): flat Slope %: 1-3
 Subregion (LRR or MLRA): LRR L Lat: 42.576897 Long: -83.13112 Datum: NAD83
 Soil Map Unit Name: Spinks loamy sand (0-6% slopes) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
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Remarks: (Explain alternative procedures here or in a separate report.)
Upland adjacent to Wetland B

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: UP2

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Acer saccharinum</u>	70	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
<u>70</u> =Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>70</u> x 2 = <u>140</u> FAC species <u>15</u> x 3 = <u>45</u> FACU species <u>15</u> x 4 = <u>60</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>245</u> (B) Prevalence Index = B/A = <u>2.45</u>	
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Rhamnus cathartica</u>	15	Yes	FAC		
2. <u>Lonicera tatarica</u>	15	Yes	FACU		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
<u>30</u> =Total Cover					
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	0	_____	_____	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
_____ =Total Cover					
<u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
_____ =Total Cover					
				Hydrophytic Vegetation Present? Yes <u>X</u> No _____	

Remarks: (Include photo numbers here or on a separate sheet.)

Project/Site: Town Haven Development City/County: Troy - Oakland Co. Sampling Date: 3-12-24
 Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP3
 Investigator(s): ASTI-KAH Section, Township, Range: Sec 22 T2N R11E
 Landform (hillside, terrace, etc.): plain Local relief (concave, convex, none): flat Slope %: 1-3
 Subregion (LRR or MLRA): LRR L Lat: 42.575827 Long: -83.130849 Datum: NAD83
 Soil Map Unit Name: Spinks loamy sand (0-6% slopes) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Upland conditions in the SW portion of the site.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: UP3

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer saccharinum</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)
2. <u>Prunus serotina</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Quercus macrocarpa</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
4. <u>Ulmus americana</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
5. _____				
6. _____				
7. _____				
	<u>65</u>	=Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>40</u> x 2 = <u>80</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>45</u> x 4 = <u>180</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>85</u> (A) <u>260</u> (B) Prevalence Index = B/A = <u>3.06</u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				
1. <u>Prunus serotina</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Lonicera tatarica</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Acer saccharinum</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	
4. _____				
5. _____				
6. _____				
7. _____				
	<u>20</u>	=Total Cover		
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	<u>0</u>			
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
		=Total Cover		
<u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
1. _____				
2. _____				
3. _____				
4. _____				
		=Total Cover		
Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point UP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14	10YR 4/3	100					Sandy	
14-18	10YR 7/8	90	10YR 4/3	10	C	M	Sandy	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Mesic Spodic (A17)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- High Chroma Sands (S11) (**LRR K, L**)
- Loamy Mucky Mineral (F1) (**LRR K, L**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (**LRR K, L**)
- Red Parent Material (F21) (**MLRA 145**)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- Coast Prairie Redox (A16) (**LRR K, L, R**)
- 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- Polyvalue Below Surface (S8) (**LRR K, L**)
- Thin Dark Surface (S9) (**LRR K, L**)
- Iron-Manganese Masses (F12) (**LRR K, L, R**)
- Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- Red Parent Material (F21) (**outside MLRA 145**)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: none

Depth (inches):

Hydric Soil Present? Yes No X

Remarks:

Project/Site: Town Haven Development City/County: Troy - Oakland Co. Sampling Date: 3-12-24
 Applicant/Owner: Mondrian Properties State: MI Sampling Point: WT1
 Investigator(s): ASTI-KAH Section, Township, Range: Sec 22 T2N R11E
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 1-3
 Subregion (LRR or MLRA): LRR L Lat: 42.575693 Long: -83.129858 Datum: NAD83
 Soil Map Unit Name: Spinks loamy sand (0-6% slopes) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland A</u>
Remarks: (Explain alternative procedures here or in a separate report.) Wetland A - forested wetland	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) 	Secondary Indicators (minimum of two required) <ul style="list-style-type: none"> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u>x</u> No <u> </u> Depth (inches): <u>0.1</u> Water Table Present? Yes <u>x</u> No <u> </u> Depth (inches): <u>5</u> Saturation Present? Yes <u>x</u> No <u> </u> Depth (inches): <u>1</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WT1

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Populus deltoides</u>	<u>25</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. <u>Acer saccharinum</u>	<u>40</u>	Yes	FACW	
3. <u>Ulmus americana</u>	<u>15</u>	No	FACW	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>80</u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>75</u> x 2 = <u>150</u> FAC species <u>95</u> x 3 = <u>285</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>170</u> (A) <u>435</u> (B) Prevalence Index = B/A = <u>2.56</u>
1. <u>Rhamnus cathartica</u>	<u>30</u>	Yes	FAC	
2. <u>Fraxinus pennsylvanica</u>	<u>20</u>	Yes	FACW	
3. <u>Populus deltoides</u>	<u>10</u>	No	FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>60</u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Toxicodendron radicans</u>	<u>25</u>	Yes	FAC	
2. <u>Carex blanda</u>	<u>5</u>	No	FAC	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
<u>30</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
1. _____	<u>0</u>	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ =Total Cover				
Hydrophytic Vegetation Present? Yes <u>X</u> No _____				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point WT1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Table with columns: Depth (inches), Matrix (Color (moist), %), Redox Features (Color (moist), %, Type¹, Loc²), Texture, Remarks. Rows include data for depths 0-9 and 9-18 inches.

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
X Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Mesic Spodic (A17)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ High Chroma Sands (S11)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Marl (F10)
___ Red Parent Material (F21)

Indicators for Problematic Hydric Soils³:

- ___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils (F19)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: none
Depth (inches):

Hydric Soil Present? Yes X No

Remarks:

Project/Site: Town Haven Development City/County: Troy - Oakland Co. Sampling Date: 3-12-24
 Applicant/Owner: Mondrian Properties State: MI Sampling Point: WT2
 Investigator(s): ASTI-KAH Section, Township, Range: Sec 22 T2N R11E
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope %: 1-3
 Subregion (LRR or MLRA): LRR L Lat: 42.577136 Long: -83.13056 Datum: NAD83
 Soil Map Unit Name: Spinks loamy sand (0-6% slopes) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland B</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Wetland B - forested wetland

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> Water Table Present? Yes <u>x</u> No <u> </u> Depth (inches): <u>8</u> Saturation Present? Yes <u>x</u> No <u> </u> Depth (inches): <u>1</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WT2

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>5</u>	No	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. <u>Acer saccharinum</u>	<u>70</u>	Yes	FACW																	
3. <u>Ulmus americana</u>	<u>5</u>	No	FACW																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>80</u>	=Total Cover		Prevalence Index worksheet: <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>120</u></td> <td>(A) <u>280</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>2.33</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>120</u>	(A) <u>280</u> (B)	Prevalence Index = B/A = <u>2.33</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>80</u>	x 2 = <u>160</u>																			
FAC species <u>40</u>	x 3 = <u>120</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>120</u>	(A) <u>280</u> (B)																			
Prevalence Index = B/A = <u>2.33</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Rhamnus cathartica</u>	<u>10</u>	Yes	FAC																	
2. <u>Fraxinus pennsylvanica</u>	<u>5</u>	Yes	FACW																	
3. <u>Populus deltoides</u>	<u>10</u>	Yes	FAC																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>25</u>	=Total Cover		Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
<u>Herb Stratum</u> (Plot size: <u>5'</u>)																				
1. <u>Toxicodendron radicans</u>	<u>15</u>	Yes	FAC																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>15</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point WT2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 3/1	100					Loamy/Clayey	
10-18	10YR 5/1	80	10YR 3/1	15	C	M	Sandy	Faint redox concentrations
			10YR 6/8	5	C	M		Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)	
<input type="checkbox"/> Mesic Spodic (A17)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (F21) (outside MLRA 145)	
<input type="checkbox"/> (MLRA 144A, 145, 149B)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Marl (F10) (LRR K, L)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) (MLRA 145)		
<input type="checkbox"/> Stripped Matrix (S6)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u> </u> none Depth (inches): <u> </u>	Hydric Soil Present? Yes <u>X</u> No <u> </u>
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Remarks:



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



C. HEIDI GREETHER
DIRECTOR

October 23, 2017

Mr. Joe Maniaci
Mondrian Properties
50215 Schoenherr Road
Shelby Township, Michigan 48315

Dear Mr. Maniaci:

SUBJECT: Wetland Identification Report
Wetland Identification Site Name: 63-934 East Wattles Road-Troy
MiWaters Submission Number: HN7-S6SZ-CYM1C

The Department of Environmental Quality (DEQ) conducted a Level 3 Wetland Identification Review of approximately nine acres on property (Property Tax Identification Numbers 20-22-228-023 and -024) located in Town 02 North, Range 11 East, Section 22, city of Troy, Oakland County on October 10, 2017. The wetland identification was conducted in accordance with Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and Rule 4 (1), Wetland Identification and Assessment (R 281.924), of the Administrative Rules for Part 303. This is a report of our findings in response to your Wetland Identification application.

Based on our on-site investigation which included a review of plants, hydrology, and soils, the DEQ confirms the wetland boundaries as flagged. The DEQ also reviewed other pertinent information such as aerial imagery, soil survey data, topographic mapping data, and surface hydrology data.

Enclosed is a site map of the identified area that was created by combining information from your consultant and the DEQ. All wetlands within the review area are unregulated by the DEQ. For those unregulated wetlands and non-wetland (upland) within the site, the DEQ lacks jurisdiction under Part 303 for activities occurring in those areas. The unregulated wetlands are not regulated by the DEQ because they are not contiguous to the Great Lakes, an inland lake or pond, or a river or stream; and are not more than five acres in size.

This Wetland Identification Report is limited to findings pursuant to Part 303 and does not constitute a determination of jurisdiction under other DEQ-administered programs. Any land use activities undertaken within the review area may be subject to regulation pursuant to the NREPA under Part 91, Soil Erosion and Sedimentation Control.

Please be aware that this wetland identification report does not constitute a determination of the jurisdiction under local ordinances or federal law. The United States Army Corps of Engineers (USACE) retains regulatory authority over certain wetlands pursuant to Section 404 of the Clean Water Act (CWA), and specifically those wetlands associated with traditionally navigable waters of the state. Navigable waters are generally the Great Lakes, their connecting waters, and river systems and lakes connected to these waters. In other areas of the state, the DEQ is responsible for identification of wetland boundaries for purposes of compliance with the CWA

Mr. Joe Maniaci
Page 2
October 23, 2017

under an agreement with the United States Environmental Protection Agency. Your review area does not appear to be within those areas also regulated by the USACE. Additional information may be obtained by contacting the USACE at 313-226-2218.

You may request the DEQ reassess the wetland boundaries and regulatory status of wetlands within any portion of the review area, should you disagree with the findings, within 60 days of the date of this report. A written request to reassess the Wetland Identification review area must be accompanied by supporting evidence with regard to wetland vegetation, soils or hydrology different from, or in addition to, the information relied upon by DEQ staff in preparing this report. The request should be submitted to:

Wetland Identification Program
Department of Environmental Quality
Water Resources Division
P.O. Box 30458
Lansing, Michigan 48909-7958

The findings contained in this report do not convey, provide, or otherwise imply approval of any governing act, ordinance, or regulation, nor does it waive the obligation to acquire any applicable federal, state, county, or local approvals. This Wetland Identification Report is not a permit for any activity that requires a permit from the DEQ.

Should you need to apply for a permit for future work within this site, please use the same site name listed within the subject line of this letter when you are listing the site location within the MiWaters online permit application.

The findings contained in this report are binding on the DEQ until October 23, 2020, a period of three years from the date of this Wetland Identification Report unless a reassessment has been conducted. Please contact me at 517-243-5002; gyekisk@michigan.gov; or DEQ, P.O. Box 30458, Lansing, Michigan 48909-7958, if you have any questions regarding this report.

Sincerely,



Keto Gyekis
Wetland Identification Program Coordinator
Water Resources Division

Enclosures

cc: Oakland County Soil Erosion Enforcement Agent (CEA)
Oakland County Health Division
City of Troy Clerk
Ms. Dana Knox, ASTI Environmental
Mr. Andrew Hartz, DEQ
Ms. Susan Tepatti, DEQ

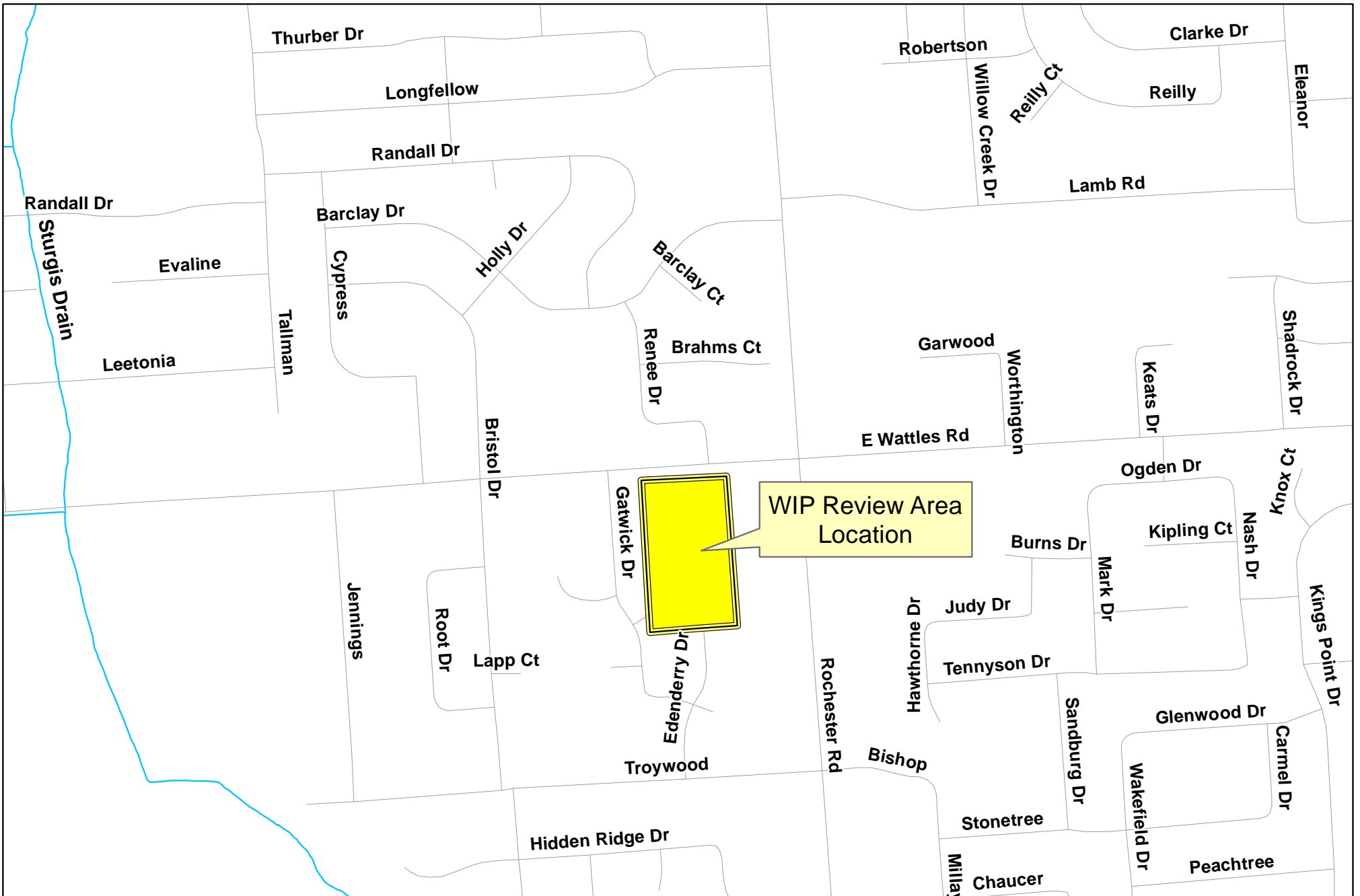


Figure 1.
 DEQ Wetland Identification Location
 934 East Wattles Road
 Troy



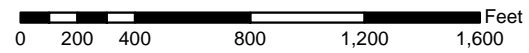
Oakland County



WIP Review Area



Stream / Drain



East Wattles Road

East Wattles Road

Upland

WIP Review Area Boundary

B11

Wetland B
0.8 Acres
Not DEQ Regulated *

B4

B1

Upland

Upland

A1

A10

Wetland A
0.4 Acres
Not DEQ Regulated

Upland

WIP Review Area Boundary

A13

Wetlands A and B
within the Review Area
are not Regulated
under Part 303
of NREPA

This drawing does not authorize or permit activities requiring a permit in accordance with Part 303 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

This drawing showing those areas containing wetland and not containing wetland is an approximation of the boundaries flagged on-site.



Map created: October 2017

Figure 2. Wetland Detail
DEQ WIP File
934 East Wattles Road
Troy

