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PLANNING COMMISSION
MEETING AGENDA
REGULAR MEETING

Tom Krent, Chairman, David Lambert, Vice Chairman
Carlton Faison, Michael W. Hutson, Lakshmi Malalahalli,
Marianna Perakis, Sadek Rahman, Jerry Rauch and John J. Tagle

December 14, 2021 **7:00 P.M.** **Council Chambers**

1. ROLL CALL
2. APPROVAL OF AGENDA
3. APPROVAL OF MINUTES – October 26, 2021
4. PUBLIC COMMENT – For Items Not on the Agenda

PRELIMINARY SITE PLAN REVIEW

5. PUBLIC HEARING – PRELIMINARY SITE PLAN REVIEW (File Number SP2021-0020) – Proposed Adler Cove (One Family Residential Cluster), South side of Long Lake, East of John R (Parcels 88-20-13-100-012, 88-20-13-100-014 and 88-20-13-100-025), Currently Zoned R-1C (One Family Residential) Zoning District

OTHER ITEMS

6. CITY OF TROY MASTER PLAN – Summary of Neighborhood Node Walk & Talks
7. MISCELLANEOUS BUSINESS – Meeting Schedule for 2022
8. PUBLIC COMMENTS – For Items on the Agenda
9. PLANNING COMMISSION COMMENT
10. 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.*

Chair Krent called the Regular meeting of the Troy City Planning Commission to order at 7:01 p.m. on October 26, 2021, in the Council Chamber of the Troy City Hall. Chair Krent presented opening remarks relative to the role of the Planning Commission and procedure of tonight's meeting.

1. ROLL CALL

Present:
Carlton M. Faison
Michael W. Hutson
Tom Krent
David Lambert
Lakshmi Malalahalli
Marianna Perakis
Sadek Rahman
Jerry Rauch
John J. Tagle

Also Present:
R. Brent Savidant, Community Development Director
Ben Carlisle, Carlisle Wortman Associates
Allan Motzny, Assistant City Attorney
Kathy L. Czarnecki, Recording Secretary

2. APPROVAL OF AGENDA

Resolution # PC-2021-10-074
Moved by: Faison
Support by: Rauch

RESOLVED, To approve the Agenda as prepared.

Yes: All present (9)

MOTION CARRIED

3. APPROVAL OF MINUTES

Resolution # PC-2021-10-075
Moved by: Lambert
Support by: Tagle

RESOLVED, To approve the minutes of the October 12, 2021, Regular meeting as submitted with one typographical error that has been corrected.

Yes: All present (9)

MOTION CARRIED

4. PUBLIC COMMENT – For Items Not on the Agenda

There was no one present who wished to speak.

ZONING ORDINANCE TEXT AMENDMENT

5. PUBLIC HEARING – ZONING ORDINANCE TEXT AMENDMENT (File Number ZOTA 256) – Residential Uses in BB Zoning District

Mr. Savidant said the intent of the proposed Zoning Ordinance Text Amendment is to provide flexibility for developers when renovating existing multi-story buildings and constructing new multi-story buildings in the Big Beaver zoning district. He said the amendment would permit some residential use in appropriate locations on the first floor for sites located on Big Beaver and arterials, which presently residential uses are permitted only on upper floors.

PUBLIC HEARING OPENED

There was no one present to speak.

PUBLIC HEARING CLOSED

Ms. Perakis expressed opposition to the proposed text amendment. She said it is clearly a contradiction to the Master Plan, that she sees no unique circumstances that would warrant a rezoning, that we are not permitted to rezone property simply to make a more valuable use, and we are not permitted to rezone property to reassure a developer is able to maximize their profits. Ms. Perakis said she had hoped the developer who initiated the email message was present to address the Board.

Mr. Rauch said he supports the proposed text amendment with a Special Use requirement. He does not think one solution fits all. Mr. Rauch asked what would happen to parking lots if residential is developed. He addressed office vacancy, walkability in downtown area and potential opportunity for developers.

Mr. Savidant said it would be a simple change to the proposed text amendment to change the first floor lodging to a Special Use requirement. He said a Special Use application would add an additional layer to the application process and Special Use standards would apply. He said it could be a better step in direction for the developer. Mr. Savidant said approval of a Special Use by the Planning Commission would be subjective.

There was discussion on:

- Potential of residential development attracting more commercial development.
- Viable walkability throughout City.
- Existing buildings with residential on first floor; relationship to Big Beaver.
- Consensus to revise amendment to require Special Use application.

Resolution # PC-2021-10-076

Moved by: Lambert
Support by: Hutson

RESOLVED, To recommend that Chapter 39 of the Code of the City of Troy be amended to revise Table 5.04.C-1, Line 2 for Residential Lodging, to amend that "P" be changed to "S" for the items that are listed on the line and the footnote to be revised as well.

Yes: All present (9)

MOTION CARRIED

PRELIMINARY SITE PLAN REVIEWS

6. PRELIMINARY SITE PLAN REVIEW - (SP JPLN2021-019) – Proposed Motor City Church, East side of Livernois, North of Big Beaver (3668 Livernois), Section 22, Currently Zoned R-1C (One Family Residential) District

Mr. Tagle asked to recuse himself from this item because his architectural firm is involved in the project.

(Mr. Tagle exited meeting at 7:25 p.m.)

Mr. Carlisle gave a review of the Preliminary Site Plan application for Motor City Church. He identified the "dome" area and "school" area, noting the school would turn into the church. He identified the site and building changes proposed, noting there are no significant changes to the site and building arrangement. Mr. Carlisle addressed the proposed demolition of the "dome" church and Special Use that applies to the entire site. He said the landscaping is compliant apart from the required number of interior trees within the parking lot. He reported the applicant is asking the Planning Commission to consider a parking lot landscaping deviation. Mr. Carlisle recommended approval of the application with the condition to provide required bicycle parking.

Discussion among Board and administration:
- Proposed split of properties as relates to parking.
- Condition approval on property split.
- Current use of "dome" church.
- Explanation of Special Use as relates to proposed and future development.
- Condition approval on existing "dome" church does not function as church.
- Height and width of Livernois elevation.

Present were Rachel Pisani, representative of Motor City Church, and Project Architect Michele Sargeant of John Tagle Associates.

Ms. Pisani said the property was acquired from Zion Christian Church in October 2019. She gave a brief history of the Motor City Church since its launch on March 15, 2020. She addressed its online services through the pandemic, its involvement in community projects and its commitment to the community. Ms. Pisani said Motor City Church wants to update the building to make it more attractive and inviting. She addressed the use of the chapel, growth in congregation, offering of multiple services and parking sufficiency. Ms. Pisani said their intent is to sell the property to the north for future development. She said Motor City Church would open other campuses should the congregation grow beyond its current capacity to keep the small community church feel. Ms. Pisani addressed present uses of the buildings, the new playground and demolition of the "dome" church building.

There was discussion on:

- Ownership of property.
- Size of congregation; growth potential.
- Vision of property to north for future development.
- Current and future uses of buildings.
- Parking lot improvements.
- Size of property; 22 acres total, 8 acres for proposed development.
- Potential change of use in future; review by Planning Commission.

Mr. Carlisle explained how the underlining zoning and Special Use for a place of worship relates to the entire property, the proposed development before the Board and future development or redevelopment of the remaining property.

Mr. Savidant stated the sanctuary area of the "dome" cannot be used as a church, but a classroom can be used as an ancillary use.

Ms. Sargeant clarified Motor City Church is currently using the "dome" building until the proposed new building is built out. She gave dimensions of the proposed entry addition as 24 feet in height and an estimated 30 feet in width, and confirmed the rendering is a view from Livernois. Ms. Sargeant addressed landscaping of the existing parking lot. She said the intent is for a tree-lined entrance, a landscaped area in the front and in the center with sidewalks and walkways throughout an improved parking lot.

After a lengthy discussion on landscaping the parking lot, there was consensus by the Planning Commission and the applicant to break up the parking lot into six islands and provide 12 additional trees within the parking lot.

Resolution # PC-2021-10-077

Moved by: Rauch
Support by: Lambert

RESOLVED, The Planning Commission recommends that Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed Motor City Church, East side of Livernois, North of Big Beaver (3668 Livernois), Section

22, Currently Zoned R-1C (One Family Residential) District, be **GRANTED**, subject to the following conditions:

1. Provide two (2) bicycle racks.
2. Six islands with 12 trees be provided in the parking lot.
3. That the present use of the sanctuary be discontinued at the time of completion of the new building and the new building takes over that use as a sanctuary.

Discussion on the motion on the floor.

Mr. Lambert acknowledged that adding trees in the interior parking lot not only improves safety but also helps to dissipate heat from the asphalt.

Vote on the motion on the floor.

Yes: Faison, Hutson, Krent, Lambert, Malalahalli, Perakis, Rahman, Rauch *(Tagle recused)*

MOTION CARRIED

(Mr. Tagle returned to meeting at 8:15 p.m.)

7. PRELIMINARY SITE PLAN REVIEW (JPLN 2021-0013) – Proposed Center Court at Butterfield 48-unit Townhome Development, North side of Butterfield, South of Big Beaver, West of Crooks (Parcels 88-20-29-226-021, -022, -023), Section 29, Currently Zoned MF (Multiple Family Residential) District

Mr. Carlisle reviewed the changes to the Preliminary Site Plan application for Center Court at Butterfield since last reviewed by the Planning Commission at their October 12, 2021 meeting. He indicated the changes relate to an overall net loss of four (4) units, a larger recreational area in the center of the site, an increase in recreation space and decrease in building coverage. Mr. Carlisle said the applicant added windows to both the side elevation and the front door entrance based on Planning Commission comments. He indicated no changes were made to the guest parking spaces initially addressed in his report. Mr. Carlisle said the application meets all requirements of the multiple family residential district and recommended approval with conditions to revise guest parking spaces and to address elevations and materials as directed by the Planning Commission.

Discussion among Board and administration:

- Pedestrian crosswalk at entrance; layout in angle and termination.
- Non-symmetry of buildings to accommodate fire apparatus.
- Open space / recreation space.
  - Definitions.
  - Interpretation / intent of Zoning Ordinance.
- Various municipality calculations on open space, occupancy, price points.
- Sidewalks; location, conflict with seating areas and material.

Mr. Carlisle read the definition of open space noting that sidewalks would be counted as open space. He said the proposed sidewalk/pathway constitutes recreation space but there is no definition of recreation space.

Erion Nikolla of Eureka Building Company addressed reducing the units by four (4) to provide for more recreation space, a bigger playground and additional family activities. Mr. Nikolla indicated he is open to making a sidewalk track on the perimeter of the property and of a different material such as black tar or pavers. He said glass was added to the center door of the entrances and windows to the side elevations.

There was discussion on:

- Side elevations; prominence of windows.
- Landscaping; push back landscaping in middle.
- Location of sidewalks.
  - Jogging/walking path around property perimeter.
  - Material of path.
- Guest parking.
  - No requirement to provide.
  - Elimination of some spaces to ease reversing out.
  - Adding landscaping along side of building.
- Widening sidewalk to seven (7) feet.
- Entrance doors; provide overhang for protection from inclement weather.

Resolution # PC-2021-10-078

Moved by: Lambert
Support by: Faison

RESOLVED, The Planning Commission recommends that Preliminary Site Plan approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed Center Court at Butterfield 48-unit Townhome Development, North side of Butterfield, South of Big Beaver, West of Crooks (Parcels 88-20-29-226-021, -022, -023), Section 29, Currently Zoned MF (Multiple Family Residential) District, be **GRANTED**, subject to the following:

1. Revise the guest parking spaces to reduce the number of spaces to allow landscape buffers between the vehicles and those guest parking spaces.
2. Revise the perimeter walkway so that it would be extended out farther to avoid the seating areas around the corners of the site and to use enhanced concrete.
3. Widen the sidewalk to seven (7) feet.
4. Push back landscaping to expand the open space.
5. Revise pedestrian crosswalk layout at the front of the building to make it more logical and safer.

Yes: All present (9)

MOTION CARRIED

CONDITIONAL REZONING

8. CONDITIONAL REZONING - (CR JPLN2021-001) – Proposed Pine View Condominiums, West side of Dequindre, North of Long Lake (88-20-12-476-070), Section 12, From NN (Neighborhood Node "J") and EP (Environmental Protection) to NN (Neighborhood Node "J")

Chair Krent announced the applicant has requested to give a statement prior to the presentation of the application by staff.

Applicant Gary Abitheira asked that Commissioner Rauch recuse himself from this item due to a conflict of interest. Mr. Abitheira acknowledged a letter from his attorney that Commissioner Rauch has entered into a lawsuit against developer Sam Stafa relating to a Neighborhood Node development near the home of Commissioner Rauch. Mr. Abitheira believes that Commissioner Rauch has a conflict of interest with all Neighborhood Node developments.

Mr. Rauch said he does not understand how he could have a conflict of interest on the application before the Board this evening. He said the lawsuit to which the applicant is referring relates to potential flooding on his property as a result of a Neighborhood Node development near his home.

Mr. Motzny referenced material he researched on conflicts of interest from the Troy Board and Committee Appointee Code of Ethics, State Law with regard to Public Officers, Planning Commission Bylaws, Parliamentary Procedure and the Michigan Planning Enabling Act.

Mr. Motzny concluded that a Board member himself/herself must disclose a potential conflict of interest. If the member does not believe there is a conflict, the Board cannot compel that member not to vote. If the member discloses a potential conflict of interest, the remaining members can conduct a vote whether the member should be disqualified.

Mr. Rauch said the lawsuit to which the applicant refers relates to the Neighborhood Node located at Crooks and Wattles and the potential flooding onto his property. Mr. Rauch said any decision on the application before the Commission this evening would have no impact on his property. He declared no conflict of interest on the application before the Board this evening.

After a brief discussion, it was the consensus of the Board to move forward because there was no conflict of interest disclosed by Mr. Rauch.

Mr. Savidant reported there are no changes to the Conditional Rezoning application since it was last reviewed by the Planning Commission at its August 24, 2021 meeting, with exception of clarification on the height of the 3-story building at 35 feet, 4 inches. Mr. Savidant reminded the Board of the two failed Resolutions with a 4-4 vote, one for approval and one for denial. He said the application and public hearing was scheduled at the September 27, 2021 City Council meeting but the applicant pulled the item prior

to City Council consideration and asked to come back to the Planning Commission for reconsideration.

Mr. Tagle asked the Planning Consultant to give a brief review of the application because he was absent from the August meeting.

Mr. Carlisle addressed the 40-foot wide strip of EP zoning and referenced the action taken by the Planning Commission at their November 19, 2020 meeting to postpose the item to allow the applicant to submit a conditional rezoning application to rezone the EP portion so it could be used for guest parking.

Mr. Carlisle said the southern portion of the property is a by-right development. He noted of significant importance are the applicant's voluntary conditions numbered 1, 4, 7 and 8. Mr. Carlisle addressed the landscaping, required screening at the southern edge of the property, the engineering department pedestrian connection improvements, shared access to the site with Taco Bell, maximum height not to exceed 35 feet, and design and site plan standards.

Mr. Carlisle referenced the failed Resolutions at the August 24, 2021 Planning Commission meeting and the applicant's request to be considered again by Planning Commission.

Mr. Carlisle recommended that the Planning Commission recommend to the City Council to grant the Conditional Rezoning and Preliminary Site Plan application with the conditions as identified in his most recent report dated October 19, 2021. He asked the Planning Commission to consider the applicant's request to use a fence in lieu of the required landscape screening.

There was discussion on:

- Crash data provided in the agenda packet.
- Anticipated traffic impact, as relates to office and residential.
- Traffic backup mentioned during public comment.
  - No information to support.
  - Queuing for drive through resulting in backup; no issues reported to police.
- Building orientation as relates to design standards.
  - Memorandum prepared and provided by Zoning Administrator relating to building orientation.
  - Role of Zoning Administrator to interpret the Zoning Ordinance.
  - Site Type B, Building Form C, permitted use.
- Confirmation that application meets open space requirement (15%).
- Master Plan survey results with respect to desirable residential.
- Transition and compatibility of development.
- Ownership of access (easement).

Mr. Abitheira addressed previous actions taken by Planning Commission on the shared entrance with Taco Bell. He addressed Taco Bell hours of operation, timing of accidents, curb cuts, queuing of drive-through traffic, housing that attracts young professionals and the initial request by a former Planning Commission member to eliminate the EP zoning district. Mr. Abitheira distributed to the Board a map/site plan of the Taco Bell property and his property in 2007, at which time the subject property was zoned O-1. He addressed ingress/egress of the properties and traffic.

Mr. Savidant addressed his memorandum and interpretation of the Zoning Ordinance on building orientation.

Chair Krent opened the floor for public comment.

There was no one present who wished to speak.

Chair Krent closed the floor for public comment.

An email message from Laura and Mike Lipinski, 4233 Carson, Troy, in opposition of the proposed application was provided to the Board prior to the beginning of tonight's meeting.

Mr. Tagle brought it to the attention of the Board and audience that the Lipinski's do not live near the proposed application and the development would have no impact on their property.

Mr. Carlisle said clearly there is a disagreement with the interpretation of the Zoning Ordinance by the Zoning Administrator and him on the issue of building entrance frontage. He addressed transition, urban characteristics and compatibility on the subject site and its surrounding properties, noting it could be determined more urban than not. Mr. Carlisle said townhomes or lower-scaled density multi-family residential has been traditionally an appropriate transition buffer from single family to commercial, one story or multi-story commercial.

Mr. Carlisle said the proposed use is an appropriate transitional use from adjacent single family and commercial that fronts on Dequindre and Long Lake. He said based on the intent of the Neighborhood Node, this Neighborhood Node might not be the vision the City wants to achieve there so it is difficult to compare with what is there now. The intent was for multi-family and other mixed use types of products.

Mr. Carlisle said results from the Master Plan survey indicated residents do not want more townhomes but he would like to make it clear to the Planning Commission that townhomes are a permitted and by-right building form in this district; and the application meets the standards of a Neighborhood Node for a by-right development. He said discussion this evening is whether to conditionally rezone the EP part of the site plan to Neighborhood Node. He said if the applicant removed the EP request from the application and came in with a by-right development where there is no proposed development on the EP portion, the recommendation would be for approval because it

is a transitional land use and product supported by the Zoning Ordinance for that particular site.

Mr. Rauch said he does not think townhomes in this instance are transitional versus single family. He says when the Planning Consultant states that a development is a by-right development, it feels like he is being bullied to do whatever the recommendation is from the Planning Consultant.

Mr. Savidant again addressed traffic data provided and the approval in 2006 of the relationship between the subject property and Taco Bell. He said office would be another transitional use and stated office would generate more traffic than multiple family residential. Mr. Savidant addressed the development rights of the property owner and said he does not think it is fair or proper to deny an application based on traffic or existing conditions that have been in place for the past 15 years.

Mr. Savidant stated there is a wide range of different uses that are permitted by right in Neighborhood Nodes, including townhomes and other forms of residential, office and commercial.

Mr. Abitheira requested to construct a 6-foot high decorative fence on the south side of the property in lieu of the required landscaping. He shared that the property is very tight and it would be somewhat of a challenge to landscape.

Mr. Abitheira said he owns the cross access easement property at the Taco Bell entrance up to Dequindre Road and the title work process will verify that.

Resolution # PC-2021-10-079

Moved by: Tagle
Support by: Faison

RESOLVED, That the Planning Commission hereby recommends to the City Council that the NN "J" and EP to NN "J" Conditional Rezoning request, as per Section 16.04 of the City of Troy Zoning Ordinance, located on the west side of Dequindre, north of Long Lake, within Section 12, being approximately 2.389 acres in size, be **GRANTED,** for the following reasons:

1. The request complies with the Master Plan.
2. The EP district does not include any significant natural features.
3. The rezoning would permit greater flexibility in use and development of the property.
4. The conditions offered by the applicant reasonably protect the adjacent properties.
5. The rezoning would be compatible with surrounding zoning and land use.
6. The site can be adequately served with municipal water and sewer.

BE IT FURTHER RESOLVED, That the Planning Commission recommends the following site plan design considerations:

1. Submit photometric plans and fixture details prior to Final approval.
2. Address Engineering Department comments related to pedestrian connection prior to Final approval.
3. Provide site landscaping calculation.
4. Indicate siding material.
5. Provide conditional rezoning agreement prior to City Council consideration.
6. That the barrier on the south property line be a fence in lieu of landscaping.

Yes: Faison, Hutson, Krent, Lambert, Malalahalli, Rahman, Tagle
No: Perakis, Rauch

MOTION CARRIED

OTHER ITEMS

9. PUBLIC COMMENTS – For Items on the Agenda

There was no one present who wished to speak.

10. PLANNING COMMISSION COMMENT

Mr. Tagle stated for the record in all his years on the Commission he has never felt bullied by the Planning Consultant, and he thought the comment inappropriate.

Mr. Faison said the conversation about transition was interesting. He said he accepted both the applicant's comments about the ranch being able to redevelop into something taller and Mr. Carlisle's comments about the projects on the corner not necessarily being what the Board would like the node to be and what the node could be. He said he thinks it might be more appropriate to look at what could be there.

Mr. Faison addressed the issue of the entrances on the street. He said he has read the language several times and the memorandum prepared by staff. He said he sees the logic of the approach taken in the interpretation of the Zoning Ordinance by the administration. Mr. Faison questioned if the matter should be discussed during a meeting or if each member individually should decide.

Mr. Lambert informed the Board that at last evening's meeting, City Council voted to name the park next to the skate park the *Jeanne Stine Community Park*.

Ms. Perakis said she appreciated Mr. Faison's comments on transition. Ms. Perakis shared favorable comments on the Citizens Planner course she is taking and looks forward to getting her certification in a week.

Mr. Rauch formally requested his communication on the Zoning Ordinance interpretation for primary building entrances in Neighborhood Nodes and the proposed text amendment be placed on an agenda for discussion.

Mr. Rauch addressed his comment on bullying. He said it appears that if there are objections to an application, the members often hear from the staff or the consultant that the application is a by-right development. He wished that Ms. Dufrane were in attendance this evening to provide an explanation on the subjectivity of the Zoning Ordinance relating to transition, compatibility, open space and recreation space. He considers those items to be subjective. Mr. Rauch said some of the answers to questions have been along the lines that an application is allowed within the form based district and the Board should approve. He said it completely takes the subjectivity out of a determination. Mr. Rauch addressed changes in the density of residential developments within the last five years, noting the survey shows that residents are not happy.

Ms. Malalahalli asked that the Board be provided a clear understanding of the open space requirements and how open space is defined.

Chair Krent asked that the Board be advised of a better definition of recreation space.

Mr. Savidant asked that there be a formal resolution to place Mr. Rauch's communication on an agenda. Mr. Savidant said he does not think it is appropriate that the Zoning Administrator, which he serves as and as a representative of the City Manager, is put in a position to debate or defend an interpretation of the Zoning Ordinance. He said he is not sure if that was the intent of Mr. Rauch but that he hesitates to go down that path. Mr. Savidant asked to confer with the City Attorney prior to placing the item on an agenda for discussion.

Chair Krent stated he never felt bullied by Mr. Carlisle, he appreciates Mr. Carlisle's excellent perspective on the Zoning Ordinance and Master Plan and that he conducts himself in a professional manner to get things done. Chair Krent addressed the upcoming Michigan Association of Planners Conference that again is a virtual event this year. He encouraged Board members to participate.

Mr. Savidant said the beauty of remote sessions at the Michigan Association of Planners Conference is that one can view all the sessions offered.

Mr. Rauch said he would hold off on a formal resolution so that the administration can confer with the City Attorney.

11. ADJOURN

The Regular meeting of the Planning Commission adjourned at 10:45 p.m.

Respectfully submitted,

_____

Tom Krent, Chair

_____

Kathy L. Czarnecki, Recording Secretary

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DATE: December 10, 2021

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: PUBLIC HEARING – PRELIMINARY SITE PLAN REVIEW (File Number SP2021-0020) – Proposed Adler Cove (One Family Residential Cluster), South side of Long Lake, East of John R (Parcels 88-20-13-100-012, 88-20-13-100-014 and 88-20-13-100-025), Currently Zoned R-1C (One Family Residential) Zoning District

The petitioner Mondrian Properties submitted the above referenced Preliminary Site Plan application for a 20-unit One Family Residential Cluster. The development proposes to preserve 38% open space on the 10-acre parcel. The Planning Commission is responsible for providing a recommendation to City Council for this item.

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.
3. Anticipated Traffic Impacts, prepared by OHM, dated November 15, 2021
4. Public comment
5. Preliminary Site Plan Application

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PROPOSED RESOLUTION

PUBLIC HEARING – PRELIMINARY SITE PLAN REVIEW (File Number SP2021-0020) – Proposed Adler Cove (One Family Residential Cluster), South side of Long Lake, East of John R (Parcels 88-20-13-100-012, 88-20-13-100-014 and 88-20-13-100-025), Currently Zoned R-1C (One Family Residential) Zoning District

Resolution # PC-2021-12-
Moved by:
Support by:

RESOLVED, The Planning Commission hereby recommends to the City Council that the proposed Adler Cove Site Condominium (One Family Residential Cluster), 20 units/lots, South side of Long Lake, East of John R (Parcels 88-20-13-100-012, 88-20-13-100-014 and 88-20-13-100-025), Section 13, approximately 10 acres in size, Currently Zoned R-1C (One Family Residential) District, be approved for the following reasons:

1. The cluster development better protects the sites natural resources than if the site were not developed as a cluster.
2. The cluster development better protects the adjacent properties than if the site were not developed as a cluster.
3. The cluster development is compatible with adjacent properties.
4. The site can be adequately served with municipal water and sewer.
5. The cluster development preserves 38% open space, to remain open space in perpetuity.

Yes:
Absent:

MOTION CARRIED

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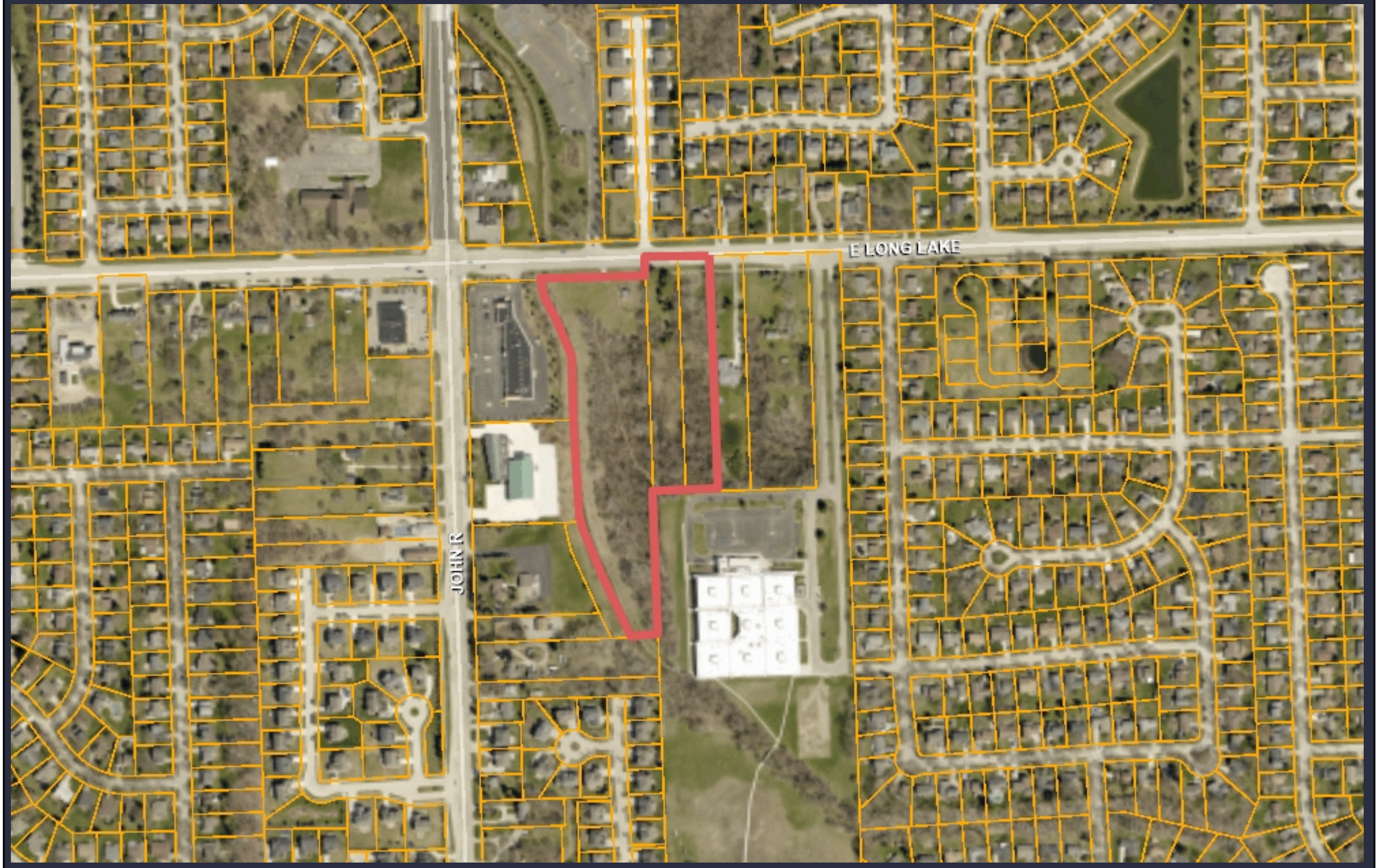
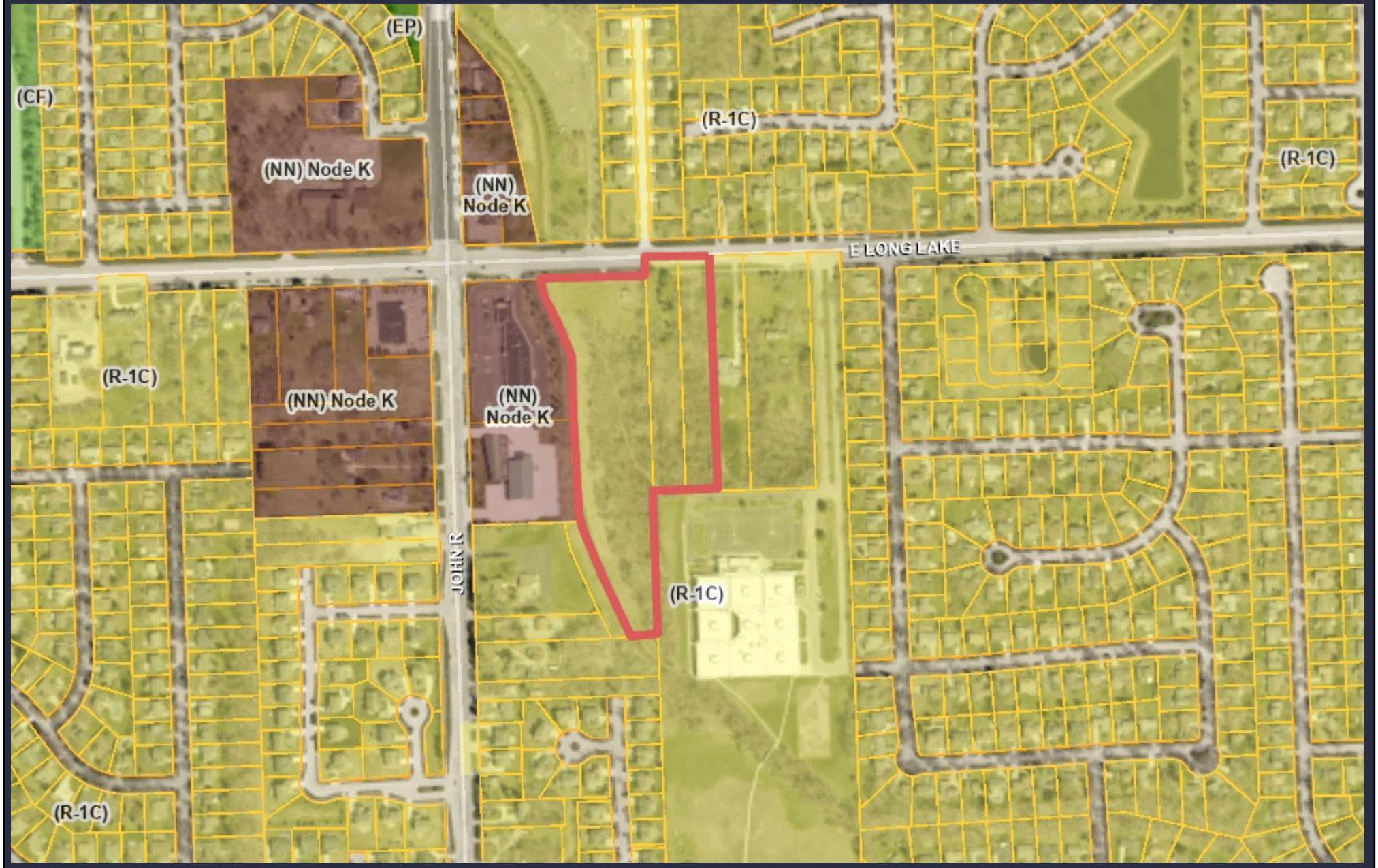
GIS Online



1,177 0 589 1,177 Feet

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.

GIS Online



1,177 0 589 1,177 Feet

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.

Carlisle | Wortman
ASSOCIATES, INC.
117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: November 2, 2021
November 30, 2021

Preliminary Site Condominium Cluster Review
For
City of Troy, Michigan

Project Name:	Alder Cove
Plan Date:	September 20, 2021
Location:	South of E. Long Lake, east of John R.
Zoning:	R-1C, One-family Residential District
Action Requested:	Preliminary Site Condominium Cluster Approval
Required Information:	Deficiencies noted.

PROJECT AND SITE DESCRIPTION

We are in receipt of a preliminary site plan application for a twenty (20) unit detached single-family condominium cluster development. The twenty (20) new lots will be accessed from a new private road that is located off E. Long Lake Road. The site is three parcels and is a total of 10.0 acres. The site is vacant but encumbered with floodplain and tree cover. The applicant has not identified any wetlands on site.

The property is surrounded by R-1C on the north, east, south, and boarded by neighborhood node to the west. The applicant proposes a cluster development. The base density base under the R-1C, One-Family Residential as determined by the submission of a parallel plan is fifteen (15) units. The applicant is seeking five (5) additional units above the parallel plan density by doing a cluster, providing 38% of the total site as open space.

The applicant is proposing three housing option types which range in size from a 1,900 sq/ft ranch with second floor option to a 2,900 sq/ft colonial.

Figure 1. *- Location and Aerial Image of Subject Site*

Size of Subject Property:
The parcel is 10.0 acres

Proposed Uses of Subject Parcel:
Twenty (20) detached single family condominium cluster development.

Current Use of Subject Property:
The subject property is currently vacant

Current Zoning:
The property is currently zoned 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 / Larson Middle School
East	R-1C, One-family Residential District	Single-family home / Larson Middle School
West	NN, Neighborhood Node	Commercial / Fire Station

NATURAL FEATURES

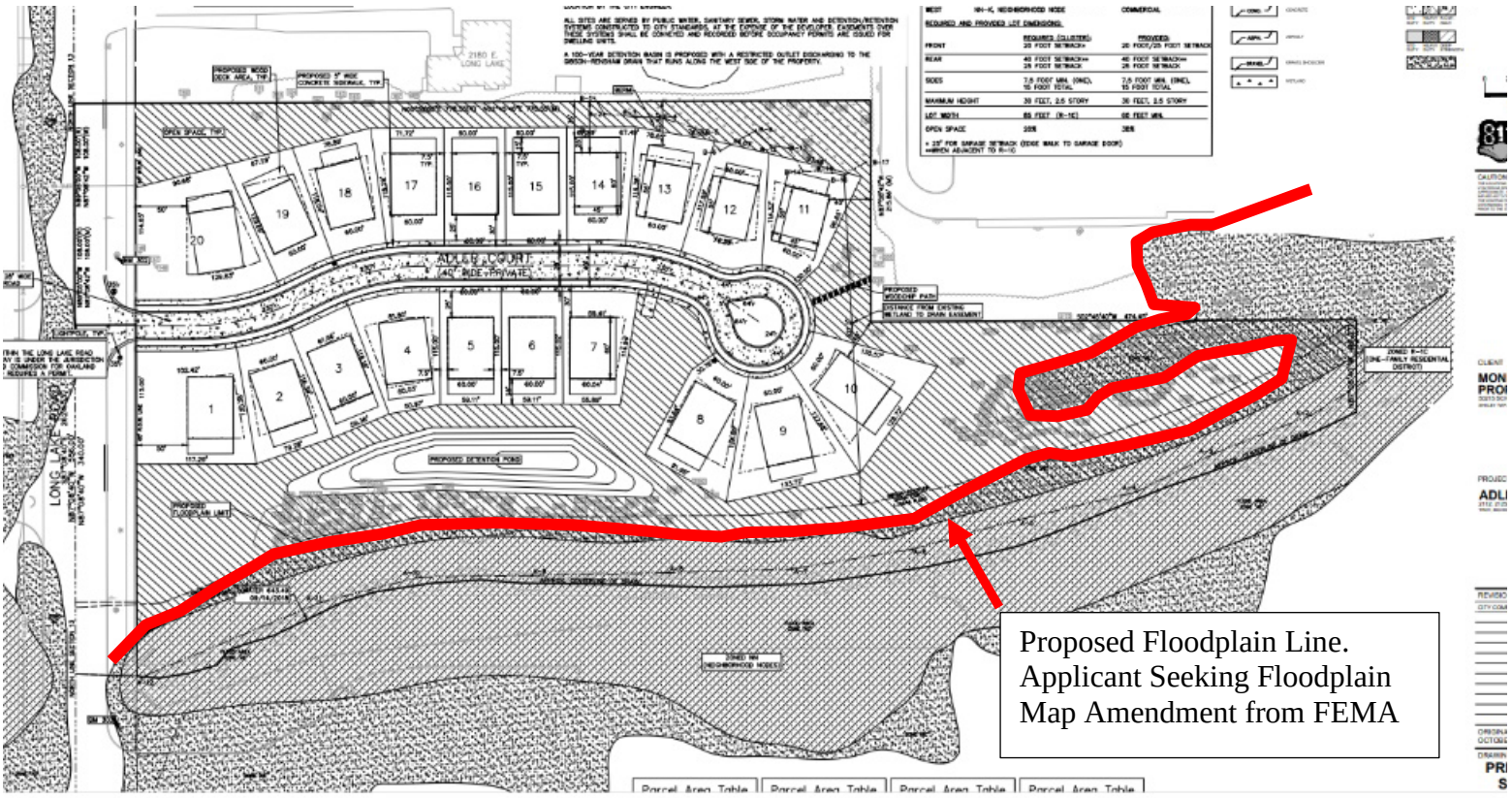
Topography: A topographic survey has been provided on sheet C-1.0. The central and northern portion of the site is relatively flat, but there is significant grade change around the southern portion of the site in the floodplain.

Wetlands: The wetland delineation report found one wetland and one watercourse likely regulated by the Michigan Department of Environment, Great Lakes & Energy (EGLE). The southern portion of the site is bounded by the Gibson Drain, which meets the states definition of a stream.

Wetland B is a scrub/shrub wetland approximately 0.2 acres in size located in the southeast corner of the site. The delineation report finds that in the wetland expert's opinion, Wetland B is regulated by the EGLE under Part 303 because it is within 500 feet of the Gibson Drain, which meets the definition of a regulated stream under Part 301. However, final determination is made by EGLE.

The applicant appears to preserve most of the wetland but does appear to require some grading within areas at the exterior of the wetland. The applicant should confirm impact upon wetland.

Floodplain: The submitted topography survey shows the existing conditions of the onsite floodplain. The applicant is proposing to modify the site based on a submitted letter to the FEMA for a Letter of Map Revision (LOMR) to adjust the floodplain limits. According to the applicant, when the Road Commission of Oakland County (RCOC) did improvements expanded the bridge and raised the road on Livernois, they did not submit for a LOMR for these improvements. The applicant notes that their submittal reflects the current conditions of the floodplain based on RCOC's improvements. The applicant is waiting on confirmation of a LOMR from FEMA.



Woodlands: A tree survey has been provided to inventory the natural features that exist onsite. The survey identified a total of approximately 450 trees on site. Many of the trees are either in poor condition, invasive, or not of high quality. There is an especially high number of Cottonwoods. The applicant has identified a total of 6 landmark trees and 27 woodland trees, preserving 2 and 9, respectively. Full replacement and preservation details are shown in ***Table 2.***

Table 2. *– Woodland Protection Ordinance*

Replacement Details		
Protected Tree	**Inches Removed**	**Replacement Required**
Landmark	82 inches	82 inches
Woodland	149 inches	75 inches
Preservation/Mitigation	**Inches Preserved**	**Credit**
Landmark	36 inches	72 inches
Woodland	62 inches	124 inches
Total	**0 inches required for replacement.** The number of inches preserved and credited exceed the mitigation required.	

Items to be addressed: *Confirm impact upon onsite wetland.*

SITE ARRANGEMENT

The proposed one-family cluster development consists of twenty (20) units. All twenty (20) new lots will be accessed from a new private road off Long Lake Road. The proposed lots range between 6,900 sq. ft. and 13,697 sq. ft.

The applicant has submitted a parallel plan to establish a base density and portray the visual difference between traditional site design versus a cluster development. The cluster option is offered as an alternative to traditional residential development. The cluster option is intended to:

1. Encourage the use of property in accordance with its natural character.
2. Assure the permanent preservation of open space and other natural features.
3. Provide recreational facilities and/or open space within a reasonable distance of all residents of the Cluster development.
4. Allow innovation and greater flexibility in the design of residential developments.
5. Facilitate the construction and maintenance of streets, utilities, and public services in a more economical and efficient manner.
6. Ensure compatibility of design and use between neighboring property.
7. Encourage a less sprawling form of development, thus preserving open space as undeveloped land.
8. Allow for design innovation to provide flexibility for land development where the normal development approach would otherwise be unnecessarily restrictive or contrary to other City goals

Items to be addressed: *Planning Commission shall determine if requirements are met to qualify for cluster development options and if the additional number of units is commensurate with open space being preserved.*

AREA, WIDTH, HEIGHT, SETBACKS and REGULATORY FLEXIBILITY

The intent of the cluster development provisions is to relax the typical R-1C district bulk requirements in order to encourage a less sprawling form of development that preserves open space and natural resources. As set forth in 10.04.E the applicant is able to seek specific departures from the dimensional requirements of the Zoning Ordinance for yards and perimeter setback as a part of the approval process.

Table 1. *– Bulk Requirements*

	Required/Allowed	Provided	Compliance
Density	Overall density shall not exceed the number of residential cluster units as developed under a conventional site condominium, unless a density bonus has been granted by City Council.	Base Density = 15 units + Cluster bonus (38% bonus) = 20 units are allowed The applicant is seeking 20 units.	Complies. 20 units are permitted with City Council approval.
Perimeter Setback	Equal to the rear yard setback requirement for the underlying zoning district of the property directly adjacent to each border = 40 feet perimeter setback	Decks for Units 11, 13-18 encroach anywhere from 2 feet into 15-feet into the required perimeter setback	Decks on units 14-18 encroach into perimeter setback
Lot Size	10,500 sq. ft.	Range in size from 6,900 sq. ft. and 13,697 sq. ft.	Complies with approval of Cluster by City Council
Front Setback (building)	20 feet	25 feet	Compiles
Rear Setback (building)	25-feet setback	25-feet minimum 10-feet with deck	Building envelopes comply. Decks encroach 15-feet into required rear yard. Applicant seeking relief to have minimum rear yard less than 25-feet due to deck.
Side Setback (building)	7.5-feet setback	7.5-feet minimum	Complies
Open Space Requirements: Minimum Percentage	20%	Proposing to preserve 3.8 acres of the 10.0 acres, or 38%, for open space.	Complies. Applicant must submit open space preservation covenant.

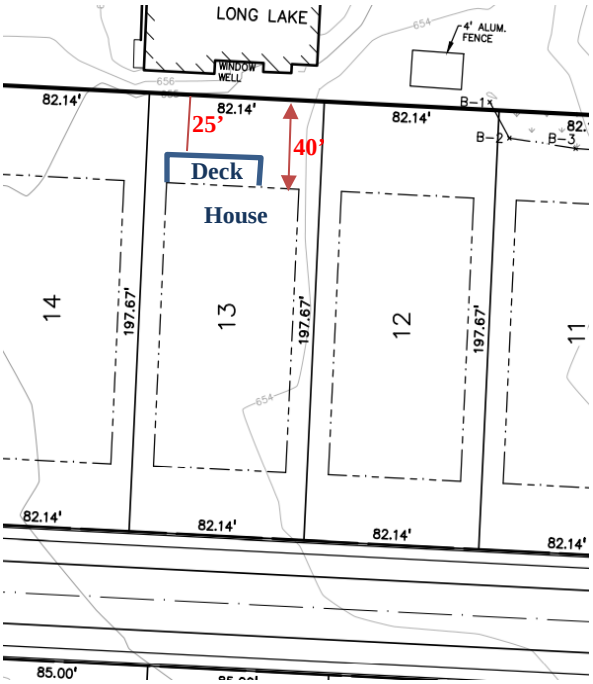
The applicant is showing decks on the rear of all properties. As set forth in Section 7.08.B:

> *An open, unenclosed, and uncovered porch, raised deck, or patio structure may project into a required rear yard for a distance not to exceed fifteen (15) feet, subject further to the requirement that the distance remaining between the encroaching facility and the rear lot line shall in no instance be less than twenty-five (25) feet. Porch, deck, patio, or terrace facilities encroaching into required front or rear yards shall not include fixed*

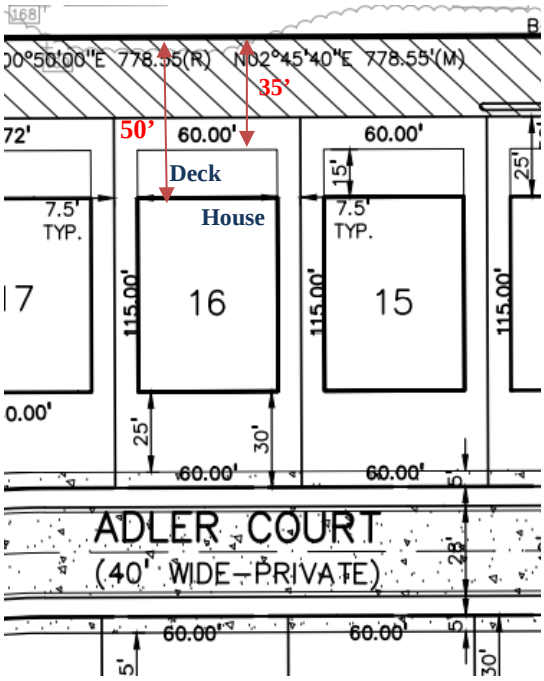
> *canopies, gazebos or permanent enclosures, and shall be at a grade no higher than that of the first or main floor of the building to which they are attached.*

The decks extend 15-feet from home and encroach 15-feet into the required 25-feet rear yard. Please note that provision 7.08.B was drafted for a conventional R 1 through R-5 lot that requires a 40-foot setback. Hence for a typical R-lot, the 40-foot rear yard requirement would allow a 15-foot deck and still maintain at least a 25-foot rear yard setback. However, due to the required additional perimeter setback required by the cluster provisions, the decks are further away from the northern property line via cluster than conventional layout. See graphic below:

<u>Setbacks for non-cluster (underlying R-3 zoning) as compared to cluster development</u>



Conventional R-3 layout, with decks 25-feet and house 40-feet from northern property line,



Proposed cluster layout with decks 35-feet and house 50-feet from northern property line

The City Council, based upon a recommendation from the Planning Commission, may waive the rear lot and perimeter setback provisions provided that the applicant has demonstrated innovative and creative site and building designs and solutions, which would otherwise be unfeasible or unlikely to be achieved absent this provision. The Planning Commission should consider the purpose and intent of the Cluster Development option in considering the setback deviations.

Items to be addressed: *Consider the deck encroachment into rear setback and perimeter buffer*

OPEN SPACE REQUIREMENTS

A requirement of the Cluster Option is to provide at least one (1) of the following open space benefits:

a. Significant Natural Features. Preservation of significant natural features contained on the site, as long as it is in the best interest of the City to preserve the natural features that might be negatively impacted by conventional residential development. The determination of whether the site has significant natural features shall be made by the City Council, after review of a Natural Features Analysis, prepared by the applicant, that inventories these features; or

b. Recreation Facilities. If the site lacks significant natural features, it can qualify with the provision of usable recreation facilities to which all residents of the development shall have reasonable access. Such recreation facilities include areas such as a neighborhood park, passive recreational facilities, soccer fields, ball fields, bike paths, or similar facilities that provide a feature of community-wide significance and enhance residential development. Recreational facilities that are less pervious than natural landscape shall not comprise more than fifty (50) percent of the open space. The determination of whether the site has significant natural features shall be made by the City Council after review of a Site Analysis Plan, prepared by the applicant, that inventories these features; or

c. Preservation of Common Open Space or Creation of Natural Features. If the site lacks significant natural features, a proposed development may also qualify if the development will preserve common open space or create significant natural features such as wetlands. The determination of whether the site has significant natural features shall be made by the City Council after review of a Site Analysis Plan, prepared by the applicant, which inventories these features.

The site is 10 acres, and the applicant is proposing to reserve 3.8 acres for common open space, or 38% of the total site. Open space is provided along the floodplain, area in southern-most portion of the site, and within an open space collar around the northern, western, and southern property line. The open space collar ranges from 10-feet in depth along the southeastern portion of the site to 25-feet along the eastern property line and well over 100 feet along the western property line. As part of the review, the Planning Commission is to consider and make a recommendation to City Council if the layout and open space plan meets the intent and standards of the Cluster provision and has the applicant creatively designed the site to either preserve significant natural resources (trees, wetland, and floodplain) or provide quality open space.

Guarantee of Open Space and Tree Preservation:

The applicant shall provide documentation to guarantee that all open space portions of the development will be preserved and maintained as approved and that all commitments for such preservation and maintenance are binding on successors and future owners of the subject property. All such documents shall be subject to approval by the City Attorney. No structures (pools, sheds) or equipment (play structures, etc.) are permitted within the dedicated open space area.

Items to be addressed: *Planning Commission is to consider and make a recommendation to City Council if the layout and open space plan, and/or natural features meet the intent of the Cluster provision and has the applicant creatively designed the site to either preserve significant natural resources (trees) or provide quality open space.*

SITE ACCESS AND CIRCULATION

Vehicular

Access to the site will be from a single location off Long Lake Road. The development will be served by an internal twenty-eight (28) foot wide private road, located inside of a forty (40) foot roadway easement.

Pedestrian

The applicant proposes a five (5) foot wide concrete sidewalk along the perimeter of the private road. The internal sidewalk will connect to existing sidewalk on Long Lake Road.

Items to be Addressed: *City Engineer to review site access and circulation.*

STORMWATER

Stormwater will be managed by a detention system.

Items to be Addressed: *None.*

LANDSCAPING

One-Family Cluster development landscaping requirements are regulated by Section 13.02.F.2.

Table 2. *– Landscaping Requirements*

Frontage	Required	Provided	Compliance
Proposed Private Rd.	One (1) deciduous tree for every 50 lineal feet. 1,262/50 = 25.24 trees = 26 trees	26 trees	Complies

Long Lake Road 120-foot ROW (section 13.02 F.2.c)	One (1) large evergreen tree per ten (10) lineal feet. 558 lf./10 lf = 56 evergreen trees	56 proposed	Complies

Items to be Addressed: *None.*

ELEVATIONS AND FLOOR PLANS

The applicant has submitted a three housing options ranging from 1,900 to 2,900 sq/ft. The first is a ranch style house, with a second-floor option. The other options are colonials.

Materials were not indicted

Items to be Addressed: *Indicate materials.*

CLUSTER STANDARDS

As set forth in section 10.04.I, the applicant shall demonstrate that through the use of the Cluster option, the development will accomplish a sufficient number of the following objectives, as are reasonably applicable to the site, providing:

a. Long-term protection and preservation of natural resources, natural features, and open space of a significant quantity and/or quality in need of protection or preservation, and which would otherwise be unfeasible or unlikely to be achieved absent these regulations.
b. Innovative and creative site design through flexibility in the siting of dwellings and other development features that would otherwise be unfeasible or unlikely to be achieved absent these regulations.
c. Appropriate buffer and/or land use transitions between the Cluster development and surrounding properties.
d. A compatible mixture of open space, landscaped areas, and/or pedestrian amenities.
e. Sustainable design features and techniques, such as green building, stormwater management best practices, and low impact design, which will promote and encourage energy conservation and sustainable development.
f. A means for owning common open space and for protecting it from development in perpetuity.
g. Any density bonus is commensurate with the benefit offered to achieve such bonus.
h. The cluster development shall be adequately served by essential public facilities and services, such as: streets, pedestrian or bicycle facilities, police and fire protection, drainage systems, refuse disposal, water and sewage facilities, and schools. Such services shall be provided and accommodated without an unreasonable public burden.
i. The architectural form, scale, and massing shall ensure buildings are in proportion and complementary to those of adjacent properties and the selected building materials are of high, durable quality. The garage shall not be the dominant feature of a residential building.

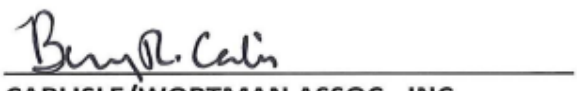
RECOMMENDATIONS

Planning Commission shall determine if requirements are met to qualify for cluster development option, if the required standards have been met, and if the additional number of units is commensurate with open space being preserved.

Items to consider include:

- Applicant is seeking following relief:
  - Decks encroaching 15-foot into the required 25-foot rear yard
  - Decks for units 14-18 encroach into the 40-foot perimeter setback
- Indicate materials

The Planning Commission may request that either the applicant address aforementioned items or make a recommendation for City Council consideration.



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

memorandum

Date: November 15, 2021

To: Bill Huotari, PE
From: Sara Merrill, PE, PTOE

Re: Adler Cove – Cluster Development
Anticipated Traffic Impacts

The purpose of this memorandum is to provide an overview of anticipated traffic impacts resulting from Adler Cove, a proposed site condominium development consisting of 20 detached single-family homes. The development is located on the south side of Long Lake Road, east of John R Road. Access to the development is proposed via a private road, located directly across from Forest View Drive. In the immediate vicinity of the site, Long Lake Road is a 5-lane roadway, with two through lanes in each direction and a two-way center turn lane.

The Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, provides trip generation rates for numerous land uses, based on thousands of studies throughout the United States and Canada. This data can then be used to estimate the number of vehicle trips generated by a development. For residential housing, traffic impacts are usually most noticeable during the peak hour of adjacent street traffic – that is, during morning and evening "rush hour", when traffic on the roads is most congested. In most areas, the morning (AM) peak is a one hour period that occurs between 7 am – 9 am, and the evening (PM) peak is a one hour period usually between 4 pm – 6 pm.

The table below provides the calculated number of trips generated for the proposed Adler Cove development, based on the ITE Trip Generation Manual for Single-Family Detached Housing (ITE Land Use Code #210).

Number of Dwelling Units	Number of Site-Generated Trips								
	AM Peak Hour			PM Peak Hour			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
20 Units	5	14	19	14	8	22	119	119	238

During the morning (AM) peak hour, the proposed Adler Cove development is expected to generate 19 new trips: 5 inbound (entering the site), and 14 outbound (exiting the site). During the evening (PM) peak hour, the proposed site is expected to generate 22 new vehicle trips: 14 inbound (entering the site) trips, and 8 outbound (exiting the site). This pattern coincides with residents typically leaving in the morning for work, and returning home in the evening.

The traffic generated by the proposed development is minimal, adding fewer than two dozen vehicle trips during the peak ("busiest") hour. The traffic impact of this site on the adjacent road network is negligible and would be imperceptible to the majority of road users.

As a point of comparison, traffic counts taken in 2018 (prior to the pandemic and I-75 construction) on Long Lake Road (between John R Road and Dequindre Road) indicate this segment carries approximately 22,000 vehicles per day, and over 2,100 vehicles during the PM peak hour. Traffic volumes in the area are generally close to but have not fully returned to pre-pandemic levels.

OHM Advisors
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LIVONIA, MICHIGAN 48150
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F 734.522.6427
OHM-Advisors.com

Amongst typical weekdays, traffic volumes during the peak hours alone often vary by 10%+ from one day to the next. These day-to-day fluctuations result in peak hour traffic volumes that vary by upwards of several hundred vehicles. The proposed Adler Cove subdivision is expected to generate less than 25 new vehicle trips during the peak hour.

With the presence of the Larson Middle School nearby, this immediate area experiences a brief spike in traffic volumes around the arrival and dismissal bell times for the nearby Larson Middle School. This concentrated traffic pattern is typical for schools, and often results in some congestion and backups at the beginning and end of the school day. The arrival time for the school overlaps the a.m. commuter peak, while the school dismissal usually occurs prior to the p.m. commuter peak. During these school transition times, there would be fewer gaps in traffic, resulting in increased delay for vehicles exiting the Adler Cove development to Long Lake Road.

From: Kimberly Ethridge
To: Brent Savidant; Planning
Subject: Comments on the proposed Adler Cove Development
Date: Thursday, December 9, 2021 12:59:23 PM

Hello, I am a resident of the Mount Vernon Subdivision in Troy, which neighbors the proposed Adler Cove one-family development planned for the South Side of East Long Lake Road, East of John R Road. I have reviewed the proposal and project narrative that was provided to me by Mondrian Properties. I advocate for the R-1C Single Family Cluster Zoning Option to be utilized at Adler Cove. The cluster option allows for a more compact neighborhood, with reasonably-sized homes that are similar in size to the homes in the Mt. Vernon Sub. More importantly, the cluster option would preserve over half of the natural habitat that is present on this property, valuable wildlife habitat in our neighborhood. This wooded 10-acres abuts the Gibson-Renshaw (G-R) Drain. The small amount of habitat surrounding this and other natural drains, are important wildlife travel corridors. It is important to keep native habitat along a contiguous corridor for wildlife to traverse it, to stay off the streets, to not get hit by cars. We enjoy our wildlife, I just say an 8 point buck in this woods a few days ago! If we lose their corridors for travel we lose the wildlife, even birds. Keeping at least some of this contiguous wildlife corridor along the drain, appears to be considered in the cluster home design that is proposed. The traditional single-residential option would be a bad alternative, wiping out all of the wildlife corridor along the G-R Drain.

The Cluster option also keeps substantial trees, shrubs, native soil and soil cover that will help with surface rainwater retention. Native soils and vegetation prevent runoff from new homes' roofs, yards, driveways. Fill sand brought in to replace native 'percolating' soils, often drastically increases soil erosion and runoff into waterways like the G-R Drain. Although there is a retention basin in the design, and explained to me that stormwater will be diverted into the stormwater system and not a direct discharge to the drain, that inevitably is released back into the G-R Drain, or other Drains in the Clinton River Watershed. I am concerned about the drastic increase in stormwater rushing through the drain this last year, an effect of the allowed increased development as a whole in this area (and climate change affecting our precipitation levels). Behind my home on Terova Dr., the drain has reached concerning levels this year, more than any of the last ten years I've lived here. Stormwater upwelling of this size, have made it a mess along the drain banks once they subside. Since July 2021, I've observed small white foam bubbles floating down the drain, daily. The bubbles are indicative of some kind of surfactant getting into stormwater. It is collecting in pools of white foam right at the three large stormwater discharge pipes under the southeast corner of Long Lake & John R. Surface water sample results from the drain, behind my home, had no detections of PFAS chemicals luckily. The more runoff is going to increase the load on this Drain which causes a mess downstream, more foam, etc. Even with the proposed stormwater retention basin and diverting the new homes' runoff, stormwater all eventually gets into waterways in an open drain system. No one wants surfactant bubbles floating down the creek, but non-degrading substances like this are the reality now, sadly. My point in this observation, is that the increased stormwater loads on our stormwater system need to be managed appropriately by everyone to prevent pollution from getting worse, regionally. To that effect, state and local stormwater discharge, soil erosion and floodplain/wetlands laws should be complied with when building Adler Cove. Any direct discharge into the drain during construction should be prevented: excavated sediments & soils, oils, petroleum products, should all be managed

responsibly being so close to the G-R Drain.
Even if Mondrian Properties itself will not reside in the new homes, the construction they propose, makes them our neighbor.
The development will be a direct neighbor to Larson Middle School. The cluster option that allows some natural area to remain, provides a buffer for LMS, which is safer and fosters LMS's science, ecologic, and environmental education to continue. That is important because LMS uses the woods and G-R Drain as learning tools by walking the trails and even outside gym class, to foster the 'get outside' lifestyle which we all greatly need. Adler Cove's traditional residential plan has houses surrounding LMS, then a big stormwater retention next to the west side of the school. That seems unrealistic, and unsafe for students that go outside for recess and gym and science class, to construct homes and utilities along that small strip of woods that close to LMS. The Cluster option proposes to leave it alone, I also support leaving the small strip of the property's southern woods alone. I think this is the most important reason to consider the Cluster Zoning option here.
Increased traffic, especially truck traffic during construction, should be taken into consideration and safely managed. This is an already congested area during the school year, near Athens HS and adjoining Larson MS; Care should be made to notify the school, so they may notify parents, if construction is planned during the school year, to prevent loaded trucks coming and going, before 7:30 am. During summer construction: The kids in our neighborhood use the wooded trail that will be destroyed, they walk it and ride their bikes or walk on it, to 7-11. To ensure no one inadvertently enter the construction zone, signage, caution tape and the like should be utilized so they know the trail isn't to be used by them anymore. So, this development is impacting wildlife corridor and the kids' Slurpee corridor, haha.
I have walked this path myself for many years, thinking it was school property not private. Our community spread wood chips on the muddy portion of this path as a community project to keep it less messy for kids and bikes. It is part of the natural features that make Troy distinctive, why residents and government was compelled to adopt a local Woodland Ordinance into the city's code. I am sad to see this wooded area go, but I understand it is the property owner's right to build, in compliance with Troy's Woodland Ordinance and other state and local laws. I am grateful Mondrian Properties seems to understand, our community uses this wooded area, and is attempting to preserve some of it. I am hopeful that the clearing of land and trees, and development of infrastructure to support the homes, then the homes themselves, are done in a fashion that preserves the natural health of the nature around it, and is protective of human health and the environmental as a whole. Thank you for your consideration of all these issues going forward, and good luck,
Kim Ethridge, Terova Drive, Troy Mi 48085

From: Julia E Rodriguez
To: Planning
Subject: Mondrian Properties on the south side of Long Lake Road east of John R
Date: Thursday, December 9, 2021 3:53:38 PM

Dear Planning Commission,

I would like to submit comment regarding the proposed Mondrian Properties development on the south side of Long Lake Road east of John R. I would like to Commission to consider the lack of green space in Troy and overdevelopment that will soon impact our quality of life. While the property owners may be developing within the present zoning code the commission has the ability to listen to residents and require more green space be preserved. The latest city survey strongly demonstrated that residents want more green space and this parcel is especially important being along the Clinton River Watershed. I hope you will consider residents wishes for a green more nature friendly Troy when evaluating the plans for this development.

Thank you,
Julia Rodriguez
5941 Endicott Dr
Troy, 48085

From: lena anaie
To: Planning
Subject: New sub
Date: Thursday, December 9, 2021 7:22:55 PM

To whom it may concern,

My children currently attend Larson middle school and what I love about it is the long drive with trees surrounding the school. It makes the school feel homey and safe and it would be a shame to put giant houses do take away from the scenic grounds, I propose no on building giant houses that will affect wildlife and the scenic grounds.

Sent from my iPhone

From: Kimberly Culbert
To: Planning
Subject: New development by Mondrian Properties
Date: Thursday, December 9, 2021 6:49:08 PM

>
> Dear Planning Commission,
>
> I don’t believe we need so many new development. One of the reasons people are attracted to living in Troy is that there are still many undeveloped areas!! The wooded areas are so important to our community!!
>
> If you won’t listen to what people truly want please make them plant 2 trees for every single tree they cut down. Make sure they are mature trees not tiny little one, please!!
>
> Thank you for taking the time to read my email!!
>
> Sincerely,
>
>
> Kimberly Baker
> Troy, MI 48085
>
>

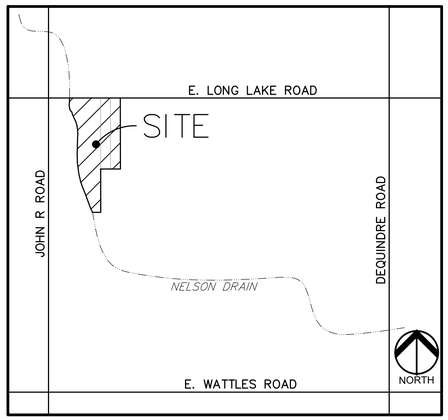
PRELIMINARY SITE PLANS

ADLER COVE

2112, 2125 & 2152 E. LONG LAKE

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-1.0	TOPOGRAPHIC SURVEY
P-2.0	PRELIMINARY SITE PLAN
P-2.1	PARALLEL SITE PLAN
P-3.0	PRELIMINARY GRADING PLAN
P-4.0	PRELIMINARY UTILITY PLAN
L-1.0	PRELIMINARY LANDSCAPE PLAN
T-1.0	TREE PRESERVATION PLAN
T-1.1	TREE PRESERVATION LIST
T-1.2	TREE PRESERVATION LIST

DESIGN TEAM

OWNER/APPLICANT/DEVELOPER

MONDRIAN PROPERTIES
50215 SCHOENHERR
SHELBY TWP., MI 48315
CONTACT: JOSEPH MANIACI
PHONE: (586) 726-7350
EMAIL: JMANIACI@MONDRIANPROPERTIES.COM

CIVIL ENGINEER

PEA GROUP
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TROY, MI 48083-1872
CONTACT: JOHN B. THOMPSON, PE
PHONE: 844.813.2949
EMAIL: JTHOMPSON@PEAGROUP.COM

LAND PLANNER

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LANDSCAPE ARCHITECT

PEA GROUP
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DETROIT, MI 48226
CONTACT: KIMBERLY DIETZEL, RLA
PHONE: 844.813.2949
EMAIL: KDIETZEL@PEAGROUP.COM

PEA GROUP

REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	10/19/2021
CITY COMMENTS	11/9/2021

LEGAL DESCRIPTION
(Per Oakland County)

PARCEL NO. 20–13–100–025
T2N, R11E, SEC 13 PART OF NW 1/4 BEG AT PT DIST E 660 FT FROM NW SEC COR, TH S 00–50–00 W 778.55 FT, TH S 89–05–00 E 108 FT, TH N 00–50–00 E 778.55 FT, TH W 108 FT TO BEG

PARCEL NO. 20–13–100–012
T2N, R11E, SEC 13 PART OF W 1/2 OF NW 1/4 BEG AT PT DIST S 87–08–40 E 320 FT FROM NW SEC COR, TH S 87–08–40 E 340 FT, TH S 02–45–40 W 1253 FT, TH N 87–08–40 W 90.07 FT TO CEN OF GIBSON DRAIN, TH NLY 1288.75 FT ALG SD DRAIN TO BEG EXC N 60 FT TAKEN FOR RD

PARCEL NO. 20–13–100–014
T2N, R11E, SEC 13 PART OF NW 1/4 BEG AT PT DIST S 89–05–00 E 768 FT FROM NW SEC COR, TH S 00–50–00 W 778.55 FT, TH S 89–05–00 E 108 FT, TH N 00–50–00 E 778.55 FT, TH N 89–05–00 W 108 FT TO BEG

BENCHMARKS
(GPS DERIVED – NAVD88)
THE ELEVATIONS SHOWN ON TOPO ARE 0.14' HIGHER THAN CITY DATUM.

BM #302 (CITY BM #1425)
ARROW ON A DIMPLE ON A HYDRANT LOCATED ON THE SOUTH SIDE OF LONG LAKE ROAD, APPROX. 230' WEST OF THE DRIVE TO #2180 E. LONG LAKE ROAD.
ELEV. – 657.84

BM #303
CUT 'X' LOCATED ON THE NORTHEAST SIDE OF A LIGHT POLE BASE LOCATED ON THE SOUTH SIDE OF E. LONG LAKE ROAD, NORTHWEST OF DRAIN HEADWALL
ELEV. – 657.72

FLOODPLAIN:
(Per Flood Insurance Rate Map Number 26125C0553G. dated January 16, 2009

BY GRAPHICAL PLOTTING, THE SITE LIES WITHIN:

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water–surface elevation of the 1% annual chance flood.

ZONE AE – Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

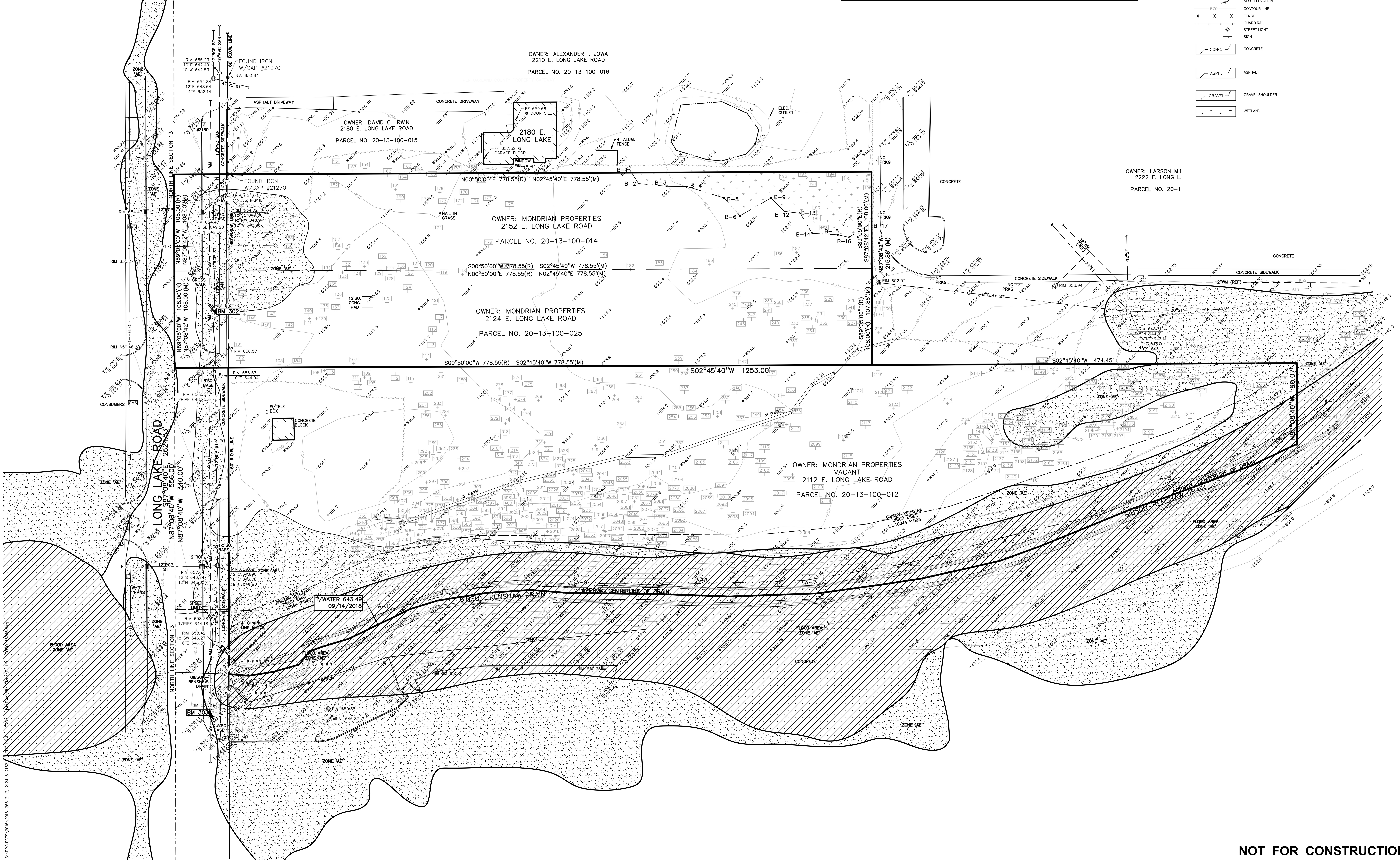
OTHER FLOOD AREAS
ZONE X – Area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

LEGEND

IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING

ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
POST INDICATOR VALVE
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
UNIDENTIFIED STRUCTURE
SPOT ELEVATION
CONTOUR LINE
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONCRETE
ASPHALT
GRAVEL SHOULDER
WETLAND



NORTH

0 25 50 100
SCALE: 1" = 50'

Know what's below. Call before you dig.

CAUTION!!
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CLIENT
MONDRIAN PROPERTIES
50215 SCHOENHERR
SHELBY TWP., MICHIGAN

PROJECT TITLE
ADLER COVE
2112, 2125 & 2152 E. LONG LAKE
TROY, MICHIGAN

REVISIONS	
CITY COMMENTS	11-9-21

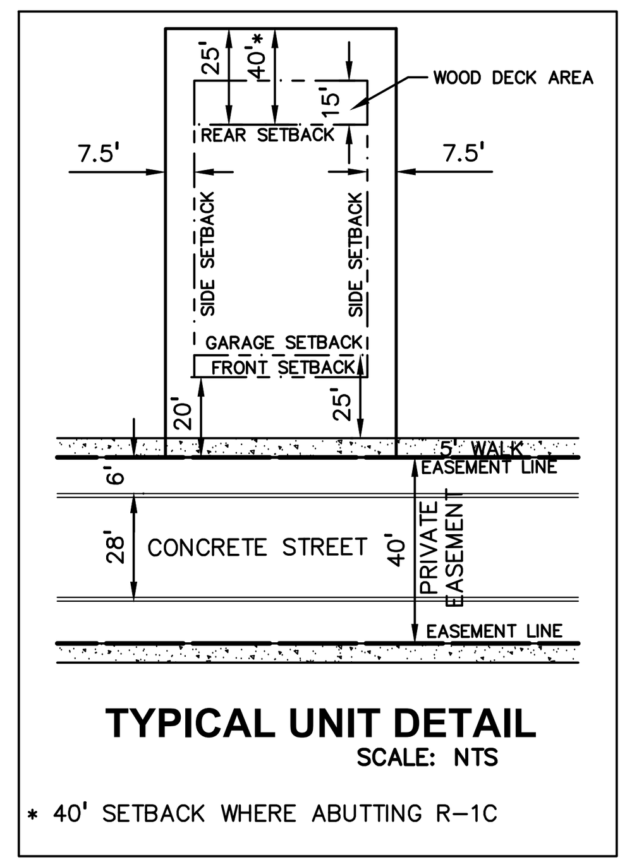
ORIGINAL ISSUE DATE:
OCTOBER 19, 2021

DRAWING TITLE
TOPOGRAPHIC SURVEY

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK

DRAWING NUMBER:
P-1.0

NOT FOR CONSTRUCTION



PROJECT AND SITE DESCRIPTION:
PROPOSED CONSTRUCTION OF A 20-LOT SINGLE FAMILY DETACHED SITE CONDOMINIUM PROJECT ON THE SOUTH SIDE OF LONG LAKE ROAD, EAST OF JOHN R ROAD. ACCESS TO ALL UNITS WILL BE VIA CONNECTION TO LONG LAKE ROAD. THE PROPOSED RESIDENTIAL USE IS PERMITTED BY-RIGHT IN THE R-1C DISTRICT. THE SITE IS CURRENTLY HEAVILY WOODED.

SITE ARRANGEMENT:
THE PROPOSED SITE CONDOMINIUM CONSISTS OF 20 LOTS (20 LOTS ALLOWED) WITH MINIMUM LOT SIZE OF 6,900 SQUARE FEET. THE AVERAGE LOT SIZE IS 8,399 SQUARE FEET. ALL UNITS FRONT ON A NEW PRIVATE STREET. THE PROPOSED LOTS ARE REGULAR IN SHAPE, ALLOW FOR ADEQUATE SETBACKS, AND PERMIT SUFFICIENT SPACE FOR THE HOMES AND INGRESS AND EGRESS FOR EACH UNIT ACCORDING TO THE CLUSTER OPTION. A MINIMUM OF 30% OPEN SPACE HAS BEEN PROVIDED.

NATURAL RESOURCES:
THE SITE CURRENTLY HAS SIGNIFICANT TREE COVER.

FLOODPLAIN:
THE PROPERTY IS LOCATED WITHIN THE FLOOD HAZARD AREA INDICATED BY FLOOD INSURANCE RATE MAP (FIRM) NO. 26125C0553G DATED: JANUARY 16, 2009.

ACCESS AND CIRCULATION:

VEHICULAR ACCESS AND CIRCULATION:
VEHICULAR ACCESS TO ALL UNITS WILL BE VIA A NEW STREET LOCATED OFF LONG LAKE ROAD. THE NEW ROADWAY WILL HAVE A FORTY (40) FOOT WIDE PRIVATE ROAD EASEMENT.

PEDESTRIAN ACCESS AND CIRCULATION:
A 5-FOOT WIDE SIDEWALK IS PROVIDED AT BOTH SIDES OF THE NEW ROADWAY.

UTILITIES:
UTILITIES ARE PLACED WITHIN STREET RIGHT-OF-WAY, OR WITHIN EASEMENTS APPROVED AS TO SIZE AND LOCATION BY THE CITY ENGINEER.

ALL SITES ARE SERVED BY PUBLIC WATER, SANITARY SEWER, STORM WATER AND DETENTION/RETENTION SYSTEMS CONSTRUCTED TO CITY STANDARDS, AT THE EXPENSE OF THE DEVELOPER. EASEMENTS OVER THESE SYSTEMS SHALL BE CONVEYED AND RECORDED BEFORE OCCUPANCY PERMITS ARE ISSUED FOR DWELLING UNITS.

A 100-YEAR DETENTION BASIN IS PROPOSED WITH A RESTRICTED OUTLET DISCHARGING TO THE GIBSON-RENSHAW DRAIN THAT RUNS ALONG THE WEST SIDE OF THE PROPERTY.

SITE DATA:

LOCATION OF PROJECT:
SOUTH SIDE OF LONG LAKE ROAD, EAST OF JOHN R

SIZE OF PROPERTY: 10.0 ACRES

AREA DEVELOPED: 4.73 AC (47.3%)
TOTAL UNDEVELOPED AREA: 5.27 AC (52.7%)

PROPOSED USE OF PROPERTY: TWENTY (20) DETACHED, SINGLE FAMILY HOMES

CURRENT ZONING: R-1C, ONE-FAMILY RESIDENTIAL DISTRICT

PROPOSED: R-1C, ONE-FAMILY RESIDENTIAL DISTRICT, CLUSTER OPTION

CLUSTER OPTION CALCULATION:
- BASE NUMBER OF UNITS – PARALLEL PLAN = 16 UNITS
- 20% DENSITY BONUS PER 10.04D = 3 UNITS
- EXTRA 10% OPEN SPACE PER 10.04H.1 = 1 UNITS
  (OPEN SPACE PROVIDED = 3.80 ACRES, 38.0%)
  (OPEN SPACE INCLUDES UTILITY EASEMENTS)
- TOTAL UNITS ALLOWED = 20 UNITS
- TOTAL UNITS PROVIDED = 20 UNITS

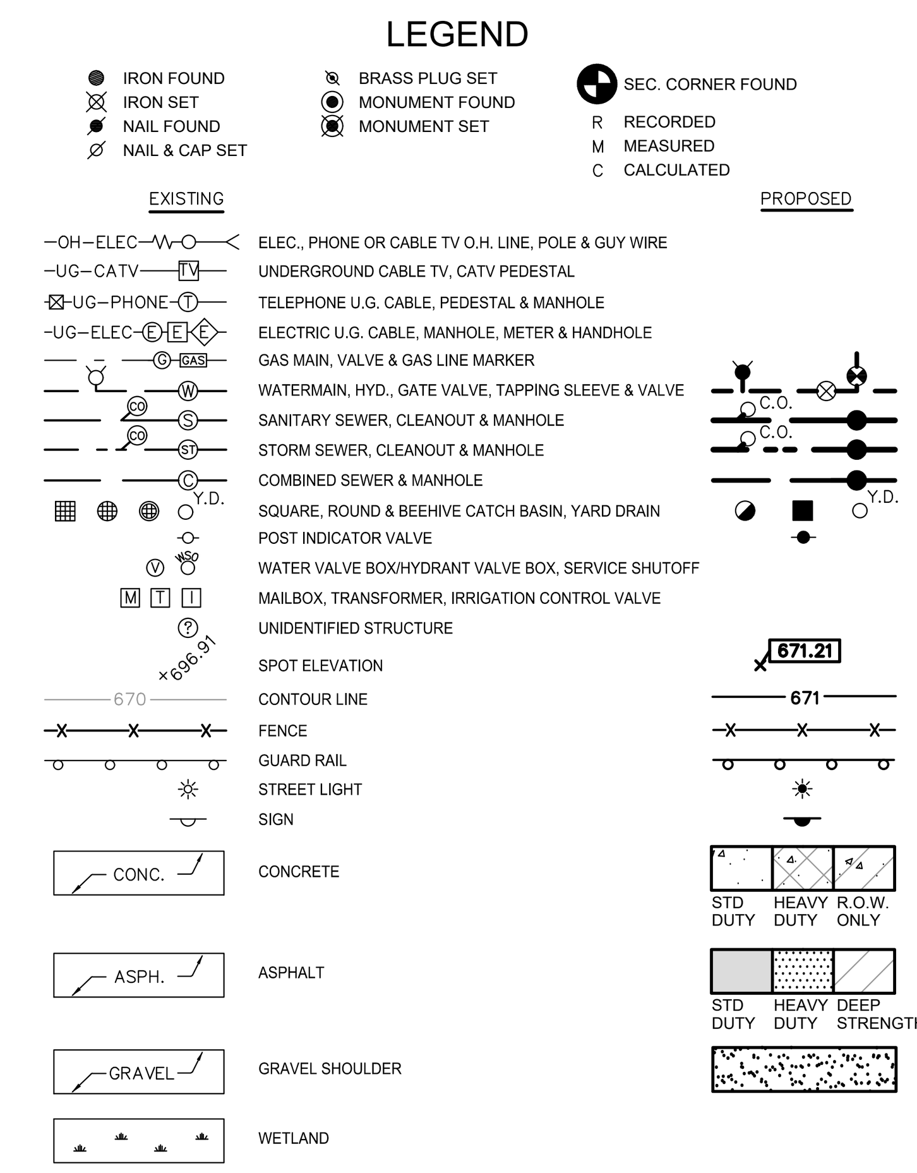
SURROUNDING PROPERTY DETAILS:

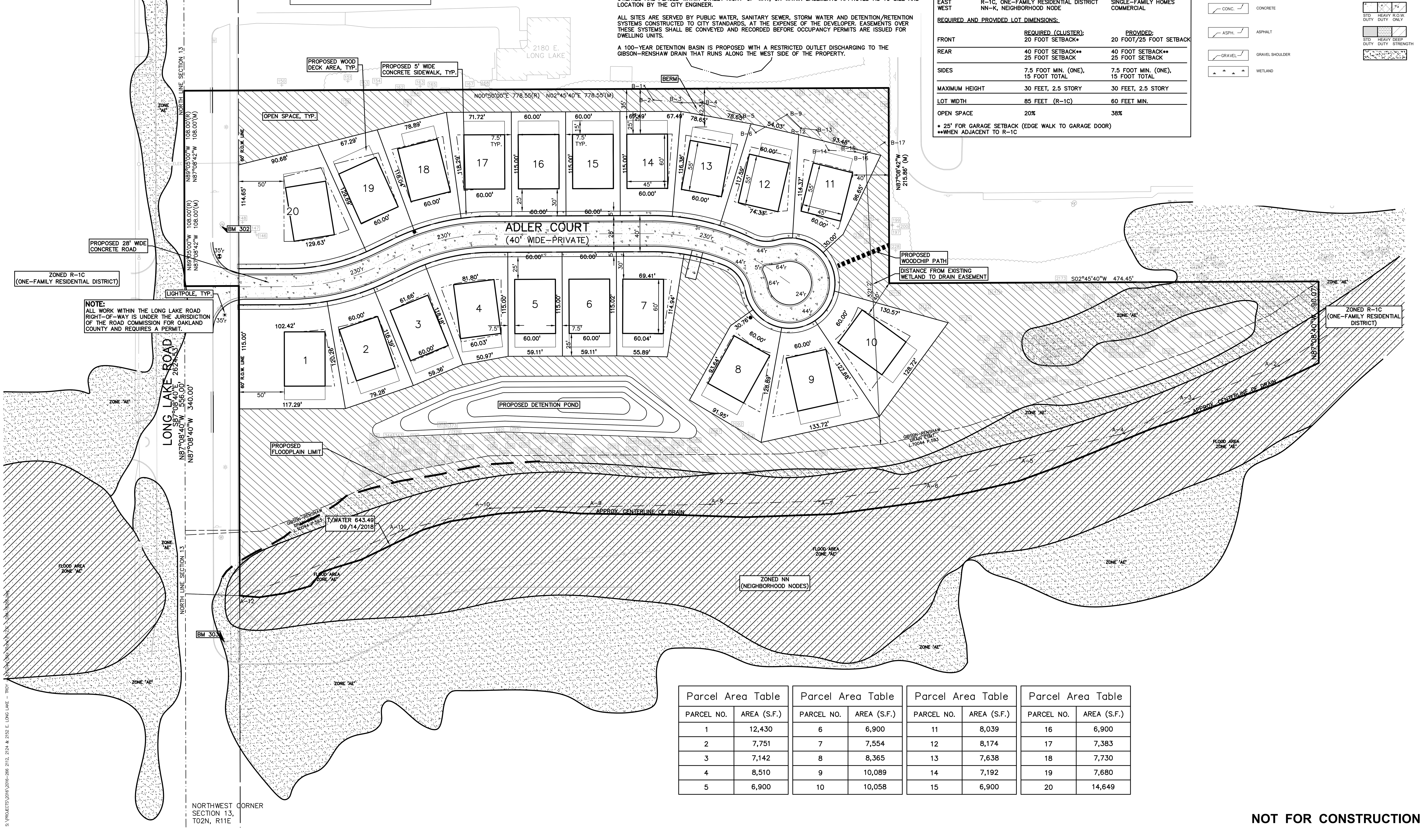
DIRECTION	ZONING	USE
NORTH	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES
SOUTH	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES
EAST	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES
WEST	NN-K, NEIGHBORHOOD NODE	COMMERCIAL

REQUIRED AND PROVIDED LOT DIMENSIONS:

	REQUIRED (CLUSTER):	PROVIDED:
FRONT	20 FOOT SETBACK*	20 FOOT/25 FOOT SETBACK
REAR	40 FOOT SETBACK** 25 FOOT SETBACK	40 FOOT SETBACK** 25 FOOT SETBACK
SIDES	7.5 FOOT MIN. (ONE), 15 FOOT TOTAL	7.5 FOOT MIN. (ONE), 15 FOOT TOTAL
MAXIMUM HEIGHT	30 FEET, 2.5 STORY	30 FEET, 2.5 STORY
LOT WIDTH	85 FEET (R-1C)	60 FEET MIN.
OPEN SPACE	20%	38%

* 25' FOR GARAGE SETBACK (EDGE WALK TO GARAGE DOOR)
**WHEN ADJACENT TO R-1C





Parcel Area Table	
PARCEL NO.	AREA (S.F.)
1	12,430
2	7,751
3	7,142
4	8,510
5	6,900

Parcel Area Table	
PARCEL NO.	AREA (S.F.)
6	6,900
7	7,554
8	8,365
9	10,089
10	10,058

Parcel Area Table	
PARCEL NO.	AREA (S.F.)
11	8,039
12	8,174
13	7,638
14	7,192
15	6,900

Parcel Area Table	
PARCEL NO.	AREA (S.F.)
16	6,900
17	7,383
18	7,730
19	7,680
20	14,649

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CLIENT
MONDRIAN PROPERTIES
50215 SCHOENHERR
SHELBY TWP., MICHIGAN

PROJECT TITLE
ADLER COVE
2112, 2125 & 2152 E. LONG LAKE
TROY, MICHIGAN

REVISIONS	
CITY COMMENTS	11-9-21

ORIGINAL ISSUE DATE:
OCTOBER 19, 2021

DRAWING TITLE
PRELIMINARY SITE PLAN

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK

DRAWING NUMBER:
P-2.0

NOT FOR CONSTRUCTION

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING	PROPOSED	
—OH—ELEC—		ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
—UG—CATV—TV—		UNDERGROUND CABLE TV, CATV PEDESTAL
—UG—PHONE—T—		TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
—UG—ELEC—E—E—		ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
—GAS—		GAS MAIN, VALVE & GAS LINE MARKER
—W—		WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
—S—		SANITARY SEWER, CLEANOUT & MANHOLE
—ST—		STORM SEWER, CLEANOUT & MANHOLE
—C—		COMBINED SEWER & MANHOLE
C.B.	C.B.	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
		POST INDICATOR VALVE
		WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
M T I		MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
?		UNIDENTIFIED STRUCTURE
+696.50	671.21	SPOT ELEVATION
670	671	CONTOUR LINE
X X X	X X X	FENCE
		GUARD RAIL
		STREET LIGHT
		SIGN
CONC.	STD DUTY / HEAVY DUTY / R.O.W. ONLY	CONCRETE
ASPH.	STD DUTY / HEAVY DUTY / DEEP STRENGTH	ASPHALT
GRAVEL		GRAVEL SHOULDER
		WETLAND

NORTH

0 25 50 100

SCALE: 1" = 50'

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Parcel Area Table	
PARCEL NO.	AREA (S.F.)
1	36,129
2	22,201
3	18,352
4	17,822
5	18,049
6	18,231
7	18,270
8	31,174

Parcel Area Table	
PARCEL NO.	AREA (S.F.)
9	14,188
10	16,350
11	16,237
12	16,237
13	16,237
14	16,237
15	16,237
16	24,630

NOT FOR CONSTRUCTION

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DRAWING TITLE
PARALLEL SITE PLAN

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK

DRAWING NUMBER:
P-2.1

S:\PROJECTS\2016\2016-266 2112, 2124 & 2152 E. LONG LAKE - TROY - JBT\Dwg\Site Plans\P-2.1 - PARALLEL-16266.dwg

FLOODPLAIN:
(Per Flood Insurance Rate Map Number 26125C0553G. dated January 16, 2009

BY GRAPHICAL PLOTTING, THE SITE LIES WITHIN:

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
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ZONE AE – Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

SYMBOLS: GRADING

PROPOSED SPOT ELEVATION:
TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES. 622.50

PROPOSED CONTOUR LINE 922

ABBREVIATIONS:
T/C = TOP OF CURB
G = GUTTER GRADE
T/P = TOP OF PAVEMENT
T/S = TOP OF SIDEWALK
T/W = TOP OF WALL
B/W = BOTTOM OF WALL
F.G. = FINISH GRADE
RIM = RIM ELEVATION

LEGEND

IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
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GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
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ASPHALT
GRAVEL SHOULDER
WETLAND

STD DUTY | HEAVY DUTY | R.O.W. ONLY
STD DUTY | HEAVY DUTY | DEEP STRENGTH

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NORTH

0 25 50 100
SCALE: 1" = 50'

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OWNER: ALEXANDER I. JOWA
2210 E. LONG LAKE ROAD
PARCEL NO. 20-13-100-016

OWNER: DAVID C. IRWIN
2180 E. LONG LAKE ROAD
PARCEL NO. 20-13-100-015

OWNER: LARSON MIDDLE SCHOOL
2222 E. LONG LAKE ROAD
PARCEL NO. 20-13-100-033

ADLER COURT
(40' WIDE-PRIVATE)

LONG LAKE ROAD

NORTH LINE SECTION 13

60' R.O.W. LINE

PROPOSED DETENTION POND

BERM

BM 302

BM 303

T/WATER 643.49
09/14/2018

FLOOD AREA ZONE "AE"

ZONE "AE"

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SHELBY TWP., MICHIGAN

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ADLER COVE
2112, 2125 & 2152 E. LONG LAKE
TROY, MICHIGAN

REVISIONS	
CITY COMMENTS	11-9-21

ORIGINAL ISSUE DATE:
OCTOBER 19, 2021

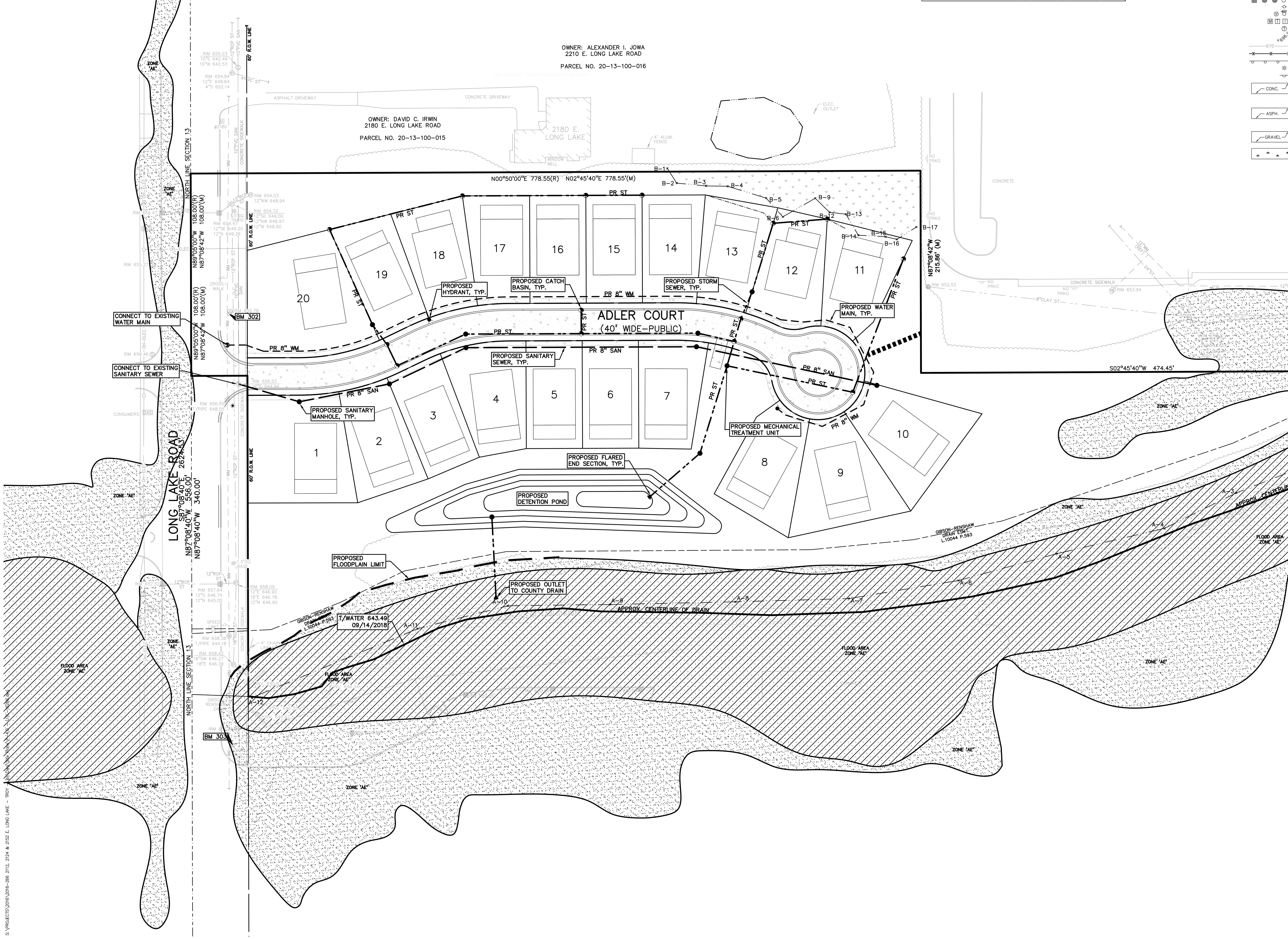
DRAWING TITLE
PRELIMINARY GRADING PLAN

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK

DRAWING NUMBER:
P-3.0

NOT FOR CONSTRUCTION

Contributing Area (A):	9.70	AC.	
Allowable Discharge (Qa)	1.94	(=0.2 * acre) CFS	
Coefficient of Runoff (Cr):	0.70		
Calculation of Required Discharge/Acre			
Qo = ((Qa)/(A)(Cr):	0.29		
T = -25 + (10312.500/Qo))0.5:	164.98		
100-Year Storage Volume Required:			
Vs = (16500(T)/(T+25)) - 40Qo(T):		12443.23	
Vt = (Vs)(A)(Cr):	84,489.55	CU. FT.	



LEGEND

IRON FOUND	BRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND

R RECORDED
M MEASURED
C CALCULATED

EXISTING — PROPOSED

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- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
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- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
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- SPOT ELEVATION
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- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE (STD DUTY, HEAVY DUTY, R.O.W. ONLY)
- ASPHALT (STD DUTY, HEAVY DUTY, DEEP STRENGTH)
- GRAVEL SHOULDER
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NORTH

0 25 50 100
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SHELBY TWP., MICHIGAN

PROJECT TITLE
ADLER COVE
2112, 2125 & 2152 E. LONG LAKE
TROY, MICHIGAN

REVISIONS

CITY COMMENTS	11-9-21

ORIGINAL ISSUE DATE:
OCTOBER 19, 2021

DRAWING TITLE
PRELIMINARY UTILITY PLAN

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK
DRAWING NUMBER:	

NOT FOR CONSTRUCTION P-4.0

DECIDUOUS TREE PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
6	NS2.5	Sour Gum	*Nyssa sylvatica*	2.5" Cal.	B&B
10	QR2.5	Red Oak	*Quercus rubra*	2.5" Cal.	B&B
10	TC2.5	Greenspire Linden	*Tilia cordata 'Greenspire'*	2.5" Cal.	B&B
26	TOTAL DEC.				

EVERGREEN TREE PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
20	PA8	Norway Spruce	*Picea abies*	8' Ht.	B&B
16	PG8	Black Hills Spruce	*Picea glauca 'Densata'*	8' Ht.	B&B
20	PS8	Eastern White pine	*Pinus strobus*	8' Ht.	B&B
56	TOTAL EVG.				

LANDSCAPE CALCULATIONS:
PER CITY OF TROY ZONING ORDINANCE; R-1C

INTERNAL PUBLIC ROADS STREET TREES
REQUIRED: 1 TREE / 50 LF (BOTH SIDES RD.) 1,262 LF / 50 LF = 26 TREES

PROVIDED: 26 TREES
NOTE: TREES SHALL BE PLACED AT A MINIMUM OF 5' AWAY FROM UTILITY LEADS.

GREENBELT TREES
REQUIRED: 1 LARGE EVG TREE / 10 LF OF STREET FRONTAGE. 558' OF RIGHT OF WAY/ 10 = 56 DEC TREES REQUIRED.

PROVIDED: 56 EVG TREES PROVIDED
NOTE: TREES SHALL BE PLANTED 5' AWAY FROM UTILITIES.

LANDMARK AND WOODLAND TREE REPLACEMENT

REQUIRED: WOODLAND TREES REPLACE AT 50% DBH AND LANDMARK AT 100% . 0" REQUIRED FOR REPLACEMENT. SEE SHEET T-1.0 FOR CALCS.

KEY:

- = GREENBELT TREES
- = STREET TREES
- = NON-IRRIGATED SEED LAWN
- = STORMWATER SEED MIX
- = EXISTING TREES TO REMAIN WITH TREE PROTECTION FENCE

NORTH

SCALE: 1" = 50'

Know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS 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.

GENERAL PLANTING NOTES:

1. 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.
2. 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.
3. 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.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
5. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
6. ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
7. ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
8. 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.
9. ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
10. ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
11. 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.
12. 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.
13. IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
14. ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
15. ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
16. SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
17. FOR NON-LAWN SEED MIX AREAS, AS NOTED ON PLAN, BRUSH MOW ONCE SEASONALLY FOR INVASIVE SPECIES CONTROL.
18. CONTRACTOR SHALL NOT INSTALL PLANTS UNDER BUILDING OVERHANG AND SHALL NOTIFY LANDSCAPE ARCHITECT IF DRAWINGS CONFLICT WITH BUILDING OVERHANGS.
19. TREES SHALL NOT CONFLICT/ BLOCK PROPOSED REGULATORY/ DIRECTION SIGNAGE, MONUMENT SIGNS, ADDRESS OR LIGHT POLES. SHIFT TREES AS NECESSARY TYP.

NOT FOR CONSTRUCTION

PEA GROUP
t: 844.813.2949
www.peagroup.com

STATE OF MICHIGAN · KIMBERLY DIETZEL · NO. 1741 · LANDSCAPE ARCHITECT

CLIENT
MONDRIAN PROPERTIES
50215 SCHOENHERR
SHELBY TWP., MICHIGAN

PROJECT TITLE
ADLER COVE
2112, 2125 & 2152 E. LONG LAKE
TROY, MICHIGAN

REVISIONS	
CITY COMMENTS	11-9-21

ORIGINAL ISSUE DATE:
OCTOBER 19, 2021

DRAWING TITLE
PRELIMINARY LANDSCAPE PLAN

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK

DRAWING NUMBER:
L-1.0

S:\PROJECTS\2016\2016-266 2112, 2124 & 2152 E. LONG LAKE - TROY - jbt\Dwg\Site Plans\L-1.0 - LANDSCAPE-16266.DWG

PEA GROUP
t: 844.813.2949
www.peagroup.com

KEY

- 2782 = EXISTING TREES TO SAVE
- 2782 = EXISTING TREES TO REMOVE
- = TREE PROTECTION FENCING

NORTH

0 25 50 100
SCALE: 1" = 50'

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

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CLIENT
MONDRIAN PROPERTIES
50215 SCHOENHERR
SHELBY TWP., MICHIGAN

PROJECT TITLE
ADLER COVE
2112, 2125 & 2152 E. LONG LAKE
TROY, MICHIGAN

REVISIONS	
CITY COMMENTS	11-9-21

ORIGINAL ISSUE DATE:
OCTOBER 19, 2021

DRAWING TITLE
TREE PRESERVATION PLAN

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK

DRAWING NUMBER:
T-1.0

NOT FOR CONSTRUCTION

S:\PROJECTS\2016\2016-266 2112, 2124 & 2152 E. LONG LAKE - TROY - JBT\Dwg\Site Plans\T-1.0 - TREE PRESERVATION-11626.dwg

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
~~101~~	~~WP~~	~~20~~	~~(Eastern) White Pine~~	~~Pinus strobus~~	~~Fair~~		~~LANDMARK~~	~~R~~	~~Y~~	REPLACE
~~102~~	~~EE~~	~~15~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~103~~	~~EE~~	~~23~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~104~~	~~EE~~	~~25~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~105~~	~~EE~~	~~8~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~106~~	~~EE~~	~~8~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~	~~x1~~	~~INVASIVE~~	~~R~~	~~Y~~	-
~~107~~	~~BX~~	~~15~~	~~Box elder~~	~~Acer negundo~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~108~~	~~EE~~	~~11~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~109~~	~~EE~~	~~10~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~110~~	~~EE~~	~~10~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~111~~	~~EE~~	~~16~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~112~~	~~BX~~	~~20~~	~~Box elder~~	~~Acer negundo~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~113~~	~~RP~~	~~11~~	~~Red Pine~~	~~Pinus resinosa~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~114~~	~~BX~~	~~7~~	~~Box elder~~	~~Acer negundo~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~115~~	~~BX~~	~~10~~	~~Box elder~~	~~Acer negundo~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~116~~	~~BX~~	~~18~~	~~Box elder~~	~~Acer negundo~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~117~~	~~WP~~	~~20~~	~~(Eastern) White Pine~~	~~Pinus strobus~~	~~Fair~~		~~LANDMARK~~	~~R~~	~~Y~~	REPLACE
~~118~~	~~BX~~	~~21~~	~~Box elder~~	~~Acer negundo~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~119~~	~~BP~~	~~8~~	~~Bradford Pear~~	~~Pyrus calleryanna~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~120~~	~~WS~~	~~12~~	~~White Spruce~~	~~Picea glauca~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~121~~	~~AS~~	~~19~~	~~Quaking Aspen~~	~~Populus tremuloides~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~122~~	~~EE~~	~~19~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~123~~	~~EE~~	~~16~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~124~~	~~WS~~	~~11~~	~~White Spruce~~	~~Picea glauca~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~125~~	~~BS~~	~~13~~	~~Blue Spruce~~	~~Picea pungens~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~126~~	~~EE~~	~~17~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~127~~	~~MR~~	~~17~~	~~Red Mulberry~~	~~Morus rubra~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~128~~	~~CT~~	~~20~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~129~~	~~EE~~	~~11~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~130~~	~~E~~	~~8~~	~~American Elm~~	~~Ulmus americana~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~131~~	~~BX~~	~~8~~	~~Box elder~~	~~Acer negundo~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~132~~	~~EE~~	~~19~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~133~~	~~BX~~	~~10~~	~~Box elder~~	~~Acer negundo~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~134~~	~~EE~~	~~33~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~135~~	~~BS~~	~~16~~	~~Blue Spruce~~	~~Picea pungens~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~136~~	~~BS~~	~~17~~	~~Blue Spruce~~	~~Picea pungens~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~137~~	~~BS~~	~~16~~	~~Blue Spruce~~	~~Picea pungens~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~138~~	~~AP~~	~~16~~	~~Domestic Apple~~	~~Malus sylvestris~~	~~Poor~~		~~LANDMARK~~	~~R~~	~~Y~~	-
~~139~~	~~BS~~	~~14~~	~~Blue Spruce~~	~~Picea pungens~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~140~~	~~WC~~	~~8~~	~~White Cedar~~	~~Thuja occidentalis~~	~~Poor~~	~~x2~~	~~WOODLAND~~	~~R~~	~~Y~~	-
~~141~~	~~BS~~	~~19~~	~~Blue Spruce~~	~~Picea pungens~~	~~Very Poor~~		~~LANDMARK~~	~~R~~	~~Y~~	-
~~142~~	~~BS~~	~~12~~	~~Blue Spruce~~	~~Picea pungens~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~143~~	~~WP~~	~~24~~	~~(Eastern) White Pine~~	~~Pinus strobus~~	~~Fair~~		~~LANDMARK~~	~~R~~	~~Y~~	REPLACE
~~144~~	~~WS~~	~~16~~	~~White Spruce~~	~~Picea glauca~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~145~~	~~BW~~	~~9~~	~~Black Walnut~~	~~Juglans nigra~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
146	WC	15	White Cedar	Thuja occidentalis	Fair		LANDMARK	S	Y	-
147	WP	21	(Eastern) White Pine	Pinus strobus	Fair		LANDMARK	S	Y	-
148	BF	11	Balsam Fir	Abies balsamea	Fair		WOODLAND	S	Y	-
~~149~~	~~AP~~	~~19~~	~~Domestic Apple~~	~~Malus sylvestris~~	~~Poor~~		~~LANDMARK~~	~~R~~	~~Y~~	-
150	EE	36	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	N	-
151	EE	25	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	N	-
152	SM	52	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
153	EE	17	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	N	-
154	BX	40	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
~~155~~	~~PW~~	~~19~~	~~White Poplar~~	~~Populus alba~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~156~~	~~PW~~	~~15~~	~~White Poplar~~	~~Populus alba~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~157~~	~~PW~~	~~38~~	~~White Poplar~~	~~Populus alba~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~158~~	~~E~~	~~19~~	~~American Elm~~	~~Ulmus americana~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~159~~	~~SM~~	~~42~~	~~Silver Maple~~	~~Acer saccharinum~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~160~~	~~BW~~	~~18~~	~~Black Walnut~~	~~Juglans nigra~~	~~Good~~		~~LANDMARK~~	~~R~~	~~Y~~	REPLACE
161	EE	24	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	Y	-
162	EE	19	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	Y	-
163	MR	8	Red Mulberry	Morus rubra	Poor		INVASIVE	S	N	-
164	BX	6	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
165	NS	9	Norway Spruce	Picea Abies	Poor		WOODLAND	S	N	-
166	EE	14	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	Y	-
167	BX	24	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
168	MR	13	Red Mulberry	Morus rubra	Poor	x3	INVASIVE	S	N	-
169	EE	16	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	Y	-
~~170~~	~~EE~~	~~15~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~171~~	~~EE~~	~~15~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~172~~	~~EE~~	~~21~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~173~~	~~EE~~	~~24~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~174~~	~~EE~~	~~32~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~175~~	~~EE~~	~~24~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~176~~	~~EE~~	~~24~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~177~~	~~EE~~	~~13~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~178~~	~~BW~~	~~8~~	~~Black Walnut~~	~~Juglans nigra~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~179~~	~~MR~~	~~20~~	~~Red Mulberry~~	~~Morus rubra~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~180~~	~~BW~~	~~8~~	~~Black Walnut~~	~~Juglans nigra~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~181~~	~~GA~~	~~8~~	~~Green Ash~~	~~Fraxinus pennsylvanica~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~182~~	~~GA~~	~~10~~	~~Green Ash~~	~~Fraxinus pennsylvanica~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~183~~	~~GA~~	~~6~~	~~Green Ash~~	~~Fraxinus pennsylvanica~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~184~~	~~GA~~	~~8~~	~~Green Ash~~	~~Fraxinus pennsylvanica~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~185~~	~~CT~~	~~22~~	~~Cottonwood~~	~~Populus deltoides~~	~~Good~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~186~~	~~SM~~	~~12~~	~~Silver Maple~~	~~Acer saccharinum~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~187~~	~~E~~	~~12~~	~~American Elm~~	~~Ulmus americana~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
188	E	6	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
189	SM	7	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
190	GA	9	Green Ash	Fraxinus pennsylvanica	Fair		INVASIVE	S	Y	-
191	CT	25	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
192	CT	23	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
193	CT	24	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
194	GA	8	Green Ash	Fraxinus pennsylvanica	Very Poor		INVASIVE	S	Y	-
195	GA	6	Green Ash	Fraxinus pennsylvanica	Fair		INVASIVE	S	Y	-
196	EE	14	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	Y	-
197	EE	9	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	N	-
198			NO TAG 198				#N/A	S	Y	#N/A
199	EE	12	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	N	-
200	EE	17	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	N	-
JUMP IN SEQUENCE							#N/A	S	Y	#N/A
226	EE	13	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	Y	-
227	EE	11	Siberian Elm	Ulmus pumila	Dead		INVASIVE	S	Y	-
228	EE	22	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	N	-
~~229~~	~~EE~~	~~11~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
230	EE	6	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	Y	-
~~231~~	~~EE~~	~~12~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
~~232~~	~~EE~~	~~12~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~233~~	~~SM~~	~~18~~	~~Silver Maple~~	~~Acer saccharinum~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~234~~	~~EE~~	~~9~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~	~~x1~~	~~INVASIVE~~	~~R~~	~~Y~~	-
~~235~~	~~EE~~	~~6~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~236~~	~~CT~~	~~32~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~237~~	~~E~~	~~6~~	~~American Elm~~	~~Ulmus americana~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~238~~	~~RM~~	~~9~~	~~Red Maple~~	~~Acer rubrum~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~239~~	~~EE~~	~~12~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~240~~	~~EE~~	~~6~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~241~~	~~EE~~	~~9~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~242~~	~~EE~~	~~6~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~243~~	~~EE~~	~~6~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~244~~	~~EE~~	~~9~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~245~~	~~BX~~	~~12~~	~~Box elder~~	~~Acer negundo~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~246~~	~~SWO~~	~~6~~	~~Swamp White Oak~~	~~Quercus bicolor~~	~~Good~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~247~~	~~SM~~	~~15~~	~~Silver Maple~~	~~Acer saccharinum~~	~~Good~~	~~x2~~	~~INVASIVE~~	~~R~~	~~Y~~	-
~~248~~	~~E~~	~~14~~	~~American Elm~~	~~Ulmus americana~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~249~~	~~PB~~	~~10~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~250~~	~~BC~~	~~6~~	~~Wild Black Cherry~~	~~Prunus serotina~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~251~~	~~PB~~	~~8~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Very Poor~~	~~x3~~	~~WOODLAND~~	~~R~~	~~Y~~	-
~~252~~	~~PB~~	~~7~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~253~~	~~PB~~	~~9~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~254~~	~~PB~~	~~6~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~255~~	~~PB~~	~~6~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~256~~	~~PB~~	~~6~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~257~~	~~CT~~	~~32~~	~~Cottonwood~~	~~Populus deltoides~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~258~~	~~CT~~	~~11~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~259~~	~~CT~~	~~17~~	~~Cottonwood~~	~~Populus deltoides~~	~~Good~~	~~x1~~	~~INVASIVE~~	~~R~~	~~Y~~	-
~~260~~	~~CT~~	~~13~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~261~~	~~PB~~	~~8~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Good~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~262~~	~~PB~~	~~6~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~263~~	~~E~~	~~6~~	~~American Elm~~	~~Ulmus americana~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~264~~	~~RO~~	~~6~~	~~Red Oak~~	~~Quercus rubra~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~265~~	~~SWO~~	~~6~~	~~Swamp White Oak~~	~~Quercus bicolor~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~266~~	~~CT~~	~~38~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~267~~	~~E~~	~~8~~	~~American Elm~~	~~Ulmus americana~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~268~~	~~E~~	~~10~~	~~American Elm~~	~~Ulmus americana~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~269~~	~~CT~~	~~10~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~270~~	~~WC~~	~~14~~	~~White Cedar~~	~~Thuja occidentalis~~	~~Poor~~		~~LANDMARK~~	~~R~~	~~Y~~	-
~~271~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~272~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~273~~	~~CT~~	~~12~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~274~~	~~CT~~	~~12~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~275~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~276~~	~~CT~~	~~11~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~277~~	~~CT~~	~~13~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~278~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~279~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~280~~	~~E~~	~~17~~	~~American Elm~~	~~Ulmus americana~~	~~Poor~~	~~x1~~	~~INVASIVE~~	~~R~~	~~Y~~	-
~~281~~	~~BX~~	~~13~~	~~Box elder~~	~~Acer negundo~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~282~~	~~WC~~	~~6~~	~~White Cedar~~	~~Thuja occidentalis~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~283~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~284~~	~~WC~~	~~12~~	~~White Cedar~~	~~Thuja occidentalis~~	~~Very Poor~~		~~LANDMARK~~	~~R~~	~~Y~~	-
~~285~~	~~EE~~	~~18~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~286~~	~~TH~~	~~6~~	~~Thornapple/Hawthorne~~	~~Cragaegus spp.~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~287~~	~~WC~~	~~6~~	~~White Cedar~~	~~Thuja occidentalis~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~288~~	~~EE~~	~~8~~	~~Siberian Elm~~	~~Ulmus pumila~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~289~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~290~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~291~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~292~~	~~CT~~	~~14~~	~~Cottonwood~~	~~Populus deltoides~~	~~Good~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~293~~	~~BW~~	~~6~~	~~Black Walnut~~	~~Juglans nigra~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~294~~	~~AP~~	~~9~~	~~Domestic Apple~~	~~Malus sylvestris~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~295~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~296~~	~~CT~~	~~13~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~297~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~298~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~299~~	~~CT~~	~~11~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~300~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~	~~x1~~	~~INVASIVE~~	~~R~~	~~Y~~	-
~~301~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~302~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~303~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~304~~	~~BX~~	~~8~~	~~Box elder~~	~~Acer negundo~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~305~~	~~BX~~	~~9~~	~~Box elder~~	~~Acer negundo~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~306~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~307~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~308~~	~~CT~~	~~10~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~311~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~309~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~310~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~312~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~313~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~314~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~315~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~316~~	~~CT~~	~~10~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~317~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~318~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~319~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Good~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~320~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Good~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~321~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~322~~	~~WP~~	~~10~~	~~(Eastern) White Pine~~	~~Pinus strobus~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~323~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~324~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~325~~	~~CO~~	~~6~~	~~Chestnut Oak~~	~~Quercus Prinus~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~326~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~327~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~328~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~329~~	~~BW~~	~~9~~	~~Black Walnut~~	~~Juglans nigra~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~330~~	~~CT~~	~~21~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~331~~	~~BX~~	~~7~~	~~Box elder~~	~~Acer negundo~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~332~~	~~E~~	~~6~~	~~American Elm~~	~~Ulmus americana~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~333~~	~~WP~~	~~7~~	~~(Eastern) White Pine~~	~~Pinus strobus~~	~~Very Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~334~~	~~BW~~	~~7~~	~~Black Walnut~~	~~Juglans nigra~~	~~Fair~~		~~WOODLAND~~	~~R~~	~~Y~~	REPLACE
~~335~~	~~WP~~	~~8~~	~~(Eastern) White Pine~~	~~Pinus strobus~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~336~~	~~PB~~	~~8~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~337~~	~~PW~~	~~10~~	~~White Poplar~~	~~Populus alba~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~338~~	~~PW~~	~~7~~	~~White Poplar~~	~~Populus alba~~	~~Very Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
~~339~~	~~PW~~	~~7~~	~~White Poplar~~	~~Populus alba~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~340~~	~~E~~	~~8~~	~~American Elm~~	~~Ulmus americana~~	~~Poor~~	~~x2~~	~~INVASIVE~~	~~R~~	~~Y~~	-
341	E	6	American Elm	Ulmus americana	Very Poor		INVASIVE	S	Y	-
342	CT	9	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
343	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
344	CT	11	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
345	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
346	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
347	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
348	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
349	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
350	CT	16	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
351	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
352	CT	14	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
353	CT	14	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
354	CT	11	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
355	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
356	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
357	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
358	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
359	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
360	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
361	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
362	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
363	CT	10	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
364	AP	9	Domestic Apple	Malus sylvestris	Poor		WOODLAND	S	Y	-
365	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
366	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
367	CT	11	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
368	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
369	CT	12	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
370	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
371	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
372	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
373	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
374	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
375	CT	13	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
376	CT	14	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
377	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
378	AP	10	Domestic Apple	Malus sylvestris	Poor		WOODLAND	S	Y	-
379	CT	11	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
380	AP	9	Domestic Apple	Malus sylvestris	Fair		WOODLAND	S	Y	-
~~381~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~382~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~383~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~384~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~385~~	~~PB~~	~~8~~	~~Paper Birch~~	~~Betula papyrifera~~	~~Poor~~		~~WOODLAND~~	~~R~~	~~Y~~	-
~~386~~	~~CT~~	~~14~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~387~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
388	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
389	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
390	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
391	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
392	BW	7	Black Walnut	Juglans nigra	Fair		WOODLAND	S	Y	-
~~393~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
394	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
395	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
396	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
~~397~~	~~CT~~	~~11~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~398~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~399~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~400~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
IN SEQUENCE							#N/A	S	Y	#N/A
2001	AP	7	Domestic Apple	Malus sylvestris	Poor		WOODLAND	S	Y	-
~~2002~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
2003	CT	17	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2004	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2005	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2006	CT	10	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
~~2007~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2008~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2009~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2010~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2011~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2012~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2013~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2014~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2015~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
2016	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2017	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2018	EE	7	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	Y	-
2019	EE	7	Siberian Elm	Ulmus pumila	Fair		INVASIVE	S	Y	-
2020	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
~~2021~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2022~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
2023	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
~~2024~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
2025	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
~~2026~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2027~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2028~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2029~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2030~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2031~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2032~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
2033	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
~~2034~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~	~~x1~~	~~INVASIVE~~	~~R~~	~~Y~~	-
~~2035~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2036~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2037~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2038~~	~~CT~~	~~9~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2039~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2040~~	~~CT~~	~~7~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2041~~	~~CT~~	~~8~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2042~~	~~CT~~	~~10~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2043~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Poor~~		~~INVASIVE~~	~~R~~	~~Y~~	-
~~2044~~	~~CT~~	~~6~~	~~Cottonwood~~	~~Populus deltoides~~	~~Fair~~		~~INVASIVE~~	~~R~~	~~Y~~	-

S:\PROJECTS\2016\2016-266 2112, 2124 & 2152 E. LONG LAKE - TROY - jbt\Dwg\Site Plans\T-1.0 - TREE PRESERVATION-16266.dwg

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

CAUTION!!
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CLIENT
MONDRIAN PROPERTIES
50215 SCHOENHERR
SHELBY TWP., MICHIGAN

PROJECT TITLE
ADLER COVE
2112, 2125 & 2152 E. LONG LAKE
TROY, MICHIGAN

REVISIONS
CITY COMMENTS 11-9-21

ORIGINAL ISSUE DATE:
OCTOBER 19, 2021

DRAWING TITLE
TREE PRESERVATION LIST

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK
DRAWING NUMBER:	T-1.1

NOT FOR CONSTRUCTION

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
2045	EE	7	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
2046	EE	7	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
2047	EE	6	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
2048	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2049	CT	9	Cottonwood	Populus deltoides	Fair	x1	INVASIVE	R	Y	-
2050	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2051	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2052	EE	7	Siberian Elm	Ulmus pumila	Fair		INVASIVE	S	Y	-
2053	AP	8	Domestic Apple	Malus sylvestris	Fair		WOODLAND	S	Y	-
2054	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2055	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2056	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2057	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2058	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2059	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2060	AP	7	Domestic Apple	Malus sylvestris	Poor		WOODLAND	S	Y	-
2061	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2062	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2063	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2064	AP	6	Domestic Apple	Malus sylvestris	Poor		WOODLAND	R	Y	-
2065	CT	8	Cottonwood	Populus deltoides	Poor	x1	INVASIVE	R	Y	-
2066	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2067	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2068	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2069	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2070	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2071	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2072	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2073	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2074	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2075	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2076	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2077	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2078	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2079	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2080	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2081	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2082	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2083	CT	9	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2084	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2085	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2086	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2087	E	9	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2088	PW	6	White Poplar	Populus alba	Poor	x4	INVASIVE	R	Y	-
2089	RO	8	Red Oak	Quercus rubra	Fair		WOODLAND	R	Y	REPLACE
2090	PW	7	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
2091	BW	7	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y	REPLACE
2092	BW	9	Black Walnut	Juglans nigra	Fair		WOODLAND	S	Y	-
2093	PW	10	White Poplar	Populus alba	Poor	x4	INVASIVE	S	Y	-
2094	BW	7	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y	REPLACE
2095	E	15	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
2096	CT	21	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2097	BW	7	Black Walnut	Juglans nigra	Good		WOODLAND	R	Y	REPLACE
2098	PW	6	White Poplar	Populus alba	Poor	x2	INVASIVE	R	Y	-
2099	E	17	American Elm	Ulmus americana	Poor		INVASIVE	R	Y	-
2100	E	25	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
2101	SWO	9	Swamp White Oak	Quercus bicolor	Poor		WOODLAND	R	Y	-
2102	SM	21	Silver Maple	Acer saccharinum	Poor		INVASIVE	R	Y	-
2103	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2104	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2105	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2106	RM	7	Red Maple	Acer rubrum	Fair		WOODLAND	R	Y	REPLACE
2107	PW	7	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
2108	PW	7	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
2109	BW	7	Black Walnut	Juglans nigra	Very Poor		WOODLAND	R	Y	-
2110	PW	8	White Poplar	Populus alba	Very Poor		INVASIVE	R	Y	-
2111	PW	8	White Poplar	Populus alba	Very Poor		INVASIVE	R	Y	-
2113	PW	10	White Poplar	Populus alba	Very Poor		INVASIVE	R	Y	-
2112	PW	7	White Poplar	Populus alba	Fair		INVASIVE	R	Y	-
2114	PW	9	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
2115	SM	13	Silver Maple	Acer saccharinum	Fair	x4	INVASIVE	R	Y	-
2116	E	6	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
2117	RP	6	Red Pine	Pinus resinosa	Poor		WOODLAND	R	Y	-
2118	AP	6	Domestic Apple	Malus sylvestris	Poor		WOODLAND	R	Y	-
2119	SM	6	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2120	E	8	American Elm	Ulmus americana	Poor		INVASIVE	R	Y	-
2121	SM	7	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
2122	SM	7	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2123	E	6	American Elm	Ulmus americana	Poor		INVASIVE	R	Y	-
2124	E	9	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2125	E	9	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2126	E	6	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2127	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2128	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2129	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2130	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2131	CT	16	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2132	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2133	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2134	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2135	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2136	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2137	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2138	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2139	AP	7	Domestic Apple	Malus sylvestris	Poor		WOODLAND	S	Y	-
2140	CT	21	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2141	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2142	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2143	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2144	CT	9	Cottonwood	Populus deltoides	Fair	x1	INVASIVE	S	Y	-
2145	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2146	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2147	SM	7	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2148	SM	15	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2149	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2150	E	15	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2151	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
2152	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2153	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2154	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2155	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2156	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2157	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2158	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2159	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2160	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2161	CT	24	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2162	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2163	CT	8	Cottonwood	Populus deltoides	Fair	x1	INVASIVE	S	Y	-
2164	CT	18	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2165	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2166	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2167	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2168	BW	8	Black Walnut	Juglans nigra	Fair		WOODLAND	S	Y	-
2169	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2170	E	8	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2171	E	7	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2172	E	7	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2173	E	7	American Elm	Ulmus americana	Very Poor		INVASIVE	S	Y	-
2174	SM	8	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2175	E	6	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2176	RC	10	Red Cedar	Juniperus virginiana	Poor		INVASIVE	S	Y	-
2177	CT	9	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2178	E	7	American Elm	Ulmus americana	Poor	x1	INVASIVE	S	Y	-
2179	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2180	E	8	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2181	BW	10	Black Walnut	Juglans nigra	Poor		WOODLAND	S	N	-
2182	BX	10	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
2183	BX	24	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
2184	BX	7	Box elder	Acer negundo	Poor	x1	INVASIVE	S	N	-
2185	BX	10	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
2186	E	7	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2187	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2188	BX	7	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2189	BX	9	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2190	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2191	BX	8	Box elder	Acer negundo	Poor	x1	INVASIVE	S	Y	-
2192	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2193	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2194	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2195	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2196	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2197	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2198	CT	12	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2199	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2200	CT	13	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2201	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2202	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2203	CT	22	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2204	CT	16	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2205	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2206	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2207	CT	15	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2208	BX	6	Box elder	Acer negundo	Fair		INVASIVE	S	Y	-
2209	BX	7	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2210	BX	6	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2211	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2212	BX	12	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2213	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2214	BX	10	Box elder	Acer negundo	Fair		INVASIVE	S	N	-
2215	BX	7	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2216	BW	10	Black Walnut	Juglans nigra	Fair		WOODLAND	S	Y	-
2217	E	10	American Elm	Ulmus americana	Fair	x2	INVASIVE	S	Y	-
2218	E	7	American Elm	Ulmus americana	Poor		INVASIVE	S	N	-
2219	BW	6	Black Walnut	Juglans nigra	Fair		WOODLAND	S	N	-
2220	E	16	American Elm	Ulmus americana	Poor	x1	INVASIVE	S	N	-
2221	BW	6	Black Walnut	Juglans nigra	Fair		WOODLAND	S	N	-
2222	BW	8	Black Walnut	Juglans nigra	Fair		WOODLAND	S	N	-
2223	CT	9	Cottonwood	Populus deltoides	Very Poor		INVASIVE	S	N	-

TREE INVENTORY/PRESERVATION CALCULATIONS

WOODLAND TREES			
WOODLAND TREES REMOVED:	**20**	(REPLACE AT 50% OF REMOVED DBH)	
149" DBH x 0.5 =		**75"** REPLACEMENT	
WOODLAND TREES SAVED:	7	(CREDIT OF 2X DBH)	
62" DBH x 2 =		**124"** CREDIT	
74.5 -	124	= -49.5	
0 " DBH REQUIRED FOR WOODLAND REPLACEMENT			
LANDMARK TREES			
LANDMARK TREES REMOVED:	4	(REPLACE AT 100% OF REMOVED DBH)	
82" DBH x 1 =		**82"** REPLACEMENT	
LANDMARK TREES SAVED:	2	(CREDIT OF 2X DBH)	
36" DBH x 2 =		**72"** CREDIT	
82 -	72	= 10	
0 " TOTAL DBH REQUIRED FOR REPLACEMENT			

-49.5 (WOODLAND CREDIT) + 10" LANDMARK = -39.5 (CREDIT)

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NORTH

0 25 50 100
SCALE: 1" = 50'

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

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CLIENT
MONDRIAN PROPERTIES
50215 SCHOENHERR
SHELBY TWP., MICHIGAN

PROJECT TITLE
ADLER COVE
2112, 2125 & 2152 E. LONG LAKE
TROY, MICHIGAN

REVISIONS
CITY COMMENTS 11-9-21

ORIGINAL ISSUE DATE:
OCTOBER 19, 2021

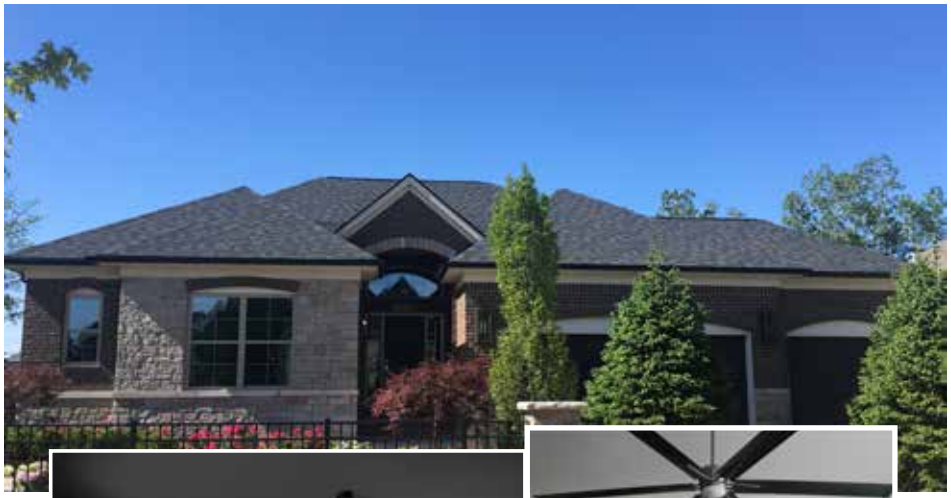
DRAWING TITLE
TREE PRESERVATION LIST

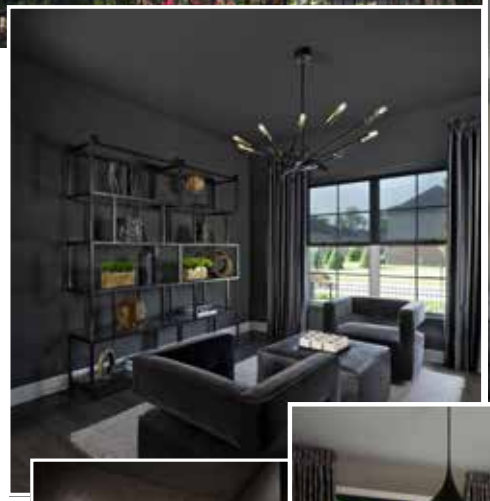
PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK

DRAWING NUMBER:
T-1.2

NOT FOR CONSTRUCTION

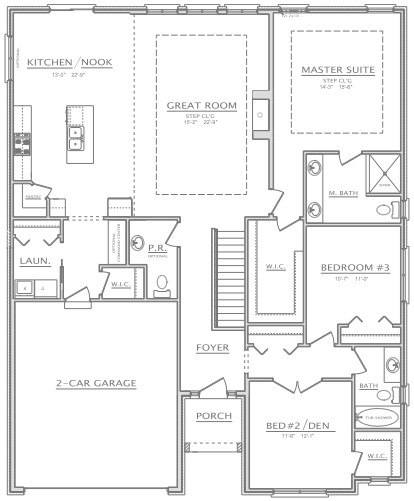
S:\PROJECTS\2016\2016-266 2112, 2124 & 2152 E. LONG LAKE - TROY - JH\Dwg\Site Plans\T-1.0 - TREE PRESERVATION-16266.dwg

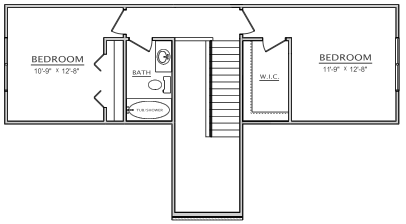




HOMEWOOD RANCH
W/ OPTIONAL SECOND FLOOR
1990 SQFT.

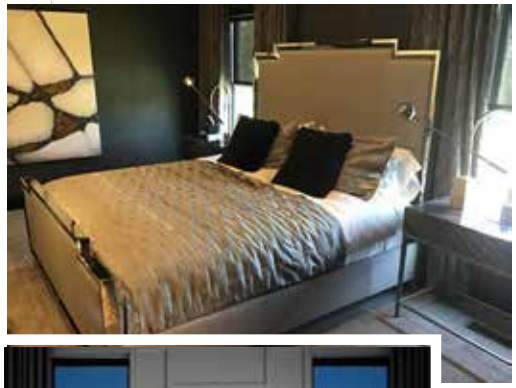
MONDRIAN | PROPERTIES





OPTIONAL SECOND FLOOR

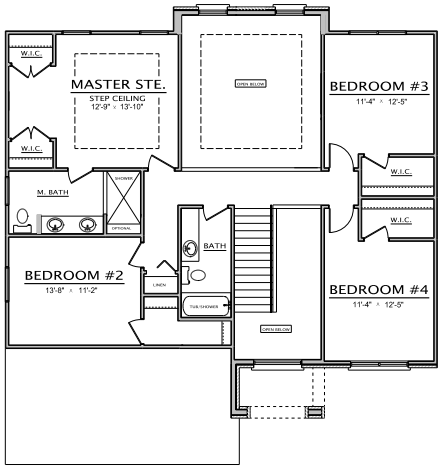
*PLANS ARE CONCEPTUAL AND MAY VARY

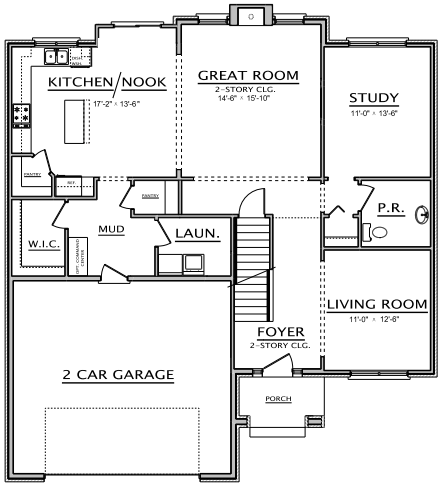


TUDORGATE COLONIAL

2515 sqft

MONDRIAN PROPERTIES

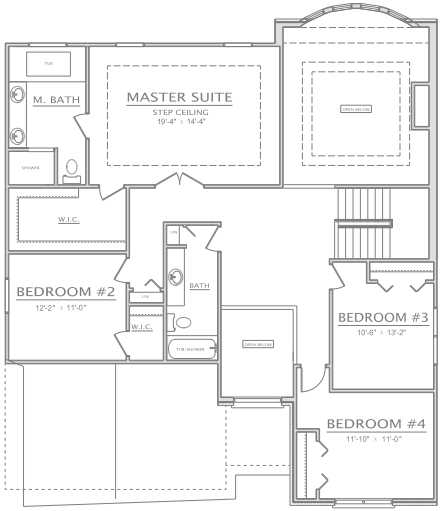


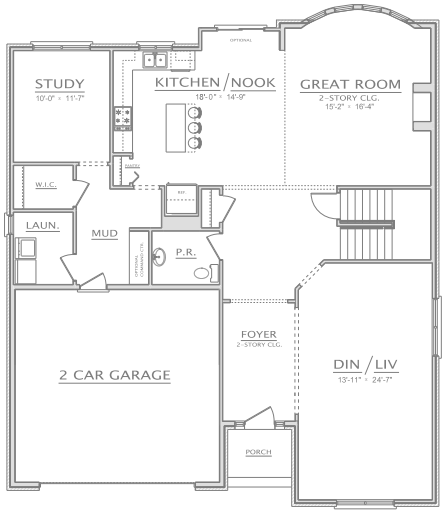


MANOR COLONIAL

2900 sqft

MONDRIAN PROPERTIES





October 4, 2021
UPDATE: November 9, 2021

Project Applicant / Developer:

Mondrian Properties

50215 Schoenherr Road
Shelby Township, MI 48315

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

Development Team Consultants:

Civil Engineer:

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

Site Planning:

J Eppink Partners, Inc.
Jim Eppink, RLA
9336 Sashabaw Road
Clarkston, MI 48348
248-922-0789

Site Data:

Parcel Size:
10 acres

Location:
South side of E. Long Lake, easy of John R Road within the City of Troy, MI

Existing Zoning:
R-1C One Family Residential

Proposed Zoning:
R-1C One Family Residential using the Cluster Option

Proposed Uses:
20 single family residential homes

Project Narrative

Adler Cove

A Proposed Single-Family Residential Neighborhood
City of Troy, Michigan

The Adler Cove Site Plan Submission Package was updated in response to the Carlisle Wortman Associates review letter dated September 20, 2021

Project Vision:

Adler Cove is a proposed single family residential neighborhood to be constructed in the City of Troy. The 10-acre site is currently undeveloped and is located on the south side of E. Long Lake Road, east of John R Road. Twenty single-family homes with nearly 60% open space will have direct access to 'Adler Court', a proposed private street that will have its connection to E. Long Lake Road.

The 10-acre Adler Cove site is located on the south side of E. Long Lake Road just east of John R Road. The property abuts Commercial / Neighborhood Node zoning to the west, R-1C residential to the east, and the Larson Middle School to the southeast.

The Adler Cove property is comprised of three adjacent parcels which were assembled to form the 10-acre subject property. The parcel is wooded and because of its adjacency to the Gibson-Renshaw Drain and associated floodway, the property is located within a 'Flood Hazard Area' (See Sheet P-1.0 within the attached Preliminary Site Plan Submission package for additional information).

Existing R-1C Zoning & Permitted Development Patterns:

The subject property is currently zoned R-1C One-Family Residential, which, according to the City's Zoning Ordinance, permits single family residential homes to be built on the site providing the meet the following standards:

R1-C – Lot Size per dwelling unit (when public sewer is available):

- Lot Area: 10,500sf
- Lot Width: 85’
- Lot Frontage: 85’
- Max Height: 30’ / 2.5 stories
- Front Setback: 30’
- Side Setback: 10’ / 20’ total
- Rear Setback: 40’
- Open Space: 0% required

A ‘parallel site plan’ or ‘by-zoning rights’ plan was developed using the ordinance standards (see Sheet P-2.1 within the attached Preliminary Site Plan Submission package). The parallel site plan provides 16 single family lots all with access to E. Long Lake Road via a new public road. Each lot meets the minimum ordinance standards and could accommodate a 5,000-sf single family home. The parallel plan provides a detention basin at the southern end of the site, however, does not provide any additional community open space or preservation areas within the development.

A conventional R-1C sub-division development pattern would provide only large-lot parcels and homes, as well as unnecessarily ‘privatize’ all natural areas within the development into the individual lots, leaving no community open space or ability to protect and set aside the natural features. Because the of the desire to provide smaller homes and preserve significant open space within the development, alternate zoning vehicles within the Zoning Ordinance were evaluated.

As noted, this property has significant natural features including densely wooded areas, floodways, and floodplain areas. A conventional R-1C single family development, designed according to the zoning ordinance would in-essence ‘privatize’ those features by incorporating them within the lot areas of the individual R-1C home sites. In so doing there would be limited means to prevent future homeowners from removing trees or altering the topography or native landscape if it was located within their lots. This predicably would have detrimental impacts on the natural features of the site over time. Because of the limited ability to protect the natural features of the site and the very large homes sizes that result from the use of the R-1C zoning, Mondrian Properties examined alternative zoning and development opportunities for the site to better align with the development objectives.

R-1C One-Family Cluster Option:

Section 10.04 of the City's Zoning Ordinance permits One-Family Cluster Option developments within parcels currently zoned R-1C as an alternative to conventional residential development as a means to:

1. Encourage the use of property in accordance with its natural character
2. Assure the permanent preservation of open space and other natural features
3. Provide recreation and/or open space within a reasonable distance of all residents in the Cluster development
4. Allow greater flexibility in the design of the neighborhood
5. Facilitate the construction and maintenance of infrastructure in a more efficient manner
6. Ensure compatibility of design and use between neighboring property
7. Encourage a less sprawling form of development and ability to preserve open space
8. Allow for innovative design to align with City goals

Using the Cluster Option standards, Mondrian Properties developed site plan alternatives that sought to maximize and protect the open space preservation on the property as well as provide home sites that would accommodate smaller and various size homes compared to those that may typically be built in the large-lot R-1C conventional developments. To that end, we have developed Adler Cove, a premier single family residential neighborhood that will preserve 38% of the site as dedicated open space and existing trails, and cluster twenty homes within the center of the walkable community. In total, only 4.73 acres of the site will be developed, and 5.27 acres will remain undeveloped. (See the data table on Sheet P-2.0 for proposed site and development data)

The R-1C Single Family Cluster Zoning Option enables the ability to develop a compact neighborhood with 38% dedicated open space and a total of 5.27 acres of undeveloped land on the 10-acre site ***resulting in nearly 60% of the site being common area open space****. The walkable community will provide 20 homes of various size, adding additional housing choices to the vibrant Troy market.*

Using the R-1C Cluster Option standards outlined within the Zoning Ordinance, the minimum lots size within Adler Cove will be 6,900 sf (60'x115') with the average lot size of 8,341 sf. A 40' wide private road easement will be constructed with sidewalks located on each side of the private road as well as along the E. Long Lake frontage and a walking connection to the Larson Middle School.

The homes within Adler Cove will vary in size to appeal to a range of choices within the Troy housing market. There will be three homes styles beginning with a 1,990-sf ranch home with a ground floor owner's suite with options for additional bedrooms on an optional second-floor. All Cluster Option Zoning Ordinance dimensional and area standards, including perimeter setbacks, open space, and lot areas have been achieved or exceeded on the attached proposed site plan. Additionally, Cluster Option Calculations can be found of Sheet P-2.0 which provide the information needed to substantiate the total proposed density (20 units) based on the conventional plan's number of units allowed plus the 20% open space bonus as well as the additional 10% additional open space allowance which results in the permitted 20-unit density.

Adler Cove, using the R-1C Single Family Cluster Option will provide a high-quality compact neighborhood of 20 homes while preserving 38% of the site as dedicated open space and a total of 5.27-acres of the site and non-developed area. The proposed Family Cluster Option plan will protect the important natural features of the site and maintain the existing community trail system.

A side-by-side comparison of the Conventional R1-C site plan and development pattern (on the left) and the proposed Adler Cove Single Family Cluster Option site plan and development pattern (on the right) demonstrates the ability to preserve and protect nearly 60% of the site as open space and common area while still providing a compact walkable neighborhood with several housing styles and sizes when the Single-Family Cluster Option is used. Using the less preferred Conventional R1-C zoning guidelines would result in a monolithic, standard large home subdivision with no common area open space or natural features preservation.

Standards for Review:

The Zoning Ordinance outlines standards from which the Planning Commission should review a Cluster Option Development, and may, based on its review, make a recommendation to the City Council. The proposed Adler Cove development will create a beautiful neighborhood within the City of Troy and will provide several of housing options while preserving a substantial portion of the site as permanent open space. We believe that the proposed development meets the standards of review in the following ways:

a. Adler Cove provides long-term protection and preservation of the property's natural resources, natural features, and open space through the preservation of 38% dedicated open space and a total of 5.27-acres of undeveloped areas within the site. This amount of open space and neighborhood character would not be possible if developed under conventional R-1C zoning.
b. Adler Cove incorporates innovative site design and flexibility in the placement and clustering of homes within the site. This innovative clustered design approach allowed the home sites to remain out of the floodway and enabled the ability to preserve quality natural features.
c. Adler Cove provides appropriate buffers to the E. Long Lake frontage as well as to the adjacent single-family home to the east as outlined within the Zoning Ordinance.

d. Adler Cover takes advantage of its proximity to Larson Middle School by providing walking trails to the school to maximize neighborhood connections and walkability. Additionally, sidewalks are provided throughout the neighborhood and along the E. Long Lake frontage.
e. Stormwater features and other site design elements we're designed to minimize their impact on the site, integrate with the natural systems of the local area, and provide long-term sustainability of this floodway system.
f. Adler Cove homeowner's associate will ultimately own the dedicated open space and will have systems in place within the Master Deed and Bylaws that ensure its long-term viability.
g. Adler Cove seeks a density bonus of four units, as permitted by the Zoning Ordinance, in exchange for the significant open space (nearly 60% of the site), diverse housing types, and neighborhood character provided by the development.
h. Adler Cove will be served by existing essential public facilities, services, and infrastructure and will not put an undue burden on those systems.
i. Adler Cove will provide a range of housing types and sizes that are appropriate for the Cluster Option lots sizes including home sizes beginning at 1,990 sf.

We are proud of the innovative design solutions we are submitting and excited to bring the character, quality, and benefits of the Adler Cove neighborhood to the City of Troy. The attached Preliminary Site Plan Submission document set provides the information required by the city and outlines the technical details of the development. We appreciate the opportunity to have the project reviewed by the City Planning Department and related professionals and look forward to being placed on the next available Planning Commission agenda to review the merits of the project.

Our entire team is available to provide any additional information as requested.

Sincerely,

Joe Maniaci
Mondrain Properties

ASTI ENVIRONMENTAL

Investigation • Remediation
Compliance • Restoration

10448Citation Drive, Suite 100
Brighton, MI 48116

Mailing Address:
P.O. Box 2160
Brighton, MI 48116-2160

800 395-ASTI
Fax: 810.225.3800

www.asti-env.com

Sent Via Email Only

September 10, 2018

Mr. Joseph Maniaci
Mondrian Properties
50215 Schoenherr Road
Shelby Township, MI 48315

RE: Wetland Delineation and Jurisdictional Assessment
2112, 2124, & 2152 Long Lake Road
City of Troy, Oakland County, Michigan
ASTI File No. 10809

Dear Mr. Maniaci:

A site investigation was completed on September 5, 2018 by ASTI Environmental (ASTI) to delineate wetland boundaries on three parcels with the addresses of 2112, 2124, and 2152 Long Lake Road located east of John R Road and west of Dequindre Road within the City of Troy, Oakland County, Michigan (Property). One wetland and one watercourse likely regulated by the Michigan Department of Environmental Quality (DEQ) were found on the Property (Figure 1 – *Approximate Wetland Boundaries*).

SUPPORTING DATA

The United States Geological Survey (USGS) Warren, Michigan 7.5' Quadrangle Map, the USDA Web Soil Survey (WSS), the National Wetland Inventory Map (NWI), the DEQ 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 wetlands on the Property. All reviewed data indicated the Gibson Drain along the western portion of the Property

The WSS indicates the Property is comprised of the soil complexes of Brookston and Colwood loams, Sebewa loam (disintegration moraine, 0-2% slopes), Cohoctah fine sandy loam, and Selfridge loamy sand (0-3% slopes). Colwood loams, Sebewa loam (disintegration moraine, 0-2% slopes), and Cohoctah fine sandy loam are on the list H*ydric Soils of Michigan*.

FINDINGS

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

One wetland and one watercourse were found on the Property.

Watercourse A/Gibson Drain

The Gibson Drain was observed in the western portion of the Property. This watercourse exhibited defined channel bed and banks and was flowing on the day of the site inspection; therefore it meets the definition of a stream under Part 301.

Wetland B

Wetland B is a scrub/shrub wetland approximately 0.2 acres in size on the Property located in the eastern portion of the Property (see Figure 1). Vegetation within Wetland B was dominated by gray dogwood (*Cornus racemosa*), green ash saplings (*Fraxinus pennsylvanica*), and glossy buckthorn (*Frangula alnus*). Soils within Wetland B were comprised of fine sandy loams and are considered hydric because the criteria for a sandy redox matrix was met. Indicators of wetland hydrology observed within Wetland B included sparsely vegetated concave surfaces and soil cracks.

Vegetation observed within the upland adjacent to Wetland B was dominated by southern crab apple (*Malus angustifolia*), honeysuckle (*Lonicera tatarica*), gray dogwood, prickly ash (*Zanthoxylem americanum*), and multiflora rose (*Rosa multiflora*). Soils in the adjacent upland were comprised of sandy loams that did not exhibit hydric soil characteristics. No indicators of wetland hydrology were observed.

It is ASTI's opinion that Wetland B is regulated by the DEQ under Part 303 because it is within 500 feet of the Gibson Drain, which meets the definition of a regulated stream under Part 301.

Wetland Flagging
Wetland boundaries were marked in the field with day-glo pink and black striped flagging and numbered as follows:

Watercourse A/Gibson Drain = A-1 through A-11

Wetland B = B-1 through B-16

A professional survey should be conducted to determine the exact location of the wetland flagging on the Property.

SUMMARY
Based upon the data, criteria, and evidence noted above, it is ASTI's professional opinion the Property includes one watercourse (Gibson Drain) and one wetland (Wetland B) regulated by the DEQ. However, the DEQ has the final authority on the extent of regulated wetlands, lakes, and streams in the State of Michigan.

Attached are Figure 1, which shows the approximate locations of flagging on the Property, and a completed US Army Corps of Engineers (ACOE) Wetland Data Form.

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 – Approximate Wetland Boundaries
Completed ACOE Wetland Data Forms

2112, 2124, & 2152 E. Long Lake Road

Troy, Oakland Co., MI

Client: Mondrian Properties
Created by: BJG, September 7, 2018, ASTI Project10809
Imagery: ArcGIS Online, Oakland County Aerial Imagery (Spring of 2017)

Figure 1 - Approximate Wetland Boundaries

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18

Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP1

Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E

Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): flat Slope %: 1-3

Subregion (LRR or MLRA): LRR L Lat: Long: Datum:

Soil Map Unit Name: Brookston and Colwood loams 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	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes	No X	**within a Wetland?** **Yes** **No** X
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Conditions in the east central portion of the Property

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- 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	No x	Depth (inches):
Water Table Present?	Yes	No x	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No x	Depth (inches):

Wetland Hydrology Present? **Yes** **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: UP1

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juglans nigra*	10	Yes	FACU
2. *Fraxinus americana*	5	Yes	FACU
3. *Fraxinus pennsylvanica*	10	Yes	FACW
4.			
5.			
6.			
7.			
	25	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Fraxinus americana*	15	Yes	FACU
2. *Cornus racemosa*	15	Yes	
3. *Fraxinus pennsylvanica*	5	No	FACW
4. *Frangula alnus*	15	Yes	FAC
5. *Malus angustifolia*	5	No	UPL
6.			
7.			
	55	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Apocynum cannabinum*	10	Yes	FAC
2. *Cirsium vulgare*	20	Yes	FACU
3. *Euthamia graminifolia*	10	Yes	FAC
4. *Digitaria ischaemum*	15	Yes	FACU
5. *Poa annua*	10	Yes	FACU
6. *Solidago speciosa*	10	Yes	UPL
7.			
8.			
9.			
10.			
11.			
12.			
	75	=Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 12 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	35	x 3 =	105
FACU species	75	x 4 =	300
UPL species	15	x 5 =	75
Column Totals:	140 (A)		510 (B)

Prevalence Index = B/A = 3.64

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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** ___ **No** X

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

SOIL

Sampling Point UP1

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-3	10YR 5/3	100					Sandy	fine sandy loam
3-18	10YR 5/4	80	10YR 6/3	10	C	M	Sandy	Faint redox concentrations
			10YR 5/3	10	C	M		Faint redox concentrations
								fine sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: 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)
- ___ 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**)

Indicators for Problematic Hydric Soils[3]:

- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators 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:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18

Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP2

Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E

Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): flat Slope %: 1-3

Subregion (LRR or MLRA): LRR L Lat: Long: Datum:

Soil Map Unit Name: Brookston and Colwood loams 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	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes	No X	**within a Wetland?** **Yes** **No** X
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Conditions in the central portion of the Property

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- 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	No x	Depth (inches):
Water Table Present?	Yes	No x	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No x	Depth (inches):

Wetland Hydrology Present? **Yes** **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: UP2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juglans nigra*	40	Yes	FACU
2. *Populus alba*	20	Yes	UPL
3. *Ulmus pumila*	10	No	FACU
4. *Fraxinus americana*	10	No	FACU
5.			
6.			
7.			
	80	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Juglans nigra*	5	No	FACU
2. *Frangula alnus*	25	Yes	
3. *Cornus racemosa*	25	Yes	FAC
4. *Elaeagnus umbellata*	5	No	UPL
5.			
6.			
7.			
	60	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Carex pensylvanica*	5	Yes	UPL
2. *Parthenocissus inserta*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	10	=Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	70	x 4 =	280
UPL species	30	x 5 =	150
Column Totals:	125 (A)		505 (B)

Prevalence Index = B/A = 4.04

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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** ___ **No** X

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

SOIL

Sampling Point UP2

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-8	10YR 5/3	85	10YR 6/3	15	C	M	Sandy	fine sandy loam
8-18	10YR 6/3	90	10R 5/4	10	C	M	Sandy	Prominent redox concentrations
								fine sandy loam

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

[2]Location: 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)
- ___ 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**)

Indicators for Problematic Hydric Soils[3]:

- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators 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:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18

Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP3

Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E

Landform (hillside, terrace, etc.): slight slope toe Local relief (concave, convex, none): gentle slope Slope %: 2-4

Subregion (LRR or MLRA): LRR L Lat: Long: Datum:

Soil Map Unit Name: Brookston and Colwood loams 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	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes	No X	**within a Wetland?** **Yes** **No** X
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Conditions in the south west portion of the Property

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- 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	No x	Depth (inches):
Water Table Present?	Yes	No x	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No x	Depth (inches):

Wetland Hydrology Present? **Yes** **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: UP3

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	20	Yes	FAC
2. *Juglans nigra*	10	Yes	FACU
3. *Populus alba*	10	Yes	UPL
4.			
5.			
6.			
7.			
	40	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Juglans nigra*	30	Yes	FACU
2. *Frangula alnus*	10	No	FAC
3. *Cornus racemosa*	30	Yes	FAC
4. *Elaeagnus umbellata*	20	Yes	UPL
5.			
6.			
7.			
	90	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Toxicodendron radicans*	5	Yes	FAC
2. *Parthenocissus inserta*	5	Yes	FACU
3. *Verbena urticifolia*	10	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20	=Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 44.4% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	45	x 4 =	180
UPL species	30	x 5 =	150
Column Totals:	150 (A)		555 (B)

Prevalence Index = B/A = 3.70

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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** ___ **No** X

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	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-6	10YR 5/3	100					Sandy	fine sandy loam
6-18	10YR 6/3	90	10R 5/4	10	C	M	Sandy	Prominent redox concentrations
								fine sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: 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)
- ___ 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**)

Indicators for Problematic Hydric Soils[3]:

- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators 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:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18

Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP4

Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E

Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): flat Slope %: 1-3

Subregion (LRR or MLRA): LRR L Lat: Long: Datum:

Soil Map Unit Name: Brookston and Colwood loams 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 X	No	**Is the Sampled Area**
Hydric Soil Present?	Yes	No X	**within a Wetland?** **Yes** **No** X
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Conditions in the west west portion of the Property

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- 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	No x	Depth (inches):
Water Table Present?	Yes	No x	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No x	Depth (inches):

Wetland Hydrology Present? **Yes** **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: UP4

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	10	No	FAC
2. *Juglans nigra*	40	Yes	FACU
3. *Populus deltoides*	25	Yes	FAC
4. *Prunus serotina*	10	No	FACU
5.			
6.			
7.			
	85	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Cornus racemosa*	30	Yes	FAC
2. *Frangula alnus*	30	Yes	FAC
3.			
4.			
5.			
6.			
7.			
	60	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Toxicodendron radicans*	15	Yes	FAC
2. *Parthenocissus inserta*	10	Yes	FACU
3. *Verbena urticifolia*	10	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	35	=Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.4% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	120	x 3 =	360
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	180 (A)		600 (B)

Prevalence Index = B/A = 3.33

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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** X **No** ___

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

SOIL

Sampling Point UP4

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-6	10YR 5/3	100					Sandy	fine sandy loam
6-18	10YR 6/3	90	10R 5/4	10	C	M	Sandy	Prominent redox concentrations
								fine sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: 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)
- ___ 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**)

Indicators for Problematic Hydric Soils[3]:

- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators 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:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18

Applicant/Owner: Mondrian Properties State: MI Sampling Point: UPA10

Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E

Landform (hillside, terrace, etc.): terrace along Gibson Drain Local relief (concave, convex, none): flat Slope %: 2-3

Subregion (LRR or MLRA): LRR L Lat: Long: Datum:

Soil Map Unit Name: Cohoctah fine sandy loam 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	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes	No X	**within a Wetland?** **Yes** **No** X
Wetland Hydrology Present?	Yes	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Upland adjacent to Gibson Drain at flag A10

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- 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	No x	Depth (inches):
Water Table Present?	Yes	No x	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No x	Depth (inches):

Wetland Hydrology Present? **Yes** **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: UPA10

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. *Malus angustifolia*	10	Yes	UPL
2. *Elaeagnus umbellata*	10	Yes	
3.			
4.			
5.			
6.			
7.			
	20 =Total Cover		
Herb Stratum (Plot size: 5')			
1. *Bromus inermis*	20	Yes	UPL
2. *Daucus carota*	5	No	UPL
3. *Sonchus arvensis*	10	No	FACU
4. *Trifolium pratense*	20	Yes	FACU
5. *Poa annua*	20	Yes	FACU
6. *Prunella vulgaris*	5	No	FAC
7. *Symphyotrichum ericoides*	10	No	FACU
8.			
9.			
10.			
11.			
12.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	60	x 4 =	240
UPL species	35	x 5 =	175
Column Totals:	100 (A)		430 (B)

Prevalence Index = B/A = 4.30

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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** ___ **No** X

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

SOIL

Sampling Point UPA10

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-4	10YR 5/4	100					Sandy	fine sandy loam
4-18	10YR 5/4	75	10YR 5/3	15	C	M	Sandy	Faint redox concentrations
			10YR 6/2	10	C	M		Distinct redox concentrations
								fine sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: 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)
- ___ 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**)

Indicators for Problematic Hydric Soils[3]:

- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators 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:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18

Applicant/Owner: Mondrian Properties State: MI Sampling Point: UPB2

Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E

Landform (hillside, terrace, etc.): slight slope Local relief (concave, convex, none): slight slope Slope %: 2-4

Subregion (LRR or MLRA): LRR L Lat: Long: Datum:

Soil Map Unit Name: Cohoctah fine sandy loam 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 ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Upland adjacent to Wetland B at flag B2

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ 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 ____	No x	Depth (inches): ____
Water Table Present?	Yes ____	No x	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No x	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: UPB2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Malus angustifolia*	70	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
	70	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Cornus racemosa*	10	Yes	FAC
2. *Frangula alnus*	10	Yes	
3. *Lonicera tatarica*	10	Yes	FACU
4.			
5.			
6.			
7.			
	30	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Toxicodendron radicans*	5	Yes	FAC
2. *Parthenocissus inserta*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	10	=Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	15	x 4 =	60
UPL species	70	x 5 =	350
Column Totals:	100 (A)		455 (B)

Prevalence Index = B/A = 4.55

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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** ___ **No** X

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

SOIL

Sampling Point UPB2

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-6	10YR 5/4	100					Sandy	fine sandy loam
6-18	10YR 6/6	100						fine sandy loam, dry & loose

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: 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)
- ___ 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**)

Indicators for Problematic Hydric Soils[3]:

- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators 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:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18

Applicant/Owner: Mondrian Properties State: MI Sampling Point: WETB2

Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E

Landform (hillside, terrace, etc.): slight slope Local relief (concave, convex, none): slight slope Slope %: 2-4

Subregion (LRR or MLRA): LRR L Lat: Long: Datum:

Soil Map Unit Name: Cohoctah fine sandy loam 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 X	No	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No	**within a Wetland?** **Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Wetland B at flag B2

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- x Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- x Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- x 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)
- x Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No x	Depth (inches):
Water Table Present?	Yes	No x	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No x	Depth (inches):

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: WETB2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2. *Acer saccharinum*	5	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Cornus racemosa*	50	Yes	FAC
2. *Fraxinus pennsylvanica*	30	Yes	
3. *Cornus amomum*	10	No	FACW
4. *Frangula alnus*	20	No	FAC
5.			
6.			
7.			
	110	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Symphyotrichum lateriflorum*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	10	=Total Cover	
Woody Vine Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	80	x 3 =	240
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		280 (B)

Prevalence Index = B/A = 2.80

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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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** X **No** ___

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

SOIL

Sampling Point WETB2

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
1-18	10YR 5/2	80	10YR 6/8	20	C	PL/M	Sandy	fine sandy loam

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

[2]Location: 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)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- X 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**)

Indicators for Problematic Hydric Soils[3]:

- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators 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:

DATE: December 14, 2021

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: MASTER PLAN UPDATE – Neighborhood Node Walk & Talks

The Planning Commission held a series of Neighborhood Node Walk & Talks. The intent of these site visits was for Planning Commission members to investigate challenges and opportunities at various intersections, as well as engage residents and solicit feedback.

Dates and locations were as follows:

- Long Lake and Livernois – Thursday, November 4 at 4 pm
- Square Lake and Livernois – Thursday, November 4 at 6 pm
- John R and South Boulevard – Saturday, November 6 at 10 am
- Crooks and Wattles – Saturday, November 6 at 2 pm
- Long Lake and Rochester – Wednesday, November 10 at 4 pm
- Wattles and John R – Wednesday, November 10 at 6 pm

The public was notified of the Neighborhood Node Walk & Talks as follows:

- Multiple postings on the City's Facebook page (Approx. 9,000 followers)
- Multiple postings on the City's Twitter page (Approx. 4,000 followers)
- Posted on City of Troy website
- Email blast sent to 55 Troy Homeowners Associations

Attached is a summary of the Neighborhood Node Walk & Talks, prepared by Carlisle/Wortman Associates, Inc. We will discuss this item at the December 14, 2021 Planning Commission Regular meeting.

Attachments:

1. Memo prepared by CWA, dated December 6, 2021.

Carlisle | Wortman
ASSOCIATES, INC.
117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

To: Troy Planning Commission
Brent Savidant, Community Development Director

From: Ben Carlisle, AICP
Megan Masson-Minock, AICP

Date: December 6, 2021

RE: Walking Tour Summary Memo

In October and November, Troy held a series of six (6) walking tours of selected neighborhood nodes. The purpose of the tours was to survey the nodes, collect stakeholder input about existing development, and discern a vision for the neighborhood nodes in general. Listed below is a summary of notes from tours.

At your upcoming meeting, we would appreciate additional Planning Commission input on the following:

- What were your major takeways or observations from the tours you attended?
- What is missing from the notes below?
- Which observations or suggestions should be incorporated into the update of the Master Plan?

Major Overall Takeaways

- Each node needs a unique approach. One size does not fit all.
- Where appropriate, limit specific uses specifically townhomes.
- Design matters, especially in terms of size of yards, height, building materials and landscaping.
- Mixed use in nodes is appropriate and desired. However, mixed use to the public often means that every development has a mixture of uses, not that a townhouse development is next to a shopping center within a mixed use zone.
- The zoning should allow or incentivize uses that serve the local neighborhood.
- Building placement at roadway and parking behind creates a better built environment but a greater buffer between roadway to building should be provided. Multiple participants expressed safety concerns about parking in the rear yards only, but felt comfortable with parking in side yards.
- Landscaping can soften the built environment.
- One-story is appropriate; however no more than 2 stories even at the corner.
- As much buffering and landscape as possible should be preserve and/or required.

- Improvements to sidewalks, pathways, and pedestrian crosswalks (striping and timing), as well as connections to make a non-motorized network throughout the City are needed.

Crooks and Wattles

- Head Count: 4 staff, 5 PC, and 36 public members
- General Notes:
    - Traffic is very bad
    - High school, middle school and elementary school are nearby.
    - Big Beaver is one mile away and has the daily retail and services available there.
    - Single-story only
    - Cross-access should be provided
    - Future development should match architectural quality of Troy
    - Parking behind building is good, however there are business and safety concerns.
    - Need more green space
    - What are the impact of new development on housing values
    - Utility lines are unsightly

- SE Corner:
    - Nice restaurant
    - One-story
    - One-level living
- NW Corner:
    - More green, more buffer
    - One-story
    - Natural features should be protected
    - Wide-sidewalks, green space
    - Bury utility lines
- Preserve
    - Green/open space
    - Safety
- Improve
    - Bury utility lines
    - Traffic speed and volume
- Change
    - The layout and design of future development should match the existing pattern created by the existing single-family residential.
    - Don't allow new multiple family residential.
    - Find uses that serve local neighborhood and keep in mind that Big Beaver is nearby.

John R and South

- Head Count: 4 staff, 6 PC, and 1 public member
- General Notes:
    - Area across bridge is residential. Continuing residential would be consistent
    - How much commercial can Troy support?

    - SE corner is greatly underutilized and could be improved/redeveloped
    - Consider limited uses such as no gas stations or townhomes
- SE Corner:
    - Underutilized opportunity
    - Uses could vary from office to convenience retail
    - Mixed use
    - No more than 2 stories
- Preserve
    - Pathway
    - Green/buffer/tree area
    - Great opportunity at southeast corner
- Improve
    - Add welcome sign
- Change
    - Land use and zoning should be more specific to area.
    - Do not remove single-family homes from node.

Livernois and Square Lake

- Head Count: 4 staff, 5 PC, and 25 public member
- General notes:
    - Consider making area historic district
    - Do not put housing behind Johns market
    - Needs better access management
    - Better road lighting
    - Remove historic structures (including the Flower Barn) from node
- Tisbury Square:
    - Too tall
    - 3-stories are not a transition
    - Too clustered, too closed in
    - Need better balance
- SE Corner:
    - Parking in back hides areas and doesn't feel safe
    - If building close to street, preserve extra green space as buffer
    - Have sidewalk separate from street
    - Buildings are too close to street
    - No sense of community
    - Don't like mixed material buildings
    - Nodes as developed are losing quaintness
    - Anything more than one-story needs to be set way back
    - Enhance landscaping
- NE Corner
    - Buildings at the four corners makes it too tight, need buffer
    - No 3 stories
    - Need to respect this intersection's history
- Preserved
    - Green/open space

    - Historic homes
- Improved
    - Green space
    - Pedestrian infrastructure – sidewalks, crosswalks, signs, etc.

Long Lake and Livernois

- Head Count: 4 staff, 6 PC, and 31 public member
- General Notes:
    - Traffic is a problem
    - Future building in parking lot
    - What is the future of Kim's?
    - Discussion of current building placement and development patterns
    - How does grandfathering work?
- SW Corner
    - Like building closer to the street
    - Like greenspace buffer, feels less closed in
    - 3 story building would be way too tall
    - Buildings too close block buildings in back
    - Like wider sidewalks and landscape buffer
- Long Lake Square
    - Cramped
    - Too much density
    - Too tall
    - No amenities
    - Cheap materials, Troy likes brick materials
    - To close to street, no landscape buffer
    - Cheap construction
    - No place for snow
    - No transition, doesn't fit
- NE corner
    - Too tight
    - Need quick carryout restaurant
- SE corner
    - Like openness
    - Like screening with shrubs
    - Inviting
- Improved
    - Make it better
    - Sidewalks
    - Landscaping
    - Require attractive signing
- Changed
    - Create an identity
    - No townhouses
    - No residential at all
    - Eliminate brick wall as buffers

Long Lake and Rochester

- Head Count: 4 staff, 7 PC, and 4 public members
- General Notes:
    - What is the plan to widen Rochester Road?
    - Too much traffic
- Parking Lot on Long Lake
    - Strip mall lacks anchor
    - Do not need more retail. Need better, higher quality retail.
    - Show some reinvestment in area
- Southwest corner
    - Opportunity for infill
    - Limit height to 2 stories
    - Not safe walking across street.
    - Like the Kroger gas station kiosk
- Thoughts and Impressions
    - Loud, traffic
    - Not welcoming
    - Harsh environment
- Preserved
    - Trees
    - Landscaping
    - Flagstar is nice anchor
- Improved
    - Design standards
    - Anchor improvements
- Changed
    - More open space/landscaped area
    - Less parking lots
    - More pedestrian friendly
- Changed on the land use plan?
    - Each node has to have its own specific plan as they are all different.
    - Focus on cultural nodes

Wattles and John R

- Head Count: 4 staff, 7 PC, and 2 public members
- General Notes:
    - Not fan of townhomes
    - Keep a quite intersection and low key
    - Opportunity for infill in parking lot, but no townhomes on parking Lot on SW corner
    - Meets node concept
    - Need non-franchised restaurants
    - Enjoyed walking node-easier to walk, neighborhood feel
    - Wattles is a different major mile road than others

- NW corner- Residential
    - Really like it
    - Mature trees
    - High quality design-materials, sideloaded garages
    - Outside seems inviting
    - Great model of future development
    - Provides missing middle
    - Looks like single family homes
- Preserved
    - Keep human scale
    - Keep quiet
    - Keep 1-story. 2 stories is out of place.
- Improved
    - Strip mall on NW corner
    - Gathering Place parking lot: potential, underutilized
- Changed
    - Strip mall in Gathering Place parking lot

Sincerely,

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

CARLISLE/WORTMAN ASSOC., INC.
Megan Masson-Minock, AICP

DATE: December 10, 2021

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: MISCELLANEOUS BUSINESS – Meeting Schedule for 2022

Every December, the Planning Commission is asked to approve the Planning Commission meeting schedule by resolution. The schedule is then added to the City website calendar and posted at City Hall as per the Open Meetings Act.

The proposed 2022 Planning Commission Meeting Schedule is attached for your information.

Attachment:

1. Proposed 2022 Planning Commission Meeting Schedule

G:\PLANNING COMMISSION\Meeting Schedules\PC Memo Meeting Schedule 2022.doc

CITY OF TROY
MICHIGAN
PUBLIC NOTICE
CITY PLANNING COMMISSION

In accordance with the provisions of the Michigan State Law, Notice is hereby given that the Planning Commission of the City of Troy will hold Public Meetings in the City Hall, 500 West Big Beaver Road, Troy, Michigan, (248) 524-3364, on the following dates:

2022 PLANNING COMMISSION REGULAR MEETING DATES

January 11	July 12
January 25	July 26
February 8	August 09
February 22	August 23
March 8	September 13
March 22	September 27
April 12	October 11
April 26	October 25
May 10	November 8
May 24	
June 14	December 13
June 28	

All meetings are held in City Hall and are open to the public.
The Agenda and City website will reflect any changes in meeting times and/or rooms.

Regular Planning Commission meetings begin at 7:00 p.m. and are held in the Council Board Room. Meetings are subject to be held in the Council Chamber based on anticipated audience capacity.

This notice is hereby posted as required by Section 4 of the Open Meetings Act (MCLA 15.261 et seq.)

R. Brent Savidant, AICP
Community Development Director

Posted:

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) 524-3316 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.*