



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## CITY COUNCIL AGENDA ITEM

Date: March 28, 2023

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
R. Brent Savidant, Community Development Director

Subject: PUBLIC HEARING – PRELIMINARY SITE PLAN REVIEW (File Number SP2022-0027)  
– Proposed Estates at Eckford (One Family Residential Cluster), South side of Eckford, West of Rochester (Parcels 88-20-15-252-028, -002, -036, -037, -004, -005), Section 15, Currently Zoned R-1C (One Family Residential) District.

The petitioner Mondrian Properties submitted the above referenced Preliminary Site Plan application for a 26-unit One Family Residential Cluster on a 7.56-acre parcel. The development proposes to preserve 35% of dedicated open space. The petitioner is proposing homes which range in size from an 1,990 square foot ranch to a 2,900 square foot colonial.

City Council has the authority to approve these types of developments following a recommendation by the Planning Commission. The Planning Commission held a public hearing on this item on February 14, 2023 and recommended approval of this item by a vote of 7-1.

During the meeting the applicant offered to provide patios instead of decks for all homes. This eliminates the need for rear yard setback relief for decks for all 26 units. The applicant seeks setback relief from the 40-foot perimeter setback requirement for Unit 26, where only 32 feet is provided between the house and the property line to the south.

A City Council public hearing has been scheduled for April 10, 2023.

### Legal Review

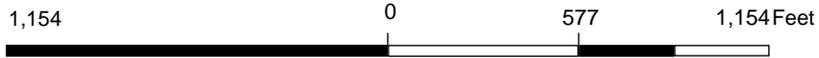
This item was submitted to the City Attorney for review pursuant to City Charter Section 3.17.

### Attachments:

1. Maps
2. Report prepared by Carlisle/Wortman Associates, Inc.
3. OHM Memo, dated January 31, 2023
4. Minutes from February 14, 2023 Planning Commission Regular meeting (excerpt)
5. Preliminary Site Plan Application



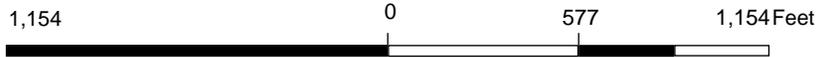
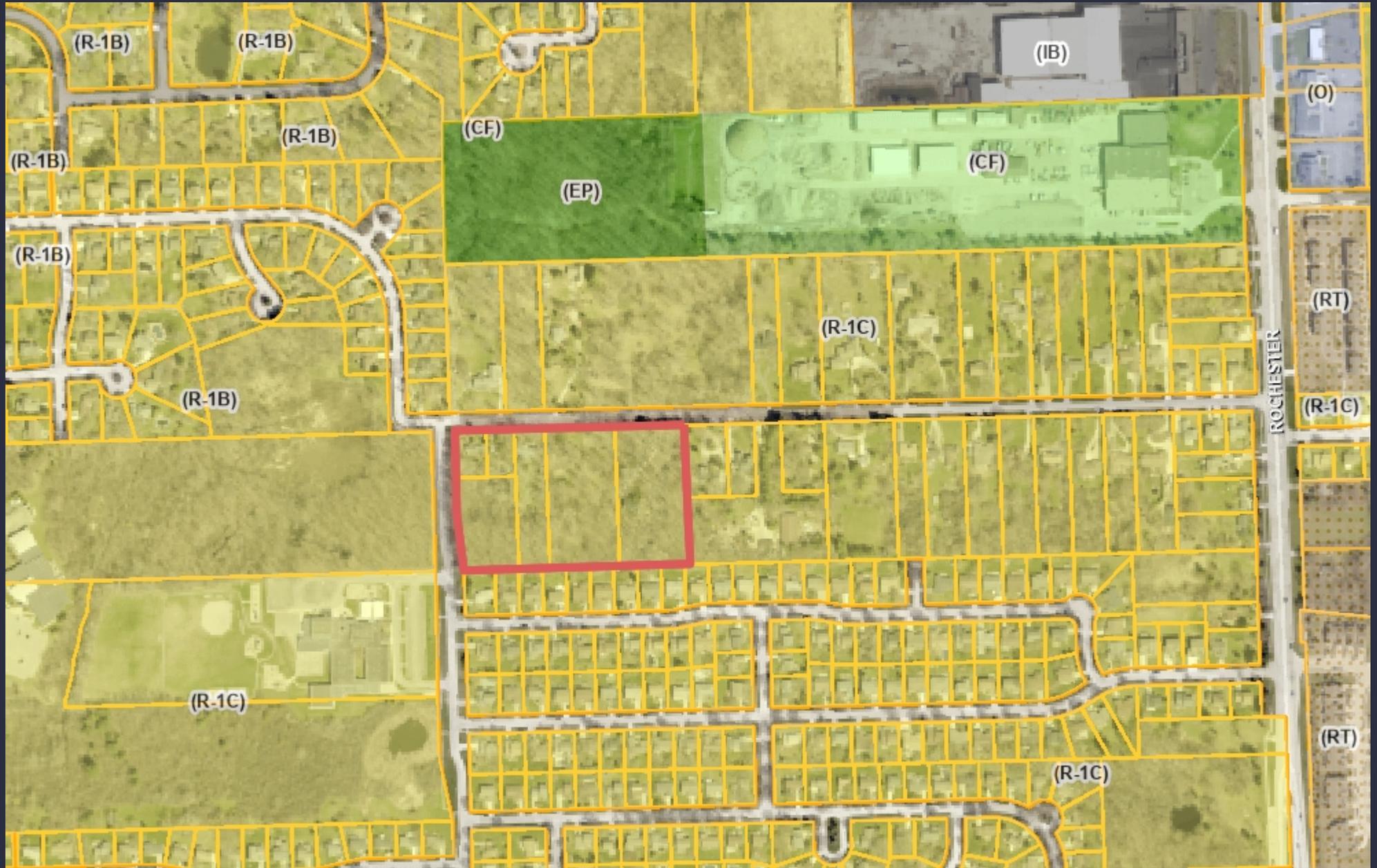
# GIS Online



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



# GIS Online



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



**Carlisle | Wortman**  
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: February 7, 2023

## **Preliminary Site Condominium Cluster Review For City of Troy, Michigan**

<b>Project Name:</b>	Estates of Eckford
<b>Plan Date:</b>	January 12, 2023
<b>Location:</b>	Southeast corner of Eckford Drive and Tallman Drive
<b>Zoning:</b>	R-1C, One-family Residential District
<b>Action Requested:</b>	Preliminary Site Condominium Cluster Approval

### **PROJECT AND SITE DESCRIPTION**

We are in receipt of a preliminary site plan application for a twenty-six (26) unit detached single-family cluster development. Nine (9) of the lots will be accessed off Eckford, one (1) lot off Tallman, and the remaining sixteen (16) lots will be accessed from a new private road that is located off Tallman Drive. The site is six (6) parcels and is a total of 7.56 acres. The site is vacant but encumbered with wetlands and tree cover. The development is directly across Eckford Drive from the recently approved Eckford Oaks cluster development.

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 twenty (20) units. See parallel plan section for more details. The applicant is seeking six (6) additional units above the parallel plan density by providing 35% of the total site as open space, and preserving a significant amount of the onsite wetlands. Furthermore, the applicant is also providing a 10-foot-wide public bike path through their development. The path is intended to continue the path that starts at the Daisy Knight Dog Park on Livernois through the DPW site just to the north.

The applicant is proposing a ranch, story and a half, and colonial option which range in size from a 1,990 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 7.56 acres

Proposed Uses of Subject Parcel:

Twenty-six (26) 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, Cluster Development	Single-family Cluster
South	R-1C, One-family Residential District	Single-family homes
East	R-1C, One-family Residential District	Single-family homes
West	R-1B, One-family Residential District	Vacant (Troy Schools)

**NATURAL RESOURCES**

**Topography:** A topographic survey has been provided on sheet P-1.0. The site slopes from the northwest to southeast.

**Wetlands:** The survey indicates onsite wetlands, primarily on the southeast and eastern portions of the site. The application impacts onsite wetlands. The applicant did not provide a wetland delineation report or a permit review from EGLE.

**Woodlands:** A tree survey has been provided to inventory the natural features that exist onsite. The survey identified a total of approximately 550 trees on site. The applicant is preserving a good amount of onsite trees. Most are noted as good quality with only a few invasive species. Full replacement and preservation details are shown in **Table 2**.

**Table 2. – Woodland Protection Ordinance**

Replacement Details		
Protected Tree	Inches Removed	Replacement Required
Landmark	1590 inches	1590 inches
Woodland	1530 inches	765 inches
Preservation/Mitigation	Inches Preserved	Credit

Landmark	831 inches	1662 inches
Woodland	911 inches	1822 inches
<b>Total</b>	<b>0 inches required for replacement.</b> The number of inches preserved and credited exceed the mitigation required.	

**Items to be addressed:** Provide wetland delineation report and a permit review from EGLE.

## PARALLEL PLAN

The parallel site plan provided by the applicant includes five (5) lots constructed atop the wetlands on the east and southeast portions of the site. This includes lots 7, 9, 23, 24, and 25. Due to the presence of wetlands, development on these lots would require a permit from EGLE and may not be realistic. Excluding these lots from the parallel site plan, we find the base density in the parallel plan to be twenty (20) lots.

Based on 20 lots and 1.35 (based on 35% open space) the allowable number of units is 27 lots. The applicant is seeking approval of twenty-six (26) lots. Even by reducing the parallel plan by five (5) lots, the applicant is still able to obtain the requested 26 units by providing 35% open space.

**Items to be addressed:** none

## SITE ARRANGEMENT

The proposed one-family cluster development consists of twenty-six (26) units. Nine (9) of the lots will be accessed off Eckford, one (1) lot off Tallman, and the remaining sixteen (16) lots will be accessed from a new private road that is located off Tallman Drive. The smallest lot in size is 6,300 sq. ft and the average lot size is 7,086 sq. ft.

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

The applicant has submitted a parallel plan to establish a base density and portray the visual difference between traditional site design versus cluster development. Based on a parallel plan of 20 units, the applicant is seeking six (6) additional units above the parallel plan density by providing 35% of the total site as open space, preserving a significant amount of the onsite wetlands, and providing a 10-foot path that provides a trail connection.

***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
<b>Density</b>	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 = 20 units + Cluster bonus (35% bonus) = 27 units are allowed  The applicant is seeking 26 units.	26 units are permitted with City Council approval.
<b>Perimeter Setback</b>	Equal to the rear yard setback requirement for the underlying zoning district of the property directly adjacent to each border =  40-feet when adjacent to R1-C, otherwise 25-feet	Lots 1-25 comply. Lot 26 is only 32-feet, 40-feet required.	Lot 26 does not comply. See note below.
<b>Lot Size</b>	NA	Range in size from 6,300 sq. ft. and 9,723 sq. ft.	Complies with approval of Cluster by City Council
<b>Front Setback (building)</b>	20 feet	Varies between 20-feet and 25-feet	Complies
<b>Rear Setback (building)</b>	25-foot setback	20-foot/25-foot (Eckford) 22-foot/27-foot (Internal)	Decks encroach into rear yard. See note below.
<b>Side Setback (building)</b>	7.5-foot setback 15-foot total	7.5-foot minimum 15-foot total	Complies
<b>Open Space Requirements: Minimum Percentage</b>	20%	Proposing to preserve 2.7 acres of the 7.56 acres, or 35% for open space.	Complies. Applicant must submit open space preservation covenant.

Lot 26, which is adjacent R-1C zoned lot, requires a 40-foot perimeter setback. The applicant is encroaching 8 feet into the required 40-foot setback. In addition, decks for all units extend 15-feet from every home, and hence encroach 15-feet in to the required 25-foot setback.

The City Council, based upon a recommendation from the Planning Commission, may waive the perimeter and rear lot 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 perimeter and rear buffer for lot 26.

## **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 approximately 7.5 acres, and the applicant is proposing to reserve 2.6 acres for common open space, or 35% of the total site. Open space is provided around the existing wetlands along the eastern portion of the site and a significant open space buffer along the southern property line. Within the southern buffer, the applicant is providing a 10-foot path that provides a trail connection.

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) or provide quality open space and site amenities.

### **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 (wetland, trees) or provide quality open space.

**SITE ACCESS AND CIRCULATION**

Vehicular

Access to sixteen (16) lots will be from a single location off Tallman Drive. 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 six (6) foot wide concrete sidewalk along the perimeter of the private road. In addition, the applicant is adding a sidewalk along Eckford Drive and Tallman Drive.

The applicant is also providing a 10-foot wide public bike path through their development. The path is intended to continue the path that starts at the Daisy Knight Dog Park on Livernois through the DPW site just to the north.

**Items to be Addressed:** None

**STORMWATER**

Stormwater will be managed by a regional 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. $1,795/50 = 36$ trees = 36 trees	29 trees	Complies

Eckford	One (1) large evergreen tree per fifty (50) lineal feet. 741 lf./30 lf = 25 evergreen trees	Total of 39 new trees and 20 existing. Applicant notes they can not put all required trees along Eckford due to utilities and wetlands. However, they put additional trees and preserved trees on Tallman to compensate.	Complies with PC approval
Tallman	One (1) large evergreen tree per fifty (50) lineal feet. 447 lf./30 lf = 15 evergreen trees		
Overall Landscaping	20%	21.2%	Complies

**Items to be Addressed:** None.

### ELEVATIONS AND FLOOR PLANS

The applicant is proposing a ranch, story and a half, and colonial option which range in size from a 1,990 sq/ft ranch with second floor option to a 2,900 sq/ft colonial. Materials were not indicated.

**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.

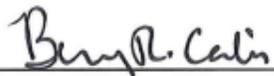
## **RECOMMENDATIONS**

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:
  - Lot 26, encroaches eight (8) feet into the required 40-foot setback along the southern property line.
  - Decks for all units extend 15-feet into the required 25-foot setback.
- Indicate materials
- Provide wetland delineation report and a permit review from EGLE.

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:** January 31, 2023

**To:** R. Brent Savidant, AICP  
Scott G Finlay, PE

**From:** Sara Merrill, PE, PTOE

**Re:** Estates of Eckford– Single Family Residential  
Anticipated Traffic Impacts

The purpose of this memorandum is to provide an overview of anticipated traffic impacts resulting from Estates of Eckford, a proposed site condominium development consisting of 26 single-family homes, developed under a cluster option and to be sited at the corner of Eckford drive and Tallman Drive. The development will provide access via a new residential street on the south side of Eckford Drive and via the connection to Tallman Drive. Eckford Drive is a two-lane local road, located east of Rochester Road between Wattles Road and Long Lake Road.

The Institute of Transportation Engineers (ITE) Trip Generation Manual, 11<sup>th</sup> 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 peak commuter periods, 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 Eckford Oaks, based on the ITE Trip Generation Manual, 11<sup>th</sup> Edition, for Single-Family Detached Housing (ITE Land Use Code #210).

Land Use	Number of Site-Generated Trips								
	AM Peak Hour			PM Peak Hour			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
Single-Family Detached Residential (26 units)	5	17	22	18	10	28	146	146	292

During the morning (AM) peak hour, the proposed Estates of Eckford development is expected to generate 22 new trips: 5 inbound (entering the site), and 17 outbound (exiting the site). During the evening (PM) peak hour, the proposed site is expected to generate 28 new vehicle trips: 18 inbound (entering the site) trips, and 10 outbound (exiting the site). This pattern coincides with residents typically leaving in the morning for work and returning home in the evening.

Traffic volumes on residential streets are closely correlated with the number of residential units. While traffic on Eckford Drive will increase slightly over current conditions, the traffic volume will remain similar to many other residential streets. The traffic generated by the proposed development would be minimal, adding less than 30 vehicle trips during the peak (“busiest”) hour. This equates to approximately one vehicle every 2-3 minutes during the peak hours. The traffic impact of this site on the adjacent road network is negligible and would be imperceptible to the majority of road users.

## PRELIMINARY SITE PLAN APPROVAL

5. PUBLIC HEARING - PRELIMINARY SITE PLAN REVIEW (File Number SP2022-0027)  
– Proposed Estates at Eckford (One Family Residential Cluster), South side of Eckford, West of Rochester (Parcels 88-20-15-252-028, -002, -036, -037, -004, -005), Section 15, Currently Zoned R-1C (One Family Residential) District

Mr. Carlisle reviewed the Preliminary Site Plan application for the proposed Estates at Eckford cluster development. He addressed surrounding land uses and zoning, existing wetlands, applicant's request to seek six (6) additional units above the parallel plan density by providing 35% of open space, preservation of significant area of onsite wetlands and provision of a 10-foot-wide public bike path that would connect with the Daisy Knight Dog Park on Livernois.

Mr. Carlisle asked the Commission to consider the applicant's request for relief of required setbacks along the southern property line (Lot 26) and required setbacks to accommodate decks on all units. He asked that the applicant indicate building materials and provide a wetland delineation report and a permit review from EGLE (Environment, Great Lakes & Energy).

In summary, Mr. Carlisle said Planning Commission shall determine if requirements are met to qualify for a cluster development option, if required Cluster Standards (Section 10.04.I) have been met and if the additional number of units is commensurate with the open space being preserved.

Discussion among administration and Planning Commission:

- Clarification on proposed relief of required rear and side yard setbacks.
- Maintenance of trail.
- Purpose of T-turnaround (stub street).

Jim Eppink of J Eppink Partners, Inc. was present to represent Mondrian Properties. He addressed:

- Wetland delineation application and permitting review with EGLE.
- Proposed setbacks for Lot 26 and decks on all units; dimensional measurement of setbacks.
- Alternative to provide at-grade patios instead of decks.
- Density, as relates to parallel plan and by-right cluster development.
- Preservation of 35% open space.
- Intent to dedicate trail to the City of Troy.
- Application meets Master Plan intent by offering missing middle housing.
- Sidewalks and trail system through natural area.

There was discussion, some comments related to:

- Flexibility to offer homeowner patio or deck.
- Lot 26, as relates to setbacks and trailhead.
- Sustainable design features; preservation of quality wetlands, utilization of regional stormwater system by three neighborhoods.

- Process/application with EGLE to mitigate wetlands in three small pocket areas.
- Building materials; first floor brick on four sides; above levels brick, stone and/or hardie board.
- Building envelopes as relates to different home styles.
- Configuration of lots as relates to number of driveways on Eckford.
- Paving of entire gravel portion of Eckford; cost sharing among mutual developers.
- Traffic calming options.
- Trail material; asphalt.

Mr. Eppink agreed to provide patios instead of decks to eliminate the request for relief of setback requirements on all 26 units.

**PUBLIC HEARING OPENED**

- Anthony Kapas, 501 Eckford; addressed concerns with increased density, traffic, water problems and destroying beautiful existing neighborhood. He said the City Council and Planning Department are not listening to concerns expressed by residents and said City should be held accountable for their actions.
- Marilena Chis, 585 Thurber; expressed concerns with density, traffic, increase of students in Troy School District, and that green space is being destroyed, not preserved. She questioned perceived benefits of the development.
- Gary Blanck, 655 Thurber; addressed concerns with losing the natural environment, increased traffic especially related to school activity, and asked about woodland buffer.
- Deanna Tabar, 515 Thurber; addressed concerns with safety and privacy of nature trail, decrease in property values.

**PUBLIC HEARING CLOSED**

Mr. Carlisle addressed woodland buffer as relates to distance in feet to residential.

Mr. Eppink addressed the trail as relates to safety, privacy, maintenance and property values.

Mr. Savidant briefly reviewed the City Traffic Consultant OHM memorandum on anticipated traffic impacts that was included in the agenda packet.

Several Board members addressed the benefit for an applicant to utilize the cluster development option so that wetlands and natural resources can be preserved.

**Resolution # PC-2023-02-013**

Moved by: Fox

Seconded by: Faison

**RESOLVED**, The Planning Commission hereby recommends to the City Council that the proposed Estates of Eckford Site Condominium (One Family Residential Cluster), 26 units/lots, South side of Eckford, West of Rochester (Parcels 88-20-15-252-028, -

002, -036, -037, -004, -005), Section 15, approximately 7.56 acres in size, Currently Zoned R-1C (One Family Residential) District, be approved for the following reasons:

1. The cluster development better protects the site’s 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 35% open space, to remain open space in perpetuity.

And approved with the following design considerations:

1. That patios only are provided with no option for decks.
2. That unit #26 be afforded flexibility of the 8-foot encroachment in the required perimeter setback.

Discussion on the motion on the floor.

Chair Lambert said he loves the trail and preservation of green space but expressed concern with the number of driveways going on Eckford. He said the City has been assured by the school superintendent in a written memorandum that the Troy School District can accommodate additional students. Chair Lambert stated the Planning Commission does not take into consideration tax revenues in its deliberation of proposed developments.

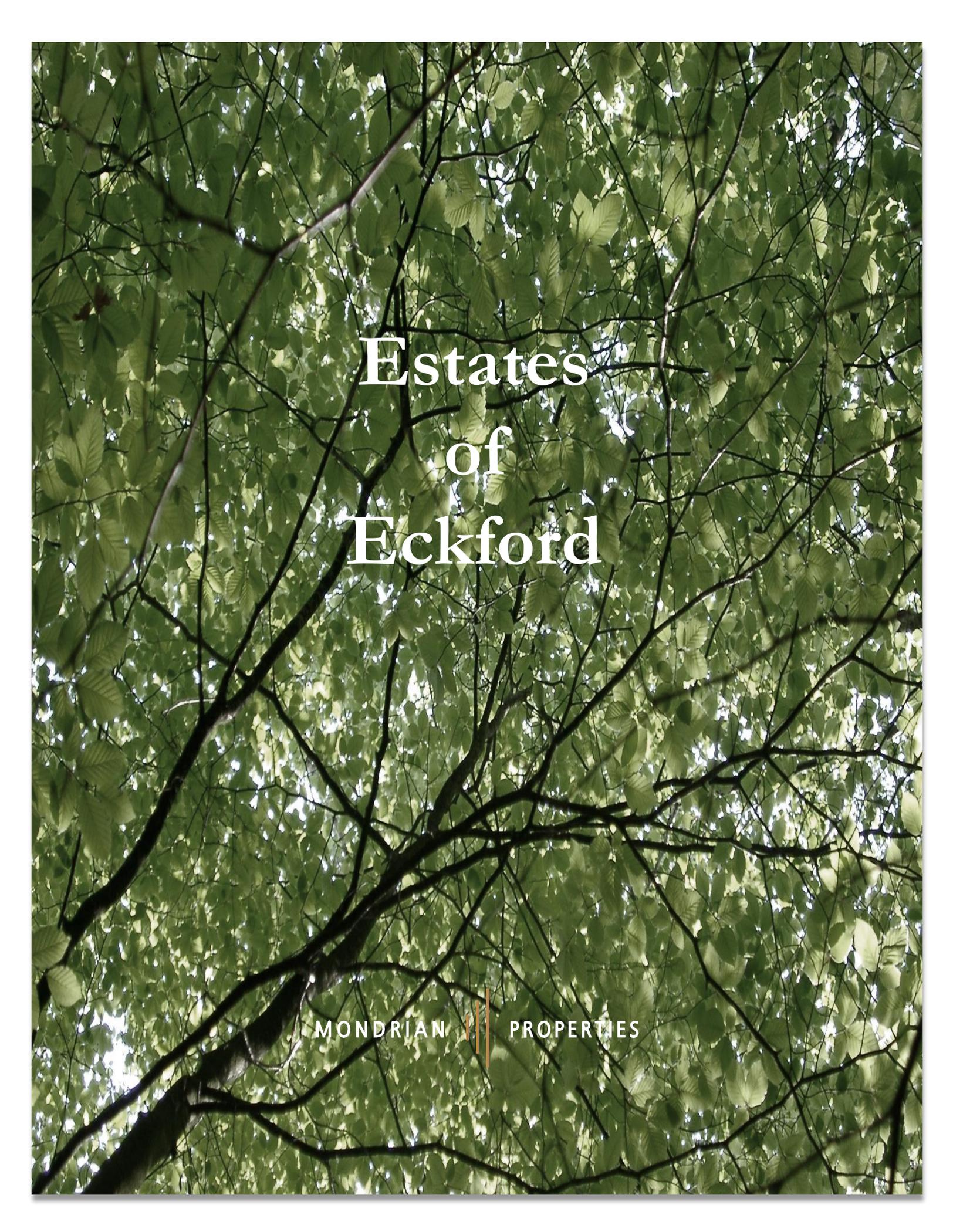
Mr. Buechner said that all Board members live in the City of Troy and that he has lived in two homes located on different trailways in the City. He shared that his family has never experienced any issues with safety, privacy, or lack of trail maintenance.

Mr. Krent said studies show property values increase for homes located on or near public trails and pathways.

Vote on the motion on the floor.

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

**MOTION CARRIED**



# Estates of Eckford

MONDRIAN | PROPERTIES

**To: City of Troy, Planning Department**  
**From: Mondrian Properties**  
**Re: Estates of Eckford**

**Dear Members of the Planning Commission,**

We are pleased and honored to present **Estates of Eckford**, a **26 Unit Single Family** residential home community. At **Mondrian Properties** we pride ourselves on designing, developing and constructing premier homes and communities. In our two-decade-long history we have constructed more than 45 communities in Southeastern Michigan, many within the **City of Troy**.

The Mondrian team is comprised of a strong group of professionals that truly understand the complexity of this project. We have deep experience and commitment to building **High Quality Homes** which we will offer in combination with open space and buffer zones on this site. We feel confident that we will be able to manage this project with great respect, care and integrity for the surrounding community.

Our plan intends to **Preserve 2.7 Acres (35%)** of open space. We will also be offering **New Homes** intended for **Young families** and **Empty Nesters**. Our goal for this site is to work closely with the surrounding community and strategically placing the new homes while also replanting new trees. We are excited about this project and the **Open Space** we have been able to save and integrate into the plan.

As we are committed to being **Good Neighbors** to the community we have shared this information with our surrounding neighbors. Everyone received an informational package and were able to review the site plan and future home plans. We will continue to work in conjunction with the Surrounding Home Owners to ensure a smooth development and building process. We believe and are confident that our plan meets the **City of Troy's** intent for the **Cluster Option** while taking into consideration the surrounding community.

**Best Regards**

**Joseph Maniaci**  
**Mondrian Properties**

**CITY OF TROY  
PRELIMINARY SITE PLAN APPLICATION  
ONE-FAMILY CLUSTER OPTION**

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



PRELIMINARY SITE PLAN REVIEW FEE  
**\$1,000.00**  
ESCROW FEE  
**\$1,800.00**  
ADMINISTRATIVE SITE PLAN REVIEW FEE  
**\$300.00**

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

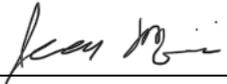
PLEASE FILE A COMPLETE PRELIMINARY SITE PLAN APPLICATION, TOGETHER WITH THE APPROPRIATE FEE, NOT LESS THAN THIRTY (30) DAYS PRIOR TO THE DATE OF THAT MEETING.

1. NAME OF THE PROPOSED DEVELOPMENT: Estates of Eckford
2. ADDRESS OF THE SUBJECT PROPERTY: 500, 510, 530, & 650 Eckford Dr.
3. ZONING CLASSIFICATION OF THE SUBJECT PROPERTY: R1-C, one-family residential district
4. TAX IDENTIFICATION NUMBER(S) OF SUBJECT PROPERTY: 88-20-15-252-028, 002, 036, 037, 004, 005
5. DESCRIPTION OF PROPOSED USE: 28 lot single family development.

6. APPLICANT:	PROPERTY OWNER:
NAME <u>Joseph Maniaci</u>	NAME <u>same</u>
COMPANY <u>Mondrain Properties</u>	COMPANY _____
ADDRESS <u>50215 Schoenherr Rd.</u>	ADDRESS _____
CITY <u>Shelby Twp.</u> STATE <u>MI</u> ZIP <u>48315</u>	CITY _____ STATE _____ ZIP _____
TELEPHONE <u>586.726.7350</u>	TELEPHONE _____
E-MAIL <u>jmaniaci@mondrainproperties.com</u>	E-MAIL _____

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

8. SIGNATURE OF APPLICANT  DATE 8.17.22

9. SIGNATURE OF PROPERTY OWNER  DATE 8.17.22

BY THIS SIGNATURE, THE PROPERTY OWNER AUTHORIZES PLACEMENT OF A SIGN ON THE PROPERTY TO INFORM THE PUBLIC AS TO THIS REQUEST FOR PRELIMINARY SITE PLAN.

# PRELIMINARY SITE PLAN SUBMITTAL CHECKLIST

## THE FOLLOWING INFORMATION AND MATERIALS ARE NECESSARY FOR SUBMISSION:

- REQUIRED FEE
- ONE (1) FLASH DRIVE CONTAINING AN ELECTRONIC VERSION OF THE ENTIRE PRELIMINARY SITE PLAN APPLICATION (PDF Format) EMAIL SUBMITTALS ARE ACCEPTABLE

### ONE (1) HARD COPY OF THE FOLLOWING:

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

### TWO (2) HARD COPIES OF THE FOLLOWING:

- PRELIMINARY SITE PLAN SHOWING PROPOSED SITE LAYOUT AND USES
- PARALLEL PLAN AS PER SECTION 10.04.C.1.
- PRELIMINARY TREE PRESERVATION PLAN / TREE INVENTORY
- PRELIMINARY LANDSCAPE PLAN
- PRELIMINARY FLOOR PLANS
- PRELIMINARY ELEVATIONS
- PRELIMINARY GRADING PLAN
- PRELIMINARY LIGHTING PLAN
- WETLANDS DETERMINATION, IF REQUIRED

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

***PLANNING COMMISSION AGENDAS ARE ELECTRONIC***



## **Estates of Eckford Fact Sheet**

### **Development**

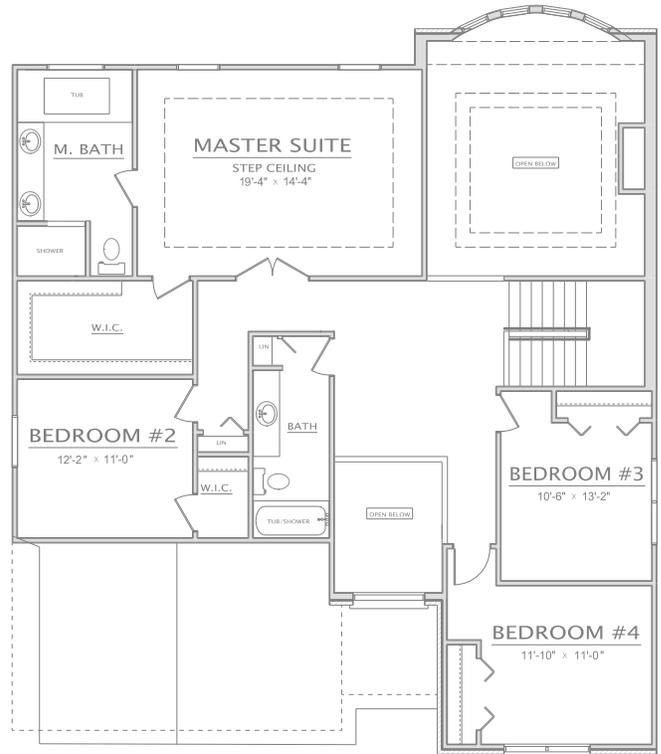
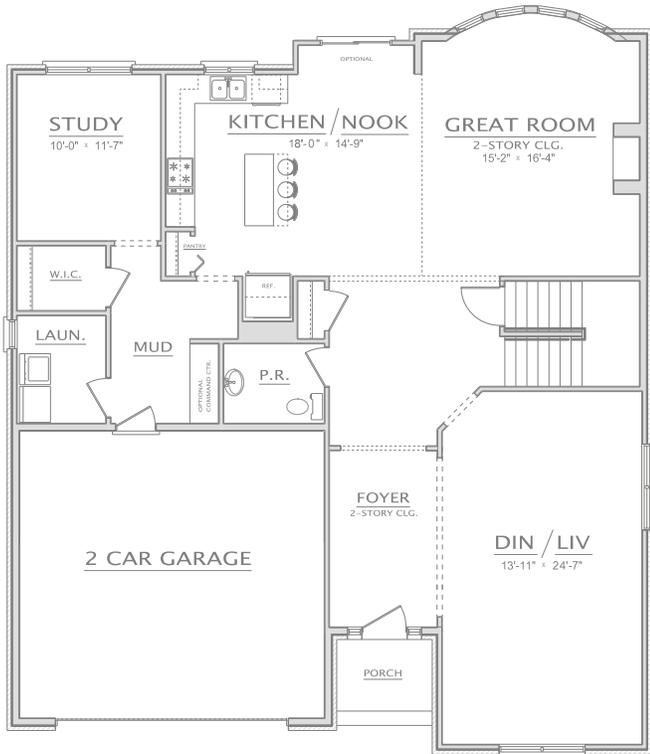
- 7.56 +/- Acres Site
- Zoning R-1C, Cluster Option
- 26 Single Family Homes
- Lot Sizes Approximately 60' x 105'
- Ranch, Story & Half and Colonial Home Styles
- Sizes from 1900 Square Feet and Above
- Development Start Spring 2023
- 30 Month Construction Period
- Off Site Model Homes Initially
- Main Road Access to the Site

### **Open Space**

- Over 2.7 (35%) Acres of Open Space
- Buffer Zones
- Tree Replacement Plan
- Part of Troy Community Walking Trails

### **Contact Information**

- Anita Khzouz
- E-mail: [administration@mondrianproperties.com](mailto:administration@mondrianproperties.com)
- Phone: 586-726-7340



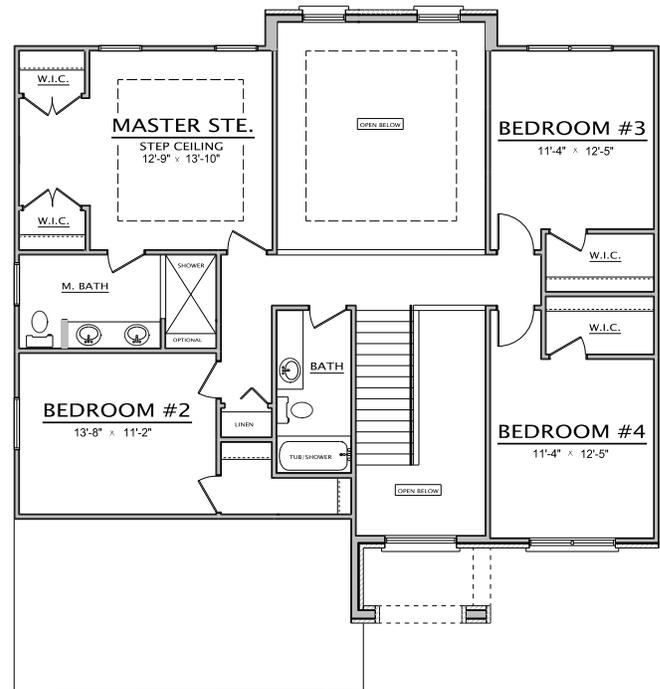
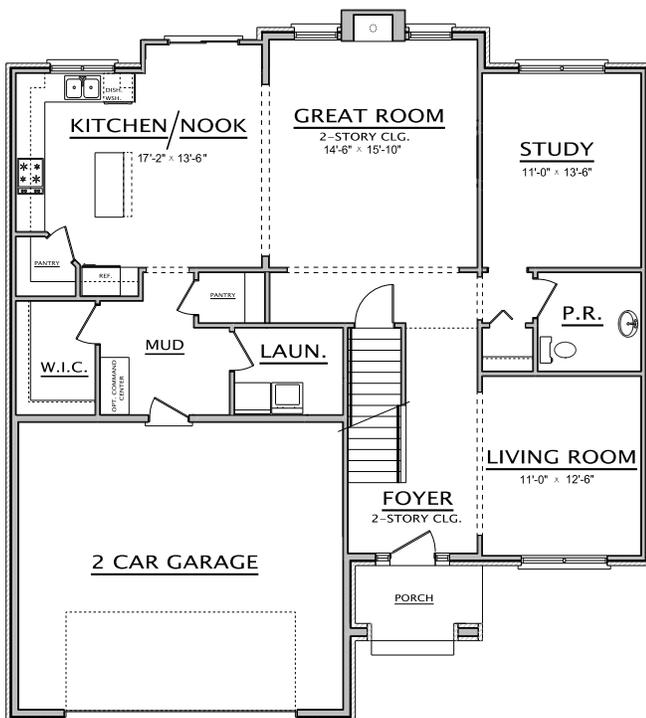
# MANOR COLONIAL

2900 sqft

# MANOR COLONIAL

2900 sqft





MONDRIAN  PROPERTIES

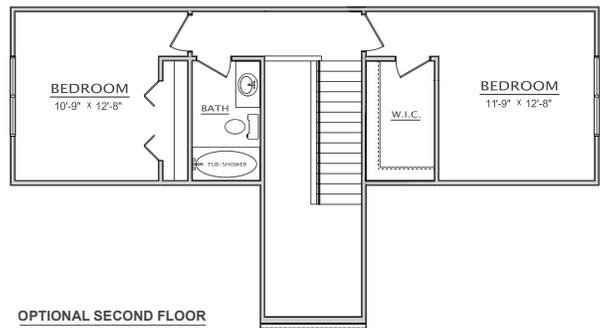
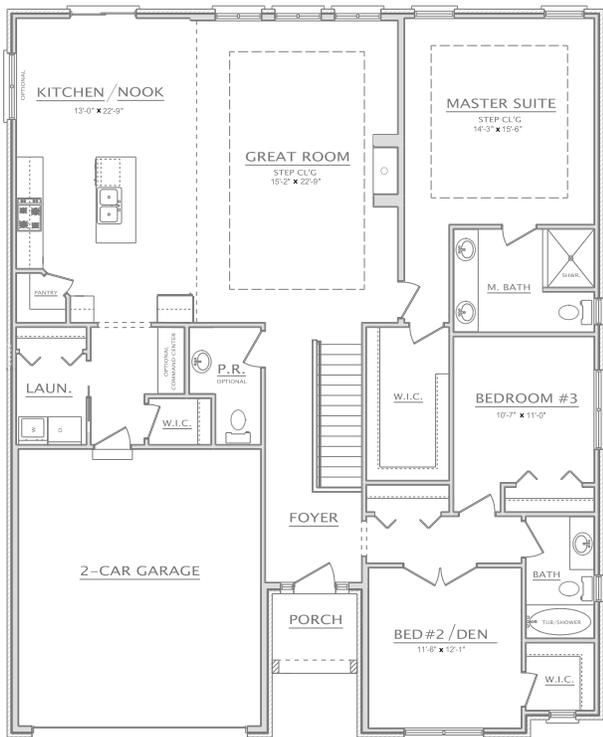
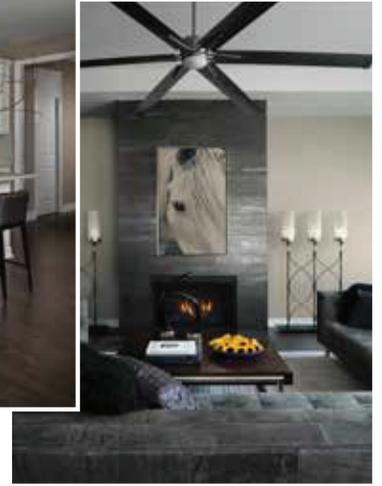
**TUDORGATE  
COLONIAL**  
2515 sqft



# TUDORGATE COLONIAL

2515 sqft





# HOMWOOD RANCH

W/ OPTIONAL SECOND FLOOR  
1990 SQFT.

MONDRIAN

PROPERTIES



# HOMEWOOD RANCH

W/ OPTIONAL SECOND FLOOR  
1990 SQFT.





# The Estates of Eckford

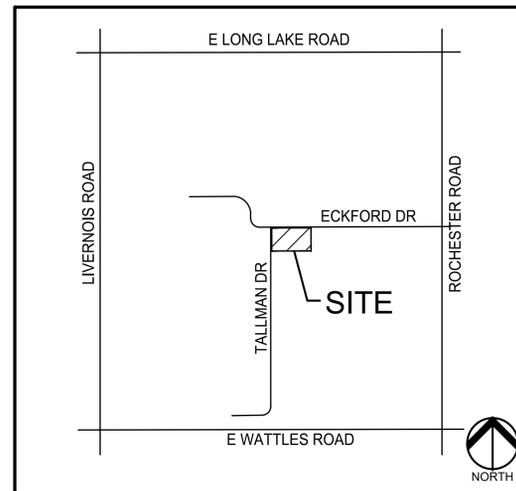


PRELIMINARY SITE PLANS

# ESTATES OF ECKFORD

ECKFORD DR./TALLMAN DR.  
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
	FOR REFERENCE
C-3	DPW REGIONAL DETENTION POND - SITE PLAN

DESIGN TEAM

OWNER/APPLICANT/DEVELOPER	CIVIL ENGINEER
MONDRAIN PROPERTIES 50215 SCHOENHERR RD. SHELBY TWP, MI 48315 CONTACT: JOSEPH MANIACI PHONE: 586.726.7350 EMAIL: JMANIACI@MONDRIANPROPERTIES.COM	PEA GROUP 2430 ROCHESTER COURT, STE. 100 TROY, MI 48063-1872 CONTACT: JOHN B. THOMPSON, PE PHONE: 844.813.2949 EMAIL: JTHOMPSON@PEAGROUP.COM
LANDSCAPE ARCHITECT	
PEA GROUP 45 W. GRAND RIVER AVE., STE. 501 DETROIT, MI 48226 CONTACT: KIMBERLY DIETZEL, RLA PHONE: 844.813.2949 EMAIL: KDIETZEL@PEAGROUP.COM	



REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	1/12/2022



**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**

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

**REFERENCE DRAWINGS**

- WATER MAIN CITY OF TROY GIS, DATED 6-21-21
- CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT NO10.501.5, SHEET 7, DATED 2-1-11
- SANITARY SEWER CITY OF TROY GIS, DATED 6-21-21
- CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT NO10.501.5, SHEET 7, DATED 2-1-11
- STORM SEWER CITY OF TROY GIS, DATED 6-21-21
- CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT NO10.501.5, SHEET 7, DATED 2-1-11
- GAS CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT NO10.501.5, SHEET 7, DATED 2-1-11
- FLOOD PLAN FEMA F.I.R.M. MAP #26125C0534F, DATED 9-29-2006

**BENCHMARKS**  
(GPS DERIVED - CITY OF TROY DATUM)

- BM #300  
ARROW ON HYDRANT WEST SIDE OF TALLMAN DRIVE, SOUTH OF LEONARD ELEMENTARY NORTH ENTRANCE.  
ELEV. - 678.00
- BM #301  
BENCHMARK IN EAST FACE OF POWER POLE, SOUTH WEST CORNER OF ECKFORD DRIVE AND TALLMAN DRIVE.  
ELEV. - 682.68
- BM #302  
MAG NAIL IN WEST FACE POWER POLE, SOUTH SIDE OF ECKFORD DRIVE AND EAST OF TALLMAN DRIVE.  
ELEV. - 679.70
- CITY OF TROY BM0797  
N-RIM SAN M H W-BOUND LANE OF ECKFORD AT TALLMAN  
ELEV. - 681.818(R)  
ELEV. - 682.00(M)
- CITY OF TROY BM2515  
TOP OF 1/2" CAPPED IRON, E-SIDE TALLMAN AT B/C, N-END CONC ROAD C.O.C.  
ELEV. - 677.98(R)  
ELEV. - 678.104(M)

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

**CAUTION!**  
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY AS APPLIED AS TO THE COMPLETENESS ON ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT  
**MONDRIAN PROPERTIES**  
50215 SCHOENHERR RD  
SHELBY TWP, MI 48315

PROJECT TITLE  
**ESTATES OF ECKFORD**  
ECKFORD DR/TALLMAN DR,  
TROY, MICHIGAN

REVISIONS

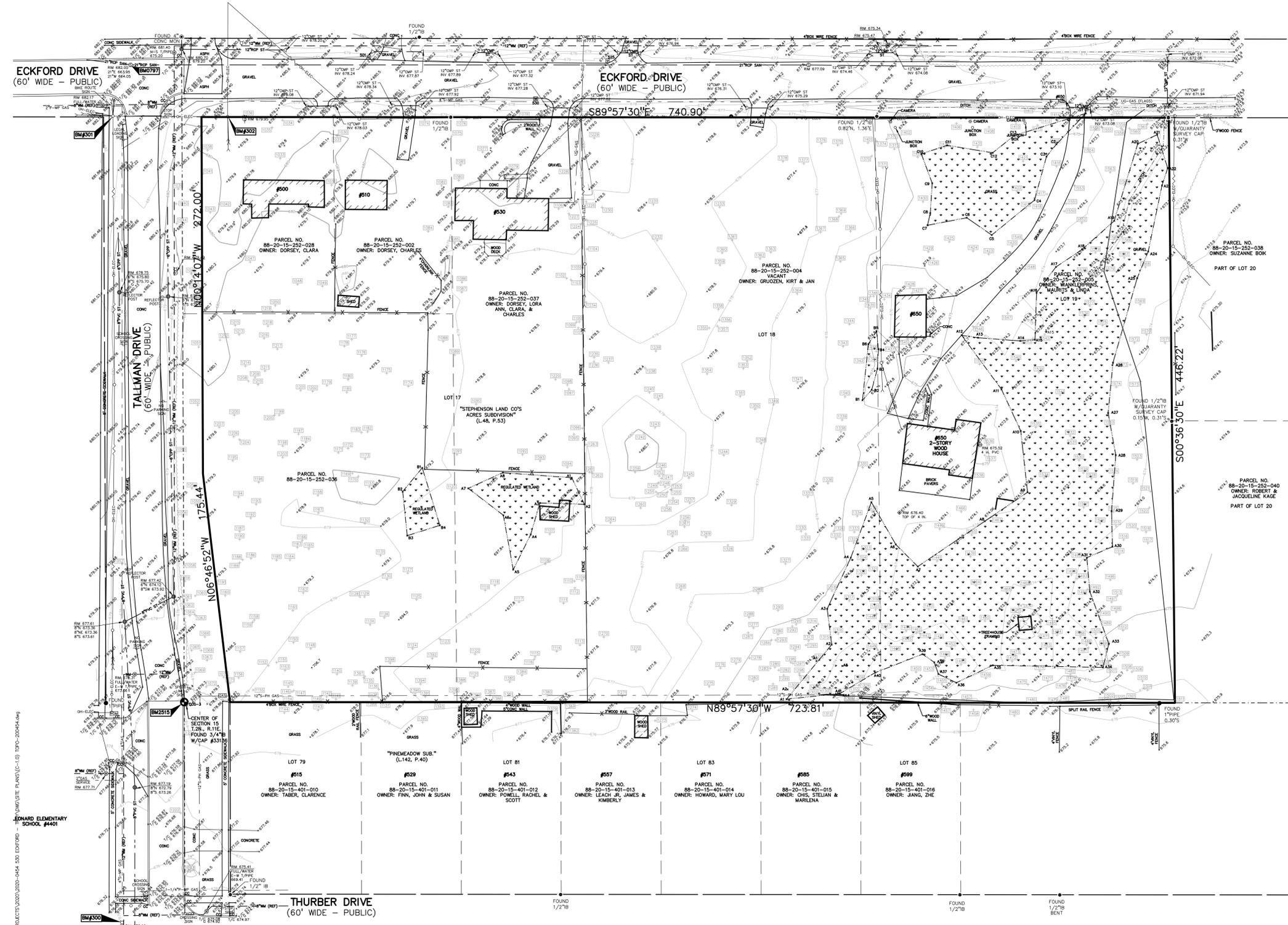
ORIGINAL ISSUE DATE:  
JANUARY 12, 2023

DRAWING TITLE  
**TOPOGRAPHIC SURVEY**

PEA JOB NO. 2020-0454  
P.M. JBT  
DN. KMB  
DES. DSK  
DRAWING NUMBER:

**FLOODPLAIN NOTE:**  
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26125C0534F, DATED SEPTEMBER 29, 2006.

**LEGAL DESCRIPTION**  
(Per ATA NATIONAL TITLE GROUP COMMITMENT PACKAGE)  
Land in the City of Troy, Oakland County, Michigan, described as follows:  
PARCEL ID 88-20-15-252-028 (Parcel 1)  
THE NORTH 150 FEET OF THE WEST 115.98 FEET OF LOT 17, EXCEPT THE WEST 15 FEET THEREOF, STEPHENSON LAND CO'S ACRES SUBDIVISION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 48, PAGE 53 OF PLATS, OAKLAND COUNTY RECORDS.  
PARCEL ID 88-20-15-252-036 (Parcel 2)  
LOT 17, EXCEPT THE EAST 100 FEET, ALSO EXCEPT THE NORTH 150 FEET OF THE WEST 190.98 FEET THEREOF, STEPHENSON LAND CO'S ACRES SUBDIVISION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 48, PAGE 53 OF PLATS, OAKLAND COUNTY RECORDS.  
PARCEL ID 88-20-15-252-037  
THE EAST 100 FEET OF LOT 17, STEPHENSON LAND COMPANY'S ACRES, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 48, PAGE 53 OF PLATS, OAKLAND COUNTY RECORDS.  
PARCEL ID 88-20-15-252-002  
PARCEL ID 88-20-15-252-004



EDWARD ELEMENTARY SCHOOL #4401





**LEGEND**

● IRON FOUND	⊗ BRASS PLUG SET	⊙ SEC. CORNER FOUND
⊗ IRON SET	⊗ MONUMENT FOUND	⊗ R. RECORDED
⊗ NAL FOUND	⊗ NAL & CAP SET	⊗ M. MEASURED
		⊗ C. CALCULATED

**EXISTING**

- OH-ELEC— ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UG-CATV— UNDERGROUND CABLE TV, CATV PEDESTAL
- UG-PHONE— TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- UG-ELEC— ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS VALVE & GAS LINE MARKER
- WATERMAN, HYD., GATE VALVE, TAPPING BLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BODY/DRYANT VALVE BOX, SERVICE SHUTOFF
- MARB. TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARDRAIL
- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT
- GRAVEL GRAVEL SHOULDER
- WETLAND

**PROPOSED**

- 671.21
- 671
- 310 HEAVY FLOW DUTY ONLY
- STD HEAVY DEEP DUTY STRENGTH

**REFERENCE DRAWINGS**

- WATER MAIN CITY OF TROY GIS, DATED 6-21-21
- CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT NO10.501.5, SHEET T, DATED 2-1-11
- SANITARY SEWER CITY OF TROY GIS, DATED 6-21-21
- CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT NO10.501.5, SHEET T, DATED 2-1-11
- STORM SEWER CITY OF TROY GIS, DATED 6-21-21
- CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT NO10.501.5, SHEET T, DATED 2-1-11
- GAS CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT NO10.501.5, SHEET T, DATED 2-1-11
- FLOOD PLAN FEMA F.I.R.M. MAP #26125C0534F, DATED 9-29-2006

**CAUTION!**  
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

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

SCALE: 1" = 40'

NORTH

**SYMBOLS: GRADING**

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

PROPOSED CONTOUR LINE

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

**RETAINING WALL NOTE:**  
TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

CLIENT  
**MONDRIAN PROPERTIES**  
50215 SCHOENHERR RD.  
SHELBY TWP, MI 48315

PROJECT TITLE  
**ESTATES OF ECKFORD**  
ECKFORD DR./TALLMAN DR.  
TROY, MICHIGAN

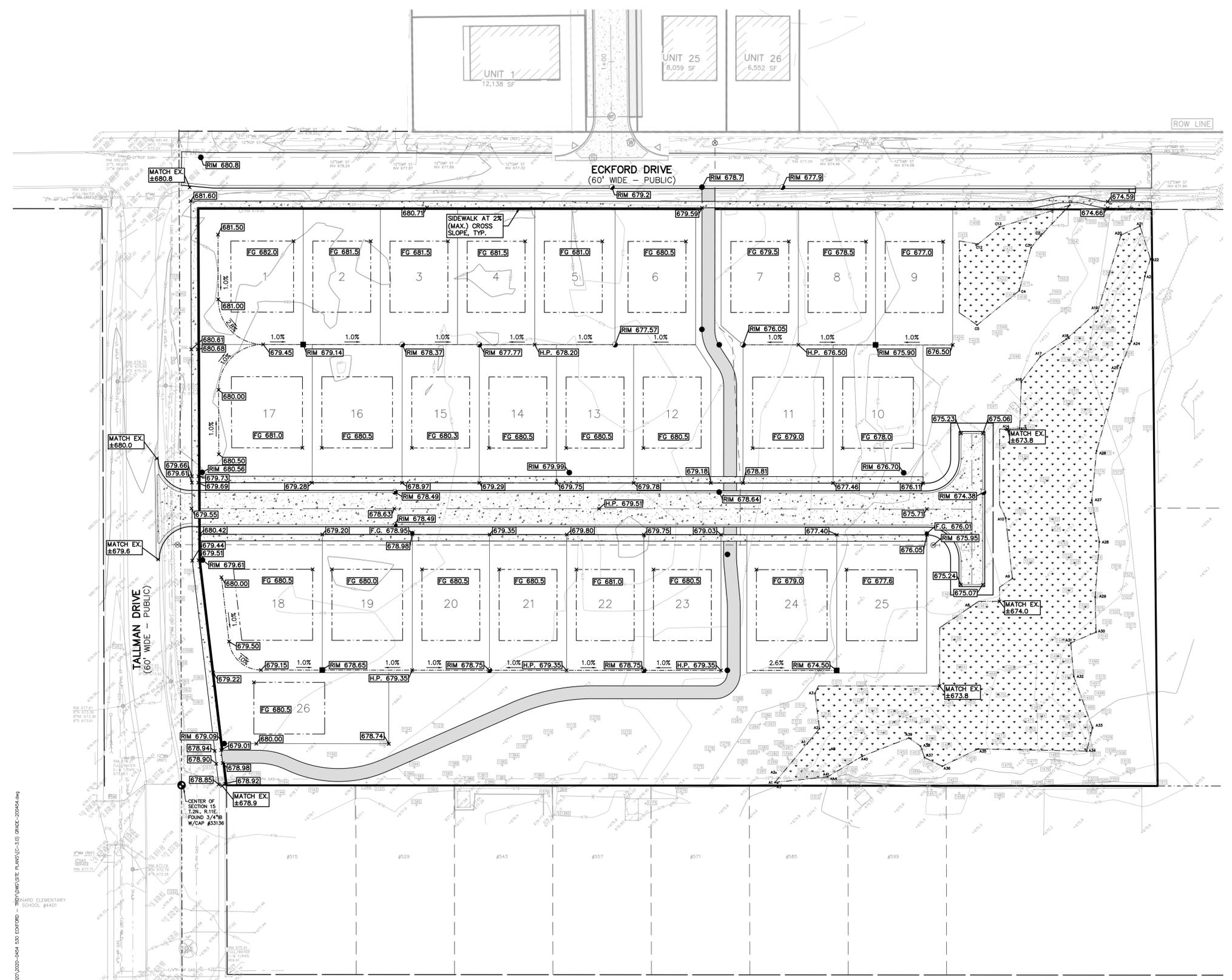
REVISIONS

ORIGINAL ISSUE DATE:  
JANUARY 12, 2023

DRAWING TITLE  
**PRELIMINARY GRADING PLAN**

PEA JOB NO. 2020-0454  
P.M. JBT  
DN. KMB  
DES. DSK  
DRAWING NUMBER:

NOT FOR CONSTRUCTION **P-3.0**



S:\PROJECTS\2020\2020-0454-001\0454-001\DWG\ESTATE PLANS\C-1.0\_Grade-200454.dwg  
WARD ELEMENTARY SCHOOL #4401



DECIDUOUS TREE PLANT LIST:					
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
11	AS2.5	Legacy Sugar Maple	<i>Acer saccharum 'Legacy'</i>	2.5" Cal.	B&B
12	CC8	Forset Pansy Redbud	<i>Cercis canadensis 'Forest Pansy'</i>	8' Ht.	B&B
10	GT2.5	Sunburst Honeylocust	<i>Gleditsia triacanthos f. Inermis 'Suncole'</i>	2.5" Cal.	B&B
8	TA2.5	Redmond Linden	<i>Tilia americana 'Redmond'</i>	2.5" Cal.	B&B
10	QM2.5	Bur Oak	<i>Quercus macrocarpa</i>	2.5" Cal.	B&B
51	TOTAL DECIDUOUS TREES				

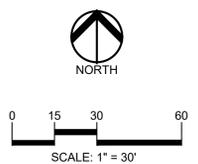
**LANDSCAPE CALCULATIONS:**  
 PER CITY OF TROY ZONING ORDINANCE, ZONED R1-C

**5.03 C-1A. GENERAL SITE LANDSCAPE**  
 REQUIRED: 20% OF SITE AREA SHALL BE LANDSCAPE MATERIAL  
 (5.26 ACRES) 229,125 SF \* 20 % = 45,825 SF LANDSCAPE AREA REQUIRED  
 PROVIDED: 48,787 SF LANDSCAPED AREA (21.2%)

**13.02 F. SUBDIVISION AND SITE CONDOMINIUM STANDARDS**  
 REQUIRED: 1 TREE PER 50 LF OF INTERNAL ROADS  
 716 LF / 50 = 14.3 TREES TREES REQUIRED (EACH SIDE)  
 PROVIDED: 29 PROPOSED TREES

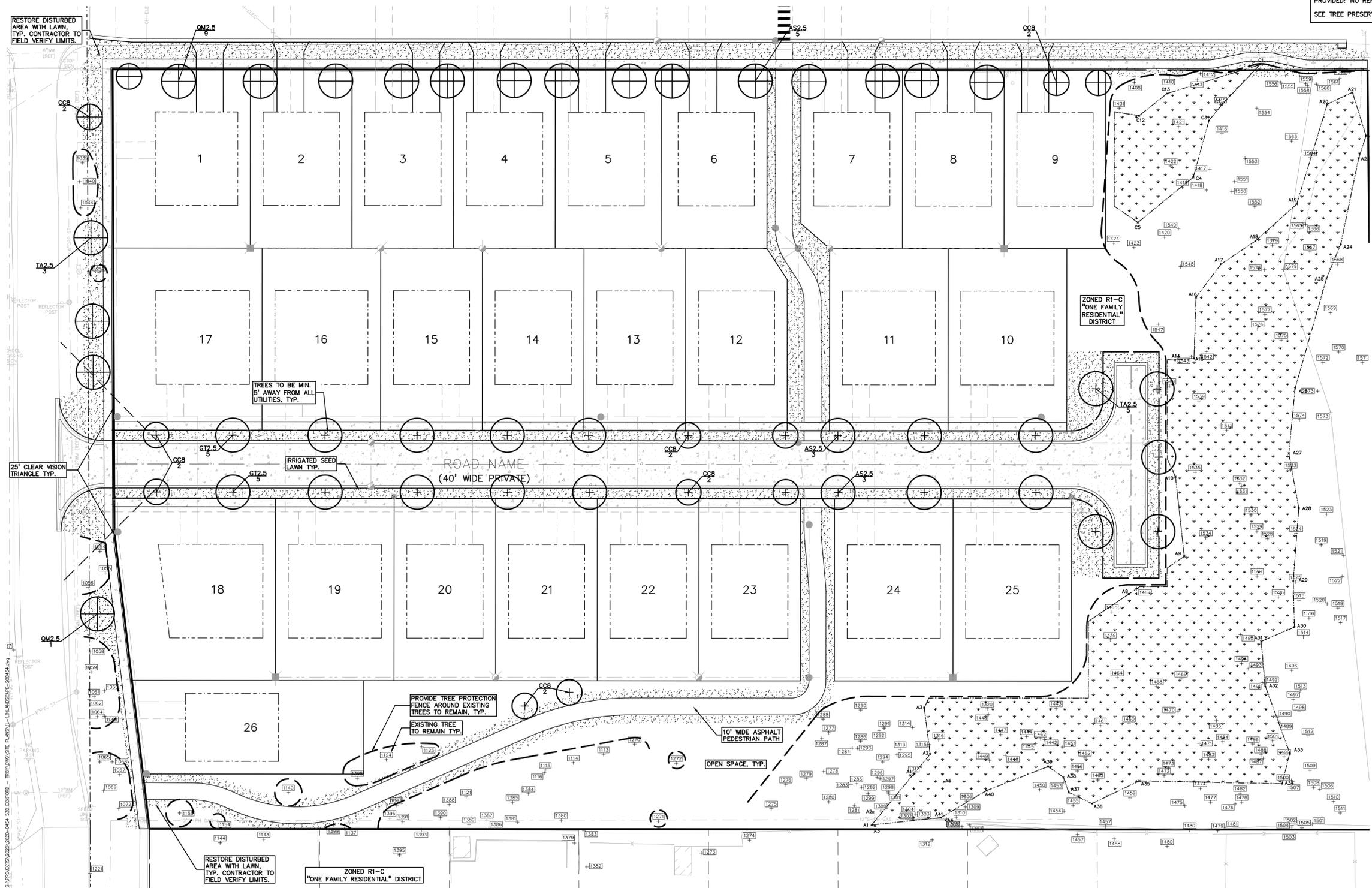
**13.02 D2. GREENBELT**  
 REQUIRED: 1 TREE / 30 LF OF FRONTAGE TO PUBLIC RD.  
 ECKFORD DRIVE - 741 LF FRONTAGE / 30 = 25 TREES  
 TALLMAN DRIVE - 447 LF FRONTAGE / 30 = 15 TREES  
 PROVIDED: 22 PROPOSED TREES AND 20 EXISTING TREES ALONG TALLMAN DR. AND 7 TREES ALONG ECKFORD DR. TO AVOID UTILITY CONFLICT THE FRONTAGE TREES ALONG ECKFORD ARE PROPOSED AT THE FRONT OF THE INDIVIDUAL LOTS.

**13.07 F. TREE REPLACEMENT:**  
 REQUIRED:  
 WOODLAND TREES - 50% DBH TO BE REPLACED. 765" REPLACEMENT  
 LANDMARK TREES - 100% DBH TO BE REPLACED. 1,590" REPLACEMENT  
 TREES RETAINED ON SITE - 2x DBH RETAINED OFF REPLACEMENT REQUIRED.  
 1,822" WOODLAND AND 1,682" LANDMARK.  
 TOTAL: -1,129" REQUIRED FOR REPLACEMENT.  
 PROVIDED: NO REPLACEMENT REQUIRED.  
 SEE TREE PRESERVATION PLAN, T-1.0, FOR TREE REMOVALS AND CALCULATIONS.



**811** 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.



- KEY:**
- = INTERNAL STREET TREES
  - = GREENBELT TREES
  - = IRRIGATED SEED LAWN
  - = EXISTING TREES TO REMAIN WITH TREE PROTECTION FENCE

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

CLIENT  
**MONDRIAN PROPERTIES**  
 50215 SCHOENHERR RD.  
 SHELBY TWP, MI 48315

PROJECT TITLE  
**ESTATES OF ECKFORD**  
 ECKFORD DR/TALLMAN DR.  
 TROY, MICHIGAN

REVISIONS

ORIGINAL ISSUE DATE:  
 JANUARY 12, 2023

DRAWING TITLE  
**PRELIMINARY LANDSCAPE PLAN**

PEA JOB NO. 2020-0454  
 P.M. JBT  
 DN. KAD  
 DES. KAD  
 DRAWING NUMBER:

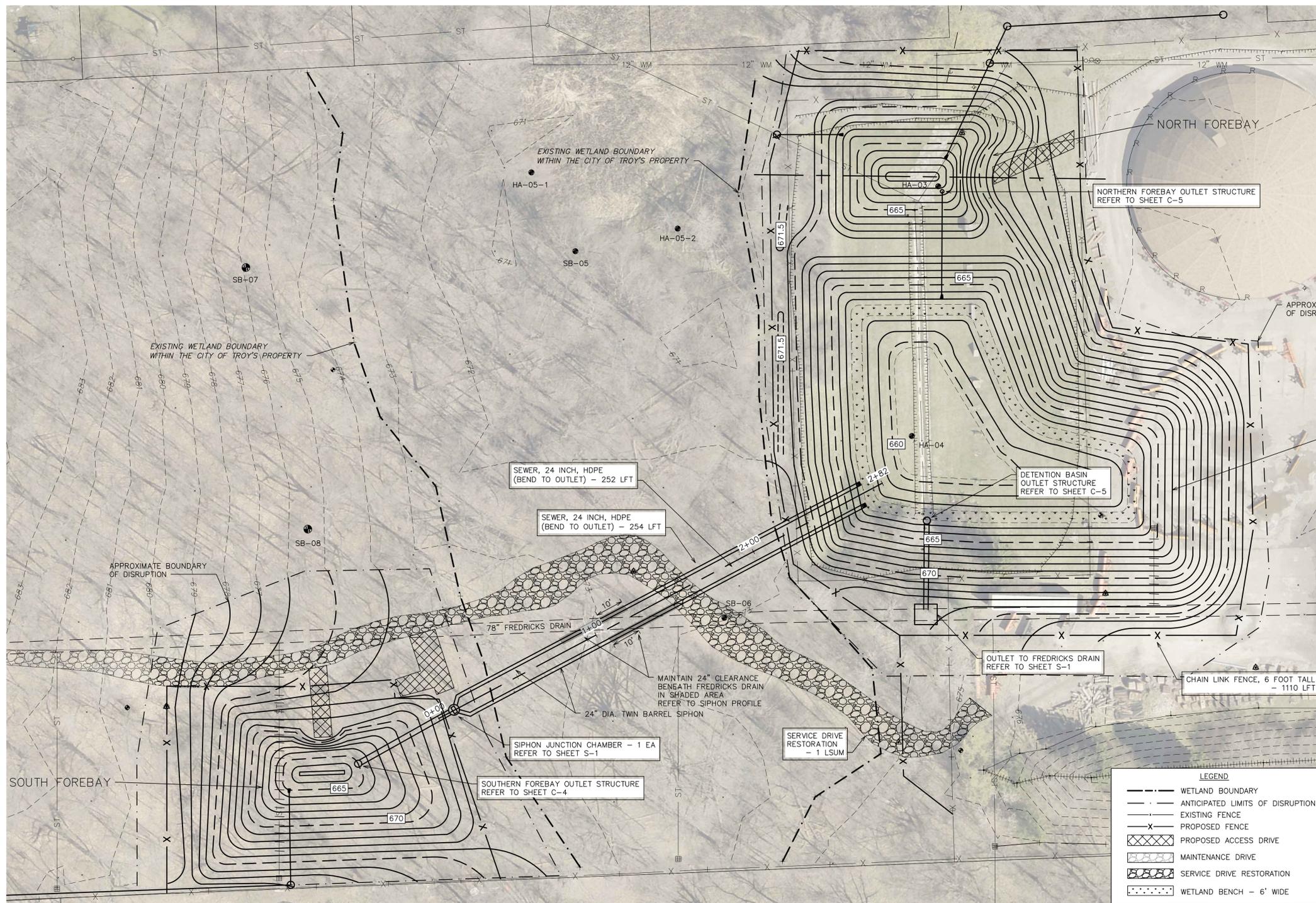


TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
1030	BS	7	Blue Spruce	Picea pungens	Fair		WOODLAND	R	N	REPLACE
1031	BS	6	Blue Spruce	Picea pungens	Fair		WOODLAND	R	N	REPLACE
1032	WC	15	White Cedar	Thuja occidentalis	Fair		LANDMARK	R	Y	REPLACE
1033	BS	10	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
1034	BS	9	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
1035	BS	13	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
1036	SH	14	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	N	REPLACE
1037	BS	7	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
1038	SH	17	Shagbark Hickory	Carya ovata	Good		LANDMARK	R	Y	REPLACE
1039	RO	9	Red Oak	Quercus rubra	Good		WOODLAND	S	N	-
1040	BR	6	Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	N	-
1041	SH	14	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1042	SH	9	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	Y	REPLACE
1043	SH	18	Shagbark Hickory	Carya ovata	Fair		LANDMARK	R	Y	REPLACE
1044	RO	9	Red Oak	Quercus rubra	Good		WOODLAND	S	N	-
1045	SH	9	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	N	-
1046	SH	18	Shagbark Hickory	Carya ovata	Good		LANDMARK	R	N	REPLACE
1047	WO	64	White Oak	Quercus alba	Good		LANDMARK	R	Y	REPLACE
1048	RO	8	Red Oak	Quercus rubra	Fair		WOODLAND	R	Y	REPLACE
1049	BR	26	Bur oak	Quercus macrocarpa	Fair		LANDMARK	R	Y	REPLACE
1050	BR	6	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1051	RO	32	Red Oak	Quercus rubra	Good	no tag	LANDMARK	R	N	REPLACE
1052	WO	27	White Oak	Quercus alba	Fair		LANDMARK	R	N	REPLACE
1053	RO	15	Red Oak	Quercus rubra	Good	x1-no tag	WOODLAND	R	N	REPLACE
1054	SH	17	Shagbark Hickory	Carya ovata	Good		LANDMARK	S	N	-
1055	RO	11	Red Oak	Quercus rubra	Good		WOODLAND	S	N	-
1056	RO	8	Red Oak	Quercus rubra	Good		WOODLAND	S	N	-
1057	E	10	American Elm	Ulmus americana	Fair		INVASIVE	S	N	-
1058	BR	6	Bur oak	Quercus macrocarpa	Good		WOODLAND	S	N	-
1059	SH	11	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	N	-
1060	SH	12	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	N	-
1061	BR	8	Bur oak	Quercus macrocarpa	Poor		WOODLAND	S	N	-
1062	BR	6	Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	N	-
1063	BR	7	Bur oak	Quercus macrocarpa	Good		WOODLAND	S	N	-
1064	RO	9	Red Oak	Quercus rubra	Good	no tag	WOODLAND	S	N	-
1065	E	8	American Elm	Ulmus americana	Fair		INVASIVE	S	N	-
1066	BR	7	Bur oak	Quercus macrocarpa	Poor		WOODLAND	R	N	-
1067	BR	8	Bur oak	Quercus macrocarpa	Poor		WOODLAND	S	N	-
1068	B	6	Basswood	Tilia americana	Good		WOODLAND	S	N	-
1069	TH	13	Thornapple/Hawthorn	Cragagus spp.	Fair		LANDMARK	S	N	-
1070	BR	9	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	N	REPLACE
1071	SH	7	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	Y	REPLACE
1072	SH	7	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	N	-
1074	SM	29	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	N	-
1075	BS	6	Blue Spruce	Picea pungens	Fair		WOODLAND	R	Y	REPLACE
1076	BS	6	Blue Spruce	Picea pungens	Fair	x1	WOODLAND	R	Y	REPLACE
1077	BR	23	Bur oak	Quercus macrocarpa	Fair		LANDMARK	R	Y	REPLACE
1078	SM	17	Silver Maple	Acer saccharinum	Good	x1	INVASIVE	R	Y	-
1079	BS	11	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
1080	BS	11	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
1081	SM	16	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
1082	SM	27	Silver Maple	Acer saccharinum	Good		INVASIVE	R	N	-
1083	RM	7	Red Maple	Acer rubrum	Fair	x2	WOODLAND	R	N	REPLACE
1084	SM	17	Silver Maple	Acer saccharinum	Good	x1	INVASIVE	R	N	-
1085	BS	6	Blue Spruce	Picea pungens	Fair		WOODLAND	R	Y	REPLACE
1086	SM	17	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
1087	BR	21	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1088	BR	24	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1089	WW	35	Weeping Willow	Salix babylonica	Fair		INVASIVE	R	Y	-
1090	BR	30	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1091	BS	8	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
1092	BS	9	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
1093	BS	7	Blue Spruce	Picea pungens	Fair		WOODLAND	R	Y	REPLACE
1094	BS	6	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
1095	E	17	American Elm	Ulmus americana	Good	x1	INVASIVE	R	Y	-
1096	B	16	Basswood	Tilia americana	Fair	x1	WOODLAND	R	Y	REPLACE
1097	B	11	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE
1098	SM	23	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
1099	B	11	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE
1100	B	6	Basswood	Tilia americana	Fair		WOODLAND	R	Y	REPLACE
1101	SH	6	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1102	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1103	BR	12	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1104	BR	12	Bur oak	Quercus macrocarpa	Fair	x1	WOODLAND	R	Y	REPLACE
1106	BR	7	Bur oak	Quercus macrocarpa	Poor		WOODLAND	R	Y	-
1106	SH	21	Shagbark Hickory	Carya ovata	Good		LANDMARK	R	Y	REPLACE
1107	BR	37	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1108	PH	10	Pignut Hickory	Carya glabra	Good		WOODLAND	R	Y	REPLACE
1109	B	8	Basswood	Tilia americana	Good	x1	WOODLAND	R	Y	REPLACE
1110	BR	24	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1111	RO	11	Red Oak	Quercus rubra	Good		WOODLAND	R	Y	REPLACE
1112	PH	13	Pignut Hickory	Carya glabra	Good		WOODLAND	R	Y	REPLACE
1113	PH	9	Pignut Hickory	Carya glabra	Fair		WOODLAND	S	Y	-
1114	PH	12	Pignut Hickory	Carya glabra	Good		WOODLAND	S	Y	-
1115	PH	10	Pignut Hickory	Carya glabra	Good		WOODLAND	S	Y	-
1116	B	8	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
1117	SH	17	Shagbark Hickory	Carya ovata	Good		LANDMARK	R	Y	REPLACE
1118	BR	28	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1119	BR	45	Bur oak	Quercus macrocarpa	Fair		LANDMARK	R	Y	REPLACE
1120	CT	11	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
1121	BR	46	Bur oak	Quercus macrocarpa	Fair		LANDMARK	S	Y	-
1122	PH	14	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	Y	REPLACE
1123	BR	23	Bur oak	Quercus macrocarpa	Fair		LANDMARK	S	Y	-
1124	SH	15	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	Y	-
1126	BR	26	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1126	SH	11	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	Y	REPLACE
1127	BR	16	Bur oak	Quercus macrocarpa	Fair		LANDMARK	R	Y	REPLACE
1128	RO	8	Red Oak	Quercus rubra	Good	x1-no tag	WOODLAND	R	Y	REPLACE
1129	BR	25	Bur oak	Quercus macrocarpa	Fair		LANDMARK	R	Y	REPLACE
1130	BR	26	Bur oak	Quercus macrocarpa	Fair		LANDMARK	R	Y	REPLACE

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
1131	RO	10	Red Oak	Quercus rubra	Good	no tag	WOODLAND	R	Y	REPLACE
1132	SH	15	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1133	SH	6	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	Y	REPLACE
1134	SH	15	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1135	B	6	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE
1136	BR	12	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1137	SH	6	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	Y	-
1138	SH	7	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1139	PH	7	Pignut Hickory	Carya glabra	Good		WOODLAND	R	Y	REPLACE
1140	BR	40	Bur oak	Quercus macrocarpa	Good		LANDMARK	S	Y	-
1141	SH	7	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1142	SH	6	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1143	SH	7	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	N	-
1144	SH	6	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	N	-
1145	BR	10	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1146	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1147	BR	7	Bur oak	Quercus macrocarpa	Good		WOODLAND	R	Y	REPLACE
1148	SH	20	Shagbark Hickory	Carya ovata	Good		LANDMARK	R	Y	REPLACE
1149	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1150	SH	21	Shagbark Hickory	Carya ovata	Good		LANDMARK	R	Y	REPLACE
1151	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1152	PH	7	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	Y	REPLACE
1153	BR	12	Bur oak	Quercus macrocarpa	Good		WOODLAND	R	Y	REPLACE
1154	SH	6	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	Y	-
1155	BR	35	Bur oak	Quercus macrocarpa	Good		LANDMARK	S	Y	-
1156	SH	7	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1157	SH	6	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1158	SH	16	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1159	WO	24	White Oak	Quercus alba	Good	up against 1158	LANDMARK	R	Y	REPLACE
1160	BR	27	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1161	SH	10	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1162	BR	8	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1163	SH	14	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1164	SH	6	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1165	SH	10	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	Y	REPLACE
1166	SH	10	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1167	SH	13	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1168	SH	11	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1169	B	6	Basswood	Tilia americana	Fair		WOODLAND	R	Y	REPLACE
1170	B	6	Basswood	Tilia americana	Fair		WOODLAND	R	Y	REPLACE
1171	SH	9	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1172	BR	10	Bur oak	Quercus macrocarpa	Good		WOODLAND	R	Y	REPLACE
1173	SH	9	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1174	BR	14	Bur oak	Quercus macrocarpa	Good		WOODLAND	R	Y	REPLACE
1175	BR	19	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1176	BR	12	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1177	SH	9	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1178	CT	18	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
1179	PH	9	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	Y	REPLACE
1180	RO	10	Red Oak	Quercus rubra	Good	x1-no tag	WOODLAND	R	Y	REPLACE
1181	TH	8	Thornapple/Hawthorn	Cragagus spp.	Good		WOODLAND	R	Y	REPLACE
1182	B	9	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE
1183	TH	8	Thornapple/Hawthorn	Cragagus spp.	Fair	x1	WOODLAND	R	Y	REPLACE
1184	SH									

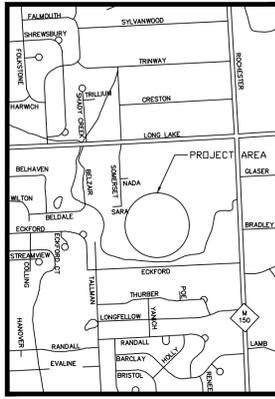
TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
1331	I	12	Ironwood	Ostrya virginiana	Fair		LANDMARK	R	Y	REPLACE
1332	B	9	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE
1333	B	6	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE
1334	BE	6	American Beech	Fagus grandifolia	Fair		WOODLAND	R	Y	REPLACE
1335	BE	20	American Beech	Fagus grandifolia	Good		LANDMARK	R	Y	REPLACE
1336	I	10	Ironwood	Ostrya virginiana	Fair		LANDMARK	R	Y	REPLACE
1337	I	11	Ironwood	Ostrya virginiana	Fair		LANDMARK	R	Y	REPLACE
1338	PH	15	Pignut Hickory	Carya glabra	Good		WOODLAND	R	Y	REPLACE
1339	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1340	BR	6	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1341	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1342	E	6	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
1343	PH	27	Pignut Hickory	Carya glabra	Good		LANDMARK	R	Y	REPLACE
1344	B	6	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE
1345	RO	10	Red Oak	Quercus rubra	Fair	no tag	WOODLAND	R	Y	REPLACE
1346	RO	12	Red Oak	Quercus rubra	Fair	no tag	WOODLAND	R	Y	REPLACE
1347	PH	20	Pignut Hickory	Carya glabra	Fair		LANDMARK	R	Y	REPLACE
1348	SH	16	Shagbark Hickory	Carya ovata	Fair		LANDMARK	R	Y	REPLACE
1349	BE	16	American Beech	Fagus grandifolia	Good		WOODLAND	R	Y	REPLACE
1350	BE	22	American Beech	Fagus grandifolia	Good		LANDMARK	R	Y	REPLACE
1351	BE	14	American Beech	Fagus grandifolia	Fair		WOODLAND	R	Y	REPLACE
1352	BE	12	American Beech	Fagus grandifolia	Fair		WOODLAND	R	Y	REPLACE
1353	BE	11	American Beech	Fagus grandifolia	Good		WOODLAND	R	Y	REPLACE
1354	BE	20	American Beech	Fagus grandifolia	Good		LANDMARK	R	Y	REPLACE
1355	BE	16	American Beech	Fagus grandifolia	Good		WOODLAND	R	Y	REPLACE
1356	PH	20	Pignut Hickory	Carya glabra	Good		LANDMARK	R	Y	REPLACE
1357	BE	13	American Beech	Fagus grandifolia	Dead	x1	WOODLAND	R	Y	-
1358	BE	23	American Beech	Fagus grandifolia	Good		LANDMARK	R	Y	REPLACE
1359	SH	11	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	Y	REPLACE
1360	SH	14	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	Y	REPLACE
1361	BS	9	Blue Spruce	Picea pungens	Dead		WOODLAND	R	Y	-
1362	PH	14	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	Y	REPLACE
1363	PH	20	Pignut Hickory	Carya glabra	Good		LANDMARK	R	Y	REPLACE
1364	SH	15	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	Y	REPLACE
1365	PH	21	Pignut Hickory	Carya glabra	Good		LANDMARK	R	Y	REPLACE
1366	PH	21	Pignut Hickory	Carya glabra	Good		LANDMARK	R	Y	REPLACE
1367	PH	19	Pignut Hickory	Carya glabra	Fair		LANDMARK	R	Y	REPLACE
1368	SH	10	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	Y	REPLACE
1369	SH	10	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	Y	REPLACE
1370	B	7	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE
1371	I	12	Ironwood	Ostrya virginiana	Good		LANDMARK	R	N	REPLACE
1372	RO	21	Red Oak	Quercus rubra	Good	no tag	LANDMARK	R	N	REPLACE
1373	RO	20	Red Oak	Quercus rubra	Good	no tag	LANDMARK	R	N	REPLACE
1374	I	6	Ironwood	Ostrya virginiana	Good		WOODLAND	R	N	REPLACE
1375	RO	24	Red Oak	Quercus rubra	Good	no tag	LANDMARK	R	Y	REPLACE
1376	PH	14	Pignut Hickory	Carya glabra	Good		WOODLAND	R	Y	REPLACE
1377	BR	19	Bur oak	Quercus macrocarpa	Good		LANDMARK	R	Y	REPLACE
1378	RO	27	Red Oak	Quercus rubra	Good		LANDMARK	R	Y	REPLACE
1379	WO	31	White Oak	Quercus alba	Fair	x1	LANDMARK	S	N	-
1380	WO	21	White Oak	Quercus alba	Fair		LANDMARK	S	Y	-
1381	WO	18	White Oak	Quercus alba	Fair		LANDMARK	S	Y	-
1382	SH	8	Shagbark Hickory	Carya ovata	Good	on outside of fence	WOODLAND	S	N	-
1383	RO	6	Red Oak	Quercus rubra	Good	no tag	WOODLAND	S	N	-
1384	B	8	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
1385	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	Y	-
1386	SH	8	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	Y	-
1387	SH	7	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	Y	-
1388	BR	7	Bur oak	Quercus macrocarpa	Good		WOODLAND	S	Y	-
1389	PH	6	Pignut Hickory	Carya glabra	Good		WOODLAND	S	Y	-
1390	RO	20	Red Oak	Quercus rubra	Good	x1 no tag	LANDMARK	S	Y	-
1391	SH	6	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	Y	-
1392	PH	8	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	Y	REPLACE
1393	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	N	-
1394	BR	6	Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	Y	-
1395	SH	11	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	N	-
1396	SH	8	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	Y	-
1397	BR	11	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Y	REPLACE
1398	SH	6	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	Y	-
1399	B	14	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
1401	RO	23	Red Oak	Quercus rubra	Fair		LANDMARK	R	Y	REPLACE
1402	RO	19	Red Oak	Quercus rubra	Fair		LANDMARK	R	Y	REPLACE
1403	RC	10	Red Cedar	Juniperus virginiana	Poor	out under utility	INVASIVE	R	Y	-
1404	RC	10	Red Cedar	Juniperus virginiana	Fair	2-cut under utility	INVASIVE	R	Y	-
1405	RC	9	Red Cedar	Juniperus virginiana	Fair	x1-cut under utility	INVASIVE	R	Y	-
1406	WC	8	White Cedar	Thuja occidentalis	Poor		WOODLAND	R	Y	-
1407	WS	6	White Spruce	Picea glauca	Poor		WOODLAND	R	Y	-
1408	SU	10	Sugar Maple	Acer saccharum	Fair		WOODLAND	S	Y	-
1409	WS	10	White Spruce	Picea glauca	Poor		WOODLAND	R	Y	-
1410	SM	11	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1411	SC	10	Scotch Pine	Pinus sylvestris	Very Poor		#N/A	R	Y	#N/A
1412	SC	12	Scotch Pine	Pinus sylvestris	Poor		#N/A	S	Y	#N/A
1413	SH	15	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	Y	-
1414	WC	8	White Cedar	Thuja occidentalis	Fair		WOODLAND	R	Y	REPLACE
1415	SM	25	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1416	SM	25	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1417	SM	15	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1418	SM	28	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1419	SM	20	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1420	SM	28	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1421	BR	10	Bur oak	Quercus macrocarpa	Good		WOODLAND	S	Y	-
1422	BR	20	Bur oak	Quercus macrocarpa	Fair		LANDMARK	S	Y	-
1423	SM	23	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1424	SM	42	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1425	SM	13	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
1426	SU	7	Sugar Maple	Acer saccharum	Fair		WOODLAND	R	Y	REPLACE
1427	SWO	16	Swamp White Oak	Quercus bicolor	Good		LANDMARK	R	Y	REPLACE
1428	SM	24	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
1429	SM	24	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
1430	RO	16	Red Oak	Quercus rubra	Good		LANDMARK	R	Y	REPLACE

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
1431	BR	35	Bur oak	Quercus macrocarpa	Good		LANDMARK	S	Y	-
1432	B	7	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE
1433	PH	11	Pignut Hickory	Carya glabra	Good	x1	WOODLAND	R	Y	REPLACE
1434	RO	12	Red Oak	Quercus rubra	Good		WOODLAND	R	Y	REPLACE
1435	RO	11	Red Oak	Quercus rubra	Good		WOODLAND	R	Y	REPLACE
1436	SM	40	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
1437	SM	35	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
1438	SM	38	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
1439	SM	29	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1440	SM	13	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
1441	SM	33	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
1442	SM	8	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1443	E	6	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
1444	SM	9	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1445	CT	16	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
1446	E	19	American Elm	Ulmus americana	Good		INVASIVE	S	Y	-
1447	SM	10	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1448	CT	25	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
1449	E	9	American Elm	Ulmus americana	Good		INVASIVE	S	Y	-
1450	RO	11	Red Oak	Quercus rubra	Good	x1	WOODLAND	S	Y	-
1451	SM	15	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1452	CT	25	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
1453	CT	15	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
1454	E	12	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
1455	SM	7	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1456	SM	6	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1457	BC	12	Wild Black Cherry	Prunus serotina	Fair		WOODLAND	S	Y	-
1458	BC	7	Wild Black Cherry	Prunus serotina	Good		WOODLAND	S	Y	-
1459	BR	55	Bur oak	Quercus macrocarpa	Good		LANDMARK	S	Y	-
1460	SM	15	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1461	E	10	American Elm	Ulmus americana	Good		INVASIVE	S	Y	-
1462	CT	19	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
1463	CT	20	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
1464	SM	23	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1465	SM	16	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1466	SM	28	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y	-
1467	SM	23	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1468	SM	28	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1469	SM	30	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1470	E	8	American Elm	Ulmus americana	Good		INVASIVE	S	Y	-
1471	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
1472	SM	6	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1473	SM	9	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1474	SM	6	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1475	E	15	American Elm	Ulmus americana	Good		INVASIVE	S	Y	-
1476	RO	6	Red Oak	Quercus rubra	Good		WOODLAND	S	Y	-
1477	RO	10	Red Oak	Quercus rubra	Good		WOODLAND	S	Y	-
1478	SM	8	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1479	SM	8	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1480	SU	8	Sugar Maple	Acer saccharum	Good		WOODLAND	S	Y	-
1481	I	6	Ironwood	Ostrya virginiana	Good		WOODLAND	S	Y	-
1482	SM	8	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1483	SM	11	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1484	SM	10	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1485	CT	24	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
1486	E	8	American Elm	Ulmus americana	Fair					

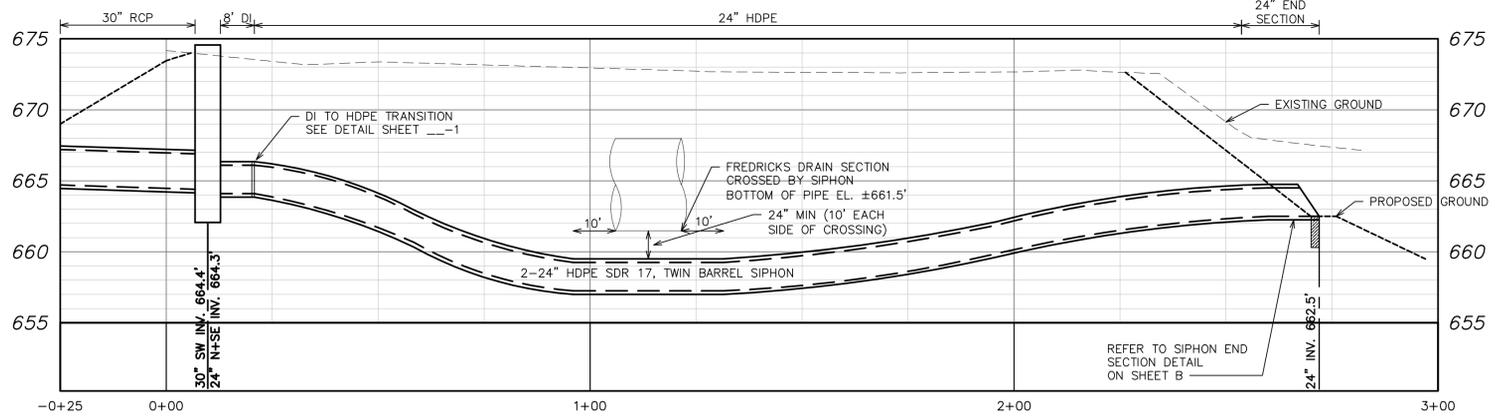


**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 555 HULET DRIVE P.O. BOX 824  
 BLOOMFIELD HILLS, MICH. 48303 - 0824  
 PHONE: (248) 454-6300  
 FAX (1st. Floor): (248) 454-6312  
 FAX (2nd. Floor): (248) 454-6359  
 WEB SITE: [http:// www.hrcengr.com](http://www.hrcengr.com)

11-11-2022	PLAN REVIEW - 80% COMPLETION
DATE	ADDITIONS AND/OR REVISIONS
DESIGNED	BWS/AWM
DRAWN	AWM
CHECKED	BWS
APPROVED	BWS



QUANTITIES THIS SHEET			
No.	DESCRIPTION	UNIT	QTY
	PAVT, REM	SYD	1930
	TREE, REM, SPECIAL	LSUM	1
	CLEARING/GRUBBING OF SITE	LSUM	1
	SIPHON JUNCTION CHAMBER	EA	1
	SIPHON OUTLET	EA	2
	FREDRICKS DRAIN JUNCTION CHAMBER	EA	1
	EARTHWORK	CYD	15400
	SEWER, 30 INCH, RCP	LFT	58
	SEWER, 24 INCH, DI	LFT	16
	SEWER, 24 INCH, HDPE	LFT	506
	CHAIN LINK FENCE, REM	LFT	990
	CHAIN LINK FENCE, 6 FOOT TALL	LFT	1605
	CHAIN LINK FENCE GATE, 6 FOOT TALL, 12 FOOT WIDE	EA	4
	MAINTENANCE DRIVES AND SERVICE DRIVE RESTORATIONS	LSUM	1
	SITE RESTORATION	SYD	12425
	LANDSCAPE PLANTINGS	LSUM	1



SIPHON PROFILE  
 HORIZONTAL - 1:30  
 VERTICAL - 1:5

FOR REFERENCE ONLY

**811**  
 CALL MISS DIG  
 72 HOURS  
 (3 WORKING DAYS)  
 BEFORE YOU DIG  
 1-800-482-7171  
 or 811  
 CALL811.COM (TOLL FREE)

CITY OF TROY  
**DPW REGIONAL  
 DETENTION POND**

SITE PLAN

HRC JOB NO. 20210882	SCALE 1:30
DATE November 2022	SHEET NO. <b>C-3</b> OF