

PLANNING COMMISSION MEETING AGENDA REGULAR MEETING

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

February 14, 2023 7:00 P.M. Council Chambers

- 1. ROLL CALL
- 2. APPROVAL OF AGENDA
- 3. <u>APPROVAL OF MINUTES</u> January 24, 2023
- 4. PUBLIC COMMENT For Items Not on the Agenda

PRELIMINARY SITE PLAN APPROVAL

5. <u>PUBLIC HEARING - PRELIMINARY SITE PLAN REVIEW (File Number SP2022-0027)</u> – 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.

OTHER ITEMS

- POTENTIAL PLANNED UNIT DEVELOPMENT (PUD) APPLICATION Concept Plan discussion, East of Livernois, North of Square Lake (PIN 88-20-03-301-088, 88-20-03-301-025, -024, -023), Section 35, Currently Zoned NN (Neighborhood Node "Q") and R-1B (One Family Residential) Districts.
- 7. PRELIMINARY SITE PLAN REVIEW (SP JPLN2022-0008) Proposed The Westington II, South of Wattles, East of Crooks (870 Barilane Drive; PIN 88-20-21-101-009), Section 21, Currently Zoned NN (Neighborhood Node "I") District
- 8. PUBLIC COMMENT For Items on the Agenda
- 9. PLANNING COMMISSION COMMENT
- 10. ADJOURN

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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 Lambert called the Regular meeting of the Troy City Planning Commission to order at 7:00 p.m. on January 24, 2023, in the Council Chamber of the Troy City Hall. Chair Lambert and Vice Chair Perakis presented opening remarks relative to the role of the Planning Commission and procedure of tonight's meeting.

1. ROLL CALL

Present:

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

Also Present:

R. Brent Savidant, Community Development Director Julie Quinlan Dufrane, Assistant City Attorney Kathy L. Czarnecki, Recording Secretary

2. <u>APPROVAL OF AGENDA</u>

Resolution # PC-2023-01-006

Moved by: Fox
Support by: Faison

RESOLVED, To approve the Agenda as prepared.

Yes: All present (9)

MOTION CARRIED

3. <u>APPROVAL OF MINUTES</u> – January 10, 2023

Resolution # PC-2023-01-007

Moved by: Krent Support by: Tagle

RESOLVED, To approve the minutes of the January 10, 2023 Regular meeting as submitted.

Yes: All present (9)

MOTION CARRIED

4. PUBLIC COMMENT – For Items Not on the Agenda

There was no one present who wished to speak.

PLANNED UNIT DEVELOPMENT

5. <u>PLANNED UNIT DEVELOPMENT (File Number PUD2020-0018)</u> — Proposed Concept Development Plan for Long Lake and Crooks Masterplan Development, Northwest corner of Long Lake and Crooks, Section 8, Currently Zoned O Office

Mr. Savidant explained the Planned Unit Development (PUD) three-step approval process. He briefly addressed discussion items during review of the application in previous meetings.

Mr. Savidant addressed revisions to the application since its last review, proposed amenities in Zones A, B and C, buildout of development phases and displayed several generic renderings that capture the flavor of the application.

Mr. Savidant said the applicant noted benefits of the application as follows:

- Horizontal mixed-use development consistent with the Master Plan.
- Development of an undeveloped and prominent site.
- Outdoor plazas.
- Outdoor dining areas.
- Pedestrian circulation paths and activities around the site.
- Public art.
- Wetland preservation.

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

- The proposed development guidelines (height/setbacks, etc.)
- The proposed allowable and special uses.
- The proposed phasing.
- If proposed benefits are commensurate with the requested relief/development flexibility.
- If the PUD Standards have been met.

Discussion among administration and Planning Commission:

- Public transportation drop-off area.
- · Height of Flagstar bank; 14 stories.
- Intent of Urban Residential zoning district.
- Sustainability, renewable energy, environmental impact.
- Traffic study recommendations, responsibility to apply.
- Potential uses.

Anthony Antone of Kojaian was present. Project members in the audience were Randy Wertheimer of Hunter Pasteur Homes, Chris Beck of Gensler and Tyler Tennent of Dawda Mann PLC.

Mr. Antone addressed the revisions to the application and amenities and said they are committed to the uses as presented this evening in their presentation.

There was discussion, some comments related to:

- Public transportation drop-off; possible location south side of Crooks service drive; applicant working with SMART.
- Amenities open to public; more details with site plan application.
- Development phases; 1st phase multi-family residential, 2nd phase amenities.
- Public art; one-time installation.
- Sustainability, energy conservation, charging stations.
- Natural wetland area; seating around periphery; applicant working with Environment, Great Lakes & Energy (EGLE) on other possible functions.
- Great Lawn Area; applicant working with outside source to promote various activities.
- Correction to Site Plan to show only one entrance on Long Lake.
- Food truck staging; on promenade, malleable locations.
- Traffic improvements; applicant to work with Engineering and County.
- Green space; 76% open space.
- Office space (Area 2); objective to remain as office use until tenant is secured.
- Goal to create a live, play, work environment.
- Public comment received expressing concern with destruction of trees, office space vacancies and building height.
- Applicant encouraged to include renderings from various perspectives of surrounding areas at City Council presentation.
- Project timetable.
- Recycling resources.

Chair Lambert opened the floor for public comment. Acknowledging there was no one present who wished to speak, Chair Lambert closed the floor for public comment.

There was discussion on the PUD Agreement, some comments related to:

- Limitation on uses; reference to email communication from Attorney Tyler Tennent confirming commitment of uses identified in application.
- Site Plan to show only one entrance on Long Lake.
- Traffic circulation as relates to recommendations of traffic consultants and County regulations.
- Project timetable; up to 20 years to complete construction.
- Development phases.

Resolution # PC-2023-01-008

Moved by: Krent Seconded by: Buechner

WHEREAS, The applicant Gensler submitted a Conceptual Development Plan application for a Planned Unit Development, located on the northwest corner of Long Lake and Crooks, in Section 8, approximately 24.88 acres in area; and

WHEREAS, The Concept Development Plan proposes multiple phases for a mixed-use development including office, residential, lodging, restaurant, retail and open space with public amenities; and

WHEREAS, The Concept Development Plan will be implemented through submittal of Preliminary Development Plans for each phase of development; and

WHEREAS, Each Preliminary Development Plan will require a Planning Commission public hearing and City Council public hearing prior to approval; and

WHEREAS, The proposed Concept Development Plan meets the Standards for Approval set forth in Section 11.03.

THEREFORE BE IT RESOLVED, That the Planning Commission recommends to City Council that Concept Development Plan Approval for the proposed Long Lake and Crooks Masterplan Development be granted, subject to the following:

1. The concept plan indicates extensive landscape and trees, and the Planning Commission approves that type of concept.

Yes: All present (9)

MOTION CARRIED

PRELIMINARY SITE PLAN APPROVAL

6. PRELIMINARY SITE PLAN REVIEW (File Number SP JPLN2022-0009) – Proposed Hills West, East side of Crooks, South of Wattles (3902 Crooks; 88-20-21-101-003), Section 21, Currently Zoned NN (Neighborhood Node "I") District

Ms. Dufrane referenced an email received from the applicant's attorney, Henry Sandweiss, requesting that Ms. Perakis recuse herself from deliberation on this item. Ms. Dufrane said she and Ms. Perakis discussed the request earlier today. It was determined to allow Ms. Perakis an opportunity to respond, followed by a vote of the Planning Commission on whether or not recusal is necessary. Ms. Dufrane asked if either Arban Stafa or Mr. Sandweiss, who were present in the audience, had anything further to say on behalf of the applicant Sam Stafa, to which they declined.

Ms. Perakis said she would not recuse herself. Ms. Perakis addressed the reference by the applicant, Sam Stafa, that she cannot render a fair and impartial decision and thus suggests she might be biased against him. Ms. Perakis said she believes she treats all applications with the same scrutiny and strategy as relates to Zoning Ordinance

standards. She said she has nothing personal against Mr. Stafa and has no reason to be biased or has ever been biased against the applicant.

Commissioners Krent, Tagle, Hutson and Malalahalli spoke in support of not recusing Ms. Perakis.

Resolution # PC-2023-01-009

Moved by: Krent Seconded by: Fox

RESOLVED, To not recuse Ms. Perakis from deliberation on this application.

Yes: Buechner, Faison, Fox, Hutson, Krent, Lambert, Malalahalli, Tagle

Abstain: Perakis

MOTION CARRIED

Mr. Savidant said the application before the Board this evening looks different than what was presented in November 2022. He reviewed the changes as noted on page 6 of the Planning Consultant report dated January 19, 2023. Mr. Savidant addressed site access, common ownership of parcels, potential for cross access connectivity, open space, landscaping, parking, traffic study, elevations and building materials.

Mr. Savidant asked the Planning Commission in its deliberation to consider compliance with Sections 5.06E Design Standards and 8.06 Site Plan Review Standards.

Discussion among administration and Planning Commission:

- Application relationship to previously approved developments and potential future development.
- Preservation of twelve trees.
- Bicycle parking spaces.
- Residentially zoned parcel to the south is a church.

Peter Stuhlreyer of Designhaus Architecture was present to represent the developer of Hills West.

There was discussion, some comments related to:

- Location of bicycle parking spaces; inside gym building to the north.
- Consideration to locate pocket park between the two buildings.
- Consideration to move Crooks access to the south of the most southern building.
- Traffic concerns; circulation, Crooks access, proximity to Barilane driveway, potential for backup traffic, consideration for EVA (emergency vehicular access).
- Building floor plans.
- Separate venture/ownership of parcels.
- Parking; no deficit per parcel, no shared parking required.
- Requirement of cross access easements.
- Location of pocket park initially determined to preserve existing trees.
- Recycling resources.

City Traffic Consultant Sara Merrill OHM Advisors addressed the process in which the developer, or its designated traffic/civil engineer, would reach out to the Road Commission for Oakland County (RCOC) Permit Department to move the Crooks Road access and rearrange the deceleration lane. She said, in her opinion, there could be a benefit or a potential ripple effect of moving the access further south. Ms. Merrill addressed numerous factors used to determine if traffic mitigation is necessary and internal traffic site flow. She shared that RCOC uses an adaptive traffic system at each intersection in Troy that responds live to current traffic volumes.

Mr. Tagle asked if one is heading southbound on Crooks and turning left into the site driveway, and with the cars stacking up in the northbound left turn lane to go west on Wattles, how many cars would it take before one could not turn left to get into the complex.

Julie Kroll of Fleis & Vandenbrink responded that the traffic calculations show there would be no impact to the site driveway in that scenario.

Civil Engineer Greg Bono of PEA Group addressed the RCOC requirements on separation distance between driveways and noted it is based on the speed limit on Crooks Road. He opined the RCOC would not issue a permit for a change in the driveway location. Mr. Bono addressed the potential to extend the deceleration lane and the limitations an EVA would pose to the Barilane property.

Chair Lambert opened the floor for public comment.

 Michelle Lyons, 3902 Crooks, owner of the subject property, addressed the existing zoning and surrounding uses. She expressed support for the application as presented and asked the Board's consideration in its approval this evening.

Chair Lambert closed the floor for public comment.

Mr. Fox addressed the location of the Barilane driveway, potential for cut-through traffic, speeding and emergency vehicular access.

Resolution # PC-2023-01-

Moved by: Fox

Seconded by:

RESOLVED, That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed Hills West 29-unit apartment development, East side of Crooks, South of Wattles, Section 21, Currently Zoned NN (Neighborhood Node "I") District, be granted.

Discussion:

Mr. Krent said he would support the motion on the condition that RCOC explore the possibility of having the driveway at the south end of the property.

Ms. Perakis said exploring the possibility has no teeth and suggested waiting for a response from RCOC prior to taking any action this evening.

Mr. Tagle said it would be advantageous for the developer to reach out to the RCOC to discuss the possibility of moving the access to the south but noted that the RCOC has the final say on the access and deceleration lane.

Resolution # PC-2023-01-010

Moved by: Fox Seconded by: Krent

RESOLVED, That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed Hills West 29-unit apartment development, East side of Crooks, South of Wattles, Section 21, Currently Zoned NN (Neighborhood Node "I") District, be granted, subject to the following:

1. That the Road Commission for Oakland County (RCOC) explores the possibility of having the driveway at the south end of the property.

Yes: Faison, Fox, Hutson, Krent, Tagle

No: Buechner, Lambert, Malalahalli, Perakis

MOTION CARRIED

OTHER ITEMS

7. PLANNING COMMISSION ANNUAL REPORT FOR 2022

Mr. Savidant presented the Planning Commission 2022 Annual Report.

Chair Lambert asked that the report be revised as follows:

- Add site plan approval of the Kelly Services redesigned office building site development on Crooks.
- Sub-Committee on Neighborhood Nodes.
 - o Rephrase 'established' to 'appointed' by Chair.
 - Add names of members; Lambert, Perakis, Faison, Krent.

Mr. Savidant said he would revise the report to reflect the changes prior to presenting the report to City Council and posting it on the City website.

8. <u>PUBLIC COMMENT</u> – For Items on the Agenda

There was no one present who wished to speak.

9. PLANNING COMMISSION COMMENT

There were general comments, some relating to:

- Administration presentation of proposed Zoning Ordinance Text Amendments for review.
- Current vacancy rates for office and apartment complexes; possibly presentation by experts on topic(s).
- Status of Master Plan update.
- Capacity of Troy schools to accommodate additional students resulting from recent developments.

10. ADJOURN

The Regular meeting of the Planning Commission adjourned at 9:35 p.m.

Respectfully submitted,	
Devid Levels and Oberin	
David Lambert, Chair	
Kathy L. Czarnecki, Recording Secretary	

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ITEM #5

DATE: January 27, 2023

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: The proposed one-family cluster development is located on the South side of

Eckford, West of Rochester (parcel 88-20-15-252-028, 002, 036, 037, 004, 005).

The subject parcel is 7.56 acres in size.

The petitioner Mondrian Properties submitted the above referenced Preliminary Site Plan application for a 26-unit One Family Residential Cluster. The development proposes to preserve 35% open space on the 7.56-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. OHM Memo, January 31, 2023
- 4. Preliminary Site Plan Application

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GIS Online



1,154 0 577 1,154Feet



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



1,154 Feet

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

Date: February 7, 2023

For City of Troy, Michigan

Project Name: Estates of Eckford

Plan Date: January 12, 2023

Location: Southeast corner of Eckford Drive and Tallman Drive

Zoning: R-1C, One-family Residential District

Action Requested: 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 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





<u>Size of Subject Property:</u>

The parcel is 7.56 acres

Proposed Uses of Subject Parcel:

Twenty-six (26) detached single family condominium cluster development.

<u>Current Use of Subject Property</u>:

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 weltands. 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	
Total	0 inches required for replacement. 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 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

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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
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 = 20 units + Cluster bonus (35% bonus) = 27 units are allowed The applicant is seeking 26 units.	26 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 when adjacent to R1-C, otherwise 25-feet	ck ing ty Lots 1-25 comply. er = Lot 26 is only 32-feet, 40- feet required. Lot 26 does not com note below.	
Lot Size	NA	Range in size from 6,300 sq. ft. and 9,723 sq. ft.	Complies with approval of Cluster by City Council
Front Setback (building)	20 feet	Varies between 20-feet and 25-feet	Compiles
Rear Setback (building)	25-feet setback	20-feet/25-feet (Eckford) 22-feet/27-feet (Internal)	Decks encroach into rear yard. See note below.
Side Setback (building)	7.5-feet setback 15-feet total	7.5-feet minimum 15-feet total	Complies
Open Space Requirements: Minimum Percentage	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

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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

<u>Vehicular</u>

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	29 trees	Complies	
	trees			

	One (1) large evergreen	Total of 39 new trees	
	tree per fifty (50) lineal	and 20 existing.	
Eckford	feet.	Applicant notes they	
	741 lf./30 lf = 25 evergreen	can not put all	
	trees	required trees along	
	One (1) large evergreen	Eckford due to utilities	Complies with
	tree per fifty (50) lineal	and wetlands.	PC approval
	feet.	However, they put	
Tallman	447 lf./30 lf = 15 evergreen	additional trees and	
	trees	preserved trees on	
		Tallman to	
		compensate.	
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.
 - o 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, 11th 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, 11th Edition, for Single-Family Detached Housing (ITE Land Use Code #210).

	Number of Site-Generated Trips								
Land Use	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.

PROPOSED RESOLUTION

<u>PUBLIC HEARING - PRELIMINARY SITE PLAN REVIEW (File Number SP2022-0027)</u> – 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.

Resolution # PC-2023-02-

Moved by: Support by:

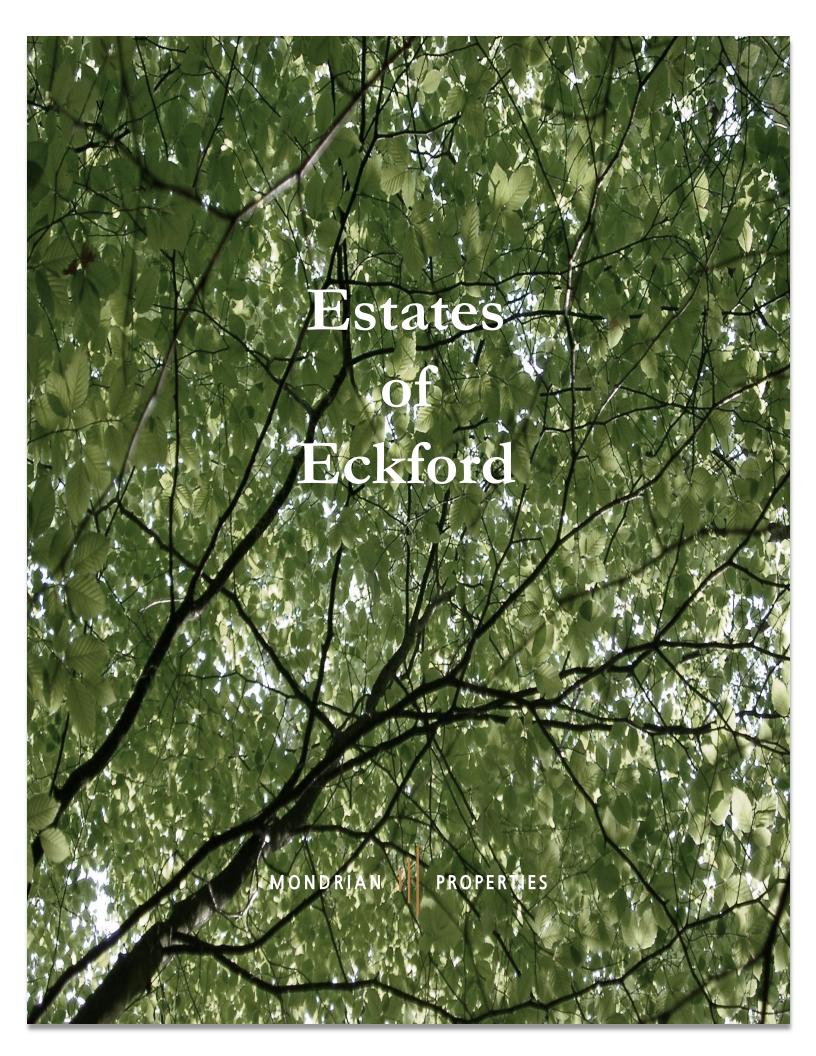
RESOLVED, The Planning Commission hereby recommends to the City Council that the proposed Estates of Eckford Site Condominium (One Family Residential Cluster), 26 units/lots, South side of Eckford, West of Rochester (Parcels 88-20-15-252-028, -002, -036, -037, -004, -005), Section 15, approximately 7.56 acres in size, Currently Zoned R-1C (One Family Residential) District, be approved for the following reasons:

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

Yes: Absent:

MOTION CARRIED

G:\SITE PLANS\SP JPLN2022-0027 ESTATES OF ECKFORD\Proposed PC Resolution 2023 02 14.doc



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



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 A EACH MONTH AT 7:00 P.M. AT CITY HALL.	ARE HELD ON THE SECOND AND FOURTH TUESDAYS OF				
PLEASE FILE A COMPLETE PRELIMINARY SITE PLAN APPLICATION, TOGETHER WITH THE APPROPRIATE FEE, NOT LESS ITHAN THIRTY (30) DAYS PRIOR TO THE DATE OF THAT MEETING.					
1. NAME OF THE PROPOSED DEVELOPMENT: Estates of					
2. ADDRESS OF THE SUBJECT PROPERTY: 500, 510, 53	0, & 650 Eckford Dr.				
3. ZONING CLASSIFICATION OF THE SUBJECT PROPERTY					
4. TAX IDENTIFICATION NUMBER(S) OF SUBJECT PROPER					
5. DESCRIPTION OF PROPOSED USE: 28 lot single famil					
5. BEGORII 11614 61 1 1161 66EB 66E. <u>== 101 611 151 1511 1511 1511 1511 1511 15</u>	у истогоринания				
6. APPLICANT:	PROPERTY OWNER:				
NAME Joseph Maniaci	NAME same				
COMPANY Mondrain Properties	COMPANY				
ADDRESS 50215 Schoenherr Rd.	ADDRESS				
CITY Shelby Twp. STATE MI ZIP 48315	CITYSTATE ZIP				
TELEPHONE <u>586.726.7350</u>					
E-MAIL jmaniaci@mondrainproperties.com	E-MAIL				
7. THE APPLICANT BEARS THE FOLLOWING RELATIONSH	IP TO THE OWNER OF THE SUBJECT PROPERTY:				
8. SIGNATURE OF APPLICANT	DATE				
9. SIGNATURE OF PROPERTY OWNER	DATE 8.17.22				
. CICHAI CILL OF THOSE ENTER	DNIL				

BY THIS SIGNATURE, THE PROPERTY OWNER AUTHORIZES PLACEMENT OF A SIGN ON THE PROPERTY TO INFORM THE PUBLIC AS TO THIS REQUEST FOR PRELIMINIARY 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. \Box PRELIMINARY TREE PRESERVATION PLAN / TREE INVENTORY PRELIMINARY LANDSCAPE PLAN PRELIMINARY FLOOR PLANS \Box PRELIMINARY ELEVATIONS PRELIMINARY GRADING PLAN PRELIMINARY LIGHTING PLAN

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

G:\Applications & Forms\CURRENT PLANNING Applications\Preliminary Site Plan Application CLUSTER 2021 08 17.doc

WETLANDS DETERMINATION, IF REQUIRED

 \Box



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

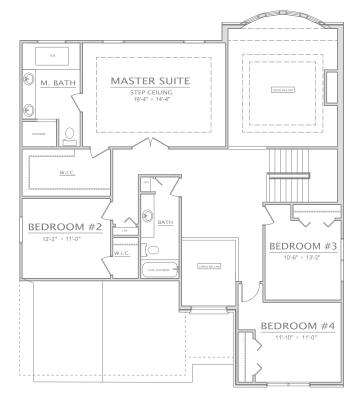
Anita Khzouz

• E-mail: administration@mondrianproperties.com

• Phone: 586-726-7340







MANOR COLONIAL 2900 sqft



MANOR COLONIAL

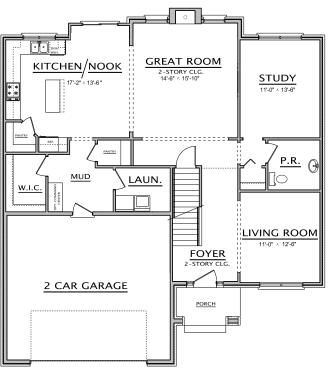
2900 sqft

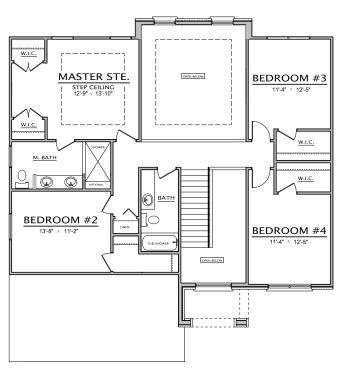












TUDORGATE COLONIAL 2515 sqft



TUDORGATE COLONIAL

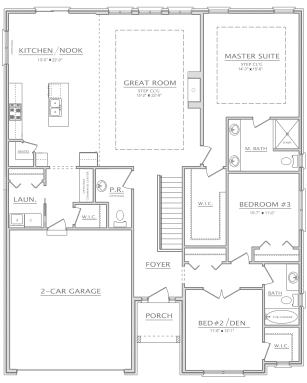


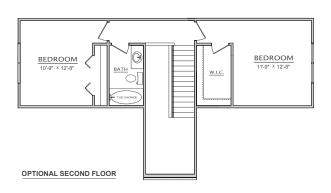












HOMEWOOD RANCH

PROPERTIES W/ OPTIONAL SECOND FLOOR 1990 SQFT.



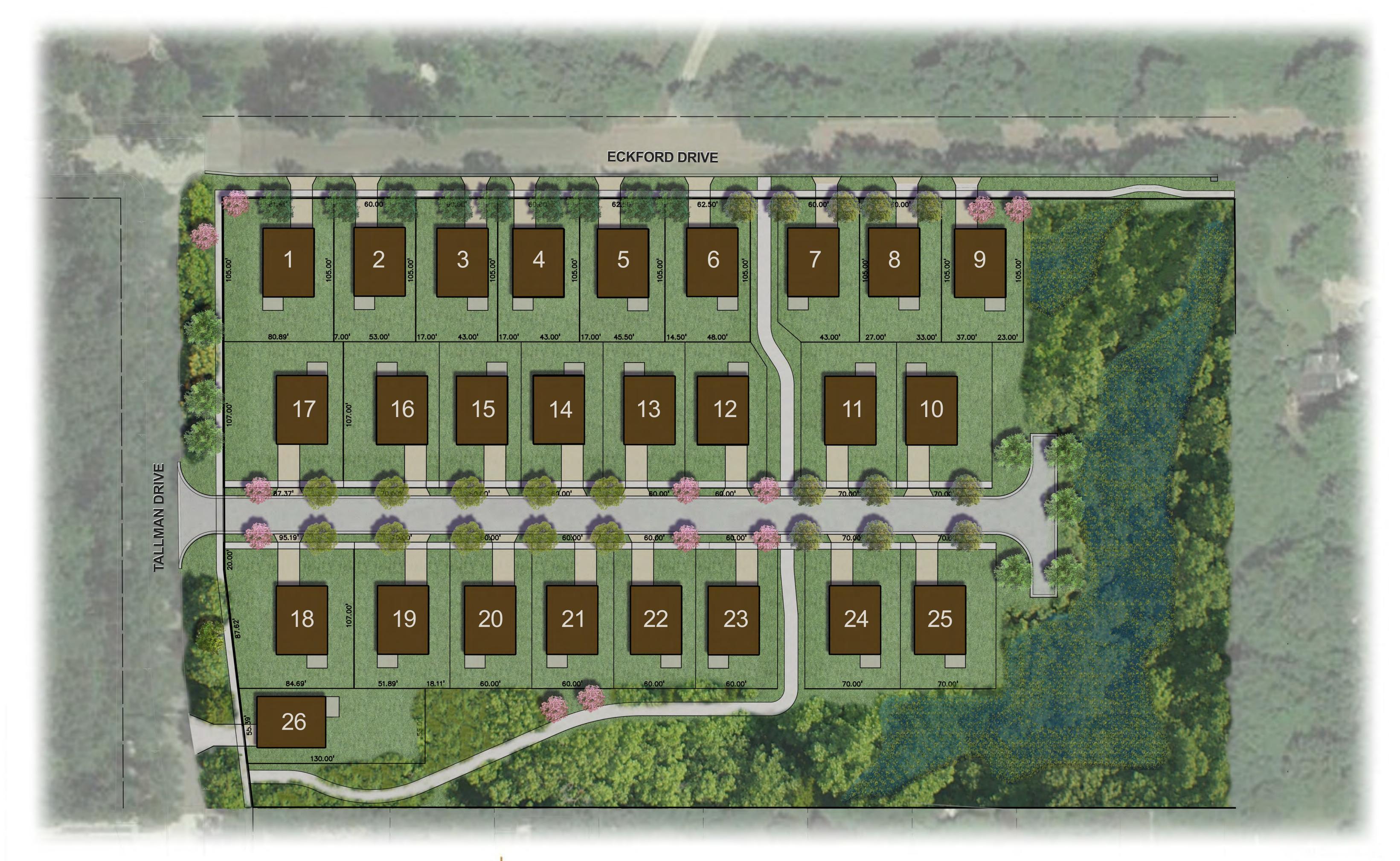
HOMEWOOD RANCH

W/ OPTIONAL SECOND FLOOR 1990 SQFT.











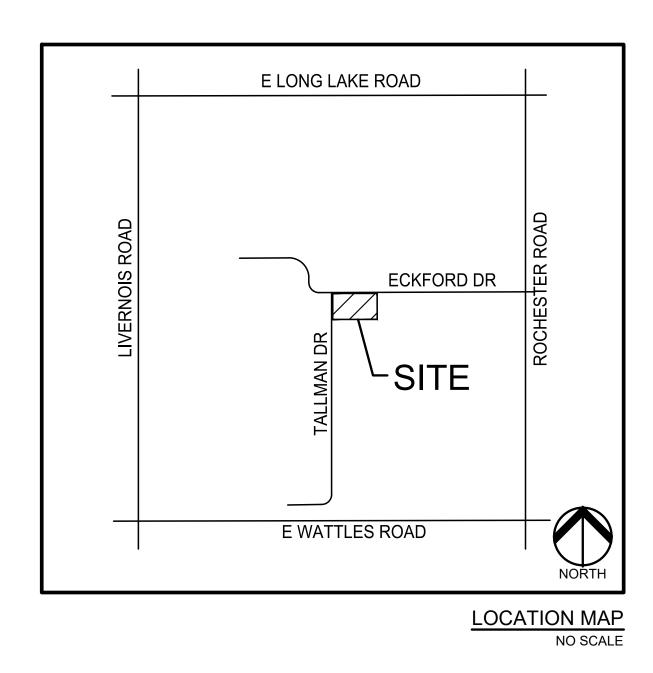


ESTATES OF ECKFORD

ECKFORD DR./TALLMAN DR. TROY, OAKLAND COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY

DATE SUBMITTED DATE APPROVED PERMIT / APPROVAL



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

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 48083-1872

CONTACT: JOHN B. THOMPSON, PE

PHONE: 844.813.2949

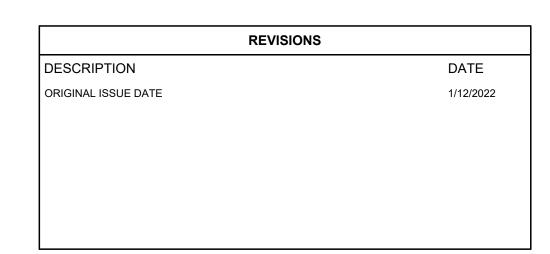
EMAIL: JTHOMPSON@PEAGROUP.COM

LANDSCAPE ARCHITECT

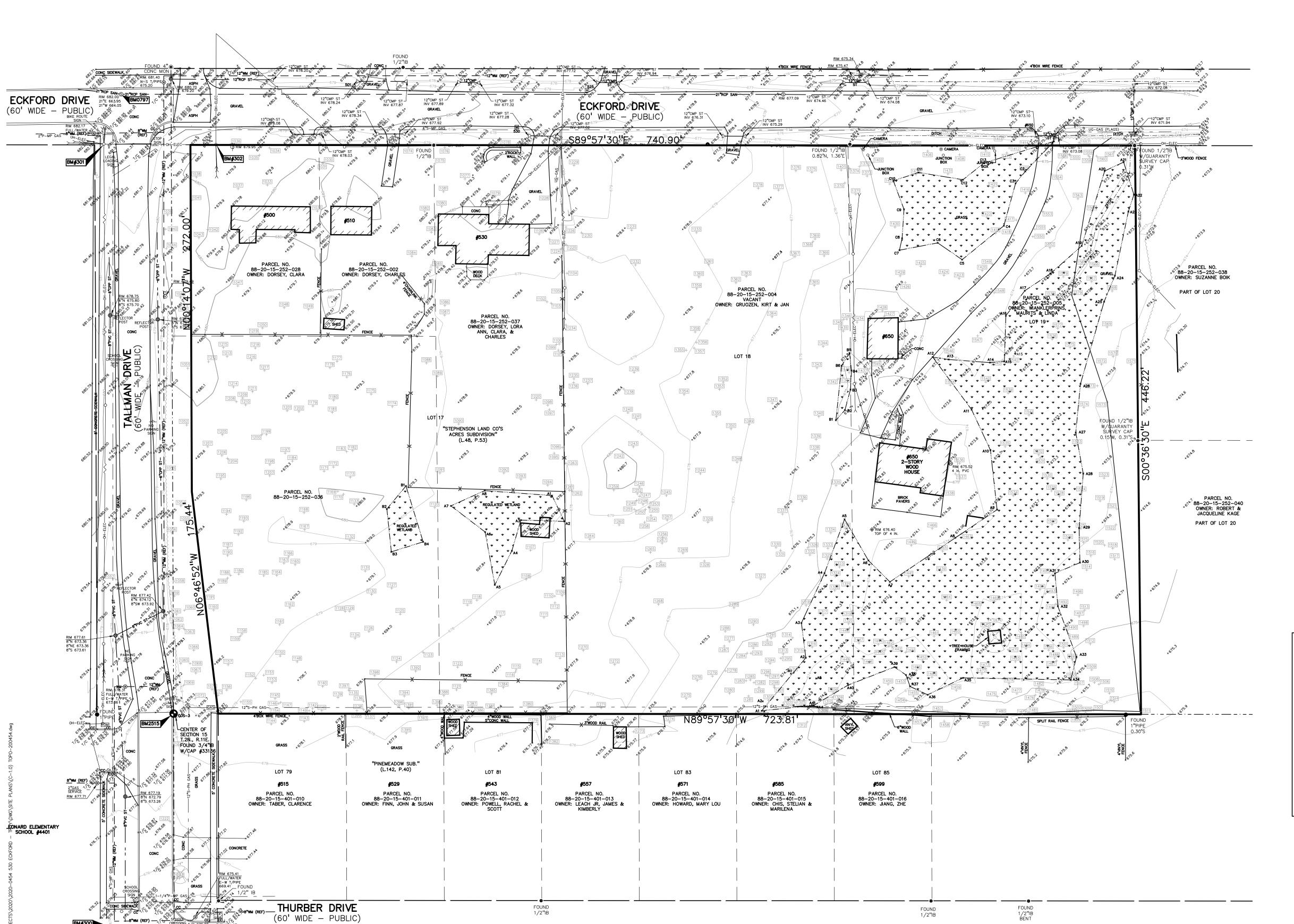
CIVIL ENGINEER

PEA GROUP
45 W. GRAND RIVER AVE., STE. 501
DETROIT, MI 48226
CONTACT: KIMBERLY DIETZEL, RLA
PHONE: 844.813.2949
EMAIL: KDIETZEL@PEAGROUP.COM

PENA GROUP







LEGEND

IRON FOUND BRASS PLUG SET MONUMENT FOUND MAIL FOUND

Ø NAIL & CAP SET

R RECORDED MONUMENT SET

SEC. CORNER FOUND M MEASURED C CALCULATED GROUP

t: 844.813.2949

www.peagroup.com

SCALE: 1" = 40'

-OH-ELEC-W-O- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE -UG-CATV-TV- UNDERGROUND CABLE TV, CATV PEDESTAL -⊠-UG-PHONE-①--- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE -UG-ELEC-E-E-E- 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

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

SPOT ELEVATION _____670 _____ CONTOUR LINE **-X---X** FENCE ☆ STREET LIGHT ── SIGN

UNIDENTIFIED STRUCTURE

CONC. -

GRAVEL SHOULDER _GRAVEL _____ ngr ngr mg MELTAND

✓ ASPH. ✓

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 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

BENCHMARKS

CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT NO10.501.5, SHEET 7, DATED 2-1-11 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. 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.

DATUM) BM #300 ARRÖW ON HYDRANT WEST SIDE OF TALLMAN DRIVE, SOUTH OF LEONARD ELEMENTARY NORTH ENTRANCE. ELEV. - 678.00

(GPS DERIVED - CITY OF TROY

BM #301 BENCHTIE IN EAST FACE OF POWER POLE, SOUTHWEST 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 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)

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 FEE 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

ORIGINAL ISSUE DATE:

MONDRIAN

SHELBY TWP, MI 48315

PROJECT TITLE

ECKFORD

REVISIONS

ESTATES OF

ECKFORD DR./TALLMAN DR.

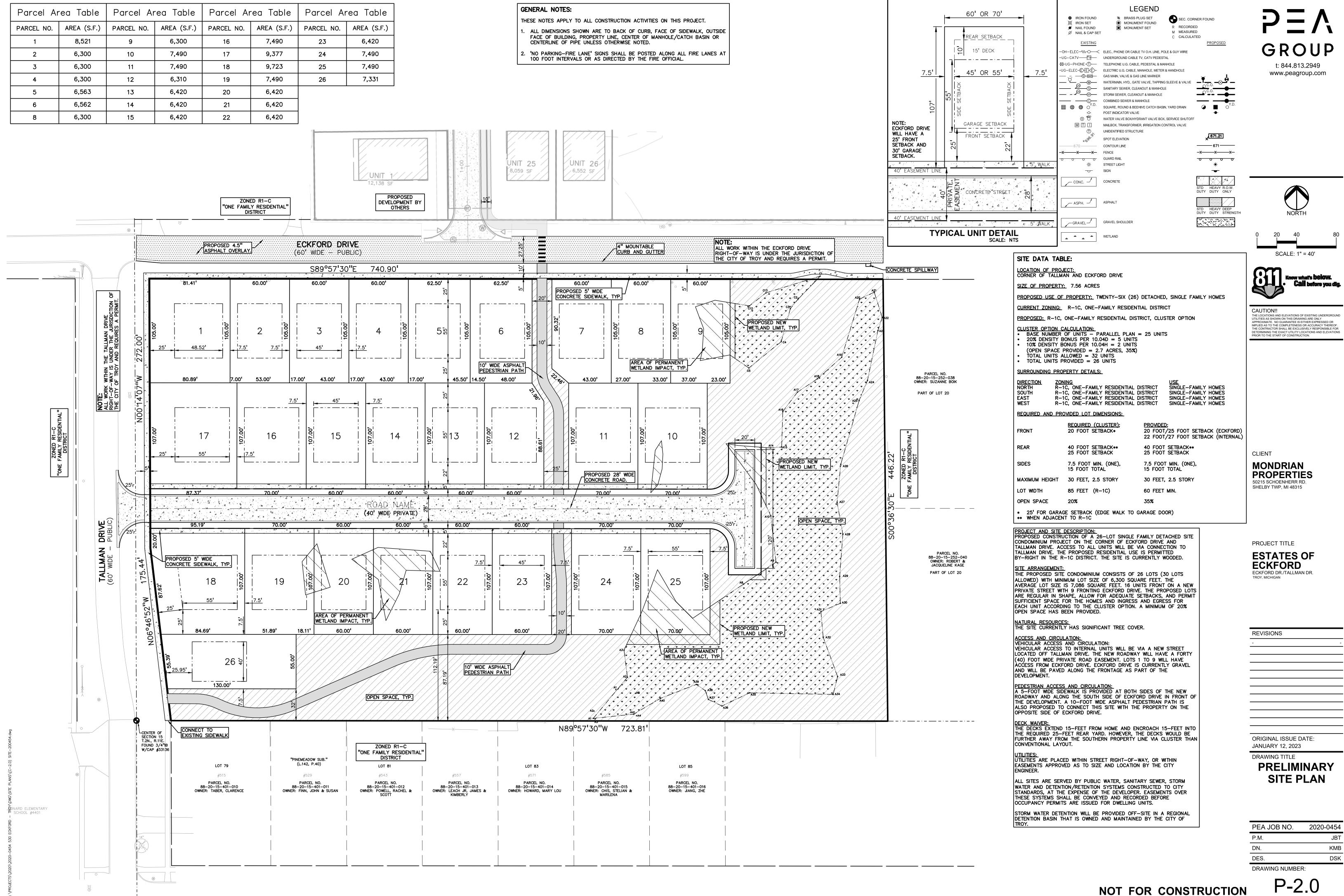
PROPERTIES

JANUARY 12, 2023

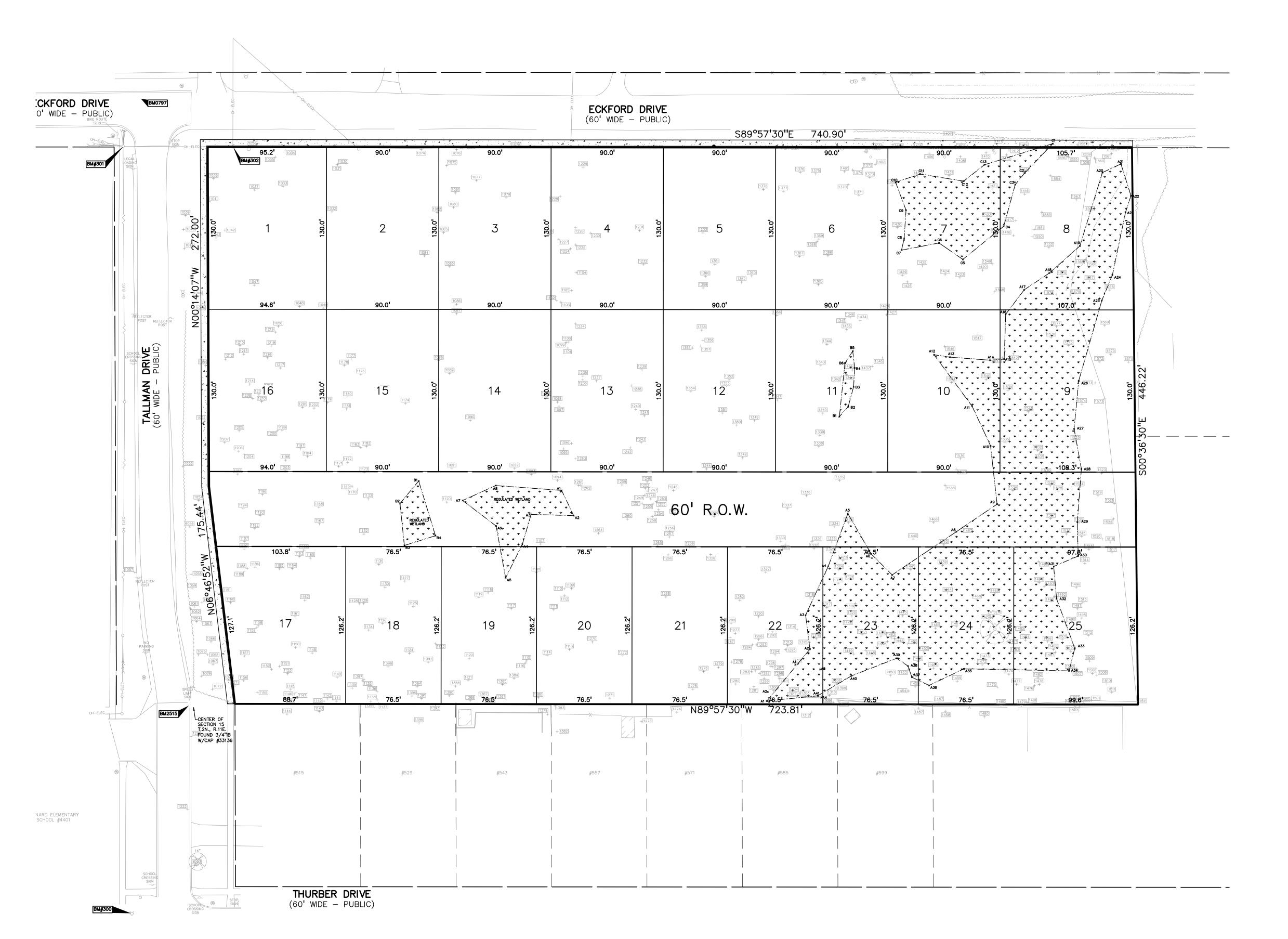
TOPOGRAPHIC SURVEY

2020-0454 PEA JOB NO. KMB DES. DSK DRAWING NUMBER:

NOT FOR CONSTRUCTION



SITE DATA: LOCATION OF PROJECT:
SOUTHEAST CORNER OF ECKFORD DRIVE AND TALLMAN DRIVE SIZE OF PROPERTY: 7.56 ACRES CURRENT ZONING: R-1C, ONE-FAMILY RESIDENTIAL DISTRICT MIN. LOT SIZE: 10,500 SF LOT SETBACK DIMENSIONS: 30 FOOT SETBACK FRONT 40 FOOT SETBACK SIDES 10 FOOT EACH SIDE 30 FEET, 2.5 STORY MAXIMUM HEIGHT LOT WIDTH 85 FEET (R-1C)



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

-OH-ELEC-W-O- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE -UG-CATV-TV- UNDERGROUND CABLE TV, CATV PEDESTAL -⊠-UG-PHONE-①---- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE -UG-ELEC-E-E-E- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE — _ GAS MAIN, VALVE & GAS LINE MARKER WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE $-\P$ SANITARY SEWER, CLEANOUT & MANHOLE — – CO ST— STORM SEWER, CLEANOUT & MANHOLE SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN POST INDICATOR VALVE

M T I MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE

WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF UNIDENTIFIED STRUCTURE 671.21 SPOT ELEVATION 671 _____670 _____ CONTOUR LINE -X-X-X-X-X- FENCE -x----x---x-0 0 0 0 ☆ STREET LIGHT → SIGN _ CONC. -ASPH. ASPHALT

GRAVEL SHOULDER GRAVEL -THE THE THE 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 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

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

	PARCEL TABLE	
LOT NUMBER	LOT WIDTH (LF)	LOT AREA (SF)
1	94.6	12339
2	90	11698
3	90	11698
4	90	11698
5	90	11698
6	90	11698
7	90	11698
8	105.7	13819
9	107	13995
10	90	11702
11	90	11702
12	90	11702
13	90	11702
14	90	11702
15	90	11702
16	94	12261
17	88.7	12148
18	76.5	9654
19	76.5	9654
20	76.5	9654
21	76.5	9654
22	76.5	9654
23	76.5	9654
24	76.5	9654
25	97.8	12458

*THE LOT SIZE AVERAGE OPTION HAS BEEN APPLIED PER SECTION 10.01 MIN. UNIT AREA REQUIRED = 9450 SQ. FT. MIN UNIT WIDTH AT BLDG. SETBACK REQUIRED = 76.50 FEET

88

11400

AVERAGE

GROUP t: 844.813.2949 www.peagroup.com







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CLIENT MONDRIAN PROPERTIES 50215 SCHOENHERR RD. SHELBY TWP, MI 48315 PROJECT TITLE **ESTATES OF**

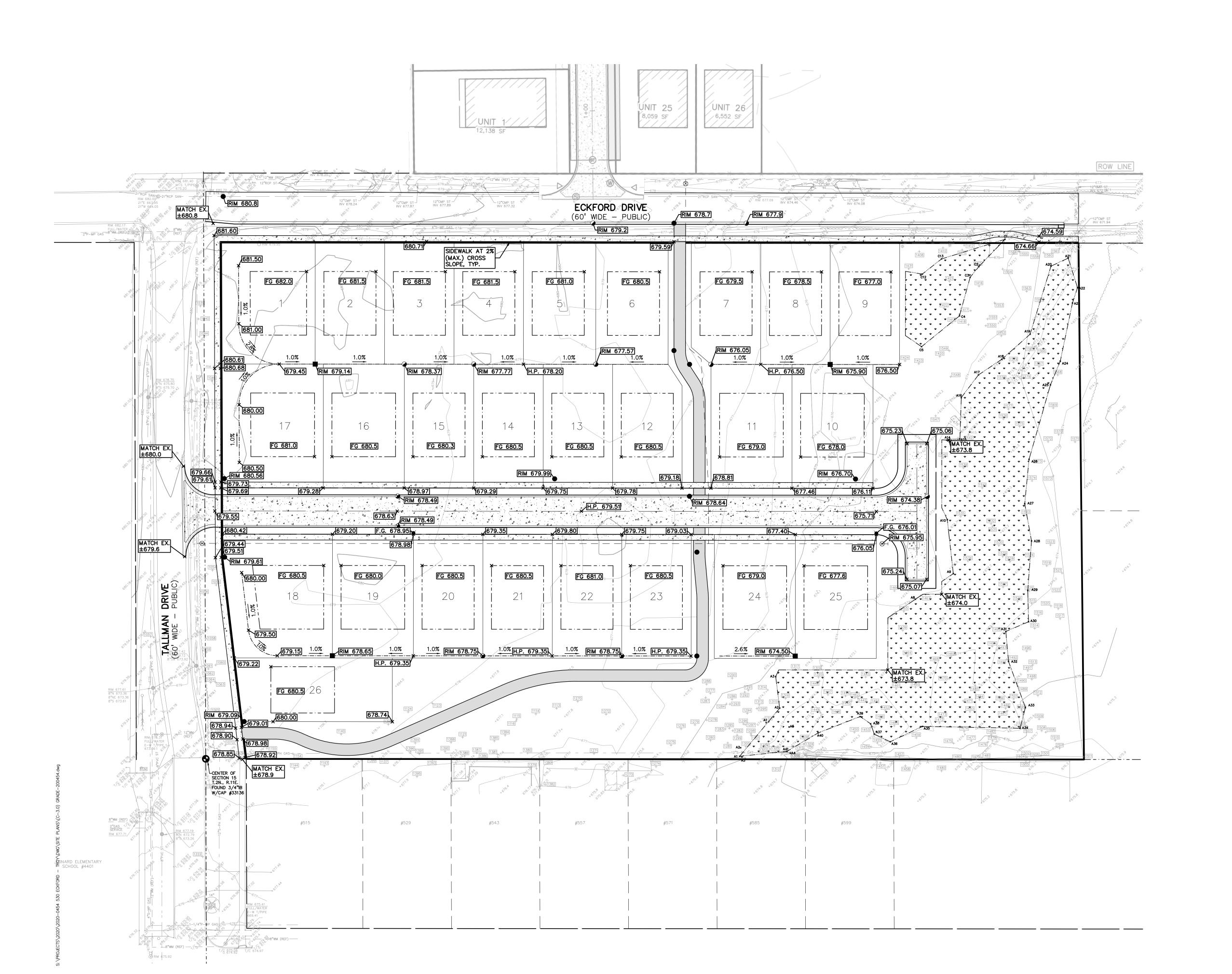
REVISIONS

ECKFORD
ECKFORD DR./TALLMAN DR.
TROY, MICHIGAN

ORIGINAL ISSUE DATE: JANUARY 12, 2023

> **PARALLEL** SITE PLAN

PEA JOB NO. 2020-0454 KMB DES. DSK DRAWING NUMBER:



LEGEND BRASS PLUG SET SEC. CORNER FOUND MONUMENT FOUND R RECORDED MONUMENT SET M MEASURED C CALCULATED GROUP

-OH-ELEC-W-O- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE -UG-CATV-TV- UNDERGROUND CABLE TV, CATV PEDESTAL -⊠-UG-PHONE-①--- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE -UG-ELEC-E-E- 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 M T MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE UNIDENTIFIED STRUCTURE 671.21 SPOT ELEVATION 671 ------670 ------ CONTOUR LINE **-X---X** FENCE -x----x---x-0 0 0

IRON FOUND

MAIL FOUND

Ø NAIL & CAP SET

☆ STREET LIGHT ── SIGN _ CONC. → __ ASPH. _/ | ASPHALT

GRAVEL SHOULDER __GRAVEL____ ngr ngr ngr MELTAND

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 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 FEMA F.I.R.M. MAP #26125C0534F, DATED 9-29-2006

SCALE: 1" = 40' CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT 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.

t: 844.813.2949

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SYMBOLS: GRADING PROPOSED SPOT ELEVATION:
TYPICALLY TOP OF PAVEMENT IN PAVED

* 622.50 AREAS, GUTTER GRADE IN CURB LINES. PROPOSED CONTOUR LINE ----922----ABBREVIATIONS: T/C = TOP OF CURBG' = GUTTER GRADET/P = TOP OF PAVEMENTT/S = TOP OF SIDEWALK T/W = TOP OF WALLB/W = BOTTOM OF WALLRIM = RIM ELEVATION

NO10.501.5, SHEET 7, DATED 2-1-11

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.

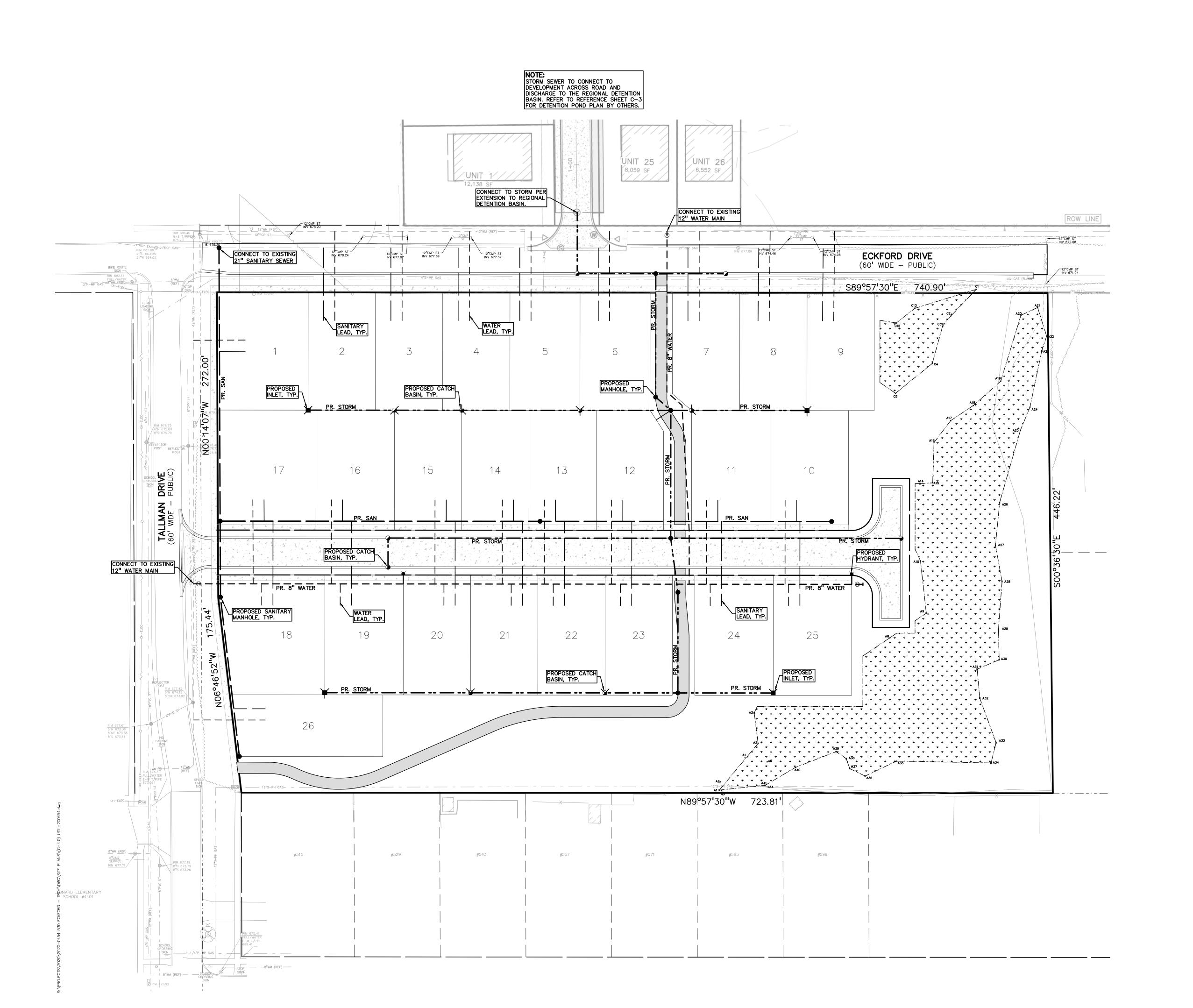
REVISIONS

ORIGINAL ISSUE DATE: JANUARY 12, 2023 DRAWING TITLE

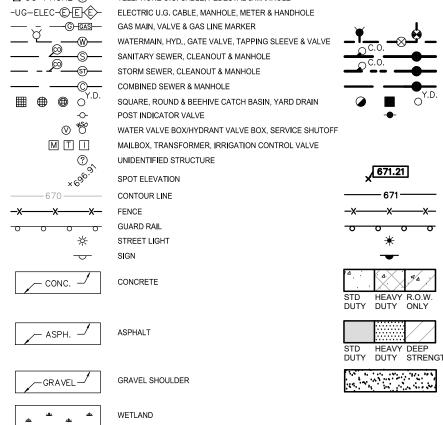
PRELIMINARY GRADING PLAN

2020-0454 PEA JOB NO. KMB DSK DES. DRAWING NUMBER:

NOT FOR CONSTRUCTION



LEGEND RASS PLUG SET SEC. CORNER FOUND MONUMENT FOUND R RECORDED MONUMENT SET M MEASURED C CALCULATED GROUP -OH-ELEC-W-O- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE -UG-CATV-TV- UNDERGROUND CABLE TV, CATV PEDESTAL -⊠-UG-PHONE-①---- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE t: 844.813.2949



IRON FOUND

MAIL FOUND

Ø NAIL & CAP SET

WATER MAIN CITY OF TROY GIS, DATED 6-21-21 CITY OF TROY, TALLMAN AND ECKFORD WATER MAIN REPLACEMENT CONTRACT NO.5, PROJECT 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

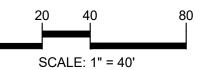
REFERENCE DRAWINGS

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

NO10.501.5, SHEET 7, DATED 2-1-11



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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.

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 UTILITY PLAN**

2020-0454 PEA JOB NO.

KMB DES. DRAWING NUMBER:

NOT FOR CONSTRUCTION

DECIDUO	US TREE PLA	NT LIST:				Ļ
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC	5 R
11	AS2.5	Legacy Sugar Maple	Acer saccharum 'Legacy'	2.5" Cal.	B&B	R
12	CC8	Forset Pansy Redbud	Cercis canadensis 'Forest Pansy'	8' Ht.	B&B	Р
10	GT2.5	Sunburst Honeylocust	Gleditsia triacanthos f. inermis 'Suncole'	2.5" Cal.	B&B	1. R
8	TA2.5	Redmond Linden	Tilia americana 'Redmond'	2.5" Cal.	B&B	
10	QM2.5	Bur Oak	Quercus macrocarpa	2.5" Cal.	B&B	Р
51	TOTAL DECIDU	IOUS TREES				1. R

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

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

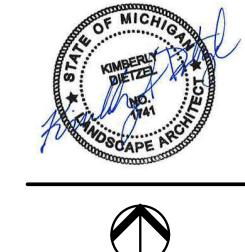
13.07 E. TREE REPLACEMENT: REQUIRED:

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 1,662" LANDMARK. TOTAL: -1,129" REQUIRED FOR REPLACEMENT.

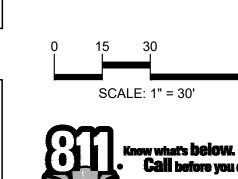
PROVIDED: NO REPLACEMENT REQUIRED.

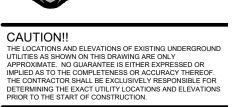
KEY:

SEE TREE PRESERVATION PLAN, T-1.0, FOR TREE REMOVALS AND CALCULATIONS.



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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.

= INTERNAL STREET TREES

= GREENBELT TREES

= IRRIGATED SEED LAWN

= EXISTING TREES TO REMAIN

WITH TREE PROTECTION FENCE

- 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
- 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.
- . 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.
- 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
- ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
- 10. 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.
- 12. IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
- 13. ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
- 14. ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED
- 15. SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
- 16. TREES SHALL NOT CONFLICT/ BLOCK PROPOSED REGULATORY/ DIRECTION SIGNAGE, MONUMENT SIGNS, ADDRESS OR LIGHT POLES. SHIFT TREES AS NECESSARY

MONDRIAN PROPERTIES

PROJECT TITLE

50215 SCHOENHERR RD.

SHELBY TWP, MI 48315

ESTATES OF ECKFORD ECKFORD DR./TALLMAN DR.

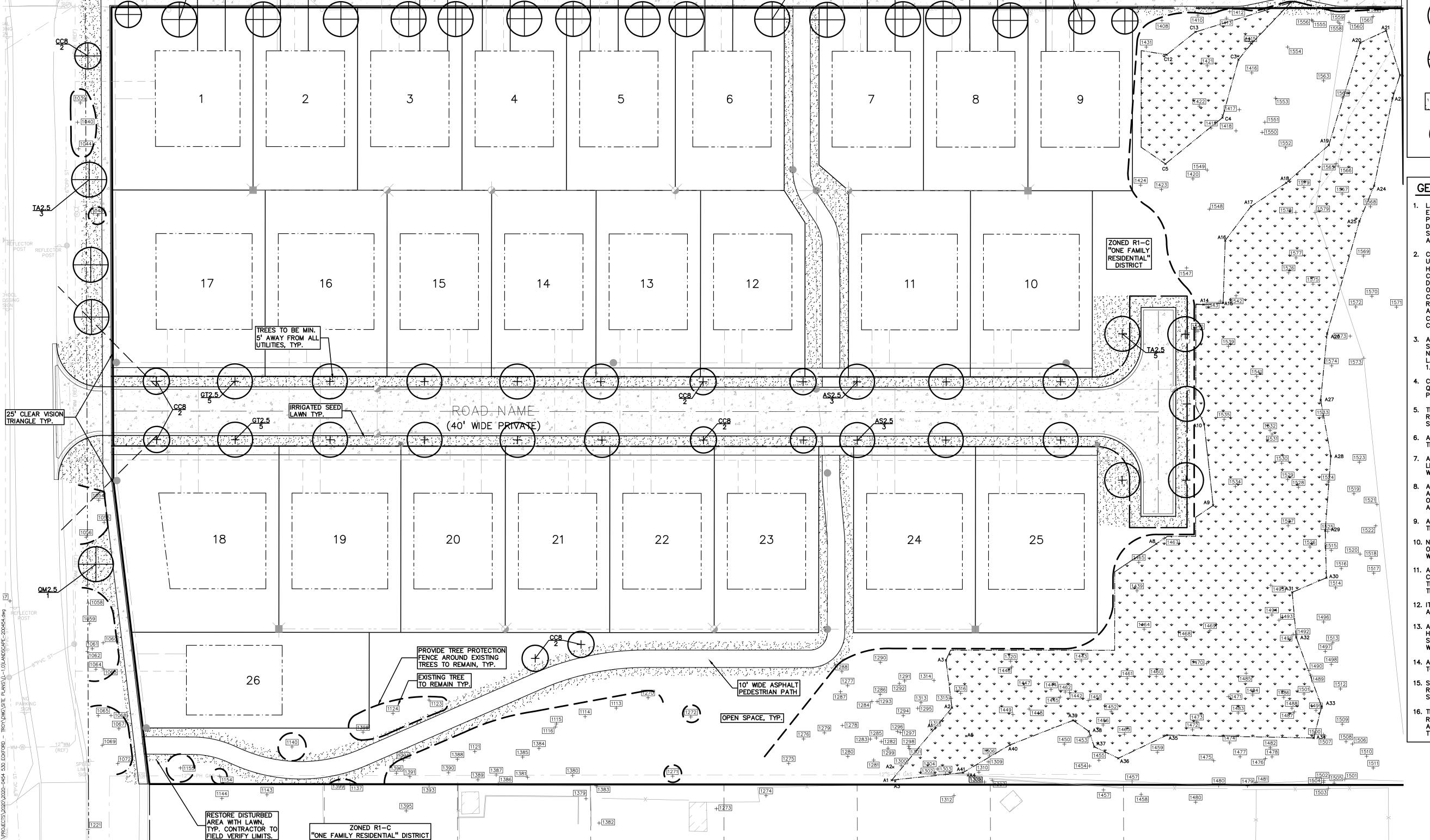
REVISIONS	
-	-

ORIGINAL ISSUE DATE: JANUARY 12, 2023

DRAWING TITLE **PRELIMINARY** LANDSCAPE **PLAN**

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

NOT FOR CONSTRUCTION



RESTORE DISTURBED AREA WITH LAWN, TYP. CONTRACTOR TO FIELD VERIFY LIMITS.

WOODLAND TREES: 50% DBH TO BE REPLACED - 2X DBH RETAINED. 786" REPLACEMENT - 1718" RETAINED CREDIT = -932". O WOODLAND REPLACEMENT REQUIRED. LANDMARK TREES: 100% DBH TO BE REPLACED - 2X DBH RETAINED. 1,590" REPLACEMENT - 1662" RETAINED CREDIT = -72". O LANDMARK REPLACEMENT REQUIRED. t: 844.813.2949 NO TREES REQUIRED FOR REPLACEMENT. www.peagroup.com **WOODLAND TREES** 158 (REPLACE AT 50% OF REMOVED DBH) WOODLAND TREES REMOVED: **1530"** DBH x 0.5 = **765"** REPLACEMENT **WOODLAND TREES SAVED:** 101 (CREDIT OF 2X DBH) **911"** DBH x 2 = **1822"** CREDIT 1822 = -1057 0 " DBH REQUIRED FOR WOODLAND REPLACEMENT LANDMARK TREES LANDMARK TREES REMOVED: 69 (REPLACE AT 100% OF REMOVED DBH) 1590" REPLACEMENT **1590"** DBH x 1 = LANDMARK TREES SAVED: 36 (CREDIT OF 2X DBH) **1662"** CREDIT **831"** DBH x 2 = 1590 1662 = 0 " TOTAL DBH REQUIRED FOR REPLACEMENT ECKFORD DRIVE (60' WIDE + PUBLIC) SCALE: 1" = 30' CAUTION!! THE LOCATIONS!

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. 1228 / / */ / * * * 1368 +1104 1577 1577 1576 1576 CLIENT MONDRIAN PROPERTIES 50215 SCHOENHERR RD. SHELBY TWP, MI 48315 DRIVE PUBLIC) TALLMAN (60' WIDE -PROJECT TITLE ESTATES OF ECKFORD EXISTING TREE TO BE REMOVED TYP. ECKFORD DR./TALLMAN DR. TROY, MICHIGAN **122** 20 24 ORIGINAL ISSUE DATE: JANUARY 12, 2023 PROVIDE TREE PROTECTION
FENCE AROUND EXISTING
TREES TO REMAIN, TYP. DRAWING TITLE **TREE PRESERVATION PLAN** 1140 PEA JOB NO. DES. DRAWING NUMBER: NOT FOR CONSTRUCTION

GROUP

13.07 E. TREE REPLACEMENT:



2020-0454 KAD

REPLACE

REPLACE

REPLACE

REPLACE

	-	i	1240	PH	18	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE	
	REPLACE	-	1241		8	American Elm	Ulmus americana	Fair	*2	INVASIVE	R	 ¥		
									**			•	\vdash	
	REPLACE		1242	MW	9	White Mulberry	Morus alba	Fair		INVASIVE	R	¥	-	
	-		1243	₽	10	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE	
	-		1244	₽	9	Basswood	Tilia americana	Good	×2	WOODLAND	R	¥	REPLACE	
	REPLACE		1245	GA	6	Green Ash	Fraxinus pennsylvanica	Fair		INVASIVE	R	¥	-	
	REPLACE		1246	₽	8	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE	
	REPLACE	•	1247	₽	6	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE	
	REPLACE		1248	 B	6	Basswood	Tilia americana	Good		WOODLAND	R	Y	REPLACE	
												¥	INEI EAGE	
	REPLACE	-	1249	CT	11	Cottonwood	Populus deltoides	Fair		INVASIVE	R	•	<u>-</u>	
	REPLACE	-	1250	CŦ	11	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-	
	REPLACE		1251	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-	
	REPLACE		1252	₽	7	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE	
	REPLACE		1253	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-	
	-		1254	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-	
	-		1255	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	_	
	REPLACE	-	1256	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	 ¥		
							·					· ·		NO SCALE
	REPLACE		1257	₿	6	Basswood	Tilia americana	Fair		WOODLAND	R	¥	REPLACE	
	REPLACE		125 8	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-	
	REPLACE		1259	CŦ	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-	
	REPLACE		1260	₽	6	American Elm	Ulmus americana	Good		INVASIVE	R	¥	-	Know what's below.
	REPLACE		1261	PH	12	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	¥	REPLACE	Call before you dig.
	REPLACE		1262	₽Ħ	13	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	¥	REPLACE	
	REPLACE		1263	PH	9	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	Y	REPLACE	
							, ,					•	NEFLACE	
	REPLACE		1264	CT	13	Cottonwood	Populus deltoides	Good		INVASIVE	R	¥	-	CAUTION!! THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND
	REPLACE		1265	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-	UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY
	REPLACE		1266	E	6	American Elm	Ulmus americana	Fair		INVASIVE	R	¥	-	APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR
	REPLACE		1267	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-	DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.
	REPLACE		1268	₩O	28	White Oak	Quercus alba	Fair		LANDMARK	R	¥	REPLACE	PRIOR TO THE START OF CONSTRUCTION.
	REPLACE	•	1269	₽	6	Basswood	Tilia americana	Fair		WOODLAND	R	¥	REPLACE	
	REPLACE	•	1270	BE	29	American Beech	Fagus grandifolia	Good	x1	LANDMARK	S	Y	_	
	REPLACE	•	1271	BE	22	American Beech	Fagus grandifolia	Good	A.	LANDMARK	S	Y	<u> </u>	
							, ,					-	- -	
_	REPLACE		1272	BE	27	American Beech	Fagus grandifolia	Good		LANDMARK	S	Y	<u> </u>	
	REPLACE		1273	PH	14	Pignut Hickory	Carya glabra	Fair		WOODLAND	S	N	-	
	REPLACE		1274	В	12	Basswood	Tilia americana	Good	fence dripline ove	WOODLAND	S	N	-	
	REPLACE		1275	SH	23	Shagbark Hickory	Carya ovata	Fair		LANDMARK	S	Υ	-	
	REPLACE		1276	В	6	Basswood	Tilia americana	Good		WOODLAND	s	Υ	-	
	REPLACE		1277	В	6	Basswood	Tilia americana	Good		WOODLAND	S	Υ	_	
	_	•	1278	В	6	Basswood	Tilia americana	Good		WOODLAND	S	Υ		
	REPLACE	•	1279	<u> </u>	6	Basswood	Tilia americana	Good	x2	WOODLAND	S	· Y		
					_							•		
-1	REPLACE		1280	PH -	8	Pignut Hickory	Carya glabra	Good	x1	WOODLAND	S	Y	-	
	REPLACE		1281	В	12	Basswood	Tilia americana	Good		WOODLAND	S	Υ	-	
	REPLACE		1282	В	6	Basswood	Tilia americana	Good		WOODLAND	S	Y	-	
	REPLACE		1283	В	10	Basswood	Tilia americana	Good		WOODLAND	S	Υ	-	CLIENT
	REPLACE		1284	В	9	Basswood	Tilia americana	Good		WOODLAND	S	Υ	-	MONDRIAN
	REPLACE		1285	В	9	Basswood	Tilia americana	Fair		WOODLAND	S	Υ	-	MONDRIAN
	REPLACE	•	1286	В	13	Basswood	Tilia americana	Fair		WOODLAND	S	Υ	_	PROPERTIES
	REPLACE		1287	В	7	Basswood	Tilia americana	Good		WOODLAND	S	Y	_	50215 SCHOENHERR RD.
	REPLACE		1288	В	7					WOODLAND	s	Y		SHELBY TWP, MI 48315
	REPLACE				_	Basswood	Tilia americana	Good				•	-	
	-		1289	PH	24	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE	
	REPLACE		1290	В	8	Basswood	Tilia americana	Good		WOODLAND	S	Y	-	
	REPLACE		1291	В	9	Basswood	Tilia americana	Poor		WOODLAND	S	Υ	-	
	REPLACE		1292	PH	16	Pignut Hickory	Carya glabra	Good		LANDMARK	s	Υ	-	
	REPLACE		1293	В	7	Basswood	Tilia americana	Good		WOODLAND	S	Υ	-	
	REPLACE		1294	SH	21	Shagbark Hickory	Carya ovata	Good		LANDMARK	S	Υ	-	
	REPLACE		1295	В	11	Basswood	Tilia americana	Good		WOODLAND	S	Y	_	PROJECT TITLE
-1				В								Y		
	REPLACE		1296		8	Basswood	Tilia americana	Good		WOODLAND	S	·	-	ESTATES OF
_	REPLACE		1297	В	7	Basswood	Tilia americana	Good		WOODLAND	S	Y		
	REPLACE		1298	В	7	Basswood	Tilia americana	Good		WOODLAND	S	Υ	-	ECKFORD
	REPLACE		1299	В	6	Basswood	Tilia americana	Fair		WOODLAND	S	Υ	-	ECKFORD DR./TALLMAN DR. TROY, MICHIGAN
	REPLACE		1300	В	23	Basswood	Tilia americana	Good	on adj prop	LANDMARK	S	Υ		· ,
	DEDI ACE		1301	B	۵	Rasswood	Tilia americana	Good		WOODI AND	g			

LATIN NAME | COND | COMMENTS

Fair

Fair

Quercus macrocarpa

Quercus alba

Pinus resinosa

Acer rubrum

LANDMARK

LANDMARK

WOODLAND

WOODLAND |

REPLACE

REPLACE

REPLACE

REPLACE

1232 WO 36

1233 RP 10

1234 RM 12

White Oak

Red Maple

WOODLAND

WOODLAND

WOODLAND

Quercus rubra

Carya ovata

Carya ovata

Carya ovata Tilia americana Quercus macrocarpa

Carya ovata

Carya ovata

Carya glabra

Carya ovata

Carya ovata

Carya ovata

Quercus macrocarpa

Quercus macrocarpa

Carya glabra

Carya ovata

Carya ovata

Carya ovata

Carya ovata

Quercus alba

Carya ovata Quercus macrocarpa

Carya ovata

Carya ovata

Carva ovata

Carya ovata

Carya ovata

Tilia americana

Carya ovata

Quercus macrocarpa

Populus deltoides

Carya glabra

Quercus rubra

Cragaegus spp.

Cragaegus spp.

Carya ovata

Carya ovata

Quercus macrocarpa

Carya ovata

Carya ovata

Quercus rubra

Carya ovata

Carya ovata

Carya glabra

Carya ovata

Carya ovata

Carya ovata

Quercus macrocarpa

Quercus rubra

Quercus rubra Carya glabra

Quercus macrocarpa

Carya ovata

Quercus rubra

Ulmus americana

Quercus rubra Ulmus americana

Carya ovata

Carya glabra

Tilia americana

Gleditsia triacanthos

Gleditsia triacanthos

Quercus alba

Carya ovata

Quercus macrocarpa

Good

Carya ovata Good

Quercus macrocarpa Good

Quercus macrocarpa Fair

Quercus macrocarpa Good

Quercus macrocarpa Good

Good

Good

Good

Good

Good

Good

Good

Good

Good x1 no tag

Good

Fair

Good

Fair

no tag

Good up against 1158

PROJECT TITLE ESTATES OF ECKFORD ECKFORD DR./TALLMAN DR. TROY, MICHIGAN
REVISIONS
<u>-</u>
ORIGINAL ISSUE DATE: JANUARY 12, 2023
DRAWING TITLE TREE
PRESERVATION LIST

PEA JOB NO.

2020-0454

	R	¥	REPLACE	1234	RM	12	Red Maple	Acer rubrum	Fair		WOODLAND	R	¥	REPLACE
/OODLAND	R	¥	REPLACE	1235	MH	12	Bitternut Hickory	Carya cordiformis	Good		WOODLAND	R	¥	REPLACE
VOODLAND	R	¥	REPLACE	1236	MH	14	Bitternut Hickory	Carya cordiformis	Good		WOODLAND	R	¥	REPLACE
OODLAND	S	Y	-	1237	SH	15	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	¥	REPLACE
OODLAND	R	¥	REPLACE	123 8	PH	18	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1239	BS	8	Blue Spruce	Picea pungens	Very Poor	f	WOODLAND	R	¥	-
NDMARK	S	Y	-	1240	PH	18	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1241	E	8	American Elm	Ulmus americana	Fair	x2	INVASIVE	R	¥	-
OODLAND	R	¥	REPLACE	1242	MW	9	White Mulberry	Morus alba	Fair		INVASIVE	R	¥	-
OODLAND	S	N	_	1243	₿	10	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
DODLAND	s	N		1244		9	Basswood		Good	×2	WOODLAND	R	¥	REPLACE
			-	l				Tilia americana	1	**				REPLACE
OODLAND	R	¥	REPLACE	1245	GA	6	Green Ash	Fraxinus pennsylvanica	Fair		INVASIVE	R	¥	
OODLAND	R	¥	REPLACE	1246	₽	8	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1247	₽	6	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
NDMARK	R	¥	REPLACE	124 8	₽	6	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1249	CT	11	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-
NDMARK	R	¥	REPLACE	1250	CT	11	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	_
OODLAND	R	¥	REPLACE	1251	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	
		¥			 ₿	7		 	+		WOODLAND			DEDI ACE
OODLAND	<u>R</u>		REPLACE	1252		_	Basswood	Tilia americana	Good		 	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1253	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-
OODLAND	S	Y	-	1254	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-
NDMARK	S	Y	-	1255	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-
OODLAND	R	¥	REPLACE	1256	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-
OODLAND	R	¥	REPLACE	1257	₽	6	Basswood	Tilia americana	Fair		WOODLAND	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1258	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	<u> </u>
NDMARK	R	¥	REPLACE	1259	CT	7		· '	Fair		INVASIVE	R	¥	+
							Cottonwood	Populus deltoides			1			-
NDMARK	R	¥	REPLACE	1260	E	6	American Elm	Ulmus americana	Good		INVASIVE	R	¥	-
OODLAND	R	¥	REPLACE	1261	PH	12	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1262	PH	13	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1263	PH	9	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1264	CT	13	Cottonwood	Populus deltoides	Good		INVASIVE	R	¥	-
OODLAND	R	Y Y	REPLACE	1265	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	-
OODLAND	R	¥	REPLACE	1266	<u></u>	6	American Elm	Ulmus americana	Fair		INVASIVE	R	¥	+
		-		—					1	+			-	1
OODLAND	R	¥	REPLACE	1267	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	R	¥	1
OODLAND	R	¥	REPLACE	1268	₩O	28	White Oak	Quercus alba	Fair		LANDMARK	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1269	₿	6	Basswood	Tilia americana	Fair		WOODLAND	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1270	BE	29	American Beech	Fagus grandifolia	Good	x1	LANDMARK	S	Y	
OODLAND	R	¥	REPLACE	1271	BE	22	American Beech	Fagus grandifolia	Good		LANDMARK	S	Y	-
OODLAND	R	¥	REPLACE	1272	BE	27	American Beech	Fagus grandifolia	Good		LANDMARK	S	Y	-
OODLAND	R	¥	REPLACE	1273	PH	14	Pignut Hickory	Carya glabra	Fair		WOODLAND	S	N	1 -
OODLAND	R	¥	REPLACE	1273	В	12	Basswood	Tilia americana	Good	fence dripline ove		s	N	
+				<u> </u>					 	lence dripinie ove	 			-
NDMARK	R	¥	REPLACE	1275	SH	23	Shagbark Hickory	Carya ovata	Fair		LANDMARK	S	Y	-
OODLAND	R	¥	REPLACE	1276	В	6	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
OODLAND	R	¥	REPLACE	1277	В	6	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
WASIVE	R	¥	-	1278	В	6	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
OODLAND	R	¥	REPLACE	1279	В	6	Basswood	Tilia americana	Good	x2	WOODLAND	S	Y	-
OODLAND	R	¥	REPLACE	1280	PH	8	Pignut Hickory	Carya glabra	Good	x1	WOODLAND	S	Y	-
OODLAND	R	¥	REPLACE	1281	В	12	Basswood	Tilia americana	Good		WOODLAND	S	Y	_
OODLAND	R	¥	REPLACE	1282	<u> </u>	6	Basswood	Tilia americana	Good		WOODLAND	S	Y	_
		-		—		_			1		 		-	
OODLAND	R	¥	REPLACE	1283	В	10	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
OODLAND	R	¥	REPLACE	1284	В	9	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
ANDMARK	R	¥	REPLACE	1285	В	9	Basswood	Tilia americana	Fair		WOODLAND	S	Y	-
ANDMARK	R	¥	REPLACE	1286	В	13	Basswood	Tilia americana	Fair		WOODLAND	S	Υ	-
OODLAND	R	¥	REPLACE	1287	В	7	Basswood	Tilia americana	Good		WOODLAND	S	Υ	1 -
OODLAND	R	¥	REPLACE	1288	В	7	Basswood	Tilia americana	Good		WOODLAND	S	Y	<u> </u>
OODLAND	R	¥	_	1289	PH	24	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE
		¥	REPLACE	1290	В	8	Basswood	<u> </u>			WOODLAND	S	Y	THE BAOL
OODLAND	R			l —				Tilia americana	Good		1			+ -
OODLAND	R	¥	REPLACE	1291	В	9	Basswood	Tilia americana	Poor		WOODLAND	S	Y	-
OODLAND	₽	¥	REPLACE	1292	PH	16	Pignut Hickory	Carya glabra	Good		LANDMARK	S	Y	-
NDMARK	R	¥	REPLACE	1293	В	7	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
OODLAND	R	¥	REPLACE	1294	SH	21	Shagbark Hickory	Carya ovata	Good		LANDMARK	s	Y	-
OODLAND	R	¥	REPLACE	1295	В	11	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
OODLAND	₽	¥	REPLACE	1296	В	8	Basswood	Tilia americana	Good		WOODLAND	S	Y	_
OODLAND	R	¥	REPLACE	1297	 В	7	Basswood	Tilia americana	Good		WOODLAND	S	Y	_
				l —		<u> </u>							-	+
NDMARK	<u> </u>	¥	REPLACE	1298	B	7	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
OODLAND	R -	¥	REPLACE	1299	B	6	Basswood	Tilia americana	Fair		WOODLAND	S	Y	
OODLAND	R	¥	REPLACE	1300	В	23	Basswood	Tilia americana	Good	on adj prop	LANDMARK	S	Y	-
OODLAND	R	¥	REPLACE	1301	В	9	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
OODLAND	R	¥	REPLACE	1302	BR	15	Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	Υ	-
OODLAND	R	¥	REPLACE	1303	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	Y	-
OODLAND	R	¥	REPLACE	1304	BR	17	Bur oak	Quercus macrocarpa	Good		LANDMARK	S	Y	-
OODLAND	R	¥	REPLACE	1305	B	9	Basswood	Tilia americana	Good		WOODLAND	s	Y	
OODLAND	R	¥	REPLACE	1305	PH	23			Good		LANDMARK	s	Y	-
				<u> </u>			Pignut Hickory	Carya glabra			1			 -
DODLAND	R	¥	REPLACE	1307	В	8	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
NDMARK	R	¥	REPLACE	1308	PH	17	Pignut Hickory	Carya glabra	Fair		LANDMARK	S	Y	-
OODLAND	R	¥	REPLACE	1309	PH	18	Pignut Hickory	Carya glabra	Good		LANDMARK	S	Y	-
OODLAND	R	¥	REPLACE	1310	RO	6	Red Oak	Quercus rubra	Fair	no tag	WOODLAND	S	Y	-
OODLAND	R	¥	REPLACE	1311	В	7	Basswood	Tilia americana	Fair		WOODLAND	S	Υ	-
OODLAND	R	¥	REPLACE	1312	AS	10	Quaking Aspen	Populus tremuloides	Fair		INVASIVE	s	N	-
OODLAND	R	¥	REPLACE	1313	В	9	Basswood	Tilia americana	Fair		WOODLAND	S	Y	_
		¥		l	<u>В</u>	7				 			Y	
VASIVE	R		PED:	1314		· ·	Basswood	Tilia americana	Good		WOODLAND	S		-
ODLAND	R	¥	REPLACE	1315	B	10	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
VASIVE	R	¥	-	1316	В	16	Basswood	Tilia americana	Good		WOODLAND	S	Y	-
ODLAND	R	¥	REPLACE	1317	1	10	Ironwood	Ostrya virginiana	Very Poor	F	LANDMARK	R	¥	_
ODLAND	R	¥	REPLACE	1318	BE	26	American Beech	Fagus grandifolia	Good		LANDMARK	R	¥	REPLACE
OODLAND	R	¥	REPLACE	1319	₽	10	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
ODLAND	R	¥	REPLACE	1320	В	11	Basswood	Tilia americana	Good		WOODLAND	S	Y	1 -
											 			PEDIAGE
OODLAND	S	N	-	1321	B	12	Basswood	Tilia americana	Good	<u> </u>	WOODLAND	R	¥	REPLACE
NDMARK	S	N	-	1322	PH	12	Pignut Hickory	Carya glabra	Fair	may be off prop.	WOODLAND	R	¥	REPLACE
OODLAND	S	N	-	1323	BC	10	Wild Black Cherry	Prunus serotina	Dead		WOODLAND	R	¥	1 -
IVASIVE	R	¥		1324	PH	7	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	¥	REPLACE
	R	¥	REPLACE	1325	₿	12	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
NDMARK	R	¥		1326	В	9	Basswood	Tilia americana	Fair		WOODLAND	R	¥	REPLACE
	R	¥	REPLACE	1327	SH	14	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	¥	REPLACE
VASIVE	17	¥						· · · · · · · · · · · · · · · · · · ·	1		 		¥	+
NVASIVE DODLAND		. Y	REPLACE	1328	BE	34	American Beech	Fagus grandifolia	Good		LANDMARK	R		REPLACE
ANDMARK NVASIVE OODLAND OODLAND	R				SH	27	Shagbark Hickory	Carya ovata	Good	1	LANDMARK	₽	¥	REPLACE
NVASIVE OODLAND		¥	REPLACE	1329 1330	PH		onageant monory	,	+	 	 		¥	1,72, 2,401

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March Marc			1	-	•						-	1155	_	35	Bur oak	ՙ
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1968 1						-					-	1157	SH	6	Shagbark Hickory	▙
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1906 191			+ -		•						-		+	6	Shagbark Hickory	_
1975 1976			+ -			1	no tag				-	1165	_	10	Shagbark Hickory	\perp
March March December Dece			+ -	American Elm		+					-	1166	SH	10	Shagbark Hickory	oxdot
190 10 0 December Forester and System WORDSLAND 0 N	1066	BR	7	Bur oak	Quercus macrocarpa	Poor		WOODLAND	R	Н	-	1167	SH	13	Shagbark Hickory	
1906 50	1067	BR	8	Bur oak	Quercus macrocarpa	Poor		WOODLAND	S	N	-	1168	SH	11	Shagbark Hickory	
200 24	1068	В	6	Basswood	Tilia americana	Good		WOODLAND	S	N	-	1169	₽	6	Basswood	
March Fat Proposed Service Proposed Service	1069	TH	13	Thornapple/Hawthorne	Cragaegus spp.	Fair		LANDMARK	S	N	-	1170	В	6	Basswood	
1972 67 7 Stepuns Honory Congres and Congress WOODCAAD 0 N 145 544 2 Suggest Honory 175	1070	BR	9	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	Н	REPLACE	1171	SH	9	Shagbark Hickory	
1975 1976	1071	SH	7	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	¥	REPLACE	1172	BR	10	Bur oak	
1979 198	1072	SH	7	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	N	-	1173	SH	9	Shagbark Hickory	
1975 5 6 Due Only Prime regions Fire st WOODLAND R Y REFLACE See 42 Beacade See Se	1074	SM	29	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	H	-	1174	BR	14	Bur oak	T
1777 1787 20 30 20 20 20 20 20 20	1075	BS	6	Blue Spruce	Picea pungens	Fair		WOODLAND	R	¥	REPLACE	1175	BR	19	Bur oak	
March Application	1076	BS	6	Blue Spruce	Picea pungens	Fair	x 1	WOODLAND	R	¥	REPLACE	1176	BR	12	Bur oak	<u> </u>
1655 58 14	1077	BR	23	Bur oak	Quercus macrocarpa	Fair		LANDMARK	R	¥	REPLACE	1177	SH	9	Shagbark Hickory	\vdash
1576 00 11	1078	SM	17	Silver Maple	Acer saccharinum	Good	x1	INVASIVE	R	¥	-		CT	18		\vdash
100 0 1 0 0 0 0 1 0 0	1079	BS	11	Blue Spruce	Picea pungens	Poor		WOODLAND	R	¥	-	1179		1	Pignut Hickory	†
	1080	BS	11	Blue Spruce	Picea pungens	Poor		WOODLAND	R	¥	-			+		\vdash
Fig. 2 Stor. Flags	1081	SM	16			Fair		INVASIVE	R	¥	-		+	+		+
AND 1082	SM	27	Silver Maple	Acer saccharinum	Good		INVASIVE	R	N	-		+	+		 	
MAIN MAIN AND An	1083	RM	7	Red Maple	Acer rubrum	Fair	×2	WOODLAND	R	N	REPLACE		+	_		+
1855 S. S. B. B. Spiece Prices paragrain Fay MOOD_AND R Y 1596 MAR	1084	SM	17	Silver Maple	Acer saccharinum	Good	x1	INVASIVE	R	И	-		+	+		\vdash
ADMINISTRATION ADMI		BS	6		Picea pungens	Fair		WOODLAND		¥	REPLACE		+	+	- ,	+
1907 BB 21			17		<u> </u>	Good				¥	_			+		+
1995 W. 1997 Warrage Pillor Salts halpfords Salts Sylvings S	1087	BR	21	·	Quercus macrocarpa	Good		LANDMARK	R	¥	REPLACE			+		+
MAN MAN MAN MAN MAN Manifer Mani					· ·									+		+
1909 1907 1907 1909		ww	35	Weeping Willow	· ·	Fair		INVASIVE		¥	_		+	+		+
1991 BS 8 8 Bills Sprice		BR	+			Good				¥	REPLACE		_	1		+
1902 BS 9 Blue Sprice Pices purgers Poor														+		\vdash
1906 86 66 Blee Sprince Piece purgers Far WOODLAND R	1092	BS	9	·		Poor		WOODLAND	R	¥	_			+	, ,	+
1996 8 6 Bishe-Sanuee Pième pungeres Pième		BS	7	·		+					REPLACE			+	, ,	+
1996 E				·		+								 	,	+
1996 B 16 Basewood Tilla americana Fair X1 MOODLAND R X REPLACE 1996 N 14 Shapbah Hickory 1996 N			+ -				×1				_		+	_		\vdash
1996 SM 23 Silver Mapple Acet ascchaffrum Good MOODLAND R Y REPLACE 1996 SM 23 Silver Mapple Acet ascchaffum Good SNA.DVE R Y REPLACE 1996 SM 23 Silver Mapple Acet ascchaffum Good SNA.DVE R Y REPLACE 1996 SM SNappost History 1996 SM SNappost History 1996 SNA SNAPPOST 1996			+							-	REPLACE		+	_	, ,	+
1998 SM 23 Silver Maple Acer saccharinum Good Ni-NASIVE R Y						1							+	+	, ,	
100 B			+			+								+		Τ,
1400 B 6 Basswood			-	-							REPLACE			+		+
14101 SH 6 Shagbark-Hickory Carya-everla Good WOODLAND R Y REPLACE 14102 RF 24 Shagbark-Hickory 14103 RF 12 Shagbark-Hickory 14104 RF 14 Shagbark-Hickor														+		+
BR 7 Bur oak Quercue macrocappa Fair WOODLAND R Y REPLACE 1203 Sh 15 Shagbark-Hickory 1204 Br 7 Bur oak Quercue macrocappa Fair WOODLAND R Y REPLACE 1203 Sh 15 Shagbark-Hickory 1204 Br 7 Bur oak Quercue macrocappa Fair X1 WOODLAND R Y REPLACE 1203 Sh 15 Shagbark-Hickory 1204 Br 7 Bur oak Quercue macrocappa Fair X1 WOODLAND R Y REPLACE 1203 Sh 15 Shagbark-Hickory 1204 Br 7 Bur oak Quercue macrocappa Good LANDMARK R Y REPLACE 1206 RO 10 Red Oak 1407 Br 37 Bur oak Quercue macrocappa Good WOODLAND R Y REPLACE 1207 Ph 14 Pignut Hickory 1409 Br 8 Basewood Tillia americana Good WOODLAND R Y REPLACE 1208 Sh 6 Shagbark-Hickory 1419 Red Oak Quercue macrocappa Good WOODLAND R Y REPLACE 1208 Sh 6 Shagbark-Hickory 1419 Red Oak Quercue macrocappa Good WOODLAND R Y REPLACE 1208 Sh 6 Shagbark-Hickory 1419 Red Oak Quercue macrocappa Good WOODLAND R Y REPLACE 1208 Sh 6 Shagbark-Hickory 1419 Red Oak Quercue macrocappa Good WOODLAND R Y REPLACE 1210 Sh 7 Shagbark-Hickory 1419 Red Oak Quercue macrocappa Fair WOODLAND R Y REPLACE 1210 Sh 7 Shagbark-Hickory 1419 Red Oak 1419 Red Oak WOODLAND R Y REPLACE 1210 Sh 7 Shagbark-Hickory 1419 Red Oak 1419 Red Oak WOODLAND S Y - 1213 Red Oak 1419 Red Oak WOODLAND S Y - 1214 Red Oak 1419 Red Oak WOODLAND S Y - 1214 Red Oak Shagbark-Hickory 1419 Red Oak WOODLAND S Y - 1214 Red Oak Shagbark-Hickory 1419 Red Oak WOODLAND S Y - 1214 Red Oak Shagbark-Hickory 1419 Red Oak WOODLAND S Y - 1214 Red Oak Shagbark-Hickory 1419 Red Oak Shagbark-Hickory 1419 Red Oak WOODLAND S Y - 1214 Red Oak Shagbark-Hickory 1419 Red Oak Shagbark-Hick										-			+	+		+
Horse BR 42 Bur-oak Questue-macrocarpa Fair WOODLAND R Y REPLACE 1203 SH 15 Shagbark-Hickopy 1406 BR 42 Bur-oak Questue-macrocarpa Fair X1 WOODLAND R Y REPLACE 1206 RO 17 Red Oak 1406 BR 7 Bur-oak Questue-macrocarpa Poor WOODLAND R Y REPLACE 1206 RO 10 Red Oak 1407 RR 37 Bur oak Questue-macrocarpa Good LANDMARK R Y REPLACE 1208 RO 7 Red Oak 1408 RO 10 Pignut-Hickopy Carya-glabra Good WOODLAND R Y REPLACE 1208 BR 23 Bur oak Questue-macrocarpa Good WOODLAND R Y REPLACE 1208 RR 24 Bur oak Questue-macrocarpa Good WOODLAND R Y REPLACE 1208 RR 24 Bur oak Questue-macrocarpa Good WOODLAND R Y REPLACE 1208 RR 24 Bur oak Questue-macrocarpa Good WOODLAND R Y REPLACE 1208 RR 25 Bur oak RR Y REPLACE 1209 SH 6 Shagbark-Hickopy 1411 RR Good WOODLAND R Y REPLACE 1214 SH 7 Shagbark-Hickopy 1414 SH 25 Pignut-Hickopy Carya-glabra Good WOODLAND R Y REPLACE 1214 SH 7 Shagbark-Hickopy 1214 SH 7 Shagbark-Hickopy 1214 SH 7 RR 1214 SH 7 R				-	•								+	+		\vdash
Horizon Harage			+		· ·	1								+		+
Hospital Hard Har					· .		¥1							+		+
14106 SH 24 Shagbark-Hickory Carya-ovata Good LANDMARK R Y REPLACE 1206 RO 7 Red Oak 14107 BR 37 Bur-oak Querous-macrocarpa Good LANDMARK R Y REPLACE 1208 BR 23 Bur-oak 14108 PH 10 Pignut-Hickory Carya-glabra Good WOODLAND R Y REPLACE 1209 SH 6 Shagbark-Hickory 14114 Ro 11 Red Oak Querous-macrocarpa Good LANDMARK R Y REPLACE 1209 SH 6 Shagbark-Hickory 14114 Ro 11 Red Oak Querous-macrocarpa Good WOODLAND R Y REPLACE 1209 SH 6 Shagbark-Hickory 14114 Ro 11 Red Oak Querous-macrocarpa Good WOODLAND R Y REPLACE 12114 SH 7 Shagbark-Hickory 14115 PH 13 Pignut-Hickory Carya-glabra Good WOODLAND S Y - 1211 SH 7 Shagbark-Hickory Carya-glabra Good WOODLAND S Y -			+		· ·	+								+		
1107 BR 37 Bur-oak			1								REPLACE		_	+		+
1108 PH			+	-	•	+							+	+		\vdash
Hide B			+											+		+
1110 BR 24 Bur-oak Quercus-macrocarpa Good LANDMARK R Y REPLACE 1210 Sh 7 Shagbark-Hickory 1111 Red-Oak Quercus-macrocarpa Good WOODLAND R Y REPLACE 1211 Sh 7 Shagbark-Hickory 1111 Sh 9 Pignut-Hickory Carya-glabra Good WOODLAND S Y .				,	, , , , , , , , , , , , , , , , , , ,	1	¥1							+		+
Hith RO						+	7.1							+	,	+
1112 PH			-											_		+
1113 PH 9					·								+	+	-	+
1114 PH 12				,										+		+
1115 PH			1	,	, ,								+	+		\vdash
1116 B 8 Basswood Tilia americana Good WOODLAND S Y - 1216 E 12 AmericanElm 1417 SH 17 Shagbark-Hickory Carya-ovata Good LANDMARK R Y REPLACE 14217 WO 12 White-Oak 1418 BR 28 Bur-oak Quercus-macrocarpa Good LANDMARK R Y REPLACE 14218 SH 8 Shagbark-Hickory 1419 BR 45 Bur-oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 14218 SH 8 Shagbark-Hickory 1420 CT 14 Cottonwood Populus-deltoides Good INVASIVE R Y - 1420 BR 46 Bur-oak Quercus macrocarpa Fair LANDMARK S Y - 1422 PH 14 Pignut-Hickory Carya-glabra Fair LANDMARK S Y - 1425 BR 23 Bur oak Quercus macrocarpa Fair LANDMARK S Y - 1425 BR 26 Bur-oak Quercus macrocarpa Good LANDMARK R Y REPLACE 1428 BM American-Elm 1426 BR 26 Bur-oak Quercus-macrocarpa Good LANDMARK R Y REPLACE 1428 SH 14 Shagbark-Hickory 1428 BR 14 Shagbark-Hickory 14			+	,		+							+	+		+
4117 SH 17 Shagbark-Hickory Carya-ovata Good LANDMARK R Y REPLACE 1217 WO 12 White-Oak 1418 BR 28 Bur-oak Quercus-macrocarpa Good LANDMARK R Y REPLACE 1217 WO 12 White-Oak 1419 BR 45 Bur-oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 1219 PH 8 Pignut-lickory 1121 BR 46 Bur oak Quercus macrocarpa Fair LANDMARK S Y - 1221 HL 14 Honeylocust 1123 BR 23 Bur oak Quercus macrocarpa Fair LANDMARK S Y - 1223 HL 13 Honeylocust 1124 SH 15 Shagbark Hickory Carya ovata Good WOODLAND S Y - 1223 HL 13 Honeylocust </td <td></td> <td>-</td> <td></td> <td>_</td> <td>+</td> <td></td> <td>+</td>											-		_	+		+
1418 BR 28 Bur-oak Quercus-macrocarpa Good LANDMARK R Y REPLACE 1419 BR 45 Bur-oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 1429 PH 8 Pignut-Hickory 1420 BR 46 Bur oak Quercus macrocarpa Fair LANDMARK R Y REPLACE 1420 BR 40 Basswood 188 140 Basswood 188 1			+ -		_	1				-	REDIACE		_	+		+
1119 BR 45 Bur-oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 1219 PH 8 Pignut-Hickory 1220 B 10 Basswood 1121 BR 46 Bur oak Quercus macrocarpa Fair LANDMARK S Y - 1221 HL 14 Honeylocust 1222 HL 17 Honeylocust 1223 BR 23 Bur oak Quercus macrocarpa Fair LANDMARK S Y - 1222 HL 17 Honeylocust 1223 HL 13 Honeylocust 1224 BR 26 Bur-oak Quercus-macrocarpa Good LANDMARK R Y REPLACE 1226 E 8 American-Elm 1226 BR 16 Bur-oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 1226 E 8 American-Elm 1227 SH 9 Shagbark-Hickory 1228 SH 14 Shagbark-Hickory 1229 TH 8 Thornapple/Hawthome				-									+	+		+
1420 CT					· .								+	+		+
1121 BR 46 Bur oak Quercus macrocarpa Fair LANDMARK S Y - 1221 HL 14 Honeylocust 1222 PH 14 Pignut Hickory Carya-glabra Fair WOODLAND R Y REPLACE 1123 BR 23 Bur oak Quercus macrocarpa Fair LANDMARK S Y - 1223 HL 17 Honeylocust 1224 SH 15 Shagbark Hickory Carya ovata Good WOODLAND S Y - 1224 E 8 American-Elm 1225 BR 26 Bur-oak Quercus macrocarpa Good LANDMARK R Y REPLACE 1426 SH 11 Shagbark-Hickory Carya-ovata Fair WOODLAND R Y REPLACE 1427 SH 9 Shagbark-Hickory 1428 RO 8 Red-Oak Quercus macrocarpa Good x1-no-tag WOODLAND R Y REPLACE 1428 SH 14 Shagbark-Hickory 1429 BR 25 Bur-oak Quercus macrocarpa Fair LANDMARK R Y REPLACE 1429 TH 8 Thornapple/Hawthorne			+			+					NLFLACE			+		\vdash
H122 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 - 1125 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-macrocarpa Fair LANDMARK R Y REPLACE 1129 BR 25 Bur-oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 1120 HL 17 Honeylocust 1121 HL 17 Honeylocust 1122 HL 17 Honeylocust 1122 HL 17 Honeylocust 1123 HL 13 Honeylocust 1124 E 8 American-Elm 1125 WO 24 White-Oak 1126 E 8 American-Elm 1127 SH 9 Shagbark-Hickory 1128 RO 8 Red-Oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 1128 SH 14 Shagbark-Hickory 1129 BR 25 Bur-oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 1129 TH 8 Thornapple/Hawthorne					•					-	-		+	+		+
1123 BR 23 Bur oak Quercus macrocarpa Fair LANDMARK S Y - 1223 HL 13 Honeylocust 1124 SH 15 Shagbark Hickory Carya ovata Good WOODLAND S Y - 1224 E 8 American Elm 1125 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 SH 14 Shagbark Hickory 1128 RO 8 Red Oak Quercus macrocarpa Fair LANDMARK R Y REPLACE 1128 SH 14 Shagbark Hickory 1129 BR 25 Bur oak Quercus macrocarpa Fair LANDMARK R Y REPLACE 1228 SH 14 Shagbark Hickory 1129 BR 25 Bur oak Quercus macrocarpa Fair LANDMARK R Y REPLACE 1229 TH 8 Thornapple/Hawthorne			-		· ·	+				-	PEDLAGE			+		
1124 SH 15 Shagbark Hickory Carya ovata Good WOODLAND S Y - 1125 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 1129 TH 8 Thornapple/Hawthorne					, ,						REPLACE			+	•	-
1125 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 1129 TH 8 Thornapple/Hawthorne			-		•						-			+	· · · · · · · · · · · · · · · · · · ·	
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 1129 TH 8 Thornapple/Hawthorne			+		<u> </u>	1								+		
1127BR16Bur oakQuercus macrocarpaFairLANDMARKRYREPLACE1227SH9Shagbark Hickory1128RO8Red OakQuercus rubraGoodx1 no tagWOODLANDRYREPLACE1228SH14Shagbark Hickory1129BR25Bur oakQuercus macrocarpaFairLANDMARKRYREPLACE1229TH8Thornapple/Hawthorne					· ·								+	+		<u> </u>
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 1228 SH 14 Shagbark Hickory 1229 TH 8 Thornapple/Hawthorne			+	-	•	+							+	+		
1129 BR 25 Bur-oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 1229 TH 8 Thornapple/Hawthorne			+			+							_	+		<u> </u>
			_				x1 no tag				-		+	+		<u> </u>
1130 BR 26 Bur-oak Quercus-macrocarpa Fair LANDMARK R Y REPLACE 1230 BR 28 Bur-oak			+		•								_			<u> </u>
	1130	BR	26	Bur oak	Quercus macrocarpa	Fair		LANDMARK	R	¥	REPLACE	1230	BR	28	Bur oak	<u></u>

	ピニハ
13.07 E. TREE REPLACEMENT:	GROUF
WOODLAND TREES: 50% DBH TO BE REPLACED — 2X DBH RETAINED. 765" REPLACEMENT — 1822" RETAINED CREDIT = -1057". 0 WOODLAND REPLACEMENT REQUIRED.	t: 844.813.2949 www.peagroup.com

WOODLAND TREES: 50% DBH TO BE REPLACED — 2X DBH RETAINED. 765" REPLACEMENT — 1822" RETAINED CREDIT = -1057". 0 WOODLAND REPLACEMENT REQUIRED.
LANDMARK TREES: 100% DBH TO BE REPLACED $-$ 2X DBH RETAINED. 1,590" REPLACEMENT $-$ 1,662" RETAINED CREDIT $=$ $-$ 72". 0 LANDMARK REPLACEMENT REQUIRED.

WOODLAND TREE	ES .			
WOODLAND TREE		158	(REPLAC	E AT 50% OF REMOVED DBH)
1530"	DBH x 0.5 =		765"	REPLACEMENT
WOODLAND TREE	S SAVED:	101	(CREDIT	OF 2X DBH)
911"	DBH x 2 =		1822"	CREDIT
	765 -	1822	=	-1057
0 <u>" DB</u> H	REQUIRED FOR	WOODLA	ND REPLA	ACEMENT_

NO TREES REQUIRED FOR REPLACEMENT.

LANDMARK TREES			
LANDMARK TREES REMOVED:	69	(REPLACE AT 100% OF REMOVED DBH))
1590" DBH x 1 =		1590" REPLACEMENT	
LANDMARK TREES SAVED:	36	(CREDIT OF 2X DBH)	
831" DBH x 2 =		1662" CREDIT	
1500	1662	= 72	

1590 - 1662 =

0 " TOTAL DBH REQUIRED FOR REPLACEMENT

Fair Good Fair Good Good Good		LANDMARK WOODLAND	S	Y	1
Fair Good Good Good		MOODLAND			<u> </u>
Good Good Good		WOODLAND	S	Y	-
Good Good		WOODLAND	S	Y	-
Good		WOODLAND	s	Y	-
		INVASIVE	s	Y	-
		INVASIVE	S	Y	-
Good	x1	INVASIVE	R	¥	-
Good		INVASIVE	R	¥	-
Good		INVASIVE	R	¥	-
Good		INVASIVE	S	Y	-
Good		INVASIVE	S	Y	-
Fair		LANDMARK	S	Y	-
Good		INVASIVE	S	Y	-
Good		INVASIVE	S	Y	-
Good		INVASIVE	R	¥	-
Good		INVASIVE	R	¥	-
Fair		#N/A	R	¥	#N/ <i>A</i>
Good		INVASIVE	S	Y	-
Good		INVASIVE	S	Y	_
Good		INVASIVE	S	Y	_
Fair		INVASIVE	S	Y	_
Fair		INVASIVE	S	Y	_
Good		INVASIVE	S	Y	_
Fair		WOODLAND	S	Y	_
Fair		INVASIVE	S	Y	_
Fair	x2	INVASIVE	S	Y	_
Fair	cut under utility	#N/A	S	Y	#N/ <i>P</i>
Very Poor	,	#N/A	R	¥	#N/ <i>A</i>
Good	out under utility	INVASIVE	S	Y	
Very Poor		#N/A	s	Y	#N/ <i>A</i>
Poor		INVASIVE	s	Y	H1 1/7
Very Poor		#N/A	s	Y	#N/ <i>A</i>
Very Poor		INVASIVE	s S	Y	#19//
Good		INVASIVE	s	Y	_
Good		INVASIVE	s S	Y	_
Fair		INVASIVE	s	Y	-
		WOODLAND	s	Y	-
Good					_
Good		INVASIVE	S S	Y	-
Good		WOODLAND			_
Good		WOODLAND	S	Y	_
Fair		WOODLAND	S	Y	-
Good		WOODLAND	S	Y	-
Good		WOODLAND	S	Y	-
Good		WOODLAND	S	Y	-
					-
Fair			S	Y	-
Good		WOODLAND	S	Y	-
Fair		INVASIVE	S	Y	-
		INVASIVE	S	Y	_
	Fair Fair Good	Fair Good Fair Good	Fair WOODLAND Fair INVASIVE Good WOODLAND Fair INVASIVE Good INVASIVE	Fair WOODLAND S Fair INVASIVE S Good WOODLAND S Fair INVASIVE S Good INVASIVE S	Fair WOODLAND S Y Fair INVASIVE S Y Good WOODLAND S Y Fair INVASIVE S Y Good INVASIVE S Y

1	NO SCA	LE



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.

MONDRIAN PROPERTIES 50215 SCHOENHERR RD. SHELBY TWP, MI 48315

PROJECT TITLE

ESTATES OF ECKFORD
ECKFORD DR./TALLMAN DR.
TROY, MICHIGAN

REVISIONS

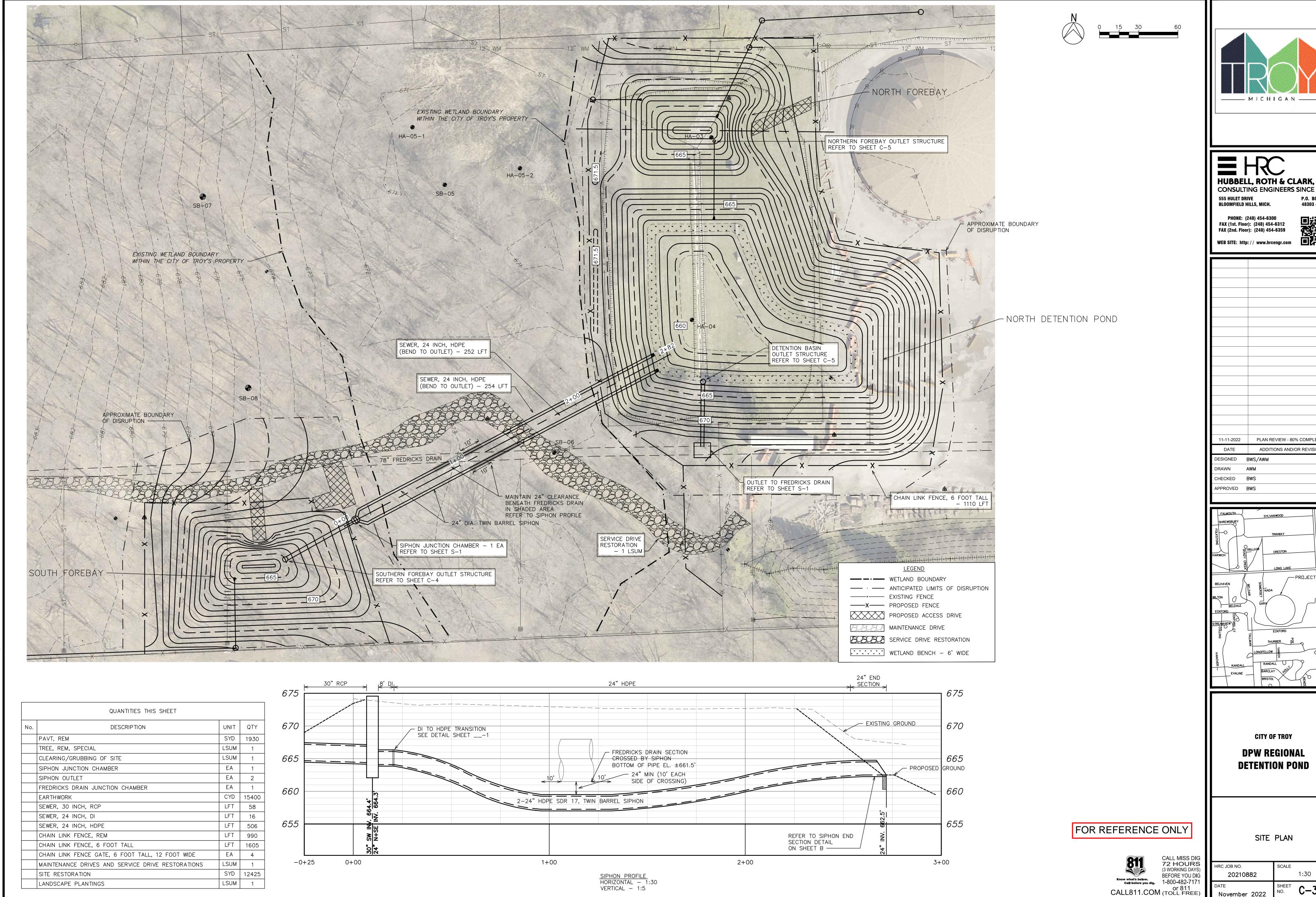
ORIGINAL ISSUE DATE: JANUARY 12, 2023 DRAWING TITLE

TREE **PRESERVATION** LIST

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

TAG	CODE	DBH	BH CC	OMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLAC
1331	1	12	2	Ironwood	Ostrya virginiana	Fair		LANDMARK	R	¥	REPLACE
1332	₿	9	9	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
1333	₽	6	€	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
1334	BE	6	3 4	American Beech	Fagus grandifolia	Fair		WOODLAND	R	¥	REPLACE
1335	₽E	20		American Beech	Fagus grandifolia	Good		LANDMARK	R	¥	REPLACE
	, DE		-			<u> </u>					
1336	+	10	-	Ironwood	Ostrya virginiana	Fair		LANDMARK	R	¥	REPLACE
1337	+	11	4	Ironwood	Ostrya virginiana	Fair		LANDMARK	R	¥	REPLACE
1338	PH	15	5	Pignut Hickory	Carya glabra	Good		WOODLAND	R	¥	REPLACE
1339	BR	7	z	Bur oak	Quercus macrocarpa	Fair		WOODLAND	₽	¥	REPLACE
1340	BR	6	€	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	¥	REPLACE
1341	BR	7	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	¥	REPLACE
1342	E	6	-	American Elm	Ulmus americana	Fair		INVASIVE	R	¥	_
			-			+					DEDLAGE
1343	PH	27	+	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE
1344	₿	6	€	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
1345	RO	10	0	Red Oak	Quercus rubra	Fair	no tag	WOODLAND	R	¥	REPLACE
1346	RO	12	2	Red Oak	Quercus rubra	Fair	no tag	WOODLAND	₽	¥	REPLACE
1347	PH	20	:0	Pignut Hickory	Carya glabra	Fair		LANDMARK	R	¥	REPLACE
1348	SH	16	6 S	Shagbark Hickory	Carya ovata	Fair		LANDMARK	R	¥	REPLACE
1349	BE	15	_	American Beech	Fagus grandifolia	Good		WOODLAND	R	¥	REPLACE
			_								
1350	BE	22		American Beech	Fagus grandifolia	Good		LANDMARK	R	¥	REPLACE
1351	BE	14	4 /	American Beech	Fagus grandifolia	Fair		WOODLAND	R	¥	REPLACE
1352	BE	12	2 /	American Beech	Fagus grandifolia	Fair		WOODLAND	R	¥	REPLACE
1353	BE	11	4 /	American Beech	Fagus grandifolia	Good		WOODLAND	R	¥	REPLACE
1354	BE	20	:O A	American Beech	Fagus grandifolia	Good		LANDMARK	R	¥	REPLACE
1355	BE	15	5 4	American Beech	Fagus grandifolia	Good		WOODLAND	R	¥	REPLACE
1356	PH	20		Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE
			_				y.4				TALL LAGE
1357	BE	13	_	American Beech	Fagus grandifolia	Dead	x1	WOODLAND	R	¥	- -
1358	₽E	23		American Beech	Fagus grandifolia	Good		LANDMARK	R	¥	REPLACE
1359	SH	11	4 S	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	¥	REPLACE
1360	SH	14	4 S	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	¥	REPLACE
1361	BS	9	9	Blue Spruce	Picea pungens	Dead		WOODLAND	R	¥	
1362	PH	14	4	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	¥	REPLACE
1363	PH	20	-	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE
1364	SH	15			Carya giabia Carya ovata	+		WOODLAND	R	¥	REPLACE
			_	Shagbark Hickory	·	Good					
1365	PH	21	14	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE
1366	PH	21	:1	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE
1367	PH	19	9	Pignut Hickory	Carya glabra	Fair		LANDMARK	₽	¥	REPLACE
1368	SH	10	0 S	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	¥	REPLACE
1369	SH	10	0 S	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	¥	REPLACE
1370	В	7	_	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE
	-		_								
1371	+	12	-	Ironwood	Ostrya virginiana	Good		LANDMARK	R	H	REPLACE
1372	RO	21	1	Red Oak	Quercus rubra	Good	no tag	LANDMARK	R	И	REPLACE
1373	RO	20	.0	Red Oak	Quercus rubra	Good	no tag	LANDMARK	₽	Н	REPLACE
1374	1	6	€ .	Ironwood	Ostrya virginiana	Good		WOODLAND	₽	N	REPLACE
1375	RO	24	4	Red Oak	Quercus rubra	Good	no tag	LANDMARK	R	¥	REPLACE
1376	PH	14	4	Pignut Hickory	Carya glabra	Good		WOODLAND	R	¥	REPLACE
1377	BR	19		Bur oak	Quercus macrocarpa	Good		LANDMARK	R	¥	REPLACE
1378	RO	27	-	Red Oak	·	Good			R	¥	REPLACE
			-		Quercus rubra		4	LANDMARK			REPLACE
1379	wo	31	_	White Oak	Quercus alba	Fair	x1	LANDMARK	S	N	-
1380	WO	21	:1	White Oak	Quercus alba	Fair		LANDMARK	S	Y	-
1381	WO	18	8	White Oak	Quercus alba	Fair		LANDMARK	S	Y	-
1382	SH	8	3 S	Shagbark Hickory	Carya ovata	Good	on outside of fence	WOODLAND	S	N	-
1383	RO	6	3	Red Oak	Quercus rubra	Good	no tag	WOODLAND	S	N	-
1384	В	8	3	Basswood	Tilia americana	Good		WOODLAND	S	Υ	_
1385	BR	7	_	Bur oak		Fair		WOODLAND	S	Y	
			_		Quercus macrocarpa						
1386	SH	8		Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	Y	-
1387	SH	7	7 S	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	Y	-
1388	BR	7	7	Bur oak	Quercus macrocarpa	Good		WOODLAND	S	Υ	-
1389	PH	6	3	Pignut Hickory	Carya glabra	Good		WOODLAND	S	Υ	-
1390	RO	20	:0	Red Oak	Quercus rubra	Good	x1 no tag	LANDMARK	S	Υ	_
1391	SH	6	3 5	Shagbark Hickory	Carya ovata	Good	3	WOODLAND	S	Υ	_
			-		<u> </u>						
1392	PH 	8	-	Pignut Hickory	Carya glabra	Fair		WOODLAND	R	¥	REPLACE
1393	BR	7		Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	N	-
1394	BR	6	3	Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	Y	-
1395	SH	11	1 S	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	N	-
1396	SH	8	3 s	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	Y	-
1397	BR	11	4	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	¥	REPLACE
1398	SH	6	3 S	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	Y	-
1399	В	14	_	Basswood	Tilia americana	Good		WOODLAND	S	Y	_
1401	RO	23	_	Red Oak	Quercus rubra	Fair		LANDMARK		¥	REPLACE
			_		<u> </u>						
1402	RO	19		Red Oak	Quercus rubra	Fair		LANDMARK	R	¥	REPLACE
1403	RC	10	_	Red Cedar	Juniperus virginiana	Poor	cut under utility	INVASIVE	R	¥	-
1404	RC	10	0	Red Cedar	Juniperus virginiana	Fair	2 cut under utilit	INVASIVE	R	¥	
1405	RC	9	9	Red Cedar	Juniperus virginiana	Fair	x1 cut under utility	INVASIVE	R	¥	L -
1406	₩C	8	3	White Cedar	Thuja occidentalis	Poor		WOODLAND	R	¥	-
1407	₩s	6	•	White Spruce	Picea glauca	Poor		WOODLAND	R	¥	-
1408	SU	10	_	Sugar Maple	Acer saccharum	Fair		WOODLAND	S	Y	_
		-	_								-
1409	₩S	10	-	White Spruce	Picea glauca	Poor		WOODLAND	R	¥	-
1410		11	1	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1411	SM		_	Scotch Pine	Pinus sylvestris	Very Poor	r	#N/A	R	¥	#N/A
4440	sc	10	0			1 -		#N/A	S	Y	#N/A
1412		10 12		Scotch Pine	Pinus sylvestris	Poor					
1412	sc	†	2	Scotch Pine Shagbark Hickory	Pinus sylvestris Carya ovata	Poor Fair		WOODLAND	S	Y	-
	sc sc	12	2 5 S		•			WOODLAND WOODLAND	S R	Y ¥	- REPLACE
1413 1414	SC SC SH WC	12 15 8	2 5 S	Shagbark Hickory White Cedar	Carya ovata Thuja occidentalis	Fair Fair		WOODLAND	R	¥	- REPLACE
1413 1414 1415	SC SC SH WC SM	12 15 8 25	2 5 S	Shagbark Hickory White Cedar Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum	Fair Fair Fair		WOODLAND INVASIVE	R S	¥ Y	REPLACE
1413 1414 1415 1416	SC SC SH WC SM	12 15 8 25 25	2 5 S	Shagbark Hickory White Cedar Silver Maple Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum Acer saccharinum	Fair Fair Good		WOODLAND INVASIVE INVASIVE	R S S	¥ Y Y	- REPLACE - -
1413 1414 1415	SC SC SH WC SM SM	12 15 8 25 25 15	2 5 S	Shagbark Hickory White Cedar Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum	Fair Fair Fair		WOODLAND INVASIVE INVASIVE	R S S	Y Y Y	REPLACE
1413 1414 1415 1416	SC SC SH WC SM	12 15 8 25 25	2 5 S	Shagbark Hickory White Cedar Silver Maple Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum Acer saccharinum	Fair Fair Good		WOODLAND INVASIVE INVASIVE	R S S	¥ Y Y	REPLACE
1413 1414 1415 1416 1417	SC SC SH WC SM SM	12 15 8 25 25 15	2	Shagbark Hickory White Cedar Silver Maple Silver Maple Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum Acer saccharinum Acer saccharinum	Fair Fair Fair Good Fair		WOODLAND INVASIVE INVASIVE	R S S	Y Y Y	REPLACE
1413 1414 1415 1416 1417 1418	SC SC SH WC SM SM SM	12 15 8 25 25 15 28	2 S S S S S S S S S S S S S S S S S S S	Shagbark Hickory White Cedar Silver Maple Silver Maple Silver Maple Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum	Fair Fair Good Fair Fair		WOODLAND INVASIVE INVASIVE INVASIVE	R S S S	¥ Y Y Y	REPLACE
1413 1414 1415 1416 1417 1418 1419	SC SC SH WC SM SM SM SM SM	12 15 8 25 25 15 28 20 28	2 S S S S S S S S S S S S S S S S S S S	Shagbark Hickory White Cedar Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum	Fair Fair Fair Good Fair Fair Fair Fair		WOODLAND INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE	R S S S S	Y Y Y Y Y	REPLACE
1413 1414 1415 1416 1417 1418 1419 1420 1421	SC SC SH WC SM	12 15 8 25 25 15 28 20 28	2 S S S S S S S S S S S S S S S S S S S	Shagbark Hickory White Cedar Silver Maple Bur oak	Carya ovata Thuja occidentalis Acer saccharinum Quercus macrocarpa	Fair Fair Good Fair Fair Fair Fair Good		WOODLAND INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE VOODLAND	R S S S S S	Y Y Y Y Y Y Y Y Y Y Y Y	REPLACE
1413 1414 1415 1416 1417 1418 1419 1420 1421	SC SC SH WC SM	12 15 8 25 25 15 28 20 28 10	2 5 S S S S S S S S S S S S S S S S S S	Shagbark Hickory White Cedar Silver Maple Bur oak Bur oak	Carya ovata Thuja occidentalis Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Quercus macrocarpa Quercus macrocarpa	Fair Fair Good Fair Fair Fair Good Fair Fair Fair Fair Fair		WOODLAND INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE WOODLAND LANDMARK	R S S S S S S	Y Y Y Y Y Y Y Y Y Y Y Y Y Y	REPLACE
1413 1414 1415 1416 1417 1418 1419 1420 1421 1422	SC SC SH WC SM	12 15 8 25 25 15 28 20 28 10 20 23	2	Shagbark Hickory White Cedar Silver Maple Bur oak Bur oak Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum Quercus macrocarpa	Fair Fair Good Fair Fair Fair Good Fair Fair Fair Fair Fair Fair Fair		WOODLAND INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE VOODLAND LANDMARK INVASIVE	R S S S S S S	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	REPLACE
1413 1414 1415 1416 1417 1418 1419	SC SC SH WC SM	12 15 8 25 25 15 28 20 28 10	2	Shagbark Hickory White Cedar Silver Maple Bur oak Bur oak	Carya ovata Thuja occidentalis Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Quercus macrocarpa Quercus macrocarpa	Fair Fair Good Fair Fair Fair Good Fair Fair Fair Fair Fair		WOODLAND INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE WOODLAND LANDMARK	R S S S S S S	Y Y Y Y Y Y Y Y Y Y Y Y Y Y	- REPLACE
1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423	SC SC SH WC SM	12 15 8 25 25 15 28 20 28 10 20 23	2	Shagbark Hickory White Cedar Silver Maple Bur oak Bur oak Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum Quercus macrocarpa Quercus macrocarpa Acer saccharinum	Fair Fair Good Fair Fair Fair Good Fair Fair Fair Fair Fair Fair Fair		WOODLAND INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE VOODLAND LANDMARK INVASIVE	R S S S S S S	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	- REPLACE
1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423	SC SC SH WC SM	12 15 8 25 25 15 28 20 28 10 20 23 42	2	Shagbark Hickory White Cedar Silver Maple Bur oak Bur oak Silver Maple Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum	Fair Fair Good Fair Fair Fair Good Fair Fair Fair Fair Good Fair Fair Fair		WOODLAND INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE WOODLAND LANDMARK INVASIVE	R S S S S S S S	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	- - - - - - - - -
1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425	SC SC SH WC SM	12 15 8 25 25 15 28 20 28 10 20 23 42	2 S S S S S S S S S S S S S S S S S S S	Shagbark Hickory White Cedar Silver Maple Bur oak Bur oak Silver Maple Silver Maple Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Quercus macrocarpa Quercus macrocarpa Acer saccharinum Acer saccharinum Acer saccharinum	Fair Fair Good Fair Fair Fair Good Fair Fair Fair Good Fair Fair Fair		WOODLAND INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE WOODLAND LANDMARK INVASIVE INVASIVE	R S S S S S S S	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	REPLACE
1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426	SC SC SH WC SM	12 15 8 25 25 15 28 20 28 10 20 23 42 43 7	2	Shagbark Hickory White Cedar Silver Maple Bur oak Bur oak Silver Maple Silver Maple Silver Maple Silver Maple Silver Maple Silver Maple	Carya ovata Thuja occidentalis Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum Quercus macrocarpa Quercus macrocarpa Acer saccharinum Acer saccharinum Acer saccharinum Acer saccharinum	Fair Fair Good Fair Fair Good Fair Fair Fair Good Fair Fair Fair Fair Fair Fair Fair		WOODLAND INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE INVASIVE VOODLAND LANDMARK INVASIVE INVASIVE INVASIVE INVASIVE	R S S S S S S S S R R	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	- - - - - - - - - - - - - - - - - - -

TAG	CODE	DBH	COMMON NAME	LATIN NAME Ostrya-virginiana	COND) COMMENTS	CLASS LANDMARK	SAVE / REMOVE	ON-SITI	E REPLACE	TAG 1431	CODE BR	DBH 35	COMMON NAME Bur oak	LATIN NAME Quercus macrocarpa	COND Good	COMMENTS	CLASS LANDMARK	SAVE / REMOVE C	N-SITE R	EPLACE
1332	В	9	Basswood	Tilia americana	Good		WOODLAND	R	¥	REPLACE	1432		7	Basswood	Tilia americana	Good	,	WOODLAND		¥	REPLAC
1333 1334	B BE	6	Basswood American Beech	Tilia americana Fagus grandifolia	Good Fair		WOODLAND WOODLAND	R	<u>Ұ</u> Ұ	REPLACE REPLACE	1433 1434	PH RO	11 12	Pignut Hickory Red Oak	Carya glabra Quercus rubra	Good Good	×1	WOODLAND	1	¥ ¥	REPLAC REPLAC
1335	BE	20	American Beech	Fagus grandifolia	Good		LANDMARK	R	¥	REPLACE	1435	RO	11	Red Oak	Quercus rubra	Good		WOODLAND	-	¥	REPLAC
1336 1337	1	10	Ironwood Ironwood	Ostrya virginiana Ostrya virginiana	Fair Fair		LANDMARK LANDMARK	R R	¥	REPLACE REPLACE	1436 1437	SM	40 35	Silver Maple Silver Maple	Acer saccharinum Acer saccharinum	Good		INVASIVE	R	Ż Ż	-
1338	PH	15	Pignut Hickory	Carya glabra	Good		WOODLAND	R	¥	REPLACE	1438	SM	38	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	¥	-
1339	BR	7	Bur oak	Quercus macrocarpa	Fair		WOODLAND	R	¥	REPLACE	1439 1440	SM	29 13	Silver Maple Silver Maple	Acer saccharinum Acer saccharinum	Fair Good		INVASIVE	S R	Y	-
1340 1341	BR BR	6 7	Bur oak Bur oak	Quercus macrocarpa Quercus macrocarpa	Fair Fair		WOODLAND WOODLAND	R R		REPLACE REPLACE	1441	SM	33	Silver Maple	Acer saccharinum	Good		INVASIVE	R	¥	-
1342	E	6	American Elm	Ulmus americana	Fair		INVASIVE	R	¥	-	1442		8	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1343 1344	PH B	27 6	Pignut Hickory Basswood	Carya glabra Tilia americana	Good Good		LANDMARK WOODLAND	R R	¥ ¥	REPLACE REPLACE	1443	E SM	9	American Elm Silver Maple	Ulmus americana Acer saccharinum	Fair Fair		INVASIVE	S S	Y	-
1345	RO	10	Red Oak	Quercus rubra	Fair	no tag	WOODLAND	R	¥	REPLACE	1445	СТ	16	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
1346	RO	12	Red Oak	Quercus rubra	Fair	no tag	WOODLAND	R	¥	REPLACE	1446 1447	E SM	19 10	American Elm Silver Maple	Ulmus americana Acer saccharinum	Good		INVASIVE INVASIVE	S S	Y	-
1347 1348	PH SH	20 16	Pignut Hickory Shagbark Hickory	Carya glabra Carya ovata	Fair Fair		LANDMARK LANDMARK	R	<u>Ұ</u>	REPLACE REPLACE	1447	CT	25	Cottonwood	Populus deltoides	Good Fair		INVASIVE	S	Y	-
1349	₿E	15	American Beech	Fagus grandifolia	Good		WOODLAND	R	¥	REPLACE	1449	Е	9	American Elm	Ulmus americana	Good		INVASIVE	S	Y	-
1350	₽E	22	American Beech	Fagus grandifolia	Good		LANDMARK	R R	¥	REPLACE	1450 1451	RO SM	11	Red Oak Silver Maple	Quercus rubra Acer saccharinum	Good Good	x1	WOODLAND	S S	Y	-
1351 1352	BE BE	14 12	American Beech American Beech	Fagus grandifolia Fagus grandifolia	Fair Fair		WOODLAND WOODLAND	R		REPLACE REPLACE	1452		25	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
1353	BE	11	American Beech	Fagus grandifolia	Good		WOODLAND	R	¥	REPLACE	1453		15	Cottonwood	Populus deltoides	Good		INVASIVE	S	Y	-
1354 1355	BE BE	20 45	American Beech American Beech	Fagus grandifolia Fagus grandifolia	Good Good		LANDMARK WOODLAND	R R	¥	REPLACE REPLACE	1454 1455	E SM	12 7	American Elm Silver Maple	Ulmus americana Acer saccharinum	Fair Fair		INVASIVE	S S	Y	-
1356	PH	20	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE	1456	+	6	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	_
1357	BE	13	American Beech	Fagus grandifolia	Dead	x1	WOODLAND	R	¥	-	1457	BC	12	Wild Black Cherry	Prunus serotina	Fair		WOODLAND		Y	-
1358 1359	BE SH	23 11	American Beech Shagbark Hickory	Fagus grandifolia Carya ovata	Good Fair		WOODLAND	R R	¥ 	REPLACE REPLACE	1458 1459	BC BR	55	Wild Black Cherry Bur oak	Prunus serotina Quercus macrocarpa	Good Good		WOODLAND LANDMARK	S S	Y	-
1360	SH	14	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	¥	REPLACE	1460	SM	15	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	<u> </u>
1361	BS	9	Blue Spruce	Picea pungens	Dead		WOODLAND	R	¥	-	1461	E CT	10 19	American Elm Cottonwood	Ulmus americana	Good Fair		INVASIVE INVASIVE	s s	Y	-
1362 1363	PH PH	14 20	Pignut Hickory Pignut Hickory	Carya glabra Carya glabra	Fair Good		WOODLAND LANDMARK	R	¥ ¥	REPLACE REPLACE	1462 1463	СТ	20	Cottonwood	Populus deltoides Populus deltoides	Good		INVASIVE	S	Y	<u> </u>
1364	SH	15	Shagbark Hickory	Carya ovata	Good		WOODLAND	R	¥	REPLACE	1464	SM	23	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1365	PH	21	Pignut Hickory	Carya glabra	Good		LANDMARK	R	¥	REPLACE	1465 1466	SM	16 28	Silver Maple Silver Maple	Acer saccharinum Acer saccharinum	Good Good		INVASIVE	S R	Y	-
1366 1367	PH PH	21 19	Pignut Hickory Pignut Hickory	Carya glabra Carya glabra	Good Fair		LANDMARK LANDMARK	R	<u>Ұ</u> Ұ	REPLACE REPLACE	1467	SM	23	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
1368	SH	10	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	¥	REPLACE	1468	SM	28	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1369	SH	10 7	Shagbark Hickory	Carya ovata	Fair		WOODLAND	R	¥	REPLACE	1469 1470		30 8	Silver Maple American Elm	Acer saccharinum Ulmus americana	Fair Good		INVASIVE	S S	Y	-
1370 1371	B I	+ 12	Basswood Ironwood	Tilia americana Ostrya virginiana	Good Good		WOODLAND LANDMARK	R R	— Y N	REPLACE REPLACE	1471	СТ	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
1372	RO	21	Red Oak	Quercus rubra	Good	no tag	LANDMARK	R	Н	REPLACE	1472	+	6	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1373 1374	RO	20 6	Red Oak	Quercus rubra	Good	no tag	LANDMARK WOODLAND	R R	H N	REPLACE REPLACE	1473 1474	SM	9	Silver Maple Silver Maple	Acer saccharinum Acer saccharinum	Good		INVASIVE	S S	Y	-
1375	RO RO	24	Ironwood Red Oak	Ostrya virginiana Quercus rubra	Good Good	no tag	LANDMARK	R	¥ ¥	REPLACE	1475	_	15	American Elm	Ulmus americana	Good		INVASIVE	S	Y	-
1376	PH	14	Pignut Hickory	Carya glabra	Good		WOODLAND	R	¥	REPLACE	1476	+	6	Red Oak	Quercus rubra	Good		WOODLAND	+	Y	-
1377 1378	BR RO	19 27	Bur oak Red Oak	Quercus macrocarpa Quercus rubra	Good Good		LANDMARK LANDMARK	R	¥	REPLACE REPLACE	1477 1478	RO SM	10 8	Red Oak Silver Maple	Quercus rubra Acer saccharinum	Good Fair		WOODLAND	S S	Y	-
1379	wo	31	White Oak	Quercus alba	Fair	x1	LANDMARK	S	N	-	1479	SM	8	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1380	WO	21	White Oak	Quercus alba	Fair		LANDMARK	S	Υ	-	1480 1481	SU	8	Sugar Maple	Acer saccharum	Good Good		WOODLAND		Y	-
1381 1382	WO SH	18 8	White Oak Shagbark Hickory	Quercus alba Carya ovata	Fair Good	on outside of fence	LANDMARK WOODLAND	S S	Y N	-	1481	SM	8	Ironwood Silver Maple	Ostrya virginiana Acer saccharinum	Fair		INVASIVE	S	Y	-
1383	RO	6	Red Oak	Quercus rubra	Good	no tag	WOODLAND	S	N	-	1483	SM	11	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
1384	В	8	Basswood	Tilia americana	Good		WOODLAND	S	Y Y	-	1484 1485	SM	10 24	Silver Maple Cottonwood	Acer saccharinum Populus deltoides	Fair Fair		INVASIVE	S S	Y	-
1385 1386	BR SH	8	Bur oak Shagbark Hickory	Quercus macrocarpa Carya ovata	Fair Fair		WOODLAND WOODLAND	S S	Y Y	-	1486	E	8	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
1387	SH	7	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	Υ	-	1487	RO	18	Red Oak	Quercus rubra	Good		LANDMARK	S	Y	-
1388 1389	BR PH	7 6	Bur oak Pignut Hickory	Quercus macrocarpa Carya glabra	Good Good		WOODLAND WOODLAND	S S	Y	-	1488 1489	RO RO	14	Red Oak Red Oak	Quercus rubra Quercus rubra	Good		WOODLAND	+	Y	-
1390	RO	20	Red Oak	Quercus rubra	Good	x1 no tag	LANDMARK	S	Y	-	1490		8	Red Oak	Quercus rubra	Good		WOODLAND		Y	-
1391	SH	6	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	Υ	-	1491 1492	SH B	16	Shagbark Hickory	Carya ovata Tilia americana	Good Good		LANDMARK WOODLAND	S S	Y	-
1392 1393	PH BR	8 7	Pignut Hickory Bur oak	Carya glabra Quercus macrocarpa	Fair Fair		WOODLAND WOODLAND	R S	¥ N	REPLACE -	1492		15	Basswood Bur oak	Quercus macrocarpa	Good		WOODLAND	+	Y	-
1394	BR	6	Bur oak	Quercus macrocarpa	Fair		WOODLAND	S	Υ	-	1494	E	6	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
1395	SH	11	Shagbark Hickory	Carya ovata	Good		WOODLAND	S	N	-	1495 1496	B RO	12 9	Basswood Red Oak	Tilia americana Quercus rubra	Good Good		WOODLAND		Y	-
1396 1397	SH BR	8 11	Shagbark Hickory Bur oak	Carya ovata Quercus macrocarpa	Fair Fair		WOODLAND WOODLAND	S R	Y ¥	- REPLACE	1496	RO	17	Red Oak	Quercus rubra	Good		LANDMARK	S	Y	
1398	SH	6	Shagbark Hickory	Carya ovata	Fair		WOODLAND	S	Y	-	1498	+	7	Red Oak	Quercus rubra	Good		WOODLAND	+	Y	-
1399 1401	B RO	14 23	Basswood Red Oak	Tilia americana Quercus rubra	Good Fair		WOODLAND LANDMARK	S R	Y	- REPLACE	1499 1500	BR SH	15 6	Bur oak Shagbark Hickory	Quercus macrocarpa Carya ovata	Fair Good		WOODLAND		Y	-
1401	RO	23	Red Oak	Quercus rubra	Fair Fair		LANDMARK	R	¥	REPLACE	1501	E	15	American Elm	Ulmus americana	Fair		INVASIVE	s	Y	_
1403	RC	10	Red Cedar	Juniperus virginiana	Poor	cut under utility	INVASIVE	R	¥	-	1502		7	Shagbark Hickory	Carya ovata	Fair		WOODLAND	+	Y	-
1404 1405	RC RC	10 9	Red Cedar Red Cedar	Juniperus virginiana Juniperus virginiana	Fair Fair	2 cut under utility x1 cut under utility	INVASIVE INVASIVE	R R	<u>Ұ</u>	-	1503 1504	PH PH	8	Pignut Hickory Pignut Hickory	Carya glabra Carya glabra	Good Fair		WOODLAND		Y	-
1406	₩C	8	White Cedar	Thuja occidentalis	Poor	and activey	WOODLAND	R	¥		1505	SH	6	Shagbark Hickory	Carya ovata	Good		WOODLAND	+	Y	-
1407	₩S	6	White Spruce	Picea glauca	Poor		WOODLAND	R	¥		1506 1507	B RO	14 22	Basswood Red Oak	Tilia americana Quercus rubra	Good Good		WOODLAND	S S	Y	-
1408 1409	SU WS	10 10	Sugar Maple White Spruce	Acer saccharum Picea glauca	Fair Poor		WOODLAND WOODLAND	S R	Y Y	-	1507	RO	19	Red Oak	Quercus rubra Quercus rubra	Good		LANDMARK	S	Y	
1410	SM	11	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-	1509	-	12	Red Oak	Quercus rubra	Good		WOODLAND	+	Y	-
1411 1412	sc sc	10 12	Scotch Pine Scotch Pine	Pinus sylvestris Pinus sylvestris	Very Poor	of	#N/A #N/A	R S	¥	#N/A #N/A	1510 1511	RO RO	18 30	Red Oak Red Oak	Quercus rubra Quercus rubra	Good Good		LANDMARK LANDMARK	S S	Y	-
1412	SH	15	Shagbark Hickory	Carya ovata	Fair		#N/A WOODLAND	S	Y	#1W/A	1512		18	Red Oak	Quercus rubra	Good		LANDMARK	S	Y	-
1414	₩C	8	White Cedar	Thuja occidentalis	Fair		WOODLAND	R	¥	REPLACE	1513	+	13	Pignut Hickory	Carya glabra	Good		WOODLAND	+	Y	-
1415 1416	SM SM	25 25	Silver Maple Silver Maple	Acer saccharinum Acer saccharinum	Fair Good		INVASIVE INVASIVE	S S	Y	-	1514 1515		17	Pignut Hickory Pignut Hickory	Carya glabra Carya glabra	Fair Fair		LANDMARK LANDMARK	S S	Y	-
1417	SM	15	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y		1516		6	Pignut Hickory	Carya glabra	Good		WOODLAND		Y	<u> </u>
1418	SM	28	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-	1517	PH	18	Pignut Hickory	Carya glabra	Fair		LANDMARK	S	Y	-
1419 1420	SM SM	20 28	Silver Maple Silver Maple	Acer saccharinum Acer saccharinum	Fair Fair		INVASIVE INVASIVE	S S	Y	<u> </u>	1518 1519		7	Pignut Hickory American Beech	Carya glabra Fagus grandifolia	Good	x2	WOODLAND	+	Y	-
1421	BR	10	Bur oak	Quercus macrocarpa	Good		WOODLAND	S	Y	<u>-</u>	1520	-	6	American Beech	Fagus grandifolia	Good		WOODLAND	S	Y	-
1422	BR	20	Bur oak	Quercus macrocarpa	Fair		LANDMARK	S	Y	-	1521 1522	l pr	7	Ironwood	Ostrya virginiana	Fair Fair		WOODLAND	S S	Y	<u> </u>
1423 1424	SM SM	23 42	Silver Maple Silver Maple	Acer saccharinum Acer saccharinum	Fair Fair		INVASIVE INVASIVE	S S	Y Y	-	1522		18 8	American Beech Ironwood	Fagus grandifolia Ostrya virginiana	Good		LANDMARK LANDMARK	S	Y	-
1425	SM	42 13	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	¥		1524	BE	14	American Beech	Fagus grandifolia	Good		WOODLAND	S	Y	_
1426	SU	7	Sugar Maple	Acer saccharum	Fair		WOODLAND	R	¥	REPLACE	1525		9	Pignut Hickory	Carya glabra	Fair	<u> </u> •	WOODLAND	+	Y	-
1427 1428	SWO SM	16 24	Swamp White Oak Silver Maple	Quercus bicolor Acer saccharinum	Good Good		LANDMARK INVASIVE	R R	¥ ¥	REPLACE -	1526 1527		16 8	Bur oak Shagbark Hickory	Quercus macrocarpa Carya ovata	Very Poor		LANDMARK WOODLAND	+	Y	-
1429	SM	24	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	¥		1528	WO	8	White Oak	Quercus alba	Good		WOODLAND	S	Y	-
1430	RO	16	Red Oak	Quercus rubra	Good		LANDMARK	R	¥	REPLACE	1529	В	6	Basswood	Tilia americana	Good		WOODLAND	S	Y	-



HUBBELL, ROTH & CLARK, INC CONSULTING ENGINEERS SINCE 1915

11-11-2022 PLAN REVIEW - 80% COMPLETION ADDITIONS AND/OR REVISIONS

CITY OF TROY

DETENTION POND

ORIGINAL PLOT SIZE: ARCH D (24.00 X 36.00 INCHES)

ITEM #6

DATE: December 7, 2022

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: POTENTIAL PLANNED UNIT DEVELOPMENT (PUD) APPLICATION – Concept

Plan discussion, East of Livernois, North of Square Lake (PIN 88-20-03-301-088, 88-20-03-301-025, -024, -023), Section 35, Currently Zoned NN (Neighborhood

Node "Q") and R-1B (One Family Residential) Districts.

The owner of the subject parcel, GFA, is interested in developing a mixed use (residential only) PUD on the site. Planning Department was provided a conceptual site plan describing the potential project.

The site is 5.48 acres in area. Three single family homes presently sit on the property. A PUD would provide the applicant with some flexibility with potential project uses moving forward. The attached memo summarizes the project.

The Planning Commission reviewed a concept at the July 26, 2022 Regular meeting and provided feedback. The applicant revised the concept based on Planning Commission feedback and requested another opportunity to present to the board.

A formal application has not been submitted. The applicant seeks input and direction from the Planning Commission on this matter, prior to moving forward. Formal action is not required.

Please be prepared to discuss this item at the December 13, 2022 Regular meeting.

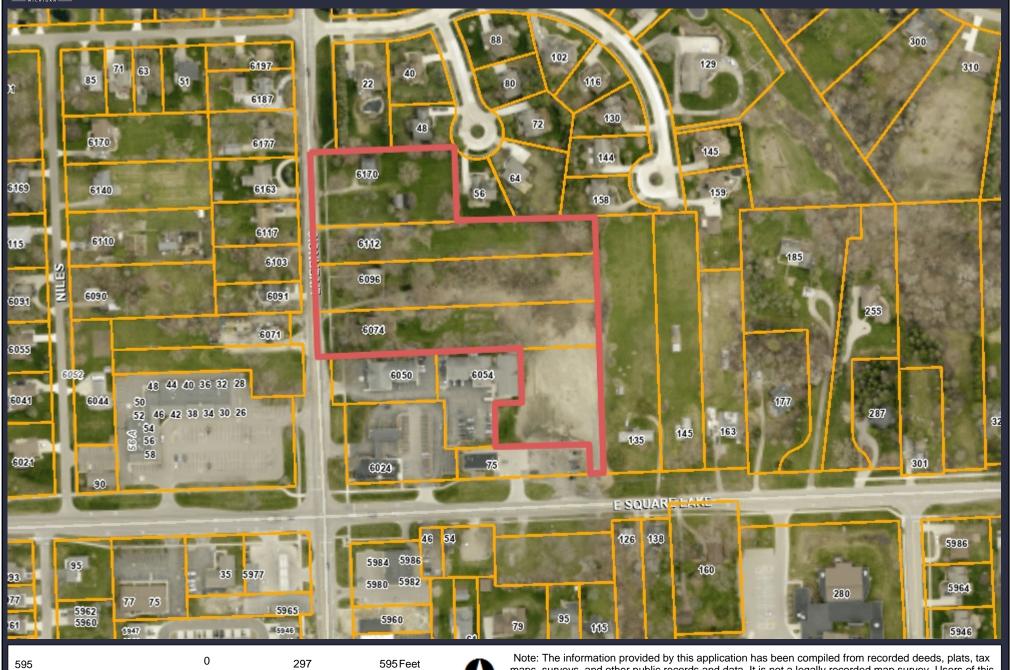
Attachments:

- 1. Maps
- 2. Minutes from July 26, 2022 Planning Commission Regular meeting.
- 3. Memo from Carlisle/Wortman Associates, Inc.
- 4. Miscellaneous information provided by applicant

G:\PUDs\Potential Project\GFA Livernois & Square Lake\GFA Square Lake Concept 2-14-23.docx

TROY

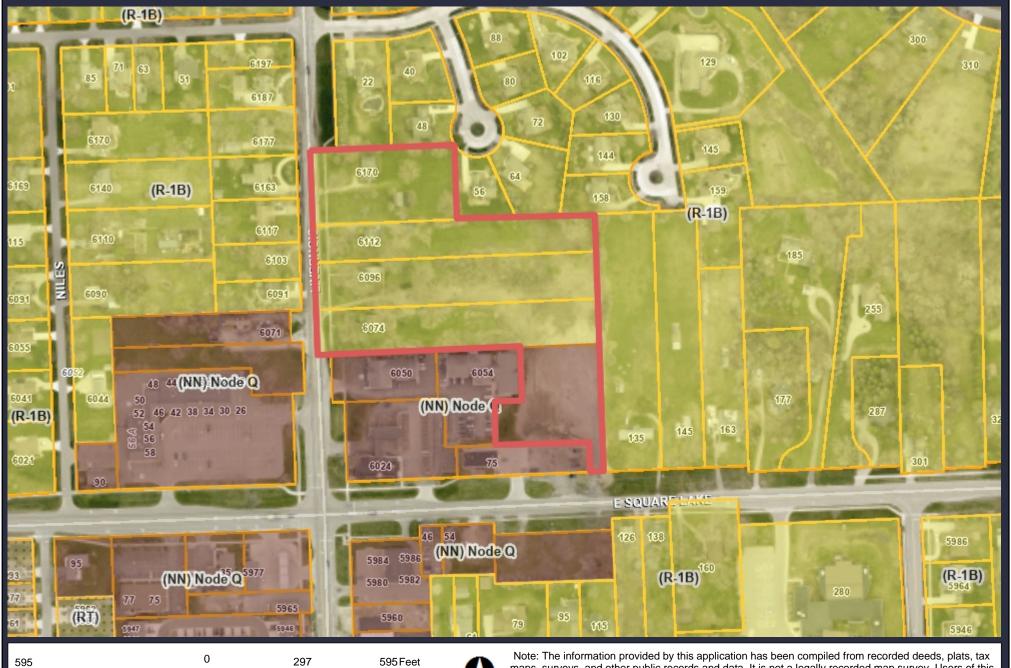
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maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.

TROY

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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.

OTHER ITEMS

6. <u>POTENTIAL PLANNED UNIT DEVELOPMENT (PUD) APPLICATION</u> – Concept Plan Discussion, East of Livernois, North of Square Lake (PIN 88-20-03-301-088, 88-20-03-301-025, -024, -023), Section 35, Currently Zoned NN (Neighborhood Node "Q") and R-1B (One Family Residential) Districts

Mr. Carlisle presented a brief background of the Planned Unit Development application. He addressed the mixed zoning and the 14-unit attached townhome development that was granted approval in 2018. Mr. Carlisle said the applicant is seeking to amend the previously approved plan to incorporate four additional parcels into an overall development of the site. Mr. Carlisle said the concept plan is only for discussion and no action would be taken this evening. He said it is too early in the process to determine data with respect to Zoning Ordinance requirements.

Mr. Carlisle read revised language recently drafted by the Master Plan Neighborhood Node Steering Committee for Neighborhood Node "Q" that relates to primary uses and character of the neighborhood node.

Applicant Gary Abitheira addressed his vision of incorporating the additional parcels with the townhome development and shared his thoughts on various placements of the PUD housing types to blend with the townhomes.

There was discussion, some comments related to:

- Previously approved development; housing types, timing and validity of approval, currently in engineering process.
- Existing homes; historical in nature, not listed in Historic Preservation Chapter.
- Neighborhood Node "Q" toured by Planning Commission and City Council.
- Public benefit; preservation of two existing homes, housing types offered.
- Intent of PUD development; provide flexibility from Zoning Ordinance regulations to allow a more creative and negotiable product.
- Board members expressed opposition to 3-story tall buildings.
- Applicant encouraged to:
 - o Create more green space.
 - o Retain "old Troy" feel of neighborhood.
 - o Create a community feel, a village.
 - o Create a different and unique development.
 - o Let element of historical homes shine on their own.



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

Date: December 6, 2022

RE: GFA Square Lake Concept Review

A concept plan has submitted a Planned Unit Development (PUD) for adjacent to the northeast corner of the intersection of Square Lake and Livernois. The concept plan includes a total of forty-eight (48) units with a mix of housing types. Additional amenities include preservation of two

existing homes on site, homes with first floor master, stormwater management, and small play area. The part of this site that is zoned FB, Form-Based was approved for a fourteen (14) unit attached townhome See section project. below for more information. This project has been expanded to include four parcels currently zoned R-1B.



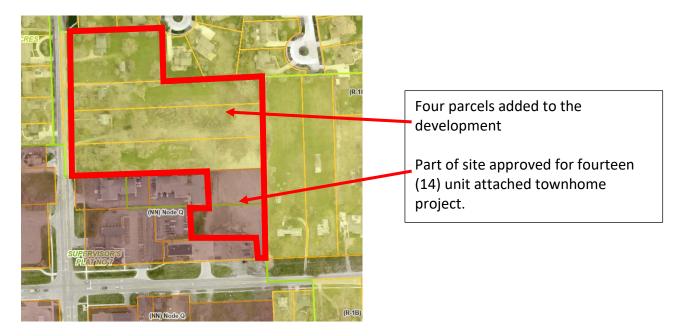
Housing Types

As noted, the project proposes a mix of housing types:

Туре	Number	Notes
Preservation of Existing	2	Existing homes on site
Single-Family Homes		
Single Family Ranch Homes	4	First Floor Master
Two-Story Attached (first	9	First Floor Master
floor Master)		
Two-Story Attached	27	
Townhome		
Two-Story Duplexes	6	
Total	48	

Zoning

The site includes a mix of Form-based zoning and R-1B. The preservation of the single-family homes, the inclusion of the new homes, and the mix of other housing products require this site to be developed as a Planned Unit Development.

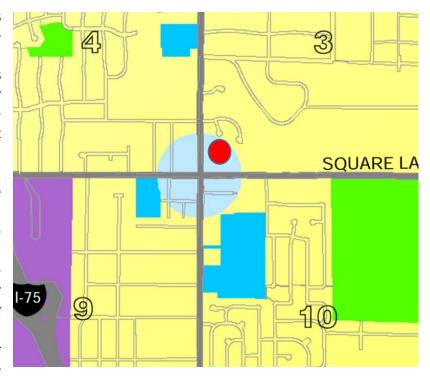


Master Plan

The site is designated as Neighborhood Node on the future land use plan. The Neighborhood Node master plan designation is not parcel specific, but rather shown as a concentric circle approximately within a 1,000 foot radius of the intersection.

Elements of neighborhood node include:

- Neighborhood Nodes are the concentrated, commercial and mixed-use centers situated at major intersections of Troy thoroughfares.
- Development will be denser and taller than the
 - surrounding area, encouraging visual prominence to signal a gathering space.
- Nodes should be generally confined to a 1,000 foot radius from a major intersection.
- The nodes provide uses and spaces that attract and welcome neighborhood residents.
- Buildings should be separated from the right-of-way line by a landscaped greenbelt, one lane of off-street parking or a pedestrian walk, or a combination of these.
- Primary parking areas will be located within rear or interior side yards.
- Off-street parking should be screened from the public right-of-way by a knee wall or low decorative fence with a hedge of plantings.
- Walks will connect adjacent developments and the public sidewalks.
- Well-defined crosswalks with timed signalization will permit safe crossings.
- Flexible use of space allowing modest outdoor gathering spaces, such as plazas, will be encouraged.
- Buildings should be between two and three stories, although one—story structures accommodating gas stations or other special situations may be permitted.
- One-story buildings should have a minimum exterior height of sixteen feet.
- A ground level story should have a minimum height of twelve feet from finished floor to finished ceiling.
- Facades facing major thoroughfares will be treated as fronts and should have a minimum of half transparent glass and special architectural design treatments.
- Fenestration (the arrangement of windows and doors) should be highlighted through the use of awnings, overhangs or trim detailing.

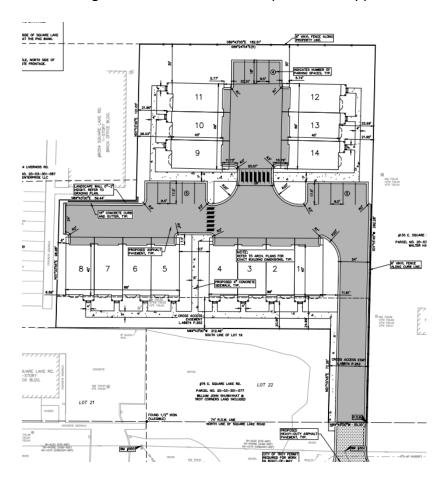


• Lighting will be carefully managed so as not to encroach on adjacent residential areas.

Please note that Planning Commission is considering amendments to the Master Plan section for neighborhood node, including modifying many of these elements.

Approved Plan

As noted the following 14-unit townhome development was approved in 2018.



2018 approved 14-unit site plan

Concept Plan

The Concept Plan was first reviewed by the Planning Commission in July. Discussion included:

- Previously approved development, housing types, timing and validity of approval, currently in engineering process
- Existing homes; historical in nature, and listed in Historic Preservation Chapter
- Neighborhood Node "Q" toured by Planning Commission and City Council
- Public benefit, preservation of two existing homes, housing types offered
- Intent of PUD development, provide flexibility from Zoning Ordinance regulations to allow a more creative and negotiable product
- Planning Commission members expressed opposition to 3-story tall buildings
- Applicant was encouraged to:
 - o Create more green space
 - o Retain "old Troy" feel of neighborhood
 - o Create a community feel, a village
 - Create a different and unique development
 - o Let element of historical homes shine on their own

The applicant has submitted a revised concept plan. Significant changes to the plan include:

- Reduced height of all units to not exceed two-stories
- Reduced number of units by 3
- Added duplex unit type
- Added internal park





GFA Square Lake

PUD Standards

A Planned Unit Development project is viewed as an integrated development concept. To that end, the provisions of this Article are not intended to be used as a device for avoiding the zoning requirements that would otherwise apply, but rather to allow flexibility and mixture of uses, and to improve the design, character and quality of new development. The use of a Planned Unit Development to permit variations from other requirements of this Ordinance shall only be approved when such approval results in improvements to the public health, safety and welfare in the area affected, and in accordance with the intent of this Article.

As set forth in Section 11.01, the intent of the Planned Unit Development option is to permit flexibility in the design and use of residential and non-residential land which, through the implementation of an overall development plan, when applicable to the site, will:

- 1. Encourage developments that will result in a long-term contribution to social, environmental and economic sustainability in the City of Troy.
- 2. Permit development patterns that respond to changing public and private needs.
- 3. Encourage flexibility in design and use that will result in a higher quality of development and a better overall project than would be accomplished under conventional zoning, and which can be accommodated without sacrificing established community values.
- 4. Provide for the long-term protection and/or preservation of natural resources, natural features, and/or historic and cultural resources.
- 5. Promote the efficient use and conservation of energy.
- 6. Encourage the use, redevelopment and improvement of existing sites where current ordinances do not provide adequate protection and safeguards for the site or its surrounding areas, or where current ordinances do not provide the flexibility to consider redevelopment, replacement, or adaptive re-use of existing structures and sites.
- 7. Provide for enhanced housing, employment, recreation, and shopping opportunities for the citizens of Troy.
- 8. Ensure the compatibility of design and use between various components within the PUD and with neighboring properties and uses.
- 9. Ensure development that is consistent with the intent of the Master Plan.

Details:

The concept plan is very conceptual. Details such as architectural quality, elevations, material selection, building height, and onsite amenities are very important and will be reviewed in detail if this project moves forward.

Questions for the Planning Commission Consideration

- 1. Has the revised plan addressed the concerns of the Planning Commission?
- 2. Is the proposed plan consistent with the Master Plan?
- 3. Does the Planning Commission support the proposed mix of housing types? Are there additionally types or changes in types that the Planning Commission thinks should be considered?
- 4. Is the proposed plan consistent with the PUD standards?
- 5. Are there site plan changes that the applicant should consider?
- 6. Are there other considerations that should be discussed with the applicant?

I look forward to discussing this plan at your December meeting.

Sincerely,

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





SQUARE LAKE ROAD





ITEM #7

DATE: January 27, 2023

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: PRELIMINARY SITE PLAN REVIEW (SP JPLN2022-0008) - Proposed The

Westington II, South of Wattles, East of Crooks (870 Barilane Drive; PIN 88-20-21-

101-009), Section 21, Currently Zoned NN (Neighborhood Node "I") District

The petitioner Troy Westington LLC submitted the above referenced Preliminary Site Plan application for a 16-unit, 2 story multi-family apartment building. Multi-family is permitted by right in the NN (Neighborhood Node "I") Zoning District.

Westington Phase I received Preliminary Site Plan Approval on December 8, 2020 and is currently under construction. Phase I included four 3-story buildings and 102 units.

In 2021, the applicant submitted a Preliminary Site Plan application for the same parcel that included two15-unit apartment buildings. The application was denied by the Planning Commission on January 25, 2022. This is a new application.

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. Preliminary Site Plan.

G:\SITE PLANS\SP JPLN2022-0008 WESTINGTON PHASE II 2022 SUBMITTAL\PC Memo 2023 02 14 Westington II.docx

PROPOSED RESOLUTION

PRELIMINARY SITE PLAN REVIEW (SP JPLN2022-0008) - Proposed The Westington II, South of Wattles, East of Crooks (870 Barilane Drive; PIN 88-20-21-101-009), Section 21, Currently Zoned NN (Neighborhood Node "I") District

(100 g .100111000 1) = 1011101	
Resolution # PC-2022-02- Moved by: Seconded by:	
RESOLVED , That Preliminary Site Plan Approval, pursuant to Article 8 of Ordinance, as requested for the proposed The Westington II 16-unit apartment South of Wattles, East of Crooks, Section 21, Currently Zoned NN (Neighborh District, be granted, subject to the following:	development,
	_) or
(denied, for the following reasons:	_) or
(postponed, for the following reasons:	_)
Yes: No:	

MOTION CARRIED/FAILED



GIS Online



835 0 417 835 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.

TROY

GIS Online



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

Date: January 13, 2022 January 20, 2022 March 22, 2022 September 13, 2022

For City of Troy, Michigan

Applicant: DesignHaus

Project Name: The Westington Phase 2

Plan Date: July 15, 2022

Location: Wattles Rd, just east of Crooks Rd

Zoning: Neighborhood Node (NN) – I

Action Requested: Site Plan Approval

SITE DESCRIPTION

The subject site is located on the south side of Wattles Road, just east of Crooks Road. The site is approximately 1.20 acres in area and is proposed for development as the Phase 2 component of the Westington multi-family development project. Phase 1 of the Westington project is currently under construction. The subject site is currently vacant, and the northeastern portion is located within a 100-year floodplain. Proposed Phase 2 is directly east of Phase 1.

The applicant is proposing to construct one (1) 16-unit multi-family building on the site. The building will be 2.5 stories in height. Interior drives through the Phase 1 component of the Westington project will provide access to the site, in addition to access via 3902 Crooks (proposed for the Hills West Apartment development, and cross-access with the 7-Eleven site. There is no direct access to Barilane Court. The property is zoned Neighborhood Node (NN) and multiple family residential is a permitted use.

The Westington Phase 2 September 15, 2022

The properties to the east and south of the subject site are zoned R1-B, One Family Residential. The adjacent R1-B properties to the northeast and southeast are in use as single-family dwellings. Most of the property to the east of the site is undeveloped woodland and is within the 100-year floodplain, which provides a natural buffer. The southern portion of the site is bounded by a private drive.

Site Location:



The Westington Phase 2 September 15, 2022



Proposed Uses of Subject Parcel:

Sixteen (16) multi-family dwelling units.

Current Use of Subject Property:

Single Family Home

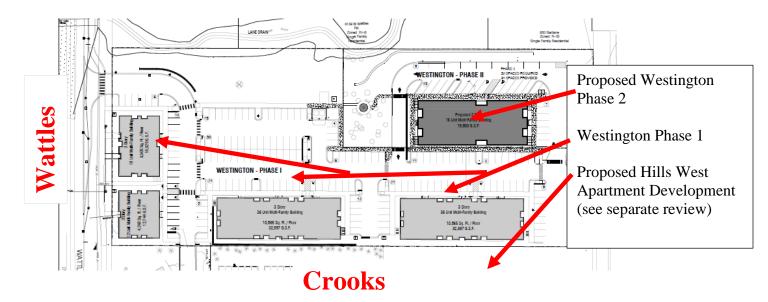
Current Zoning:

The property is currently zoned NN, Neighborhood Node District.

Surrounding Property Details:

Direction	Zoning	Use
North	NN, Neighborhood Node	Multi-Family Residential
South	R1-B, Single Family	Single Family Residential / Place of Worship
East	R1-B, Single Family	Single Family Residential / Vacant
West	NN, Neighborhood Node	Multi-Family Residential

SITE CONTEXT



PREVIOUS PLANNING COMMISSION REVIEW

The Planning Commission discussed the project at the January 25, 2022 meeting. There was lengthy discussion on a variety of topics including traffic, guest parking, tree mitigation, open space/landscaping calculations, compliance with Design Standards, compliance with Site Plan Review Standards, cross-access, Neighborhood Node zoning designations, intensity of Site Type A and Site Type B.

See the January 22 meeting minutes for more details.

After discussion, the Planning Commission, the Planning Commission moved:

That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed The Westington II 30-unit apartment development, South of Wattles, East of Crooks, (870 Barilane Drive; PIN 88-20-21-101- 009), Section 21, Currently Zoned NN (Neighborhood Node "I") District, be denied, for the following reasons:

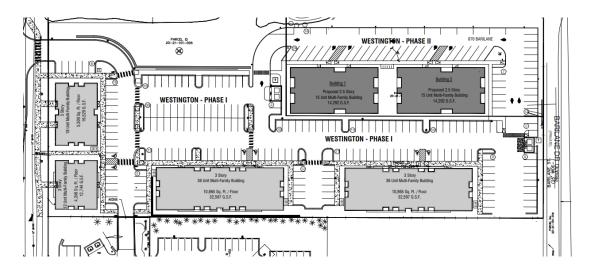
- 1. The Planning Commission does not approve the tree mitigation requirement.
- 2. The open space fails the Zoning Ordinance calculations.
- 3. The site Design Standards fail to promote public health, safety and welfare, primarily due to traffic issues.
- 4. The project fails to meet the transition requirements of the Zoning Ordinance as well as the density requirements.

There was discussion on the motion on the floor.

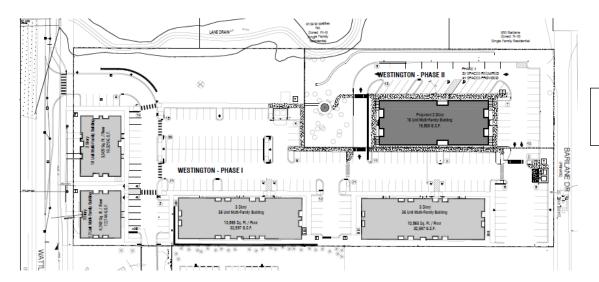
Chair Lambert said his main concerns are the destruction of the trees on the site and his belief there is not enough of a transition going from the higher height buildings that are closer to the street as proposed to where it comes up to residential areas farther to the east and to the south.

The motion passed 8-0.

CHANGES SINCE LAST PLANNING COMMISSION REVIEW



January 2022 Plan



August 2022 Plan

The applicant has proposed the following changes to the Site Plan since the last submittal:

- Combined two 14,000 sq/ft buildings into one (1) 19,800 sq/ft building
- Reduced the number of units from twenty (20) to sixteen (16)
- Removed parking and reconfigured drive-aisle along north side of the building
- Providing 9 guest spaces
- Preserved 24 trees on site, increase from 6 on previous plan
- Decreased building coverage by over 3% to a total of 19%
- Increased overall open space by 7% for a total of 40%
- Decreased lot coverage by 5% for a total of 25%

NATURAL FEATURES

Topography: A topographic survey has been provided on sheet C-2.0. Elevations

decrease in the northwest corner of site towards the floodplain.

Wetlands: There are no wetlands on site.

Floodplain: An existing 100-year floodplain is located at the northwest corner of the

site, with two different designations as to where the edge of said floodplain lies. The applicant is proposing to continue the retaining wall

that was done for Phase 1 to accommodate floodplain on this site.

Floodplain confirmation will be determined as part of final engineering.

Woodlands: A tree inventory and replacement plan has been provided on Sheet L100,

with replacement trees shown in the landscape plan on Sheet L101.

Replacement Details		
Protected Tree	Inches Removed	Replacement Required
Landmark	165 inches	165 inches
Woodland	354 inches	177 inches
Preservation/Mitigation	Inches Preserved	Credit
Landmark / Woodland	272	544 inches
Protected Replacement Required	342 Inches	
Preservation Credit	544 Inches	
Total	+ 202-inch credit	
Total Tree Mitigation	Not Applicable	

Items to be addressed: None

SITE ARRANGEMENT

The applicant is proposing to construct one (1) 16-unit multi-family building. The building is 2.5 stories in height. The building is located on the western side of the site, with parking and circulation drives to the south and east.

The site is adjacent to a 7-Eleven, a medical office, and single-family residential zoned Neighborhood Node to the east; a single-family residential zoned Neighborhood Node to the southwest; a single-family residential zoned Neighborhood Node to the north; and the eastern

portion of the site is located within the 100-year floodplain and provides a natural buffer to the R1-B property to the east.

Items to be addressed: None.

AREA, WIDTH, HEIGHT, SETBACKS

Table 5.03.B.3, Building Form C, Standards Applicable to All Districts of the Zoning Ordinance establishes the dimensional requirements for the NN, Neighborhood Node District. The requirements of Building form C and the proposed dimensions are shown in the following table.

	Required	Provided	Compliance
Side (East)	N/A, building may be placed up to property line	74.5 feet	Complies
Side (north)	N/A, building may be placed up to property line	87 feet	Complies
Rear (South)	30-foot minimum setback	93 feet	Complies
Building Height	Any building, or portion of a building, on a parcel abutting a one-family residentially zoned parcel shall not exceed 2.5-stories, 30 feet in height.	2.5 stories, 26 feet (to mid-point of ridge)	Complies but see discussion below
Lot Coverage (Building)	30%	19% (Phase 2 only) 20.4% (Project Total)	Complies
Minimum Open Space	20%	40.2% (Phase 2 only) 32.43% (Project Total)	Complies
Parking Location	Cannot be located in front yard	Parking lots not in front yard	Complies

Building Height and Story Discussion:

Because this site is adjunct to one-family residentially zoned property, the applicant shall comply with Section 5.06.E.3.c, which limits height and stories to 2.5 stories and 30-feet. As set forth in the Zoning Ordinance, building height is defined as the following:

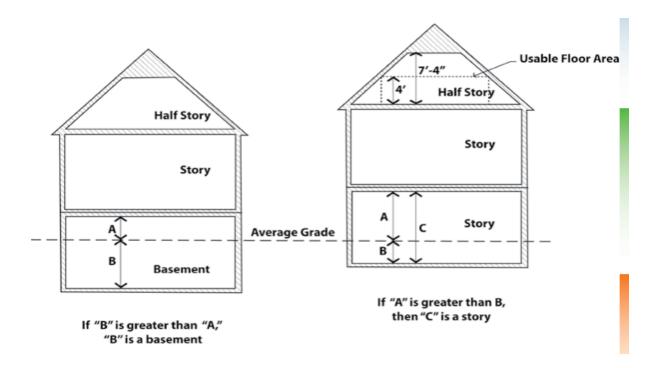
The term "building height" shall mean the vertical distance as measured from the established grade to the highest point of the roof for flat roofs, including walls or parapets that extend above the horizontal roof surface; to the deck line of mansard roofs; and to

the average height between eaves and ridge for gable, hip, and gambrel roofs. When a non-residential building is located on sloping terrain, the height may be measured from the average ground level of the grade at the building wall. When a residential building is located on sloping terrain, the height shall be measured from the highest grade adjacent to the front of the structure to the highest point of the roof for flat roofs, including walls or parapets that extend above the horizontal roof surface; to the deck line of mansard roofs; and to the average height between eaves and ridge for gable, hip, and gambrel roofs. For residential buildings, the major or main roof over the living area shall be used to determine building height, with the following exception: when the total horizontal roof area of dormers and/or minor gables enclosing the living area exceeds twenty (20) percent of the total horizontal area of the roof to which such dormers or gables are attached, the predominant height of such dormers or gables shall be used as the basis for the determination of the building height.

Story and half-story is defined as the following:

STORY: That part of a building, except a mezzanine, included between the surface of one (1) floor and the surface of the next floor, or if there is not a floor above, then the ceiling next above. A story thus defined shall not be counted as a story when more than fifty (50) percent by cubic content, is below the height level of the adjoining ground.

STORY, HALF: An uppermost story lying under a sloping roof, the usable floor area of which, at a height of four feet above the floor, does not exceed two-thirds (2/3) of the floor area in the story directly below and the height above at least two hundred (200) square feet of floor space is seven feet four inches (7'4"). When the usable floor area of such a story, at a height of four (4) feet above the floor, does exceed two-thirds (2/3) of the floor area of the story directly below, it shall be counted as a full story.



During the review process, we had asked the applicant to confirm that the building complied with the 2.5 story maximum. The applicant's architect provided additional plans and the required calculations. The City's Building Official reviewed the plans and the calculations and confirmed that the building meets the 2.5 story requirement as defined in the Zoning Ordinance. The applicant's architect plans and calculations, and the Building Official's response are provided in your packet.

Items to be addressed: None.

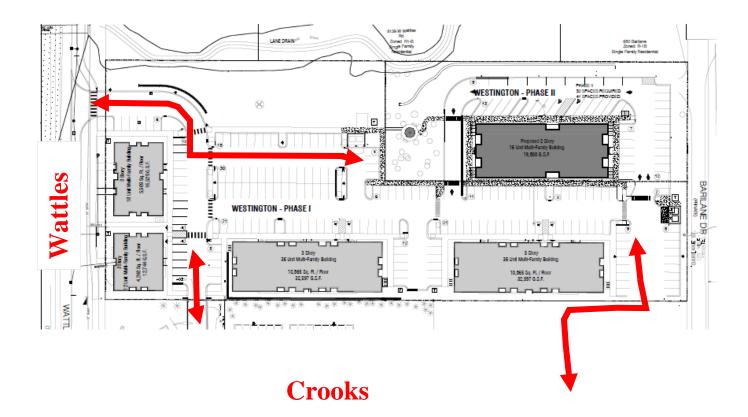
PARKING

Section 13.06.G of the Zoning Ordinance requires:

	Required	Provided
Residential (General):		
2 spaces per unit	Phase 2: 16 units = 32	Phase 2: 41 spaces
	spaces	
		Combined: 238 spaces
	Combined: 218 spaces	
Barrier Free	2	2
Bicycle Parking	2	
Loading	0	0
Total	32 spaces (phase 2)	218 spaces
	Combined: 218 spaces	

Items to be Addressed: None

SITE ACCESS AND CIRCULATION (Vehicular and Pedestrian)



Interior drives through the Phase 1 component of the Westington project will provide access to the site. Access to Phase 1 is via Wattles Road, 7-11 cross-access, and through 3902 Crooks (proposed to be developed as Hills West, see separate review).

Items to be addressed: None

TRAFFIC

As directed by the City the applicant has provided a Traffic Impact Study for both the Westington Phase II and the Hills West developments. Please note that the traffic study has not been revised as the applicant has reduced the overall number of units and thus reduced the traffic impact. The traffic review is based on 162 units. The revised total is 147 units

Summary:

The proposed development includes three (3) multi-family residential homes developments: Westington Phase I, Westington Phase II, and West Hills. The number of peak hour (AM and PM), and daily vehicle trips that would be generated by the proposed residential were forecast based on data published in the Institute of Transportation Engineers (ITE) Trip Generation Manual 11 th Edition, and the ITE Trip Generation Handbook, 3rd Edition. The site trip generation was reviewed and approved by the City of Troy (OHM) prior to use in the analysis and is summarized in Table E2.

Land Use	Phase	Amount (units)	Average Traffic (vpd)	Daily	AM (vph	Peak)	eak Hour		PM Peak (vph)		
					In	Out	Total	In	Out	Total	
Multifamily Residential	Westington Phase I	102	701		11	35	46	36	21	57	
	Westington Phase II	16	206		4	10	14	11	6	17	
	West Hills	29	206		3	10	13	10	6	16	
Total Trips		162	1,114		18	55	73	<i>57</i>	33	90	

To/From	Via	AM	PM
North	Crooks Road	31%	28%
South	Crooks Road	39%	41%
East	Wattles Road	14%	16%
West	Wattles Road	16%	15%
Total		100%	100%

ANALYSIS SUMMARY

The conclusions of this TIS are as follows:

- 1. Existing Conditions (2021): The result of the existing condition analysis indicates that all the study intersection approaches will operate at LOS D or better with the exceptions as follows:
 - Crooks Road & Wattles Road: The eastbound and westbound left and through movements are operating at LOS E during both AM and PM peak periods. Review of SimTraffic network simulations indicates long vehicle queues for these movements especially for eastbound through movement during the PM peak hour; however, these vehicle queues were observed to dissipate and were not present throughout the peak periods.
 - Crooks Road & 7-11 Drive: Although the westbound egress movements at 7-11 driveway currently operate at LOS D or better during the peak periods, long vehicle queue are observed on the site driveway during the PM peak hour. The northbound traffic at Wattles Road intersection occasionally extends past this driveway during peak periods and blocks the egress movements at the 7-11 Drive.

This causes westbound egress vehicles to wait longer to find gaps within the through traffic along Crooks Road.

- 2. Background Conditions (2023): The results of the background conditions analysis indicates that all study intersection approaches and movements will continue to operate in a manner similar to existing conditions with the following exceptions:
 - Crooks Road & Wattles Road: The southbound left-turn movement is expected to operate in LOS E during the PM peak hour at the intersection of Crooks Road & Wattles Road intersection due to the traffic growth in background (2023) conditions. However, the projected additional delay is only 1.6 seconds, which is not significant.
- 3. Future Conditions (2023): The results of the future conditions analysis indicates that with the addition of site generated traffic, all the study intersection approaches and delays continue to operate in a manner similar to background conditions with the exceptions as follows:
 - Crooks Road & Wattles Road: The overall intersection is expected to operate at LOS E during the PM peak hour. However, the overall delay at this intersection is expected to increase by only 0.4 seconds, which will be indiscernible from background condition intersection operations.
 - Crooks Road & Site Drive (West Hills): The westbound egress movements at West Hills driveway are expected to operate at LOS E during the PM peak periods with a 95th percentile queue length of 43 feet (2 vehicles), which is not significant. These vehicles will be contained within the project site and will not impact traffic operations at the adjacent streets. Moreover, the review of SimTraffic network simulation indicates the egress vehicles are able to find adequate gaps within through traffic along Crooks Road.

RECOMMENDATIONS

The results of this study indicate that with the addition of site generated traffic, all the study intersection approaches and delays will continue to operate in a manner similar to existing conditions with minor additional delays. Therefore, no mitigation measures are recommended to accommodate the site generated traffic volumes.

The applicant TIS was reviewed by OHM, the City's Traffic Consultant. OHM concludes:

I have reviewed the Traffic Impact Study for the Westington & West Hills development site, a proposed residential development located at the corner of Crooks and Wattles Roads. The applicant has proposed 162 dwelling units. The Traffic Impact Study was prepared by Fleis & Vandenbrink and is dated November 1, 2021.

OHM recommends approval of the TIS. While there are a few corrections and changes that could be made for this report, they are minor and would not impact the conclusions contained in the TIS.

Items to be addressed: None

LANDSCAPING

A landscaping plan has been provided on Sheet L101. The following table discusses the development's compliance with the landscape requirements set forth in Section 13.02.

	Required:	Provided:	Compliance:
East Property Line:			
Landscape buffering: Required buffering between two differentiating land uses. Alternative 1 or 2.	1 large evergreen every 10 feet or 1 narrow evergreen every 3 feet. Alternative screening method may be considered by the Planning Commission.	1 narrow evergreen every 3 feet.	Complies
Southeast property line: (adjacent to existing single-family home)			
Landscape buffering: Required buffering between two differentiating land uses. Alternative 1 or 2.	1 large evergreen every 10 feet or 1 narrow evergreen every 3 feet. Alternative screening method may be considered by the Planning Commission.	1 narrow evergreen every 3 feet along northern property line.	Complies
West Property Line:			
<u>Landscape</u> buffering: None required	None required	A variety of trees and bushes, numbering approx. 164 plants.	Complies
South Property Line			
Required buffering between two differentiating land uses. Alternative 1 or 2.	1 large evergreen tree every 10 feet	12 evergreen trees	Complies
Overall			
Site landscaping:	20%	40%	Complies

A minimum of twenty percent		
(20%) of the site area shall be		
comprised of landscape		
material. Up to twenty-five		
percent (25%) of the required		
landscape area may be brink,		
stone, pavers, or other public		
plaza elements, but shall not		
include any parking area or		
required sidewalks.		

<u>Transformer / Trash Enclosure:</u>

The applicant has indicated a central trash enclosure. There will be one trash enclosure with two trash containers contained within a 6-foot-high masonry brick wall.

Items to be Addressed: None

PHOTOMETRICS

A photometric plan has been provided. A total of five (5) building light fixtures are proposed, along with four (4) pole-mounted light fixtures.

Items to be Addressed: None.

FLOOR PLAN AND ELEVATIONS

Floor plans and elevations have been provided on sheets A100, A101, A102, and A200,. The elevations provided show architectural details, variations in material and pattern (brick, hardiboard siding, and limestone headers roof), as well as general color scheme.

Items to be Addressed: None

DESIGN STANDARDS AND SITE PLAN REVIEW STANDARDS

The Neighborhood Node design standards as well as Site Plan review standards provide the Planning Commission with direction when reviewing the proposed site plan and design features of this development.

Section 5.06.E. outlines Design Standards:

- 1. Building Orientation and Entrance
- 2. Ground Story Activation
- 3. Transitional Features
- 4. Site Access, Parking, and Loading

Please see Section 5.06.E for standard details.

<u>Section 8.06 outlines Site Plan Review Design Standards.</u>

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

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

SUMMARY

As part of the deliberation, the Planning Commission and applicant shall discuss:

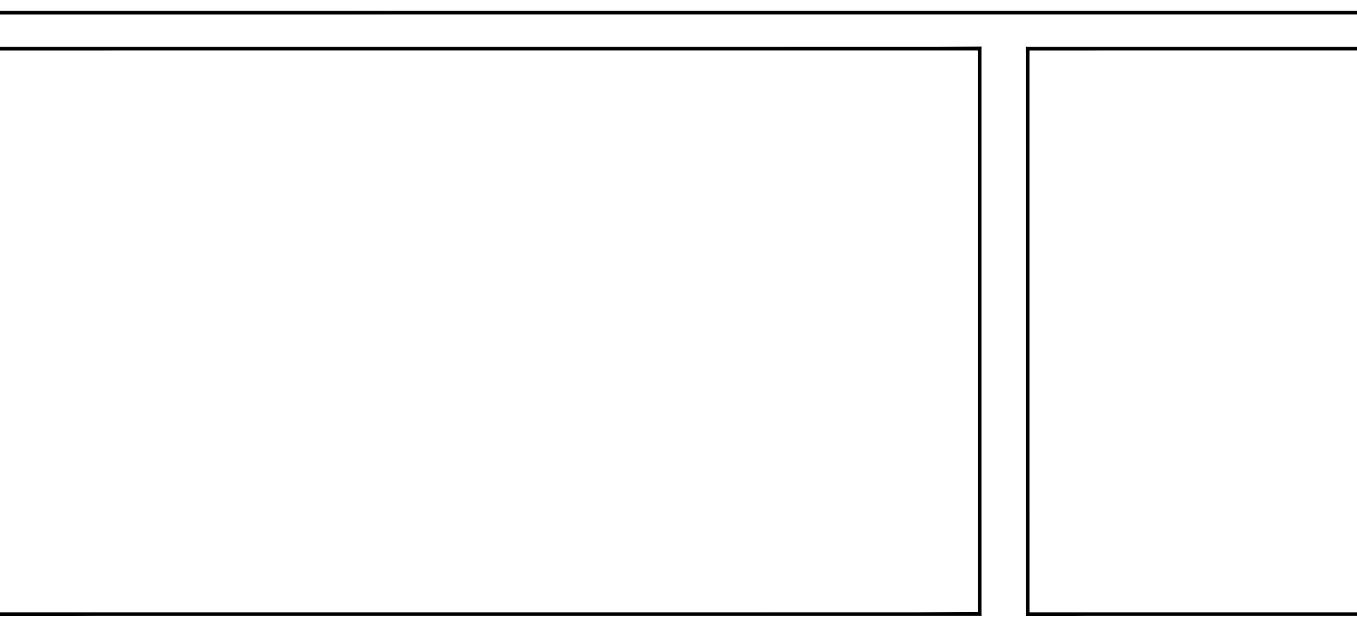
- 1. Compliance with Design Standards
- 2. Compliance with Site Plan Review Standards

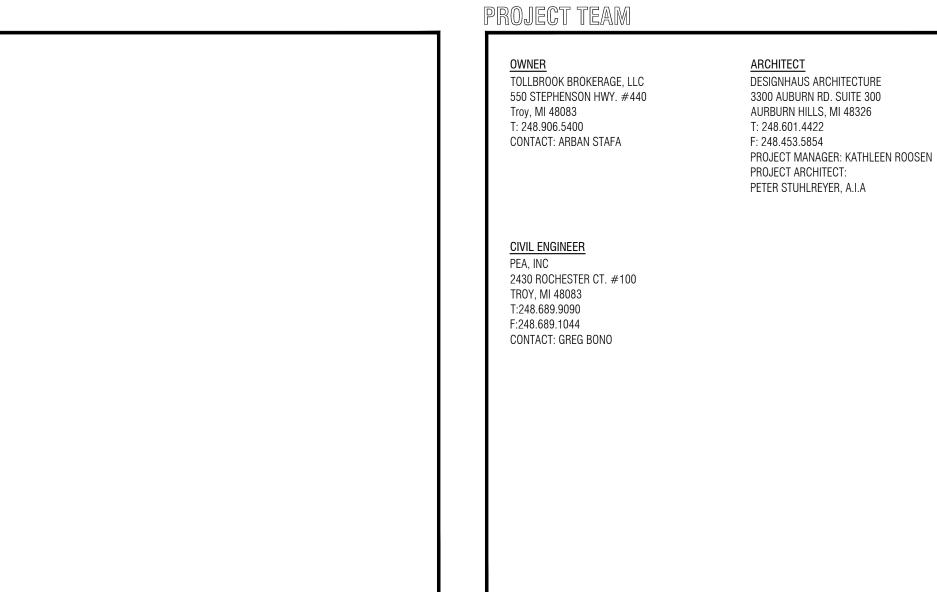
Sincerely,

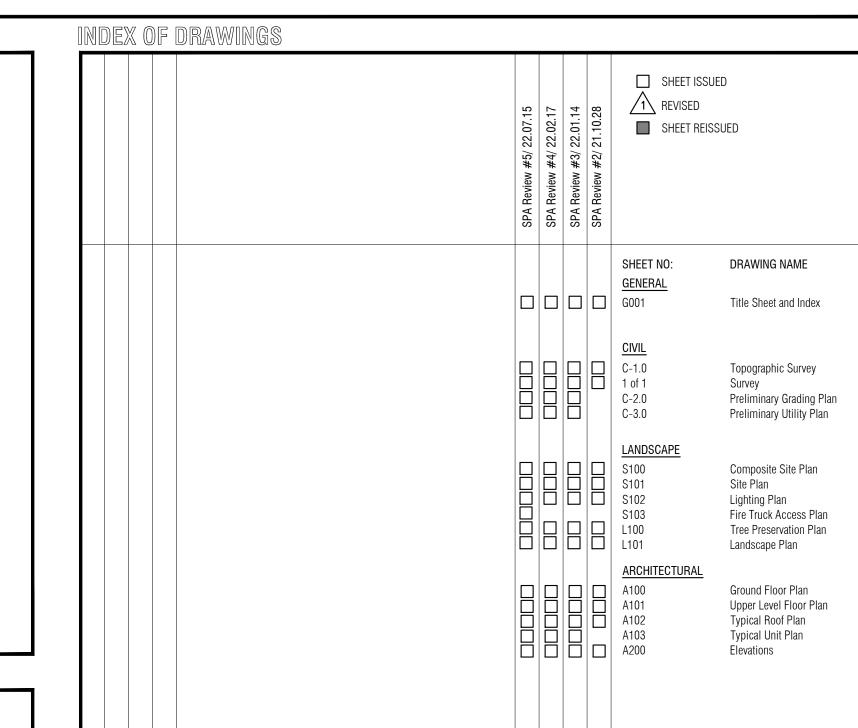
CARLISLE/WORTMAN ASSOC., INC. Benjamin R. Carlisle, LEED AP, AICP

Westington Phase II

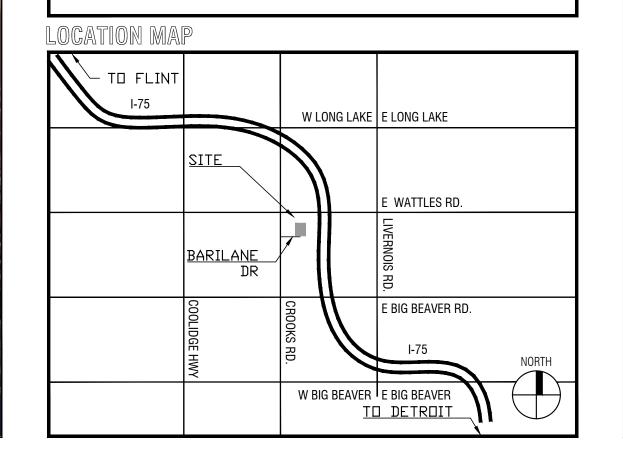
870 Barilane Dr. Troy, MI 48084











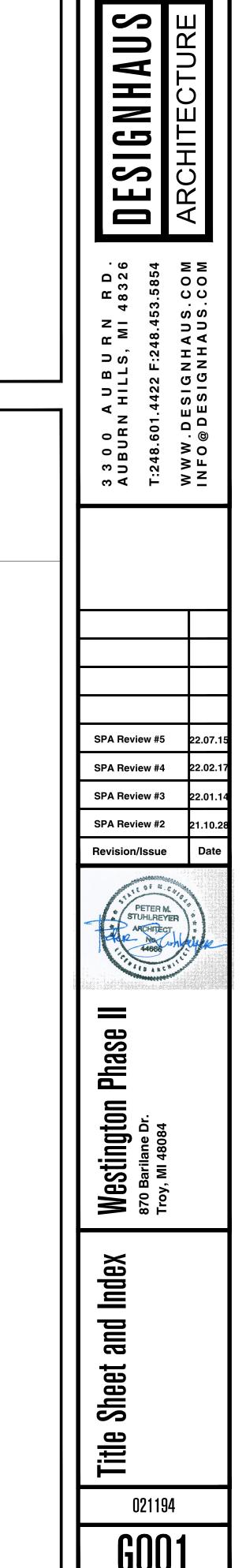
STATEMENT OF SELECTED DESIGN PROFESSIONAL

CHARGE FOR REVIEW AND APPROVAL.

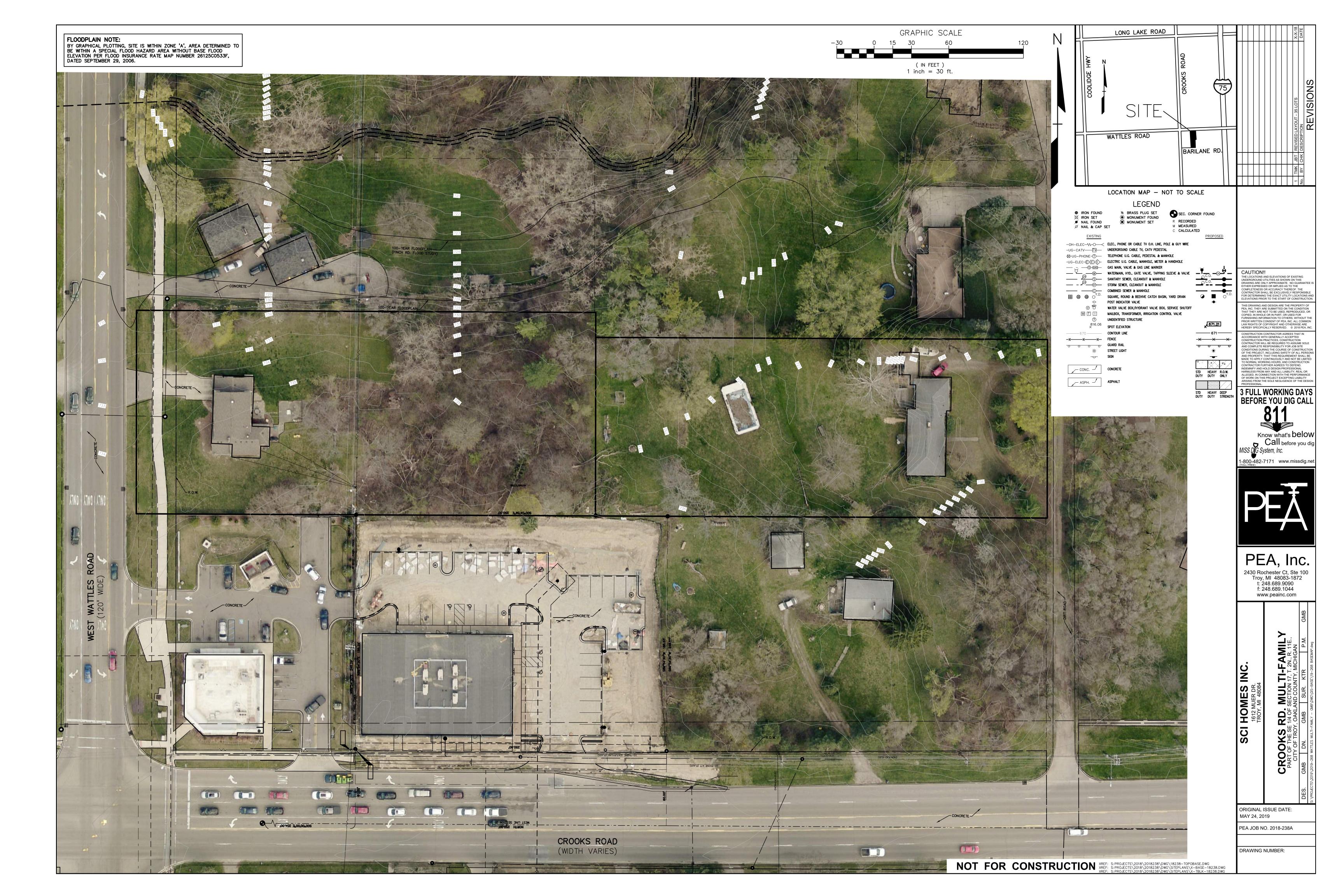
PETER STUHLREYER. A.I.A.
MICHIGAN IDENTIFICATION # 44668
DESIGNHAUS ARCHITECTURE

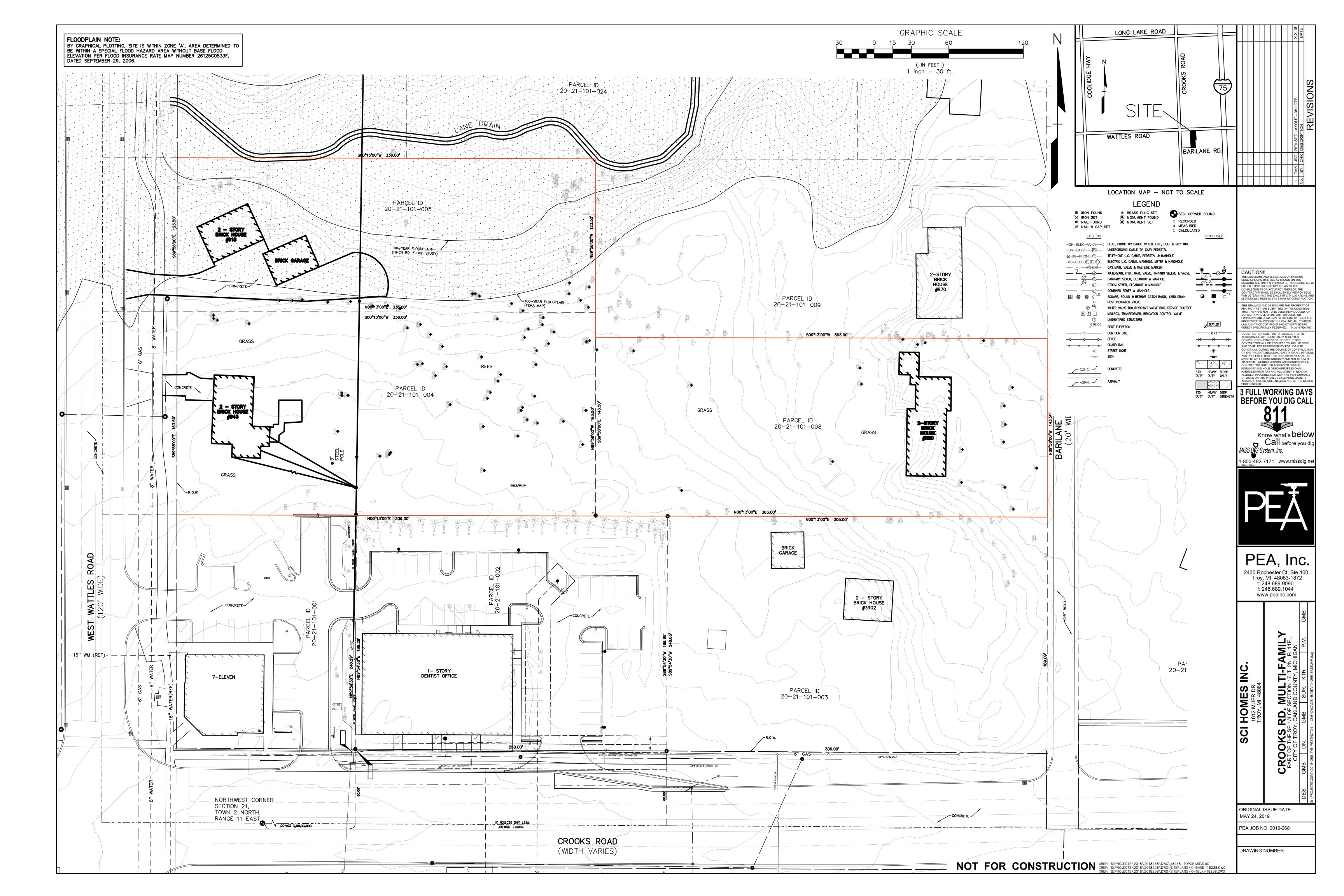
REGISTERED DESIGN PROFESSIONAL IN CHARGE:

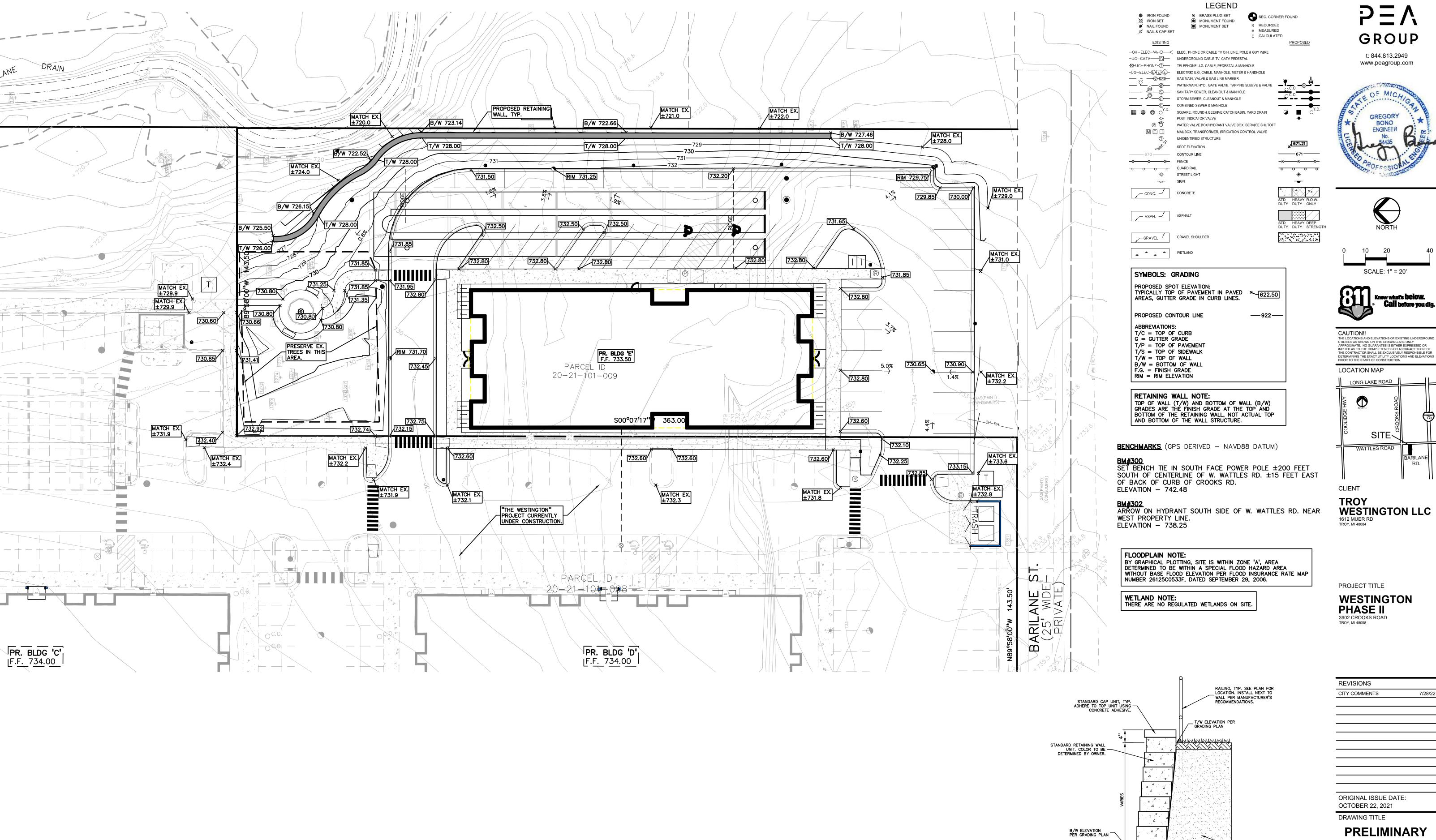
THESE CONSTRUCTION DOCUMENTS WERE PREPARED FOR COMPLIANCE WITH THE MICHIGAN CONSTRUCTION CODES IN EFFECT AT THE TIME OF PERMIT SUBMITTAL. ALL ENGINEERS, CONTRACTORS AND SUPPLIERS INVOLVED WITH THIS PROJECT SHALL COMPLY WITH THE SAME CODES ISSUED AND APPROVED CODE MODIFICATIONS AND/OR MUNICIPAL CONSTRUCTION BOARDS OF APPEALS RULINGS AND WHENEVER REQUIRED SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS CLEARLY DESCRIBING COMPLIANCE TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE



Kat Roosen







NOTE:

MANUFACTURER.

THIS DETAIL IS A GENERIC RETAINING WALL SECTION ILLUSTRATING THE MATERIALS TO BE USED IN THE WALL CONSTRUCTION. THE FINAL ENGINEERING OF THE WALL COMPONENTS, FOUNDATIONS, MECHANICALLY STABILIZED EARTH AND GEOTECHNICAL FABRICS SHALL BE THE RESPONSIBILITY OF THE RETAINING WALL MATERIAL

CONTRACTOR MUST SUBMIT SHOP DRAWINGS AND SITE SPECIFIC WALL CALCULATIONS OF PROPOSED WALL SEALED BY A PROFESSIONAL ENGINEER FOR APPROVAL.

REVISIONS CITY COMMENTS ORIGINAL ISSUE DATE: OCTOBER 22, 2021 DRAWING TITLE **PRELIMINARY GRADING PLAN**

DRAINAGE AGGREGATE

— PER MANUFACTURER

DETEAILS

INSTALL GEOTEXTILE FILTER FABRIC BEHIND WALL UNITS PER MANUFACTURER DETAILS

NOT TO SCALE

PERFORATED UNDERDRAIN
PER MANUFACTURER DETAILS

FINISH GRADE -

TYPICAL RETAINING WALL SECTION

GROUP

t: 844.813.2949

ENGINEER

SCALE: 1" = 20'

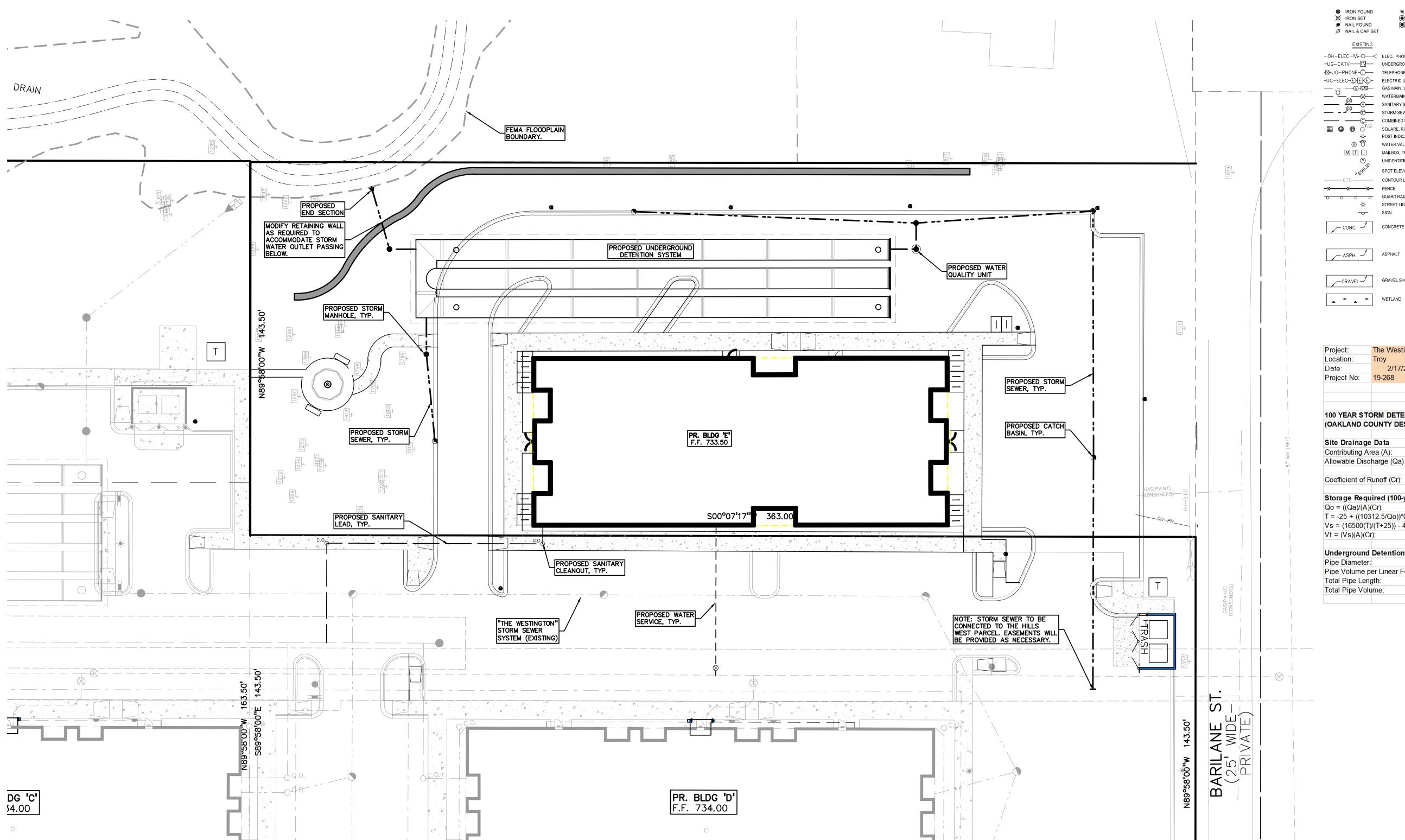
SITE

WATTLES ROAD

www.peagroup.com

2019-268 PEA JOB NO. P.M. GMB DAS DES. GMB DRAWING NUMBER:

C-2.0



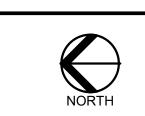
LEGEND SEC. CORNER FOUND IRON FOUND BRASS PLUG SET
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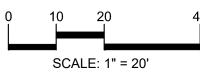
Project:	The Westington	n - Phas	se 2	
Location:	Troy			
Date:	2/17/2022			
Project No:	19-268			
100 YEAR STO	ORM DETENTION	N DES	IGN	
(OAKLAND CO	DUNTY DESIGN	METH	OD)	
Site Drainage				
Contributing Ar			1.874	
Allowable Disc	harge (Qa)		0.37	cfs (0.2*area)
Coefficient of R	Runoff (Cr):		0.72	
Storage Regu	ired (100-yr St	orm)		
Qo = ((Qa)/(A)	(Cr):		0.27	cfs/acre impervi
T = -25 + ((103)	12.5/Qo))^0.5:		170.43	minutes
Vs = (16500(T)	/(T+25)) - 40Qo	(T):	12,549	cf/acre impervio
Vt = (Vs)(A)(Ct)	r) :		16,939	cft
Underground	Detention Stor	rage Pi	rovided	
Pipe Diameter:			96	in
Pipe Volume p			50.265	cft
Total Pipe Len	-		552	
Total Pipe Volu	ımo:		27,747	cff



ENGINEER

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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. **LOCATION MAP** LONG LAKE ROAD WATTLES ROAD

CLIENT

TROY WESTINGTON LLC 1612 MUER RD TROY, MI 48084

PROJECT TITLE

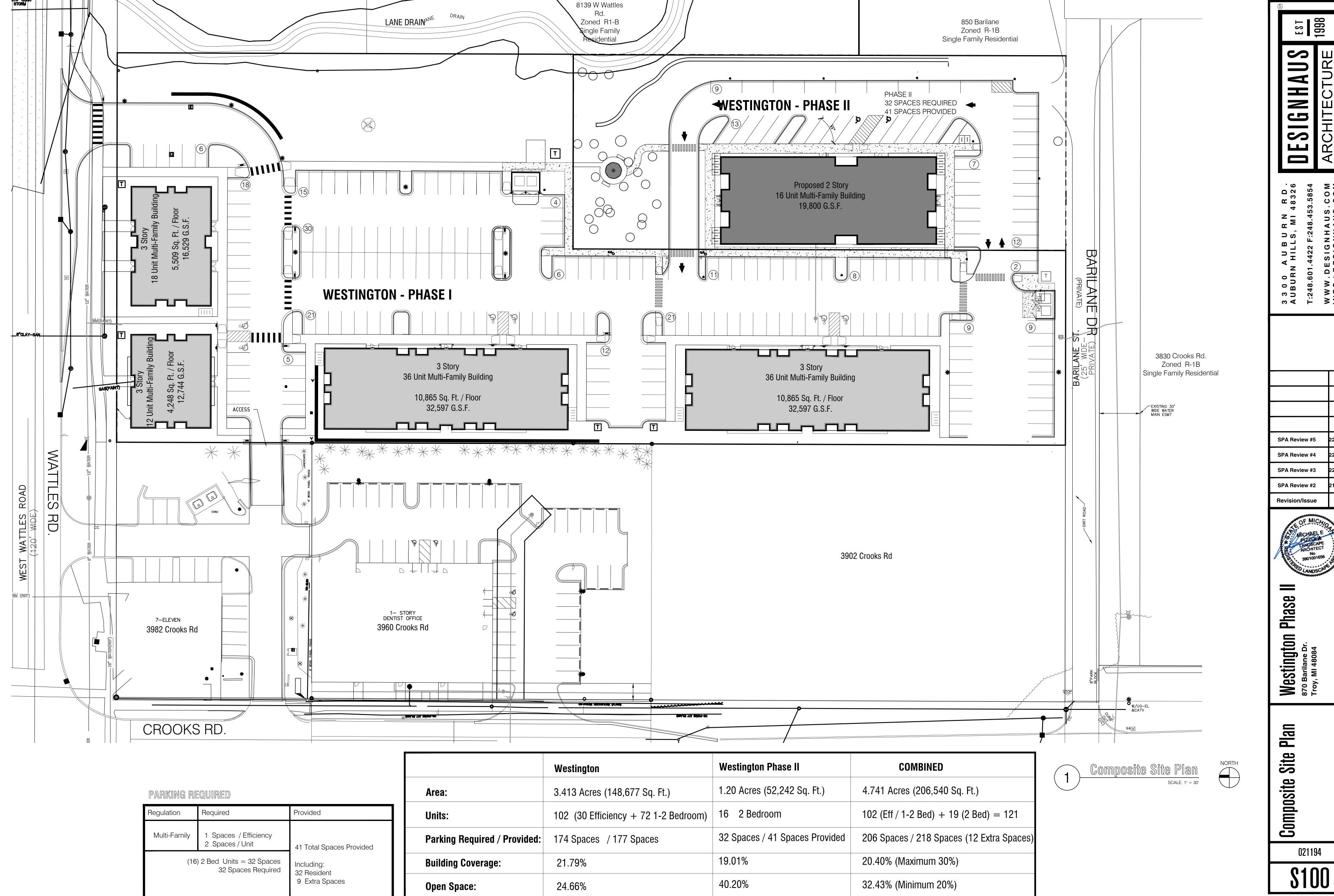
WESTINGTON PHASE II 3902 CROOKS ROAD TROY, MI 48098

7/28/22

ORIGINAL ISSUE DATE: OCTOBER 22, 2021 DRAWING TITLE

PRELIMINARY UTILITY PLAN

PEA JOB NO.	2019-268
P.M.	GMB
DN.	DAS
DES.	GMB
DRAWING NUMBER:	



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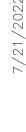
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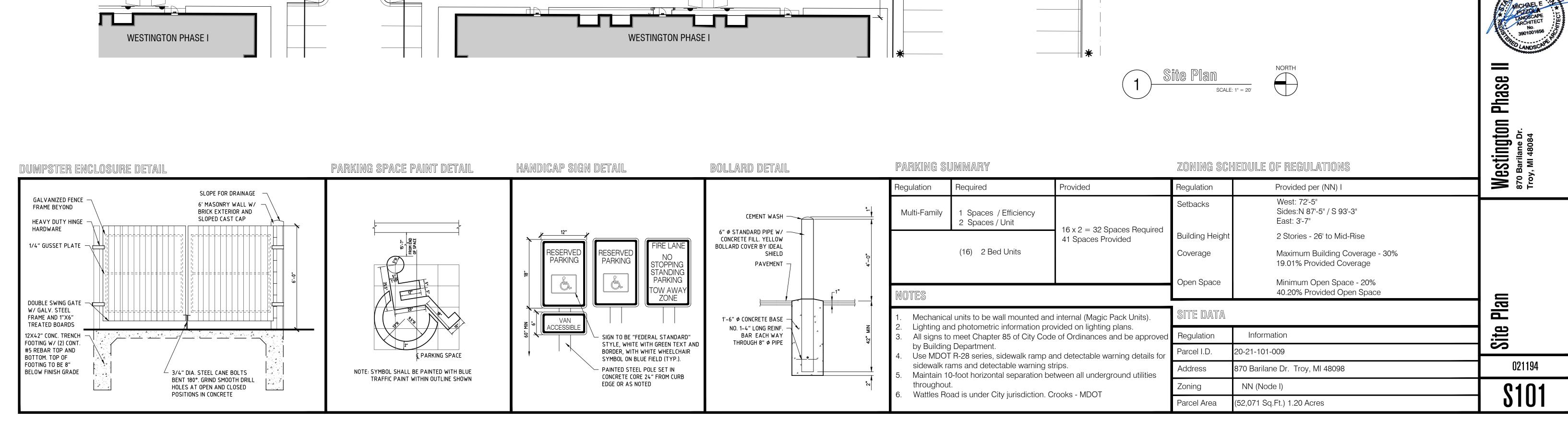
SPA Review #5 SPA Review #4 SPA Review #3 SPA Review #2 Revision/Issue

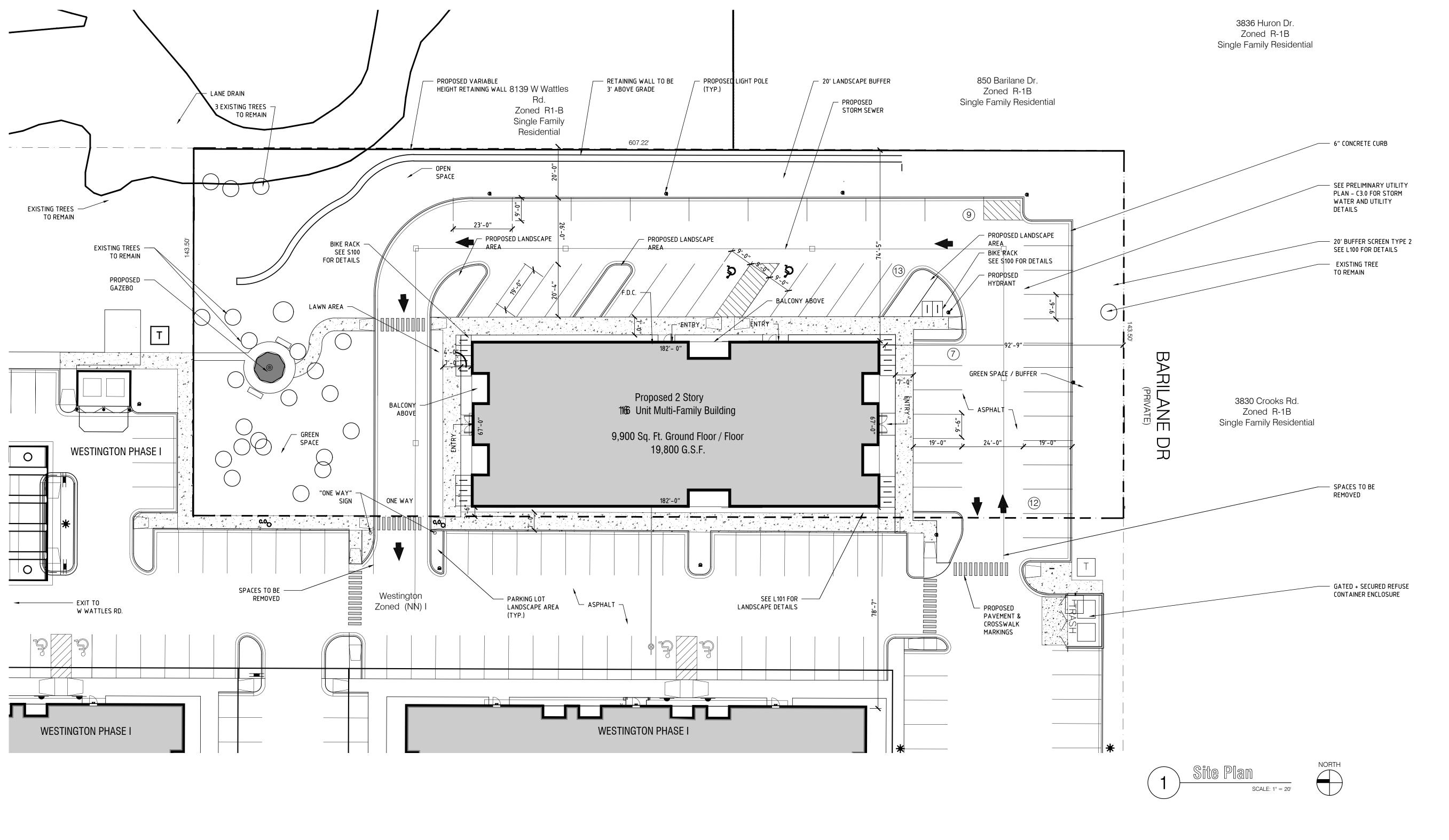


Westington Phase II 870 Barilane Dr. Troy, MI 48084









9

SPA Review #5

SPA Review #3

SPA Review #2

Revision/Issue

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Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	4	Lithonia Lighting	DSXW1 LED 10C 1000 40K T3S MVOLT	DSXW1 LED WITH (1) 10 LED LIGHT ENGINES, TYPE T3S OPTIC, 4000K, @ 1000mA.	LED	1	DSXW1_LED_10C_1000 _40K_T3S_MVOLT.ies	3912	1	38.8
	В	5	Lithonia Lighting	DSXW1 LED 10C 1000 40K T3S MVOLT	DSXW1 LED WITH (1) 10 LED LIGHT ENGINES, TYPE T3S OPTIC, 4000K, @ 1000mA.	LED	1	DSXW1_LED_10C_1000 _40K_T3S_MVOLT.ies	3912	1	38.8

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #2	+	0.7 fc	5.5 fc	0.0 fc	N/A	N/A

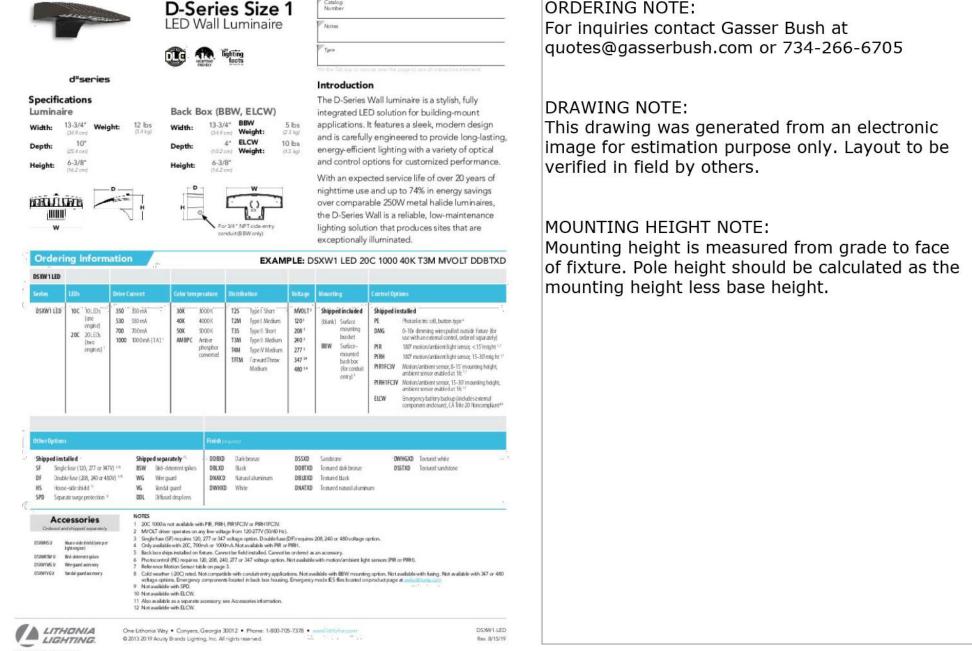
GENERAL NOTE:

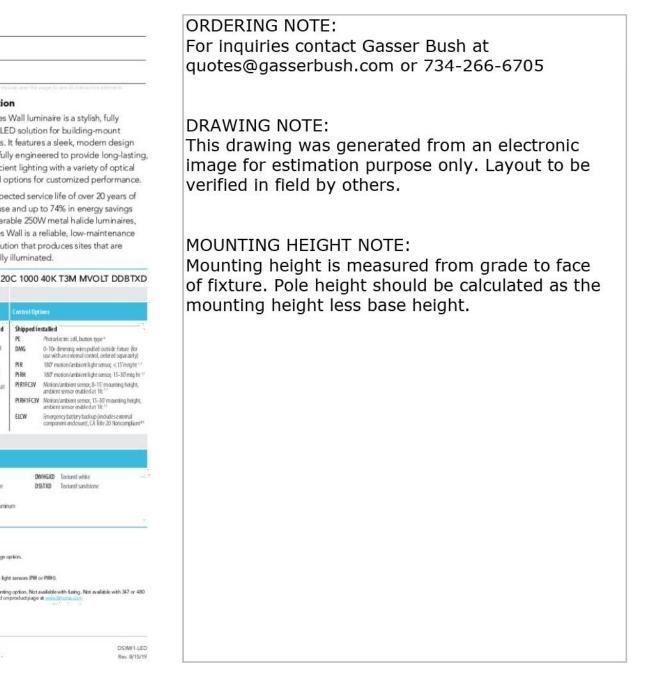
All site lighting to comply with City of Troy lighting standards (Section 13.05)

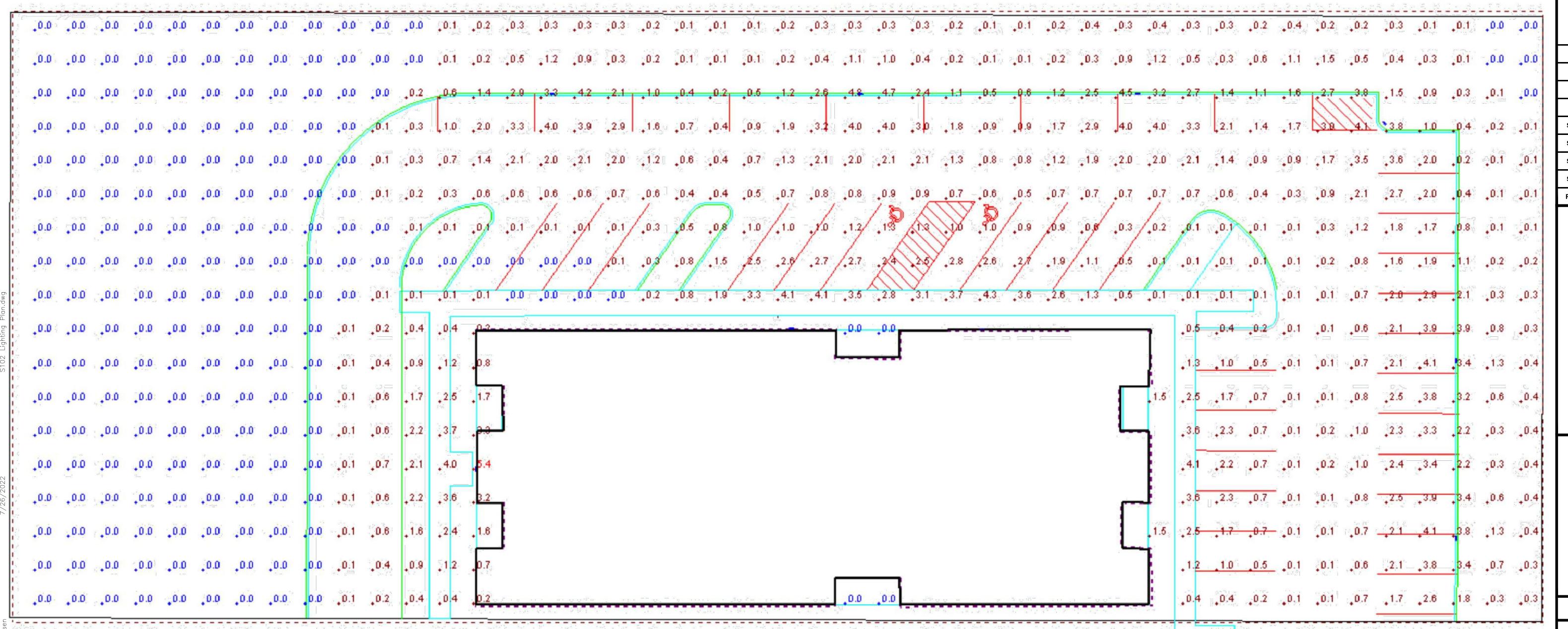
The engineer and/or architect must determine applicability of the layout to existing /future field conditions. This lighting layout represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with illuminating engieering society approved methods. Actual performance of any manufacturer's luminaire may vary due to variation in electrical voltage, tolerance in lamps, and other variable field conditions. Mounting heights indicated are from grade and/or floor up.

These lighting calculations are not a substitute for independent engieering analysis of lighting system suitability and safety. The engineer and/or architect is responsible to review for Michigan Energy Code and lighting quality compliance.

Unless exempt, project must comply with lighting controls requirements defined in ASHRAE 90.132013. For specific information contact GBA controls group at ASG@gasserbush.com or 734-266-6705







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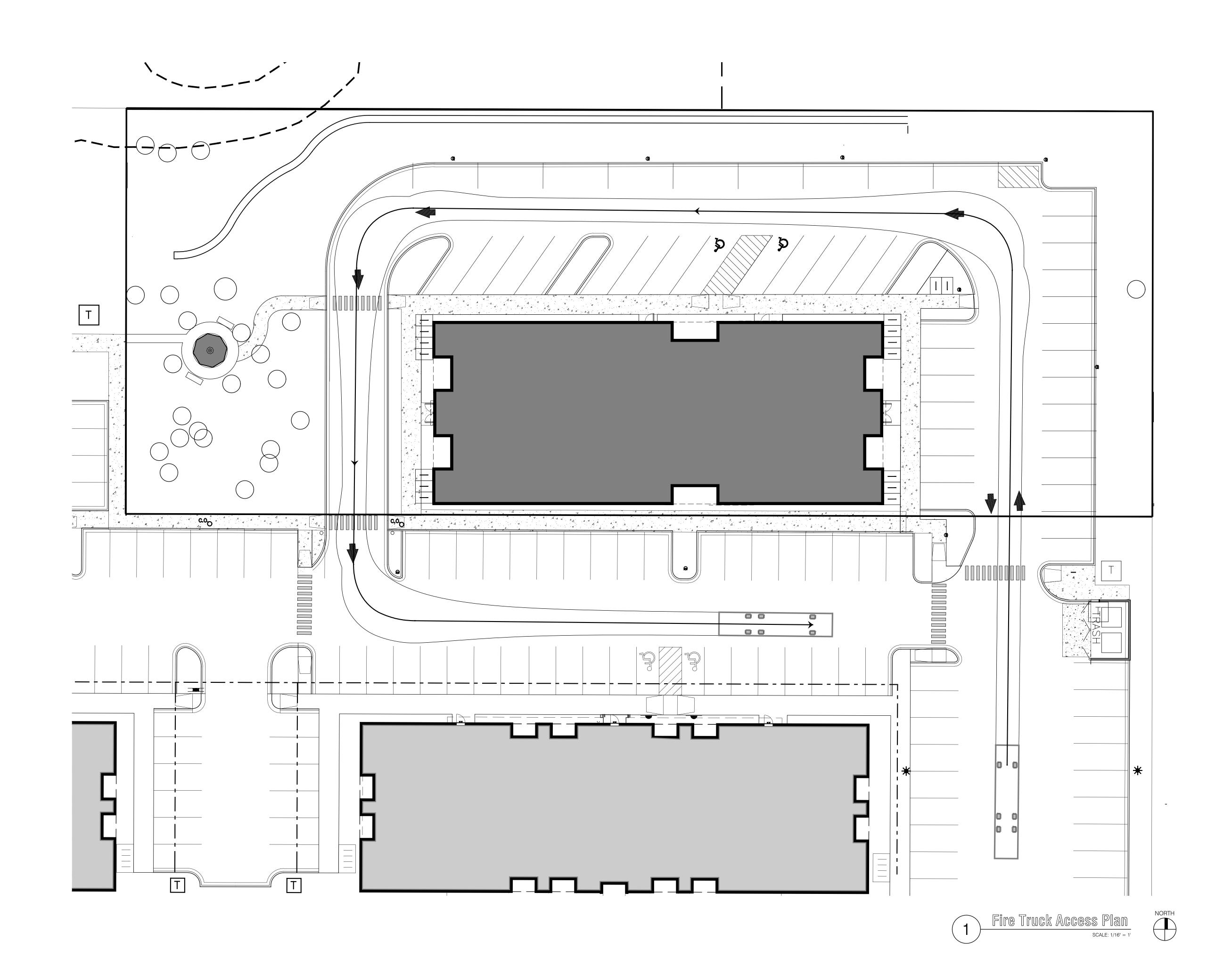
SPA Review #5 SPA Review #3 SPA Review #2

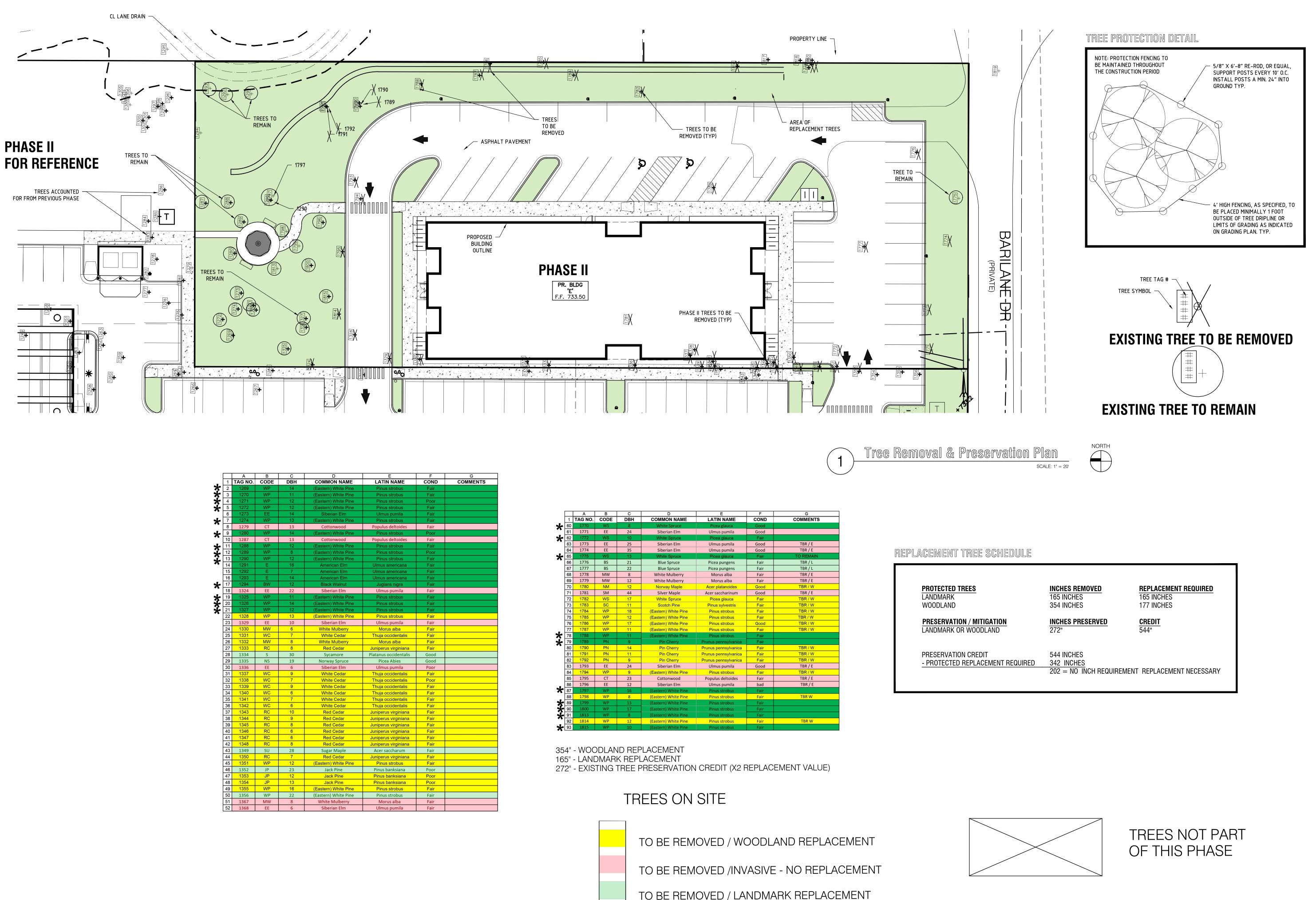
Westington Phase | 870 Barilane Dr.

Lighting Plan

021194

\$102





TO REMAIN

EXISTING TREES REMAINING FOR PRESERVATION CREDIT

EST 1998

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SPA Review #5 SPA Review #4 SPA Review #3

SPA Review #2 Revision/Issue

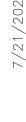


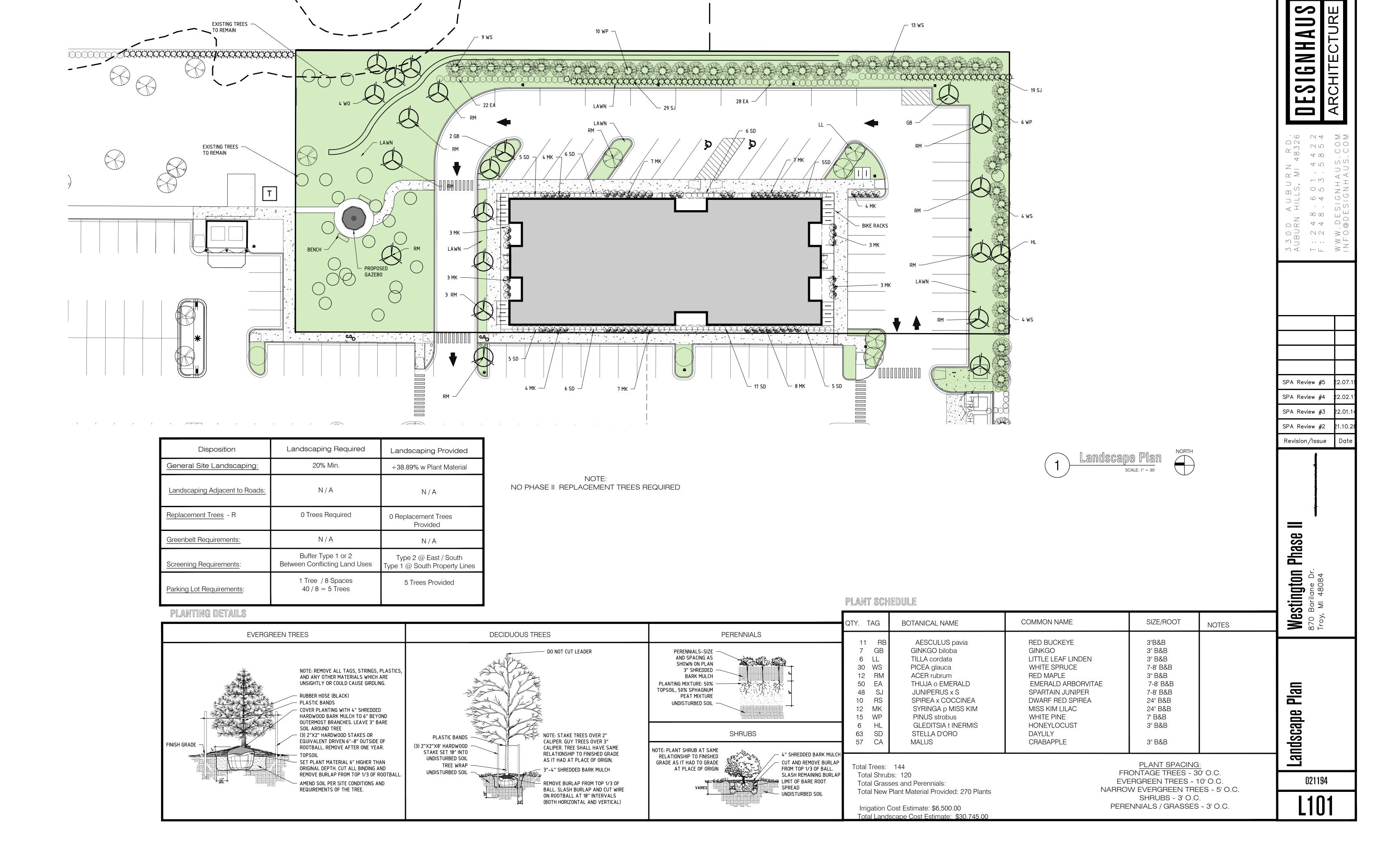
Phase

Westington 870 Barilane Dr. Troy, MI 48084

Plan Preservation Tree







A100

Ground Floor Plan

SQFT

2 BR 890 SQFT

2 BR 1090 SQFT

2 BR 1190 SQFT

2 BR 1180 SQFT

1ST

2ND

EST 1998

DESIGNHAUS

3 3 0 0 A U B U R N R D . AUBURN HILLS, MI 48326 T:248.601.4422 F:248.453.5854 W W W . D E S I G N H A U S . C O M I N F O @ D E S I G N H A U S . C O M

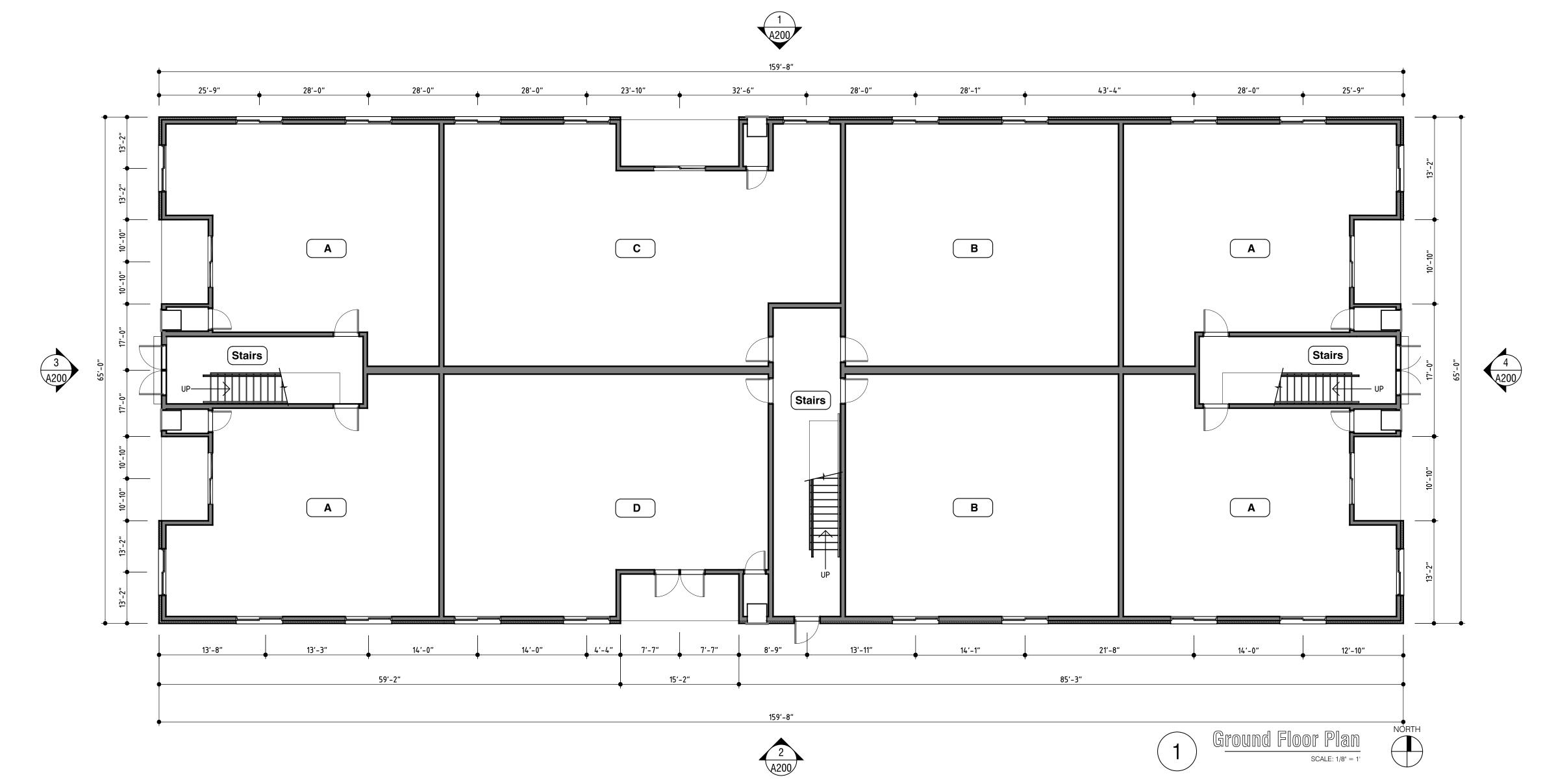
SPA Review #5

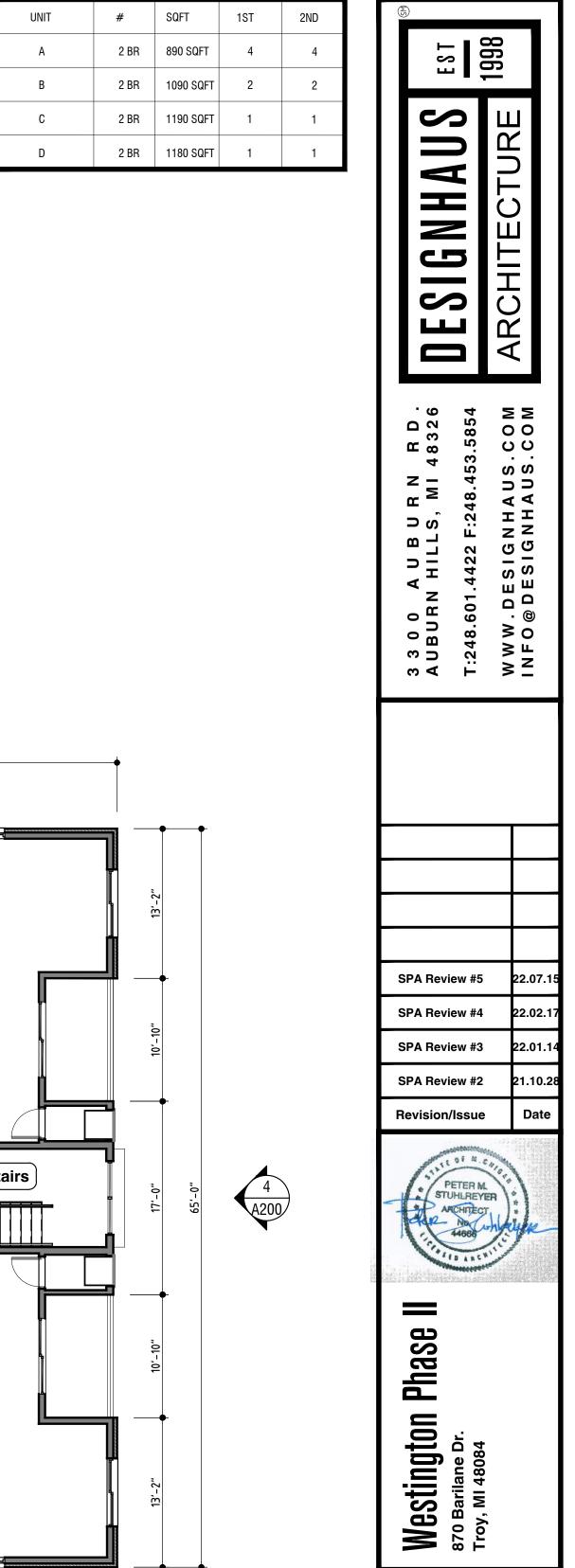
SPA Review #3

SPA Review #2

Revision/Issue

Westington Phase II 870 Barilane Dr. Troy, MI 48084

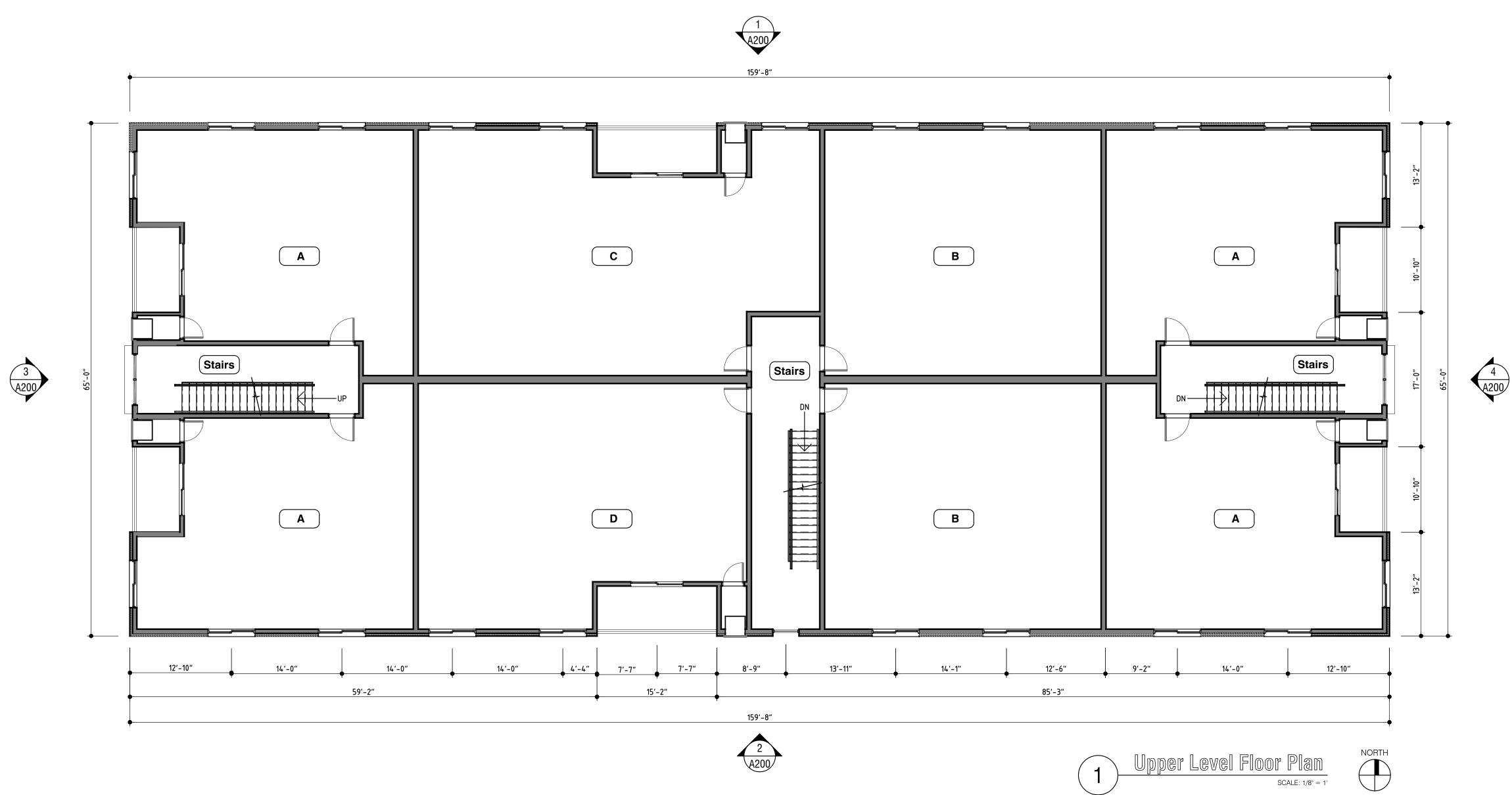




Upper Level Floor Plan

021194

A101



Westington Phase II
870 Barilane Dr.
Troy, MI 48084

SPA Review #5 SPA Review #4 SPA Review #3 SPA Review #2 Revision/Issue

3 3 0 0 A U B U R N R D . AUBURN HILLS, MI 48326 T:248.601.4422 F:248.453.5854 W W W. DESIGNHAUS.COM INFO@DESIGNHAUS.COM

DESIGNHAUS Architecture

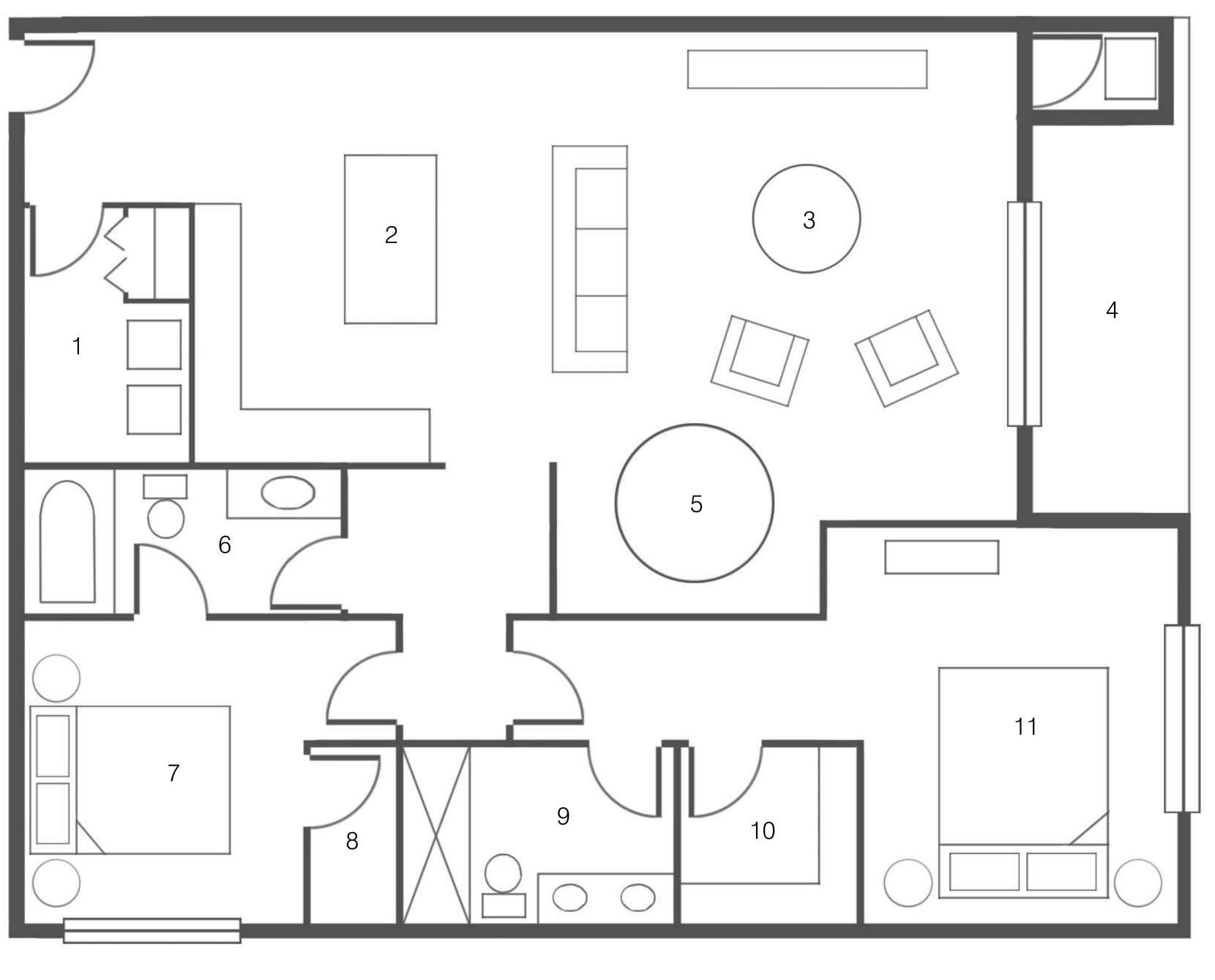
1 A200

Typical Roof Plan

SCALE: 1/8" = 1'

124'-0"

RIDGE VENT





- Laundry
 Kitchen

- Living Room
 Balcony
 Dining Room
 Bathroom
- Bedroom
- Closet Bathroom
- 10. Walk in Closet
- 11. Master Bedroom



SPA Review #5

SPA Review #3

SPA Review #2

Revision/Issue

DESIGNHAUS

3 3 0 0 A U B U R N R D . AUBURN HILLS, MI 48326 T:248.601.4422 F:248.453.5854 W W W . D E S I G N H A U S . C O M I N F O @ D E S I G N H A U S . C O M

Typical Unit Plan

021194 A103



