



500 West Big Beaver
Troy, MI 48084
troymi.gov

248.524.3364
planning@troymi.gov

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

November 28, 2023

7:00 P.M.

Council Chambers

1. ROLL CALL
2. APPROVAL OF AGENDA
3. APPROVAL OF MINUTES – November 14, 2023
4. PUBLIC COMMENT – For Items Not on the Agenda

PLANNED UNIT DEVELOPMENT

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

OTHER ITEMS

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

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

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

Chair Lambert called the Regular meeting of the Troy City Planning Commission to order at 7:02 p.m. on November 14, 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:

- Ben Carlisle, Carlisle Wortman & Associates
- R. Brent Savidant, Community Development Director
- Julie Quinlan Dufrane, Assistant City Attorney
- Kathy L. Czarnecki, Recording Secretary

2. APPROVAL OF AGENDA

Resolution # PC-2023-11-062

Moved by: Fox
Support by: Buechner

RESOLVED, To approve the Agenda as prepared.

Yes: All present (9)

MOTION CARRIED

3. APPROVAL OF MINUTES – October 24, 2023

Resolution # PC-2023-11-063

Moved by: Buechner
Support by: Fox

RESOLVED, To approve the minutes of the October 24, 2023 Regular meeting as submitted.

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

MOTION CARRIED

4. PUBLIC COMMENT – For Items Not on the Agenda

There was no one present who wished to speak.

SPECIAL USE APPROVAL AND PRELIMINARY SITE PLAN REVIEW

5. SPECIAL USE APPROVAL AND PRELIMINARY SITE PLAN REVIEW (SU JPLN2023-0019) – Proposed Clean Express Car Wash, West side of John R, North of Fourteen Mile (PIN 88-20-35-401-002), Section 35, Zoned GB (General Business) District

Mr. Carlisle reviewed the Special Use Approval and Preliminary Site Plan application for the Clean Express Car Wash. He noted the application was postponed by the Board at their September 26, 2023 meeting to allow the City Traffic Consultant OHM to review the traffic study provided by the applicant. A public hearing was held at the September 26th meeting. Mr. Carlisle stated revisions to the site plan since the September meeting relate to providing an 8-foot sidewalk along John R, relocating the dumpster, providing a sidewalk across the north side of the property to/from John R, and adding one (1) internal parking lot island along the western parking lot side. He said the application complies with all setback and parking requirements.

Mr. Carlisle reported OHM recommends approval of the traffic impact assessment and departmental review of the application disclosed no concerns. In summary, Mr. Carlisle asked the Planning Commission to consider if the application meets Special Use Standards and Site Plan Design Review Standards. He said if the plan is granted approval, the applicant should address site plan items as identified in his report dated November 7, 2023.

Jacob Rilett of Mannick Smith said he would comply with the site plan items identified in the Planning Consultant report.

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.

Mr. Fox addressed the application as relates to the South John R Road section of the Master Plan. He said the proposed use is the antithesis to the Master Plan description.

There was discussion, some comments related to:

- Vision of the area.
- Compatibility with future uses.

Resolution # PC-2023-11-

Moved by: Fox
 Seconded by: Perakis

RESOLVED, That Special Use Approval and Preliminary Site Plan Approval for the proposed Clean Express Car Wash, West side of John R, North of Fourteen Mile (PIN 88-20-35-401-001), Section 35, Currently Zoned GB (General Business) District, be **denied**, for the following reason:

1. The plan is inconsistent with the Master Plan, Section 2 of the Special Use Standards.

Discussion on the motion on the floor.

Ms. Perakis voiced concerns that the proposed use might impede future uses. She said proposed future uses might relate more to the Master Plan vision.

Mr. Buechner voiced support for the project. He said the applicant’s vision for the property is optimistic.

Ms. Malalahalli voiced support for the project. She agrees the applicant shared an optimistic vision for future uses.

Mr. Krent voiced support for the project. He noted there are auto-related uses directly across the street.

Ms. Dufrane said the Master Plan is a guide and zoning is the law. She said the zoning allows this car wash to be built. Ms. Dufrane said the Planning Commission should not rely totally on the Master Plan in its consideration of an application. She said the Resolution on the floor is sufficient as it reads but it is indefensible in the court.

Mr. Fox said he has no interest in creating potential legal liabilities for the City and accepts the advice of the Assistant City Attorney. He withdrew the motion on the floor. Ms. Perakis supported the withdrawal of the motion.

Motion withdrawn.

Resolution # PC-2023-11-064

Moved by: Malalahalli
 Seconded by: Faison

RESOLVED, That Special Use Approval and Preliminary Site Plan Approval for the proposed Clean Express Car Wash, West side of John R, North of Fourteen Mile (PIN 88-20-35-401-001), Section 35, Currently Zoned GB (General Business) District, be **granted**, subject to the following conditions:

1. Add one (1) parking lot tree internal to the parking lot along the western parking area.
2. Add one (1) tree along the eastern parking lot area.
3. Stamp the plan by a licensed landscape architect.

Discussion on the motion on the floor.

Chair Lambert said he feels the car wash is an appropriate use of the property. He said the applicant’s intent to make improvements to Oakland Mall is a step in the right direction.

Vote on the motion on the floor.

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

MOTION CARRIES

PRELIMINARY SITE PLAN REVIEW

6. PRELIMINARY SITE PLAN REVIEW (File Number SP JPLN2023-0026) – Proposed Controlled Exit onto Colebrook from Parking Lot, Northwest corner of Rochester and Colebrook (3635 Rochester; PIN 88-20-22-276-051, -052 and -053), Section 22, Currently Zoned GB (General Business) and R-1C (One Family Residential) District

Mr. Carlisle reviewed the Preliminary Site Plan application for a controlled exit onto Colebrook from 1st Jamiah Masjid of Troy located at 3635 Rochester. He said the applicant is seeking approval to construct a curb-cut and drive-aisle to Colebrook through an existing parking lot. Mr. Carlisle said the drive-aisle would be one way only exiting from the site onto Rochester Road. He said the curb-cut aligns with an internal drive in the existing parking lot and would be controlled with an automatic gate. Mr. Carlisle said the Traffic Consultant Engineer OHM reviewed the proposed traffic impacts and recommends approval of the curb-cut.

Mr. Carlisle said the Planning Commission should consider if the Site Plan Design Review Standards have been met.

Discussion among Planning Commission and administration followed. Some comments related to:

- Confirmation that the drive-aisle is for egress only and cannot be used as an entrance.
- Signs to indicate “one-way only” and “do not enter”.

Dr. Md. Nurul Amin of the Nima Group LLC addressed the internal circulation of the existing parking lot, and the problem worshipers are experiencing while entering and exiting the parking lot after worship services. He said they spoke with neighbors and there were no concerns expressed about the proposed exit.

There was discussion, some comments related to:

- Operation of the controlled gate.
- Internal traffic circulation in parking lot.
- Signs to designate “do not enter” and “one-way only”.
- Number of parking spaces on site.

- Number of cars exiting after worship services; impact on Colebrook.
- Potential stacking of vehicles on Rochester.
- Specific days/times of worship services; scheduling of services.
- Pavement markings and angling curb-cut radius toward Rochester.

Mr. Tagle suggested creating a landscape island in the existing parking lot that might alleviate some traffic congestion. He designated the specific location of the landscape island on the display screen.

Dr. Amin said that would result in the loss of two (2) parking spaces, but he was amenable to the suggestion.

Chair Lambert opened the floor for public comment.

Mahmood Syed, member of 1st Jamiah Masjid of Troy; addressed the proposed exit, operation of the gate and specific occasions the drive-aisle would be of benefit to the church.

Chair Lambert closed the floor for public comment.

Resolution # PC-2023-11-065

Moved by: Fox
 Seconded by: Buechner

RESOLVED, That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed Controlled Exit onto Colebrook from Parking Lot, Northwest corner of Rochester and Colebrook (3635 Rochester; PIN 88-20-22-276-051, -052 and -053), Section 22, Currently Zoned GB (General Business) and R-1C (One Family Residential) District, be granted, subject to the following conditions:

1. Petitioner to provide parking calculations to confirm compliance with the Zoning Ordinance parking requirements.
2. Petitioner to create a landscape feature as designated, contingent on Zoning Ordinance parking requirements being met.
3. Provide an angled curb-cut in the direction of Rochester Road, pursuant to approval by the City Engineering Department.
4. Provide signage that designates vehicles cannot enter from Colebrook access.
5. The drive-aisle on Colebrook is for exiting the parking lot only.

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

MOTION CARRIED

OTHER ITEMS

7. **DRAFT MASTER PLAN**

Mr. Carlisle reviewed the comments received after the 63-day review period of the Draft Master Plan. He asked the Planning Commission to consider the comments, direct staff to make any amendments to the Master Plan and consider setting a Public Hearing at the December 12, 2023 Planning Commission Regular meeting.

A brief discussion followed, some comments related to:

- Protection of green space.
- Equity in planning and zoning.
- Affordability of housing.
- Sidewalk connectivity.

Resolution # PC-2023-11-066

Moved by: Lambert

Support by: Fox

RESOLVED, To schedule a Public Hearing on the December 12, 2023 Regular meeting to consider revisions to the Master Plan that incorporate comments from Oakland County and interconnectivity of sidewalks throughout the City.

Yes: All present (9)

MOTION CARRIED

8. **PUBLIC COMMENT** – For Items on the Agenda

Deborah Louzecky, 6327 Donaldson; four year resident, 34 year real estate broker. Ms. Louzecky addressed the draft Master Plan and concerns of residents relating to the density of the historical Troy Corners located at Square Lake and Livernois. She read a communication received by residents and said she would forward the communication to both the Planning Commission and the City Council.

Mr. Savidant said to email him the communication and he would distribute it to both the Planning Commission and the City Council prior to the Public Hearing on the Master Plan.

9. **PLANNING COMMISSION COMMENT**

There were general Planning Commission comments.

Ms. Dufrane addressed the Bylaws as relates to abstention by members when voting on motions.

Mr. Savidant said the administration and the Board can address any underlying zoning that the Board feels needs some tweaking.

10. ADJOURN

The Regular meeting of the Planning Commission adjourned at 8:19 p.m.

Respectfully submitted,

David Lambert, Chair

Kathy L. Czarnecki, Recording Secretary

[https://d.docs.live.net/2f7ed4fe5f664ea8/Documents/Kathy/COT Planning Commission Minutes/2023/2023 11 14 Draft.docx](https://d.docs.live.net/2f7ed4fe5f664ea8/Documents/Kathy/COT%20Planning%20Commission%20Minutes/2023/2023%2011%2014%20Draft.docx)

ITEM #5

DATE: November 20, 2023

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

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

The applicant GFA Development, Inc. seeks Conceptual Development Plan (CDP) and Preliminary Development Plan (PDP) approval for the Village of Hastings Planned Unit Development (PUD). The project features a total of 44 residential units comprised of 4 different housing types (single family detached, ranch style detached, single family attached and duplex).

The Planning Commission is a recommending body for this application.

The attached report prepared by Carlisle/Wortman Associates, Inc. (CWA), the City’s Planning Consultant, summarizes the project as revised. 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. PUD Application/Site Plan
4. OHM Memo, dated August 24, 2023.
5. Public comment.

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

Resolution # PC-2022-11-

Moved by:
Seconded by

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

WHEREAS, The Village of Troy PUD features 2 detached single-family homes, 8 ranch style single family homes, 28 two-story attached homes and 6 single family duplex homes, for a total of 44 residential units; and

WHEREAS, The PUD provides a walkable urban environment that is compact and designed to human scale, and

WHEREAS, The PUD provides a compatible mix of open space, landscaped areas and pedestrian amenities; and

WHEREAS, The PUD proposes appropriate land use transitions between the PUD and surrounding properties, and

WHEREAS, The PUD will reasonably mitigate impacts to the transportation system and enhance non-motorized facilities and amenities.

WHEREAS, The PUD provides a complementary variety of housing types; and

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

- 1.) The Emergency Vehicle Access Road located in southeast corner of the development needs clear signage stating its restricted use.
- 2.) Crosswalks should be added between sport courts and unit thirty-six (36) and between unit nine (9) and unit twenty-four (24).
- 3.) Incorporate OHMs August 23rd memo circulation improvements.
- 4.) Fence specifications should be added to the site plan per Section 13.02 B-3.
- 5.) Confirm trash pickup and provide trash vehicle circulation plan.
- 6.) Provide a lighting plan indicating proposed photometrics, height of light fixtures, proposed light fixtures, and proposed methods of shielding needs to be submitted per Section 8.05 part 14.

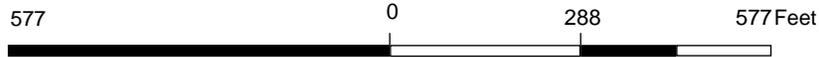
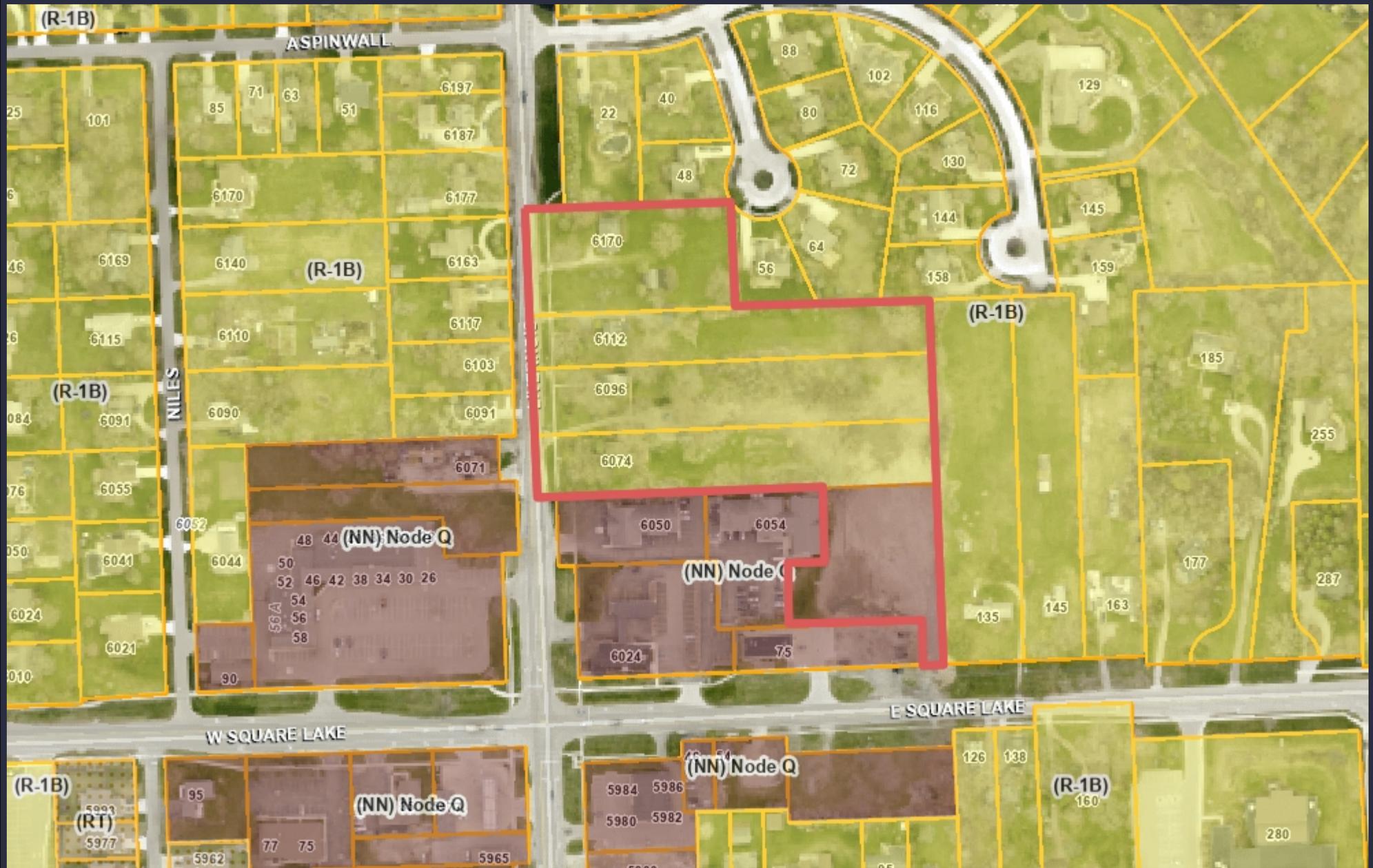
- 7.) Floor plans and elevations with dimensions for the ranch and duplex units should be provided per Section 8.05-A.12;
- 8.) Elevations with dimensions for multi-family row homes should be provided per Section 8.05-A.12; and 3).
- 9.) Indicate materials of all buildings on site.

Yes:

No:

Absent:

MOTION CARRIED/FAILED



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



Carlisle | Wortman
ASSOCIATES, INC.

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

Date: October 10, 2023

PUD and Preliminary Development Plan Approval Review For City of Troy, Michigan

Applicant:	GFA Development Inc
Project Name:	Village of Hastings
Plan Date:	August 9, 2023
Location:	East side of Livernois, north of Square Lake
Zoning:	R-1B, Single Family Residential (approx. 4.9 acres) & NN-Q Neighborhood Node, (approx. 1.1 acres)
Proposed Zoning:	Planned Unit Development
Action Requested:	PUD and Preliminary Development Plan Approval Review

BACKGROUND

An application has been submitted to conditionally rezone a +/-6.0 acre site to PUD in order to construct forty-two (42) new residential units and preserve two (2) existing homes on site. Thirty-eight (38) will be attached units and four (4) will be single family homes. The site currently has four (4) existing single-family homes of which two (2) will be preserved and incorporated into the entire development. The site includes five (5) parcels. The site is currently zoned R-1B, which does not permit multi-family residential.

The subject site is located on the east side of Livernois, north of Square Lake. Access is via a new twenty-eight (28) foot wide private road off Livernois along with an emergency vehicle access road off Square Lake in the southeast corner of the development. The 44-units will be distributed in the format outlined below:

- Four (4) six (6) unit multi-unit row homes. Twenty-four (24) units total.

- One (1) four (4) unit multi-unit row home. Four (4) units total.
- Three (3) two (2) unit duplexes. Six (6) units total.
- Four (4) one (1) unit detached ranches. Four (4) units total.
- Two (2) two (2) unit attached ranches. Four (4) units total.
- Two (2) existing (1) unit single family homes. Two (2) units total.

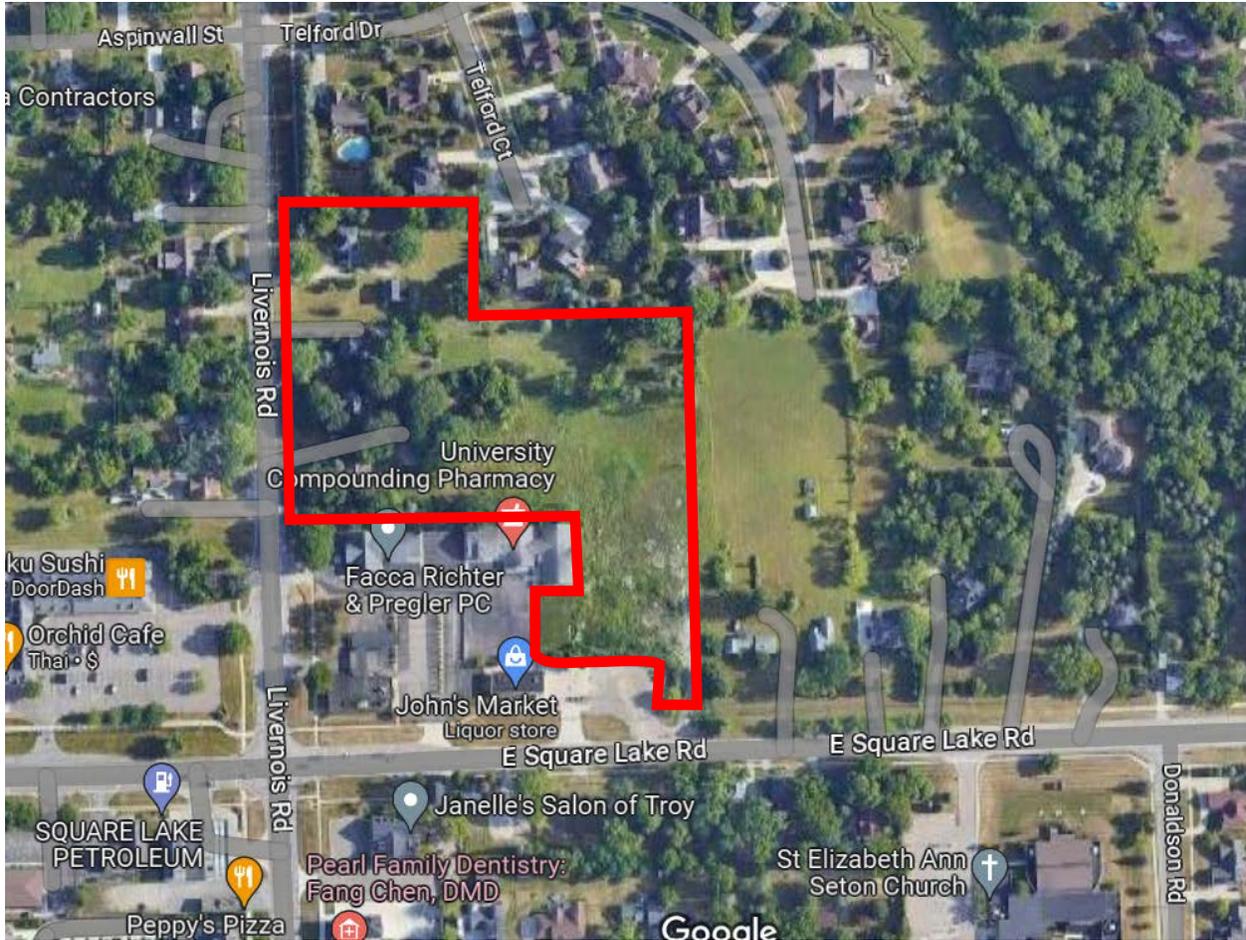
Grand Total of Units: 42 new units + 2 existing units = 44 units.

All duplex and multi-unit row homes are two stories and approx. 1,620 sq.ft in size. Attached and detached ranch units are approx. 1,500 – 2,200 sq.ft in size though no floor plans with dimensions were provided.

The following benefits have been noted by the applicant:

1. *Preservation of two existing homes built in 1910.*
2. *Offer multiple styles of housing.*
3. *Emergency Vehicle Access from Square Lake Road.*
4. *1.3 acres of open space including pickleball courts and butterfly gardens.*
5. *Landscaping will be viable, interesting and inviting to encourage outdoor recreation and exercise.*
6. *Communal sport court and butterfly garden.*
7. *Extensive interior sidewalks to promote walkability.*
8. *Development shall be limited to a maximum of 14 new buildings with 42 total new units.*
9. *Maximum Building Height shall not exceed 2 stories or 30' in height.*
10. *Maximum % of Lot Area Covered by Buildings will be twenty-one percent (21%).*

If the PUD is recommended for approval by the Planning Commission, a PUD Agreement will be drafted between the applicant and the City Attorney's office prior to consideration by the City Council.



Current Zoning:

R-1B, Single Family Residential & NN-Q Neighborhood Node

Proposed Uses of Subject Parcels:

Forty-four (44) multi-family and single-family dwelling units.

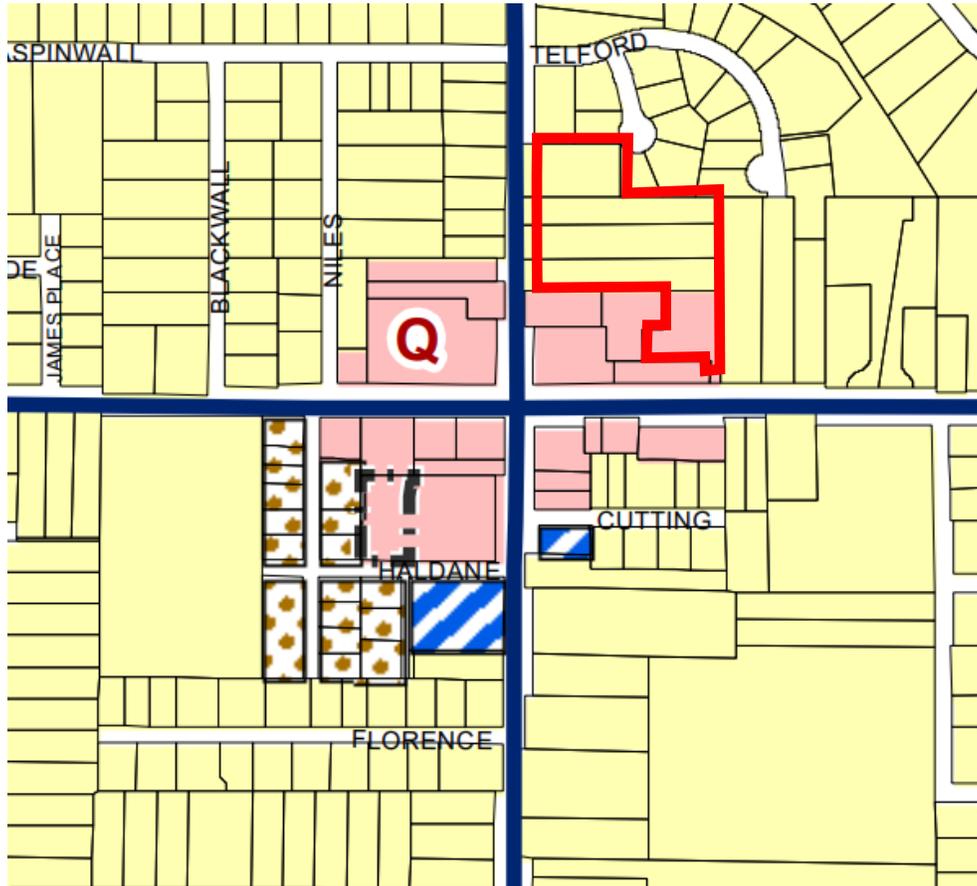
Current Use of Subject Properties:

Single Family Homes

Surrounding Property Details:

Direction	Zoning	Use
North	R-1B	Single Family Housing
South	NN-Q	Commercial / Office
East	R-1B	Single Family Housing
West	R-1B / NN-Q	Single Family Housing / Commercial

ZONING



The site includes a mix of zoned R1-B (one family residential) and NN, Neighborhood Node Zoning. Uses along this portion of Livernois and Square Lake Road are primarily low intensity office and retail located near the intersection. Institutional uses exist along Square Lake Road with Troy Preschool to the west of the intersection and Saint Elizabeth Ann Seton Church to the east of the intersection. Newer dense multi-family housing does exist south of the intersection along Livernois.

PUD PROCESS

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.

The approval of a Planned Unit Development (PUD) is a three-step process:

Step 1-Concept Plan: *The first step shall be application for and approval of a Concept Development Plan, which requires a legislative enactment amending the zoning district map so as to reclassify the property as a Planned Unit Development. A proposed Development Agreement shall be included and incorporated with the Concept Development Plan, to be agreed upon and approved coincident with said Plan. The Concept Development Plan and Development Agreement shall be approved by the City Council following the recommendation of the Planning Commission. Such action, if and when approved, shall confer upon the applicant approval of the Concept Development Plan and shall rezone the property to PUD in accordance with the terms and conditions of the Concept Development Plan approval.*

Step 2- Preliminary Development Plan Approval: *The second step of the review and approval process shall be the application for and approval of a Preliminary Development Plan (preliminary site plan) for the entire project, or for any one or more phases of the project. City Council shall have the final authority to approve and grant Preliminary Development Plan approvals, following a recommendation by the Planning Commission.*

Step 3- Final Development Plan Approval: *The third step of the review and approval process shall be the review and approval of a Final Development Plan (final site plan) for the entire project, or for any one or more phases of the project, and the issuance of building permits. Final Development Plans for Planned Unit Developments shall be submitted to the Zoning Administrator for administrative review, and the Zoning Administrator, with the recommendation of other appropriate City Departments, shall have final authority for approval of such Final Development Plans.*

The applicant is seeking a recommendation of approval for their Preliminary Development Plan.

PUD INTENT

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.

NATURAL FEATURES

Topography: A topographic survey has been provided on sheet P-1.0. The site is relatively flat with the exception of the southeast corner where a natural depression exists and will be converted into the detention basin.

Wetlands: There are no state regulated wetlands on the site.

Floodplain: The site is not located within a flood hazard zone.

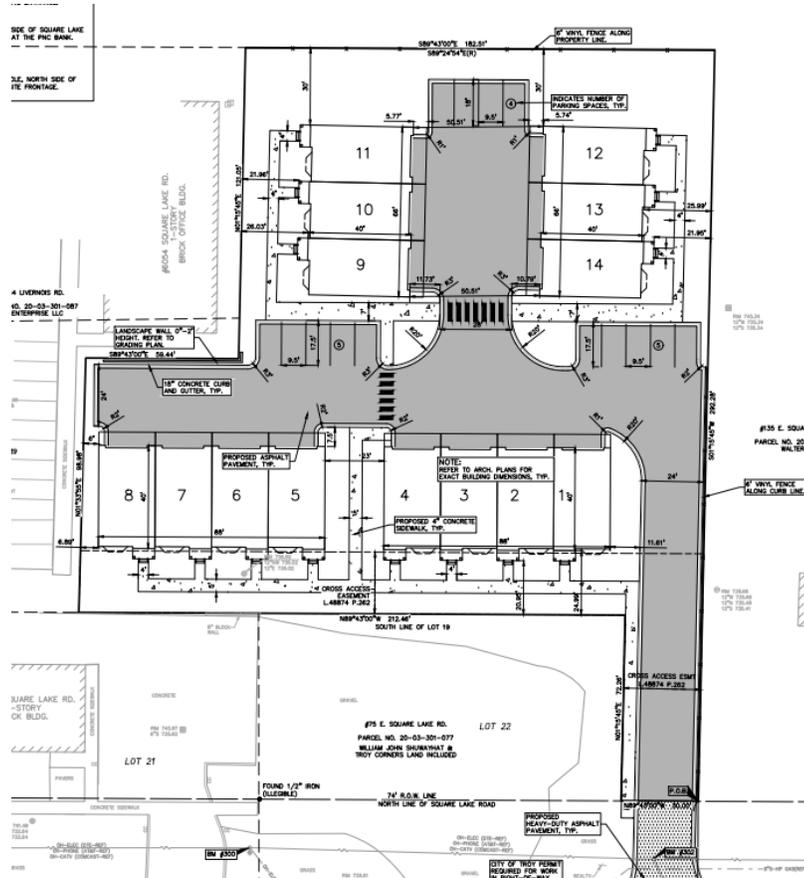
Woodlands: A tree inventory and replacement plan has been provided on Sheet T.1.0-T.1.1. The applicant surveyed a total of 305 trees on site. The composition of trees is predominantly woodland and invasive species with a small amount of landmark trees. Invasive species include silver maples, box elder, black walnut, elm, white mulberry, american elm, norway maple, catalpa, white poplar, green ash and cottonwood. Of the 305 on-site trees, 18 woodland trees and 4 landmark trees will be saved. Preserved trees will be primarily along the borders of the site and adjacent to the two existing homes.

Replacement Details		
Protected Tree	Inches Removed	Replacement Required
Landmark	189 inches	189 inches
Woodland	570 inches	285 inches
Protected Tree	Inches Preserved	Credit
Landmark	77 inches	154 inches
Woodland	199 inches	398 inches
Protected Replacement Required	474 Inches	
Preservation Credit	552 Inches	
Total	0 inches of replacement required	
Total Tree Mitigation	0 inches of replacement required	

Items to be addressed: none

PREVIOUS PLANNING COMMISSION REVIEW

The following 14-unit townhome development was approved in 2018.



2018 approved 14-unit site plan

The applicant is revising the approved site layout and expanding the project to the northwest.

The Concept Plan was first reviewed by the Planning Commission in July 2022. 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

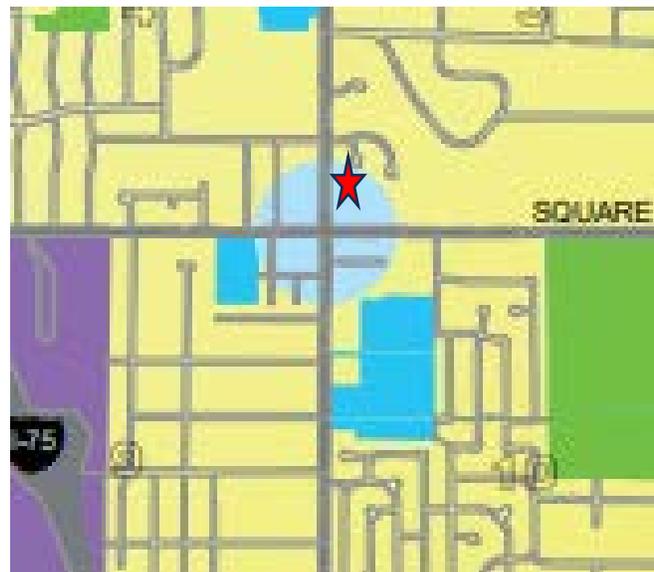
- Planning Commission members expressed opposition to 3-story tall buildings
- Applicant was encouraged to:
 - Create more green space
 - Retain “old Troy” feel of neighborhood
 - Create a community feel, a village
 - Create a different and unique development
 - Let element of historical homes shine on their own

MASTER PLAN

In both the current and the updated Master Plan, the site is located within the neighborhood node designation and bordering single-family residential. 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

As set forth in the revised master plan, neighborhood nodes are intended to be commercial and mixed-use centers situated at major intersections of Troy thoroughfares that serve as the center of the City’s Economic Neighborhoods, with the following characteristics:

- Located at intersections of the City’s main roads.
- Work together with Social Neighborhoods to create a more livable community.
- Mixed use.
- Provide neighborhood gathering places.
- Accommodate the daily needs of residents.



Future Land Use

Single Family Residential	The Smart Zone
High Density Residential	Automall
Neighborhood Nodes	The Transit Center
South John R. Road	21st Century Industrial
Big Beaver Road	Public and Quasi-Public
Rochester Road	Recreation and Open Space
Maple Road	15 Section Number
Northfield	

Specifically, the Livernois and Square Lake Neighborhood Nood is described as:

Development in this area should be especially considerate of the remaining historic assets of the neighborhood. When possible, adaptive reuse of existing historic structures must be considered before demolition or relocation of these resources. Low intensity uses working in conjunction with one another to form a central neighborhood village, walkable and accessible, would create an ideal complement to the predominantly residential surroundings.

According to the Future Land Use Plan this area is planned as Single Family Residential and Neighborhood Nodes. The applicant is preserving two existing homes. The proposed land use as a residential-only PUD with single and multi-family living options is less diverse from a land-use perspective than intended, however, it is complimentary with some existing nearby land uses and the promotion of quality development around important intersections.

Items to be Addressed: *Planning Commission to consider if the development is consistent with the Master Plan.*

SITE ARRANGEMENT/SETBACKS/HEIGHT CONSIDERATION

The applicant is proposing to construct forty-two (42) new residential units and maintain two (2) existing houses on site. Thirty-eight (38) will be attached units and four (4) will be single family homes. The site currently has four (4) existing single-family homes of which two (2) will be preserved and incorporated into the entire development. A detention basin is proposed for the southeastern portion of the site which will be bordered by neighboring properties to the south and west, the site emergency vehicle access drive to the east and site parking to the north. Two outdoor recreational areas have been proposed in the northern central portion of the development. They include a sport court and butterfly garden.

The ranches and duplexes that are adjacent to the single-family residential along the northern and eastern property line are set back 30-feet from those property lines. The applicant has noted that the maximum building height is 30-feet and 2-stories. We note the following with regards to height:

- The elevations for the attached residential, which is not adjacent to residential, are not dimensioned. We cannot confirm the height.
- The elevations for the duplex and ranches, which are adjacent to residential, are not provided. We cannot confirm the height.

Items to be addressed: *1). Provide dimensions on attached residential to confirm height; and 2). Provide elevations and dimensions of ranch and duplexes to confirm height.*

PARKING

Each unit is served with a two-car garage and there are 25 surface guest spaces. Parking is sufficient.

Items to be Addressed: *None*

SITE ACCESS AND CIRCULATION

Vehicular Access

The site will be accessed from Livernois Road via a two-lane entry with a proposed shoulder for vehicles accessing the site from the south. There is a one lane emergency vehicle access proposed from Square Lake Road into the southeastern portion of the development. No signage information was provided regarding this access point but it is recommended that signage be included to indicate the lane is meant for emergency vehicles only.

Pedestrian Circulation

Five (5) foot sidewalks are shown throughout the development providing pedestrian connection to multiple units and open space amenities. To promote safety, crosswalks should be added between unit thirty-six (36) to the south and the sports courts to the north as well as unit nine (9) to the east and unit twenty-four (24) to the west.

In an August 23, 2023 memo, OHM outlines a number of pedestrian and circulation improvements.

Items to be addressed: 1). The Emergency Vehicle Access Road located in southeast corner of the development needs clear signage stating its restricted use; 2). Crosswalks should be added between sport courts and unit thirty-six (36) and between unit nine (9) and unit twenty-four (24); and 3). Incorporate OHMs August 23rd memo circulation improvements.

LANDSCAPING

A landscaping plan has been provided on Sheets L-1.0 and L-1.1. The following table discusses the development’s compliance with the landscape requirements set forth in Section 13.02.

	Required:	Provided:	Compliance:
Greenbelt Planting			
Livernois: 1 tree every 30 feet. Western Boundary	463 / 30 = 15	1 existing tree + 15 new deciduous trees	Complies
Property Lines:			
<u>North (Residential):</u> Required one (1) large evergreen tree per ten (10) lineal feet or one (1) narrow evergreen tree per three (3) lineal feet.	297-feet along western half / 10 = 30 trees	9 existing trees + 30 new evergreen trees	Complies
	305-feet along eastern half / 10 = 31 trees	3 existing trees + 31 new evergreen trees	Complies

<u>East (Residential)</u> Required one (1) large evergreen tree per ten (10) lineal feet or one (1) narrow evergreen tree per three (3) lineal feet.	170-feet along northern quarter / 3 = 57	3 existing trees + 57 new evergreen trees	Complies
	586-feet along southern three quarters / 3 = 195 trees	3 existing trees + 195 new evergreen trees	Complies
	<u>South (Office)</u> Not required.	250-feet along office building	2 existing trees + 1 new evergreen tree + 4 new deciduous trees
	220-feet along northern portion of detention pond	3 new evergreen trees + 6 new deciduous trees	
Parking Lot			
Minimum of one (1) tree per eight (8) parking spaces.	79 / 8 = 10 trees	14 new trees	Complies
Overall			
Site landscaping: A minimum of twenty percent (20%) of the site area shall be comprised of landscape material.	20%	34%	Complies

Trash pickup

It is assumed that trash will be stored in the garage of each unit and picked up weekly. However, that should be confirmed, and a trash vehicle circulation plan should be provided.

Items to be Addressed: 1). A fence is proposed between the existing historic homes and the adjacent new housing units but no details are provided. Fence specifications should be added to the site plan per Section 13.02 B-3; and 2). Confirm trash pickup and provide trash vehicle circulation plan.

TRAFFIC

In an August 23rd, 2023 memo, OHM has reviewed traffic.

Traffic Counts:

Land Use	Number of Units	ITE Land	Number of Site Generation Trips											
			AM Peak Hour			PM Peak Hour			Daily					
			In	Out	Total	In	Out	Total	In	Out	Total			

		Use Code									
Single Family Detached	6	210	1	5	6	4	3	7	38	38	76
Single Family Attached	38	215	4	10	14	11	8	19	120	120	240
Site Totals – 44 units			5	15	20	15	11	26	158	158	316

OHM Conclusion:

Traffic volumes are closely correlated with the number of residential units. Essentially all the trips generated by the Village of Hastings development will be delivered directly to Livernois Road, an arterial roadway, which will increase slightly over current conditions. 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.

PHOTOMETRICS

No Photometric plan was provided.

Items to be Addressed: Per Section 8.05 part 14, a lighting plan indicating proposed photometrics, height of light fixtures, proposed light fixtures, and proposed methods of shielding needs to be submitted.

FLOOR PLAN AND ELEVATIONS

Limited floor plans and elevations have been provided. Floor Plans and Elevations have been provided for:

- Livernois facing townhomes. Materials not indicated
- Interior facing townhomes. Materials not indicated

Elevations, materials, and floor plans have not been submitted for the various ranch options, the four (4) unit attached townhome, and the duplex. Additional architectural, material, elevation, and floor plan details need to be provided to fully determine the architectural character and quality of design for the site.

Items to be Addressed: 1). Floor plans and elevations with dimensions for the ranch and duplex units should be provided per Section 8.05-A.12; 2). Elevations with dimensions for multi-family row homes should be provided per Section 8.05-A.12; and 3). Indicate materials of all buildings on site.

PUD STANDARDS

As set forth in section 11.03, Standards for Approval, it should be demonstrated that the following standards will be met, as reasonably applicable to the site:

1. *The applicant shall demonstrate that through the use of the PUD option, the development will accomplish a sufficient number of the following objectives, as are reasonably applicable to the site, providing: 1. A mixture of land uses that would otherwise not be permitted without the use of the PUD provided that other objectives of this Article are also met.*
2. *A public improvement or public facility (e.g. recreational, transportation, safety and security) which will enhance, add to or replace those provided by public entities, thereby furthering the public health, safety and welfare.*
3. *A recognizable and material benefit to the ultimate users of the project and to the community, where such benefit would otherwise be infeasible or unlikely to be achieved absent these regulations.*
4. *Long-term protection and preservation of natural resources, natural features, and historic and cultural resources, 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.*
5. *A compatible mixture of open space, landscaped areas, and/or pedestrian amenities.*
6. *Appropriate land use transitions between the PUD and surrounding properties.*
7. *Design features and techniques, such as green building and low impact design, which will promote and encourage energy conservation and sustainable development.*
8. *Innovative and creative site and building designs, solutions and materials.*
9. *The desirable qualities of a dynamic urban environment that is compact, designed to human scale, and exhibits contextual integration of buildings and city spaces.*
10. *The PUD will reasonably mitigate impacts to the transportation system and enhance non-motorized facilities and amenities.*
11. *For the appropriate assembly, use, redevelopment, replacement and/ or improvement of existing sites that are occupied by obsolete uses and/or structures.*
12. *A complementary variety of housing types that is in harmony with adjacent uses.*
13. *A reduction of the impact of a non-conformity or removal of an obsolete building or structure.*
14. *A development consistent with and meeting the intent of this Article, which will promote the intent of the Master Plan or the intent of any applicable corridor or sub-area plans. If conditions have changed since the Plan, or any applicable corridor or sub-area plans were adopted, the uses shall be consistent with recent development trends in the area.*
15. *Includes all necessary information and specifications with respect to structures, heights, setbacks, density, parking, circulation, landscaping, amenities and other design and layout*

features, exhibiting a due regard for the relationship of the development to the surrounding properties and uses thereon, as well as to the relationship between the various elements within the proposed Planned Unit Development. In determining whether these relationships have been appropriately addressed, consideration shall be given to the following:

- a. The bulk, placement, and materials of construction of the proposed structures and other site improvements.*
 - b. The location and screening of vehicular circulation and parking areas in relation to surrounding properties and the other elements of the development.*
 - c. The location and screening of outdoor storage, loading areas, outdoor activity or work areas, and mechanical equipment.*
 - d. The hours of operation of the proposed uses.*
 - e. The location, amount, type and intensity of landscaping, and other site amenities.*
- 16. Parking shall be provided in order to properly serve the total range of uses within the Planned Unit Development. The sharing of parking among the various uses within a Planned Unit Development may be permitted. The applicant shall provide justification to the satisfaction of the City that the shared parking proposed is sufficient for the development and will not impair the functioning of the development, and will not have a negative effect on traffic flow within the development and/or on properties adjacent to the development.*
- 17. Innovative methods of stormwater management that enhance water quality shall be considered in the design of the stormwater system. 18. The proposed Planned Unit Development shall be in compliance with all applicable Federal, State and local laws and ordinances, and shall coordinate with existing public facilities.*

SITE PLAN REVIEW STANDARDS

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

Section 8.06 outlines Site Plan Review Design Standards.

- 1. Development shall ensure compatibility to existing commercial districts and provide a transition between land uses.*
 - a. Building design shall enhance the character of the surrounding area in relation to building and parking placement, landscape and streetscape features, and architectural design.*
 - b. Street fronts shall provide a variety of architectural expression that is appropriate in its context and prevents monotony.*
 - c. Building design shall achieve a compatible transition between areas with different height, massing, scale, and architectural style.*
- 2. Development shall incorporate the recognized best architectural building design practices.*

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

SUMMARY

The Planning Commission is asked to hold a public hearing and consider public testimony. As part of the deliberations, the Planning Commission should consider if the plan meets the PUD standards and if the plan meets the site plan design standards.

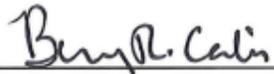
If the Planning Commission recommends approval of the PUD, and Preliminary Development Plan approval, the following site plan items should be addressed by the applicant:

- 1.) The Emergency Vehicle Access Road located in southeast corner of the development needs clear signage stating its restricted use.
- 2.) Crosswalks should be added between sport courts and unit thirty-six (36) and between unit nine (9) and unit twenty-four (24).
- 3.) Incorporate OHMs August 23rd memo circulation improvements.
- 4.) Fence specifications should be added to the site plan per Section 13.02 B-3.
- 5.) Confirm trash pickup and provide trash vehicle circulation plan.

Village of Hastings / Livernois
October 10, 2023

- 6.) Provide a lighting plan indicating proposed photometrics, height of light fixtures, proposed light fixtures, and proposed methods of shielding needs to be submitted per Section 8.05 part 14.
- 7.) Floor plans and elevations with dimensions for the ranch and duplex units should be provided per Section 8.05-A.12;
- 8.) Elevations with dimensions for multi-family row homes should be provided per Section 8.05-A.12; and 3).
- 9.) Indicate materials of all buildings on site.

Sincerely,



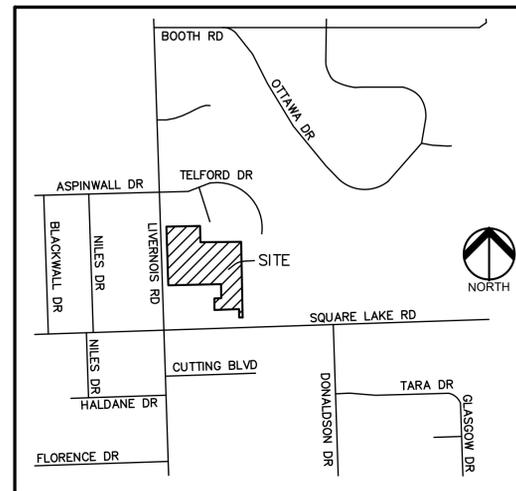
CARLISLE/WORTMAN ASSOC., INC.
Benjamin R. Carlisle, LEED AP, AICP

PLANNED UNIT DEVELOPMENT
CONCEPT DEVELOPMENTAL PLAN

THE VILLAGE OF HASTINGS

PART OF THE SW 1/4 OF SECTION 3, T. 02N., R. 11E.,
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL



LOCATION MAP
NO SCALE

INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
P-1.0	TOPOGRAPHIC SURVEY
P-2.0	PRELIMINARY SITE PLAN
P-3.0	PRELIMINARY GRADING PLAN
P-4.0	PRELIMINARY UTILITY PLAN
L-1.0	PRELIMINARY LANDSCAPE PLAN
L-1.1	LANDSCAPE DETAILS
T-1.0	TREE PRESERVATION PLAN
T-1.1	TREE PRESERVATION LIST
<u>ARCHITECTURAL PLANS</u>	
A1	1ST FLOOR PLAN LIVERNOIS BUILDING
A2	2ND FLOOR PLAN LIVERNOIS BUILDING
A3	FRONT AND REAR ELEVATIONS LIVERNOIS BUILDING
A4	SIDE ELEVATIONS LIVERNOIS BUILDING
A5	AXONOMETRICS LIVERNOIS BUILDING
A6	1ST FLOOR PLAN STANDARD BUILDING
A7	2ND FLOOR PLAN STANDARD BUILDING
A8	FRONT AND REAR ELEVATIONS STANDARD BUILDING
A9	SIDE ELEVATIONS STANDARD BUILDING
A10	AXONOMETRICS STANDARD BUILDING
A11	AERIAL RENDERS
A12	RENDERS
A13	RENDERS

DESIGN TEAM

OWNER/APPLICANT/DEVELOPER	CIVIL ENGINEER
GFA DEVELOPMENT, INC. 986 ELMSFORD DRIVE TROY, MI 48063 CONTACT: GARY ABITHEIRA PHONE: 248.840.2828 EMAIL: GABITHEIRA@WIDOPENWEST.COM	PEA GROUP 1849 POND RUN AUBURN HILLS, MI 48326 CONTACT: JOHN B. THOMPSON, PE PHONE: 844.813.2949 EMAIL: JTHOMPSON@PEAGROUP.COM

LANDSCAPE ARCHITECT

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



REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	6/1/2023
REVISED PER PLANNER COMMENTS DATED 6/2/2023	8/9/2023





0 25 50 100
SCALE: 1" = 50'



CAUTION!
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CLIENT
GFA DEVELOPMENT, INC.
5301 MIRAGE DRIVE
TROY, MI 48063

PROJECT TITLE
THE VILLAGE OF HASTINGS
PART OF THE SW 1/4 OF SECTION 3, T. 02N., R. 11E., TROY, MI

REVISIONS
REV. PER COMMENTS 6/2/2023 8/9/2023

ORIGINAL ISSUE DATE:
JUNE 1, 2023
DRAWING TITLE
TOPOGRAPHIC SURVEY

PEA JOB NO. 2017-009
P.M. KR
DN. EH
DES. EH
DRAWING NUMBER:

P-1.0

LEGEND

- IRON FOUND
 - ⊗ IRON SET
 - NAIL FOUND
 - ⊗ NAIL & CAP SET
 - ⊗ BRASS PLUG SET
 - ⊗ MONUMENT FOUND
 - ⊗ MONUMENT SET
 - ⊗ SEC. CORNER FOUND
 - R RECORDED
 - M MEASURED
 - C CALCULATED
- EXISTING**
- OH—ELEC—W—W— ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
 - UG—CATV— UG. CABLE, PEDESTAL & MANHOLE
 - UG—PHONE— UG. PHONE U.G. CABLE, PEDESTAL & MANHOLE
 - UG—ELEC—ELEC— UG. ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
 - GAS—VALVE & GAS LINE MARKER
 - WATERMAN, HYD. GATE VALVE, TAPPING BLEWIE & VALVE
 - SANITARY SEWER, CLEANOUT & MANHOLE
 - STORM SEWER, CLEANOUT & MANHOLE
 - COMBINED SEWER & MANHOLE
 - SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
 - POST INDICATOR VALVE
 - WATER VALVE BODY/HYDRANT VALVE BOX, SERVICE SHUTOFF
 - MARB. TRANSFORMER, IRRIGATION CONTROL VALVE
 - UNIDENTIFIED STRUCTURE
 - SPOT ELEVATION
 - CONTOUR LINE
 - FENCE
 - GUARDRAIL
 - STREET LIGHT
 - SIGN
 - CONC. CONCRETE
 - ASPH. ASPHALT
 - GRAVEL SHOULDER
 - WETLAND

REFERENCE DRAWINGS

- PRELIMINARY ALTA/NSPS SURVEY, PEA JOB NO. 2017-009, DATED JANUARY 24, 2018
- COMCAST MAP NO. 1319-404, DATED 4/03/07
- DATE MAP 316-404 & 319-404, DATED 2/15/2017
- ELECTRIC AT&T SKETCH VIA EMAIL, DATED 01/15/2017
- CONSUMERS ENERGY QUARTER SECTION MAP NO. 02-61-03-3, DATED 10-16-14
- CITY OF TROY GIS ONLINE
- OKLAHOMA COUNTY WATER RESOURCES COMMISSION - KING DRAIN MAP SHEET #11 SW SECTION 3
- KING DRAIN, OKLAHOMA COUNTY DRAIN COMMISSIONER JOB NO. 88019, SHEET NO. 3, DATED 09-10-93, 43'-BUILT 09-10-98
- STORM DRAIN SYSTEMS, SHEET 011, WATER RESOURCES COMMISSIONER

Legal Description
(Combined Parcel Per PEA Group)

Part of Lots 19 and 22 of "Supervisors Plat No. 7" as recorded in Liber 45 on pages 21 and 21A, Oakland County Records, together with part of the Southwest 1/4 of Section 3, Town 2 North, Range 11 East, City of Troy, Oakland County Michigan and being more particularly described as Commencing at the Southwest Corner of said Section 3; thence along the south line of said section, S89°43'00"E, 643.50 feet; thence N00°08'00"W, 74.00 feet to the north line of East Square Lake Road, 74' half width, and the Point of Beginning; thence along said north line, N89°43'00"W, 29.62 feet; thence N01°15'45"E, 72.26 feet to the north line of said Lot 22, said line also being the south line of said Lot 19; thence along said south line N89°43'00"W, 212.46 feet; thence N01°33'55"E, 98.99 feet; thence S89°43'00"E, 59.44 feet; thence N01°15'45"E, 121.05 feet to the easterly extension of the north line of Lot 18 of said Supervisors Plat; thence along said line, N89°43'00"W, 430.98 feet to the east line of Livernois Road, 33' half width; thence along said east line, N00°34'30"E, 483.76 feet to the easterly extension of the south line of "Telford Ridge" as recorded in Liber 206, page 24 Oakland County Records; thence along said south line, S89°43'00"E, 297.00 feet to the west line of said Telford Ridge; thence along said west line, S00°34'30"W, 170.00 feet to the south line of said Telford Ridge, said line also being the north line of the south 660 feet of the southwest 1/4 of said Section 3; thence along said south line, S89°43'00"E, 305.34 feet to the west line of tax parcel 20-03-301-033; thence along said west line, S00°08'00"E, 586.02 feet to the aforementioned north line of East Square Lake Road and the Point of Beginning. Containing 6.313 acres of land more or less.

BENCHMARKS
(CITY OF TROY DATUM)

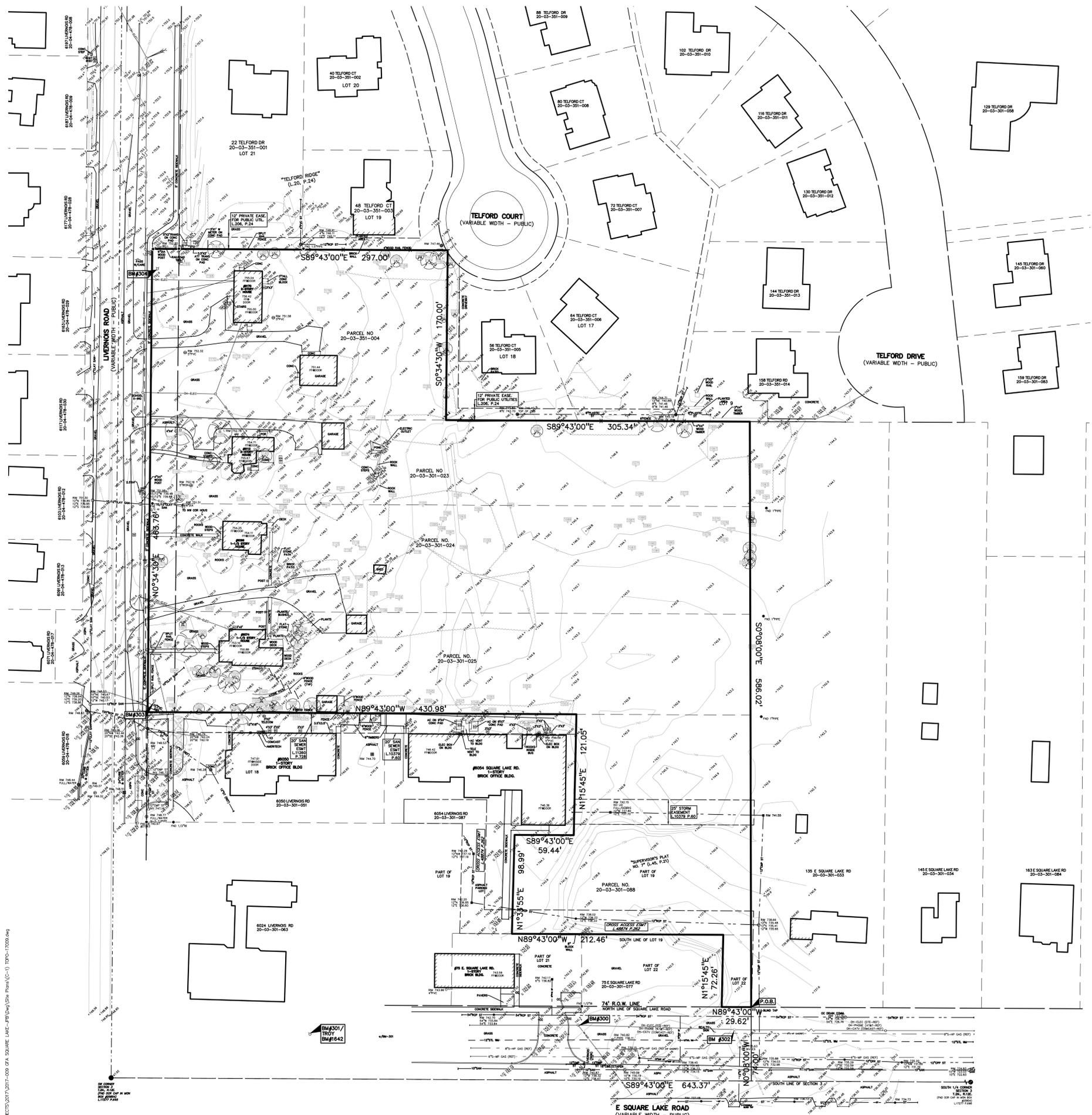
BM #300
SET BENCHMARK IN SOUTHEAST FACE OF POWER LIGHT POLE, NORTH SIDE OF SQUARE LAKE ROAD APPROX. 70' SOUTHEAST OF SOUTHEAST BUILDING CORNER OF JOHN'S MARKET AT EAST SIDE OF DRIVE ENTRANCE.
ELEV. - 743.36

BM #301 - CITY OF TROY BM #1642
ARROW ON A HYDRANT LOCATED ON THE NORTH SIDE OF SQUARE LAKE ROAD, APPROX. 200' EAST OF LIVERNOIS ROAD AT THE PNC BANK.
ELEV. - 750.08

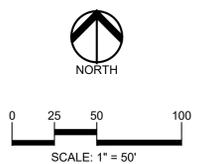
BM #302
FOUND BOAT SPIKE IN SOUTH FACE OF UTILITY POLE, NORTH SIDE OF SQUARE LAKE ROAD, AT THE CENTERLINE OF 30' WIDE SITE FRONTAGE.
ELEV. - 737.51

BM #303
ARROW ON HYDRANT, EAST SIDE OF LIVERNOIS, APPROX. 75' SOUTHWEST OF #6074 LIVERNOIS.
ELEV. - 750.66

BM #304
ARROW ON HYDRANT, EAST SIDE OF LIVERNOIS, APPROX. 80' WEST OF #6170 LIVERNOIS.
ELEV. - 755.18



NOT FOR CONSTRUCTION



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CLIENT
GFA DEVELOPMENT, INC.
5301 MIRAGE DRIVE
TROY, MI 48063

PROJECT TITLE
THE VILLAGE OF HASTINGS
PART OF THE SW 1/4 OF SECTION 3, T. 02N., R. 11E., TROY, MI

REVISIONS
REV. PER COMMENTS 6/2/2023 8/9/2023

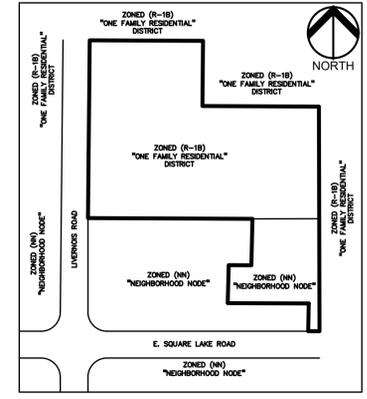
ORIGINAL ISSUE DATE:
JUNE 1, 2023

DRAWING TITLE
PRELIMINARY SITE PLAN

PEA JOB NO. 2017-009
P.M. JBT
DN. KMB
DES. DSK
DRAWING NUMBER:

LEGEND

- | | | |
|------------------|------------------|---------------------|
| ● IRON FOUND | ⊗ BRASS PLUG SET | ⊙ SEC. CORNER FOUND |
| ⊙ IRON SET | ⊙ MONUMENT FOUND | R RECORDED |
| ⊙ NAIL FOUND | ⊙ NAIL & CAP SET | M MEASURED |
| ⊙ NAIL & CAP SET | | C CALCULATED |
-
- | | |
|-----------------|---|
| — OH-ELEC— | ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE |
| — UG-CATV— | UNDERGROUND CABLE TV, CATV PEDESTAL |
| — UG-PHONE— | TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE |
| — UG-ELEC— | ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE |
| — GAS— | GAS MAIN, VALVE & GAS LINE MARKER |
| — WATER— | WATER MAIN, HYD. GATE VALVE, TAPPING GREEVE & VALVE |
| — SANITARY— | SANITARY SEWER, CLEANOUT & MANHOLE |
| — STORM— | STORM SEWER, CLEANOUT & MANHOLE |
| — COMBINED— | COMBINED SEWER & MANHOLE |
| — SQUARE— | SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN |
| — POST— | POST INDICATOR VALVE |
| — WATER VALVE— | WATER VALVE BODY/HYDRANT VALVE BOX, SERVICE SHUTOFF |
| — MAILBOX— | MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE |
| — UNIDENTIFIED— | UNIDENTIFIED STRUCTURE |
| — SPOT— | SPOT ELEVATION |
| — CONTOUR— | CONTOUR LINE |
| — FENCE— | FENCE |
| — GUARD RAIL— | GUARD RAIL |
| — STREET LIGHT— | STREET LIGHT |
| — SIGN— | SIGN |
| — CONC.— | CONCRETE |
| — ASPHL— | ASPHALT |
| — GRAVEL— | GRAVEL SHOULDER |
| — WETLAND— | WETLAND |



ZONING SKETCH
NOT TO SCALE

SITE DATA:

LOCATION OF PROJECT:
LIVERNOIS ROAD, NORTH OF SQUARE LAKE ROAD

SIZE OF PROPERTY: 6.31 ACRES GROSS, 6.05 ACRES NET

PROPOSED USE OF PROPERTY: TWO (2) EXISTING HOMES TO REMAIN, EIGHT (8) RANCH STYLE SINGLE FAMILY HOMES, TWENTY EIGHT (28) 2 STORY ATTACHED SINGLE FAMILY HOMES, SIX (6) SINGLE FAMILY DUPLEX HOMES.

CURRENT ZONING: R-1B, ONE-FAMILY RESIDENTIAL DISTRICT AND (NN) NEIGHBORHOOD NODE Q, SITE TYPE NN-B, BUILDING FORM: C

SURROUNDING PROPERTY DETAILS:

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

REQUIRED AND PROVIDED LOT DIMENSIONS:

FRONT	REQUIRED: 10'(NN) & 40'(R-1B) SETBACK	PROVIDED: 30' SETBACK
REAR	30'(NN) & 45'(R-1B) SETBACK	30' SETBACK *
SIDES	N/A(NN) & 12.5'(R-1B) SETBACK	16' SETBACK
MAXIMUM HEIGHT	4 STORIES/55'(NN), 2.5 STORIES/30'(R-1B)	30 FEET, 2 STORY
OPEN SPACE	15%(NN)	20%
LOT COVERAGE BY ALL BLDGS	30%(NN)	21%

* 30' REAR SETBACK AT ALL UNITS BESIDES 15-18 AS SHOWN ON PLAN

PROJECT AND SITE DESCRIPTION:
PROPOSED CONSTRUCTION OF A 42-UNIT RESIDENTIAL DEVELOPMENT. THE SITE CONSISTS OF 38 ATTACHED UNITS AND 4 DETACHED SINGLE FAMILY UNITS, ON LIVERNOIS ROAD NORTH OF SQUARE LAKE ROAD. ACCOMPANYING THE DEVELOPMENT IS THE PRESERVATION OF 2 SINGLE FAMILY HOUSES. ACCESS TO ALL UNITS WILL BE VIA CONNECTION TO LIVERNOIS ROAD AND AN EMERGENCY VEHICLE ACCESS (EVA) WILL BE PROVIDED TO SQUARE LAKE ROAD. THE PROPOSED RESIDENTIAL USE IS PERMITTED BY-RIGHT IN THE (NN) NEIGHBORHOOD NODE Q DISTRICT AND THE R-1B PORTION OF THE SITE. DUE TO THE MIXED HOUSING PRODUCTS AND MIXED ZONING A PUD IS PROPOSED FOR THIS PROPERTY.

NATURAL RESOURCES:
THE SITE CURRENTLY HAS MODERATE TREE COVER.

FLOODPLAIN:
THE PROPERTY IS NOT LOCATED WITHIN THE FLOOD HAZARD AREA INDICATED BY FLOOD INSURANCE RATE MAP (FIRM) NO. 26125C0532F DATED: SEPTEMBER 29, 2006 (ZONE X).

WETLAND:
PER THE 2022 SEMCOG WETLAND DATA, THE SITE CONTAINS NO WETLANDS.

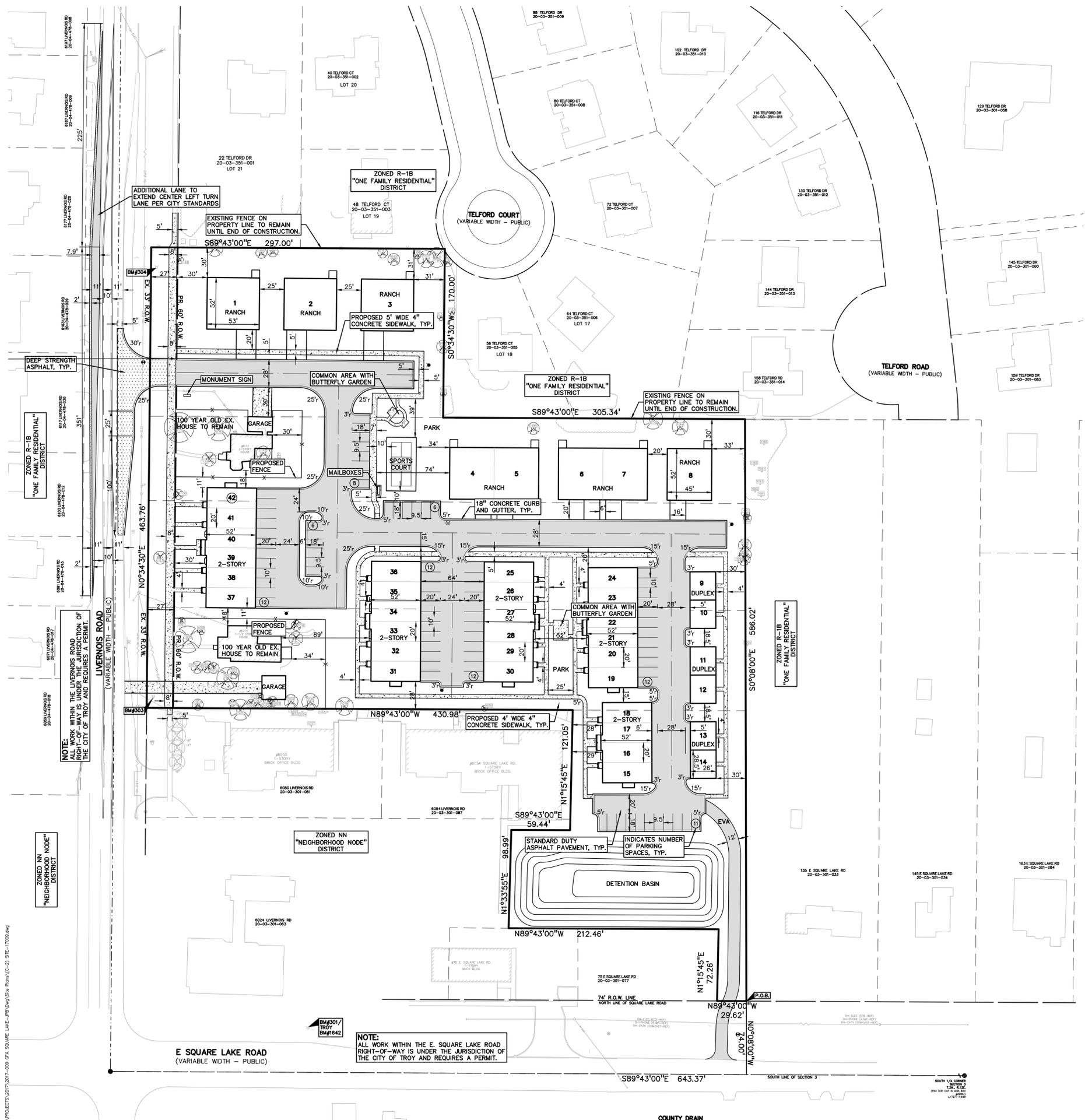
ACCESS AND CIRCULATION:
VEHICULAR ACCESS AND CIRCULATION:
VEHICULAR ACCESS TO ALL UNITS WILL BE VIA A PRIVATE ROAD OFF OF LIVERNOIS ROAD. THE NEW ROAD WILL HAVE A TWENTY-EIGHT (28) FOOT WIDE ACCESS AGREEMENT. AN EVA WILL BE PROVIDED TO SQUARE LAKE ROAD.

PEDESTRIAN ACCESS AND CIRCULATION:
SIDEWALKS ARE PROVIDED AT BUILDING ENTRANCES TO PARKING FIELDS. THIS WILL BE A WALK FRIENDLY DEVELOPMENT WITH CIRCULATION THROUGHOUT THE DEVELOPMENT WITH CONNECTIONS TO LIVERNOIS ROAD VIA THE EVA.

UTILITIES:
UTILITIES ARE PLACED WITHIN EASEMENTS APPROVED AS TO SIZE AND LOCATION BY THE CITY ENGINEER.

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

100-YEAR DETENTION IS PROPOSED WITH A RESTRICTED OUTLET DISCHARGING THROUGH CITY OF TROY STORM SEWER TO AN ENCLOSED COUNTY DRAIN.

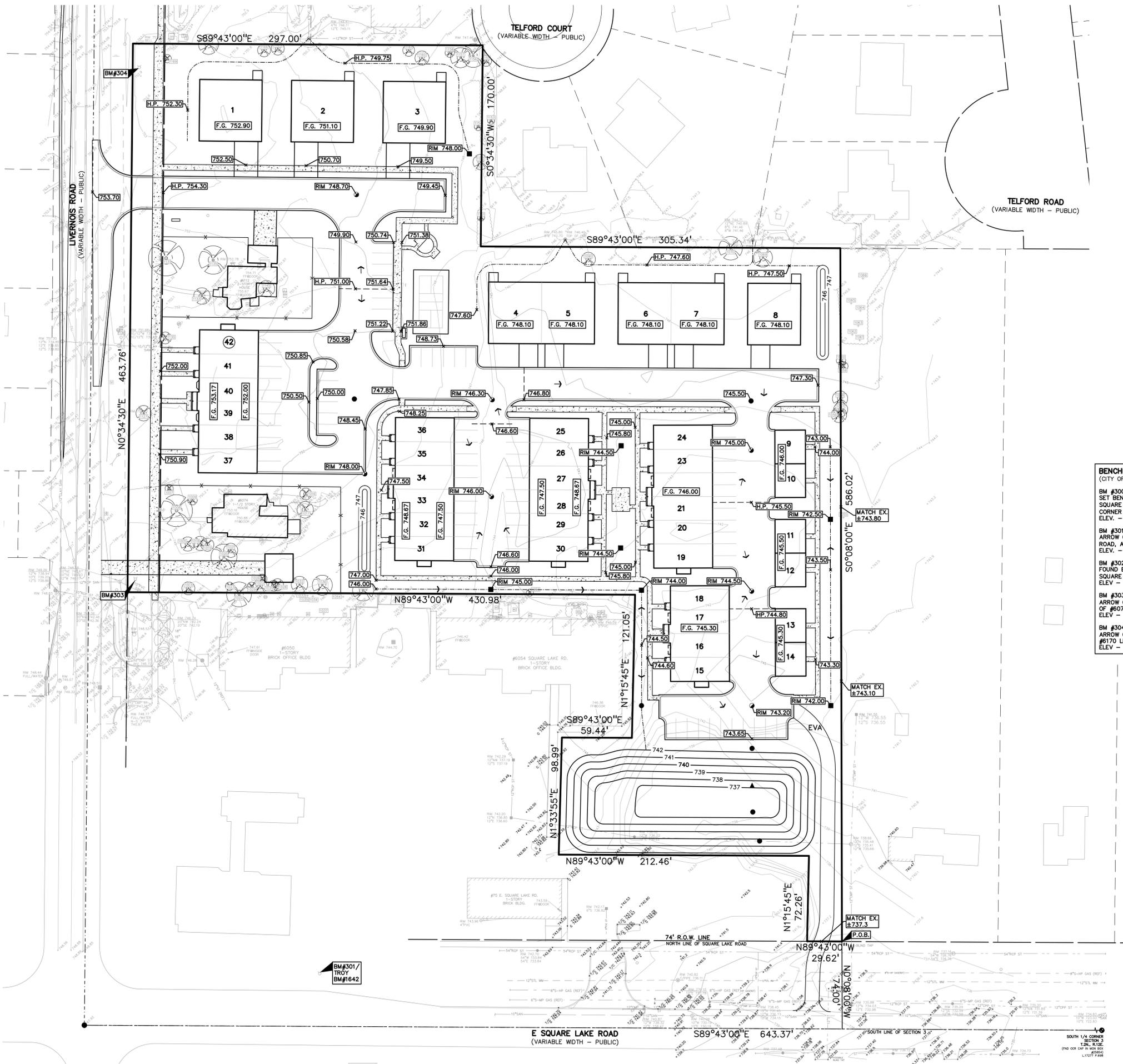


NOTE:
ALL WORK WITHIN THE E. SQUARE LAKE ROAD RIGHT-OF-WAY IS UNDER THE JURISDICTION OF THE CITY OF TROY AND REQUIRES A PERMIT.

S:\PROJECTS\2017\2017-009 GFA SQUARE LAKE - #18 (Dwg) (Shr) Plans\1(C)-2 SITE-17000.dwg

NOT FOR CONSTRUCTION

P-2.0



LEGEND

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

EXISTING

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

PROPOSED

- 671—671
- 671.21—671.21
- 622.50—622.50
- 922—922
- 310 HEAVY FLOW DUTY ONLY—310 HEAVY FLOW DUTY ONLY
- 310 HEAVY DEEP DUTY STRENGTH—310 HEAVY DEEP DUTY STRENGTH

SYMBOLS: GRADING

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

PROPOSED CONTOUR LINE

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

BENCHMARKS
(CITY OF TROY DATUM)

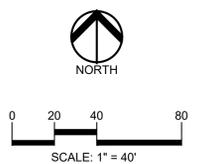
BM #300
SET BENCHMARK IN SOUTHEAST FACE OF POWER LIGHT POLE, NORTH SIDE OF SQUARE LAKE ROAD APPROX. 70' SOUTHEAST OF SOUTHEAST BUILDING CORNER OF JOHN'S MARKET AT EAST SIDE OF DRIVE ENTRANCE.
ELEV. - 743.36

BM #301 - CITY OF TROY BM #1642
ARROW ON A HYDRANT LOCATED ON THE NORTH SIDE OF SQUARE LAKE ROAD, APPROX. 200' EAST OF LIVERNOIS ROAD AT THE PNC BANK.
ELEV. - 750.08

BM #302
FOUND BOAT SPIKE IN SOUTH FACE OF UTILITY POLE, NORTH SIDE OF SQUARE LAKE ROAD, AT THE CENTERLINE OF 30' WIDE SITE FRONTAGE.
ELEV. - 737.51

BM #303
ARROW ON HYDRANT, EAST SIDE OF LIVERNOIS, APPROX. 75' SOUTHWEST OF #6074 LIVERNOIS.
ELEV. - 750.66

BM #304
ARROW ON HYDRANT, EAST SIDE OF LIVERNOIS, APPROX. 80' WEST OF #6170 LIVERNOIS.
ELEV. - 755.18



CAUTION!
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CLIENT
GFA DEVELOPMENT, INC.
5301 MIRAGE DRIVE
TROY, MI 48063

PROJECT TITLE
THE VILLAGE OF HASTINGS
PART OF THE SW 1/4 OF SECTION 3, T. 02N., R. 11E., TROY, MI

REVISIONS

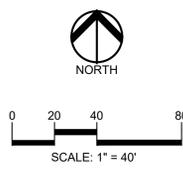
REV.	PER COMMENTS	6/2/2023	8/9/2023
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ORIGINAL ISSUE DATE:
JUNE 1, 2023

DRAWING TITLE
PRELIMINARY GRADING PLAN

PEA JOB NO.	2017-009
P.M.	JBT
DN.	KMB
DES.	DSK
DRAWING NUMBER:	

S:\PROJECTS\2017\2017-009_GFA_SQUARE LAKE - #161 (DWG) (SHA_Plan) (C-3) GRADING (17028).dwg



CAUTION!!
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CLIENT
GFA DEVELOPMENT, INC.
5301 MIRAGE DRIVE
TROY, MI 48063

PROJECT TITLE
THE VILLAGE OF HASTINGS
PART OF THE SW 1/4 OF SECTION 3, T. 02N., R. 11E., TROY, MI

REVISIONS
REV. PER COMMENTS 6/2/2023 8/9/2023

ORIGINAL ISSUE DATE:
JUNE 1, 2023
DRAWING TITLE
PRELIMINARY UTILITY PLAN

PEA JOB NO. 2017-009
P.M. JBT
DN. KMB
DES. DSK
DRAWING NUMBER:

P-4.0

WATER MAIN BASIS OF DESIGN:
(Unit Factors Based on Oakland County Unit Assignment Factors)
Residential Dwelling

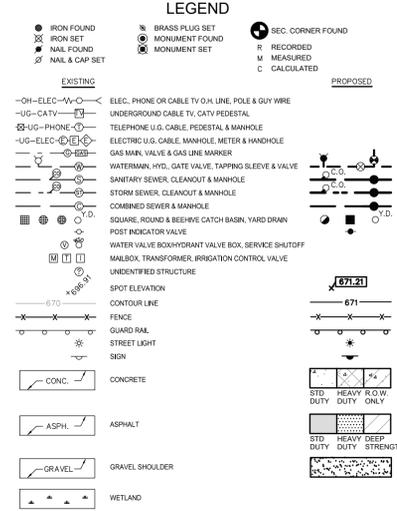
ULTIMATE DESIGN	
Number of Units	41.0
REU	41.0
People / REU	3.5
Average Flow (150 GPCPD)	144 People
	21,600 G.P.D.
	0.033 C.F.S.
	0.022 M.G.D.
Design Max. Flow = (2*avg)	43,200 G.P.D.
	0.067 C.F.S.
	0.043 M.G.D.

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

ULTIMATE DESIGN	
Number of Units	35.0
REU (1.0 Per Dwelling)	35.0
Population / REU	3.5
Population (P)	123 People
Average Flow (100 GPCPD)	12,300 G.P.D.
	0.019 C.F.S.
P (1000s)	0.123
Peaking Factor (PF)	4.22
PF = (18+sqrt(P))/(4+sqrt(P))	
Peak Flow (G.D.P.)	51,880 G.P.D.
Peak Flow (C.F.S.)	0.080 C.F.S.
8" Pipe Capacity Provided	0.906 C.F.S.

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

ULTIMATE DESIGN	
Number of Existing Units	4.0
Number of Existing Units Removed	2.0
Number of Proposed Units	6.0
Net REUs Added (1.0 Per Dwelling)	4.0
Population / REU	3.5
Population (P)	14 People
Average Flow (100 GPCPD)	1,400 G.P.D.
	0.002 C.F.S.
P (1000s)	0.014
Peaking Factor (PF)	4.40
PF = (18+sqrt(P))/(4+sqrt(P))	
Peak Flow (G.D.P.)	6,159 G.P.D.
Peak Flow (C.F.S.)	0.010 C.F.S.
8" Pipe Capacity Provided	0.906 C.F.S.



Site Drainage Data
Select County: **Oakland**

Existing

Natural Greenspace area:	0.00 acre	C = 0.35
Select NCRS Soil type:	D	
Select NCRS Soil type:	D	
Impervious Area:	0.00 acre	C = 0.95
Greenbelt Area:	6.31 acre	C = 0.35
Total Area (A):	6.31 acre	
Weighted Coefficient of Runoff (C):	0.35	

Proposed

Natural Greenspace area:	0.00 acre	C = 0.35
Select NCRS Soil type:	D	
Improved Greenspace area:	3.07 acre	C = 0.35
Select NCRS Soil type:	D	
Wooded Area:	0.00 acre	C = 0.35
Select NCRS Soil type:	D	
Impervious Area:	2.96 acre	C = 0.95
Greenbelt Area:	3.07 acre	C = 0.35
Total Area (A):	6.03 acre	
Weighted Coefficient of Runoff (C):	0.64	

Rainfall Intensity
Flood Control Time of Concentration, Tc = **20.00 min**

Rainfall Intensity

Time of Concentration (Tc)	20.00 min
Since 15<Tc<60, use intensity equation	
I1 = 30.2 / (T + 9.17)^0.81	1.97 in/hr
I10 = 50.12 / (T + 9.17)^0.81	3.26 in/hr
I100 = 83.3 / (T + 9.17)^0.81	5.42 in/hr

CPVC: Channel Protection Volume Control Volume
Vcpvc = (4719)CA
18,212 cf

CPVC: Channel Protection Rate Control Volume: Extended Detention
VED = (6897)CA
26,617 cf

CPVC Allowable Outlet Rate
Qved = VED / (48*60*60)
0.15 cfs

Water Quality Control
Forebay Volume = (545)CA
2,103 cf
Forebay Release Rate: QVF = VF/(48*60*60)
0.012 cfs

100-Year Allowable Outlet Rate
Since 2-A<100, Qvrr = 1.1055-0.206ln(A)
Qvrr = 0.74 cfs/ac

100-Year Peak Allowable Discharge
Q100P = Qvrr(A)
4.43 cfs

100-Year Runoff Volume
V100R = (18,985)CA
73,267 cf

100-Year Peak Inflow
Q100IN = Q100P(A)
20.92 cfs

Storage Curve Factor (Ns/Vr)
R = 0.206-0.15 x ln(Q100P/Q100IN)
0.439

100-Year Storage Volume
Vs = R(V100R)
32,164 cf

No infiltration will be provided, so no CPVC deduction is taken.
V100 = Vs
32,164 cf

Vsed must be larger or equal to VED:
Is V100 >= VED? **Yes**

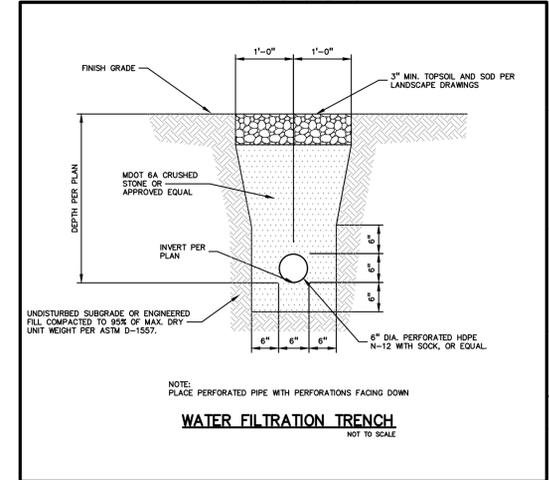
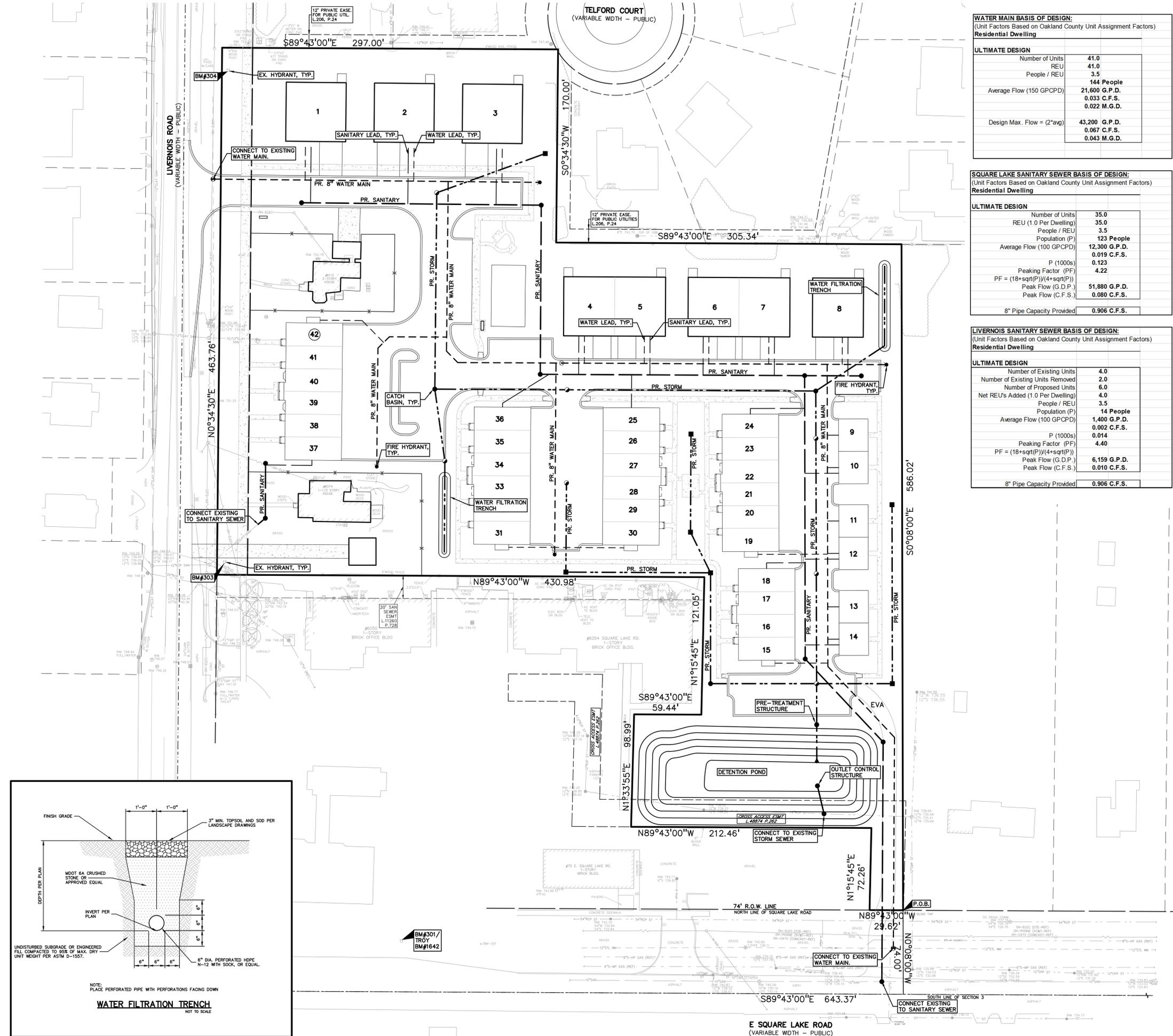
Vsed = **32,164 cf**

Design Requirements

CPVC Storage Volume: Vcpvc	NA cf
CPVC Storage Outlet Rate: Qcpvc	NA cfs
CPVC Extended Detention: VED	26,617 cf
CPVC Allowable Outlet Rate: Qved	0.15 cfs
100-Year Storage Volume: V100R	32,164 cf
100-Year Allowable Outlet Rate: Qvrr	4.43 cfs
100 Year Peak Inflow: Q100IN	20.92 cfs

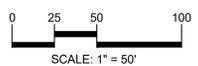
Detention Basin

CPVC Storage Elevation:	740.24	26,617 cf	
100-yr Storage Elevation:	740.67	32,164 cf	
Elev. (ft)	Area (sf)	Vol. (cf)	Total Vol. (cf)
736.00	0	0	0
737.00	3,127	1,564	1,564
738.00	6,082	4,605	6,168
739.00	8,610	7,346	13,514
740.00	11,412	10,011	23,525
741.00	14,395	12,904	36,429



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NOT FOR CONSTRUCTION



CAUTION!
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CLIENT
GFA DEVELOPMENT, INC.
3301 MIRAGE DRIVE
TROY, MI 48063

PROJECT TITLE
THE VILLAGE OF HASTINGS
PART OF THE SW 1/4 OF SECTION 3, T. 02N., R. 11E., TROY, MI

REVISIONS
REV. PER COMMENTS 6/2/2023 8/9/2023

ORIGINAL ISSUE DATE:
JUNE 1, 2023

DRAWING TITLE
PRELIMINARY LANDSCAPE PLAN

PEA JOB NO. 2017-009
P.M. JBT
DN. KAD
DES. KAD
DRAWING NUMBER:

LANDSCAPE CALCULATIONS:
PER CITY OF TROY ZONING ORDINANCE - FORM BASE DISTRICT (NN) NEIGHBORHOOD NODE Q; SITE TYPE NN-B; BUILDING FORM C

5.03 C-1a - GENERAL SITE LANDSCAPE:
REQUIRED: 15% OF SITE AREA SHALL BE LANDSCAPE MATERIAL
274,863.6 SF * 15% = 41,229.5 SQ FT REQUIRED
PROVIDED: 95,628 SQ FT LANDSCAPE (34.8%)

13.02 B - SCREENING BETWEEN USES:
REQUIRED: ABUTS R-1B USE SPACE TO THE NORTH AND EAST REQUIRES SCREEN ALT. 1 (1 NARROW EVG. / 3') OR ALT. 2 (1 LARGE EVG. TREE / 10 LF)
NORTH PROPERTY LINE - WESTERN SEGMENT 297 LF AND EASTERN SEGMENT 305 LF. ALT. 2: 297 LF / 10 = 30 AND 305 LF / 10 = 31 LARGE EVG. TREES
PROVIDED: WESTERN SEGMENT: 30 8' HT LARGE EVG. TREES EASTERN SEGMENT: 31 8' HT LARGE EVG. TREES

**EAST PROPERTY LINE - NORTHERN SEGMENT 170 LF AND SOUTHERN SEGMENT 586 LF. ALT 1: 170 LF / 3 = 57 AND 586 LF / 3 = 195 NARROW EVG. TREES
PROVIDED: NORTHERN SEGMENT: 57, 6' HT. NARROW EVG. / 3' OC. SOUTHERN SEGMENT: 195, 6' HT. NARROW EVG. / 3' OC.**

13.02 F. INTERIOR STREET TREES:
REQUIRED: 1 TREE PER 50 LF OF INTERNAL STREETS
1281 LF / 50 = 26 TREES REQUIRED (EACH SIDE)
PROVIDED: 52 PROPOSED TREES

13.02 D2. GREENBELT:
REQUIRED: 1 TREE / 30 LF OF FRONTAGE TO PUBLIC RD.
LIVERNOS ROAD - 463 LF FRONTAGE / 30 = 15 TREES
E. SQUARE LAKE ROAD - 42 LF FRONTAGE / 30 = 2 TREES
PROVIDED: LIVERNOS ROAD: 15 TREES
E. SQUARE LAKE ROAD: 2 TREES

REPLACEMENT TREES:
SEE SHT. T-1.0 AND T-1.1 FOR EXISTING TREE LIST AND TREE PRESERVATION PLAN.
REQUIRED: 35" DBH TO REPLACE REMOVED REGULATED TREES
PROVIDED: 14 TREES AT 2.5" (14 * 2.5 = 35") PROVIDED

DECIDUOUS TREE LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
9	AB2.5	Bowhall Maple	<i>Acer rubrum 'Bowhall' (columnar)</i>	2.5" Cal.	B&B
10	AG8	Autumn Brilliance Serviceberry	<i>Amelanchier x grandiflora 'Autumn Brilliance'</i>	8-10' Ht.	B&B
5	CB2.5	European Hornbeam	<i>Carpinus betulus</i>	2.5" Cal.	B&B
11	CC2.5	Eastern Redbud	<i>Cercis canadensis</i>	2.5" Cal.	B&B
7	GD2.5	Kentucky Coffee Tree	<i>Gymnocladus dioica- male only</i>	2.5" Cal.	B&B
8	LS2.5	Sweetgum	<i>Liquidambar styraciflua</i>	2.5" Cal.	B&B
6	LT2.5	Tulip Tree	<i>Liriodendron tulipifera</i>	2.5" Cal.	B&B
9	MP2.5	Prairifire Crab	<i>Malus 'Prairifire'</i>	2.5" Cal.	B&B
10	MS2.5	Sugar Tyme Crab	<i>Malus 'Sugar Tyme'</i>	2.5" Cal.	B&B
3	NS2.5	Black Gum	<i>Nyssa sylvatica</i>	2.5" Cal.	B&B
2	QP2.5	Regal Prince Oak	<i>Quercus robur x bicolor 'Long' (columnar)</i>	2.5" Cal.	B&B
11	QR2.5	Red Oak	<i>Quercus rubra</i>	2.5" Cal.	B&B
9	TB2.5	Boulevard Linden	<i>Tilia americana 'Boulevard (columnar)</i>	2.5" Cal.	B&B
100					

EVERGREEN TREE PLANT LIST:

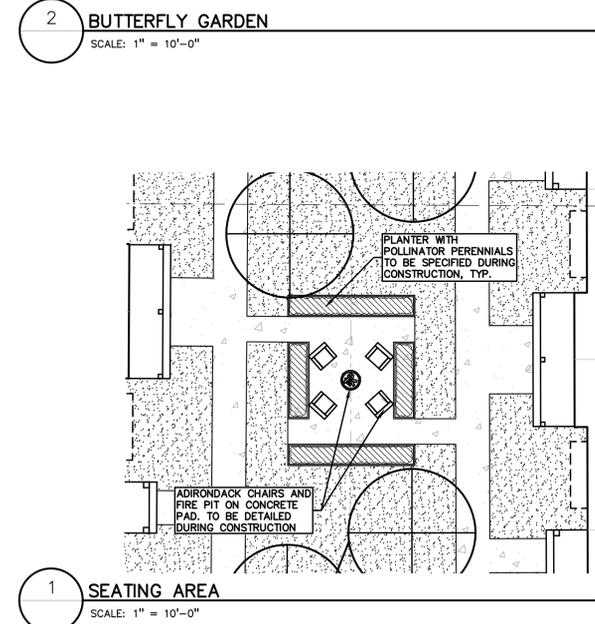
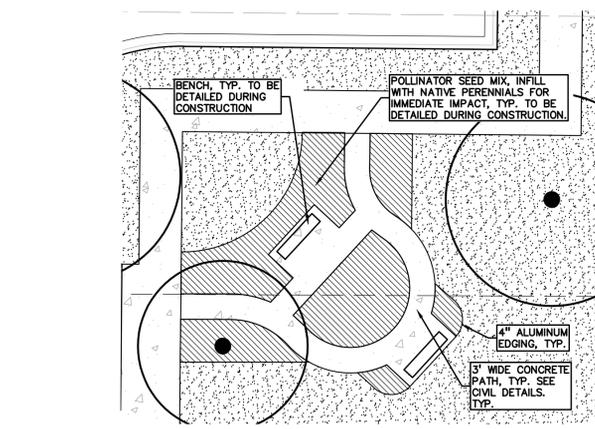
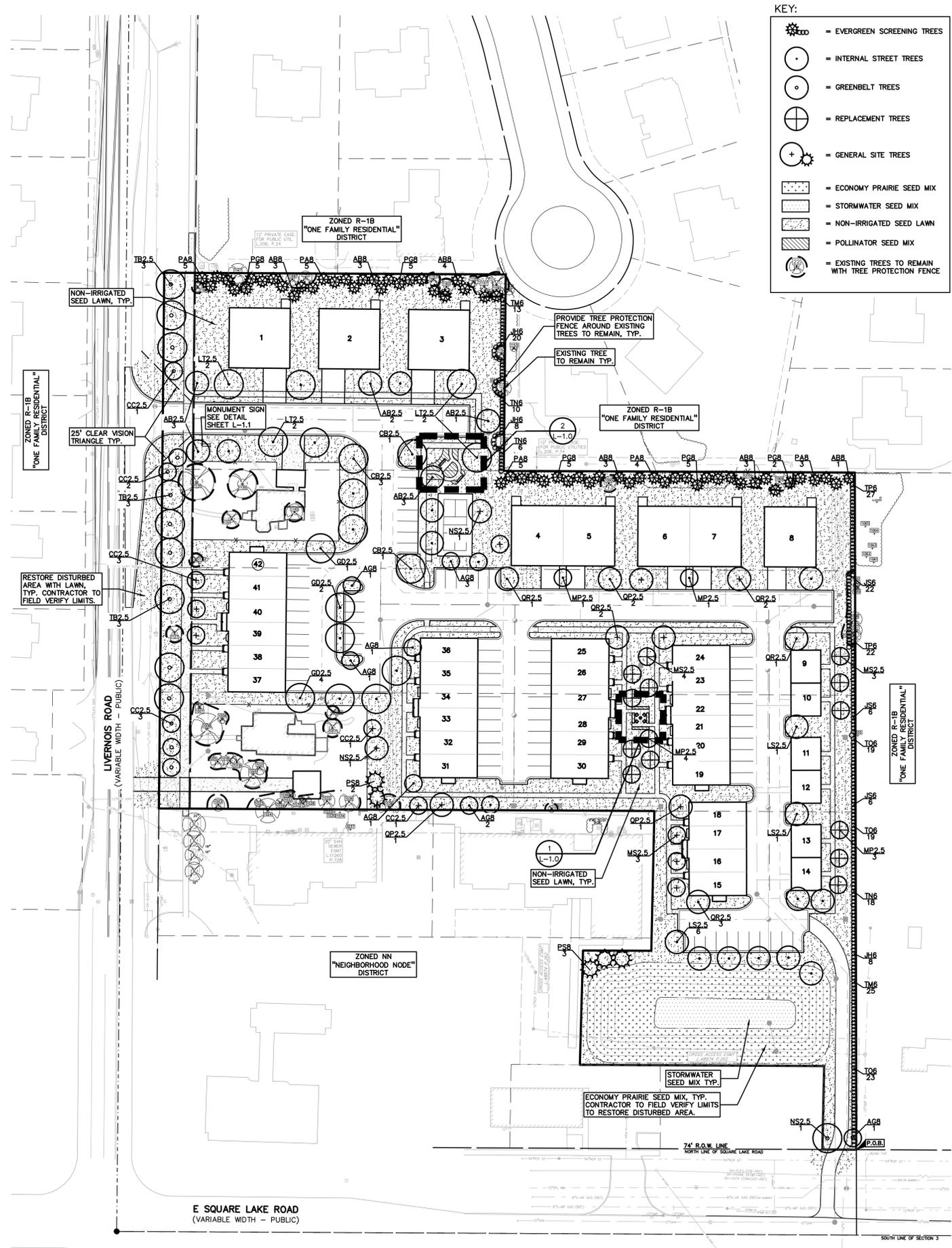
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
17	AB8	Balsam Fir	<i>Abies balsamea</i>	8' Ht.	B&B
22	PA8	Norway Spruce	<i>Picea abies</i>	8' Ht.	B&B
22	PG8	Black Hills Spruce	<i>Picea glauca 'Densata'</i>	8' Ht.	B&B
5	PS8	Eastern White Pine	<i>Pinus strobus</i>	8' Ht.	B&B
66					

NARROW EVERGREEN LIST:

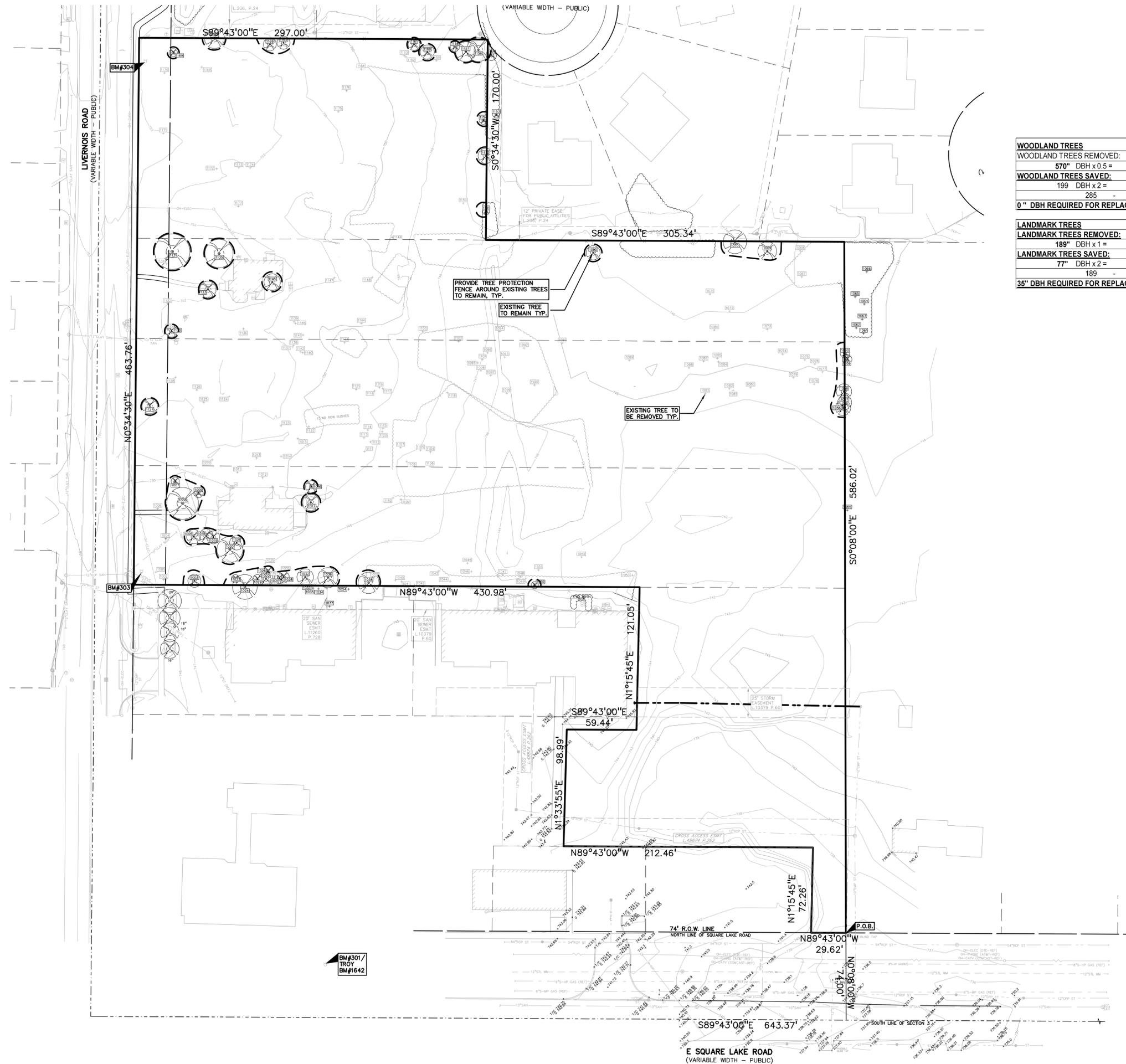
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
38	TM6	Hicks Arborvitae	<i>Thuja x media 'Hicksii'</i>	6' Ht.	B&B
61	TO6	Techy Arborvitae	<i>Thuja occidentalis 'Techny'</i>	6' Ht.	B&B
34	TN6	Dark Green Arborvitae	<i>Thuja occidentalis 'Nigra'</i>	6' Ht.	B&B
49	TP6	Pyramidal Arborvitae	<i>Thuja occidentalis 'Pyramidalis'</i>	6' Ht.	B&B
36	JH6	Hetz Columnar Juniper	<i>Juniperus chinensis 'Hetzii Columnaris'</i>	6' Ht.	B&B
14	JS6	Blue Arrow Juniper	<i>Juniperus scopolorum 'Blue Arrow'</i>	6' Ht.	B&B
252					

KEY:

- = EVERGREEN SCREENING TREES
- = INTERNAL STREET TREES
- = GREENBELT TREES
- = REPLACEMENT TREES
- = GENERAL SITE TREES
- = ECONOMY PRAIRIE SEED MIX
- = STORMWATER SEED MIX
- = NON-IRRIGATED SEED LAWN
- = POLLINATOR SEED MIX
- = EXISTING TREES TO REMAIN WITH TREE PROTECTION FENCE



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KEY

- = EXISTING TREE / TAG TO REMAIN
- = EXISTING TREE / TAG TO BE REMOVED
- = TREE PROTECTION FENCE

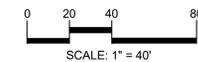
WOODLAND TREES

WOODLAND TREES REMOVED:	56	(REPLACE AT 50% OF REMOVED DBH)
570" DBH x 0.5 =	285	285" REPLACEMENT
WOODLAND TREES SAVED:	18	(CREDIT OF 2X DBH)
199 DBH x 2 =	398	398" CREDIT
285 -	398	= -113
0" DBH REQUIRED FOR REPLACEMENT		

LANDMARK TREES

LANDMARK TREES REMOVED:	11	(REPLACE AT 100% OF REMOVED DBH)
189" DBH x 1 =	189"	189" REPLACEMENT
LANDMARK TREES SAVED:	4	(CREDIT OF 2X DBH)
77" DBH x 2 =	154	154" CREDIT
189 -	154	= 35
35" DBH REQUIRED FOR REPLACEMENT		

PEA GROUP
t: 844.813.2949
www.peagroup.com



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

CLIENT
GFA DEVELOPMENT, INC.
3301 MIRAGE DRIVE
TROY, MI 48063

PROJECT TITLE
THE VILLAGE OF HASTINGS
PART OF THE SW 1/4 OF SECTION 3, T. 02N., R. 11E., TROY, MI

REVISIONS

REV. PER COMMENTS	6/2/2023	8/9/2023
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ORIGINAL ISSUE DATE:
JUNE 1, 2023

DRAWING TITLE
TREE PRESERVATION PLAN

PEA JOB NO.	2017-009
P.M.	JBT
DN.	KAD
DES.	KAD
DRAWING NUMBER:	

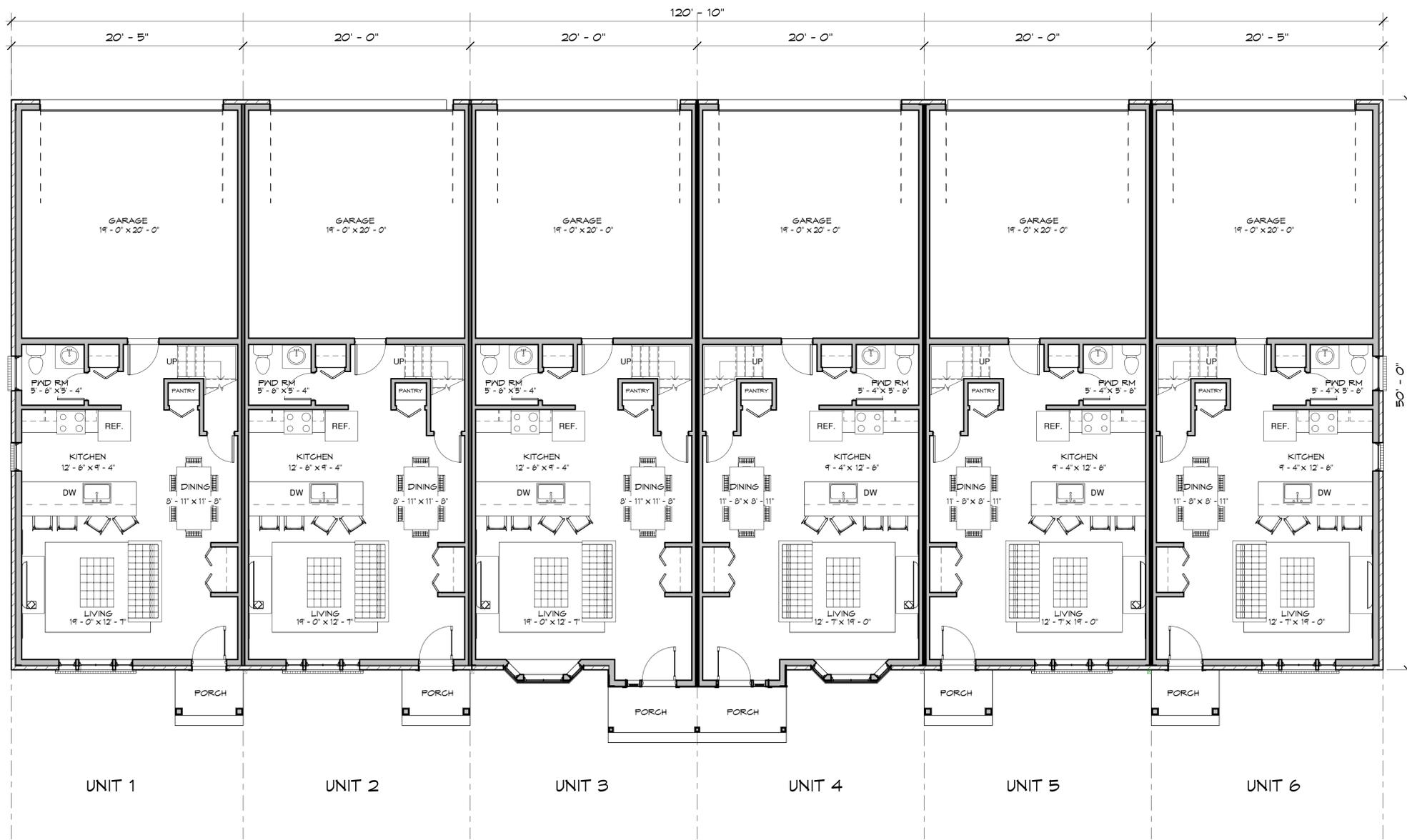
NOT FOR CONSTRUCTION

T-1.0

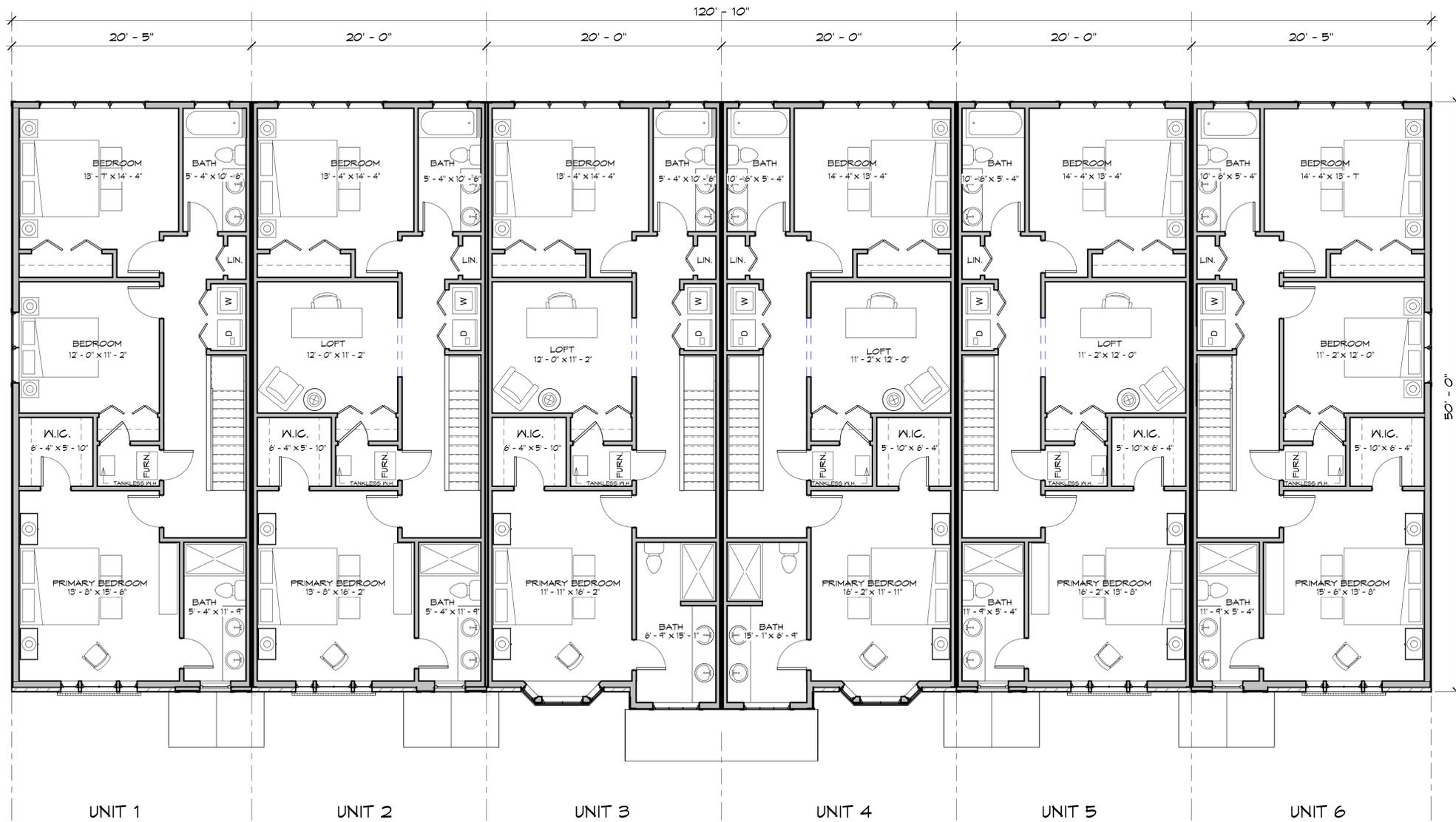
S:\PROJECTS\2017\009 GFA SQUARE LAKE - #16\DWG\17-000\TREE PLAN(T-1.0) TREE PRESERVATION-17009.dwg

TAG	CODE	DBH	COMMON NAME	LATIN NAME	CONDITION	NOTE	CLASS	SAVE / REMOVE	ON-SITE
1	E	6	American Elm	Ulmus americana	Poor		INVASIVE	R	Y
2	E	7	American Elm	Ulmus americana	Very-Poor		INVASIVE	R	Y
3	CT	11	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y
4	BW	14	Black Walnut	Juglans nigra	Very-Poor		WOODLAND	R	Y
5	B	8	Basswood	Tilia americana	Fair		WOODLAND	R	Y
6	BX	8	Box elder	Acer-negundo	Very-Poor		WOODLAND	R	Y
7	B	9	Basswood	Tilia americana	Fair		WOODLAND	R	Y
8	BX	6	Box elder	Acer-negundo	Poor		WOODLAND	R	Y
9	E	9	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
10	E	6	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
11	B	6	Basswood	Tilia americana	Poor		WOODLAND	R	Y
12	E	9	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
13	BX	8	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
14	BX	7	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
15	E	7	American Elm	Ulmus americana	Very-Poor		INVASIVE	R	Y
16	E	7	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
17	E	9	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
18	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y
19	NM	11	Norway Maple	Acer platanoides	Fair		INVASIVE	R	Y
20	E	12	American Elm	Ulmus americana	Poor		INVASIVE	R	Y
21	BX	12	Box elder	Acer-negundo	Very-Poor		INVASIVE	R	Y
22	E	9	American Elm	Ulmus americana	Poor		INVASIVE	R	Y
23	E	7	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
24	CT	11	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y
25	B	9	Basswood	Tilia americana	Poor		WOODLAND	R	Y
26	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y
27	BX	7	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
28	E	10	American Elm	Ulmus americana	Good		INVASIVE	R	Y
29	E	13	American Elm	Ulmus americana	Fair		INVASIVE	S	Y
30	B	7	Basswood	Tilia americana	Poor		WOODLAND	R	Y
31	NM	15	Norway Maple	Acer platanoides	Good		INVASIVE	R	Y
32	NM	15	Norway Maple	Acer platanoides	Very-Poor		INVASIVE	R	Y
33	B	7	Basswood	Tilia americana	Poor		WOODLAND	R	Y
34	B	10	Basswood	Tilia americana	Poor		WOODLAND	R	Y
35	B	14	Basswood	Tilia americana	Poor		WOODLAND	R	Y
36	E	6	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
37	E	9	American Elm	Ulmus americana	Poor		INVASIVE	R	Y
38	BC	7	Wild Black Cherry	Prunus serotina	Fair		WOODLAND	R	Y
39	E	6	American Elm	Ulmus americana	Poor		INVASIVE	R	Y
40	B	7	Basswood	Tilia americana	Poor		WOODLAND	R	Y
41	B	9	Basswood	Tilia americana	Fair		WOODLAND	R	Y
42	B	8	Basswood	Tilia americana	Poor		WOODLAND	R	Y
43	B	8	Basswood	Tilia americana	Very-Poor		WOODLAND	R	Y
44	B	6	Basswood	Tilia americana	Very-Poor		WOODLAND	R	Y
45	BC	10	Wild Black Cherry	Prunus serotina	Good		WOODLAND	R	Y
46	B	8	Basswood	Tilia americana	Very-Poor		WOODLAND	R	Y
47	B	8	Basswood	Tilia americana	Fair		WOODLAND	R	Y
48	B	8	Basswood	Tilia americana	Very-Poor		WOODLAND	R	Y
49	B	11	Basswood	Tilia americana	Poor		WOODLAND	R	Y
50	B	7	Basswood	Tilia americana	Poor		WOODLAND	R	Y
51	B	7	Basswood	Tilia americana	Fair		WOODLAND	R	Y
52	B	7	Basswood	Tilia americana	Fair		WOODLAND	R	Y
53A	GA	7	Green Ash	Fraxinus pennsylvanica	Very-Poor		INVASIVE	R	Y
53B	E	9	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
54	E	7	American Elm	Ulmus americana	Poor		INVASIVE	R	Y
55	BW	8	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y
56	B	11	Basswood	Tilia americana	Fair		WOODLAND	R	Y
57	E	10	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
58	B	12	Basswood	Tilia americana	Fair		WOODLAND	R	Y
59	BX	7	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
60	BX	7	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
61	CT	11	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y
62	NM	12	Norway Maple	Acer platanoides	Good		INVASIVE	R	Y
63	B	10	Basswood	Tilia americana	Fair		WOODLAND	R	Y
64	CT	21	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y
65	B	10	Basswood	Tilia americana	Fair		WOODLAND	R	Y
66	B	12	Basswood	Tilia americana	Fair		WOODLAND	R	Y
67	CT	12	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y
68	NM	7	Norway Maple	Acer platanoides	Poor		INVASIVE	R	Y
69	NM	15	Norway Maple	Acer platanoides	Good		INVASIVE	R	Y
70	BX	9	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
71	B	11	Basswood	Tilia americana	Fair		WOODLAND	R	Y
72	BX	7	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
73	BX	7	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
74	B	13	Basswood	Tilia americana	Fair		WOODLAND	R	Y
75	B	12	Basswood	Tilia americana	Fair		WOODLAND	R	Y
76	B	11	Basswood	Tilia americana	Fair		WOODLAND	R	Y
77	B	11	Basswood	Tilia americana	Fair		WOODLAND	R	Y
78	BX	9	Box elder	Acer-negundo	Fair		INVASIVE	R	Y
79	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y
80	B	7	Basswood	Tilia americana	Fair		WOODLAND	R	Y
81	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y
82	B	7	Basswood	Tilia americana	Poor		WOODLAND	R	Y
83	B	7	Basswood	Tilia americana	Poor		WOODLAND	R	Y
84	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y
85	BX	8	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
86	PW	14	White Poplar	Populus alba	Good		INVASIVE	R	Y
87	BX	8	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
88	E	9	American Elm	Ulmus americana	Poor		INVASIVE	R	Y
89	BX	11	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
90	E	10	American Elm	Ulmus americana	Good		INVASIVE	R	Y
91	E	8	American Elm	Ulmus americana	Fair		INVASIVE	R	Y
92	BX	11	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
93	BX	13	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
94	B	14	Basswood	Tilia americana	Very-Poor		WOODLAND	R	Y
95	BX	16	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
96A	B	9	Basswood	Tilia americana	Poor		WOODLAND	R	Y
96B	B	9	Basswood	Tilia americana	Poor		WOODLAND	R	Y
97	BX	10	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
98	BX	11	Box elder	Acer-negundo	Very-Poor		INVASIVE	R	Y
99	CT	11	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y
100	RO	8	Red Oak	Quercus rubra	Poor		WOODLAND	R	Y
101	B	7	Basswood	Tilia americana	Fair		WOODLAND	R	Y
102	BX	12	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
103	BX	8	Box elder	Acer-negundo	Poor		INVASIVE	R	Y

TAG	CODE	DBH	COMMON NAME	LATIN NAME	CONDITION	NOTE	CLASS	SAVE / REMOVE	ON-SITE
104	BX	7	Box elder	Acer-negundo	Very-Poor		INVASIVE	R	Y
105	BX	9	Box elder	Acer-negundo	Very-Poor		INVASIVE	R	Y
106	BX	12	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
107	BX	17	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
108	BX	9	Box elder	Acer-negundo	Poor		INVASIVE	R	Y
109	B	12	Basswood	Tilia americana	Fair		WOODLAND	R	Y
110	B	10	Basswood	Tilia americana	Fair		WOODLAND	R	Y
111	B	12	Basswood	Tilia americana	Fair		WOODLAND	R	Y
112	B	10	Basswood	Tilia americana	Fair		WOODLAND	R	Y
113	B	8	Basswood	Tilia americana	Fair		WOODLAND	R	Y
114	B	8	Basswood	Tilia americana	Fair		WOODLAND	R	Y
115	BX	7	Box elder	Acer-negundo	Fair		INVASIVE	R	N
116	BX	8	Box elder	Acer-negundo	Fair		INVASIVE	S	N
117	PW	6	White Poplar	Populus alba	Good		INVASIVE	S	N
1001	BS	10	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y
1002	AU	15	Austrian Pine	Pinus nigra	Fair		WOODLAND	R	Y
1003	SC	11	Scotch Pine	Pinus sylvestris	Fair		WOODLAND	S	Y
1004	B	23	Basswood	Tilia americana	Good		LANDMARK	R	Y
1005	SM	12	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y
1006	NS	14	Norway Spruce	Picea Abies	Fair		WOODLAND	R	Y
1007	WS	7	White Spruce	Picea glauca	Poor		WOODLAND	S	Y
1008	NM	27	Norway Maple	Acer platanoides	Good		INVASIVE	S	Y
1009	WS	14	White Spruce	Picea glauca	Fair		WOODLAND	S	Y
1010	TH	7	Thornapple/Hawthorne	Cragaeus spp.	Poor		WOODLAND	R	Y
1011	TH	11	Thornapple/Hawthorne	Cragaeus spp.	Poor		WOODLAND	R	Y
1012	SU	17	Sugar Maple	Acer saccharum	Fair		LANDMARK	R	Y
1013	NM	10	Norway Maple	Acer platanoides	Fair		INVASIVE	R	Y
1014	NM	13	Norway Maple	Acer platanoides	Good		INVASIVE	R	Y
1015	NM	11	Norway Maple	Acer platanoides	Good		INVASIVE	R	Y
1016	WS	10	White Spruce	Picea glauca	Poor		WOODLAND	S	Y
1017	SU	14	Sugar Maple	Acer saccharum	Very Poor	dead	WOODLAND	S	Y
1018	SC	12	Scotch Pine	Pinus sylvestris	Fair		WOODLAND	S	Y
1019	NM	11	Norway Maple	Acer platanoides	Good		INVASIVE	S	Y
1020	SM	22	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y
1021	SC	20	Scotch Pine	Pinus sylvestris	Good		LANDMARK	S	Y
1022	NM	12	Norway Maple	Acer platanoides	Fair		INVASIVE	S	Y
1023	SC	7	Scotch Pine	Pinus sylvestris	Fair		WOODLAND	S	Y
1024	NM	21	Norway Maple	Acer platanoides	Good		INVASIVE	S	N
1025	SC	13	Scotch Pine	Pinus sylvestris	Fair		WOODLAND	R	Y
1026	NM	8	Norway Maple	Acer platanoides	Good		INVASIVE	S	Y
1027	NM	10	Norway Maple	Acer platanoides	Good		INVASIVE	R	Y
1028	NM	10	Norway Maple	Acer platanoides	Good		INVASIVE	S	Y
1029	NM	8	Norway Maple	Acer platanoides	Good		INVASIVE	S	Y
1030	NM	9	Norway Maple	Acer platanoides	Good		INVASIVE	R	Y
1031	NM	9	Norway Maple	Acer platanoides	Good		INVASIVE	S	Y
1032	BX	14	Box elder	Acer-negundo	Fair		INVASIVE	S	Y
1033	BX	11	Box elder	Acer-negundo	Fair		INVASIVE	S	N
1034	AU	16	Austrian Pine	Pinus nigra	Fair		WOODLAND	S	N
1035	NM	6	Norway Maple	Acer platanoides	Good		INVASIVE	S	N
1036	AU	17	Austrian Pine	Pinus nigra	Very Poor	dead	WOODLAND	S	N
1037	NM	12	Norway Maple	Acer platanoides	Fair		INVASIVE	S	N
1038	BX	18	Box elder	Acer-negundo	Fair		INVASIVE	S	Y
1039	WC	6	White Cedar	Thuja occidentalis	Good		WOODLAND	R	Y
1040	WC	6	White Cedar	Thuja occidentalis	Fair		WOODLAND	R	Y
1041	BX	10	Box elder	Acer-negundo	Fair		INVASIVE	R	Y
1042	NM	12	Norway Maple	Acer platanoides	Good		INVASIVE	R	Y
1043	SM	12	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y
1044	SC	11	Scotch Pine	Pinus sylvestris	Very-Poor	dead	WOODLAND	R	Y
1045	SM	43	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y
1046	NM	8	Norway Maple	Acer platanoides	Good		INVASIVE	R	Y
1047	SM	16	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y
1048	SC	14	Scotch Pine	Pinus sylvestris	Poor		WOODLAND	R	Y
1049	SC	14	Scotch Pine	Pinus sylvestris	Poor		WOODLAND	R	Y
1050	SM	6	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y
1051	SM	22	Silver Maple	Acer saccharinum	Good		INVASIVE	R	Y
1052	NM	8	Norway Maple	Acer platanoides	Very-Poor		INVASIVE	R	Y
1053	SM	30	Silver Maple	Acer saccharinum	Poor		INVASIVE	R	Y
1054	SU	7	Sugar Maple	Acer saccharum	Good		WOODLAND	S	N
1055	TH	7	Thornapple/Hawthorne	Cragaeus spp.	Very Poor				



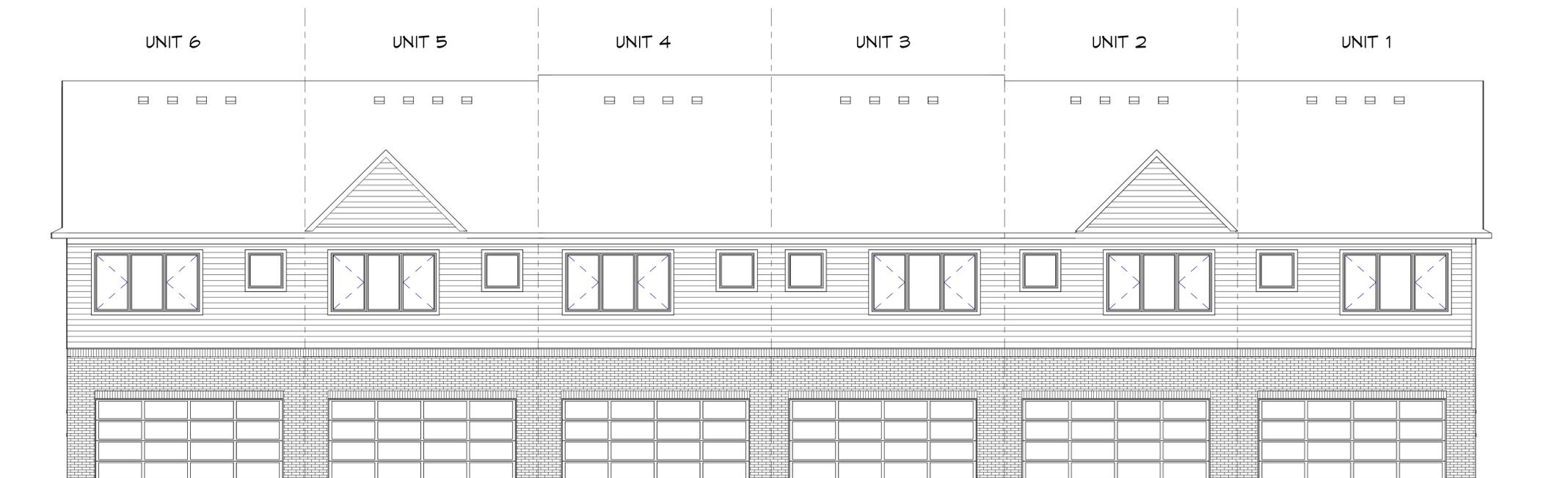
1 FIRST FLOOR
3/16" = 1'-0"



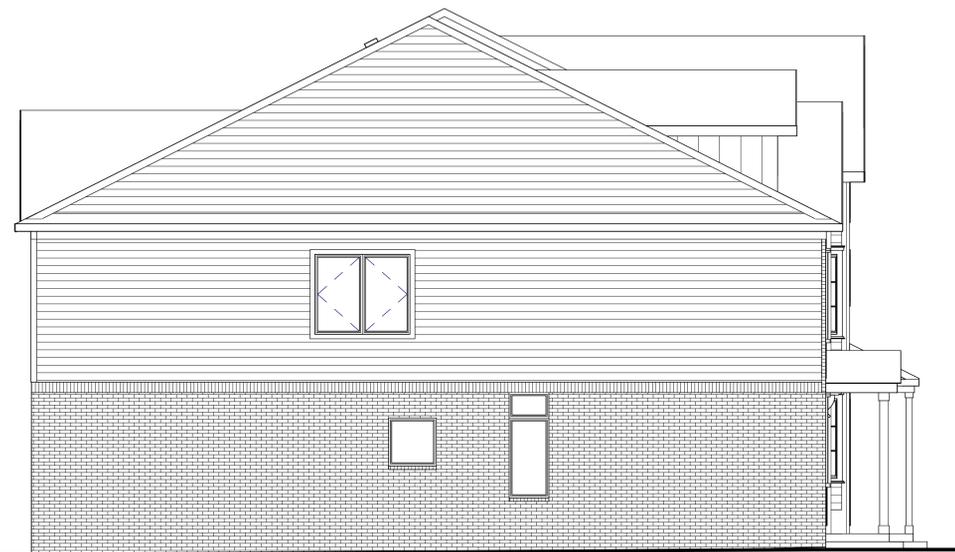
1 SECOND FLOOR
3/16" = 1'-0"



1 SOUTH ELEVATION
3/16" = 1'-0"



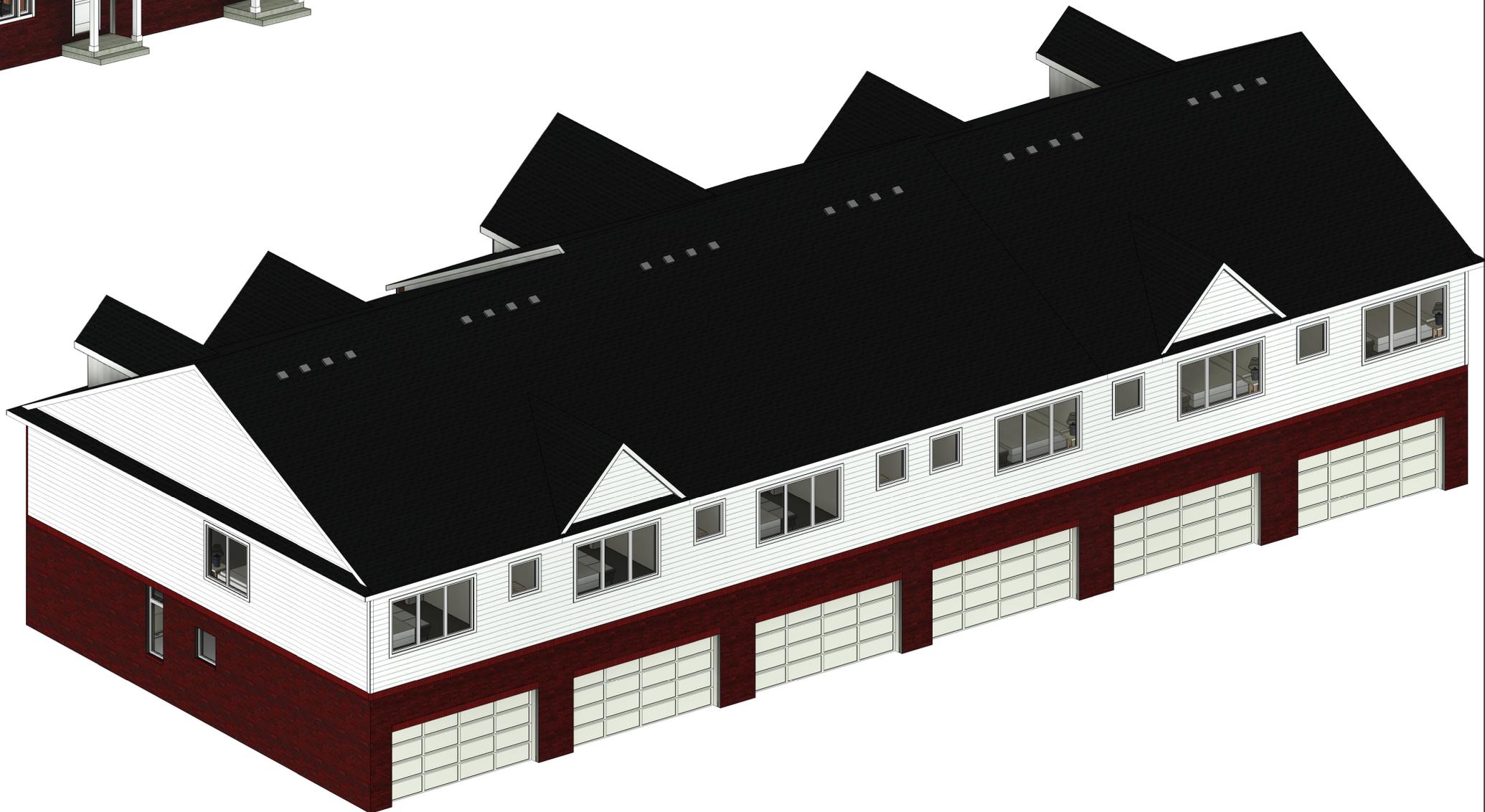
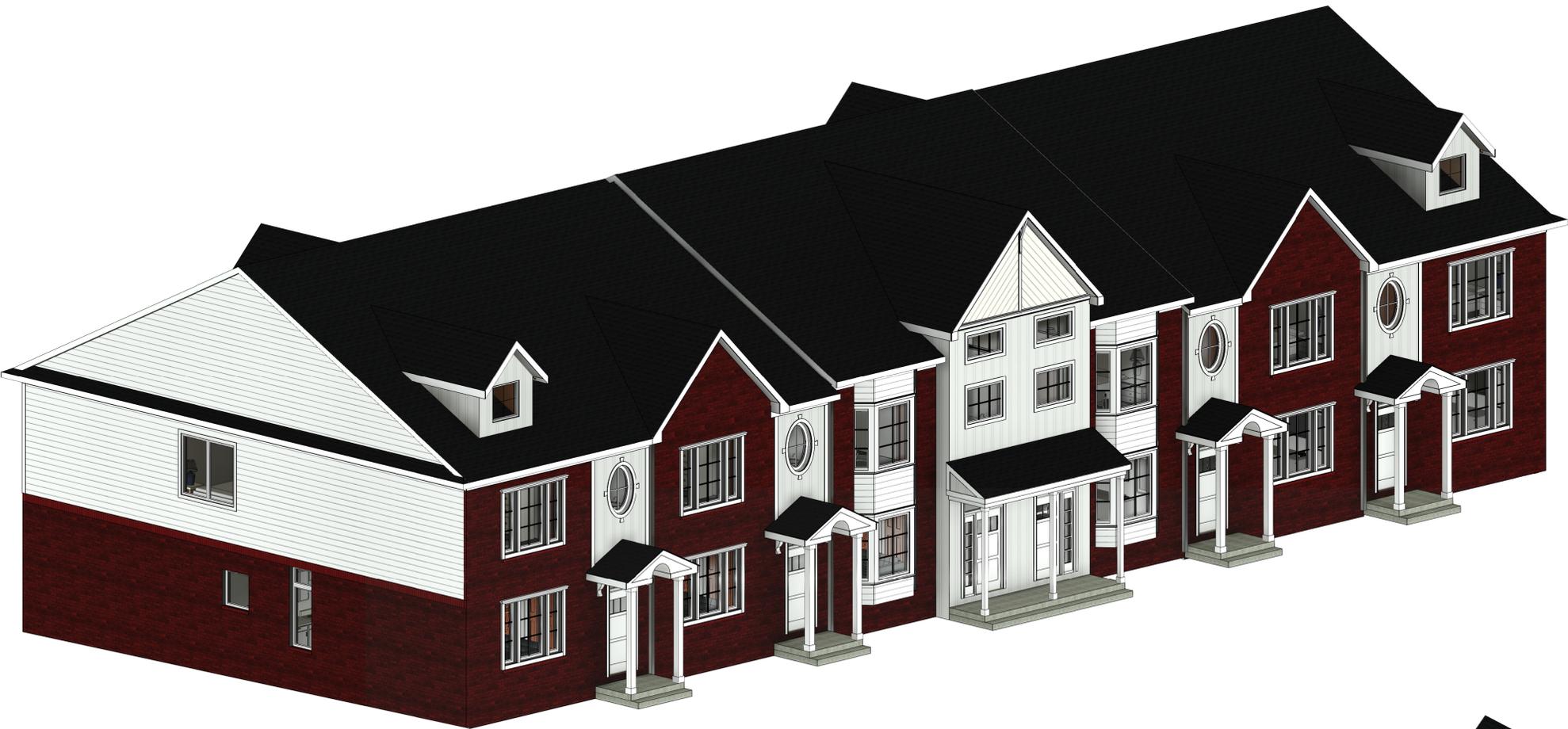
2 NORTH ELEVATION
3/16" = 1'-0"

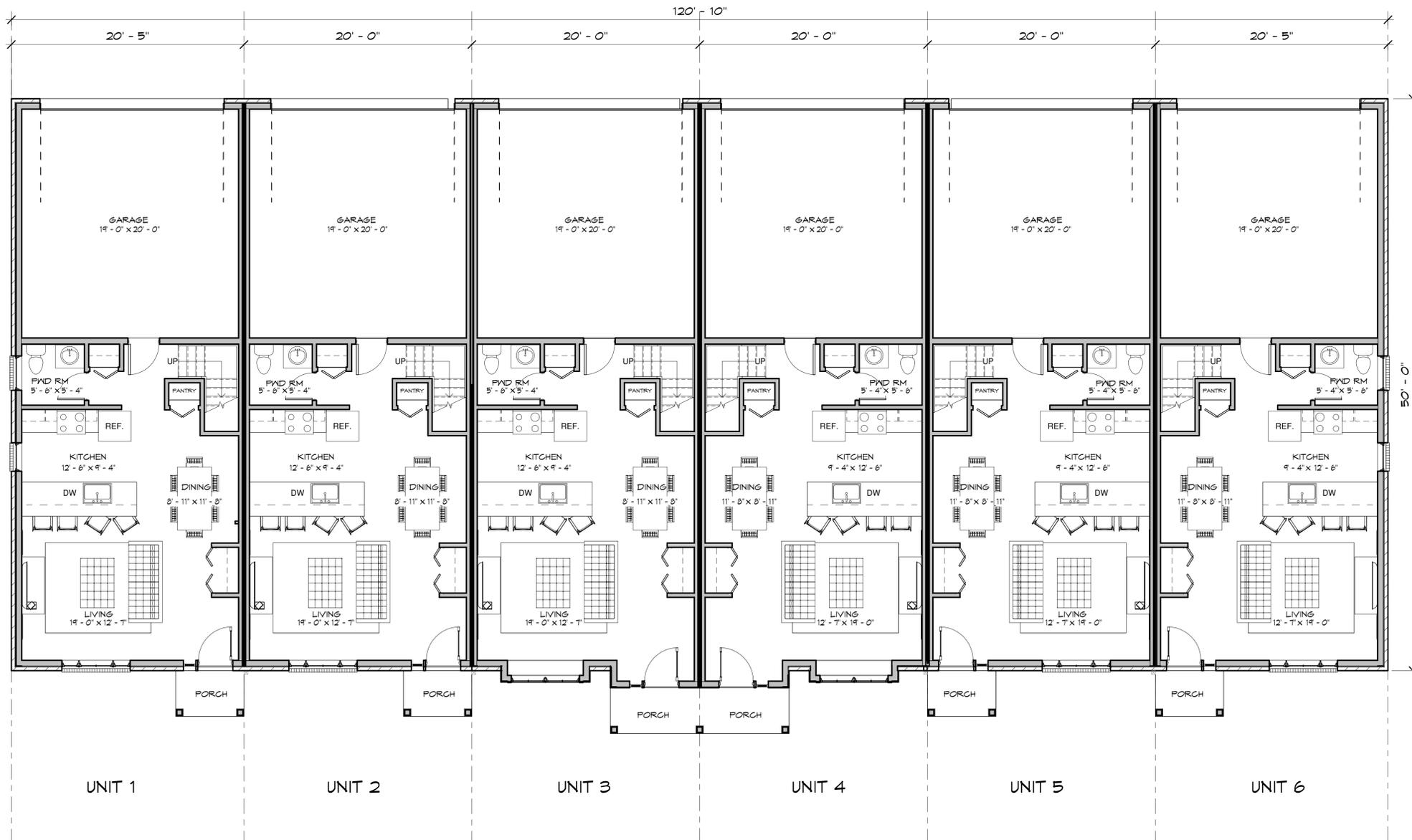


1 WEST ELEVATION
3/16" = 1'-0"

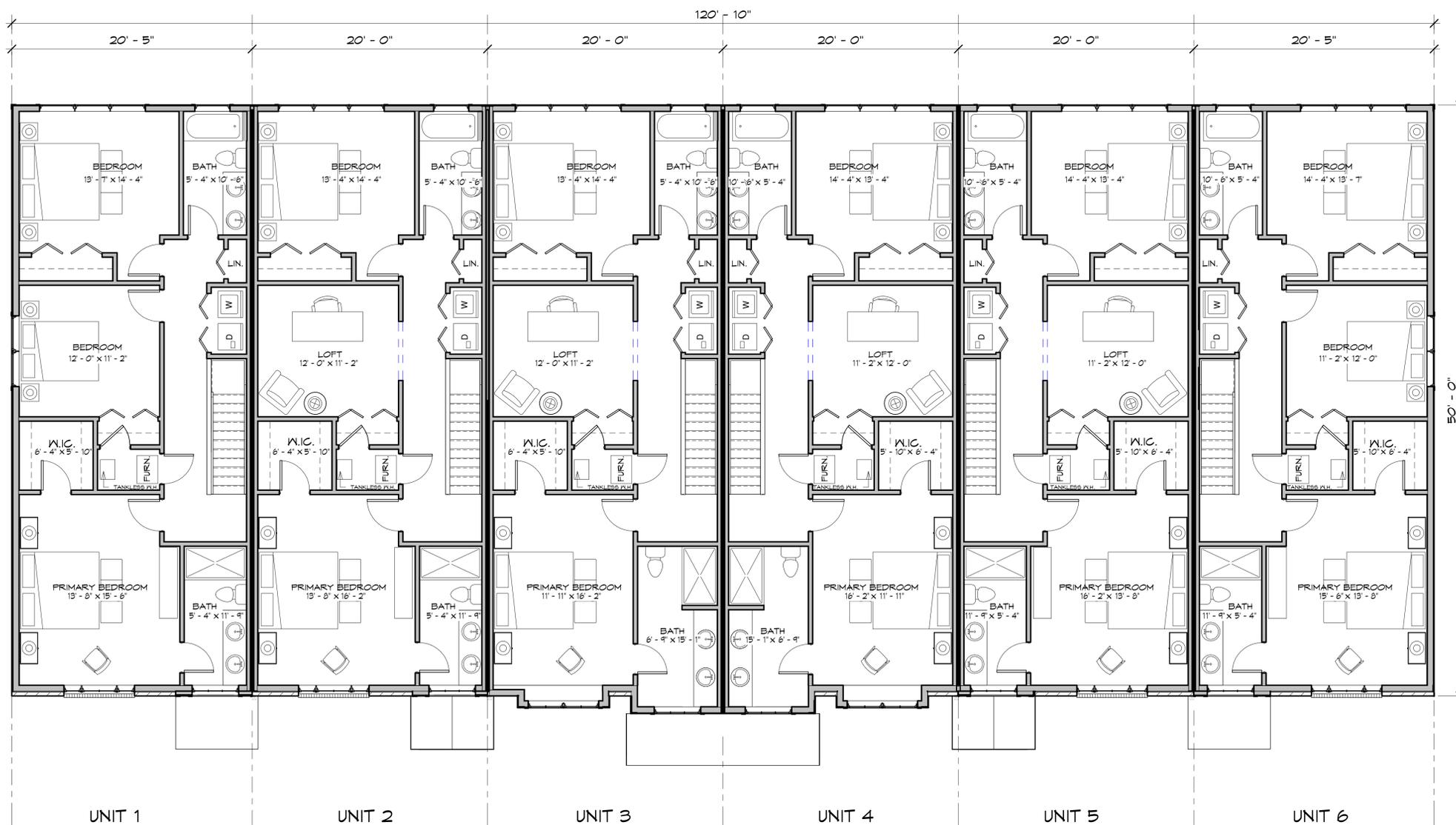


2 EAST ELEVATION
3/16" = 1'-0"





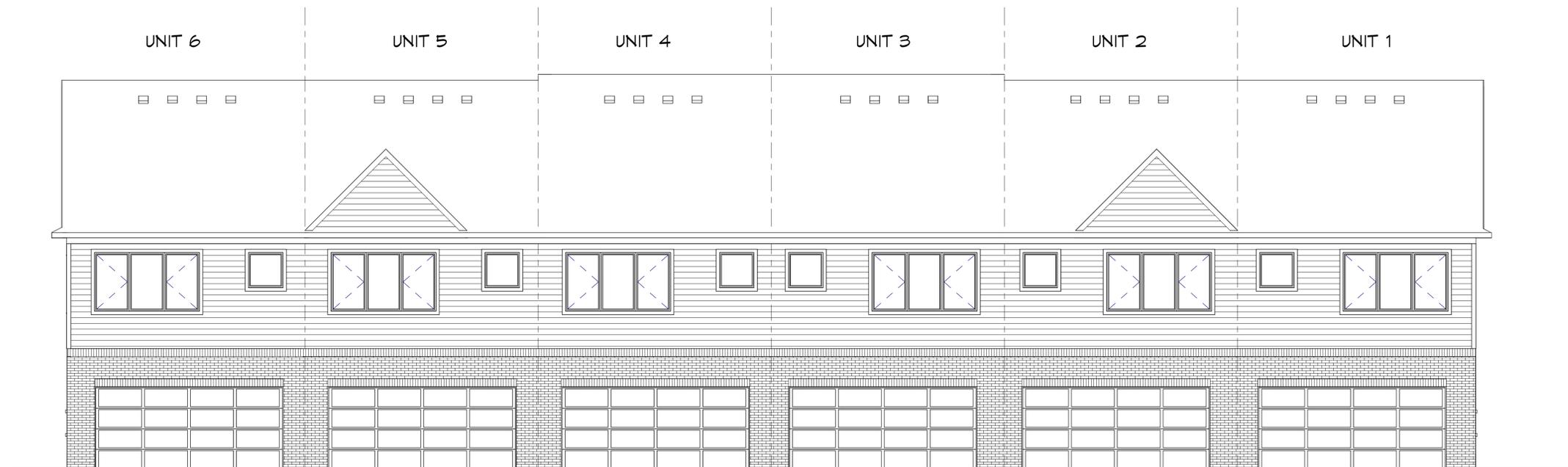
1 FIRST FLOOR
3/16" = 1'-0"



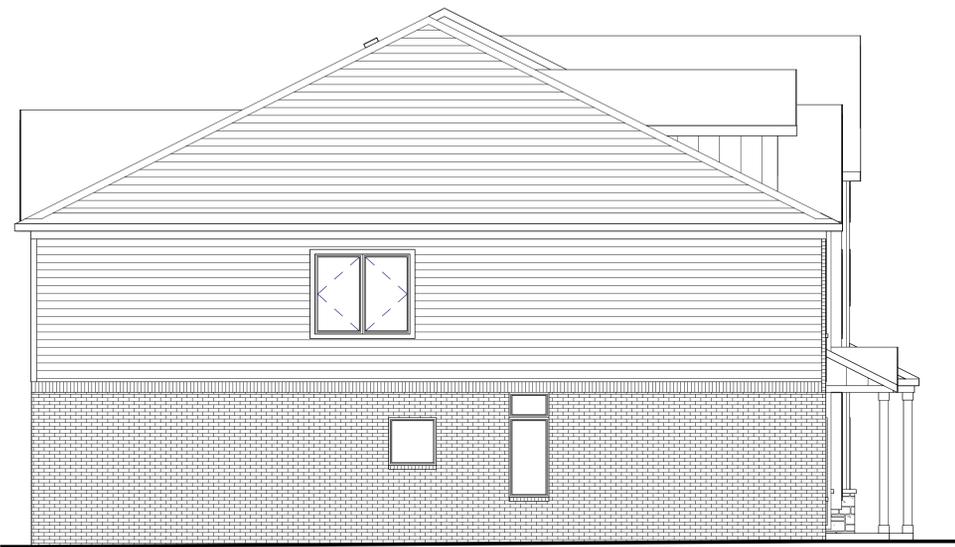
1 SECOND FLOOR
3/16" = 1'-0"



1 SOUTH ELEVATION
3/16" = 1'-0"



2 NORTH ELEVATION
3/16" = 1'-0"



1 LEFT ELEVATION
3/16" = 1'-0"



2 RIGHT ELEVATION
3/16" = 1'-0"











POLLINATOR GARDEN WITH BENCHES



SEATING AREA, WITH RAISED BEDS

1849 Pond Run
Auburn Hills, MI 48326

844.813.2949
peagroup.com

August 9, 2023
PEA Project No: 2017-009

City of Troy
Planning Department
500 West Big Beaver
Troy, MI 48084

**Subject: The Village of Hastings Condominiums
Planned Unit Development Concept Development Plan (CDP) Submittal**

This office is submitting the following as part of the PUD Application. This letter and the attached Concept Development Plan are being submitted as the PUD Application with the intent to gain both Concept Development Plan approval and Preliminary Development Plan approval. While reviewing the Concept Development Plan please consider the following:

1. Development Concept

The proposed Single-Family Residential Development is on an approximately six net acre site located north of Square Lake Rd and east of Livernois Rd. The Planned Unit Development is being requested in accordance with the City of Troy Code Chapter 39, Section 11, in order to re-develop a site that currently consists of a portion of undeveloped & vacant land along with four older single-family homes. Two of these homes will be preserved as part of this development.

The site is currently zoned for both Neighborhood Node (NN) and One Family Residential (R-1B). Due to the current multiple zoning on the property, the development team is requesting that this site be approved for a Planned Unit Development (PUD). Developing the project under a PUD will provide for a better transition from the commercial buildings at the corner of Square Lake Rd. and Livernois Rd. to the surrounding neighborhoods to the north as well as provide a much safer and desirable pedestrian connection to and from each; promoting people to walk and interact.

The development team is also seeking a PUD for the project due to the unique nature of the varied single-family products to be implemented within the same development. While the project does comply with the City's Master Plan, the innovative site design, is not covered by a single zoning designation within the Ordinance. The team has designed the project to create a community and enhance the existing neighboring developments. The site will include extensive landscaping along the existing residential sites to the north and the east, the installation of new sidewalks and paths, and new common green areas within the development.

PUD Justification:

The current site plan has been developed with the input and recommendations of the City of Troy Planning Commission and the Planning Department. The walkability of the site, the proposed building height, the additional greenspace, and the guest parking are all matters that have been influenced by their comments with the goal in mind to meet the City's PUD standards.

In accordance with the City of Troy Code Chapter 39, Section 11.01, the subject development will provide enhanced housing options for the City of Troy. Making this site a PUD also allows for increased flexibility in design and allows for diverse residential development while not sacrificing any of the established community values.

In accordance with the City of Troy Code Chapter 39, Section 11.03, the subject development will consist of a mixture of residential products, that would not be permitted without the use of a PUD. The site incorporates a large amount of open space via parks and multiple pathways for pedestrian circulation throughout the site as set forth in the Development Plan. The PUD option creates a natural and smooth transition between the commercial buildings in the Neighborhood Node zoning at the intersection of Square Lake Rd. and Livernois Rd. to the south and the single-family residential development to the north and the houses to the east.

2. Density

The subject development will consist of two existing homes which will remain, eight ranch style single family homes, twenty-eight - two story attached single family homes, and six single family duplex homes. With these 44 single family units on 6 acres the proposed PUD density is 7.3 units/acre. The proposed single-family units will range from 1,500 square feet to 2,200 square feet, providing a wide variety of options for existing downsizing residencies and first time home buyers.

3. Road System

The project will have one entry point to the development, from Livernois Rd. A paved Emergency Vehicle Access route will be provided for emergency vehicles to access the site from Square Lake Rd. The internal roadways, which will be private, are designed for efficient flow of traffic within and through the project, but not compromising the safety of the residents who will enjoy the extensive network of walkways around the project. Walkways are designed to be wide enough to accommodate residents who may need the assistance of a walker, wheelchair, or other similar type of device. The parking areas were designed to comply with the Ordinance and are detailed on the Site Plan.

4. Utilities

The Village of Hastings Condominiums will connect to and be served by the City's existing water, sanitary, and storm systems. There shall be a connection to both the Square Lake Rd. and Livernois Rd. for water and sanitary to service the proposed PUD. The storm will outlet to the Square Lake Rd. storm sewer. The storm sewer will utilize storm water infiltration trenches to capture some rear and side yard storm water in a few designated areas throughout the development. The impact on Troy's public utilities will be in line with a typical residential development of its size.

5. Open Space/Common Areas

As detailed on the attached Site Plan, the development will provide significant open space, totaling 1.3 acres, which comprises approximately 20% of the project's total area. The open space will include 2 parks, the north park will include a pickleball court and a butterfly garden. The park to the south will include a common area with butterfly planters. These areas are designed to be inviting to all the residents of the project and to be utilized by everyone within the project's community.

6. Uses

The project is being developed as a mixed unit single-family residential development, consisting of both attached and detached units. The proposed Site Plan has been developed with feedback from the Planning Commission.

7. Development Guidelines

The attached Site Plan depicts the proposed setbacks, building heights, and size of each building to be constructed and includes the parking, drive lanes, landscaping, green spaces, and common areas.

8. Parking and Traffic

The attached Site Plan depicts all the proposed parking to be included in the project. Every single-family unit will have a two-car garage. Most of the single-family units will have a guest space or spaces in front of their garage. For the units that don't have room for a guest space in front of the garage, multiple guest spaces have been provided around the site. The traffic generated by the proposed project is minimal, expected to add just a few dozen trips during the busiest hours. The traffic impact of this site on the adjacent road network is negligible and would be imperceptible to the majority of road users.

9. Landscaping

The landscaping is designed to be viable, interesting, and inviting to encourage the residents to spend time outdoors and to utilize the network of sidewalks for exercise and recreation. The attached Landscape Plan shows the proposed landscaping for the project, including the entrances and perimeter of the property.

10. Natural Resources and Features

The site currently has moderate tree cover and is located outside of the flood hazard area.

11. Phasing Information

There is no proposed phasing for this project.

12. Public Services and Facilities

The project will be served by the City's water and sewer systems. The anticipated demand for the system based on full occupancy of the project is set forth on the attached Preliminary Utility Plan. The anticipated increased demand for police and fire will not be appreciably different than if the project was developed for any other type of use. The impact on Troy's schools and public utilities will be in line with a typical residential development of its size. As previously stated, the traffic impact will be negligible to most users.

13. Historical Resources and Structures

The two houses that are proposed to be preserved were built in 1910 and are beautiful and in great shape. The intent of preserving the two historic homes is to preserve the character and historic nature of the houses and integrate them into the new surrounding development.

14. Site Topography

Please see the attached Topographic Survey that sets forth the property's topography, grades, and elevations of the property.

15. Signage

There shall be a monument sign for the community development at the Livernois entrance in accordance with the City Zoning Ordinances. There will be internal road system signs such as stop signs and "no parking, fire lane" signs as required by the City of Troy's Zoning Ordinance.

16. Amenities.

This unique development will include many amenities for the residents of the development with the main site amenity being the proposed pickleball court. The extensive sidewalks throughout the site are designed to encourage walkability throughout the site. This walkability will give the residents access to the parks and the pickleball court in the development.

17. Zoning Classification

The Property has two zoning designations:

4.9 acres fronting Livernois Rd., Zoned R-1B.

1.1 acres fronting Square Lake Rd., Zoned NN.

The land surrounding the development is developed and zoned as follows:

North – zoned as R-1B

East – zoned as R-1B

West – zoned as R-1B & NN

South – zoned as NN

18. Specification of Deviations

The proposed project complies with the City of Troy's Master Plan and helps to create a smooth transition between the commercial Neighborhood Node district and the residential houses to the north and the east. The community shall have a mix of unit styles and is coupled with the mix of zoning within the property through means of the PUD and as is permitted per the zoning ordinance is the R-1B zoning setbacks. The R-1B zoning requires a 45-foot rear yard setback and a 40-foot front yard setback, the proposed front and rear yard setbacks are to be 30 feet, except for units 15-18, where the rear setback have been noted on the plan. The building height adheres to the City Ordinance standards, and the side setbacks, open space, and building coverage are to be greater than the minimum requirement per the City of Troy's Zoning Ordinance as set forth in the Development Plan.

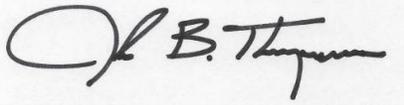
19. Community Impact Statement

The project creates a valuable and beneficial opportunity for the City of Troy to approve a development on a vacant parcel that is readily available and poised for the right type of development. The project is consistent with the City's Master Plan which identifies the property for a combination of single-family development and a neighborhood node development. The proposed use offers an ideal transition from the commercial uses at the intersection of Livernois and Square Lake to the residential development both to the north and east. This unique lifestyle development concept will offer an integrated blend of single-family units that responds to the changing need for enhanced and diverse housing and community options for the citizens of Troy. By approving this proposed PUD, the City of Troy would allow the development of additional Missing Middle Housing in a Neighborhood Node district. The NN district has been targeted for the Missing Middle Development in the City of Troy's Master Plan. The project has preserved and incorporated existing century year old houses into the development and will create multiple parks for the use of and enjoyment by the residents and their guests.

If you should have any questions or require any additional information, please feel free to contact this office.

Sincerely,

PEA Group

A handwritten signature in black ink, appearing to read "John B. Thompson". The signature is written in a cursive style with a large initial "J".

John B. Thompson, PE
Senior Project Manager

memorandum



Date: August 24, 2023

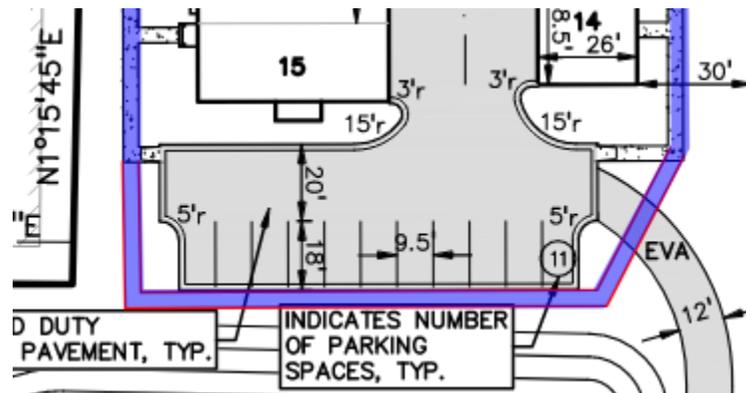
To: R. Brent Savidant, AICP
Scott G Finlay, PE

From: Stephen Dearing, PE, PTOE

Re: Village of Hastings – Mixed Residential
Site Review and Anticipated Traffic Impacts

We have reviewed the preliminary site plan for the Village of Hastings, prepared by PEA and dated August 9, 2023. There are a variety of issues and concerns that should be addressed and revised plans submitted.

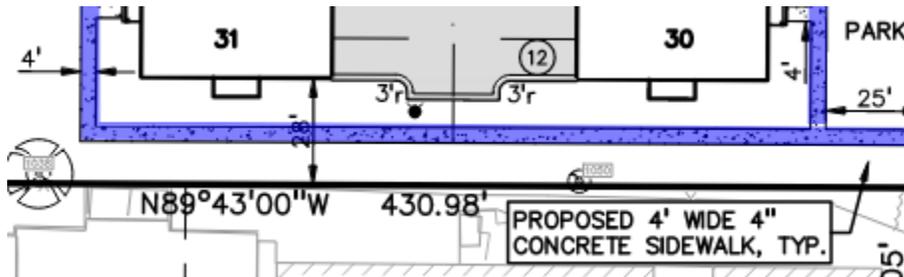
1. The plans already proposed improvements to Livernois Rd in support of the development, widening to provide a center lane for left turns for SB movement into the site and a NB right turn lane. The geometry for the center lane needs to be changed for the width to be 11', not 10' as depicted. The right turn lane width needs to be dimensioned and should be at least 11' wide.
2. The Telford Court ROW looks to overlap with the parcel corner to the northeast of Ranch No. 3. Clarify this issue.
3. The developer should add sidewalk along the site's Square Lake Rd frontage, as there's only a few gaps remaining along that roadway.
4. Verify that emergency vehicles can navigate the proposed EVA to Square Lake by way of an AutoTurn analysis.
5. The following points relate to the image below:



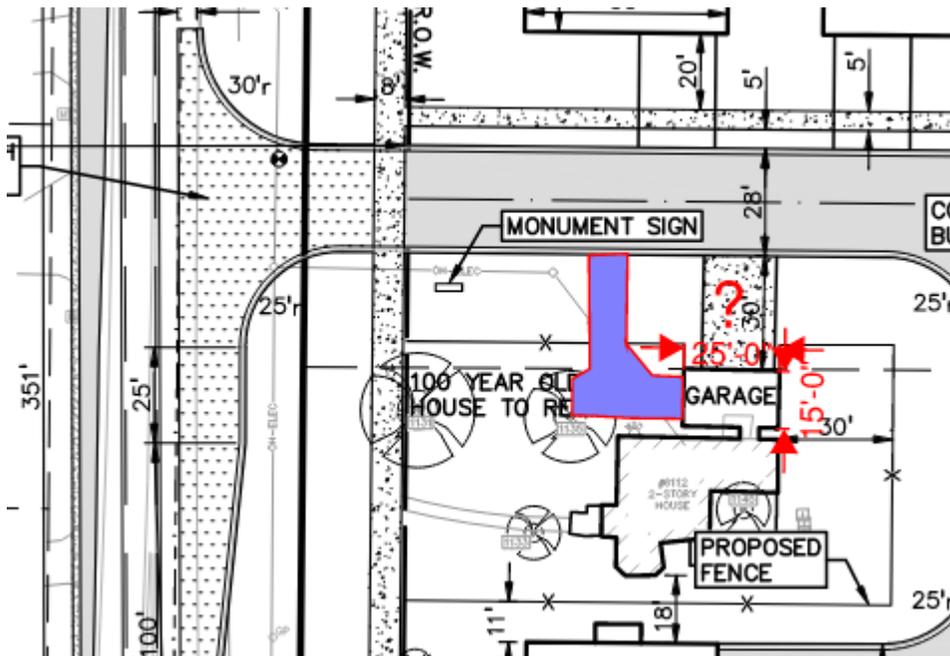
- a. The aisle width of 20' for the parking lot does not conform to zoning ordinance requirements.
- b. Should have continuity of sidewalk, avoiding long transit of parking lot.
- c. The relocated portion adjacent to parking stalls needs to be 7' wide to account for bumper overhang.



6. The following points relate to the image below:



- a. All internal walks should be 5' wide.
 - b. Dead end turnarounds must be a minimum of 5' deep, not the 3' depicted.
7. Five of the ranch homes have some of the worst ped access within the site. Add ped connectivity for units #4-8.
 8. The stub of pavement between Ranch #8 and Duplex #9 is problematic. If the intent is to allow from the future extension of the street to the east, then have the pavement extend to the property line. If not, then truncate / eliminate the pavement east of the driveway for Ranch #8.
 9. Same issue for stub of pavement near Ranch # 3. In this case, will not be extending into adjacent property. Truncate / eliminate the pavement east of driveway for Ranch #3.
 10. The proposed driveway for the historic house that will remain adjacent to the new development access is illogical. The existing one car garage is orientated east-west with the door on the west side. The garage is not wide/deep enough to reorientate it to store vehicles north-south. Do not retain the existing driveway approach to Livernois; change to access the new site street.





Anticipated Traffic Impacts

Usually, a traffic study is performed to identify any needed roadway improvements that would be required to support a proposed development. In this case, the site plan already shows reasonable turn lane improvements for the site’s point of access. But it may be considered appropriate to at least identify the trip generation that is likely to result from the proposed development.

The proposed site development consisting of 2 existing single-family homes to remain, as well as 8 new ranch homes, 6 duplexes and 28 townhouses. All but one existing home will be accessing Livernois with the site’s single street to Livernois.

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 Village of Hastings, based on the ITE Trip Generation Manual, 11th Edition, for various residential building types (ITE Land Use Codes #210 and 215).

Land Use	No. of Units	ITE Land Use Code	Number of Site-Generated Trips								
			AM Peak Hour			PM Peak Hour			Daily		
			In	Out	Total	In	Out	Total	In	Out	Total
Single Family Detached	6	210	1	5	6	4	3	7	38	38	76
Single Family Attached	38	215	4	10	14	11	8	19	120	120	240
Site Totals – 44 Units			5	15	20	15	11	26	158	158	316

Single family detached is self-explanatory and includes the two existing historic houses. The category of single family attached encompasses the four ranches that share a common wall, the six duplex units and the 28 townhouse units.

During the morning (AM) peak hour, the proposed Village of Hastings development is expected to generate 20 new trips: 5 inbound (entering the site), and 15 outbound (exiting the site). During the evening (PM) peak hour, the proposed site is expected to generate 26 new vehicle trips: 15 inbound (entering the site) trips, and 11 outbound (exiting the site). This pattern coincides with residents typically leaving in the morning for work and returning home in the evening.

Traffic volumes are closely correlated with the number of residential units. Essentially all the trips generated by the Village of Hastings development will be delivered directly to Livernois Road, an arterial roadway, which will increase slightly over current conditions. 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.

PUBLIC COMMENT

From: [Nannette Gearhart](#)
To: [Planning](#)
Cc: [Nannette Gearhart](#)
Subject: Fwd: Village of Hastings
Date: Tuesday, November 14, 2023 5:15:54 PM

You don't often get email from nannettegearhart@gmail.com. [Learn why this is important](#)

CAUTION: This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

FYI Nannette Gearhart

Sent from my iPhone

Begin forwarded message:

From: Nannette Gearhart <nannettegearhart@gmail.com>
Date: October 29, 2023 at 7:43:00 PM EDT
To: CityCouncilEmail@troymi.gov
Subject: Village of Hastings

Hello I am emailing you tonight to make sure you are aware of the Village of Hastings development at Square Lake Road and Livernois. This project will require rezoning and demolition of at least 2 100 year old homes on Livernois. I live on the corner of Livernois and Aspinwall and myself and most of the neighbors are very upset with this project and feel that this area is the last unique area of Troy that has several 100 year old houses that the owners have spent many years and lots of money preserving these homes!!! This project does not belong in this area which includes 42 condominiums and 3 ranch houses. I plan on attending the Planning Commission Public Hearing on November 28th and hope that we have support in not moving forward with this proposal. Thank you Nannette Gearhart 6197 Livernois for the past 27 years

Sent from my iPhone

From: [Lynn Cronin](#)
To: [Planning](#)
Cc: [Larry Cronin](#)
Subject: Development
Date: Wednesday, October 18, 2023 6:38:02 PM

CAUTION: This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission,

This letter is in regards to the potential development north of Square Lake Road and east of Livernois, Parcel ID88-20-03-301-088. We are OPPOSED to the developer wanting to rezone the R1B to a PUD. We are OPPOSED to any multi-level structures such as the ones near the southwest corner of Square Lake Road, the Tisbury Square Townhouses.

We SUPPORT a development that maintains lot sizes consistent with Troy's Master Plan that was approved by a previous Troy Planning Commission and City Council.

Thank you for your consideration.

Larry and Lynn Cronin
130 Telford Dr.
Troy, MI 48085

From: [Jeff W](#)
To: [Planning](#)
Subject: Rezone Request Parcel Id: 20-03-301-088, -023, -024, -025, & 20-03-351-004
Date: Wednesday, October 25, 2023 12:42:15 PM

CAUTION: This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Board Members....

I spoke last night at the Planning Commission meeting, 10-24-23....Non Agenda. There is a rezone request for the land near Troy Corners (Square Lake rd and Livernois) coming up on November 28th. I mentioned that, as one of the subdivision representatives, I would like to personally invite any and all Board Members to briefly stop by my house on 159 Telford Dr to view the properties in question. This rezone request is one of the largest for this corner in my 24 years living in Telford Ridge. My thoughts are that each of you could view the location from a different perspective. Instead of seeing the upcoming rezone request on paper, aerial shots or driving by, come and get a feel for the neighborhood and the surroundings. See what's here and get an up close visual on what it would be if the rezone request gets approved. Looking forward to meeting everyone....

Thanks for the consideration,
Jeff and Leasa Williams
159 Telford Dr
248 670 2020
kingwilly91@gmail.com

From: Lynn Cronin

To: Planning

Cc: Larry Cronin

Subject: Development

Date: Wednesday, October 18, 2023 6:38:02 PM

CAUTION: This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission,

This letter is in regards to the potential development north of Square Lake Road and east of Livernois, Parcel ID88-20-03-301-088. We are **OPPOSED** to the developer wanting to rezone the R1B to a PUD. We are **OPPOSED** to any multi-level structures such as the ones near the southwest corner of Square Lake Road, the Tisbury Square Townhouses.

We **SUPPORT** a development that maintains lot sizes consistent with Troy's Master Plan that was approved by a previous Troy Planning Commission and City Council.

Thank you for your consideration.

Larry and Lynn Cronin

130 Telford Dr.

Troy, MI 48085

From: [marv schoenherr](#)

To: [Planning](#)

Subject: Proposed Village of Hastings Planned Unit Development PUD-020

Date: Friday, October 13, 2023 9:48:38 AM

Planning Commission,

The Telford Ridge HOA met with this developer on May 15, 2023 to discuss his proposed site plan for this development. After much discussion, he agreed to not make Telford Dr. a through street to Sq. Lake Rd., keep all buildings at two (2) stories, eliminate the pickle ball courts and put single family homes on the far east end of the proposed development. He further agreed to submit the revised plan to the Telford Ridge HOA prior to the planning meeting scheduled on October 24, 2023, which he has not done. So, his credibility is immediately in question.

We totally understand progress, as we live in what used to be a 'pasture', but we also live in this city because it has 'sanctuary' neighborhoods such as Telford Ridge. However, Troy is turning into a multi-family building community. Greenspace and yards for families to enjoy are getting lost in three and four storied buildings with covered parking spaces and concrete lots while traffic is increasing at an alarming rate.

We can agree to a rezoning IF this developer does exactly what he told us he would do, and we would have to see the site plan as submitted to the city for approval. However, if he does not, we are totally against this rezoning. He can build single family dwellings in accordance with the current zoning requirements.

This type of construction/zoning is not in the spirit of why we moved to Troy. The city, in our opinion, has not placed the residents' interest over tax collection.

We ask that you seriously consider this application, as well as those in the future, to keeping Troy a beautiful community and not a cluttered community.

In conclusion, we are against this rezoning without the consensus of the Telford Ridge HOA to the proposed site plan as discussed with this developer on May 15, 2023.

Respectfully,

Marv & Cindy Schoenherr

115 Telford Dr.

Troy, MI 48085