



MUNRO'S PRESERVE JSP19-09

MUNRO'S PRESERVE JSP 19-09

Public hearing at the request of Taft 11 Group LLC for Preliminary Site Plan With Open Space Preservation Option, Site Condominium, Wetland Permit, Woodland Permit and Stormwater Management Plan Approval. The Subject Property is located in Section 22, South of Eleven Mile Road and East of Taft Road and is Zoned R-4 (One Family Residential). The applicant is proposing to construct 17 single-family residential unit development (Site Condominium) utilizing the Open Space Preservation Option, with 2 additional single family parcels off of Danya's Way.

Required Action

Approval of the Preliminary Site Plan with Open Space Preservation Option, Site Condominium, Wetland Permit, Woodland Permit, and Stormwater Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	6-19-19	<ul style="list-style-type: none"> • Approval of Open Space Preservation Option which allows a 20% reduction of lot size and 12.5% reduction of lot width. • Area undeveloped will be preserved in a permanent Conservation Easement. • Zoning Board of Appeals variance for deficiency in minimum lot frontage in order to avoid wetland impacts for construction of the road (Staff supported) • Items to be addressed on the Final Site Plan submittal.
Engineering	Approval recommended	6-19-19	<ul style="list-style-type: none"> • Items to be addressed by the applicant prior to Final Site Plan approval
Landscaping	Approval recommended	6-7-19	<ul style="list-style-type: none"> • Items to be addressed by the applicant prior to Final Site Plan approval
Wetlands	Approval recommended	6-17-19	<ul style="list-style-type: none"> • Requires a City of Novi Non-Minor Wetland Permit and an Authorization to encroach the 25-Foot Natural Features Setback. • Physical means of protection is suggested for wetland buffers that are located in the rear of proposed lots. • Items to be addressed on the final site plan submittal
Woodlands	Approval recommended	6-17-19	<ul style="list-style-type: none"> • Requires a City of Novi Woodland Permit • Items to be addressed by the applicant prior to Final Site Plan approval
Traffic	Approval recommended	6-11-19	<ul style="list-style-type: none"> • Waiver to allow the use of an "eyebrow" in the road design where one is not warranted • Items to be addressed by the applicant prior to Final Site Plan approval

Façade	NA		<ul style="list-style-type: none">• Single family homes are reviewed at the time of building permit submittal
Fire	Approval recommended	6-5-19	Meets Fire Department standards

MOTION SHEET

Approve – Preliminary Site Plan

In the matter of Munro's Preserve JSP 19-09, motion to **approve** the Preliminary Site Plan with Open Space Preservation and the Site Condominium based on and subject to the following:

- a. The Planning Commission has made the determination that the parallel plan is acceptable and, based on that plan, has determined the maximum number of dwelling units that would be permitted under the Open Space Preservation Option is nineteen units;
- b. The Planning Commission has made the determination that the Open Space Preservation Plan satisfies the intent of the Open Space Preservation Option;
- c. Reduction of minimum site area (10,000 square feet required, 8,000 square feet provided), minimum lot width (80 feet required, 70 feet provided) and minimum side yard setbacks (25 feet total two sides required, 20 feet provided), as the proposed site plan utilizes the Open Space Preservation option by preserving approximately 28 percent of Open Space on Site, as permitted in Section 3.30 of Zoning Ordinance;
- d. A waiver to allow the use of an "eyebrow" in the road design where one is not warranted, which is hereby granted;
- e. Administrative variance for not providing a stub street at 1300 feet intervals along property line, as listed in Sec.4.04 A.i.b of Subdivision Ordinance, due to presence of existing regulated woodlands and wetlands;
- f. Zoning Board of Appeals variance for deficiency in minimum lot frontage for parcels C & D in order to avoid wetland impacts for construction of the road;
- g. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- h. *(additional conditions here if any)*

(This motion is made because the plan is otherwise in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

-AND-

Approval – Wetland Permit

In the matter of Munro's Preserve JSP 19-09, motion to **approve** the Wetland Permit based on and subject to the following:

- a. The applicant should consider demarcation of wetland buffers on-site behind lot 10, and Parcels C and D, through the use of proposed easement signage and potentially other means such as boulders or decorative fencing along the setback boundaries,
- b. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- c. *(additional conditions here if any)*

(This motion is made because the plan is otherwise in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)

-AND-

Approval – Woodland Permit

In the matter of Munro’s Preserve JSP 19-09, motion to **approve** the Woodland Permit based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

(This motion is made because the plan is otherwise in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

Approval – Stormwater Management Plan

In the matter of Munro’s Preserve JSP 19-09, motion to **approve** the Stormwater Management Plan, based on and subject to:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

(This motion is made because it otherwise in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

-OR-

Denial – Preliminary Site Plan with Site Condominium

In the matter of Munro’s Preserve JSP 19-09, motion to **deny** the Preliminary Site Plan Open Space Preservation with Site Condominium... *(because the plan is not in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

-AND-

Denial- Wetland Permit

In the matter of Munro’s Preserve JSP 19-09, motion to **deny** the Wetland Permit... *(because the plan is not in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

-AND-

Denial- Woodland Permit

In the matter of Munro’s Preserve JSP 19-09, motion to **deny** the Woodland Permit... *(because the plan is not in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

-AND-

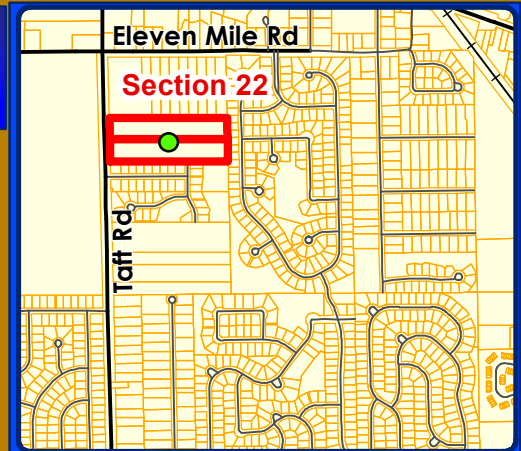
Denial – Stormwater Management Plan

In the matter of Munro’s Preserve JSP 19-09, motion to **deny** the Stormwater Management Plan... *(because the plan is not in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*


MAPS
Location
Zoning
Future Land Use
Natural Features

MUNRO'S PRESERVE: JSP19-09

LOCATION



LEGEND

 Subject Property



City of Novi

Dept. of Community Development
City Hall / Civic Center
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

Map Author: Lindsay Bell
Date: 6/17/19
Project: MUNRO'S PRESERVE JSP19-09
Version #: 1



1 inch = 333 feet

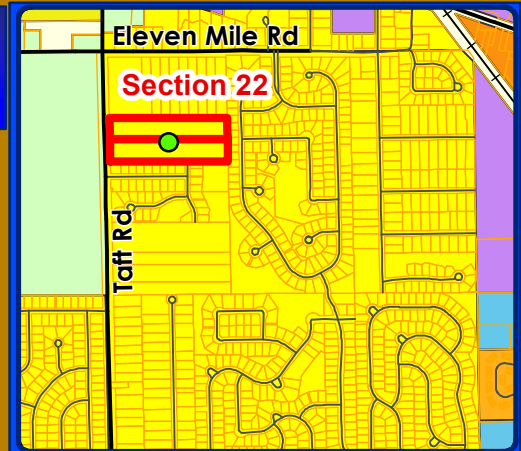
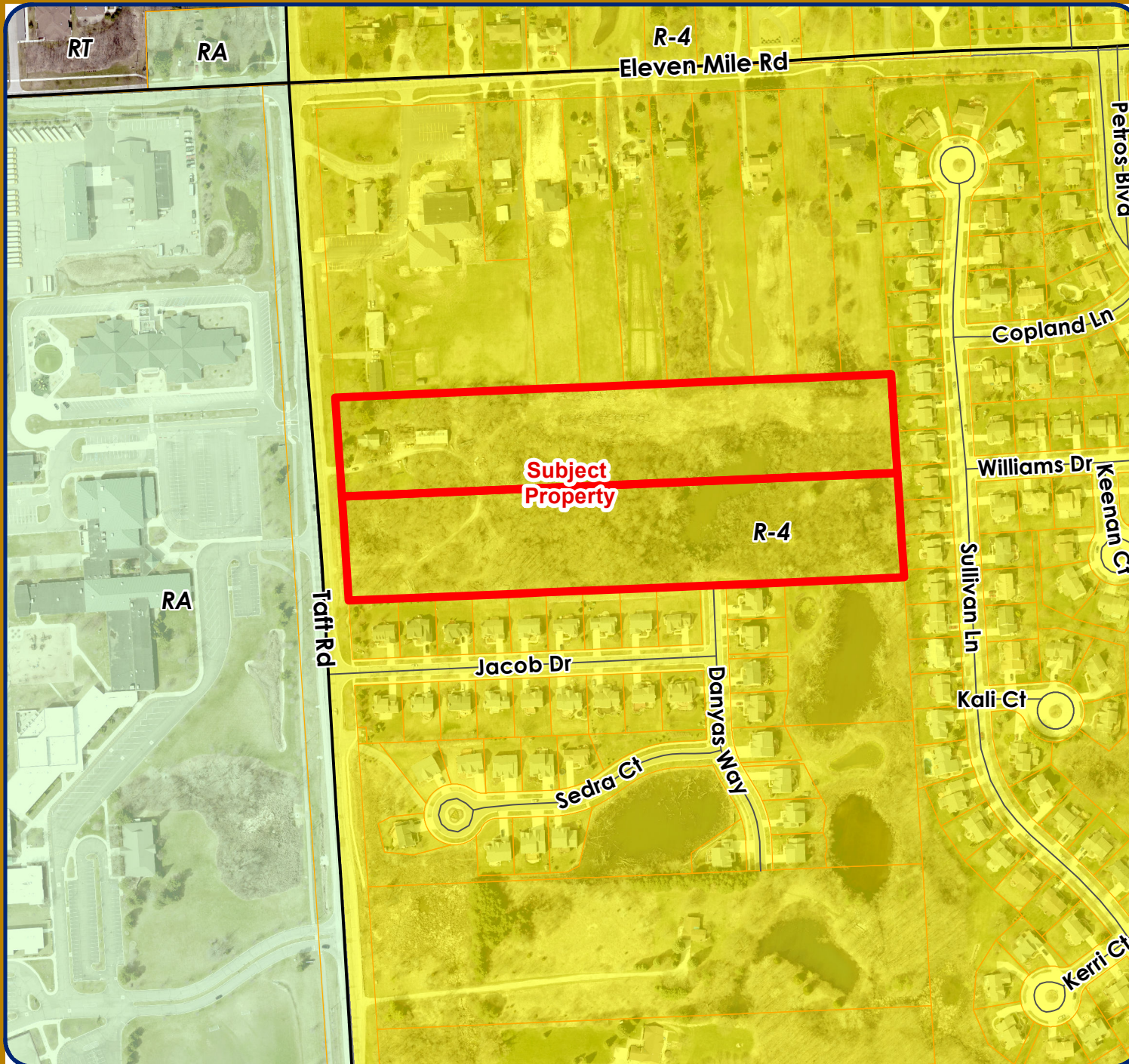


MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

MUNRO'S PRESERVE: JSP19-09

ZONING



LEGEND

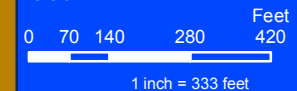
-  R-A: Residential Acreage
-  R-1: One-Family Residential District
-  R-4: One-Family Residential District
-  RM-2: High-Density Multiple Family
-  I-1: Light Industrial District
-  I-2: General Industrial District
-  OS-1: Office Service District
-  TC-1: Town Center -1 District
-  Subject Property



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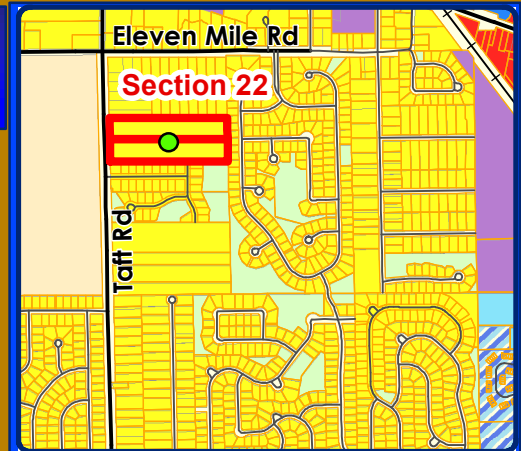


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MUNRO'S PRESERVE: JSP19-09

FUTURE LAND USE



LEGEND

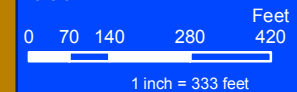
- Single Family
- Community Office
- Office Research Development Technology
- Industrial Research Development Technology
- Local Commercial
- TC Commercial
- Educational Facility
- Public
- Private Park
- Subject Property



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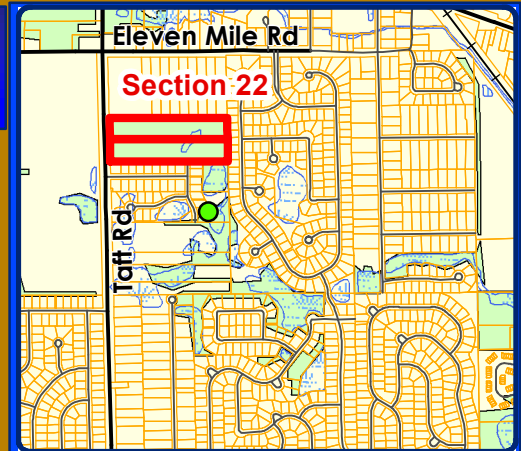


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

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MUNRO'S PRESERVE: JSP19-09

NATURAL FEATURES



LEGEND

-  WETLANDS
-  WOODLANDS
-  Subject Property



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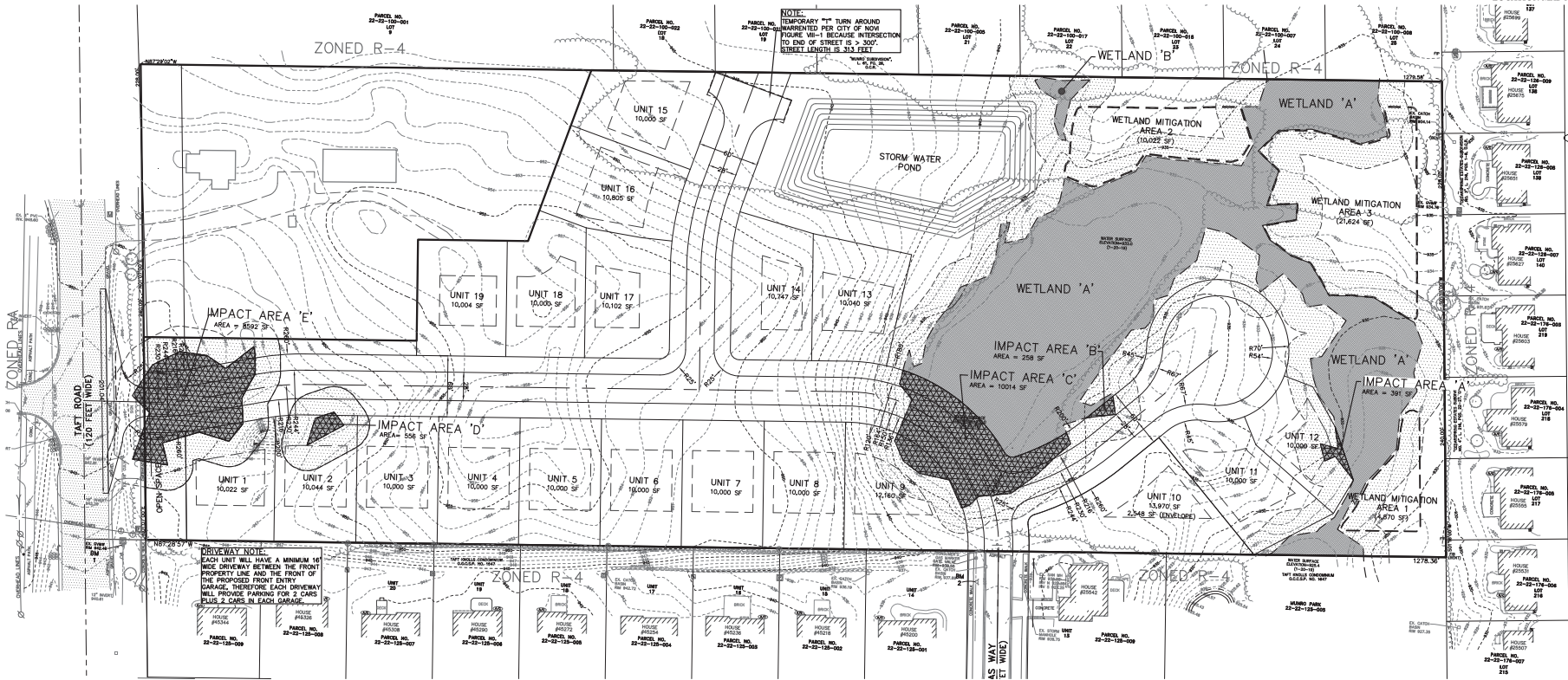
SITE PLAN

(Full plan set available for viewing at the Community Development Department.)

BENCHMARKS:

SITE BM #1
 CITY OF NOV BM 2212
 7' X ON NORTH RIM OF GATE VALVE & WELL
 100' S NORTH OF JACOB DRIVE, 3/2' E EAST
 CENTERLINE OF TAFT ROAD.
 ELEVATION: 942.46 N.A.V.D.88

SITE BM #2
 ARROW ON HYDRANT, 7'± WEST OF SIDE OF
 BACK OF CURB DANFAYS WAY, OPPOSITE HOUSE
 #25542.
 ELEVATION: 940.71 (N.A.V.D.88 DATUM)



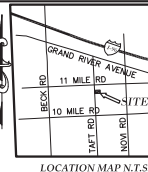
NOTE:
 THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

NOTE:
 TEMPORARY "H" TURN AROUND
 MARKED PER CITY OF NOV
 FIGURE VII-1 BECAUSE INTERSECTION
 TO END OF STREET IS > 300'.
 STREET LENGTH IS 313 FEET

DRIVEWAY NOTE:
 EACH UNIT WILL HAVE A MINIMUM 165
 WIDE DRIVEWAY BETWEEN THE FRONT
 PROPERTY LINE AND THE FRONT OF
 THE PROPOSED FRONT ENTRY
 GARAGE. THEREFORE EACH DRIVEWAY
 WILL PROVIDE PARKING FOR 2 CARS
 PLUS 2 CARS IN EACH GARAGE.

WETLAND IMPACT AREAS		
AREA	WETLAND (SF)	BUFFER (SF)
A <td>391 <td>1850 </td></td>	391 <td>1850 </td>	1850
B <td>258 <td>1850 </td></td>	258 <td>1850 </td>	1850
C <td>10,014 <td>9075 </td></td>	10,014 <td>9075 </td>	9075
D <td>556 <td>4564 </td></td>	556 <td>4564 </td>	4564
E <td>8,592 <td>8,103 </td></td>	8,592 <td>8,103 </td>	8,103
TOTAL	19,811	23,592

WETLAND MITIGATION AREAS		
AREA	WETLAND (SF)	BUFFER (SF)
1	4,870	10,922
2	21,624	36,516
TOTAL	26,494	47,438



GREENTECH ENGINEERING, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 14000 GRAND RIVER AVENUE, SUITE 100
 GRAND RIVER, MI 49431
 PHONE: (248) 668-0700 FAX: (248) 668-0701

811
 Know what's below
 Call before you dig.

CLIENT: TAFT11 GROUP, LLC.
PARALLEL PLAN
 THE PRESERVE CONDOMINIUMS
 RANGE: BE
 CITY OF NOV
 OAKLAND COUNTY
 MICHIGAN
 SECTION: 22

REVISED
 2019-5-24 PER CITY REVIEW

4-30-19 UPDATE PLAN

DATE: 04-8-2019
 DRAWN BY: RMS/MW
 CHECKED BY: D.L.

SCALE: HOR 1" = 50 FT.
 VER 1" = 10 FT.

14
 18-206

PLANNING REVIEW



PLAN REVIEW CENTER REPORT

June 19, 2019

Planning Review

THE PRESERVE

JSP 19-09

PETITIONER

Taft11 Group, LLC

REVIEW TYPE

Revised Preliminary Site Plan with Open Space Preservation Option

PROPERTY CHARACTERISTICS

Section	22	
Site Location	50-22-22-100-026 and 50-22-22-100-027 East side of Taft Road, South of Eleven Mile Road	
Site School	Novi Community School District	
Current Zoning	R-4 One-Family Residential District	
Adjoining Zoning	North	R-4 One-Family Residential District
	East	R-4 One-Family Residential District
	West	RA Residential Acreage
	South	R-4 One-Family Residential District
Current Site	One residence, mostly vacant	
Adjoining Uses	North	Single Family Homes
	East	Single Family Homes
	West	Novi School complex
	South	Single Family Homes
Site Size	11.55 acres	
Plan Date	May 24, 2019	

PROJECT SUMMARY

The subject property is located on the east side of Taft Road north of 10 Mile Road in Section 22 of the City of Novi. The property totals 11.55 acres. The current zoning of the property is R-4, One-Family Residential. The applicant has proposed a 17 unit single-family residential development (Site Condominium) utilizing the Open Space Preservation Option.

The Open Space Preservation Option is intended "...to encourage the long-term preservation of open space and natural features and the provision of recreation and open space areas." The site meets the general eligibility requirements outlined in the ordinance detailing the Open Space Preservation Option. The site also has a substantial amount of both regulated wetlands and woodlands.

The applicant is proposing to utilize the Open Space Preservation Option to develop 19 single family detached home sites. Seventeen homes are proposed to be included in a site condominium and front on each side of the proposed Preserve Court off of Taft Road. Two additional parcels would be created off the end of the existing Danyas Way. Approximately 29% of the area to be included in the site condominium is proposed to be preserved under the open space preservation plan.

RECOMMENDATION

Approval for the Preliminary Site Plan with Open Space Preservation Option is recommended. The plan mostly conforms to the requirements of the Zoning Ordinance, with deviations listed in this and other review letters. **Planning Commission's approval for Preliminary Site Plan with Open Space Conservation, Site Condominium, Wetland Permit, Woodland Permit and Storm Water Management Plan is required.**

OPEN SPACE PRESERVATION OPTION CONDITIONS

Per Section 3.30.2, *In areas that are served by municipal sewers, eligible properties shall be zoned for residential development at three and one half (3.5) or fewer dwelling units per acre (R-A through R-4). In areas which are not served by municipal sewers, eligible properties shall be zoned for residential development at two or fewer dwelling units per acre (R-A through R-2).* **The site meets these requirements.**

Per Section 3.30.6.B, *all open space preservation option plans shall include a resource inventory that contains the following:*

- i. *All floodplains, wetlands, and water bodies; **(provided)***
- ii. *A woodlands analysis identifying all regulated woodlands; **(provided)***
- iii. *All wildlife habitat areas, per the City's Wildlife Habitat Master Plan; **(provided)***
- iv. *An analysis of onsite soils and topography to identify limitations to development; and **(provided)***
- v. *An analysis of the contextual features of the site, such as scenic views, historic structures, patterns of original farm fields, fences or stone walls, recreational uses and the like. **(provided)***

ORDINANCE REQUIREMENTS

This project was reviewed for conformance with the Zoning Ordinance with respect to Article 3 (Zoning Districts), Article 4 (Use Standards), Article 5 (Site Standards), and any other applicable provisions of the Zoning Ordinance. **Please see the attached chart for information pertaining to ordinance requirements.** Items in **bold** below must be addressed and incorporated as part of the Final Site Plan submittal:

1. **Open Space Preservation Option:** The applicant is utilizing the Open Space Preservation Option which allows an applicant to develop the allowed number of units on a property on a portion of the site in exchange for the preservation of natural features and open space. The applicant has provided the required parallel plan showing the number of units that could be developed on the site. In order to qualify for the option, the applicant must save a minimum of 10% of the gross site area as permanent open space. The applicant has proposed 29% open space in this case. The Planning Commission will hold the required public hearing prior to making a determination that the proposed plan satisfies the intent of the Option.
2. **Bona Fide or Parallel Plan:** A parallel plan is required, which identifies how the property could be developed under conventional developmental standards. A revised parallel plan was provided on 4/30/2019 (sheet 14) which indicates 19 lots can be developed under conventional development standards. The plan included additional details such as setbacks, frontage, conceptual storm water management and wetland fills. The applicant also removed a portion of the area that is not intended to be a party to the development. Staff reviewed the plan and has determined the proposed density may be allowable based on the maximum density proposed on the Parallel plan. Both the Open Space Preservation plan and the Parallel plan indicate 19 total lots. **The t-turnaround has been modified to accommodate the turning radius of a fire truck (30' inside, 50' outside) as required by fire department standards.**
3. **Wetlands on Platted Lots:** As currently designed, the site boundaries of Parcels C and D extend into the wetland. However, the applicant intends to create these parcels through a lot split process rather than include them in the site condominium since they are not directly connected

to that community. Therefore the Subdivision Ordinance regulations do not apply to Parcels C and D.

4. Public Road Frontage (Sec.5.12 and Subdivision Ordinance Sec. 4.02.B): *No lot or parcel of land shall be used for any purpose permitted by this Ordinance unless said lot or parcel shall front upon a public street, unless otherwise provided for in this Ordinance.* **The applicant has proposed to dedicate 80 feet of Right-of-Way (60 feet in width) in order to extend Danya's Way to provide a public street to Parcels C and D. The street would end in a t-turnaround in order to avoid impacts to the wetland area, and provide the required access for emergency equipment. Therefore the public road frontage would be 44 feet rather than the 80 feet required by the ordinance. The applicant has applied to the Zoning Board of Appeals for a variance.**
5. Residential Development Entrance Lighting: A residential development entrance light must be provided at the entrances to the development off of Taft Road, which is shown on the plans. The applicant should contact the Engineering Division at 248-735-5695 to begin the process of working with the City and DTE on the installation of the entrance light.
6. Signage: The applicant indicates no monument sign is proposed at the development entrance.
7. Parcel Split/Combination: **The site plan is proposing Parcel splits and combinations. A Master Deed is required for the proposed Site Condominium. The applicant must provide a draft copy of the Master Deed with Electronic Stamping Set submittal.** The applicant must create the new parcels prior to printing Stamping Sets and applying for new site address. Final Stamping Sets must reflect new parcel numbers and legal descriptions, and will not be stamped until the Master Deed is approved.
8. Plan Review Chart: Planning review chart provides additional comments and requests clarification for certain items. **Please address them in addition to the comments provided in this letter.**
9. Planning Legal Acceptance Documents: Drafts for the following documents require staff review and administrative approval and/or City Council acceptance:
 1. Master Deed drafts and exhibits
 2. Conservation easements

OTHER REVIEWS

- a. Engineering Review: Engineering recommends approval of the Preliminary site plan. Additional items to be addressed with final site plan submittal.
- b. Landscape Review: Landscape recommends approval of the Preliminary site plan. Additional items to be addressed with final site plan submittal.
- c. Wetlands Review: This site plan will require a City of Novi Wetland Use Permit as well as an Authorization to encroach the 25-Foot Natural Features Setback for any proposed impacts to the 25-foot wetland buffers. Wetlands recommend approval.
- d. Woodlands Review: This site plan will require a City of Novi Woodland Permit as well. Woodland review recommends approval.
- e. Traffic Review: Traffic recommends approval of the Preliminary site plan. Additional items to be addressed with final site plan submittal.
- f. Facade Review: Elevations are not included in this submittal. Façade did not review this submittal.
- g. Fire Review: Fire is recommends approval with conditions.

NEXT STEP: PLANNING COMMISSION PUBLIC HEARING

This Site Plan is scheduled to go before Planning Commission for consideration on **June 26, 2019 at 7:00 pm**. Please provide the following **no later than 10:00 a.m., June 21, 2019** if you wish to keep this schedule.

1. Original revised site plan submittal (entire set including all sheets submitted for the review) in PDF format. **No revisions made.**
2. A response letter addressing the comments **and requesting any waivers/variances deemed necessary** (as noted in the review letters).
3. Color renderings of the site or building, if available for presentation purposes.

FINAL SITE PLAN SUBMITTAL

After receiving the Preliminary Site Plan approval from the Planning Commission and a Zoning Board of Appeals ruling on your variance request, please submit the following for Final Site Plan review and approval:

1. Six copies of Final Site Plan addressing all comments from Preliminary review
2. Response letter **addressing all comments and refer to sheet numbers where the change is reflected**
3. [Final Site Plan Application](#)
4. [Final Site Plan Checklist](#)
5. Engineering Cost Estimate
6. Landscape Cost Estimate
7. [Other Agency Checklist](#)
8. [Hazardous Materials Packet](#) (Non-residential developments)
9. [Non-Domestic User Survey](#) (Non-residential developments)
10. Legal Documents as required
11. Drafts of any legal documents (note that off-site easements need to be executed and any on-site easements need to be submitted in draft form before stamping sets will be stamped)

ELECTRONIC STAMPING SET SUBMITTAL AND RESPONSE LETTER

After receiving Final Site Plan approval, please submit the following for Electronic stamping set approval:

1. Plans addressing the comments in all of the staff and consultant review letters in PDF format.
2. Response letter addressing all comments in ALL letters and ALL charts and **refer to sheet numbers where the change is reflected.**

STAMPING SET APPROVAL

Stamping sets are still required for this project. After having received all of the review letters from City staff the applicant should make the appropriate changes on the plans and submit **10 size 24" x 36" copies with original signature and original seals,** to the Community Development Department for final Stamping Set approval.

STREET AND PROJECT NAME

Monro's Preserve and Preserve Court have been approved as the project name and street name, respectively. Any changes to those would require reconsideration by the committee. Please contact Hannah Smith (248-347-0579) in the Community Development Department for additional information.

PRE-CONSTRUCTION MEETING

A Pre-Construction meeting is required for this project. Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees and permits that must be issued before a Pre-Con can be scheduled, so it is recommended you contact Sarah Marchioni [248.347.0430 or smarchioni@cityofnovi.org] in the Community Development Department once you receive Final Site Plan approval. Any questions regarding the Pre-Con should be directed to Sarah.

SITE ADDRESSING

New addresses will be required for the proposed lots. The applicant should contact the Building Division for an address prior to applying for a building permit. Building permit applications cannot be processed without a correct address. The address application can be found by clicking on this [link](#).

CHAPTER 26.5

Chapter 26.5 of the City of Novi Code of Ordinances generally requires all projects be completed within two years of the issuance of any starting permit. Please contact Sarah Marchioni at 248-347-0430 for additional information on starting permits. The applicant should review and be aware of the requirements of Chapter 26.5 before starting construction.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.347.0484 or lbell@cityofnovi.org.



Lindsay Bell – Planner



PLANNING REVIEW CHART:

R-4 One Family Residential with Open Space Preservation Option

Review Date: June 19, 2019
Review Type: Revised Preliminary Site Plan
Project Name: JSP19-09 The Preserve
Plan Date: May 24, 2019
Prepared by: Lindsay Bell, Planner

Contact: E-mail: lbell@cityofnovi.org; **Phone:** (248) 347-0484

Items in **Bold** need to be addressed by the applicant and/or the Planning Commission before approval of the Preliminary Site Plan. Underlined items need to be addressed on the Final Site Plan.

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan <i>(adopted August 25, 2010)</i>	Single Family, with master planned 1.65 maximum dwelling units per acre.	19 Unit single family residential development with 2.03 DUA (net site area: 9.36 Ac)	Yes	Over max. recommended by Master Plan, but well within permitted density in R-4 district
Zoning <i>(Effective December 25, 2013)</i>	R-4: One-Family Residential; up to 3.3 du/ac	One-Family Residential Site Condo with Open Space Preservation Option	Yes	This will require a Planning Commission approval following a 15-day public hearing notice; scheduled for 6/26/19
Uses Permitted <i>(Sec.3.1.6)</i>	Single Family Dwellings	Single Family Dwellings	Yes	
Phasing		No phasing proposed	NA	
Open Space Preservation Option (Sec. 3.30)				
Intent <i>(Sec. 3.30.1)</i>	To encourage long-term preservation of open space and natural features and provision of recreation and open space areas	Total site area: 11.55 Ac ROW: 0.11 ac Parcels C & D: 2.97 ac Total Gross Site Condo: 8.14 ac Total Wetlands: 2.19 Ac Total Developed: 71% Total open space preserved: 2.37 Ac (29% of site condo)	Yes	Recreation Open space is not proposed <i>Note: all designated open spaces included in calculations are to be protected from future development</i>
Eligibility Requirements <i>(Sec. 3.30.2)</i>	Shall be zoned RA to R-4 if served by municipal sewer If not, shall be zoned RA to R-2	Has City water and sewer; Zoned: R-4	Yes	
Density Maximum developable land <i>(Sec. 3.30.3.A & Sec. 3.30.3.B)</i>	No more than 80% of the land can be developed using this option A special land use permit is required for more than 80%	The parallel plan submitted (5/24/19) shows the maximum number of units that can be developed with typical development: 19 for 9.36 net site	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	Other conditions apply	acreage Current site plan proposes 19 units 80% of Site: 7.68 Ac Total developed area is 53%		
Permitted Density and Bona fide Plan (Sec. 3.30.3.C)	A parallel plan shall identify how the property will be developed under conventional developmental standards	The parallel plan submitted indicates 19 lots could be developed under conventional R-4 standards with wetland mitigation for impacts;	Yes	
Design Requirements: Permanent Open Space (Sec. 3.30.4.A)	10% of gross site area shall be preserved as permanent open space or for recreational purposes	29% indicated as permanent open space; 28% would be protected under conservation easement	Yes	Open space calculated as percentage of site condominium area only (8.12 acres)
Qualifying Open Space (Sec. 3.30.4.B)	Steep slopes Wetlands Wetland Setback Areas Floodplains Natural watercourses Woodlands Scenic views Agricultural or equestrian components Recreational facilities as listed in Sec 3.30.4.B	Total area permanently preserved: 2.37 Ac (29%)	Yes	
Allowable lot area reductions (Sec. 3.30.4.C)	Equal to the percentage of qualifying open space permanently preserved, up to the limits listed in the chart <u>For R-4 10,000 reduced to a minimum of 8,000</u>	8,000 SF minimum (20% reduction)	Yes	<i>Based on percentage of open space to be preserved, requested reduction allowed</i>
Allowable side yard setback reductions (Sec. 3.30.4.C)	Equal to one-half of the percentage of qualifying open space permanently preserved, up to the limits listed in the chart <u>For 70 or greater, but less than 90, 10 ft side yard minimum, with 20</u>	10 ft. minimum, 20 ft. aggregate	Yes	<i>Based on percentage of open space to be preserved, requested reduction allowed</i>

Item	Required Code	Proposed	Meets Code	Comments
	<u>feet aggregate on two sides</u>			
Additional Modifications (Sec. 3.30.4.C)	Additional modifications to lot and width may be permitted by the approving body to comply with the intent of Sec. 3.30	Current site plan is requesting a reduction of lot width from 80 ft. to 70 ft.	Yes	
Accessibility to Open Space (Sec. 3.30.4.D)	It must be accessible to all lots in the development	Open space accessible to all lots via the internal sidewalk system and 10' maintenance access easement between lots 11 and 12	Yes	
Connected with other Open Space (Sec. 3.30.4.E)	It shall be connected with adjacent open space, public land, and existing or planned pedestrian/bicycle paths, where feasible, as determined by the approving body.	Internal sidewalks are connected to public sidewalks	Yes	
Open Space Preservation Option (Sec. 3.30.4.F)	Approval of this option does not constitute zoning change	No zoning change proposed	Yes	
Restrictions (Sec. 3.30.4.G)	<ul style="list-style-type: none"> - No multi-family units - No effect on welfare of person or property - No unreasonable burden on public facilities - No unreasonable burden on surrounding properties 	No multi-family units are proposed Restriction notes included on Sheet 5	Yes	
Qualifying Permanent Open Space Maintenance (Sec. 3.30.5.A)	<ul style="list-style-type: none"> - Conservation easement required for all open space areas except developed recreation areas - - Developed recreation areas shall be preserved via a restrictive covenant or other legal means 	Not yet submitted Conservation easement indicated on Sheet 9 covering 2.25 acres	Yes	<p>A conservation or open space easement is required for review and approval along with Final Site plan submittal</p> <p>Applicant must provide a conservation easement for any open space areas proposed except recreation areas</p> <p>How will Open Space A & B areas be preserved?</p>

Item	Required Code	Proposed	Meets Code	Comments
Donation of land to the City (Sec. 3.30.5.C)	City Council shall approve any donations to the City following a public hearing	4800 sf ROW to be dedicated	Yes	
Review Process (Sec. 3.30.6.A)	Planning Commission public hearing will be held to review and approve plans		Yes	15-day public hearing notice for site condominiums (scheduled for 6/26/19)
Resource Inventory (Sec. 3.30.6.B)	<ul style="list-style-type: none"> - 1) All floodplains, wetlands, and water bodies; - (2) A woodlands analysis identifying all regulated woodlands; - (3) All wildlife habitat areas, per the City's Wildlife Habitat Master Plan. - (4) An analysis of onsite soils and topography to identify limitations to development; and - (5) An analysis of the contextual features of the site, such as scenic views, historic structures, patterns of original farm fields, fences or stone walls, recreational uses and the like 	Plan set includes Floodplain, Wildlife Habitat, Soils, Historic Features (Sheet 2), Woodland Plan (Sheet 11), Tree Survey (sheet 12), and Wetland Plan (sheet 10)	Yes	
Other Review Procedures (Sec. 3.30.6)	<ul style="list-style-type: none"> - The approving body shall determine that the proposed plan satisfies the intent - A public hearing will be held - A special land use is required if development is proposed more than 80% of the site, as could be developed using standard development 	Less than 80% of site proposed for development	NA	Public hearing before the Planning Commission will be held 6/26/19
Height, bulk, density and area limitations (Sec. 3.1.5)				
Maximum Dwelling Unit Density (Sec. 3.1.6)	3.3 DUA	2.02 DUA (19 Units)	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Minimum Lot Area (Sec 3.1.5)	10,000 square feet	8,000 sq. ft. minimum <i>Open Space Preservation Option</i>	Yes	<i>Open Space Preservation Option allows</i>
Minimum Lot Width (Sec 3.1.5)	80 ft.	70 ft. minimum <i>Open Space Preservation Option</i>	Yes	<i>Open Space Preservation Option allows</i>
Building Setbacks (Sec 3.1.5)				
Front	30 ft.	30 ft.	No	<i>Open Space Preservation Option only allows reduction of side yard setbacks</i>
Side	10 ft. one side 25 ft. total two sides	10 ft. one side 20 ft. total two sides	Yes	
Rear	35 ft.	35 ft.	Yes	
Maximum % of Lot Area Covered (Sec 3.1.5)	25% (By All Buildings)	Unknown	Yes?	Note included on sheet 5
Minimum Floor Area (Sec 3.1.5)	1,000 Sq.ft.	Information not provided	N/A	Individual buildings are reviewed as part of the building permit application
Building Height (Sec 3.1.5)	35 ft. or 2.5 stories whichever is less	Information not provided	N/A	
Frontage on a Public Street. (Sec. 5.12)	No lot or parcel of land shall be used for any purpose permitted by this Ordinance unless said lot or parcel shall front directly upon a public street, unless otherwise provided for in this Ordinance.	17 units front on a new proposed road and 2 parcels front on extension of Danyas Way, with access to Taft Road	Yes	ZBA approval of lot split to create Parcels C & D required; The proposed T-turnaround gives 44' of public road frontage where 80' is required
Note to District Standards (Sec 3.6)				
Area Requirements (Sec 3.6A & Sec. 2.2)	- Lot width shall be measured between two lines where a front setback line intersects with side setback lines. - Distance between side lot lines cannot be less than 90% between the front setback line and the main building.	Complies	Yes	
Additional Setbacks (Sec 3.6B)	NA	Single family development and no off-street parking	NA	
Exterior Side yard abutting Streets (Sec 3.6C)	NA	Side yards abutting residential districts	NA	

Item	Required Code	Proposed	Meets Code	Comments
Wetland/Water-course Setback (Sec 3.6M)	25ft. from boundary of a wetland and 25ft. from the ordinary high water mark of a watercourse.	25ft. wetland buffer indicated. Unit 10 and Parcels C and D have wetland buffers in the rear or side yards	No	Refer to wetlands review for additional comments.
Subdivision Ordinance				
Blocks (Subdivision Ordinance: Sec. 4.01)	<ul style="list-style-type: none"> - Maximum length for all blocks shall not exceed 1,400 ft. - Widths of blocks shall be determined by the conditions of the layout. 	Layout appears to be in conformance	Yes	
Lots: Sizes and Shapes (Subdivision Ordinance: Sec. 4.02A)				
Lot Depth Abutting a Secondary Thoroughfare (Subdivision Ordinance: Sec. 4.02.A5)	Lots abutting a major or secondary thoroughfare must have a depth of at least 140'		NA	
Depth to Width Ratio (Subdivision Ordinance: Sec. 4.02.A6)	Single Family lots shall not exceed a 3:1 depth to width ratio	Appear to comply – lot table provided	Yes	Parcel D does not fall within Subdivision Ordinance requirements; Width at setback: 112, Average Depth: 275
Arrangement (Subdivision Ordinance: Sec. 4.02.B)	<ul style="list-style-type: none"> - Every lot shall front or abut on a street. - Side lot lines shall be at right angles or radial to the street lines, or as nearly as possible thereto. 	<ul style="list-style-type: none"> - All lots front on proposed street - Side lot lines at right angles or close to right angles 	Yes	
Streets (Subdivision Ordinance: Sec. 4.04)	<p>Extend streets to boundary to provide access intervals not to exceed 1,300 ft. unless one of the following exists:</p> <ul style="list-style-type: none"> - practical difficulties because of topographic conditions or natural features - Would create undesirable traffic patterns 	Layout appears to be in conformance	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Topographic Conditions (Subdivision Ordinance Sec 4.03)				
A. Flood plain	Compliance with applicable state laws and City Code Areas in a floodplain cannot be platted		NA	
B. Trees and Landscaping	Compliance with Chapter 37 and Article 5 of City Zoning Code	Landscape Plan provided	Yes	Refer to Landscape review letter for further details
C. Natural Features	To be preserved Lots cannot extend into a wetland or watercourse	Site condo lots do not extend into the wetland	Yes	Parcels C & D are lot splits and do not fall under Sub. Ordinance
D. Man-made Features	To be built according to City standards	Stormwater ponds and Wetland mitigation areas		See Engineering Review
E. Open Space Areas	Any Open Space Area shall meet the following: <ul style="list-style-type: none"> - Require performance guarantee - Shall be brought to a suitable grade - Compliance with zoning ordinance - Except for wooded areas, all ground area should be top dressed with a minimum of 25% of red fescue and a maximum of 20% perennial rye. 	The open space that is provided will need to meet these standards, unless left in a natural state.	Yes	
F. Non-Access Greenbelt Easements	<ul style="list-style-type: none"> - Along rear or side property lines for reverse frontage lots. - Shall be 15 feet wide along all reverse frontage lots - 20 feet wide where power lines exist 	No reverse frontage lots	NA	
G. Zoning Boundary Screening	A non-residential development abutting a residential development would need screening	Subject property is not abutting any non-residential development	NA	
Sidewalks Requirements				
Non-Motorized Plan	A six foot wide is required along Taft Road	Sidewalk is proposed along Taft Road	Yes	Indicated width of sidewalks on the plan

Item	Required Code	Proposed	Meets Code	Comments
Sidewalks (Subdivision Ordinance: Sec. 4.05)	Sidewalks are required on both sides of proposed drives	Five foot Sidewalks are proposed on either side of the proposed private drive within the development, except along the extent of wetland along Danya's Way extension	Yes	
Other Requirements				
Residential Entryway Lighting	A residential development entrance light must be provided at the entrances to the development off of Dixon Road	Indicated	Yes	Work with Engineering on entryway lighting
Development and Street Names	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval	Modifications of the proposed name "The Preserve" are required. Munro's Preserve would be acceptable. Street name "Preserve Court" has been approved.	Yes	<u>Contact Hannah Smith to confirm determinations of Project and Street naming committee 248-347-0579</u>
Economic Impact Information	<ul style="list-style-type: none"> - Total cost of the proposed building & site improvements - Home size & expected sales price of new homes 	<p>Projected cost: \$9.5M</p> <p>Home size: 2300-3500 sf Target price: \$600k plus</p>	Yes	
Legal Requirements				
Property Split or Combination	Property combination or split shall be reviewed and approved by the Community Development Department.	Applicant has applied for lot splits		<u>Property splits shall be completed before final Stamping Set approval</u>
Development/ Business Sign	Signage if proposed requires a permit.	Applicant indicates signage not proposed	Yes/ No	<u>For sign permit information contact Maureen Underhill 248-735-5602.</u>
Master Deed	A draft master deed is required at the time of electronic stamping sets	Not submitted		<u>Master Deed to be reviewed and approved by City Staff and Attorneys prior to Stamping Set approval</u>
Conservation Easements	The Applicant shall provide preservation/conservation easements for any areas of remaining	Wetland and Woodland Conservation easements are required for preservation of		<p>Refer to woodlands review letter for more details.</p> <p>Applicant is required to submit the drafts prior to</p>

Item	Required Code	Proposed	Meets Code	Comments
	wetlands and woodland.	areas outside the Open Space Conservation easement		stamping sets approval

NOTES:

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. Please refer to those sections in Article 3, 4 and 5 of the zoning ordinance for further details.
3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.

ENGINEERING REVIEW



PLAN REVIEW CENTER REPORT

June 19, 2019

Engineering Review

Munro's Preserve (fka The Preserve)
JSP19-0009

Applicant

Taft II Group, LLC

Review Type

Revised Preliminary Site Plan

Property Characteristics

- Site Location: South of Eleven Mile Road, East of Novi Road
- Site Size: 11.55 Acres
- Plan Date: 04/08/2019
- Design Engineer: GreenTech Engineering, Inc.

Project Summary

- Construction of nineteen detached single family homes. Site access would be provided via Taft Road for units 1-17 and via Danyas Way for parcel C and D.
- Water service would be provided by an 8-inch extension of a 12-inch water main along the east side of Taft Road and an 8-inch extension of an 8-inch water main north of Danyas Way to create a looped system.
- Sanitary sewer service would be provided by an 8-inch extension of the existing 8-inch sanitary sewer north of Danyas Way.
- Storm water would be collected by a single storm sewer collection system and conveyed/discharged to either a detention basin or rain garden.

Recommendation

Approval of the Revised Preliminary Site Plan and Revised Preliminary Storm Water Management Plan is recommended.

Comments:

The Preliminary Site Plan meets the general requirements outlined in Chapter 11 of the City of Novi Codified Ordinance, the Storm Water Management Ordinance and the Engineering Design Manual with the following exceptions, which can be addressed at the time of Final Site Plan submittal:

Additional Comments (to be addressed upon Final Site Plan submittal):

General

1. Provide a minimum of two ties to established section or quarter section corners.
2. A right-of-way permit will be required from the City of Novi.
3. Provide sight distance measurements for the Taft Road entrance in accordance with Figure VIII-E of the Design and Construction Standards.
4. Soil borings shall be provided for a preliminary review of the constructability of the proposed development (roads, basin, etc.). Borings identifying soil types and groundwater elevation should be provided at the time of Preliminary Site plan.
5. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal. They can be found on the City website (www.cityofnovi.org/DesignManual).

Water Main

6. Note that a tapping sleeve, valve and well will be provided at the connections to the existing water mains.
7. Provide a profile for all proposed water main 8-inches and larger.
8. Provide three (3) signed and sealed sets of revised utility plans along with the MDEQ permit application (06/12 rev.) for water main construction. The Streamlined Water Main Permit Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.

Sanitary Sewer

9. It is preferred that sanitary sewers be placed outside the influence of paved streets. Consider relocating the sanitary sewer that extends through the cul-de-sac.
10. Provide three (3) signed sealed sets of revised utility plans along with the MDEGLE permit application (01/18 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification Checklist shall be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets. Contact Kate Richardson at the City of Novi if an expedited review by the MDEGLE is requested.

Storm Sewer

11. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan.
12. Provide storm sewer profiles and illustrate all pipes intersecting storm structures.
13. Label the 10-year HGL on the storm sewer profiles, and ensure the HGL remains at least 1-foot below the rim of each structure.
14. A minimum cover depth of 3 feet shall be maintained over all storm sewers. Currently, a few pipe sections do not meet this standard. Grades shall be elevated and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. A Design and Construction standards variance application must be submitted under a separate cover where 3-feet of cover cannot be provided.

Storm Water Management Plan

15. The Storm Water Management Plan for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual.
16. All storm water from every unit must be contained in a basin sized for a 100-year flood event.
17. Do not refer to a permanent water surface on the outlet detail if it does not exist.
18. If no underground detention is proposed, please remove the note on sheet 7 and any other discrepancies that indicate otherwise.
19. Provide a 5-foot wide stone bridge allowing direct access to the standpipe from the bank of the basin during high-water conditions (i.e. stone 6-inches above high water elevation). Provide a detail and/or note as necessary.
20. A 25-foot vegetated buffer shall be provided around the perimeter of storm water detention basin. This buffer cannot encroach onto adjacent lots or nearby wetlands.
21. A minimum **15-foot wide** maintenance access route to the basin outlet structure and to any other pretreatment structures shall be provided.
22. Provide the boundaries of the sub-tributary areas on a drainage area map that corresponds to the composite 'C' value calculations.
23. Indicate whether or not the sedimentation forebay volume was included in calculating the necessary size of the detention basin.
 - a. According to Section 5.10 (A) of the Engineering Design Manual, the volume of storage provided in the forebay shall not be included as a part of the total storage volume required for storm water quantity control, above any permanent pool of water.
24. The rain garden shall be sized for the first flush volume and must have an adequate maintenance access easement.

25. Provide a geotextile filter fabric under the planting material to separate it from the underdrain/base material or in-situ soils.
26. Provide a soil borings in the vicinity of the bioretention facility to determine soil conditions and to establish the high water elevation of the groundwater table. Verify the ground water elevation is at least 3 feet below the rain garden.
27. Provide a four-foot deep sump and an oil/gas separator in the last storm structure prior to discharge to the rain garden and detention basin.

Paving & Grading

28. The sidewalk along Taft Road shall be 6 feet wide.
29. Provide additional spot grades as necessary to demonstrate that a minimum 5-percent slope away from the building is provided for a minimum distance of ten feet around the perimeter of the building.
30. Provide at least 3-foot of buffer distance between the sidewalk and any fixed objects, including hydrants. Note on the plan any location where the 3-foot separation cannot be provided.
31. Provide the standard Type 'M' approach at the Taft Road driveway/intersection.
32. Provide a 'Dead End' sign with a red reflective triangle at the end of Danya's Way as well as a 'Dead End' sign underneath the street name sign.

Soil Erosion and Sediment Control

33. A SESC permit is required. A full review has not been completed at this time. An informal review will be completed with the Final Site Plan if SESC plans are included in the submittal.

Off-Site Easements

34. Any off-site utility easements must be executed **prior to final approval of the plans**. If you have not done so already, drafts of the easements and a recent title search shall be submitted as soon as possible to the Community Development Department for review, and shall be approved by the Engineering Division and the City Attorney prior to executing the easements.

The following must be submitted at the time of Final Site Plan submittal:

35. A letter from either the applicant or the applicant's engineer must be submitted with the Final Site Plan highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved.
36. An itemized construction cost estimate must be submitted to the Community Development Department at the time of Final Site Plan submittal for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and shall not include any costs associated with construction of the building or any demolition work. **The cost estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving, right-of-way paving (including proposed right-of-way), grading,

- and the storm water basin (basin construction, control structure, pretreatment structure and restoration).
37. Draft copies of any off-site utility easements, a recent title search, and legal escrow funds must be submitted to the Community Development Department for review and approved by the Engineering Division and the City Attorney prior to getting executed.

The following must be submitted at the time of Stamping Set submittal:

38. A draft copy of the maintenance agreement for the storm water facilities, as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department with the Final Site Plan. Once the form of the agreement is approved, this agreement must be approved by City Council and shall be recorded in the office of the Oakland County Register of Deeds.
39. A draft copy of the 20-foot wide easement for the water main to be constructed on the site must be submitted to the Community Development Department.
40. A draft copy of the 20-foot wide easement for the sanitary sewer to be constructed on the site must be submitted to the Community Development Department.
41. If applicable, a 20-foot wide easement where storm sewer or surface drainage crosses lot boundaries must be shown on the Exhibit B drawings of the Master Deed.
42. Executed copies of any required off-site utility easements must be submitted to the Community Development Department.

The following must be addressed prior to construction:

43. A pre-construction meeting shall be required prior to the commencement of any site work. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).
44. A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting (no application fee).
45. An NPDES permit must be obtained from the MDEGLE since the site is over 5 acres in size. The MDEGLE requires an approved plan to be submitted with the Notice of Coverage.
46. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department (248-347-0430) for forms and information.
47. A permit for work within the right-of-way of Taft Road must be obtained from the City of Novi. The application is available from the City Engineering

- Division and should be filed at the time of Final Site Plan submittal. Please contact the Engineering Division at 248-347-0454 for further information.
48. A permit for water main construction must be obtained from the MDEGLE. This permit application must be submitted through the Water and Sewer Senior Manager after the water main plans have been approved.
 49. A permit for sanitary sewer construction must be obtained from the MDEGLE. This permit application must be submitted through the Water and Sewer Senior Manager after the sanitary sewer plans have been approved.
 50. Construction Inspection Fees will be determined once the construction cost estimate is submitted and must be paid prior to the pre-construction meeting.
 51. A storm water performance guarantee, equal to 1.2 times the amount required to complete storm water management and facilities (as specified in the Storm Water Management Ordinance) must be posted with Community Development.
 52. An incomplete site work performance guarantee, equal to 1.2 times the amount required to complete the site improvements (excluding the storm water detention facilities) as specified in the Performance Guarantee Ordinance, must be posted with Community Development.
 53. A street sign financial guarantee in an amount of \$2,000 (\$400 per traffic control sign proposed) must be posted with Community Development.

To the extent this review letter addresses items and requirements that require the approval of/or a permit from an agency or entity other than the City, this review shall not be considered an indication or statement that such approvals or permits will be issued.

Please contact Kate Richardson at (248) 347-0586 with any questions.



Kate Richardson, EIT
Plan Review Engineer

cc: Lindsay Bell, Community Development
George Melistas, Engineering
Darcy Rechten, PE, Engineering

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT

June 7, 2019

Revised Preliminary Site Plan - Landscaping

Munro's Preserve

Review Type

Revised Preliminary Landscape Review

Job

JSP19-0009

Property Characteristics

- Site Location: East side of Taft Road, north of Taft Knolls I Sidwell #22-22-100-026, #22-22-100-027
- Site Acreage: 11.55 acres
- Site Zoning: R-4
- Adjacent Zoning: North, East, South: R-4, West RA
- Plan Date: 5/28/2019

Ordinance Considerations

This project was reviewed for conformance with Chapter 37: Woodland Protection, Zoning Article 5.5 Landscape Standards, the Landscape Design Manual and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed and incorporated as part of the Final Site Plan submittal. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review and the accompanying Landscape Chart are summaries and are not intended to substitute for any Ordinance.

Recommendation

This project is **recommended for approval for Preliminary Site Plan**. The minor revisions noted can be addressed on the Final Site Plan.

Ordinance Considerations

Existing Soils (Preliminary Site Plan checklist #10, #17)

Provided

Existing and proposed overhead and underground utilities, including hydrants. (LDM 2.e.(4))

Provided

Existing Trees (Sec 37 Woodland Protection, Preliminary Site Plan checklist #17 and LDM 2.3 (2))

1. Provided
2. **Please clearly show the tree fencing line on the Grading Plan.**
3. **Please see ECT's letter for a complete review of the Woodlands and Wetlands.**

Adjacent to Residential - Buffer (Zoning Sec. 5.5.3.B.ii and iii)

The project is residential, and is adjacent to residential so no berm is required between uses.

Adjacent to Public Rights-of-Way – Berm/Wall, Buffer and Street Trees (Zoning Sec. 5.5.3.B.ii, iii)

1. The required greenbelt width and berm are provided.
2. Based on the frontage, less the access drive widths, 4 canopy trees and 7 subcanopy trees are provided. 4 canopy and 7 subcanopy trees are provided.
3. Based on the frontage less the clear vision zone width, 2 canopy trees or 3 subcanopy trees, if there are overhead lines, are required for street trees on Novi Road. 3 subcanopy

trees are provided.

Internal street trees (LDM 2)

1. Based on the lot frontages, 29 deciduous canopy street trees at the fronts of the lots are required. 29 trees are provided.
2. A mix of trees, shrubs and perennials are proposed in the island.

Parking Lot Landscaping (Zoning Sec. 5.5.3.C.)

No parking lots are proposed.

Plant List (LDM 2.h. and t.)

1. Provided
2. The required tree diversity is provided.
3. 15 of 19 species used (79%) are native to Michigan.

Planting Notations and Details (LDM)

Provided

Storm Basin Landscape (Zoning Sec 5.5.3.E.iv and LDM 1.d.(3))

Provided

Irrigation (LDM 1.a.(1)(e) and 2.s)

1. **The proposed landscaping must be provided with sufficient water to become established and survive over the long term.**
2. **Please provide an irrigation plan or note how this will be accomplished if an irrigation plan is not provided on Final Site Plans. An actual irrigation plan could be provided in the electronic stamping set if desired.**

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5621 or rmeader rmeader@cityofnovi.org.



Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART - REVISED PRELIMINARY SITE PLAN

Review Date: June 7, 2019
Project Name: JSP19-0009: MUNRO'S PRESERVE
Plan Date: May 24, 2019
Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org
 Phone: (248) 735-5621

Items in **Bold** need to be addressed by the applicant on the Final Site Plan.

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requirements (LDM (2))				
Landscape Plan (Zoning Sec 5.5.2, LDM 2.e.)	<ul style="list-style-type: none"> New commercial or residential developments Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. 1"=20' minimum with proper North. Variations from this scale can be approved by LA Consistent with plans throughout set 	Site plan 1" = 50'	Yes	
Project Information (LDM 2.d.)	Name and Address	Location map is shown on cover sheet	Yes	Please provide the location map on the landscape plan.
Owner/Developer Contact Information (LDM 2.a.)	Name, address and telephone number of the owner and developer or association	Yes	Yes	
Landscape Architect contact information (LDM 2.b.)	Name, Address and telephone number of RLA/LLA/PLA	Yes	Yes	
Sealed by LA. (LDM 2.g.)	Requires original signature	Yes	Yes	<u>Original signature required on Stamping Sets</u>
Miss Dig Note (800) 482-7171 (LDM.3.a.(8))	Show on all plan sheets	Yes	Yes	
Zoning (LDM 2.f.)	Include all adjacent zoning	<ul style="list-style-type: none"> Site: R-4 North, East, South: R-4 West: RA 	Yes	
Survey information (LDM 2.c.)	<ul style="list-style-type: none"> Legal description or boundary line survey Existing topography 	Topo and description on Sheet 3	Yes	

Item	Required	Proposed	Meets Code	Comments
Existing plant material Existing woodlands or wetlands (LDM 2.e.(2))	<ul style="list-style-type: none"> Show location type and size. Label to be saved or removed. Plan shall state if none exists. 	<ul style="list-style-type: none"> Wetland and woodland survey, tree chart on Sheets 3, 11 and 12. Removals are shown on Sheets 11 and 12 	Yes	<ol style="list-style-type: none"> See ECT letters for detailed reviews of wetlands and woodlands Please add a legend on Sheet 11 showing which tree symbols mean trees to be removed. Please clearly show tree fencing line on Grading Plan and add a tree protection fencing detail to the plan set with the fence located at 1 foot outside of the tree dripline.
Soil types (LDM.2.r.)	<ul style="list-style-type: none"> As determined by Soils survey of Oakland county Show types, boundaries 	Sheet 2	Yes	
Existing and proposed improvements (LDM 2.e.(4))	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
Existing and proposed utilities (LDM 2.e.(4))	<ul style="list-style-type: none"> Overhead and underground utilities, including hydrants All light posts 	All utility lines and structures are shown on landscape plan.	Yes	
Proposed grading. 2' contour minimum (LDM 2.e.(1))	Provide proposed contours at 2' interval	<ul style="list-style-type: none"> All contours, spot elevations on Sheet 6 Greenbelt berm and detention basin contours are shown on L-1 	Yes	
Snow deposit (LDM.2.q.)	Show snow deposit areas on plan	A note indicates that the snow will be deposited along the drives and curb lawns.	Yes	
LANDSCAPING REQUIREMENTS				
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o.)				
General requirements (LDM 1.c)	<ul style="list-style-type: none"> Clear sight distance within parking islands No evergreen trees 	No parking lots are proposed		
Name, type and	As proposed on planting	NA		

Item	Required	Proposed	Meets Code	Comments
number of ground cover (LDM 1.c.(5))	islands			
General (Zoning Sec 5.5.3.C.ii)				
Parking lot Islands (a, b. i)	<ul style="list-style-type: none"> A minimum of 200 SF per tree to qualify 6" curbs Islands minimum width 10' BOC to BOC 	NA		
Curbs and Parking stall reduction (c)	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	NA		
Contiguous space limit (j)	Maximum of 15 contiguous spaces	NA –no parking bays are provided.		
Plantings around Fire Hydrant (d)	<ul style="list-style-type: none"> No plantings with mature height greater than 12' within 10 ft. of fire hydrants, manholes, catch basins or other structures. Trees should be planted at least 5 feet from underground lines. 	Correct spacing is provided for all shown structures and underground lines.	Yes	
Landscaped area (g)	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	NA		
Clear Zones (LDM 2.3.(5))	<ul style="list-style-type: none"> 25 ft corner clearance required. Refer to Zoning Section 5.5.9 diagram below. 	Clear zone is provided at Taft Road entry and	Yes	
Berms, Walls and ROW Planting Requirements				
Berms				
<ul style="list-style-type: none"> All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours Berm should be located on lot line except in conflict with utilities. Berms should be constructed of loam with a 6" top layer of top soil. 				
Residential Adjacent to Non-residential (Zoning Sec 5.5.3.A and LDM 1.a)				
Berm requirements (Zoning Sec 5.5.A)	Adjacent Zoning is R4	NA		No berm is required as project is residential
Planting requirements (LDM 1.a.)	LDM Novi Street Tree List	NA		
Adjacent to Public Rights-of-Way (Zoning Sec 5.5.3.A and LDM 1.b)				
Cross-Section of Berms (Zoning Sec 5.5.3.B and LDM 2.j)				

Item	Required	Proposed	Meets Code	Comments
Slope, height and width (Zoning Sec 5.5.3.A.v)	<ul style="list-style-type: none"> • Label contour lines • Maximum 33% slope • Min. 4 feet crest • Min 4 feet tall, variable • Constructed of loam with 6" top layer of topsoil 	Yes	Yes	
Type of Ground Cover		Seed is indicated	Yes	
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	<ul style="list-style-type: none"> • Overhead lines are shown at Taft Road property line. • Subcanopy trees are used to meet the street tree requirement. 	Yes	
Walls (LDM 2.k & Zoning Sec 5.5.3.vi)				
Material, height and type of construction footing	Freestanding walls should have brick or stone exterior with masonry or concrete interior	None proposed		
Walls greater than 3 ½ ft. should be designed and sealed by an Engineer		NA		
ROW Landscape Screening Requirements (Sec 5.5.3.B. ii. 5.5.3.F.i)				
Greenbelt width (2)(3) (5)	<ul style="list-style-type: none"> • 34 ft greenbelt OR • 40 ft non-access greenbelt along major road 	40 ft greenbelt is provided	Yes	
Min. berm crest width	4 ft with undulations	2-10 ft	Yes	
Minimum berm height (9)	4 ft with undulations above 4 ft height	4-5 ft	Yes	
3' wall (4) (7)	NA	No wall is proposed		
Canopy deciduous or large evergreen trees Notes (1) (10) LDM1.d.(1)(b)	<ul style="list-style-type: none"> • 1 tree per 40 l.f.; • (199-28)/40 = 4 trees 	4 trees	Yes	
Sub-canopy deciduous trees Notes (2)(10)	<ul style="list-style-type: none"> • 1 tree per 25 l.f.; • (199-28)/25 = 7 trees 	7 trees	Yes	
Street Trees (LDM 1.d.(1) and Novi Street Tree List)	<u>Taft Road:</u> 1 per 35 l.f. <ul style="list-style-type: none"> • (199-125)/35 = 2 trees (or 3 subcanopy trees) <u>Internal lots</u> – trees set by frontage – 29 trees	<u>Taft Road:</u> 3 subcanopy trees <u>Lots:</u> 29 trees	Yes	
Transformers/Utility	<ul style="list-style-type: none"> • A minimum of 2ft. 	<ul style="list-style-type: none"> • None 	TBD	

Item	Required	Proposed	Meets Code	Comments
boxes (LDM 1.e from 1 through 5)	separation between box and the plants <ul style="list-style-type: none"> • Ground cover below 4" is allowed up to pad. • No plant materials within 8 ft. from the doors 	<ul style="list-style-type: none"> • Note regarding the requirement and a detail are provided. 		
Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)				
Planting requirements (Sec. 5.5.3.E.iv)	<ul style="list-style-type: none"> • Clusters of large native shrubs (min 3 ft tall) shall cover 70-75% of the basin rim area • 10" to 14" tall grass along sides of basin • Refer to wetland for basin mix 	Required shrubs are provided.	Yes	
Phragmites Control (Sec 5.5.6.C)	<ul style="list-style-type: none"> • Any and all populations of <i>Phragmites australis</i> on site shall be included on tree survey. • Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site. 	Plans for Phragmites removal are proposed on Sheet 15.	Yes	Please show on the Existing Conditions or Enhancement plan approximately where Phragmites is located.
Woodland Replacements (Chapter 37 Woodlands Protection)				
Woodland Replacement Calculations – Required/Provided	<ul style="list-style-type: none"> • Show calculations based on existing tree chart. • Indicate boundary of regulated woodland on plan 	Tree locations and tree chart are provided.	Yes	1. Please add a legend showing which trees are to be removed on Sheet 11. 2. See ECT letter for detailed review of woodlands.
Woodland Replacement Trees Proposed	<ul style="list-style-type: none"> • Show clearly on plan and plant list which trees are proposed as woodland replacement trees • Reforestation credit table breakdown, if applicable 	Species used are appropriate for the site.	Yes	If room is available without damaging quality habitat, please plant more replacement trees on the site.
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date (LDM 2.I. & Zoning Sec 5.5.5.B)	Provide intended date	Mar-Nov 2019 or 2020	Yes	
Maintenance &	<ul style="list-style-type: none"> • Include statement of 	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
Statement of intent (LDM 2.m & Zoning Sec 5.5.6)	intent to install and guarantee all materials for 2 years. <ul style="list-style-type: none"> • Include a minimum one cultivation in June, July and August for the 2-year warranty period. 			
Plant source (LDM 2.n & LDM 3.a.(2))	Shall be northern nursery grown, No.1 grade	Yes	Yes	
Irrigation plan (LDM 2.s.)	A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans.	No	No	<ol style="list-style-type: none"> 1. Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long- term survival. 2. If xeriscaping is used, please provide information about plantings included.
Other information (LDM 2.u)	Required by Planning Commission	NA		
Establishment period (Zoning Sec 5.5.6.B)	2 yr. Guarantee	Yes	Yes	
Approval of substitutions. (Zoning Sec 5.5.5.E)	City must approve any substitutions in writing prior to installation.	Yes	Yes	
Plant List (LDM 2.h, 4.) – Include all cost estimates				
Botanical and common names	Refer to LDM suggested plant list	Yes	Yes	
Quantities and sizes		Yes	Yes	
Root type		Yes	Yes	
Breakdown of genus/species diversity (LDM 4.)	Break down proposed plantings by genus and species	<ul style="list-style-type: none"> • 15 of 19 species used (79%) are native to Michigan. • The non-replacement tree diversity meets the requirements of LDM 4. 	Yes	
Type and amount of lawn		Seed and sod		
Cost estimate (LDM 2.t)	For all new plantings, mulch and sod as listed on the plan	Yes	Yes	<u>Please use \$3.00/sy for seed.</u>
Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details				

Item	Required	Proposed	Meets Code	Comments
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Multi-stem Tree		Yes	Yes	
Evergreen Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		NA – none proposed		
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	No	No	1. Detail should show fence at 1 foot outside of tree dripline. 2. Detail may be provided on a different sheet.
Other Plant Material Requirements (LDM 3)				
General Conditions (LDM 3.a)	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
Plant Materials & Existing Plant Material (LDM 3.b)	Clearly show trees to be removed and trees to be saved.	Yes	Yes	
Landscape tree credit (LDM3.b.(d))	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM	None		
Plant Sizes for ROW, Woodland replacement and others (LDM 3.c)	Refer to Chapter 37, LDM for more details	Yes	Yes	
Plant size credit (LDM3.c.(2))	NA			
Prohibited plants (LDM 3.d)	No plants on City Invasive Species List	None used	Yes	
Recommended trees for planting under overhead utilities (LDM 3.e)	Label the distance from the overhead utilities			
Collected or Transplanted trees (LDM 3.f)		NA		
Nonliving Durable Material: Mulch (LDM	• Trees shall be mulched to 3" depth and shrubs,	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
4)	groundcovers to 2" depth • Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate. • Refer to section for additional information			

NOTES:

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. For the landscape requirements, please see the Zoning Ordinance landscape section 5.5 and the Landscape Design Manual for the appropriate items under the applicable zoning classification.
3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.

WETLANDS REVIEW



ECT Project No. 190265-0300
 June 17, 2019

Ms. Barbara McBeth, AICP
 City Planner
 Community Development Department
 City of Novi
 45175 W. Ten Mile Road
 Novi, Michigan 48375

Re: Munro's Preserve (f.k.a., The Preserve) JSP19-0009)
 Wetland Review of the Revised Preliminary Site Plan (PSP19-0095)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Revised Preliminary Site Plan for the proposed Munro's Preserve (f.k.a., The Preserve) condominiums project (approximately 11.5 acres) located east of Taft Road and south of Eleven Mile Road in Section 22 and consists of two (2) parcels (22-22-100-026 & 22-22-100-027). This included a review of the site plan package prepared by Greentech Engineering dated May 24, 2019 and stamped "Received" by the City of Novi Community Development Department on May 28, 2019 (Plan). The Plan splits the overall development site into Parcels A, B, C, and D. Parcel A is a 2.19 acre "excepted" lot in the northwest portion of the site. Currently, no development is proposed on Parcel A. The Plan includes the construction of seventeen (17) condominium units, associated roads and utilities, stormwater detention basin, and a bioswale located in the open space area behind Unit 9. This development will be on Parcel B (8.12 acres). It appears as if the Plan proposes to create one (1) buildable Unit on Parcel C (0.42-acre). Currently, no development is proposed on Parcel D (2.88 acres) located in the eastern portion of the property. The Plan includes a *Parallel Plan* (Sheet 14) that includes the development of a total of nineteen (19) condominium units and three (3) areas of proposed wetland mitigation. The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance.

ECT currently recommends approval of the Revised Preliminary Site Plan for Wetlands. The Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving wetland approval of the Final Site Plan.

The following wetland related items are required for this project:

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Not Required (Required for <i>Parallel Plan</i>)
Wetland Buffer Authorization	Required
EGLE (formerly MDEQ) Wetland Permit	Likely Required
Wetland Conservation Easement	Not Required (Required for <i>Parallel Plan</i> and/or if Wetland Mitigation Areas are constructed)

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Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands and Woodlands Maps (see Figure 1); it appears as if this proposed project site contains an area mapped as City-Regulated Wetland/Watercourse and the entire property appears to be mapped as City-Regulated Woodlands. The site appears to contain, and be directly adjacent to, wetland areas that are regulated by the City of Novi as well as the Michigan Department of Environment, Great Lakes, and Energy (EGLE, formerly MDEQ). ECT conducted a wetland evaluation for the property on August 23, 2018. ECT most-recently visited the site on April 28, 2019.

Wetlands Evaluation

ECT's in-office review of available materials included the City of Novi Regulated Wetland and Watercourse map (see Figure 1), USGS topographic quadrangle map, NRCS soils map, USFWS National Wetland Inventory map, and historical aerial photographs (from Oakland County and Google Earth). Based on our review of this information and our on-site wetland evaluation, the site contains wetland/watercourse areas that are regulated by the City of Novi and likely by EGLE as well.

The focus of the wetland boundary evaluation site inspection was to review site conditions in order to determine whether City-regulated wetlands are found on-site. King and MacGregor Environmental, Inc. (KME) provided a map of the surveyed wetland flags. Pink wetland boundary flagging was in place at the time of this site inspection. ECT reviewed the flagging and agrees that the wetland boundaries were accurately flagged in the field. The site contains a total of four (4) wetland areas (Wetlands A, B, C, and D). Two (2) individual wetland areas are located on the eastern portion of the site (Wetlands A and B) and two (2) wetland areas are located on the western side of the site (Wetlands C and D).

The following is a brief description of the on-site wetland features:

Wetland A – Emergent/open water wetland located along the east side of the subject site and continues off site to the north and south. Common wetland vegetation includes common water-plantain (*Alisma plantago*), false nettle (*Boehmeria cylindrica*), silky dogwood (*Cornus amomum*), reed canary grass (*Phalaris arundinacea*), bur-reed (*Sparganium americanum*), pink weed (*Polygonum pennsylvanicum*), and duckweed (*Lemna minor*) with box elder (*Acer negundo*), common buckthorn (*Rhamnus cathartica*), and black willow (*Salix nigra*) trees.

Wetland B – Scrub shrub wetland located along the northern property line in the eastern portion of the site. Common wetland vegetation includes reed canary grass (*Phalaris arundinacea*), common buckthorn (*Rhamnus cathartica*), fowl manna grass (*Glyceria striata*), and silver maple (*Acer saccharinum*).

Wetland C – Scrub shrub wetland located in the western side of the site, just east of Wetland D. The dominant wetland vegetation found was spotted knapweed (*Impatiens capensis*).

Wetland D – Scrub shrub wetland located in the western side of the site, near Taft Road. Common wetland vegetation includes silver maple (*Acer saccharinum*), box elder (*Acer negundo*), riverbank grape (*Vitis riparia*), and cottonwood (*Populus deltoides*).

Based on the on-site wetland flagging, the existing vegetation and topography, it is ECT's assessment that the on-site wetlands were accurately delineated. The wetland boundaries appear to be accurately indicated on the Plan. In general, areas of on-site wetland and wetland buffer are dominated by invasive species of vegetation such as common buckthorn (*Rhamnus cathartica*) and honeysuckle (*Lonicera spp.*). The Plan includes an *Enhancement Plan* (Sheet 15) that outlines the steps that will be taken to remove invasive species of vegetation such as buckthorn, honeysuckle and common reed (*Phragmites australis*) from the areas of

Wetland A and Wetland B and their 25-foot buffers to remain. In general, this Plan appears to be approvable.

Wetland Impact Review

As noted above, several areas of wetland have been confirmed on the subject property by the applicant's wetland consultant. Currently, the Plan indicates impacts to three (3) of the four (4) existing wetlands. The Plan (*Wetland Plan*, Sheet 10) quantifies the areas of the proposed wetland impacts. The total amount of direct (i.e., fill or excavation) impact to on-site wetlands is 9,296 square feet (0.21-acre). The current impacts are to Wetland C and Wetland D for the construction of the site's entrance from Taft Road as well as Lots 1, 2, and 3. The current Plan also proposes a small permanent impact to a section of Wetland A in the southeast portion of the property for the purpose of constructing a "T" turn-around for Danyas Way.

The following table summarizes the proposed wetland impacts as listed on the *Wetland Plan* (Sheet 10):

Table 1. Proposed Wetland Impacts

<i>Impact Area</i>	<i>Wetland Impacted</i>	<i>City Regulated?</i>	<i>MDEQ Regulated?</i>	<i>Wetland Impact Area (acre)</i>	<i>Estimated Impact Volume (cubic yards)</i>
A	D (and Buffer)	Yes City Regulated /Essential	To Be Determined	8,592 Sq. Ft. (0.20-acre)	Not Provided
B	C (and Buffer)	Yes City Regulated /Essential	To Be Determined	556 Sq. Ft. (0.01-acre)	Not Provided
C	A (Buffer)	Yes City Regulated /Essential	To Be Determined	None	None
D	A & B (Buffer)	Yes City Regulated /Essential	To Be Determined	None	None
E	A (Buffer)	Yes City Regulated /Essential	To Be Determined	148 Sq. Ft. (0.003-acre)	Not Provided
TOTAL	--	--	--	9,296 Sq. Ft. (0.21-acre)	Not Provided

In addition to the proposed wetland impacts, the Plan proposes disturbance to on-site 25-foot wetland buffer areas. The proposed impacts to 25-foot wetland buffers is also provided on the *Wetland Plan* (Sheet 10). The Plan indicates a total of 21,286 square feet (0.48-acre) of impact to the 25-foot wetland buffers. Of this, 14,978 square feet (0.34-acre) is proposed as permanent impact and 6,308 square feet (0.14-acre) is indicated as temporary impact.

The following table summarizes the proposed wetland buffer impacts as listed on the *Wetland Plan* (Sheet 10):

Table 2. Proposed Wetland Buffer Impacts

Impact Area	Wetland	Buffer City Regulated?	Buffer MDEQ Regulated?	Wetland Buffer Impact Area			
				Permanent		Temporary	
				Acre	Square Feet	Acre	Square Feet
A	D (Buffer)	Yes	No	0.19	8,103	N/A	N/A
B	C (Buffer)	Yes	No	0.11	4,594	N/A	N/A
C	A (Buffer)	Yes	No	N/A	N/A	0.02	795
D	A & B (Buffer)	Yes	No	N/A	N/A	0.13	5,513
E	A (Buffer)	Yes	No	0.05	2,281	N/A	N/A
TOTAL	--	--	--	0.34	14,978	0.14	6,308

The applicant shall provide information on subsequent plans that clearly indicates the impact volumes (cubic yards) associated with all of the proposed wetland impact areas. This information is required before any necessary City of Novi Wetland and Watercourse Permits or Authorization to Encroach Upon the 25-Foot Natural Features Setback letters can be issued.

Finally, it should be noted the 'Parcel C' and 'Parcel D' lot splits shown on the Open Space plan would include portions of Wetland A as well as the 25-foot wetland setback on the Lots. One area of permanent impact to the 25-foot setback of Wetland A (i.e., Impact Area 'E') is indicated for the development of Danyas Way drive extension. This impact area includes proposed permanent impact to Wetland A as well as the 25-foot wetland setback. A portion of the Wetland A 25-foot buffer is proposed to remain in the rear yard of Unit 10. This wetland buffer impact area is listed as a temporary wetland buffer impact.

The City of Novi Subdivision Ordinance Section 4.03 includes language stating that lots cannot extend into a wetland. In addition, the City prefers that that lot boundaries do not extend into 25-foot wetland setbacks. The City of Novi Wetland Ordinance (Section 12-174.(4) – *Review Standards*) states the following:

Where the proposed activity is the platting of a residential subdivision, the boundaries of platted lots shall not extend into a wetland or watercourse. This shall not prohibit the inclusion of wetland or watercourse areas as common areas within a plat. Where the proposed activity is the development of a site condominium, the boundaries of building sites, as defined in section 2407 of the City of Novi Zoning Ordinance, shall not extend into a wetland or watercourse. This shall not prohibit the inclusion of wetland or watercourse areas as common areas within a site condominium development.

Parallel Plan

It should be noted that the *Parallel Plan* (Sheet 14) includes a greater amount of proposed impact to wetland (0.45-acre of impact on the *Parallel Plan* compared to 0.21-acre of impact on the Plan). The wetland impacts associated with the *Parallel Plan* exceed the City's threshold for wetland mitigation of 0.25-acre of impact. The main difference with respect to proposed wetland impacts on the *Parallel Plan* is the proposed impacts to Wetland A for the development of an extended entrance drive as well as the development of Lots 9 and 12. The following table summarizes the proposed wetland impacts as listed on the *Parallel Plan* (Sheet 14):

Table 3. Proposed Wetland Impacts for Parallel Plan

Impact Area	Wetland	City Regulated?	MDEQ Regulated?	Wetland Impact Area (acre)	Estimated Impact Volume (cubic yards)
A	A	Yes City Regulated /Essential	To Be Determined	391 Sq. Ft. (0.009-acre)	Not Provided
B	A	Yes City Regulated /Essential	To Be Determined	258 Sq. Ft. (0.006-acre)	Not Provided
C	A	Yes City Regulated /Essential	To Be Determined	10,014 Sq. Ft. (0.230-acre)	Not Provided
D	C	Yes City Regulated /Essential	To Be Determined	556 Sq. Ft. (0.013-acre)	Not Provided
E	D	Yes City Regulated /Essential	To Be Determined	8,592 Sq. Ft. (0.197-acre)	Not Provided
TOTAL	--	--	--	19,811 Sq. Ft. (0.45-acre)	Not Provided

The *Parallel Plan* also includes a total of 23,592 square feet (0.54-acre) of proposed, permanent impact to the existing 25-foot wetland buffers. This is approximately 0.20-acre more permanent impact to the 25-foot wetland buffers as compared to the Plan (i.e., 0.34-acre on the Plan). It should be noted that it appears that all areas of existing wetland and 25-foot wetland buffer located on the proposed Lots is proposed to be permanently impacted. This includes Units 1 and 2 on the southwest side of the site and Units 9, 10, 11, 12, and 13 on eastern side of the site. It should be noted that the impact to the 25-foot wetland buffers are not hatched on the *Parallel Plan*, however, based on the impact quantities in the Wetland Impact Areas table, it appears that this plan proposes to permanently impact these areas, leaving no wetland or wetland buffer on any of the proposed Units.

If areas of 25-foot wetland buffer are to remain on proposed Units, the applicant shall provide assurance that the 25-foot wetland setback on these lots will be maintained either through a conservation easement or deed restriction, etc. Any proposed conservation easement areas should be demarcated on-site through the use of proposed easement signage and potentially other means such as boulders or decorative fencing along the setback boundaries.

The *Parallel Plan* indicates three (3) proposed wetland mitigation areas totaling 36,516 square feet (0.83-acre). This is a wetland mitigation ratio of 1.84-to-1 based on the mitigation area-to-wetland impact area (see *Wetland Mitigation* section below for additional information with respect to wetland mitigation requirements).

Regulatory Status - EGLE

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) regulates wetlands that are within 500 feet of an inland lake, pond, or stream, or within 1,000 feet of a Great Lake, Lake St. Clair, the St. Clair River, or the Detroit River. Isolated wetlands five (5) acres in size or greater are also regulated. EGLE may also exert regulatory control over isolated wetlands less than five acres in size "...if the department determines that protection of the area is essential to the preservation of the natural resources of the state from pollution, impairment, or destruction and the department has notified the owner".

It is the applicant's responsibility to contact EGLE in order to confirm the regulatory authority with respect to the on-site wetland areas.

Regulatory Status – City of Novi

The City of Novi Wetland and Watercourse Protection Ordinance (City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 2.) describes the regulatory criteria for wetlands and review standards for wetland permit applications. The City of Novi regulates wetlands that are: (1) contiguous to a lake, pond, river or stream, as defined in Administrative Rule 281.921; (2) two (2) acres in size or greater; or (3) less than two (2) acres in size but deemed essential to the preservation of the natural resources of the city under the criteria set forth in subsection 12-174(b). Wetlands deemed regulated by the City of Novi require the approval of a use permit for any proposed impacts to the wetland.

ECT has evaluated the on-site wetlands and believes that the wetlands are all considered to be essential/regulated by the City of Novi as they are either larger than 2 acres in size (Wetland A appears to be close to 2-acres in size and extends off-site to the north and south) or meet at least one of the City's wetland essentiality criteria (i.e., wildlife habitat, stormwater storage) in the case of Wetlands B, C, and D.

As noted above, any proposed use of the wetlands will require a City of Novi *Wetland Use Permit* as well as an *Authorization to Encroach the 25-Foot Natural Features Setback* for any proposed impacts to the 25-foot wetland buffers. The applicant is urged to minimize impacts to on-site wetlands and wetland setbacks to the greatest extent practicable. The City regulates wetland buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states that:

“There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses”.

Wetland Mitigation

It should be noted that in those cases where an activity results in the impact to wetland areas of 0.25-acre or greater that are deemed essential under City of Novi Wetland Ordinance subsection 12-174(b) mitigation shall be required. The applicant shall submit a mitigation plan which provides for the establishment of replacement wetlands at a ratio of 1:1 through 2:1 times the area of the natural wetland impaired or destroyed, if impacts meet or exceed the 0.25-acre threshold. In general, EGLE's threshold for the requirement of wetland mitigation is 0.3-acre of wetland impacts. Currently, the site development as proposed does not require wetland mitigation as the total proposed wetland impact area is 0.21-acre.

It should be noted that the *Parallel Plan* does require wetland mitigation per the City of Novi Wetland Ordinance as the proposed 0.45-acre of wetland impacts exceeds the City's mitigation threshold of 0.25-acre.

The *Parallel Plan* currently proposes the construction of three (3) areas of wetland mitigation in the eastern section of the site, adjacent to existing Wetlands A and B. The following table summarizes the proposed wetland mitigation areas as listed on the *Parallel Plan* (Sheet 14):

Table 4. Proposed Wetland Mitigation Areas

<i>Mitigation Area</i>	<i>Area (Square Feet)</i>	<i>Area (Acre)</i>
1	4,870	0.11
2	10,022	0.23
3	21,624	0.49
TOTAL	35,516	0.83

The *Parallel Plan* indicates three (3) proposed wetland mitigation areas totaling 36,516 square feet (0.83-acre). This is a wetland mitigation ratio of 1.84-to-1 based on the mitigation area-to-wetland impact area. Should the Plan propose wetland impacts requiring mitigation, the wetland Mitigation Ratio required for each area of wetland impact shall be indicated, keeping in mind that the minimum requirement for mitigation of emergent and scrub-shrub wetland is 1.5-to-1 and the minimum requirement for mitigation of forested wetland is 2.0-to-1.

Wetland Comments

The following are repeat comments from our *Wetland Review of the Preliminary Site Plan (PSP19-0061)* letter dated May 9, 2019 (Revision 2). The current status of each comment follows in ***bold italics***. ECT recommends that the Applicant address the items noted below in subsequent site plan submittals:

1. ECT encourages the Applicant to minimize impacts to on-site wetlands and 25-foot wetland setbacks to the greatest extent practicable. Currently, the Plan proposes impacts to wetlands and 25-foot wetland setbacks. Impacts to wetlands currently total 0.21-acre and impacts to wetland buffers total 0.45-acre (0.145-acre of temporary impacts and 0.301-acre of permanent impacts). Lots should be oriented to avoid impacts to both wetlands and 25-foot wetland setbacks.

This comment still applies. The total impacts to both wetlands and 25-foot wetland buffer have slightly increased from the Preliminary Site Plan submittal. Currently the Plan proposes 0.21-acre of permanent impact to wetlands and a total of 21,286 square feet (0.48-acre) of impact to the 25-foot wetland buffers. Of this, 14,978 square feet (0.34-acre) is proposed as permanent impact and 6,308 square feet (0.14-acre) is indicated as temporary impact.

2. It should be noted the 'Parcel C' and 'Parcel D' lot splits shown on the Open Space plan would include portions of Wetland A as well as the 25-foot wetland setback on the Lots. The City of Novi Subdivision Ordinance Section 4.03 as well as the City's Wetland Ordinance, include language stating that lots cannot extend into a wetland. In addition, the City prefers that that lot boundaries do not extend into 25-foot wetland setbacks. The applicant shall review and revise the Plan as necessary.

This comment still applies. Currently, 'Parcel C' would include portions of Wetland A and its 25-foot wetland setback.

3. The current Plan does not specifically indicate/quantify the volume of proposed wetland impacts. This information shall be included on the Plan.

This comment still applies. The applicant shall provide information on subsequent plans that clearly indicates the impact volumes (cubic yards) associated with all of the proposed wetland impact areas. This information is required before any necessary City of Novi Wetland and Watercourse Permits can be issued.

4. It appears as though a City of Novi *Wetland Use Permit* and likely an EGLE (formerly MDEQ) Wetland Permit would be required for any proposed impacts to on-site wetlands. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* is required for any proposed impacts to on-site 25-foot wetland or watercourse buffers.\

This comment still applies.

5. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from the MDEQ for any proposed wetland impacts. Final determination as to the regulatory status of any on-site wetlands shall be made by MDEQ. The Applicant should provide a copy of the approved EGLE (formerly MDEQ) Wetland Use Permit to the City (and our office) upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information.

This comment still applies.

6. The Plan should address how any temporary impacts to wetland or 25-foot wetland buffers shall be restored, if applicable. For example, what native restoration seed mix will be used. Please include this information on the *Landscape Plan* for the temporary wetland buffer impact areas (i.e., for temporary impact areas to Wetlands A and B). Sod or common grass seed will not be authorized in these areas.

This comment has been partially addressed. The Enhancement Plan (Sheet 15) contains information related to the proposed wetland buffer seed restoration, seeding and maintenance. The seed mix information has not yet been provided. Sheet 15 notes that for seed mix details and seeding rates refer to Sheet L-3. Sheet L-3 has not been included with the Plan.

7. The *Enhancement Plan* (Sheet 15) for proposed removal of invasive species of vegetation appears to be approvable, however the applicant shall review and revise the Plan to omit any items that may not pertain to this specific site.

This comment has been addressed.

8. The applicant should ensure that any proposed snow storage areas are located such that any runoff will not directly affect any on-site wetlands.

This comment still applies.

9. Should wetland mitigation continue to be part of this site plan, the applicant shall submit a detailed wetland mitigation plan for approval concurrently with the site development plan. Subsequent Plans should provide detailed information regarding the proposed wetland mitigation area, and specifically contain all of the requirements listed in Section 12-176. – Mitigation of the City of Novi Wetland Ordinance. The applicant's engineer has noted in a response letter dated April 2, 2019 that the Final Site Plan submittal will include a full wetland planting and seed mix plan.

The Plan shall also indicate the wetland Mitigation Ratio required for each area of wetland impact keeping in mind that the minimum requirement for mitigation of emergent and scrub-shrub wetland is 1.5-to-1 and the minimum requirement for mitigation of forested wetland is 2.0-to-1.

This comment still applies.

10. The Applicant is encouraged to provide wetland conservation easements for any areas of remaining wetland and 25-foot wetland buffer. The Applicant shall provide wetland conservation easements as directed by the City of Novi Community Development Department for any areas of proposed wetland mitigation areas (if necessary). This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Wetland and Watercourse permit.

This comment still applies. A wetland conservation easement is necessary if the construction of wetland mitigation areas is included as part of the Final Site Plan.

Recommendation

ECT currently recommends approval of the Revised Preliminary Site Plan for Wetlands. The Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving wetland approval of the Final Site Plan.

If you have any questions regarding the contents of this letter, please contact us.

Sincerely,
ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Peter Hill, P.E.
Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner
Sri Komaragiri, City of Novi Planner
Rick Meader, City of Novi Landscape Architect
Hannah Smith, City of Novi Planning Assistant

Attachments: Figure 1. City of Novi Regulated Wetland & Woodland Map
Site Photos



Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate project boundary shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.

Site Photos



Photo 1. Looking south at Wetland A in the northeast section of the site (ECT, April 28, 2019).



Photo 2. Looking west at Wetland B near the northern edge of the site (northeast section of the property) (ECT, April 28, 2019).



Photo 3. Looking west at Wetland C near the western section of the of the site (ECT, April 28, 2019).



Photo 4. Looking north at Wetland D near the western edge of the site (adjacent to Taft Road) (ECT, April 28, 2019).

WOODLANDS REVIEW

ECT No. 190265-0400
June 17, 2019

Ms. Barbara McBeth, AICP
City Planner
Community Development Department
City of Novi
45175 West Ten Mile Road
Novi, MI 48375

Re: Munro's Preserve (f.k.a., The Preserve) JSP19-0009
Woodland Review of the Revised Preliminary Site Plan (PSP19-0095)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Revised Preliminary Site Plan for the proposed Munro's Preserve (f.k.a., The Preserve) condominiums project (approximately 11.5 acres) located east of Taft Road and south of Eleven Mile Road in Section 22 and consists of two (2) parcels (22-22-100-026 & 22-22-100-027). This included a review of the site plan package prepared by Greentech Engineering dated May 24, 2019 and stamped "Received" by the City of Novi Community Development Department on May 28, 2019 (Plan). The Plan splits the overall development site into Parcels A, B, C, and D. Parcel A is a 2.19 acre "excepted" lot in the northwest portion of the site. Currently, no development is proposed on Parcel A. The Plan includes the construction of seventeen (17) condominium units, associated roads and utilities, stormwater detention basin, and a bioswale located in the open space area behind Unit 9. This development will be on Parcel B (8.12 acres). It appears as if the Plan proposes to create one (1) buildable Unit on Parcel C (0.42-acre). Currently, no development is proposed on Parcel D (2.88 acres) located in the eastern portion of the property. The Plan includes a *Parallel Plan* (Sheet 14) that includes the development of a total of nineteen (19) condominium units and three (3) areas of proposed wetland mitigation. The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37.

ECT currently recommends approval of the Revised Preliminary Site Plan for Woodlands. The Applicant shall address the items noted in the *Woodland Comments* Section of this letter prior to receiving woodland approval of the Final Site Plan.

The following woodland related items are required for this project:

Item	Required/Not Required/Not Applicable
Woodland Permit	Required
Woodland Fence	Required
Woodland Conservation Easement	Required

Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands and Woodlands Maps (see Figure 1); it appears as if this proposed project site contains an area mapped as City-Regulated Wetland/Watercourse and the entire property appears to be mapped as City-Regulated Woodlands. The site appears to contain, and be directly adjacent to, wetland areas that are regulated by

the City of Novi as well as the MDEQ. ECT conducted a wetland and woodland evaluation for the property on August 23, 2018 and ECT visited the site on April 28, 2019 to conduct a woodland evaluation.

It should be noted that the purpose of the City of Novi Woodland Protection Ordinance (Chapter 37) is to:

1. *Provide for the protection, preservation, replacement, proper maintenance and use of trees and woodlands located in the city in order to minimize disturbance to them and to prevent damage from erosion and siltation, a loss of wildlife and vegetation, and/or from the destruction of the natural habitat. In this regard, it is the intent of this chapter to protect the integrity of woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem, and to place priority on the preservation of woodlands, trees, similar woody vegetation, and related natural resources over development when there are no location alternatives;*
2. *Protect the woodlands, including trees and other forms of vegetation, of the city for their economic support of local property values when allowed to remain uncleared and/or unharvested and for their natural beauty, wilderness character of geological, ecological, or historical significance; and*
3. *Provide for the paramount public concern for these natural resources in the interest of health, safety and general welfare of the residents of the city.*

Woodlands Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on April 28, 2019. ECT's in-office review of available materials included the City of Novi Regulated Woodland map and other available mapping. The entire project is mapped as containing City-regulated woodland (see Figure 1).

The current Plan includes a *Woodland Plan* (Sheets 11 and 12) that contains a woodland survey and tree list. Sheet 11 graphically indicates which trees are to be removed. Sheet 12 includes a table of tree tag numbers, species, removal status and required Woodland Replacement quantities. In general, the on-site trees consist of box elder (*Acer negundo*) and black locust (*Robinia pseudoacacia*), but the site also contains cottonwood (*Populus deltoides*), black walnut (*Juglans nigra*), bur oak (*Quercus macrocarpa*), black cherry (*Prunus serotina*), basswood (*Tilia americana*), and a few others.

In terms of habitat quality and diversity of tree species, the overall subject site consists of trees in fair condition. In terms of a scenic asset, wildlife habitat, windblock, noise buffer or other environmental asset, the forested areas located on the subject site appear to be considered to be of fair quality. It should be noted that many sections of the forested portion of the site (including wetlands and wetland buffers) are dominated by invasive species of vegetation such as common buckthorn (*Rhamnus cathartica*) and honeysuckle (*Lonicera spp.*). The Plan includes an *Enhancement Plan* (Sheet 15) that outlines the steps that will be taken to remove invasive species of vegetation such as buckthorn (as well as common reed (*Phragmites australis*)) from the site. In general, this Plan appears to be approvable.

A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch diameter-at-breast-height (DBH) or greater and located within an area designated as City Regulated Woodland, **or any tree 36-inches DBH regardless of location on the site.** Such trees shall be relocated or replaced by the permit grantee. All deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1-to-1 replacement ratio and all coniferous replacement trees shall be six (6) feet in height (minimum) and count at a 1.5-to-1 replacement ratio. All Woodland Replacement trees shall be species that are listed on the City's Woodland Tree Replacement Chart (attached).

The proposed Plan does include proposed tree removals as indicated below.

Proposed Woodland Impacts and Woodland Replacements

The tree list appears to indicate the following quantities:

- Total Trees Surveyed = 340
- Number of Unregulated Trees = 9
- Total Regulated Trees = 331
- Total Regulated Trees to Remain = 91 (25%)
- Total Regulated Trees to be Removed = 249 (75%)

The Woodland Summary on Sheet 11 indicates the following tree removals:

- Stems to be Removed 8" to 11": 136 x 1 replacement (Requiring 136 Replacements)
- Stems to be Removed 11" to 20": 72 x 2 replacements (Requiring 144 Replacements)
- Stems to be Removed 20" to 30": 7 x 3 replacements (Requiring 21 Replacements)
- Stems to be Removed 30"+: 1 x 4 replacements (Requiring 4 Replacements)
- Multi-Stemmed Trees (33 trees): (Requires 131 Replacements)

- **Total Woodland Replacement Credits Required 436 Replacements**

The Landscape Plan (Sheet L-1) notes the following:

- Woodland Replacement Required = 436 Tree Credits
- Woodland Replacement Provided = 71 Tree Credits (16% of the Total Required)
- Trees Paid into Tree Fund = 365 Tree Credits (84% of the Total Required)

The *Landscape Plan* (Sheet L-1) also contains a proposed Plant List that indicates the following proposed on-site Woodland Replacement trees. All trees currently proposed as Woodland Replacements are acceptable species per the City's Woodland Tree Replacement Chart:

- 11 red maple (*Acer rubrum*);
- 16 sugar maple (*Acer saccharum*);
- 9 tulip tree (*Liriodendron tulipifera*);
- 11 swamp white oak (*Quercus bicolor*);
- 12 bur oak (*Quercus macrocarpa*);
- 12 basswood (*Tilia americana*);
- **71 Total Woodland Replacement Credits**

With regard to the location of woodland replacement trees, the Woodland Ordinance states:

- *The location of replacement trees shall be subject to the approval of the planning commission and shall be such as to provide the optimum enhancement, preservation and protection of woodland areas. Where woodland densities permit,*

- tree relocation or replacement shall be within the same woodland areas as the removed trees. Such woodland replanting shall not be used for the landscaping requirements of the subdivision ordinance or the zoning landscaping;*
- *Where the tree relocation or replacement is not feasible within the woodland area, the relocation or replacement plantings may be placed elsewhere on the project property;*
 - *Where tree relocation or replacement is not feasible within the woodland area, or on the project property, the permit grantee shall pay into the city tree fund monies for tree replacement in a per tree amount representing the market value for the tree replacement as approved by the planning commission. The city tree fund shall be utilized for the purpose of woodland creation and enhancement, installation of aesthetic landscape vegetation, provision of care and maintenance for public trees and provision and maintenance of specialized tree care equipment. Tree fund plantings shall take place on public property or within right-of-ways with approval of the agency of jurisdiction. Relocation or replacement plantings may be considered on private property provided that the owner grants a permanent conservation easement and the location is approved by the planning commission;*
 - *Where replacements are installed in a currently non-regulated woodland area on the project property, appropriate provision shall be made to guarantee that the replacement trees shall be preserved as planted, such as through a conservation or landscape easement to be granted to the city. Such easement or other provision shall be in a form acceptable to the city attorney and provide for the perpetual preservation of the replacement trees and related vegetation.*

The applicant shall demonstrate that all proposed Woodland Replacement Trees will be guaranteed to be preserved as planted within a conservation easement or landscape easement to be granted to the City.

Parallel Plan

It should be noted that neither the Plan nor the *Parallel Plan* (Sheet 14) include development of 'Parcel A' (2.19 acres) in the northwest portion of the site but The *Parallel Plan* appears to include the removal of regulated trees in the southeast section of the site (near Wetland A) that would otherwise be preserved in the development of the Plan. These additional tree removals appear to be necessary for the development of Units 10, 11, and 12 as well as the proposed cul-de-sac on the *Parallel Plan*. This difference in proposed woodland impacts, however, has not been quantified on this Plan.

Woodland Comments

The following are repeat comments from our *Woodland Review of the Preliminary Site Plan (PSP19-0061)* letter dated May 6, 2019. The current status of each comment follows in ***bold italics***. ECT recommends that the Applicant address the items noted below in subsequent site plan submittals:

1. A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch diameter-at-breast-height (DBH) or greater and located within an area designated as City Regulated Woodland, or any tree 36-inches DBH regardless of location on the site. Such trees shall be relocated or replaced by the permit grantee. All deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1-to-1 replacement ratio and all coniferous replacement trees shall be six (6) feet in height (minimum) and count at a 1.5-to-1 replacement ratio. All Woodland Replacement trees shall be species that are listed on the City's Woodland Tree Replacement Chart (attached).

This comment still applies. The applicant currently proposes to provide 71 of the 436 (16%) of the total Required Woodland Replacement Credits on-site. The remaining 365 Woodland Replacement Credits will be paid to the City of Novi Tree Fund.

- The Plan does clearly indicate which trees are proposed for removal. The Applicant shall report the number of trees that are proposed to be removed within the following categories and indicate how many Woodland Replacement are required for each removed tree:

Replacement Tree Requirements

Removed Tree D.B.H. (In Inches)	Ratio Replacement/ Removed Tree
8 < 11	1
>11 < 20	2
> 20 < 29	3
> 30	4

This comment has been addressed. This information (i.e., Woodland Summary) has been provided on the Woodland Plan (Sheet 11).

- After a review of the *Woodland Plan* (Sheet 12)/Tree Chart, it appears as if the proposed tree removals sum to **334** Woodland Replacement Credits required as opposed to the 458 indicated on Sheet L-1. It appears as if some trees indicated on the *Woodland Plan* (Sheet 11, plan view) have not been included in the tree removal table on Sheet 12. The applicant shall review and revise the information as necessary.

This comment has been addressed.

- A Woodland Replacement financial guarantee for the planting of replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400. As currently shown on the Plan, this Woodland Replacement financial guarantee would be **\$25,600** (64 on-site Woodland Replacement Tree Credits x \$400/Credit).

This comment still applies. However, as currently shown on the Plan, this Woodland Replacement financial guarantee would be \$28,400 (71 on-site Woodland Replacement Tree Credits x \$400/Credit).

- Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement financial guarantee will be returned to the Applicant. A Woodland Maintenance financial guarantee in the amount of twenty-five percent (25%) of the original Woodland Replacement financial guarantee will then be provided by the applicant. This Woodland Maintenance financial guarantee will be kept for a period of 2-years after the successful inspection of the on-site woodland replacement tree installation. Based on the current Plan, this Woodland Maintenance financial guarantee will be **\$6,400** (64 on-site Woodland Replacement Credits x \$400/Credit x 0.25).

This comment still applies. However, based on the current Plan, this Woodland Maintenance financial guarantee will be \$7,100 (71 on-site Woodland Replacement Credits x \$400/Credit x 0.25).

6. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement tree planting outside of existing Regulated Woodland Boundaries. The applicant shall demonstrate that the all proposed woodland replacement trees will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit.

This comment still applies. These easements shall be indicated and labeled on the Plan.

7. Replacement material should not be located 1) within 10' of built structures or the edges of utility easements and 2) over underground structures/utilities or within their associated easements. In addition, replacement tree spacing should follow the *Plant Material Spacing Relationship Chart for Landscape Purposes* found in the City of Novi *Landscape Design Manual*.

This comment still applies.

Woodland Recommendation

ECT currently recommends approval of the Revised Preliminary Site Plan for Woodlands. The Applicant shall address the items noted in the *Woodland Comments* Section of this letter prior to receiving woodland approval of the Final Site Plan.

If you have any questions regarding the contents of this letter, please contact us.

Respectfully submitted,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Pete Hill, P.E.

Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner
Sri Komaragiri, City of Novi Planner
Rick Meader, City of Novi Landscape Architect
Hannah Smith, City of Novi Planning Assistant

Attachments: Figure 1 – City of Novi Regulated Wetland & Woodland Map
Woodland Tree Replacement Chart
Site Photos



Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate project boundary shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.

Woodland Tree Replacement Chart

(from Chapter 37 Woodlands Protection)
 (All canopy trees to be 2.5" cal or larger, evergreens as listed)

Common Name	Botanical Name
Black Maple	Acer nigrum
Striped Maple	Acer pennsylvanicum
Red Maple	Acer rubrum
Sugar Maple	Acer saccharum
Mountain Maple	Acer spicatum
Ohio Buckeye	Aesculus glabra
Downy Serviceberry	Amelanchier arborea
Smooth Shadbush	Amelanchier laevis
Yellow Birch	Betula alleghaniensis
Paper Birch	Betula papyrifera
American Hornbeam	Carpinus caroliniana
Bitternut Hickory	Carya cordiformis
Pignut Hickory	Carya glabra
Shagbark Hickory	Carya ovata
Northern Hackberry	Celtis occidentalis
Eastern Redbud	Cercis canadensis
Pagoda Dogwood	Cornus alternifolia
Flowering Dogwood	Cornus florida
American Beech	Fagus grandifolia
Thornless Honeylocust	Gleditsia triacanthos inermis
Kentucky Coffeetree	Gymnocladus dioica
Walnut	Juglans nigra or Juglans cinerea
Eastern Larch	Larix laricina
Tuliptree	Liriodendron tulipifera
Tupelo	Nyssa sylvatica
American Hophornbeam	Ostrya virginiana
White Spruce_(1.5:1 ratio) (6' ht.)	Picea glauca
Black Spruce_(1.5:1 ratio) (6' ht.)	Picea mariana
Red Pine_(1.5:1 ratio) (6' ht.)	Pinus resinosa
White Pine_(1.5:1 ratio) (6' ht.)	Pinus strobus
American Sycamore	Platanus occidentalis
Black Cherry	Prunus serotina
White Oak	Quercus alba
Swamp White Oak	Quercus bicolor
Scarlet Oak	Quercus coccinea
Shingle Oak	Quercus imbricaria
Burr Oak	Quercus macrocarpa
Chinkapin Oak	Quercus muehlenbergii
Red Oak	Quercus rubra
Black Oak	Quercus velutina
American Basswood	Tilia americana

Site Photos



Photo 1. Regulated trees (black locust) located in the southwestern portion of the site (ECT, April 28, 2019).



Photo 2. Looking east at woodland area located along the southern section of the site (near the area of proposed Lots 5 and 6)(ECT, April 28, 2019).



Photo 3. Looking west from the northeastern area of the site. This section of the site lacks regulation size trees (i.e., 8-inch diameter and greater) (ECT, April 28, 2019).



Photo 4. Looking east at woodland area adjacent to the west side of Wetland A. Area is typical of those dominated by invasive common buckthorn growth (ECT, April 28, 2019).

TRAFFIC REVIEW



AECOM
 27777 Franklin Road
 Southfield
 MI, 48034
 USA
 aecom.com

To:
 Barbara McBeth, AICP
 City of Novi
 45175 10 Mile Road
 Novi, Michigan 48375

Project name:
 JSP19-0009 – Munro’s Preserve (FKA The Preserve (FKA Taft Meadows)) Revised Preliminary Site Plan Traffic Review

From:
 AECOM

Date:
 June 11, 2019

CC:
 Sri Komaragiri, Lindsay Bell, George Melistas, Darcy Rechten, Hannah Smith, Kate Richardson

Memo

Subject: JSP19-0009 – Munro’s Preserve (FKA The Preserve (FKA Taft Meadows)) Revised Preliminary Site Plan Traffic Review

The revised preliminary site plan was reviewed to the level of detail provided and AECOM recommends **approval** for the applicant to move forward with the condition that the comments provided below are adequately addressed to the satisfaction of the City.

GENERAL COMMENTS

1. The applicant, Taft11 Group, LLC, is proposing a 17 unit residential development and access to 2 separated parcels on the east side of Taft Rd between 10 Mile Rd and 11 Mile Rd.
 - a. A parallel plan in the same parcel would consist of 19 units.
2. Taft Road is under the jurisdiction of the City of Novi.
3. The parcels are currently zoned R-4, One-Family Residential.
4. There are no traffic-related waivers/variances required at this time.

TRAFFIC IMPACTS

1. AECOM performed an initial trip generation estimate based on the ITE Trip Generation Manual, 10th Edition, as follows:

ITE Code: 210 – Single-Family Detached Housing
 Development-specific Quantity: 17 Dwelling Units
 Zoning Change: N/A

Trip Generation Summary				
	Estimated Trips	Estimated Peak-Direction Trips	City of Novi Threshold	Above Threshold?
AM Peak-Hour Trips	17	13	100	N
PM Peak-Hour Trips	19	12	100	N

Daily (One-Directional) Trips	204	N/A	750	N
--------------------------------------	-----	-----	-----	---

2. The number of trips does not exceed the City's threshold of more than 750 trips per day and 100 trips per either the AM or PM peak hour.

Trip Impact Study Recommendation	
Type of Study:	Justification
None	N/A

EXTERNAL SITE ACCESS AND OPERATIONS

The following comments relate to the external interface between the proposed development and the surrounding roadway(s).

1. The applicant should refer to City Ordinance Section 11-216.d for local roadway intersection requirements, including dimensions, taper/turn lanes, and spacing.
 - a. The applicant has indicated a radius of 25', which meets the standard in Figure IX.1.
 - b. The proposed width of the roadway is 28' which meets the standard per Figure IX.1.
 - c. The applicant should dimension the driveway spacing along Taft Road. Refer to Section 11-216.d.1.d and Figure IX.12 in the City's Code of Ordinances.
 - d. The applicant should label the sight distance measurements on Taft Road and refer to Figure VIII-E of the City's Code of Ordinances for sight distance requirements.
2. The applicant has indicated sidewalk along the length of the site in accordance with the City's Non-Motorized Master Plan. The applicant has indicated the proposed sidewalk along Taft Road as 6'. It should be indicated on the plans if this sidewalk is to connect to existing sidewalk to the south.
 - a. The applicant has indicated proposed ramps and included the latest Michigan Department of Transportation's (MDOT) latest sidewalk ramp detail.

INTERNAL SITE OPERATIONS

The following comments relate to the on-site design and traffic flow operations.

1. General Traffic Flow
 - a. The applicant has indicated an eyebrow with a radius of 54', which is consistent with the Figure VIII-G in the City's Code of Ordinances. However, a 230' road centerline radius is present, which negates the need for an eyebrow, as per Ordinance Section 11-194.a.8. If the eyebrow was placed for increased lot access for units 7 and 8, the applicant could consider requesting a waiver for the use of an eyebrow where one is not warranted.
 - b. The applicant has indicated a road width of 28' for the proposed extension of Danyas Way which is in compliance.
 - c. The cul-du-sac proposed at the end of the drive has a 54' outer radius and an island radius of 22', which are consistent with the standards in Figure VIII-F.
 - d. The applicant has indicated the T-turnaround for the extension of Danyas Way is to conform to dimensions requested by the Novi Fire Marshall.
 - e. The applicant has some provided dimensions for the "Parallel Plan" on sheet 14. The dimensions are generally consistent with the standards in the ordinances. More dimensions for the temporary turnaround should be included in future submittals if the parallel plan is selected. The current assumption is that the turnaround on the proposed spur road would be identical to the turnaround proposed to terminate Danyas Way based on the Fire Marshall's dimension stipulations.

2. Parking Facilities

- a. The applicant has indicated that each unit will have a two (2) car garage and space in the driveway for two (2) vehicles to park.
- b. The applicant has indicated that parking will be allowed on the outbound side of Preserve Ct.

3. Sidewalk Requirements

- a. The applicant has proposed sidewalk along both sides of the roadway for the main section.
- b. In the area of parcels C and D, the applicant has indicated that the sidewalk is not extended around the turnaround to limit the impact on the existing wetland buffer.
- c. The applicant should indicate sidewalk widths and distance from the proposed back of curb.

SIGNING AND STRIPING

1. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). The following is a discussion of the proposed signing and striping.
 - a. The applicant has provided a signing quantities table and should include additional details (proposed size) in the table in future submittals.
 - b. It appears there are two (2) back-to-back "No Parking Fire Lane" signs indicated between Units 5 and 6 but only four (4) are listed in the quantity table.
2. The applicant has indicated the proposed signing on site and provide notes and details related to the proposed signing.
 - a. Single signs with nominal dimensions of 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post. Multiple signs and/or signs with nominal dimension greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post as dictated by the weight of the proposed signs.
 - b. The applicant should indicate a bottom height of 7' from final grade for all signs installed.
 - c. The applicant should indicate that all signing shall be placed 2' from the face of the curb or edge of the nearest sidewalk to the near edge of the sign.
 - d. Traffic control signs shall use the FHWA Standard Alphabet series.
 - e. Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.
3. The applicant can remove the notes and details referring to barrier free parking on sheet 13 since there is no barrier free parking proposed.
4. The applicant should indicate appropriate "Dead End" (W14-1, W14-1a) signage at the entrances and ends of the proposed roadways.
5. The applicant has indicated a proposed stop bar. The stop bar detail on sheet 13 should indicate the white color of the stop bar.

Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

AECOM



Josh A. Bocks, AICP, MBA
Senior Transportation Planner/Project Manager



Patricia Thompson, EIT
Traffic Engineer

FIRE REVIEW



June 5, 2019

TO: Barbara McBeth- City Planner
Sri Ravali Komaragiri- Plan Review Center
Lindsay Bell-Plan Review Center
Hannah Smith-Planning Assistant

CITY COUNCIL

Mayor
Bob Gatt

Mayor Pro Tem
Dave Staudt

Andrew Mutch

Laura Marie Casey

Kelly Breen

Ramesh Verma

Doreen Poupard

City Manager
Peter E. Auger

Director of Public Safety
Chief of Police
David E. Molloy

Director of EMS/Fire Operations
Jeffery R. Johnson

Assistant Chief of Police
Erick W. Zinser

Assistant Chief of Police
Scott R. Baetens

RE: Munro's Preserve (RKA Taft Meadows and The Preserve)

PSP# 19-0095

PSP# 19-0061

PSP# 19-0022

Project Description:

Build 17 single family homes off of Taft Road south of Eleven Mile Road and two homes off of Danyas Way.

Comments:

- All fire hydrants **MUST** in installed and operational prior to any building construction begins.
- **CORRECTED 6/5/19 KSP**-Turning radius for the "T" turn around doesn't meet fire department standards. 50' outside and 30' inside.

Recommendation:

APPROVED

Sincerely,

A handwritten signature in black ink, appearing to read "KSP", with a horizontal line extending to the right.

Kevin S. Pierce-Fire Marshal
City of Novi – Fire Dept.

cc: file

Novi Public Safety Administration
45125 Ten Mile Road
Novi, Michigan 48375
248.348.7100
248.347.0590 fax

cityofnovi.org

APPLICANT RESPONSE LETTER

June 21, 2019

Lindsay Bell - Planner
City of Novi – Planning Department
47175 10 Mile Road
Novi, MI 48375

For: The Preserve
Parcel ID: 22-22-00-026 & 027

Dear Lindsay:

Please find this letter in response to the June 19, 2019 review package. The responses outlined in this letter will be included as part of all future submittals for this site as applicable.

Our responses to the review letters are as follows:

Planning Letter dated May 19, 2019

Recommendation:

1. We appreciate the consideration of the City of Novi planning commission for approval of the Preliminary Site Plan with Open Space Conservation, Site Condominium, Wetland Permit, Woodland Permit and Storm Water Management Plan. **We also humbly request a waiver to allow for the construction of the proposed eye brow along in front of lots 6-8.**

Ordinance Requirements:

2. *Parallel Plan:* The parallel plan has been revised to include the city's new turn around standards per our discussions with your office and the fire department. We understand that the city will be revisiting the City of Novi standard detail VIII-I. See the revised parallel plan on sheet 14.
4. *Public Road Frontage:* The plan has been revised to include the proposed dedication of the Danya's Way 80' extension (60 feet in width) to the City of Novi for the road right of way frontage of parcels C & D. We have also requested a variance from the city zoning board of appeals to allow for a reduction in the actual roadway construction to a total roadway length of 44 feet. The construction of the proposed 44' roadway extension will provide a significant benefit to the residents of the City of Novi as we will be providing the right of way and construction of a "T" turn around per the request of the Novi fire department. See the revised layout on sheet 4.
5. *Signage:* At this time, we are not proposing a monument sign at the entrance.
7. *Parcel Split.* A parcel split application has been submitted to the city assessor for the creation of the parcels A and B. A master deed will be provided to planning staff with the stamping set submittal.

Final Site Plan Submittal

Upon approval of the Preliminary Site Plan, we will be submitting the final site plan for review and approval by the city. We will provide stamping sets that will comply with all submittal requirements listed in the review letter.

Electronic Stamping Sets

We will provide electronic stamping sets that will comply with all submittal requirements listed in the review letter.

Stamping Sets

We will provide 10 copies of the stamping sets that will comply with all submittal requirements listed in the review letter.

Project and Street Name

We acknowledge the name and street name approval as approved.

Pre-Construction Meeting

We acknowledge that a pre-construction meeting will be required for this project.

Site Addressing

We will contact the building division for addresses for the proposed lots.

Plan Review Chart June 19, 2019:

Open Space Preservation

- Intent: We concur with the total open space preserved as indicated on the plan set.
- Design Requirements - Permanent Open Space: We concur with the Open Space area of 8.12 Acres.
- Qualifying Permanent Open Space Maintenance: We will provide a conservation or open space easement as required for the approval along with the final site plan submittal. The conservation easement will except recreation areas. Open Space Areas A and B will be maintained as will be described in the master deed that will be submitted with the stamping set submittal.
- Other Review procedures: We understand that this project has been properly noticed and a public hearing will be held prior to planning commission consideration.
- Front Setbacks: We believe that the proposed 30' front yard setback meets the code requirement of 30 feet. This comment may have been a typo in the review letter.
- Maximum % of Lot Area Covered: We concur that a note has been added to sheet 5.
- Frontage on a Public Street: We have submitted a ZBA application for a variance to the requirement of frontage on a public street. We understand that this request will be considered at the July 9, 2019 ZBA meeting.
- Trees and Landscaping: See responses to landscape comments below.
- Residential Entryway Lighting: We are proposing a entryway light near the development entrance. We will work with engineering as part of the final site plan approval process.
- Conservation Easement – We will submit the conservation easement description with the stamping set submittal.

Engineering Review: (dated June 19, 2019)
Kate Richardson, EIT City of Novi

We will comply with all of the items listed in the engineering review letter as part of the final site plan submittal and stamping set submittal package.

21. The final site plans will include a minimum 15' wide maintenance access route to the basin outlet structure.
34. We do not anticipate any off-site easements as part of this development, but will provide prior to final approval of the plans if needed.
36. A cost estimate will be provided with the final site plan submittal package.

Landscape Review: (dated June 7, 2019)
Rick Meader, City of Novi

Ordinance Considerations

Existing Trees

2. The tree protection fencing line will be included on the final grading plan.
3. See our responses to ECT's letter below.

Irrigation

1. An irrigation plan will be provided as part of the final site plan submittal package that will provide sufficient water for long term survival of the proposed plantings.
2. As part of the final site plan, we will be proposing irrigation as required to irrigate the proposed plantings as required by ordinance.

Landscape Review Chart June 7, 2019:

Project Information: A location map will be added to the final landscape plan.

Existing plant material

1. See our responses to the ECT letters below.
2. A legend will be added to sheet 11 of the final site plan submittal package that will show a reference to the symbols for the trees to be removed.
3. The tree protection fencing line will be added to the grading plan sheet of the final site plan submittal package. The tree protection fence will be located 1' outside the tree dripline.

Phragmites Control- The enhancement plan will be revised to show the location of the phragmites as part of the final site plan submittal package.

Woodland Replacement Trees Proposed- If room is available, we will propose planting as many replacement trees as possible without damaging the quality habitat on the final site plan submittal package.

Irrigation Plan

1. An irrigation plan will be included as part of the final site plan submittal package.
2. If xeriscaping is used, we will provide information about plantings as part of the final site plan submittal package.

Establishment Period: We understand that a 2 year guarantee will be required.

Tree Protection Fencing

1. A tree protection detail will be added to the final landscape plan that shows the fence located 1' outside the tree dripline.
2. The detail will be added to the landscape plan sheet.

ECT Wetland Review Letter: (dated June 17, 2019)

We understand that a EAGLE (formerly MDEQ) wetland permit will be required for the storm water pond discharge pipe, and any disturbance to on-site regulated wetlands.

We kindly request authorization from the City of Novi for authorization to encroach into the wetland buffer as required to construct the development as shown on the site plan submittal package.

Table 1. Proposed Wetland Impacts: We will provide the estimated impact volume as part of the final site plan submittal package.

Table 3. Proposed Wetland Impacts for Parallel Plan: We will provide the estimated impact volume on the parallel plan as part of the final site plan submittal package.

Wetland Comments:

1. As part of the final site plan submittal package, we will make an effort to minimize the impact to the 25' wetland buffer wherever possible. The benefit of the open space option utilized as part of this proposal is that we were able to preserve a majority of the on-site wetland and buffer areas vs. what will be disturbed if the parallel plan were constructed as proposed
2. Based on our correspondence with city staff, we understand that parcel splits can include areas of wetlands and their 25' buffer areas.
3. The proposed volume of wetland impacts associated with all of the proposed wetland impact areas will be included on the final site plan.
4. We concur that a City of Novi and EAGLE permit will be required for this project.
5. We concur that it is the applicants responsibility to apply for an EAGLE permit for the proposed impacts to the state regulated wetlands.
6. The final site plan will be modified to include the seed mix information of the restoration areas.
8. The location of the snow storage areas is situated such that any runoff from the snow storage areas will be conveyed to the on-site detention area and will not flow directly into wetland areas.
9. The mitigation proposed on previously submitted plans has been removed from the current request.

10. A conservation easement will be submitted to the city as part of the final site plan submittal package and will include all of the remaining wetlands.

ECT Woodland Review Letter: (dated June 17, 2019)

We concur and understand the requirements listed in this letter and will address each of the comments as part of the final site plan submittal package.

1. We concur that a woodland permit will be required as indicated. We anticipate a payment will be made to the City of Novi tree for the trees that are not planted on site.
4. We acknowledge that a Woodland Replacement financial guarantee will be \$25,600.
5. We acknowledge that a Woodland Maintenance financial guarantee will be \$7,100.
6. We will provide preservation/conservation easements as part of the final site plan submittal package.
7. We concur that replacement materials will be meet the location requirements as listed.

AECOM Review Letter: (dated June 11, 2019)

We will comply with all requirements as indicated on the AECOM letter as part of the final site plan submittal package including

External Site Access and Operations:

1. Dimensions
 - a. The driveway spacing along Taft Road will be dimensioned on the final site plan
 - b. The sight distance measurements along Taft Road will be shown on the final site plan

Internal Site Operations:

1. General Traffic Flow
 - a. We kindly request a waiver for use of an eyebrow adjacent to Units 7 & 8 where one is not warranted due to the 230' centerline radius as proposed.
 - e. More dimensions for the temporary turnaround will be added to the parallel plan for future submittals.
3. c. Sidewalk widths and distance from the proposed back of curb dimensions will be added as part of the final site plan submittal package.

Signing and Striping

1. a. Additional signage details will be included as part of the final site plan submittal package.
- b. We will revise the sign locations and quantities on the final site plan
2. b. A dimension will be added to the sign bottom height from final grade will be added on the final site plan.
- c. A dimension will be placed on the final site plan indicating that the signing will be placed 2' from the back of curb.

- d. The final site plan will include a note that indicates that all traffic control signs will use the FHWA standard alphabet series letters.
- e. The final site plan will include a note that indicates that all traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.
3. We will remove the notes and details referring to barrier free parking on sheet 13 of the final site plan submittal package.
4. We will indicate on the final site plan that “Dead End” (W14-1, W14-1a) signage at the entrances and ends of the proposed roadways.
5. The final site plan will be revised to include a note that indicates that the stop bar will be white.

Fire Department Review Letter: (dated June 5, 2019)

We believe that the referenced letter was issued prior to our resubmission and that following have been included on the current set and/or will be included as part of the final site plan submittal package:

- A note has been added to the plan indicating that ALL fire hydrants MUST be installed and in operation prior to any building construction begins.
- The Tee turn around dimensions have been revised to meet the fire department requirements.

Please feel free to contact our office with any questions or concerns, regarding the response letter or updated plans.

Sincerely,



Daniel LeClair, P.E.
GreenTech Engineering, Inc.