



LAKESHORE PARK COMMUNITY BUILDING JSP19-16

LAKESHORE PARK COMMUNITY BUILDING JSP 19-16

Public hearing at the request of NSA Architects, Engineers, Planners on behalf of City of Novi for Lakeshore Park Community Building JSP 19-16 For Preliminary Site Plan, Woodlands Permit, and Storm Water Management approval. The subject property is currently zoned R-4 (One-Family Residential). The subject property is located along South side of South Lake Drive and west of Old Novi Road in Section 3. The applicant is proposing to redevelop approximately 7.7 acres of a total 32.73-acre site in the entrance area to Lakeshore Park. The modifications include an addition of approximately 6,258 square foot community building and other park improvements. The entrance drive includes an addition of bike lane to connect to the mountain biking trails.

Required Action

Approve/Deny the Preliminary Site Plan, Woodland Permit, and Storm water Management plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	03-14-19	<ul style="list-style-type: none"> • Dumpster and transformer are located in interior side yard rather than the required rear yard • Items to be addressed by the applicant prior to Final Site Plan approval
Engineering	Approval recommended	03-13-19	<ul style="list-style-type: none"> • Items to be addressed by the applicant prior to Final Site Plan approval
Landscaping	Approval recommended	03-07-19	<ul style="list-style-type: none"> • Lack of berm along South Lake Drive • Lack of street trees along South Lake Drive • Some foundation landscaping area is located away from the building • Items to be addressed by the applicant prior to Final Site Plan approval
Woodlands	Approval recommended	03-14-19	<ul style="list-style-type: none"> • A City of Novi Woodland Permit is required for the proposed impacts • Items to be addressed by the applicant prior to Final Site Plan approval
Wetlands	Approval recommended	03-14-19	<ul style="list-style-type: none"> • Letter of authorization for encroaching into 25 foot wetland buffers (Administrative) • Items to be addressed by the applicant prior to Final Site Plan approval
Traffic	Approval recommended	03-13-19	<ul style="list-style-type: none"> • Items to be addressed by the applicant prior to Final Site Plan approval
Façade	Approval recommended	03-15-19	<ul style="list-style-type: none"> • Underage of Brick and overage of Standing Seam metal roof
Fire	Approval recommended	03-11-19	<ul style="list-style-type: none"> • Items to be addressed by the applicant prior to Final Site Plan approval

MOTION SHEET

Approval – Preliminary Site Plan

In the matter of Lakeshore Park Community Building JSP 19-16, motion to **approve** the Preliminary Site Plan based on and subject to the following:

- a. The plan does not meet the Ordinance requirements for the following items:
 - i. The proposed dumpster is proposed in the interior side yard to locate it away from the adjacent residential properties(rear yard is required);
 - ii. The proposed transformer is proposed in the interior side yard due to proximity to mechanical/electrical room(rear yard is required);
 - iii. The percentage of Brick does not meet the minimum required for the Community building to attain to attain qualities of cottage/lakeside vernacular architecture (30% minimum required, 0% provided on all facades);
 - iv. The percentage of Standing Seam Metal Roof exceeds the maximum amount allowed to attain qualities of cottage/lakeside vernacular architecture (25% maximum allowed, Proposed 58% on north, 35% on east, 31% on west);
 - i. The plan does not propose a landscape berm and street trees along South Lake Drive due to the existing topography and preservation of existing trees;
 - ii. Some foundation landscaping area is located away from the building due to the building layout;
- b. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the 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 Article 3, Article 4, and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

-AND-

Approval – Woodland Permit

In the matter of Lakeshore Park Community Building JSP 19-16, 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.)

-AND-

Approval – Stormwater Management Plan

In the matter of Lakeshore Park Community Building JSP 19-16, motion to **approve** the Stormwater Management Plan 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 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

- OR -

Denial – Preliminary Site Plan

In the matter of Lakeshore Park Community Building JSP 19-16, motion to **deny** the Preliminary Site Plan... *(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- Woodland Permit

In the matter of Lakeshore Park Community Building JSP 19-16, 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 Lakeshore Park Community Building JSP 19-16, 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

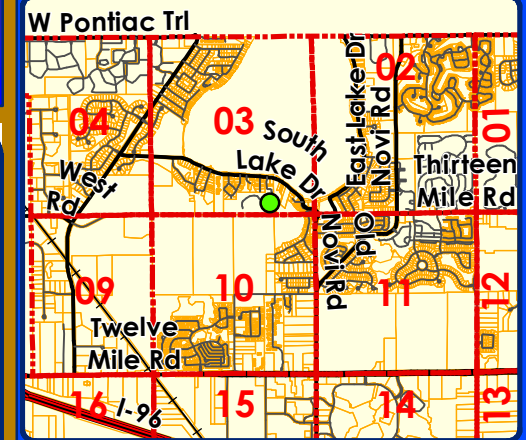
Zoning

Future Land Use

Natural Features

JSP 19-16 LAKESHORE PARK COMMUNITY BUILDING

Location



LEGEND

 Sections



City of Novi

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

Map Author: Sri Komaragiri
Date: 03/22/19
Project: LAKESHORE PARK COMMUNITY BUILDING
Version #: 1



1 inch = 261 feet

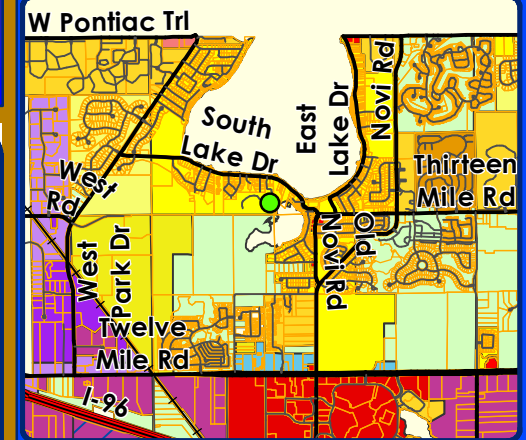
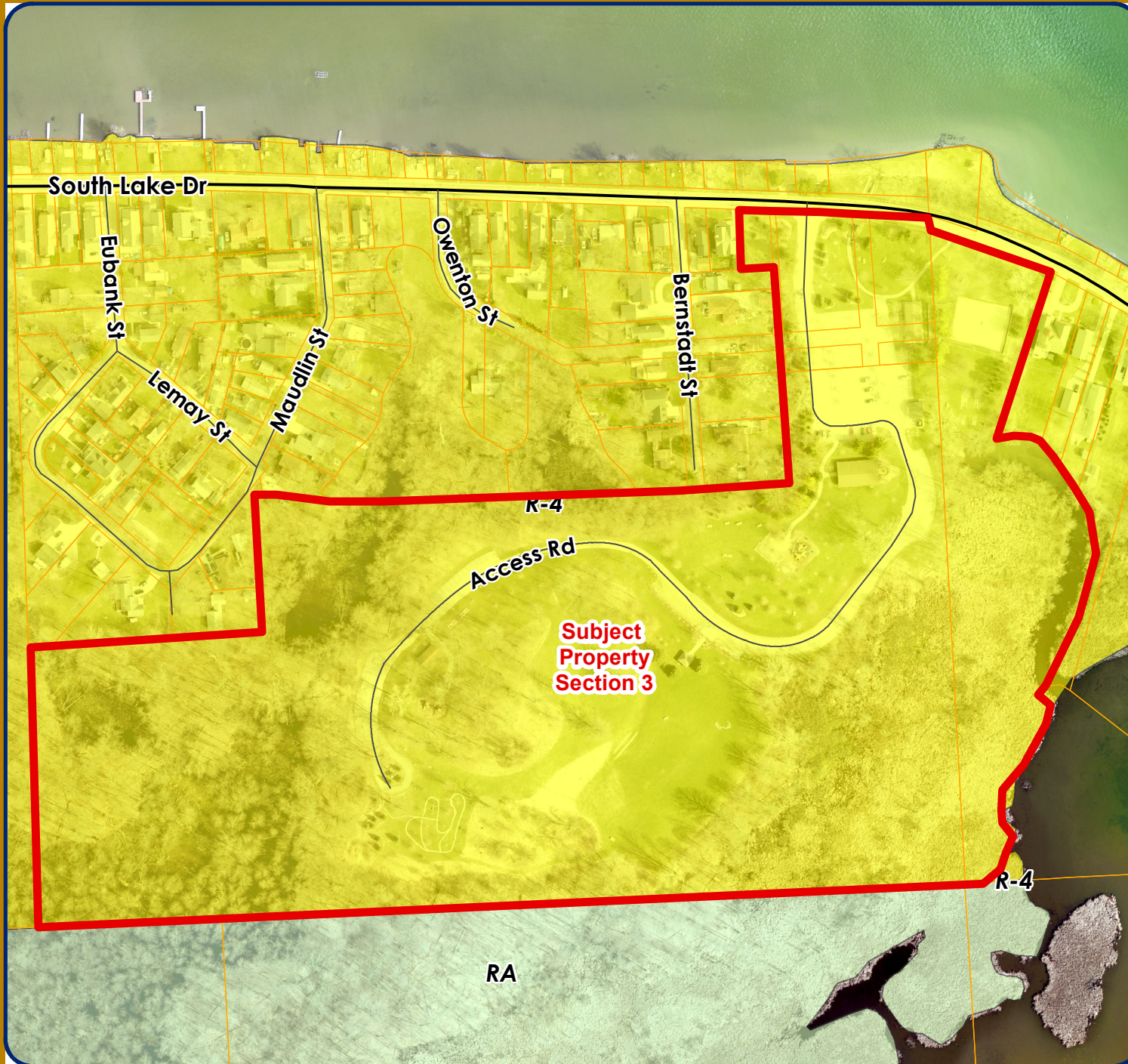


MAP INTERPRETATION NOTICE

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JSP 19-16 LAKESHORE PARK COMMUNITY BUILDING

Zoning



LEGEND

	R-A: Residential Acreage
	R-1: One-Family Residential District
	R-2: One-Family Residential
	R-4: One-Family Residential District
	RM-1: Low-Density Multiple Family
	MH: Mobile Home District
	B-2: Community Business District
	B-3: General Business District
	C: Conference District
	EXO: OST District with EXO Overlay
	I-1: Light Industrial District
	I-2: General Industrial District
	OS-1: Office Service District
	OST: Office Service Technology
	RC: Regional Center District

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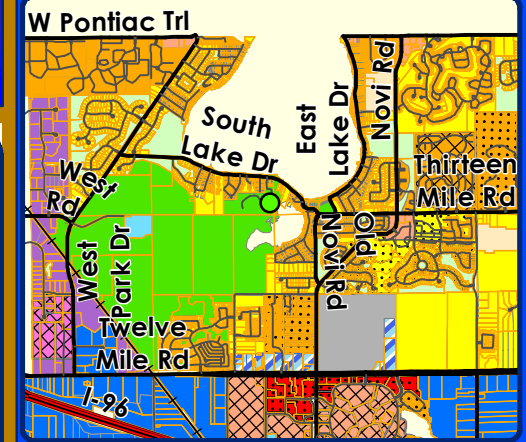
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JSP 19-16 LAKESHORE PARK COMMUNITY BUILDING

Future Landuse



- PUD
- Multiple Family
- PD1
- Mobile Home Park
- Community Office
- Office RD Tech
- Industrial RD Tech
- Heavy Industrial
- Local Commercial
- Regional Commercial
- PD2
- Educational Facility
- Public
- Public Park
- Private Park
- Cemetery

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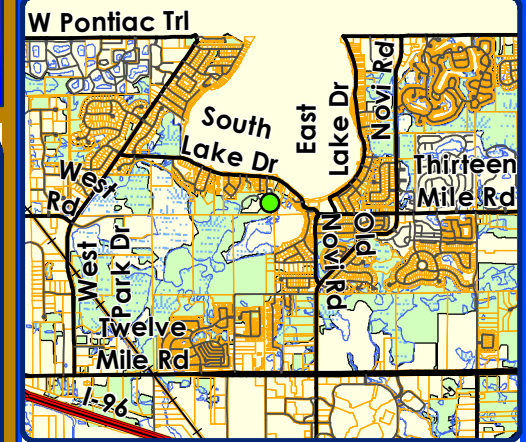
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JSP 19-16 LAKESHORE PARK COMMUNITY BUILDING

Natural Features



LEGEND

-  WETLANDS
-  WOODLANDS



City of Novi

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SITE PLAN

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

Lakeshore Park Site Plan



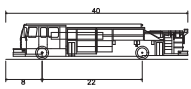
LEGAL DESCRIPTION:
(PER CITY OF NOW TAX RECORDS)

LAND IN THE CITY OF NOW, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS PART OF THE SOUTH FRACTIONAL 1/2 OF SECTION 3, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOW, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS:

PARCEL 1:
IDLEMER PARK LOTS 127 TO 141 INCLUSIVE, AS RECORDED IN LIBER 17, PAGE 29 OF PLATS, OAKLAND COUNTY RECORDS. 1.89 ACRES.
PARCEL ID: 50-22-03-455-007

PARCEL 2:
THAT PART OF THE SOUTH FRACTIONAL 1/2 OF SEC 3 LYING DIRECTLY SOUTH OF IDLEMER PARK SUBDIVISION AS PLATTED IN LIBER 17, PAGE 29 OF PLATS, OAKLAND COUNTY RECORDS. 25.80 ACRES.
PARCEL ID: 50-22-03-457-001

PARCEL 3:
THAT PART OF THE SOUTHEAST FRACTIONAL 1/4 OF SEC 3, DESCRIBED AS: BEGINNING AT A POINT DISTANT N 15-30-32 E 11 FT & N 52-14-28 W 200 FT & N 03-02-28 W 80 FT & N 61-13-28 W 170 FT FROM THE NW CORNER OF LOT 30 OF "WALLED LAKE SHORES"; THENCE S 17-01-33 W 290.57 FT TO TRAVERSE POINT "1"; THENCE S 17-01-33 W 11.26 FT TO THE EASTERN BANK OF THE CANAL; THENCE ALONG THE S/D BANK OF THE CANAL S 83-00-00 E 28 FT & S 89-03-54 E 50.93 FT & S 43-43-09 E 50.49 FT & S 35-31-27 E 34.54 FT & S 31-00-00 E 36 FT & S 04-10-01 E 30 FT & S 17-20-00 W 252 FT & S 23-45-00 E 16 FT TO THE SHORE LINE OF SHAWOOD LAKE; THENCE ALONG THE SHORE LINE OF SAID LAKE S 45-00-00 E 70 FT & S 04-00-00 E 36 FT & S 04-10-01 E 20 FT & S 23-00-00 W 62 FT & S 37-20-00 W 90 FT & S 11-25-00 W 55 FT & S 37-00-00 E 30 FT & S 25 FT & S 27-32-48 W 78.78 FT TO A POINT ON THE SOUTH SECTION LINE; THENCE S 87-07-34 W 12 FT TO TRAVERSE POINT "2" LOCATED S 80-36-36 E 79.02 FT & S 34-49-40 E 185 FT & S 19-25-10 W 264.02 FT & S 18-25-37 E 425.62 FT FROM SAID TRAVERSE POINT "1"; THENCE S 87-07-34 W 25 FT; THENCE N 03-02-23 W 1176.20 FT TO THE SOUTHERLY LINE OF SOUTH LAKE DRIVE; THENCE ALONG THE SOUTHERLY LINE OF SAID ROAD S 71-16-23 E 224.78 FT TO THE POINT OF BEGINNING. 4.27 ACRES.
PARCEL ID: 50-22-03-477-001



Pumper Fire Truck
Overall Length 40.000ft
Overall Width 8.167ft
Overall Body Height 24.255ft
Min Body Ground Clearance 8.167ft
Track Width 10.167ft
Lock-to-lock time 45.00°
Max Wheel Angle 45.00°

VEHICLE PROFILE

FIRE LADDER TRUCK ANALOG (PER AASHTO)

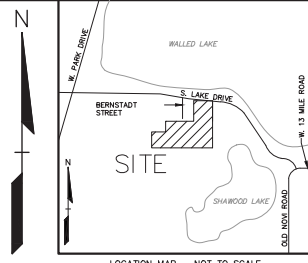
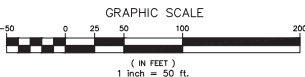
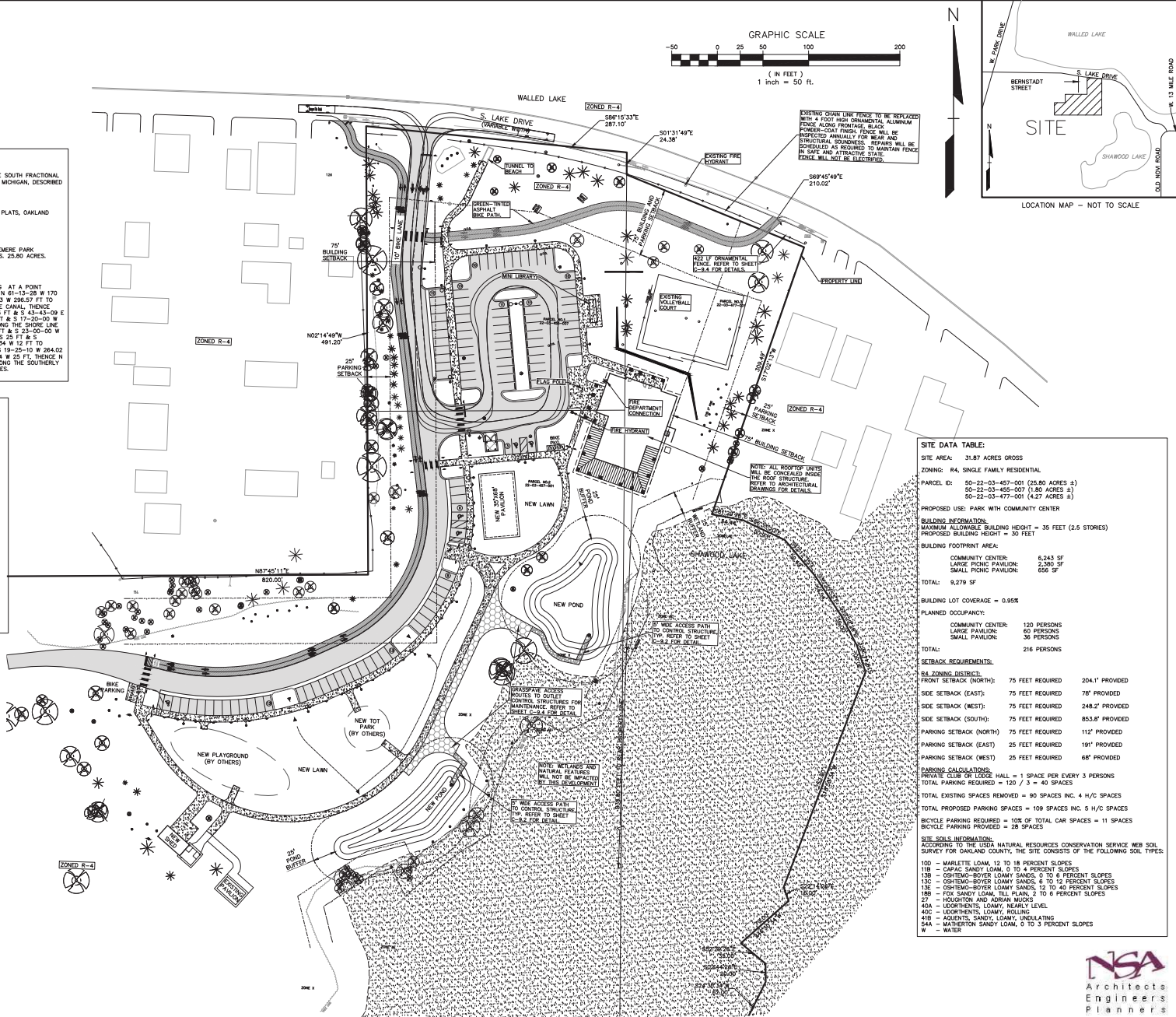
CITY OF NOW FIRE DEPARTMENT NOTES:

1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

IMPERVIOUS AREA:
BUILDING FOOTPRINT AREA = 9,279 SQ.FT.
GRASS/LANDSCAPE AREA = 1,289,890 SQ.FT.
PAVEMENT AREA = 90,270 SQ.FT.
TOTAL PARCEL AREA (51.87 AC) = 1,388,257 SQ.FT.

GENERAL NOTES:

- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.
1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
 2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOW CURRENT STANDARDS AND REGULATIONS.
 3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
 4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADES AND FOR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.
 6. PROVIDE 4" BLUE STRIPING FOR BARRIER FREE PARKING SPACES AND WHITE FOR BARRIER FREE PARKING SYMBOLS. NOTE THAT WHERE A BARRIER FREE PARKING SPACE ADJUTS A NON-BARRIER FREE SPACE, THE TWO SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
 7. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.



SITE DATA TABLE:

SITE AREA: 91.87 ACRES GROSS
ZONING: R4, SINGLE FAMILY RESIDENTIAL
PARCEL ID: 50-22-03-457-001 (50.80 ACRES ±)
50-22-03-455-007 (1.80 ACRES ±)
50-22-03-477-001 (4.27 ACRES ±)

PROPOSED USE: PARK WITH COMMUNITY CENTER

BUILDING INFORMATION:
MAXIMUM ALLOWABLE BUILDING HEIGHT = 35 FEET (2.5 STORIES)
PROPOSED BUILDING HEIGHT = 30 FEET

BUILDING FOOTPRINT AREA:
COMMUNITY CENTER: 6,243 SF
LARGE PAVILION: 2,380 SF
SMALL PAVILION: 656 SF

TOTAL: 9,279 SF

BUILDING LOT COVERAGE = 0.05%

PLANNED OCCUPANCY:
COMMUNITY CENTER: 120 PERSONS
LARGE PAVILION: 60 PERSONS
SMALL PAVILION: 36 PERSONS

TOTAL: 216 PERSONS

SETBACK REQUIREMENTS:
FRONT SETBACK (NORTH): 75 FEET REQUIRED, 204'1" PROVIDED
SIDE SETBACK (EAST): 75 FEET REQUIRED, 79" PROVIDED
SIDE SETBACK (WEST): 75 FEET REQUIRED, 248'2" PROVIDED
SIDE SETBACK (SOUTH): 75 FEET REQUIRED, 85'8" PROVIDED
PARKING SETBACK (NORTH): 75 FEET REQUIRED, 112" PROVIDED
PARKING SETBACK (EAST): 25 FEET REQUIRED, 191" PROVIDED
PARKING SETBACK (WEST): 25 FEET REQUIRED, 68" PROVIDED

PARKING CALCULATION:
PARKING CLEAR ON LOOSE HALL = 1 SPACE PER EVERY 3 PERSONS
TOTAL PARKING REQUIRED = 120 / 3 = 40 SPACES
TOTAL EXISTING SPACES REMOVED = 108 SPACES INC. 4 H/C SPACES
TOTAL PROPOSED PARKING SPACES = 108 SPACES INC. 5 H/C SPACES
BIKE PARKING PROVIDED = 28 SPACES

SITE SOILS INFORMATION:
ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR OAKLAND COUNTY, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:
10D - MARLETTE LOAM, 12 TO 18 PERCENT SLOPES
11B - CAPRIC LOAM, 0 TO 8 PERCENT SLOPES
11C - OSHTEMO-BOVER LOAMY SANDS, 0 TO 6 PERCENT SLOPES
11D - OSHTEMO-BOVER LOAMY SANDS, 8 TO 16 PERCENT SLOPES
11E - OSHTEMO-BOVER LOAMY SANDS, 12 TO 40 PERCENT SLOPES
11F - FOX SANDY LOAM, TILL PLAIN, 2 TO 9 PERCENT SLOPES
27 - HOUGHTON AND ADRIAN MUCKS
42A - UDORHENTS LOAMY, NEARLY LEVEL
42C - UDORHENTS LOAMY, ROLLING
41E - ADRIENS SANDY LOAMY, UNBULGING
54A - MATHERTON SANDY LOAM, 0 TO 3 PERCENT SLOPES
W - WATER

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

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F: 248.685.1044
www.peainc.com

NSA ARCHITECTS, ENGINEERS, PLANNERS
23701 FREEMARCH DRIVE
FARMINGTON HILLS, MICHIGAN 48335
OVERALL PLAN LAKESHORE PARK
PARCEL 3
CITY OF NOW, OAKLAND COUNTY, MICHIGAN
DES. BK. DN. BK. SUR. P.M. OS.
BY: [Signature] DATE: 03/27/2019

ORIGINAL ISSUE DATE: MARCH 4, 2019
PEA JOB NO. 2016-308
SCALE: 1" = 50'
DRAWING NUMBER:

C-3.0

NOT FOR CONSTRUCTION

NSA Architects, Engineers, Planners, Inc.
10000 Woodward Ave., Suite 100
Farmington Hills, MI 48335
Tel: 248.685.9090
Fax: 248.685.1044
www.peainc.com

BUILDING ELEVATIONS

Lakeshore Park Building



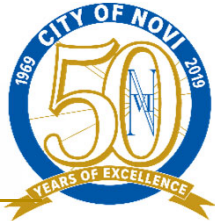
north elevation



south elevation



west elevation



Lakeshore Park Building Interior



PLANNING REVIEW



PLAN REVIEW CENTER REPORT
 March 14, 2019
Planning Review
LAKESHORE PARK COMMUNITY BUILDING
 JSP 19-16

PETITIONER

NSA Architects, Engineers, Planners on behalf of City of Novi

REVIEW TYPE

Preliminary Site Plan

PROPERTY CHARACTERISTICS

Section	3	
Site Location	601 South Lake Drive; West of Old Novi Road and South of South Lake Drive	
Site School	Walled Lake Consolidated School District / Novi Community School	
Site Zoning	R-4, Single Family Residential	
Adjoining Zoning	North	R-4, Single Family Residential / Walled Lake
	East	R-4, Single Family Residential
	West	R-4, Single Family Residential
	South	RA, Single Family Residential
Current Site	Lakeshore Park	
Adjoining Uses	North	Residential/Walled Lake
	East	Residential
	West	Residential
	South	Open Space
Site Size	32.73 acres	
Plan Date	03-09-19	

PROJECT SUMMARY

The subject property is located along South side of South Lake Drive and west of Old Novi Road in Section 3. The applicant is proposing to redevelop approximately 7.7 acres of a total 32.73-acre site in the entrance area to Lakeshore Park. The modifications include an addition of approximately 6,258 square foot community building, 109-space paved parking lot including removal of 90 existing spaces, a pavilion and other park improvements. The entrance drive includes an addition of bike lane to connect to the mountain biking trails.

RECOMMENDATION

Approval of the **Preliminary Site Plan is recommended**. The plan mostly conforms to the requirements of the Zoning Ordinance, with a few deviations listed in this and other review letters. **Planning Commission approval of the Preliminary Site Plan and Storm Water Management Plan is required.**

PROJECT HISTORY

A pre-application meeting for this project was conducted on March 13, 2019. Planning Commission approved the Preliminary Site Plan for the subject property at their December 7, 2016 meeting.

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. Changes to the site plan since last Planning Commission Approval: Following primary changes have been made to the plan since that time to reduce the development footprint and impacts on the surrounding properties.
 - a. Building square footage is decreased from 9,400 sf to 6, 258 sf (a 33% reduction). This was achieved by eliminating two out of three multipurpose rooms and reducing other areas that were proposed previously.
 - b. Parking is reduced from 129 to 98 spaces.
 - c. Dumpster is moved away from the residential spaces to the east.
 - d. A lending library kiosk is added to services provided at this location.
 - e. Building is moved away from South Lake Drive and complies with 75 feet building setback from all sides
 - f. A bypass for the bike lane along South Lake Drive is proposed through the property.
 - g. Parking is relocated away from the residences to the east.
2. Parking Calculations: Quantity for building occupancy for previous larger building is same as the current proposed smaller building. Please update the numbers and the required parking accordingly. Required parking calculation should also consider other accessory uses such as play areas and bike trails on site. **Provide the source for the required parking numbers.**
3. Items that do not conform to the Ordinance requirements: The following items do not conform to the standard Ordinance requirements:
 - a. Dumpster and transformer are located in interior side yard rather than the required rear yard
 - b. Section 9 Waiver required for underage of Brick and overage of Standing Seam Roof.
4. 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.**

OTHER REVIEWS

- a. Engineering Review: Engineering recommends approval of the Preliminary site plan. Additional comments to be addressed with final site plan.
- b. Landscape Review: Landscape recommends approval of the Preliminary site plan. Additional comments to be addressed with final site plan.
- c. Woodland Review: A City of Novi Woodland permit is required for proposed impacts. Woodland review will be updated based on findings from the site verification.
- d. Traffic Review: Traffic recommends approval of the Preliminary site plan. Additional comments to be addressed with final site plan.
- e. Facade Review: Façade recommends approval. A Section 9 waiver is required for the Community building.
- f. Fire Review: Fire recommends approval.

NEXT STEP: PLANNING COMMISSION MEETING

The site plan is scheduled for Planning Commission's public hearing on March 27, 2019. Please provide the following by March 20, 2019.

1. Original Site Plan submittal in PDF format (maximum of 10MB). **NO CHANGES MADE.**

2. A response letter addressing ALL the comments from ALL the review letters and **a request for waivers as you see fit.**
3. Lighting and Photometric plan

FINAL SITE PLAN SUBMITTAL

After receiving Planning Commission's approval of the Preliminary Site Plan, please follow the [Final Site Plan Checklist](#) and submit for approval:

1. Six copies of Final Site Plan sets addressing all comments from Preliminary review,
2. Response letter addressing ALL the comments from ALL the review letters 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. [Non-Domestic User Survey](#) (Non-residential developments)
9. Legal Documents as required
10. 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.

SITE ADDRESSING

Not Applicable

STREET AND PROJECT NAME

Not Applicable

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. **No work on the site may be commenced before a pre-construction meeting is held.** There are a variety of requirements, fees and permits that must be issued before a Pre-Con can be scheduled. If you have questions regarding the checklist or the Pre-Con itself, please contact Sarah Marchioni [248.347.0430 or smarchioni@cityofnovi.org] in the Community Development Department.

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 248.735.5607 or skomaragiri@cityofnovi.org.



Sri Ravali Komaragiri – Planner



PLANNING REVIEW CHART

Review Date: March 14, 2019
Review Type: Preliminary Site Plan
Project Name: **JSP19-16: Lakeshore Park Community Building**
Plan Date: March 4, 2019
Prepared by: Sri Ravali Komaragiri, Planner
E-mail: skomaragiri@cityofnovi.org; **Phone:** 248.735.5607

Bold To be addressed with the next submittal
Underline To be addressed with final site plan submittal
Bold and Underline Does not conform to the Ordinance requirement
Italics To be noted

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan <i>(adopted August 25, 2010)</i>	Public Park	Public Park	Yes	
Zoning <i>(Effective December 25, 2013)</i>	R-4, One-Family Residential	Same	Yes	
Uses Permitted <i>(Sec.3.1.5)</i>	Publicly owned and operated parks, parkways and outdoor recreational facilities	Public park with community building and associated parking	Yes	Planning Commission approval of the site plan is required
Height, bulk, density, and area limitations (Sec. 3.1.5)				
Maximum Dwelling Unit Density	2.7 DUA	Not Applicable	NA	
Minimum Lot Area <i>(Sec 3.1.5)</i>	12,000 square feet	Not Applicable 31.87 Acres	NA	
Minimum Lot Width <i>(Sec 3.1.5)</i>	90 ft.	Not Applicable	NA	
Building Setbacks (Sec 3.1.5 & 3.6.2.B)				
** Architectural features, including gutters, soffits, eaves, cornices, and roof overlaps, but not including vertical projections, may extend or project into a required side yard not more than two (2) inches for each one (1) foot of width of such side yard; and may extend or project into a required front yard or rear yard not more than three (3) feet.				
Front (north) 75 ft. for non-residential uses per sec.3.6.B	75 ft. (See 3.6.2.B)	75 ft.	Yes	See ** note above. Provide information to verify conformance or move the projection away from the minimum setback

Item	Required Code	Proposed	Meets Code	Comments
Interior Side (east)	75 ft.	75 ft.	Yes	
Interior Side (west)	75 ft.	258 ft.	Yes	
Rear (south)	75 ft.	1007. ft.	Yes	
Parking Setback (Sec 3.6.2.B)				
Front (north)	75 ft. (See 3.6.2.B)	130 ft.	Yes	Provide measurement on site plan
Interior Side (east)	20 ft.	55 ft.	Yes	Provide measurement on site plan
Interior Side (west)	20 ft.	75 ft.	Yes	Provide measurement on site plan
Rear (south)	20 ft.	> 20 ft.	Yes	
Development Standards (Sec 3.1.5)				
Maximum % of Lot Area Covered <i>(By All Buildings) (Sec 3.1.5)</i>	25%	0.96%	Yes	
Minimum Floor Area (Sec 3.1.5)	1,000 sq. ft.	NA	NA	<i>Not a single-family residential use</i>
Building Height (Sec 3.1.5)	35 ft. or 2.5 stories whichever is less	25 ft. proposed	Yes	
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.	Park fronts on South Lake Drive	Yes	
Note to District Standards (Sec 3.6)				
Area Requirements (Sec 3.6.A & 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.	Not Applicable	NA	

Item	Required Code	Proposed	Meets Code	Comments
Additional Setbacks (Sec 3.6.B)	- For all uses other than single-family or two-family residential, the building setback shall be at least equal to: the height of the main building, 75 ft. or setback for the district (30 ft.), whichever is greater.	Minimum of 75 ft. is provided on all sides	Yes	
Exterior Side yard abutting Streets (Sec 3.6.C)	NA	Side yards abutting residential districts	NA	
Wetland/Water -course Setback (Sec 3.6.M)	25 ft. from boundary of a wetland and 25 ft. from the ordinary high-water mark of a watercourse.	There are regulated wetlands and woodlands on site.	Yes	
Parking and Loading Requirements				
Number of Parking Spaces (Sec.5.2.12) <i>Private clubs or lodge halls</i>	1 for each 3 persons allowed within the maximum occupancy load $246/3 = 82$ spaces ITE – City Park Demand: 2.6 spaces per acre $31.87 \times 2.6 = 83$ spaces	109 new spaces proposed Maximum occupancy includes the building and the pavilion.	Yes	<i>Planning staff determined that the closest use in our table is a private club and was confirmed with reference to the Institute of Transportation Engineers 4th Edition Parking Generation Manual.</i> Proposed parking should also consider other accessory uses within the park.
Parking Space Dimensions and Maneuvering Lanes (Sec. 5.3.2)	- 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives - 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping	19 ft. x 9 ft. and 17 ft. x 9 ft. proposed	Yes	
Parking stall located adjacent to a parking lot entrance (public/private) (Sec. 5.3.13)	Shall not be located closer than 25 ft. from the street right-of-way line, street easement or sidewalk, whichever is closer	NA	NA	

Item	Required Code	Proposed	Meets Code	Comments
End Islands <i>(Sec. 5.3.12)</i>	<ul style="list-style-type: none"> - End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles. - The end islands shall generally be at least 8 feet wide, have an outside radius of 15 feet, and be constructed 3' shorter than the adjacent parking stall as illustrated in the Zoning Ordinance 	10 ft. wide and 15 ft. radius proposed	Yes	
Barrier Free Spaces <i>Barrier Free Code</i>	101-150 spaces require 5 regular barrier free spaces incl. 1 van accessible	6 barrier free provided; 3 are van accessible	Yes	The applicant can consider adding some additional spaces closer to the building
Barrier Free Space Dimensions <i>Barrier Free Code</i>	<ul style="list-style-type: none"> - 8' wide with an 8' wide access aisle for van accessible spaces - 8' wide with a 5' wide access aisle for regular accessible spaces 	Appears to meet the minimum	Yes?	<i>Please label the dimensions</i>
Barrier Free Signs <i>Barrier Free Code</i>	One sign for each accessible parking space.	Provided	Yes	
Minimum number of Bicycle Parking <i>(Sec. 5.16.1)</i>	<u>Public Parks:</u> 10% of required or provided automobile spaces, minimum 8 spaces For 129 spaces, 13 bicycle spaces required	28 spaces provided	Yes	
Bicycle Parking General requirements <i>(Sec. 5.16)</i>	<ul style="list-style-type: none"> - No farther than 120 ft. from the entrance being served - When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations - Spaces to be paved and the bike rack shall be inverted "U" design - Shall be accessible via 6 ft. paved sidewalk 	14 spaces are provided closer to the building 14 spaces are proposed closer to the park area	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Bicycle Parking Lot layout (Sec 5.16.6)	Parking space width: 6 ft. One tier width: 10 ft. Two tier width: 16 ft. Maneuvering lane width: 4 ft. Parking space depth: 2 ft. single, 2 ½ ft. double	Provided	Yes	
Covered Parking Spaces (Sec. 5.16.4)	Covered bicycle parking space requirement. Unless waived or modified as provided in subsection 5E, when 20 or more bicycle parking spaces are required, twenty-five percent of the bicycle parking spaces shall be covered bicycle parking spaces.	12 required; 28 proposed	NA	<i>Spaces required is under 20</i>
Accessory Buildings				
Location (Sec. 4.19.1.B)	Accessory buildings shall not be erected in any required front yard or in any required exterior side yard.	Garage building expansion is in the rear yard	Yes	
Maximum Area (Sec. 4.19.1.C)	The total floor area of all accessory buildings shall not occupy more than twenty-five (25) percent of any required rear yard.	Garage is the only accessory building	Yes	
Maximum Square Footage (Sec. 4.19.1.E)	R-4, 850 square feet Aggregate of all accessory buildings cannot exceed the ground floor area of the principal building on the parcel.	Toilet and garage addition total 550 sq. ft.	Yes	
Setbacks (Sec. 4.19.1.G)	It shall not be located closer than: - ten (10) feet to any main building - six (6) feet to any interior side lot or rear lot line.	Complies	Yes	
Rear Lot Line abuts a ROW (Sec. 4.19.1.H)	In those instances where the rear lot line abuts an alley right-of-way, the accessory building shall	NA	NA	

Item	Required Code	Proposed	Meets Code	Comments
	be no closer than one (1) foot to such rear lot line.			
Height Restriction (Sec. 4.19.1.I)	A detached accessory building in the R-1 through R-4, RT, RM-1, MH, OS-1, B-1, P-1, and NCC districts shall not exceed one (1) story or fourteen (14) feet in height.	Project is in R-4 Garage is 13'6" in height	Yes	
Number of Structures (Sec. 4.19.1.J)	Not more than two (2) detached accessory buildings shall be permitted on any lot having twenty-one thousand seven hundred eighty (21,780) square feet of area or more.	1 building existing with proposed addition	Yes	
Use of detached accessory building (Sec. 4.19.1.K)	Use of any detached accessory building in any Residential, Business or Office district for a use other than the parking and storage of private motor vehicles, tools, recreation equipment or dog houses shall require review and approval by the Zoning Board of Appeals.	Accessory building is for storage of recreation equipment	Yes	
Design (Sec. 4.19.1.L)	All attached and detached accessory buildings in excess of two-hundred (200) square feet shall be designed and constructed of materials and architecture compatible with the principal structure, and shall have a minimum roof pitch of 3/12 and overhangs of no less than six (6) inches.	Proposed addition is a continuation of existing materials as approved by the Façade Consultant.	Yes	
Accessory Structures (Sec. 4.19.2.A)	Accessory structures, except where otherwise permitted and regulated in this Ordinance, shall be located in the rear yard	<ul style="list-style-type: none"> - <u>Dumpster</u>: interior side yard (west) - <u>Transformer</u>: interior side yard (east) - <u>Playground</u>: rear yard - <u>Tot park</u>: rear yard - <u>New Pavilion</u>: rear 	No	<u>Dumpster and transformer are located in interior side yard rather than the required rear yard</u>

Item	Required Code	Proposed	Meets Code	Comments
		yard - <u>Library kiosk shelter</u> : rear yard		
Accessory Structure setbacks	It shall not be located closer than: - ten (10) feet to any main building - six (6) feet to any interior side lot or rear lot line.	All structures noted above complies with setback requirements	Yes	
Flagpoles (Sec. 4.19.2.B)	Flagpoles may be located within any required front or exterior side yard. Such poles shall be located no closer to a public right-of-way than one-half (½) the distance between the right-of-way and the principal building.	One proposed in front of the building to the west	Yes	
Canopies (Sec. 4.19.2.C)		NA	NA	
Antennas (Sec. 4.19.2.D)		NA	NA	
Roof top appurtenances Screening (Sec. 4.19.2.E.i)	Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.	Unable to determine	NA?	
Roof top equipment and wall mounted utility equipment (Sec. 4.19.2.E.ii)	All roof top equipment must be screened and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building	Unable to determine	NA?	
Dumpster (Sec 4.19.2.F)	- Located in rear yard - Attached to the building or - No closer than 10 ft. from building if not attached - Not located in parking setback - If no setback, then it cannot be any closer than 10 ft. from property	- Located in interior side yard - Detached from building - More than 10 feet away - Not located in parking setback - Closer to barrier free parking spaces	Yes	<u>The dumpster location does not conform to the location</u>

Item	Required Code	Proposed	Meets Code	Comments
	line. - Away from Barrier free Spaces			
Dumpster Enclosure <i>Sec. 21-145. (c)</i> <i>Chapter 21 of City Code of Ordinances</i> <i>Sec. 5.15.1</i>	- Screened from public view - A wall or fence 1 ft. higher than height of refuse bin - And no less than 5 ft. on three sides - Posts or bumpers to protect the screening - Hard surface pad - Screening Materials: Masonry, wood or evergreen shrubbery - Matches building facade	Yes 6 ft. 6 ft. Posts Asphalt? Wood No	Yes	
Solar Collectors <i>(Sec 4.19.2.G)</i>	Freestanding vs. structurally attached	NA	NA	
Outdoor Furnaces <i>(Sec 4.19.2.H)</i>	Outdoor furnaces as defined in Section 2.2 are prohibited and shall not be installed or operated within the City of Novi.	NA	NA	
Fences (Sec. 5.11)				
Fence Location <i>(Sec. 5.11.1.E)</i>	Fences which enclose public or institutional parks, playgrounds, or public landscaped areas, situated within an area developed with recorded lots shall not exceed 8 ft. in height, measured from the surface of the ground, and shall not obstruct vision to an extent greater than 25% of their total area except that nothing in this subpart shall prevent the erection of fencing for tennis courts, backstops or the like.	Existing chain-link fence along Southlake drive frontage is replaced by Aluminum fence	Yes	Please show the proposed fence line on sheet C-3.0 and C 3.1 Indicate height of the fence on plans
Electrical Currents <i>(Sec. 5.11.2.C)</i>	No fence shall carry electrical current or charge of electricity	Appear to comply	Yes	Please confirm
Acceptable Materials <i>(Sec. 5.11.3.A)</i>	Wooden, stone, brick, wrought-iron, or other such non-wire type fencing.	Wrought-iron like, non-wire proposed	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Maintenance (Sec. 5.11.3.B)	All fences shall comply with applicable provisions of the current City of Novi Property Maintenance Code	It is maintained by City of Novi	Yes	
Uniformity (Sec. 5.11.3.C)	All fences shall be of uniform material(s), finish, and color along a property line of any parcel totaling less than one-hundred fifty (150) feet in length	One type of wrought-iron aluminum fencing is proposed in the front yard	Yes	
Non-Motorized Facilities				
Article XI. Off-Road Non-Motorized Facilities	6 ft. sidewalk is required along all collector and arterials	Existing bike path along S. Lake Drive and no sidewalks within 300 ft. A bypass for the bike lane along South Lake Drive is proposed through the property.	Yes	Provide sidewalk connectivity to play areas
Pedestrian Connectivity	Whether the traffic circulation features within the site and parking areas are designed to assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets	Sidewalks and crosswalks provided along parking bays and within parking lot areas	Yes	
Lighting and Photometric Plan (Sec. 5.7)				
Intent (Sec. 5.7.1)	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	Photometric and Lighting Plan is not provided	Yes	Please confirm if any site lighting proposed. Please provide a lighting and photometric plan prior to Planning Commission meeting
Lighting Plan (Sec. 5.7.A.i)	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures			
Building Lighting (Sec. 5.7.2.A.iii)	Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance			

Item	Required Code	Proposed	Meets Code	Comments
	levels of walls and the aiming points of any remote fixtures.			
Lighting Plan <i>(Sec.5.7.2.A.ii)</i>	Specifications for all proposed & existing lighting fixtures			
	Photometric data			
	Fixture height			
	Mounting & design			
	Glare control devices <i>(Also see Sec. 5.7.3.D)</i>			
	Type & color rendition of lamps			
	Hours of operation			
Maximum Height <i>(Sec. 5.7.3.A)</i>	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses)			
Standard Notes <i>(Sec. 5.7.3.B)</i>	<ul style="list-style-type: none"> - Electrical service to light fixtures shall be placed underground - Flashing light shall not be permitted - Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation 			
Security Lighting <i>(Sec. 5.7.3.H)</i> Lighting for security purposes shall be directed only onto the area to be secured.	<ul style="list-style-type: none"> - All fixtures shall be located, shielded, and aimed at the areas to be secured. - Fixtures mounted on the building and designed to illuminate the facade are preferred 			
Average Light Levels <i>(Sec.5.7.3.E)</i>	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1			

Item	Required Code	Proposed	Meets Code	Comments
Type of Lamps (Sec. 5.7.3.F)	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps			
Min. Illumination (Sec. 5.7.3.k)	Parking areas: 0.2 min			
	Loading & unloading areas: 0.4 min			
	Walkways: 0.2 min			
	Building entrances, frequent use: 1.0 min			
	Building entrances, infrequent use: 0.2 min			
Max. Illumination adjacent to Non-Residential (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle			
Cut off Angles (Sec. 5.7.3.L)	When adjacent to residential districts - All cut off angles of fixtures must be 90° - maximum illumination at the property line shall not exceed 0.5 foot candle			
Flag lighting (Sec. 5.7.5.C)	Provided that the illumination is the minimum level necessary, and that the light source is aimed and shielded to direct light only onto the intended target and to prevent glare for motorists and pedestrians			
Other Requirements				
Building Code	Building exits must be connected to sidewalk system or parking lot.	Complies	Yes	
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).		Yes	

Item	Required Code	Proposed	Meets Code	Comments
General layout and dimension of proposed physical improvements	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).	Mostly provided	Yes	Refer to review letters for additional information requested
Economic Impact	- Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known)	Not provided at this time	No?	Please provide information in the response letter
Exterior lighting <i>(Sec. 5.7)</i>	Photometric plan and exterior lighting details needed at time of Final Site Plan submittal	No photometric plan provided	Yes	
Development/ Business Sign	Signage if proposed requires a permit.	No signage proposed	NA	

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

March 13, 2019

Engineering Review

Lakeshore Park
JSP19-0016

Applicant

City of Novi

Review Type

Preliminary Site Plan

Property Characteristics

- Site Location: South of South Lake Drive, West of Thirteen Mile Road
- Site Size: 31.87 acres
- Plan Date: March 4, 2019
- Design Engineer: PEA, Inc.

Project Summary

- Construction of a 9,450 square-foot community center, pavilion, and associated parking.
- Water service will be provided via an 8-inch extension from the existing 16-inch water main in South Lake Drive.
- Sanitary sewer service will be provided by connection to an existing sanitary sewer manhole on the 15-inch sanitary sewer in South Lake Drive.
- Storm water would be collected on site with the proposed rain garden, swales and detention basins on site.

Recommendation

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

Comments:

The Preliminary Site Plan meets the general requirements of Chapter 11 of the Code of Ordinances, the Storm Water Management Ordinance and the Engineering Design Manual with the following exceptions, which can be addressed with a Final Site Plan submittal:

General

1. A right-of-way permit will be required for work within the public right-of-way of South Lake Drive.
2. A letter from either the applicant or the applicant's engineer must be submitted with the Preliminary Site Plan submittal highlighting the changes made to the plans addressing each of the comments in this review.

Water Main

3. 6-inch fire hydrant leads cannot be longer than 25 feet. Provide 8-inch water main on the site.
4. Provide a unique shut-off valve for each water main lead.
5. Ensure all water mains are 8-inches in diameter. Currently one section of water main tappers from 8-inches to 6-inches before it connects to the building.

Sanitary Sewer

6. A sanitary sewer basis of design will **not** be required for this project.
7. Use two 45-degree bends in lieu of any 90-degree sanitary sewer bends proposed.

Paving & Grading

8. Replace the details shown on sheet C9.1 with the City's standard details.
9. In rain gardens, the maximum recommended ponding depth is 6 inches. Please provide a cross section of the rain garden showing the ponding depth.

Storm Sewer

10. Provide an oil/gas separator on the last storm structures before discharge to the detention basins.
11. Indicate how roof drainage will be conveyed to the storm sewer system.

Storm Water Management Plan

12. The SWMP must detail the storm water system design, calculations, details, and maintenance as stated in the ordinance. The SWMP must address the discharge of storm water off-site, and evidence of its adequacy must be provided. This should be done by comparing pre- and post-development discharge rates.
13. The Engineering Design Manual calls for a minimum runoff coefficient of 0.35 to be used for all grass lawns and 0.95 for pavement for detention basin sizing.
14. Provide an emergency spillway or secondary standpipe as required in section 5.6.4.C of the Engineering Design Manual.

15. A 4-foot wide safety shelf is required one-foot below the permanent water surface elevation within the basin.
16. A 25-foot vegetated buffer shall be provided around the perimeter of each storm water basin. This buffer cannot encroach onto adjacent lots or property.

The following must be addressed prior to construction:

17. A pre-construction meeting shall be required prior to the commencement of any site work. Contact Sarah Marchioni at (248) 347-0430 for details on the requirements.
18. 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. There is no fee for this permit.
19. An NPDES permit must be obtained from the MDEQ since the site is over 5 acres in size. The MDEQ requires an approved plan to be submitted with the Notice of Coverage.
20. 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.
21. A permit for work within the right-of-way South Lake Drive must be obtained from the City of Novi.
22. Contact the Water & Sewer Division at 248-347-0498 to determine any applicable water & sewer tap fees.
23. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the Water and Sewer Senior Manager after the water main plans have been approved.
24. Construction Inspection fees, amount to be determined once the final construction cost estimate is submitted, must be paid prior to the pre-construction meeting.
25. A street sign financial guarantee in the amount of \$11,600 (\$400 per traffic control sign proposed) must be posted with the Community Development Department.

The following items must be addressed prior to issuance of a Temporary Certificate of Occupancy approval for the development:

26. The amount of the incomplete site work performance guarantee for any outstanding site improvement items, limited to top course of pavement and other minor items, at 1.2 times the amount required to complete the site improvements as specified in the Performance Guarantee Ordinance.

27. Spalding DeDecker will prepare the record drawings for this development. The record drawings will be prepared in accordance with Article XII, Design and Construction Standards, Chapter 11 of the Novi Code of Ordinances.
28. A Bill of Sale for the utilities conveying the improvements to the City of Novi must be submitted to the Community Development Department. This document is available on our website.
29. Submit to the Community Development Department, Waivers of Lien from any parties involved with the installation of each utility as well as a Sworn Statement listing those parties and stating that all labor and material expenses incurred in connection with the subject construction improvements have been paid.
30. Submit a Maintenance Bond to the Community Development Department in an amount to be determined from the final cost estimate (equal to 25 percent of the cost of the construction of the utilities to be accepted). This bond must be for a period of two years from the date that the Utility Acceptance Permit is issued by the City of Novi Engineering Division. This document is available on our website.

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

cc: George Melistas, Engineering
Darcy Rechten, PE, Engineering
Sri Komaragiri, Community Development

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT

March 7, 2019

Preliminary Site Plan - Landscaping

Lakeshore Park Building

Review Type

Preliminary Landscape Review

Job

JSP19-0016

Property Characteristics

- Site Location: Lakeshore Park
- Site Acreage: 31.9 acres
- Site Zoning: R-4
- Adjacent Zoning: R-4
- Plan Date: 3/4/2019

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..

Recommendation

This project is recommended for approval for Preliminary Site Plan. The comments below are broken up into requirements per the ordinance (Section 5.5) and landscaping suggestions.

LANDSCAPE WAIVERS REQUIRED: Although these two waivers were granted by the Planning Commission in the previous submittal, this is a new project with a significantly different building and layout, so waivers will need to be granted again.

- Lack of berm along South Lake Drive – *waiver request is supported by staff*
- Lack of street trees along South Lake Drive – *waiver request is supported by staff*
- Some foundation landscaping area is located away from the building – *waiver request is supported by staff.*

Ordinance Considerations

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

Property is adjacent to Residential but it is also zoned residential so no berms or buffering are required. The suggestions below will help to provide additional screening for the property to the east.

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

1. The required 40' greenbelt width is exceeded significantly in the proposal.
2. The required berm is not provided due to the existing topography and trees to be preserved. **A landscape waiver is required for this deficiency.** *This waiver request would be supported by staff.*
3. The required landscaping is provided with a combination of existing trees to remain and newly proposed subcanopy trees.
4. The required street trees are not provided because there is insufficient room within the right-of-way for the trees. **This requires a landscape waiver.** *The request would be supported by staff.*

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

1. Based on the vehicular use area, 1,913 sf of islands and 10 trees are required. 5,048 sf of islands and 10 trees are provided.
2. **There are three endcap islands that should have deciduous trees planted in them, and possibly enlarged. Those endcaps are at the southeast corner of the parking lot, at the north end of the bay west of the pavilion, and at the very west end of the parking, which is currently occupied by bike racks. Please enlarge the islands to at least 200sf if necessary and plant the required trees.**
3. It appears that there is a break between the endcap islands in the long interior parking lot island and the central portion. **Please remove that break, so roots could move into the long section of the island. Also, please show the areas of those endcaps.** They should be at least 400sf since there are 2 trees in them.
4. **Please increase the area of the endcaps if necessary.**
5. **Please add an endcap tree to the north end of the bay along the drive, west of the parking lot.**

Parking Lot Perimeter Canopy Trees (Zoning Sec. 5.5.3.C.iv)

1. Based on the perimeter, 61 trees are required.
2. 41 deciduous canopy trees, 15 evergreen trees and 5 existing trees within 15 feet of the parking lot and/or drive are provided.
3. **Please use a canopy tree species with a minimum mature height of 30 feet and canopy of 20 feet in place of the Japanese Tree Lilacs at the entry. A large, showy tree such as red oak or sugar maple would make a nice entry, but those are just suggestions of acceptable species.**
4. **Please change the interior trees shown as replacement trees to interior or perimeter trees and make as many perimeter trees along the south edge of the bays near the playgrounds as necessary replacement trees to keep the counts right (they'll be less exposed to damage in that area and will likely live longer).**

Loading Zone screening (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)

No loading zone screening is proposed.

Building Foundation Landscape (Zoning Sec 5.5.3.D.)

1. The plan indicates a foundation perimeter of 2071f and a requirement of 1,656sf. There is a discrepancy between the area provided in the calculation versus the area shown on L1.2.
2. **Please check the foundation calculation and provide the correct foundation landscaping area.**
3. Although most of the building foundation won't be visible from South Lake Road, greater than 60% of the foundation facing the road is landscaped.
4. **Building foundation landscaping should also be proposed for the maintenance garage/bathroom building, at least on the west side of the building where foot traffic won't trample the landscaping.**

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

1. Provided.
2. 32 of 38 species used (84%) are native to Michigan.
3. The tree diversity meets the standards of Landscape Design Manual Section 4.
4. **Please break out the replacement trees in the plant list so it is clear how many replacement trees are provided, and what the species are.**

Planting Notations and Details (LDM)

Provided

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

1. The required landscaping is provided in both ponds.
2. **Please shift the birch closest to the outlet structure of the northern pond to the west to provide better maintenance access to the structure (at least 25').**

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.**

Snow Deposit (LDM.2.q.)

Please provide.

Corner Clearance (Zoning Sec 5.9)

Provided.

Layout/Landscape Suggestions:

- Enlarge the endcap west of the pavilion by shifting the bay southward to eliminate the small grass strip next to the accessible parking space.
- Widen the sidewalk between the two bays to 9 feet to provide the proper clearance if cars are parked on both sides of the walk simultaneously. The central bioswale island could be narrowed if necessary.
- Enlarge the endcap closest to the building to the north (to at least 200sf) by reducing the length of the endcap on the north end of that bay. The elm south of the endcap could be moved north to the endcap and still be counted as a perimeter tree. The entire area where the tree currently is could be used for expanded foundation area.
- Add a cluster of 2-3 subcanopy trees such as *Ostrya virginiana* or hawthorns in the open area between the retaining wall and the volleyball court to provide additional screening for the house to the east.
- Add at least 2 evergreens east of the volleyball court to increase the screening of the court.
- For the path to the beach, add a mass of dense shrubs at the bend in the path and around the walk to the south so people don't wear a "direct access path" at that bend.
- Shift the western bike rack to the other side of the path so the required endcap tree can be planted.

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@cityofnovi.org.



Rick Meader – Landscape Architect

WOODLANDS REVIEW



ECT Project No. 190191-0200
March 14, 2019

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

Re: Lakeshore Park Building 2019 (JSP19-0016)
Woodland Review of the Preliminary Site Plan (PSP19-0044)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan for the proposed Lakeshore Park Building 2019 project prepared by PEA, Inc. dated and stamped "Received" by the City of Novi Community Development Department on March 4, 2019 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37.

ECT currently recommends approval of the 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

The proposed project is to be constructed at Lakeshore Park located on the south side of South Lake Drive west of the intersection of Old Novi Road and W. Thirteen Mile Road, Section 3. The Plan includes the construction of a new 9,450 square foot park recreation center building, parking and entrance drive, pavilion, playground(s), shed, and stormwater basins/ponds.

Based on our review of the Plan, Novi aerial photos, Novi GIS, and City of Novi Official Wetlands and Woodlands Map (see Figure 1) the proposed project site contains areas indicated as Regulated Woodlands as well as Regulated Wetlands. The areas of regulated woodland on the project site are generally located along the west and the east/south edges of the proposed limits of work.

The purpose of the Woodlands Protection Ordinance 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*

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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.*

What follows is a summary of our findings regarding on-site woodlands associated with the proposed project.

Woodland Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an on-site Woodland Evaluation on March 14, 2019. As noted above, areas mapped as City of Novi Regulated Woodland are located along the western and the eastern/southern edges of the project site.

The *Demolition Plan* (Sheet C-2.0) indicates a significant number of tree removals for the project. There appear to be over 100 trees of various sizes proposed for removal for the proposed park improvements. While a significant number of the trees indicated for removal fall outside of the City of Novi's mapped Regulated Woodland Boundaries, the City's Woodland Ordinance contains the following:

Where uncertainty exists with respect to the boundaries of designated woodland areas shown on the regulated woodland map, the following rules shall apply:

- *Distances not specifically indicated on the map shall be determined by the scale on the map;*
- *Where physical or natural features existing on the ground are at variance with those shown on the regulated woodland map, or in other circumstances where uncertainty exists, the community development director or his or her designee shall interpret the woodland area boundaries;*
- *On any parcel containing any degree of regulated woodland, the applicant shall provide site plan documentation showing the locations, species, size and condition of all trees of eight-inch caliper or larger. Existing site understory trees, shrubs and ground cover conditions must be documented on the site plan or woodland use permit application plan in the form of a brief narrative. The woodland conditions narrative should include information regarding plant species, general quantities and condition of the woodland vegetation*

It is ECT's opinion that the areas containing surveyed trees on the Plan, including within the project's proposed limits of disturbance, should be considered as Regulated Woodland area. As such, there are physical and natural features existing on the site that are at variance with those shown on the regulated woodland map. The Woodland Ordinance also defines Woodland Areas as:

All lands (including all trees, shrubs and ground cover thereon regardless of size) which are subject to this chapter under section 37-4 as designated on the regulated woodland map and/or on an approved site plan. Woodlands areas are identified by such factors as: soil quality, habitat quality, tree species and diversity, health and vigor of tree stand, understory species and quality, presence of wildlife, and other factors such as the value of the woodland area as a scenic asset, windblock, noise buffer, healthy environment, and the value of historic or specimen trees.

The applicant has provided an *Existing Tree List* (Sheet T-1.1). This sheet identifies tree tag numbers, species code, diameter-at-breast-height (DBH), common/botanical name, condition, and comments. In addition, the trees proposed to be preserved are indicated in bold text in the list. The list does not indicate the number of woodland replacements required for each of the proposed tree removals.

In general, the on-site trees consist of Siberian elm (*Ulmus pumila*), box elder (*Acer negundo*), black cherry (*Prunus serotina*), red maple (*Acer rubrum*), cottonwood (*Populus deltoides*), white spruce (*Picea glauca*), Balsam fir (*Abies balsamea*), eastern white pine (*Pinus strobus*), basswood (*Tilia americana*), swamp white oak (*Quercus bicolor*), and several other species.

In terms of habitat quality and diversity of tree species, the overall subject site consists of trees in good and fair conditions. 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 to good quality. There are a significant number of trees to be removed for the proposed development.

Proposed Woodland Impacts

A review of the Plan (*Existing Tree List*) indicates the following:

- Total Trees Surveyed: 326
- Total Trees Removed: 129
- Total Regulated Trees Removed: 52
- Total Woodland Replacement Credits Required: 89

The applicant notes on the Tree Preservation Plan (Sheet T-1.0) that a total of 31 Regulated Trees are to be removed requiring 48 Woodland Replacement Credits. Based on our review the *Existing Tree List*, a total of 129 trees are proposed for removal. Of these, 75 are exempt from replacement per the City Ordinance as they are less than 8-inches diameter-at-breast-height (DBH). The applicant has further categorized a total of 23 of the trees to be removed as Exempt from replacement due to the condition of the trees (indicated as poor or very poor condition). Based on our woodland evaluation site inspection, in general we are not in agreement with the applicant's exemption request based on condition. Of the trees proposed for removal and indicated as exempt due to condition, only Tree No. 348 (14" white pine) appeared to qualify as exempt due to very poor condition (due to bark loss and cracking at the trees base).

City of Novi Woodland Review Standards & Woodland Permit Requirements

Based on Section 37-29 (*Application Review Standards*) of the City of Novi Woodland Ordinance, the following standards shall govern the grant or denial of an application for a use permit required by this article:

No application shall be denied solely on the basis that some trees are growing on the property under consideration. However, the protection and conservation of irreplaceable natural resources from pollution, impairment, or destruction is of paramount concern. Therefore, the preservation of woodlands, trees, similar woody vegetation, and related natural resources shall have priority over development when there are location alternatives.

In addition,

"The removal or relocation of trees shall be limited to those instances when necessary for the location of a structure or site improvements and when no feasible and prudent alternative location for the structure or improvements can be had without causing undue hardship".

The City of Novi regulates all trees 8-inches diameter-at-breast-height (DBH) and greater that are located within the areas delineated as regulated woodlands on the City-Regulated Woodlands Map. The City also regulates any individual tree greater than or equal to 36-inches DBH, irrespective of whether such tree is within a regulated woodland. Proposed woodland impacts will require a Woodland Permit and the regulated trees shall be relocated or replaced by the permit grantee.

Proposed Woodland Impacts and Replacements

Based on our review of the *Existing Tree List* (Sheet T-1.1), there appear to be a total of **52** Regulated Trees proposed for removal requiring **89** Woodland Replacement credits. The Plan appears to indicate that a total of 129 trees are proposed for removal, however many (75) of these trees do not appear to be regulated trees as they are less than 8" DBH.

The *Landscape Plan* (Sheet L-1.0) notes that **38** deciduous (3" caliper) and **8** evergreens (8' tall) will be planted on-site as Woodland Replacement Credits. It should be noted that deciduous Woodland Replacement trees shall be 2.5-inch caliper (minimum) and count at a ratio of 1 tree-to-1 replacement credit. Evergreens shall be 6-foot tall (minimum) as count at a ratio of 1.5 tree-to-1 replacement credit. As such, the Plan appears to propose a total of 43.3 Woodland Replacement Credits but requires a total of **89** Woodland Replacement Credits. The tree species currently proposed for Woodland Replacement Credits all appear to be acceptable species consistent with the City of Novi Woodland Tree Replacement Chart (see attached).

The majority of the proposed Woodland Replacement Trees are to be located around the proposed stormwater detention basins as well as around the playground. The Ordinance states that the location of replacement trees 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, Section 2509. 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. As this is a City Park, it is our understanding that special preservation easements for the areas of Woodland Replacement Trees will not be required. It should be noted however that the Woodland Replacement Trees are to remain and be protected in perpetuity.

Woodland Comments

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 woodlands to the greatest extent practicable. The Plan appears to indicate the removal of over 100 total trees; many of these trees do not appear to be regulated trees (not 8" dbh and greater) and the trees do not appear to be located in area mapped as City of Novi Regulated Woodland (these are likely previously-planted landscape trees).

Currently, the Plan proposes to remove **52** regulated trees requiring **89** Woodland Replacement Credits.

2. The current Plan appears to propose a total of 43.3 on-site Woodland Replacement Credits (49% of the required Woodland Replacement Tree Credits) through on-site planting of deciduous and

coniferous tree plantings. ECT suggests that the applicant work to provide as many of the required **89** Woodland Replacement Credits through on-site plantings. It should be noted that in addition to acceptable 2.5” caliper deciduous trees as well as 6-foot tall acceptable evergreen tree species, the City allows applicant’s to meet Woodland Replacement Credit requirement plantings through planting of other types of approvable, native vegetation (as indicated in the Reforestation Credit Table contained in the Woodland Ordinance):

Reforestation Credit Table

Type	Minimum Size	DBH Credit Proposed Plant: Required Replacement.	Max. Use Percentage
Canopy Trees	1.5" Caliper	2:1	70%
Evergreen trees	36" Height	3:1	30%
Understory trees	1" Caliper	5:1	30%
Large shrubs	30" Height	6:1	30%
Small shrubs	18" Height	8:1	30%
Perennials	1 Gallon Cont.	25:1	50%
Groundcover seeding	Per seed source recommendations	70 SY area:1	None

3. It should be noted that deciduous Woodland Replacement trees shall be 2.5-inch caliper (minimum) and count at a ratio of 1 tree-to-1 replacement credit. Evergreens shall be 6-foot tall (minimum) as count at a ratio of 1.5 tree-to-1 replacement credit. As such, the Plan appears to propose a total of 43.3 Woodland Replacement Credits but requires a total of **89**. Please revise the Plan as necessary.
4. The Existing Tree List (Sheet T-1.1) should be updated to include a column that indicates how many Woodland Replacement Tree Credits are required for each regulated tree being removed.
5. 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.

6. 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.
7. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on-site. The Plan shall clearly indicate how many Woodland Replacement Credits will be required to be paid to the City of Novi Tree Fund.
8. 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.
9. 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*.

Recommendation

ECT currently recommends approval of the 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



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

WETLANDS REVIEW



ECT Project No. 190191-0100
March 14, 2019

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

Re: Lakeshore Park Building 2019 (JSP19-0016)
Wetland Review of the Preliminary Site Plan (PSP19-0044)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan for the proposed Lakeshore Park Building 2019 project prepared by PEA, Inc. dated and stamped "Received" by the City of Novi Community Development Department on March 4, 2019 (Plan). 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 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)	Not Required
Wetland Mitigation	Not Required
Wetland Buffer Authorization	Required
MDEQ Permit	Not Required
Wetland Conservation Easement	Required

The proposed project is to be constructed at Lakeshore Park located on the south side of South Lake Drive west of the intersection of Old Novi Road and W. Thirteen Mile Road, Section 3. The Plan includes the construction of a new 9,450 square foot park recreation center building, parking and entrance drive, pavilion, playground(s), shed, and stormwater basins/ponds.

Based on our review of the Plan, Novi aerial photos, Novi GIS, and City of Novi Official Wetlands and Woodlands Map (see Figure 1) the proposed project site contains areas indicated as Regulated Woodlands as well as Regulated Wetlands. The areas of regulated wetland are located near the east side of the proposed limits of work for the project.

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Wetland Evaluation

ECT has reviewed the City of Novi Official Regulated Wetlands Map and completed an on-site wetland evaluation on March 14, 2019. Currently, the wetland boundaries adjacent to the project do not appear to be flagged in the field, however the wetland boundary indicated on the Plan appear to be accurately represented.

It can be noted that the City of Novi's Regulated Wetland Map (Figure 1) is not accurate in indicating the location of wetland on the subject property. While existing wetland is indicated on the Regulated Wetland Map east of the subject site, based on the review of aerial photo information, the existing wetland boundary is directly adjacent to the limits of disturbance as indicated on the Plan. One (1) area of wetland is indicated on the Plan. This wetland is associated with Shawood Lake; located just east of the proposed project limits. In general, the Plan indicates this wetland boundary but does not indicate the City-Regulated 25-foot wetland/watercourse (i.e., natural features) setback boundary. The Plan (*Overall Plan*, Sheet C-3.0) includes a note that states: "wetlands and natural features will not be impacted by this development". However, the *Grading Plan-South* (Sheet C-4.2) appears to indicate that the proposed grading limits and construction of outfalls from the stormwater detention basins will encroach the 25-foot natural features setback.

Proposed Wetland/Watercourse Impacts

As noted above, the Plan (*Grading Plan-South*) appears to indicate that grading and installation of the outfall pipes from the stormwater detention basins are proposed within the 25-foot natural features setback. The Plan does not appear to include any direct impacts (i.e., cut or fill) to the existing wetland. The Plan does not currently indicate the 25-foot natural features setback boundary. This information shall be added to the Plan. In addition, the current Plan does not appear to label or quantify the proposed impacts to the 25-foot natural features setback. This information shall be added to the Plan. The Applicant shall indicate and quantify (square feet or acres) all areas of direct impact to this 25-foot setback on subsequent plan submittals. The City of Novi regulates a 25-foot buffer surrounding all wetland and watercourses.

Regulatory Status - MDEQ

The on-site wetlands appear to be considered to be essential/regulated by the City of Novi as they meet one or more of the essentiality criteria (i.e., functions and values) outlined in the City of Novi Wetland and Watercourse Protection Ordinance.

The Michigan Department of Environmental Quality (MDEQ) generally 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. The MDEQ 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".

Should the applicant propose impacts to the on-site wetlands (or watercourse), it will be their responsibility to contact MDEQ to determine the regulatory status of these features. If wetland impacts are proposed, the applicant shall provide correspondence with the MDEQ such as a wetland permit application, wetland permit, wetland assessment, or Letter of No Jurisdiction. It appears as if the on-site wetlands could be MDEQ-regulated. Subject to MDEQ concurrence, a MDEQ Wetland Use Permit will need to be on file prior to the issuance of a City Wetland Use Permit. A City of Novi Wetland Permit cannot be issued prior to receiving this information. The current Plan does not appear to propose direct impacts to wetlands.

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 believes the wetlands are regulated by the City's Wetland and Watercourse Protection Ordinance because they meet one or more of the essentiality criteria in the Ordinance (i.e., stormwater storage and wildlife habitat).

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 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, the MDEQ's threshold for the requirement of wetland mitigation is 0.3-acre of wetland impacts. The current Plan does not appear to propose direct impacts to wetlands and will not require wetland mitigation.

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/Watercourse Comments

Please consider the following comments when preparing 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. The Applicant should consider modification of the proposed site design to preserve all wetland and wetland buffer areas. Specifically, the applicant shall work to avoid any proposed encroachment into the 25-foot wetland buffer for the purpose constructing the proposed stormwater detention basins. 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”.

2. Plan should indicate who completed the delineation of on-site wetlands and when it was done. The applicant should provide this information and provide a wetland delineation report if one was completed.

3. The 25-foot wetland/watercourse (i.e., natural features) setback shall be shown on the Plan.
4. The Plan appears to propose direct impacts to the 25-foot wetland setback for the construction of the stormwater detention basins and outlet pipes. The Applicant shall indicate and quantify (square feet or acres) all areas of direct impact to this 25-foot setback on subsequent plan submittals.
5. Direct impacts to wetland area do not appear to be proposed. A City of Novi or MDEQ Wetland Permit do not appear to be required. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland buffers.
6. 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 MDEQ Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information. Currently, the Plan does not appear to propose direct impacts to wetlands and should not require either a City of Novi Wetland Permit or MDEQ Wetland Permit.
7. The Plan should address how any temporary impacts to wetland buffers shall be restored, if applicable. A proposed seed mix should be provided on the Plan for restoration of these wetland buffer areas. Sod or common grass seed will not be authorized in these areas.

Recommendation

ECT currently recommends approval of the 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



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.

TRAFFIC REVIEW



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

Project name:
 JSP19-16 Lakeshore Park Preliminary Traffic Review

From:
 AECOM

Date:
 March 13, 2019

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

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

Memo

Subject: JSP19-16 Lakeshore Park Preliminary Traffic Review

The 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, NSA Architects, Engineers, Planners, is proposing modifications to Novi’s Lakeshore Park located on the south side of South Lake Drive, west of Thirteen Mile Road Modifications include a new pavilion, a 9,450 SF building, play areas and parking.
2. South Lake Drive is under the jurisdiction of the City of Novi.
3. The site is currently zoned R4, Single Family Residential.
4. Summary of traffic-related waivers/variances:
 - a. There are not any traffic-related waivers or variances required by the applicant at this time.

TRAFFIC IMPACTS

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

ITE Code: 495 (Recreational Community Center)
 Development-specific Quantity: 9,450 square feet
 Zoning Change: N/A

	Estimated Trips	City of Novi Threshold	Above Threshold?
AM Peak-Hour Trips	13	100	No
PM Peak-Hour Trips	13	100	No

Daily (One-Directional) Trips	318	750	No
--------------------------------------	-----	-----	----

The land use, Recreational Community Center, was used because it most closely described the new building being constructed on site at Lakeshore Park. The other park amenities were not included in the trip generation as they are generally existing. It should be noted that the proposed building size (9,400 square feet) is outside the range for the samples within the ITE Trip Generation Manual so the results may not be entirely accurate unless additional local data is collected. However, based on the provided estimates above, AECOM does not foresee trips increasing beyond the City's thresholds.

2. The number of trips does not exceed the City's threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour. AECOM recommends performing the following traffic impact study in accordance with the City's requirements.

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. There are not any proposed geometric revisions to the entrance on South Lake Drive.
 - a. A bike lane connection is proposed on both the west and east sides of the site.
 - b. The width of the driveway at South Lake Drive is 24'. The applicant should dimension the radius of the driveway. Refer to Figure IX.1 of the City's Code of Ordinances to ensure compliance.
2. The site does not require any modifications to the external roadway such as a right turn lane or taper.

INTERNAL SITE OPERATIONS

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

1. General Traffic Flow
 - a. The roadway width varies from 24' to 22' with two (2) 5' bicycle lanes.
 - b. The applicant should indicate radius dimensions throughout the site.
 - c. Large trucks and emergency vehicles are expected to be able to maneuver throughout the site but the applicant could provide truck vehicle paths throughout the front parking lot to ensure adequate access.
 - d. The applicant should include dimensions for the radii and width of the proposed end islands throughout the site to review accessibility and compliance with City requirements as stated in Section 5.3.12 of the Zoning Ordinance.
 - i. Note that all end islands adjacent to a travel way shall be constructed three (3) feet shorter than the adjacent parking space.
 - ii. The end island outside radii is required to be a minimum of 15'.
 - e. The applicant has indicated one trash receptacle location on the south side of the front parking lot.
 - i. The location of the trash receptacle shall not interfere with drive aisles or parking spaces, when in use.
 - f. There is a safety concern for the cars backing out of the parking spaces along the driveway and possibly entering the bike lanes. The applicant could consider the following options to alleviate some of the concern:
 - i. Propose special signs at the parking spaces that warn drivers of the bicycle traffic.
 - ii. Propose plastic bollards that separate the travel lanes from the bicycle lanes.

- iii. Utilize green pavement markings in order to increase visibility of the bicycle lanes.

2. Parking Facilities

- a. The applicant is proposing 109 parking spaces. The applicant should refer to Section 5.2.12 of the City's Zoning Ordinance as well as the Planning Review Letter for parking quantity requirements.
- b. There are no more than 15 parking spaces adjacent to each other without an island.
- c. The applicant has proposed both 17' and 19' long parking spaces.
 - i. A 6" curb height is required for all landscaped areas and in front of 19' long parking spaces.
 - ii. Alternatively, the applicant 4" curbs are required with 17' long parking spaces and a clear 2' overhang in order to reduce the amount of impermeable surface on the site.
 - iii. The 9' sidewalk between the parking lot and the parking along the driveway shows 6" curb height on the detail on sheet C-9.1. Since this sidewalk is in front of 17' long spaces, the curb height should be reduced to 4".
 - iv. The applicant should clearly indicate on the plans where 4" versus 6" curb is being proposed.
 - v. The accessible parking spaces may be reduced to 8' in width.
- d. The gutter pan detail on sheet C-9.1 indicates a 2' width whereas a 4' width is labeled on the plans.
- e. Parking aisle widths are in compliance with City standards.
- f. The parking bumper detail on sheet C-9.1 indicates a length of 8'. The length should be reduced to 6' so that there is a 3' wide access aisle between each bumper. The bumpers should be yellow in color.
- g. The applicant could consider relocating the two (2) accessible parking spaces located on the south side of the front parking lot to be on the east side of the lot for closer access to the mini library and pathway to the beach.
- h. A total of 12 bicycle parking spaces are required and the applicant has provided 28.
 - i. The applicant has indicated the location, design and layout of bicycle parking that is in compliance with City requirements.

3. Sidewalk Requirements

- a. The applicant has generally indicated where sidewalks are proposed on the site along with dimensions.
- b. The applicant has labeled sidewalk ramps on the plans and included the latest Michigan Department of Transportation (MDOT) detail.
- c. The applicant could consider placing a gate at each of the access paths to the control structure.

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 additional details (MMUTCD designation and proposed size).
 - b. The stop signs (R1-1) at the bicycle path could be reduced to 18" in size.
 - c. The applicant should provide signing for the bicycle lane for purposes of further designating the lane from the travel way and restricting vehicles from parking over the bicycle lane. Please consult the MMUTCD Section 9B.04.
 - d. The applicant should provide details related to the spacing of the crosswalk and bicycle lane ends sign and if their intent is to locate three signs (bicycle lane ends, crosswalk, and road narrows) on one post as indicated in the plans. The applicant should put one sign per sign post and space the signs according to sign spacing standards in the MMUTCD so that signs may be adequately viewed by both motorists and non-motorists.
 - e. The applicant should provide additional details regarding the "Path Ends" sign. The sign should match the existing bicycle lane designation signs located on South Lake Drive and an R3-17bpP plaque (MMUTCD).
 - f. Since the bicycle lane on South Lake Drive requires cyclists to ride with traffic, a R5-1b and R9-3cP sign should be placed on South Lake Drive at the west side of the driveway to Lakeshore Park.

2. The applicant should indicate 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. The barrier free parking sign heights indicate 60" bottom height on sheet C-9.5. The applicant is required to raise the sign such that the R7-8 sign is 7 feet above the ground. The van accessible plaque is allowed to be below the 7 foot requirement.
 - d. 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.
 - e. Traffic control signs shall use the FHWA Standard Alphabet series.
 - f. Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.
3. The standard parking spaces shall be striped with four (4) inch white stripes.
4. The applicant should label the proposed stop bar markings and indicate width and color.
5. The applicant has included details for the proposed crosswalk and arrow pavement markings. The proposed arrow details are not in compliance with MDOT standards. The applicant should revise the detail to match the dimensions in detail PAVE-900-E.
6. The applicant has included details for the bicycle lane pavement markings.
 - a. The applicant should also include a detail indicating the spacing dimensions of the bicycle lane pavement markings that are in compliance with Figure 9C-3 of the MMUTCD. The spacing shown on sheet C-3.2 is not in compliance.
7. The applicant has provided a detail for the proposed international symbol for accessibility pavement markings that may be placed in the accessible parking space. The symbol shall be white or white with a blue background and white border with rounded corners.

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

Sincerely,

AECOM



Paula K. Johnson, PE
Senior Traffic Engineer



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

FAÇADE REVIEW



March 15, 2019

City of Novi Planning Department
 45175 W. 10 Mile Rd.
 Novi, MI 48375-3024

Façade Review Status Summary:

Community Building - Section 9 Waiver Recommended for underage of Brick and overage of Standing Seam Roof. Shed Addition & Dumpster Enclosure – Full Compliance

Re: **FACADE ORDINANCE - Façade Review (for PSP & FSP)**
Lakeshore Park Buildings
 Façade Region: 1, Zoning District: R-4

Dear Ms. McBeth;

The following is the Façade Review for the above referenced project based on the drawings prepared by NSA Architects, dated 3/4/19. The percentages of materials proposed for each façade are as shown on the table below. The maximum percentages allowed by the Schedule Regulating Façade Materials (AKA Façade Chart) of Ordinance Section 5.15 are shown in the right hand column. Materials in non-compliance with the Façade Chart, if any, are highlighted in bold. All buildings are located in Façade region 1.

Community Building	North	South	East	West	Ordinance Maximum (Minimum)
Brick	0%	0%	0%	0%	100% (30% Minimum)
4" Natural Stone Veneer	28%	32%	60%	25%	50%
Standing Seam Metal Roof	58%	51%	35%	31%	25%
Cement Fiber Siding	14%	17%	5%	44%	50% (Notes 11 & 15)

Community Center - As shown above, the minimum percentage of Brick is not provided and the percentage of Standing Seam Metal Roof exceeds the maximum amount allowed by the Ordinance on the north and south facades. A Section 9 Waiver is required for these deviations. In this case the extensive use of Stone is visually equivalent the minimum requirement for Brick. The building exhibits well balanced proportions and composition of materials and the small overage of Standing Seam Metal is not detrimental to the building's appearance. The colored rendering provided appears to indicate carefully coordinated earth-toned colors. A Section 9 Waiver is therefore recommended for the underage of Brick and overage of Standing Seam Metal.

Shed Building Addition	North	South	East	West	Ordinance Maximum (Minimum)
Burnished CMU (to match existing)	50%	66%	68%	71%	0%
Asphalt Shingles (to match existing)	50%	34%	32%	29%	25%

Shed Addition – A continuation of existing Burnished CMU and Asphalt Shingles is proposed on the addition. It is assumed that all colors will match the existing. The design is therefore in full compliance with Section 5.15.7 of the Façade Ordinance which allows a continuation of existing materials on additions to existing buildings.

Dumpster Enclosure	North	South	East	West	Ordinance Maximum (Minimum)
Asphalt Shingles	50%	50%	50%	50%	50% (Note 16)
Wood Timbers	50%	50%	50%	50%	50% (Note 11)

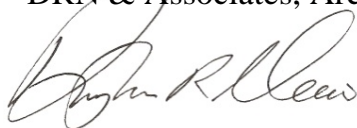
Dumpster Enclosure – The detail on sheet C-9.2 indicates that the dumpster enclosure will be constructed of 4” veneer of “architectural masonry to match building” on 8” CMU back-up wall. Assuming that this material is 4” Natural Stone Veneer matching the primary building, the design is in full compliance with the Façade Ordinance.

Notes to the Applicant:

1. The façade Ordinance requires that roof top equipment be screened from view from all vantage points both on and off site using approved materials.
2. Façade Ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board will be compared to materials delivered to the site. It is the applicant’s responsibility to request the inspection of each façade material at the appropriate time. Inspections may be requested using the Novi Building Department’s Online Inspection Portal with the following link. Please click on “Click here to Request an Inspection” under “Contractors”, then click “Façade”.
<http://www.cityofnovi.org/Services/CommDev/OnlineInspectionPortal.asp>.

If you have any questions regarding this project please do not hesitate to call.

Sincerely,
DRN & Associates, Architects PC



Douglas R. Necci, AIA

FIRE REVIEW



March 11, 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: Lakeshore Park

JSP #19-16

Project Description:

Build a 9400 sq. ft. building and renovating the parking lot.

Comments:

- **All** fire hydrants **MUST** in installed and operational prior to any building construction begins.
- Fire Hydrant spacing is **NOT** as the crow flies. Fire Hydrant spacing is no greater than 300' from hydrant to hydrant. **City of Novi Ordinance 11-68(F)(1)c.**
- **CORRECTED 3/11/19-FDC** location **MUST** be within 100' from a fire hydrant. **City of Novi Ordinance 912.2.3.**

Recommendation:

NOT APPROVED

Sincerely,

A handwritten signature in black ink, appearing to read "KSP", with a long horizontal stroke 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



City of Novi
45175 W 10 Mile Road
Novi, MI 48375

March 21, 2019

Attention: Ms. Sri Komaragiri, Planner

Reference: **Lakeshore Park Community Building
Plan Review Center Report Response
Plan Review Center Project: JSP 19-16**
NSA Project No.: 216409.00

Dear Ms. Komaragiri,

In response to the Plan Review Center Report dated March 14, 2019; we have included your comments and offer our responses in bold below:

PROJECT SUMMARY

The subject property is located along the south side of South Lake Drive and west of Old Novi Road in Section 3. The applicant is proposing to redevelop approximately 7.7 acres of a total 32.73-acre site in the entrance area to Lakeshore Park. The modifications include an addition of approximately 6,258 square foot community building, 109-space paved parking lot including removal of 90 existing spaces, a pavilion, and other park improvements. The entrance drive includes an addition of bike line to connect to the mountain biking trails.

PLANNING REVIEW

Zoning and Use Requirements

1. Item: Uses Permitted (Sec 3.1.5). Required Code: Publicly owned and operated parks, parkways and outdoor recreational facilities. Proposed: Public park with community building and associated parking. *Planning Commission approval of the site plan is required.*

Response: Noted. Site plan approval will be obtained.

Building Setbacks (Sec 3.1.5 & 3.6.2.B)

2. Item: Front (North). Required Code: 75 ft. (See 3.6.2.B). Proposed: 75 ft. Meets Code: Yes. *See note below. Provide information to verify conformance or move the projection away from the minimum setback.*

23761 Research Drive
Farmington Hills, MI 48335
248.477.2444
248.477.2445 fax

www.nsa-ae.com

Founded 1960

Note: Architectural features, including gutters, soffits, eaves, cornices, and roof overlaps, but not including vertical projections, may extend or project into a required side yard not more than two (2) inches for each one (1) foot of width of such side yard; and may extend or project into a required front yard or rear yard not more than three (3) feet.

Response: The roof edge line of the building is set exactly on the 75' east property line setback without encroaching. This will be clarified in future submittals. However, the masonry screen wall at the mechanical equipment may encroach into the setback. The wall layout, grading and landscaping will be re-worked to minimize or eliminate the encroachment. A waiver of this requirement may be requested if full compliance is not possible.

Parking Setbacks (Sec 3.6.2.B)

3. Item: Front (North). Required Code: 75 ft. (See 3.6.2.B). Proposed: 130 ft. Meets Code: Yes. *Provide measurement on site plan.*

Response: We will comply and provide proposed dimension to proposed parking.

4. Item: Interior Side (East). Required Code: 20 ft. Proposed: 55 ft. Meets Code: Yes. *Provide measurement on site plan.*

Response: We will comply and provide proposed dimension to proposed parking.

5. Item: Interior Side (West). Required Code: 20 ft. Proposed: 75 ft. Meets Code: Yes. *Provide measurement on site plan.*

Response: We will comply and provide proposed dimension to proposed parking.

Development Standards (Sec 3.1.5)

6. Item: Minimum Floor Area (Sec 3.1.5). Required Code: 1,000 sq. ft. Proposed: NA. Meets Code: NA. *Not a single-family residential use.*

Response: Noted.

Parking and Loading Requirements

7. Item: Number of Parking Spaces (Sec 5.2.12) – Private Clubs or Lodge Halls. Required Code: 1 for each 3 persons allowed within the maximum occupancy load – $246/3 = 82$ spaces. ITE – City Park Demand: 2.6 spaces per acre – $31.87 \times 2.6 = 83$ spaces. Proposed: 109 new spaces proposed. Maximum occupancy includes the building and the pavilion. Meets Code: Yes. 1) *Planning staff determined that the closest use in our table is a private club and was confirmed with reference to the Institute of Transportation Engineers 4th Edition Parking Generation Manual.* 2) *Proposed parking should also consider other accessory use within the park.*

- 1) **Response: Noted.**
- 2) **Response: The previously submitted drawings included an inaccurate occupant count of 246 for the two pavilions and the new building, which was based on the previously designed larger building. Based on the smaller building footprint (6,243 SF) the occupancy, per the building code, has been revised to reflect 179 occupants. However, per the City, the actual planned occupancy is 120 occupants (the kids camp includes 100 participants). The pavilions are noted as planned occupancies of 60 and 36 occupants. This reduces the parking demand at the building and pavilions to 72 spaces $((120+60+36)/3=72 \text{ spaces})$. This leaves 37 spaces to service the remainder of the park in addition to the existing parking spaces at the southwest end of the park that are to remain. Further, the acreage calculation should reflect a net reduction of the building, the pavilions and the associated parking and support elements.**
8. Item: Barrier Free Spaces (Barrier Free Code). Required Code: 101-150 spaces require 5 regular barrier free spaces including 1 van accessible. Proposed: 6 barrier-free provided; 3 are van accessible. Meets Code: Yes. *The applicant can consider adding some additional spaces closer to the building.*
- Response: ADA parking will be relocated closer to the building entry in future submittals.**
9. Item: Barrier Free Space Dimensions (Barrier Free Code). Required Code: 8' wide with an 8' wide access aisle for van accessible spaces; 8' wide with a 5' wide access aisle for regular accessible spaces. Proposed: Appears to meet the minimum. Meets Code: Yes? *Please label the dimensions.*
- Response: Noted. Dimensions will be added to clarify size.**
10. Item: Covered Parking Spaces (Sec 5.16.4). Required Code: Covered bicycle parking space requirement. Unless waived or modified as provided in subsection 5E, when 20 or more bicycle parking spaces are required, twenty-five percent of the bicycle parking spaces shall be covered bicycle parking spaces. Proposed: 12 required; 28 proposed. Meets Code: NA. *Spaces required is under 20.*
- Response: Noted.**

Accessory Buildings

11. Item: Accessory Structures (Sec 4.19.2.A). Required Code: Accessory structures, except where otherwise permitted and regulated in this Ordinance, shall be located in the rear yard. Proposed: Dumpster – interior side yard (west); Transformer – interior side yard (east); Playground – rear yard; Tot park – rear yard; New Pavilion – rear yard; Library Kiosk Shelter – rear yard. Meets Code: No. *Dumpster and transformer are located in interior side yard rather than the required rear yard.*

Response: The requirements are understood. However, the presence of Shawood Lake makes locating these items in the rear yard less desirable as it is a featured view. The rear yard, as defined by the ordinance, would place the accessory structures between the park building and Shawood Lake. The transformer has been placed adjacent the building, at a lower topographic elevation and will be behind a physical screen wall and landscape screening. The dumpster location was selected in an effort to keep the dumpster close enough to the building to service the building without being located along the main drive, which would place it more immediately adjacent the existing residential properties. A waiver is requested to allow location of the dumpster and transformer in the interior side yard.

12. Item: Dumpster (Sec 4.19.2.F). Required Code: Located in rear yard; Attached to the building or no closer than 10 ft. from building if not attached; Not located in parking setback; If no setback, then it cannot be any closer than 10 ft. from property line; Away from barrier free spaces. Proposed: Located in interior side yard; Detached from building; More than 10 feet away; Not located in parking setback; Closer to barrier free to parking spaces. Meets Code: Yes. *The dumpster location does not conform to the location.*

Response: See above.

Fences (Sec 5.11)

13. Item: Fence Location (Sec 5.11.1.E). Required Code: Fences which enclose public or institutional parks, playgrounds, or public landscaped areas, situated within an area developed with recorded lots shall not exceed 8 ft. in height, measured from the surface of the ground, and shall not obstruct vision to an extent greater than 25% of their total area except that nothing in this subpart shall prevent the erection of fencing for tennis courts, backstops or the like. Proposed: Existing chain-link fence along South Lake Drive frontage is replaced by aluminum fence. Meets Code: Yes. 1) *Please show the proposed fence line on Sheet C. 3.0 and C. 3.1. 2) Indicate height of the fence on plans.*

1) Response: The proposed 4' high ornamental fence will be shown and labeled on C-3.0 in future submittals.

2) Response: The height of the proposed fence will be labeled on future submittals.

14. Item: Electrical Currents (Sec 5.11.2.C). Required Code: No fence shall carry electrical current or charge of electricity. Proposed: Appears to comply. Meets Code: Yes. *Please confirm.*

Response: The fence is planned to be ornamental and will not be electrified. A note to this effect will be added to the plans.

Non-Motorized Facilities

15. Item: Article XI. Off-Road Non-Motorized Facilities. Required Code: 6 ft. sidewalk is required along all collector and arterials. Proposed: Existing bike path along South Lake Drive and no

sidewalks within 300 ft. A bypass for the bike lane along South Lake Drive is proposed through the property. Meets Code: Yes. *Provide sidewalk connectivity to play areas.*

Response: We will comply. We will add sidewalk access to each of the playground areas from the northerly and the southerly directions.

Lighting and Photometric Plan (Sec 5.7)

16. Item: Intent (Sec 5.7.1). Required Code: Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties and reduce unnecessary transmission of light into the night sky. Proposed: Photometric and Lighting Plan is not provided. Meets Code: Yes. *Please confirm if any site lighting proposed. Please provide a lighting and photometric plan prior to Planning Commission meeting.*

Response: We will comply. A full site photometric plan will be submitted for consideration prior to the planning commission meeting.

Other Requirements

17. Item: General layout and dimension of proposed physical improvements. Required Code: Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private). Proposed: Mostly provided. Meets Code: Yes. *Refer to review letters for additional information requested.*

Response: We will comply.

18. Item: Economic Impact. Required Code: Total cost of the proposed building and site improvements; Number of anticipated jobs created (during construction and after building is occupied, if known). Proposed: Not provided at this time. Meets Code: No? *Please provide information in the response letter.*

Response: The total cost of building and site improvements is anticipated to be \$4,440,850 based on a previously completed cost estimate. The temporary jobs related to the various trades involved in the construction process is approximately 100. The city anticipates that 4 positions will be created to operate the facility permanently.

ENGINEERING REVIEW

General

1. A right-of-Way permit will be required for work within the public right-of-way at South Lake Drive.

Response: A right of way permit will be obtained for all work in South Lake Drive.

2. A letter from either the applicant or the applicant's engineer must be submitted with the Preliminary Site Plan submittal highlighting the changes made to the plans addressing each of the comments in the review.

Response: The area of the building and pavilion have been revised, citing an area of 6,243 SF at the building and 2,380 SF at the pavilion.

Water Main

3. Six (6) inch fire hydrant leads cannot be longer than 25 feet. Provide 8-inch water main on the site.

Response: All hydrant leads longer than 25 feet will be upsized to 8".

4. Provide a unique shut-off valve for each water main lead.

Response: Each lead will have a unique shut-off.

5. Ensure all water mains are 8-inches in diameter. Currently, one section of water main tapers from 8-inches to 6-inches before it connects to the building.

Response: Water main will be corrected to 8" in size at the building connection.

Sanity Sewer

6. A sanitary sewer basis of design with **not** be required for this project.

Response: Noted.

7. Use two 45-degree bends in lieu of any 90-degree sanitary sewer bends proposed.

Response: Sanitary sewer will be updated to eliminate 90-degree bends.

Paving & Grading

8. Replace the details shown on Sheet C9.1 with the City's standard details.

Response: City Standard details will be used where appropriate.

9. In the rain gardens, the maximum recommended ponding depth is 6 inches. Please provide a cross section of the rain garden showing the ponding depth.

Response: Rain Gardens have been eliminated from the park design. A grassy swale with appropriate hydrophyllic plantings will be provided in the center of the parking area. Appropriate details and notes will be provided in future submittals.

Storm Sewer

10. Provide an oil/gas separator on the last storm structures before discharge to the detention basins.

Response: An oil/gas separator will be added to the storm system before the pond.

11. Indicate how roof drainage will be conveyed to the storm sewer system.

Response: Roof conductors will be shown and labeled on the plans for future submittals.

Storm Water Management Plan

12. The SWMP must detail the storm water system design, calculation, details, and maintenance as state in the ordinance. The SWMP must address the discharge of storm water off-site, and evidence of its adequacy must be provided. This should be done by comparing pre- and post-development discharge rates.

Response: Additional calculations will be added comparing pre- and post-construction discharge rates.

13. The engineering Design Manual call for a minimum runoff coefficient of 0.35 to be used for all grass lawns and 0.95 for pavement for detention basin sizing.

Response: Calculations will be updated to show the correct runoff coefficients.

14. Provide an emergency spillway or secondary standpipe as required in section 5.6.4.C of the Engineering Design Manual.

Response: An emergency spillway will be added for each pond.

15. A 4-foot wide safety shelf is required one-foot below the permanent water surface elevation within the basin.

Response: The ponds are intended to function as forebays and dry basins for offsite detention. No permanent water levels will be maintained in the ponds.

16. A 25-foot wide safety shelf is required one-foot below the permanent water surface elevation within the basin.

Response: A 25-foot buffer will be shown and labeled on future submittals.

The following must be addressed prior to construction:

17. A pre-construction meeting shall be required prior to the commencement of any site work. Contact Sarah Marchioni at (248) 347-0430 for details on the requirements.

Response: Noted.

18. 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. There is no fee for this permit.

Response: Noted.

19. An NPDES permit must be obtained from the MDEQ since the site is over 5 acres in size. The MDEQ require an approved plan to be submitted with the Notice of Coverage.

Response: Noted.

20. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department for forms and information: (248) 347-0430.

Response: Noted.

21. A permit for work within the right-of-way South Lake Drive must be obtained from the City of Novi.

Response: Noted.

22. Contact the Water & Sewer Division at (248) 347-0498 to determine any applicable water and sewer tap fees.

Response: Noted.

23. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the Water & Sewer Senior Manager after the water main plans have been approved.

Response: Noted.

24. Construction Inspection fees, amount to be determined once the final construction cost estimate is submitted, must be paid prior to the pre-construction meeting.

Response: Noted.

25. A street sign financial guarantee in the amount of \$ 11,600 (\$400 per traffic control sign proposed) must be posted with the Community Development Department.

Response: Noted.

The following must be addressed prior to issuance of a Temporary Certificate of Occupancy approval for the development:

26. The amount of the incomplete site work performance guarantee for any outstanding site improvement items, limited to top course of pavement and other minor items, at 1.2 times the amount required to complete the site improvements as specified in the Performance Guarantee Ordinance.

Response: We will comply.

27. Spalding DeDecker will prepare the record drawings for this development. The record drawings will be prepared in accordance with Article XII, Design and Construction Standards, Chapter 11 of the Novi Code of Ordinances.

Response: Noted.

28. A Bill of Sale for the utilities conveying the improvements to the City of Novi must be submitted to the Community Development Department. This document is available on our website.

Response: Noted.

29. Submit to the Community Development Department, Waivers of Lien from any parties involved with the installation of each utility as well as a Sworn Statement listing those parties and stating that all labor and material expenses incurred in connection with the subject construction improvements have been paid.

Response: We will comply.

30. Submit a Maintenance Bond to the Community Development Department in an amount to be determined from the final cost estimate (equal to 25 percent of the cost of the construction of the utilities to be accepted). This bond must be for a period of two years from the date that the Utility Acceptance Permit is issued by the City of Novi Engineering Division. This document is available on our website.

Response: We will comply.

LANDSCAPE REVIEW

Adjacent to Public Rights-of-Way: Berm/Wall & Buffer (Zoning Sec 5.5.3.B.ii and iii)

1. The required 40' greenbelt width is exceeded significantly in the proposal.

Response: Noted.

2. The required berm is not provided due to the existing topography and trees to be preserved. A landscape waiver is required for this deficiency. This waiver request would be supported by staff.

Response: Waiver has been requested due to insufficient room between ROW and road.

3. The required landscaping is provided with a combination of existing trees to remain and newly proposed subcanopy trees.

Response: Noted.

4. The required street trees are not provided because there is insufficient room within the right-of-way for the trees. This requires a landscape waiver. *This request would be supported by staff.*

Response: Waiver has been requested due to insufficient room within ROW.

Parking Lot Landscaping (Zoning Sec 5.5.3.C)

1. Based on the vehicular use area, 1,913 sf of islands and 10 trees are required. 5,048 sf of islands and 10 trees are provided.

Response: Noted.

2. There are three endcap islands that should have deciduous trees planted in them, and possibly enlarged. Those endcaps are at the southeast corner of the parking lot, at the north end of the bay west of the pavilion, and at the very west end of the parking, which is currently occupied by bike racks. Please enlarge the islands to at least 200 sf. If necessary and plant the required trees.

Response: Islands will be labeled to show at least 200 sf of area per tree and will have appropriate trees added. Islands will be adjusted as needed to ensure compliance with minimum size requirements.

3. It appears that there is a break between the endcap islands in the long interior parking lot island and the central portion. Please remove that break, so roots could move into the long section of the island. Also, please show the areas of those endcaps. They should be at least 400 sf. Since there are 2 trees in them.

Response: Curb on the end islands will be removed to allow connection between the end island green space and the central swale. Islands will be labeled with appropriate areas.

4. Please increase the area of the endcaps if necessary.

Response: Endcaps will be adjusted to ensure a minimum of 200 sf and appropriately labeled.

5. Please add an endcap tree to the north end of the bay along the drive, west of the parking lot.

Response: A tree will be added to the endcap.

Parking Lot Perimeter Canopy Trees (Zoning Sec 5.5.3.C.iv)

1. Based on the perimeter, 61 trees are required.

Response: Noted.

2. 41 deciduous canopy trees, 15 evergreen trees and 5 existing trees within 15 feet of the parking lot and/or drive are provided.

Response: Noted.

3. Please use a canopy tree species with a minimum mature height of 30 feet and canopy of 20 feet in place of the Japanese Tree Lilacs at the entry. A large, showy tree such as Red Oak or Sugar Maple would make a nice entry, but those are just suggestions of acceptable species.

Response: The Japanese tree lilacs will be replaced with sugar maples at the entry.

4. Please change the interior trees shown as replacement trees to interior or perimeter trees and make as many perimeter trees along the south edge of the bays near the playgrounds as necessary replacement trees to keep the counts right (they'll be less exposed to damage in that area and will likely live longer).

Response: The trees currently shown around play areas are intended to be replacement trees. The three evergreen replacement trees shown on the west side of the entrance drive will be changed to deciduous trees and moved near the tot lot.

Building Foundation Landscape (Zoning Sec 5.5.3.D)

1. The plan indicates a foundation perimeter of 2071f and a requirement of 1,656sf. There is a discrepancy between the area provided in the calculation versus the area shown on L1.2.

Response: The calculations will be verified and revised as required.

2. Please check the foundation calculation and provide the correct foundation landscaping area.

Response: The calculations will be verified and revised as required.

3. Although most of the building foundation won't be visible from South Lake Road, greater than 60% of the foundation facing the road is landscaped.

4. Building foundation landscaping should also be proposed for the maintenance garage/bathroom building, at least on the west side of the building where foot traffic won't trample the landscaping.

Response: Additional landscaping will be provided around the bathroom and maintenance garage building.

Plant List (LDM 2.h and t)

1. Provided.

Response: Noted.

2. 32 of 38 species used (84%) are native to Michigan.

Response: Noted.

3. The tree diversity meets the standards of Landscape Design Manual Section 4.

Response: Noted.

4. Please break out the replacement trees in the plant list so it is clear how many replacement trees are provided, and what the species are.

Response: A second tree list will be added listing only the replacement trees.

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

1. The required landscaping is provided in both ponds.

Response: Noted.

2. Please shift the birch closest to the outlet structure of the northern pond to the west to provide better maintenance access to the structure.

Response: The tree will be shifted to the west.

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

3. The proposed landscaping must be provided with sufficient water to become established and survive over the long term.

Response: Irrigation plan for the area around the building will be provided. Tree bags will be suggested for the new trees until they are established.

4. Please provide an irrigation plan or note how this will be accomplished if an irrigation plan is not provided on Final Site Plans.

Response: Irrigation plan for the area around the building will be provided. Tree bags will be suggested for the new trees until they are established.

Snow Deposit (LDM.2.g)

5. Please provide.

Response: Snow deposit areas will be provided.

Layout/Landscape Suggestions

6. Enlarge the endcap west of the pavilion by shifting the bay southward to eliminate the small grass strip next to the accessible parking spaces.

Response: The endcap west of the pavilion is of sufficient size to support a tree. The small strip of grass south of that parking bay will provide location for important signage which will be shown on future submittals.

7. Widen the sidewalk between the two bays to 9 feet to provide the proper clearance if cars are parked on both sides of the walk simultaneously. The central bioswale island could be narrowed if necessary.

Response: The sidewalk between the two bays is 9 feet wide. Dimensions will be clarified in future submittals.

8. Enlarge the endcap closest to the building to the north (to at least 200 sf.) by reducing the length of the endcap on the north end of that bay. The elm south of the endcap could be moved north to the endcap and still be counted as a perimeter tree. The entire area where the tree currently is could be used for expanded foundation area.

Response: The endcap will be enlarged; a tree will be added and the foundation area will be expanded.

9. Add a cluster of 2-3 subcanopy trees such as *Ostrya virginiana* or hawthorns in the open area between the retaining wall and the volleyball court to provide additional screening for the house to the east.

Response: Subcanopy trees will be added to the area between the retaining wall and foundation area.

10. Add at least 2 evergreens east of the volleyball court to increase the screening of the court.

Response: Evergreens will be added east of the volleyball court to increase screening of the court.

11. For the path to the beach, add a mass of dense shrubs at the bend in the path and around the walk to the south so people don't wear a "direct access path" at that bend.

Response: The bend in the path will be eliminated. Plantings will be added as appropriate to discourage cutting across the lawn rather than utilizing the paths.

12. Shift the western bike rack to the other side of the path so the required endcap tree can be planted.

Response: Bike rack will be moved and a tree will be added to the end cap.

WETLAND REVIEW

Wetland/Watercourse Comments

1. ECT encourages the applicant to minimize impacts to on-site wetlands and 25-foot wetland setbacks to the greatest extent practicable. The applicant should consider modification of the proposed site design to preserve all wetland and wetland buffer areas. Specifically, the applicant shall work to avoid any proposed encroachment into the 25-foot wetland buffer for the purpose constructing the proposed stormwater detention basins. 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".

Response: Impact to the wetlands and buffer areas will be minimized.

2. Plan should indicate who completed the delineation of on-site wetlands and when it was done. The applicant should provide this information and provide wetland delineation report if one was completed.

Response: Information will be added identifying the date of delineation and practitioner.

3. The 25-foot wetland/watercourse (i.e., natural features) setback shall be shown on the plan.

Response: Setbacks will be shown and labeled on future submittals.

4. The plan appears to propose direct impact to the 25-foot wetland setback for the construction of the stormwater detention basins and outlet pipes. The applicant shall indicate and quantify (square feet or acres) all areas of direct impact to this 25-foot setback on subsequent plan submittals.

Response: Impact areas will be shown and labeled.

5. Direct impacts to wetland area do not appear to be proposed. A City of Novi or MDEQ Wetland Permit does not appear to be required. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland buffers.

Response: Noted.

6. 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 MDEQ Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information. Currently, the Plan does not appear to propose direct impacts to wetlands and should not require either a City of Novi Wetland Permit or MDEQ Wetland Permit.

Response: Noted.

7. The plan should address how any temporary impacts to wetland buffers shall be restored, if applicable. A proposed seed mix should be provided on the plan for restoration of these wetland buffer areas. Sod or common grass seed will not be authorized in these areas.

Response: Temporary impacts will be shown and labeled, and an appropriate seed mix for restoration of the wetlands will be added to the plans.

WOODLAND REVIEW

Wetland/Watercourse Comments

1. ECT encourages the Applicant to minimize impacts to on-site woodlands to the greatest extent practicable. The Plan appears to indicate the removal of over 100 total trees; many of these trees do not appear to be regulated trees (not 8" dbh and greater) and the trees do not appear to be located in area mapped as City of Novi Regulated Woodland (these are likely previously-planted landscape trees).

Currently, the Plan proposes to remove 52 regulated trees requiring 89 Woodland Replacement Credits.

Response: Impact to the woodlands will be minimized as much as possible for this project.

2. The current Plan appears to propose a total of 43.3 on-site Woodland Replacement Credits (49% of the required Woodland Replacement Tree Credits) through on-site planting of deciduous and coniferous tree plantings. ECT suggests that the applicant work to provide as many of the required 89 Woodland Replacement Credits through on-site plantings. It should be noted that in addition to acceptable 2.5" caliper deciduous trees as well as 6-foot tall acceptable evergreen tree species, the City allows applicant's to meet Woodland Replacement Credit requirement plantings through planting of other types of approvable, native vegetation (as indicated in the Reforestation Credit Table contained in the Woodland Ordinance):

Reforestation Credit Table

Type	Minimum Size	DBH Credit Proposed Plant: Required Replacement.	Max. Use Percentage
Canopy Trees	1.5" Caliper	2:1	70%
Evergreen trees	36" Height	3:1	30%
Understory trees	1" Caliper	5:1	30%
Large shrubs	30" Height	6:1	30%
Small shrubs	18" Height	8:1	30%
Perennials	1 Gallon Cont.	25:1	50%
Groundcover seeding	Per seed source recommendations	70 SY area:1	None

Response: Noted.

3. It should be noted that deciduous Woodland Replacement trees shall be 2.5-inch caliper (minimum) and count at a ratio of 1 tree-to-1 replacement credit. Evergreens shall be 6-foot tall (minimum) as count at a ratio of 1.5 tree-to-1 replacement credit. As such, the Plan appears to propose a total of 43.3 Woodland Replacement Credits but requires a total of 89. Please revise the Plan as necessary.

Response: Plans will be revised as required to correct calculations and conform to ordinance requirements.

4. The Existing Tree List (Sheet T-1.1) should be updated to include a column that indicates how many Woodland Replacement Tree Credits are required for each regulated tree being removed.

Response: The existing tree list will be updated to provide the information required.

5. 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.

Response: Noted.

6. 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.

Response: Noted.

7. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on-site. The Plan shall clearly indicate how many Woodland Replacement Credits will be required to be paid to the City of Novi Tree Fund.

Response: Noted.

8. 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.

Response: Noted.

9. 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*.

Response: Noted.

TRAFFIC REVIEW – EXTERNAL SITE ACCESS AND OPERATIONS

1. There are not any proposed geometric revisions to the entrance on South Lake Drive.
- 1) A bike lane connection is proposed on both the west and east sides of the site.
 - 2) The width of the driveway at South Lake Drive is 24'. The applicant should dimension the radius of the driveway. Refer to Figure IX.1 of the City's Code of Ordinances to ensure compliance.

1) Response: Noted.

2) Response: The radius will be labeled as required. Compliance with Code will be verified.

2. The site does not require any modifications to the external roadways such as a right turn lane or taper.

Response: Noted.

TRAFFIC REVIEW – INTERNAL SITE OPERATIONS

General Traffic Flow

1. The roadway width varies from 24' to 22' with two (2) 5' bicycle lanes.

Response: Noted.

2. The applicant should indicate radius dimensions throughout the site.

Response: Radii will be labeled.

3. Large trucks and emergency vehicles are expected to be able to maneuver throughout the site but the applicant could provide truck vehicle paths throughout the front parking lot to ensure adequate access.

Response: Truck turning will be shown on the plans for future submittals.

4. The applicant should include dimensions for the radii and width of the proposed end islands throughout the site to review accessibility and compliance with City requirements as stated in Section 5.3.12 of the Zoning Ordinance.

- 1) Note that all end islands adjacent to a travel way shall be constructed three (3) feet shorter than the adjacent parking space.
- 2) The end island outside radii is required to be a minimum of 15'.

1) Response: Appropriate dimensions will be added to plans to demonstrate compliance.

2) Response: Appropriate dimensions will be added to plans to demonstrate compliance.

5. The applicant has indicated one trash receptacle location on the south side of the front parking lot.

The location of the trash receptacle shall not interfere with drive aisles or parking spaces, when in use.

Response: The trash receptacle will not interfere with drive aisles or parking.

6. There is a safety concern for the cars backing out of the parking spaces along the driveway and possibly entering the bike lanes. The applicant could consider the following options to alleviate some of the concern:

- 1) Propose special signs at the parking spaces that warn drivers of the bicycle traffic.
- 2) Propose plastic bollards that separate the travel lanes from the bicycle lanes.
- 3) Utilize green pavement markings in order to increase visibility of the bicycle lanes.

- 1) **Response: Signage will be added to advise drivers to check for bicycles before backing out.**
- 2) **Response: Bollards will not be utilized since they create issues for snow removal equipment, and will interfere with backing maneuvers.**
- 3) **Response: Bike lane pavement will be green-tinted asphalt.**

Parking Facilities

1. The applicant is proposing 109 parking spaces. The applicant should refer to Section 5.2.12 of the City's Zoning Ordinance as well as the Planning Review Letter for parking quantity requirements.

Response: Noted. Parking will comply with ordinance requirements.

2. There are no more than 15 parking spaces adjacent to each other without an island.

Response: Noted.

3. The applicant has proposed both 17' and 19' long parking spaces.

- 1) A 6" curb height is required for all landscaped areas and in front of 19' long parking spaces.
- 2) Alternatively, the applicant 4" curbs are required with 17' long parking spaces and a clear 2' overhang in order to reduce the amount of impermeable surface on the site.
- 3) The 9' sidewalk between the parking lot and the parking along the driveway shows 6" curb height on the detail on sheet C-9.1. Since this sidewalk is in front of 17' long spaces, the curb height should be reduced to 4".
- 4) The applicant should clearly indicate on the plans where 4" versus 6" curb is being proposed.
- 5) The accessible parking spaces may be reduced to 8' in width.

- 1) **Response: Noted. Curb heights will be revised as required.**
- 2) **Response: Noted. Curb heights will be revised as required.**
- 3) **Response: Noted. Curb heights will be revised as required.**
- 4) **Response: Noted. Curb heights will be revised as required.**
- 5) **Response: Noted.**

4. The gutter pan detail on sheet C-9.1 indicates a 2' width whereas a 4' width is labeled on the plans.

Response: The detail will be revised to match the plans

5. Parking aisle widths are in compliance with City standards.

Response: Noted.

6. The parking bumper detail on sheet C-9.1 indicates a length of 8'. The length should be reduced to 6' so that there is a 3' wide access aisle between each bumper. The bumpers should be yellow in color.

Response: Bumper blocks will be revised to meet Novi standards.

7. The applicant could consider relocating the two (2) accessible parking spaces located on the south side of the front parking lot to be on the east side of the lot for closer access to the mini library and pathway to the beach.

Response: Accessible spaces will be relocated closer to the building entry.

8. A total of 12 bicycle parking spaces are required and the applicant has provided 28.

The applicant has indicated the location, design and layout of bicycle parking that is in compliance with City requirements.

Response: Noted.

Sidewalk Requirements

1. The applicant has generally indicated where sidewalks are proposed on the site along with dimensions.

Response: Noted.

2. The applicant has labeled sidewalk ramps on the plans and included the latest Michigan Department of Transportation (MDOT) detail.

Response: Noted.

3. The applicant could consider placing a gate at each of the access paths to the control structure.

Response: Gates will be added if desired by the maintenance department

TRAFFIC REVIEW – 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.

- 1) The applicant has provided a signing quantities table and additional details (MMUTCD designation and proposed size).
- 2) The stop signs (R1-1) at the bicycle path could be reduced to 18" in size.

- 3) The applicant should provide signing for the bicycle lane for purposes of further designating the lane from the travel way and restricting vehicles from parking over the bicycle lane. Please consult the MMUTCD Section 9B.04.
- 4) The applicant should provide details related to the spacing of the crosswalk and bicycle lane ends sign and if their intent is to locate three signs (bicycle lane ends, crosswalk, and road narrows) on one post as indicated in the plans. The applicant should put one sign per sign post and space the signs according to sign spacing standards in the MMUTCD so that signs may be adequately viewed by both motorists and non-motorists.
- 5) The applicant should provide additional details regarding the "Path Ends" sign. The sign should match the existing bicycle lane designation signs located on South Lake Drive and an R3-17bpP plaque (MMUTCD).
- 6) Since the bicycle lane on South Lake Drive requires cyclists to ride with traffic, a R5-1b and R9-3cP sign should be placed on South Lake Drive at the west side of the driveway to Lakeshore Park.

- 1) **Response: Noted.**
- 2) **Response: Noted.**
- 3) **Response: Signage will be reviewed and revised as required.**
- 4) **Response: Details will be provided as required.**
- 5) **Response: Signage will be revised per MMUTCD.**
- 6) **Response: Signage will be added as required.**

2. The applicant should indicate the proposed signing on site and provide notes and details related to the proposed signing.

- 1) 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.
- 2) The applicant should indicate a bottom height of 7' from final grade for all signs installed. The barrier free parking sign heights indicate 60" bottom height on sheet C-9.5. The applicant is required to raise the sign such that the R7-8 sign is 7 feet above the ground. The van accessible plaque is allowed to be below the 7 foot requirement.
- 3) 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.
- 4) Traffic control signs shall use the FHWA Standard Alphabet series.
- 5) Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.

- 1) **Response: Details and notes will be provided as required.**
- 2) **Response: Details will be revised as required.**
- 3) **Response: Details will be revised as required.**
- 4) **Response: Details will be revised as required.**
- 5) **Response: Details will be revised as required.**

3. The standard parking spaces shall be striped with four (4) inch white stripes.

Response: Notes will be added as required.

4. The applicant should label the proposed stop bar markings and indicate width and color.

Response: Notes will be added as required.

5. The applicant has included details for the proposed crosswalk and arrow pavement markings. The proposed arrow details are not in compliance with MDOT standards. The applicant should revise the detail to match the dimensions in detail PAVE-900-E.

Response: Arrows will be revised per MDOT standards. The MDOT details will be added to the plans

6. The applicant has included details for the bicycle lane pavement markings.

The applicant should also include a detail indicating the spacing dimensions of the bicycle lane pavement markings that are in compliance with Figure 9C-3 of the MMUTCD. The spacing shown on sheet C-3.2 is not in compliance.

Response: Details will be added as required.

7. The applicant has provided a detail for the proposed international symbol for accessibility pavement markings that may be placed in the accessible parking space. The symbol shall be white or white with a blue background and white border with rounded corners.

Response: Noted.

FIRE MARSHAL REVIEW

1. All fire hydrants MUST be installed and operational prior to any building construction beginning.

Response: Noted.

2. Hydrant spacing is not as the crow flies. Hydrant spacing no greater than 300 feet hydrant to hydrant. City Ordinance 11-68(F)(1)c.

Response: Spacing of hydrants will be no more than 300 feet as measured along the water main.

3. Corrected 3/11/19 – FDC location must be within 100 feet from a fire hydrant. City Ordinance 912.2.3.

Response: The FDC will be located within 100 feet of a hydrant.

FACADE REVIEW

1. The façade ordinance requires that roof top equipment be screened from view from all vantage points both on and off site using approved materials.

Response: The project does not include any roof mounted equipment. The HVAC will be a ground-mounted packaged unit that will be screened with a masonry wall to match the building façade.

2. Façade ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board will be compared to materials delivered to the site. It is the applicant's responsibility to request the inspection of each façade material at the appropriate time. Inspections may be requested using the Novi Building Department's Online Inspection Portal.

Response: We will comply

3. Community Center – The proposed project does achieve full compliance with the façade ordinance. A Section 9 Waiver is recommended for the underage of brick and overage of standing seam metal.

Response: Per the City's direction to achieve an aesthetic appearance that is in keeping with the surrounding context and the historical nature of the site, the design was developed in a manner that reflects the qualities of cottage/lakeside vernacular architecture. The scale, proportions and materials are intended to be a cohesive addition to the surrounding residential structures. A Section 9 Waiver is requested.

Prepared by:
NSA Architects, Engineers, Planners



Brandon Kritzman, AIA, NCARB, LEED AP
Associate Principal

Cc: B. McCullough, R. Petty – City of Novi; F. Ray, A. Whitmer, M. Shuell – NSA; S. Sorensen, B. Klein – PEA; File