



DAIFUKU TEST BUILDING JSP19-13

DAIFUKU TEST BUILDING JSP19-13

Consideration at the request of Northern Equities Group for Preliminary Site Plan and Stormwater Management Plan approval. The subject property is 10.28 acres located in Section 1 of the City of Novi and located north of Thirteen Mile Road and east of Cabot Drive. The applicant is proposing to construct a 1-story research and testing building, consisting of 24,100 square feet, on the east side of the property. The site previously received approval for a 76,549 square foot office building for Daifuku North America Holding Company’s headquarters, which has been constructed.

Required Action

Approval/Denial of the Preliminary Site Plan and Stormwater Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	3-18-19	<ul style="list-style-type: none"> • Planning Commission waiver required for reduction of parking lot setback along north property line (staff supports). • Items to be addressed on stamping sets
Engineering	Approval recommended	3-15-19	Items to be addressed on stamping sets
Landscape	Approval recommended	2-27-19	Items to be addressed on Final Site Plan
Wetlands	Approval recommended	3-28-19	Items to be addressed on Final Site Plan
Traffic	Approval recommended	3-18-19	Items to be addressed on Final Site Plan
Facade	Approval Recommended	4-10-19	Full compliance with façade ordinance
Fire	Approval recommended	3-1-19	Items to be addressed on Final Site Plan

Motion Sheet

Approval –Preliminary Site Plan

In the matter of Daifuku Test Building, JSP19-13, motion to **approve** the Preliminary Site based on and subject to the following:

- a) Planning Commission waiver to permit the reduction of parking lot setbacks on the north (20 ft required, 12 ft provided) as listed in Section 3.1.23.D. based on Section 3.6.2.Q. due to improved use of the site and because a greater setback is provided on the south side of the site, the modification does not reduce the total area of setback on the site below the minimum setback area requirements for the subject property, which is hereby granted;
- 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;
- c) *(additional conditions here if any)*

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

-AND-

Approval –Stormwater Management Plan

In the matter of Daifuku Test Building, JSP19-13, 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 Daifuku Test Building, JSP19-13, motion to **deny** the Preliminary Site Plan, *for the following reasons...(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-

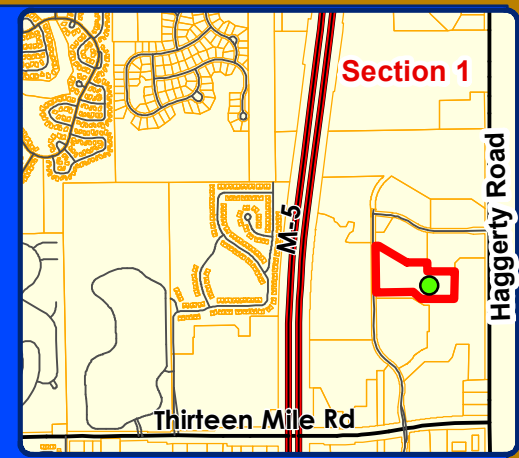
Denial –Stormwater Management Plan

In the matter of Daifuku Test Building, JSP19-13, motion to **deny** the Stormwater Management Plan, *for the following reasons...(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

DAIFUKU TEST BUILDING: JSP 19-13

LOCATION




LEGEND

 Subject Property

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

Map Author: Lindsay Bell
Date: 4/11/19
Project: DAIFUKU TEST BUILDING JSP19-13
Version #: 1

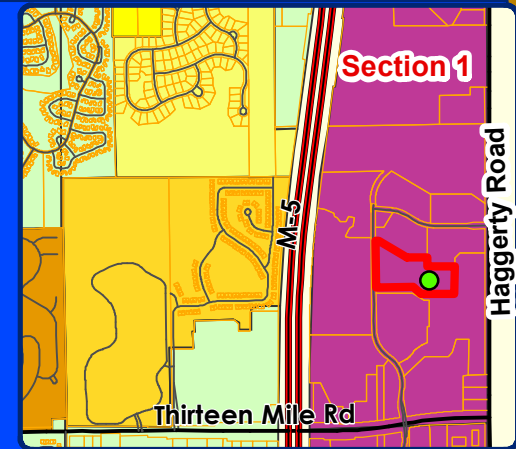
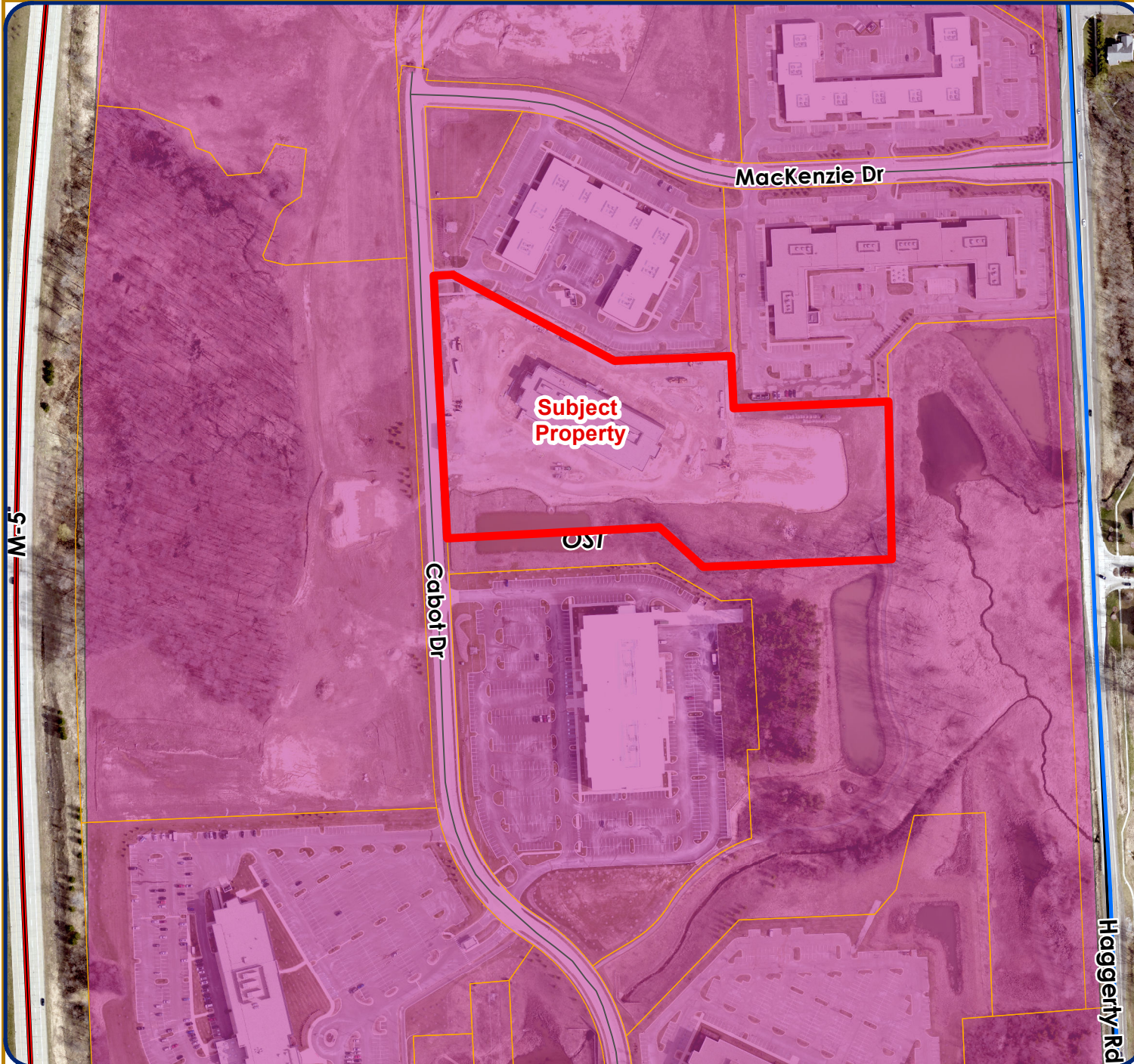
0 70 140 280 420 Feet
1 inch = 333 feet



MAP INTERPRETATION NOTICE
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DAIFUKU TEST BUILDING: JSP 19-13

ZONING



LEGEND

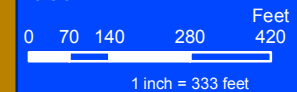
- R-A: Residential Acreage
- R-2: One-Family Residential
- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
- MH: Mobile Home District
- OST: Office Service Technology
- Subject Property



City of Novi

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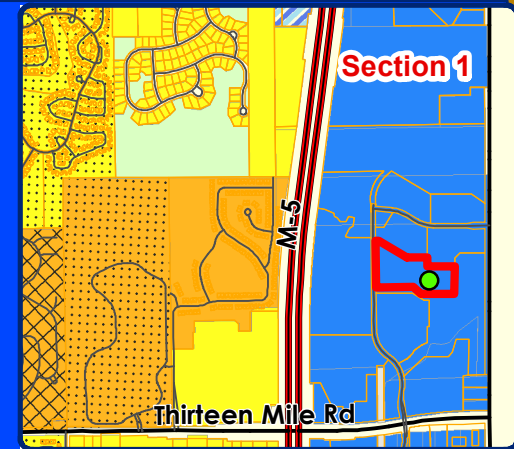


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DAIFUKU TEST BUILDING: JSP 19-13

FUTURE LAND USE



LEGEND

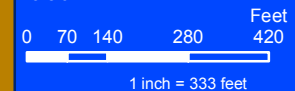
- Single Family
- PUD
- Multiple Family
- PD1
- Mobile Home Park
- Community Office
- Office Research Development Technology
- Private Park
- Utility
- Subject Property



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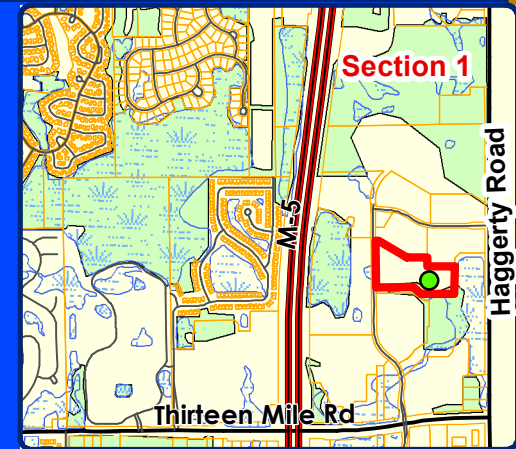


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NATURAL FEATURES



LEGEND

-  WETLANDS
-  WOODLANDS
-  Subject Property



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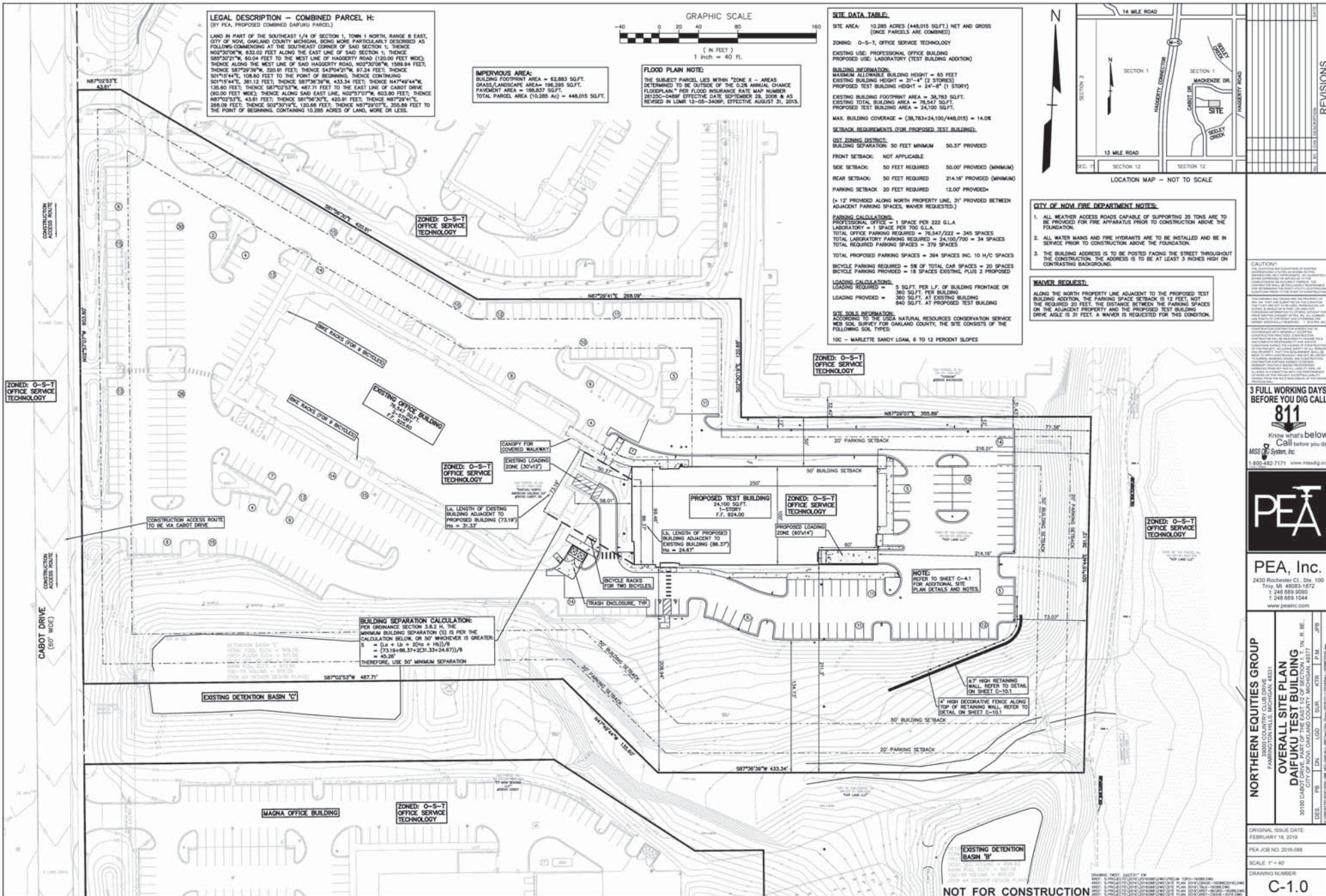


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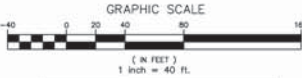
SITE PLAN

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



LEGAL DESCRIPTION - COMBINED PARCEL H:
(BY PEA, PROPOSED COMBINED DAIFUKU PARCEL)

LAND IN PART OF THE SOUTHEAST 1/4 OF SECTION 1, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOW, OAKLAND COUNTY MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 1; THENCE N60°20'07"W, 432.00 FEET ALONG THE EAST LINE OF SAID SECTION 1; THENCE S85°30'27"W, 60.04 FEET TO THE WEST LINE OF HADDERTY ROAD (120.00 FEET WIDE); THENCE ALONG THE WEST LINE OF SAID HADDERTY ROAD, N07°00'00"W, 108.84 FEET; THENCE S87°29'30"W, 330.81 FEET; THENCE S43°04'21"W, 97.24 FEET; THENCE S07°15'47"E, 124.80 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING S07°15'44"E, 361.12 FEET; THENCE S87°29'30"W, 433.34 FEET; THENCE N47°49'44"W, 130.60 FEET; THENCE S87°02'57"W, 467.70 FEET TO THE EAST LINE OF CABOT DRIVE (60.00 FEET WIDE); THENCE ALONG SAID EAST LINE, N07°17'07"W, 60.00 FEET; THENCE N87°02'57"E, 43.61 FEET; THENCE S87°06'30"E, 430.81 FEET; THENCE N87°29'41"E, 246.00 FEET; THENCE S07°17'11"E, 120.00 FEET; THENCE N87°19'07"E, 305.88 FEET TO THE POINT OF BEGINNING, CONTAINING 10.285 ACRES OF LAND, MORE OR LESS.



IMPERVIOUS AREA:
BUILDING FOOTPRINT AREA = 62,863 SQ.FT.
GRASS/LANDSCAPE AREA = 195,295 SQ.FT.
PAVEMENT AREA = 186,837 SQ.FT.
TOTAL IMPERVIOUS AREA = 445,095 SQ.FT.

FLOOD PLAN NOTE:
THE SUBJECT PARCEL LIES WITHIN "ZONE X" - AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN* PER FLOOD INSURANCE RATE MAP NUMBER 38125C-04M EFFECTIVE DATE SEPTEMBER 28, 2008 & AS REVISED IN LOAR 12-05-240P, EFFECTIVE AUGUST 31, 2015.

SITE DATA TABLE:

SITE AREA: 10.285 ACRES (448,015 SQ.FT.) NET AND GROSS (ONCE PARCELS ARE COMBINED)

ZONING: O-S-T, OFFICE SERVICE TECHNOLOGY

EXISTING USE: LABORATORY (TEST BUILDING ADDITION)

PROPOSED USE: LABORATORY (TEST BUILDING ADDITION)

BUILDING INFORMATION:
MAXIMUM ALLOWABLE BUILDING HEIGHT = 45 FEET
EXISTING BUILDING HEIGHT = 31'-4" (2 STORIES)
PROPOSED TEST BUILDING HEIGHT = 34'-0" (1 STORY)

EXISTING BUILDING FOOTPRINT AREA = 38,783 SQ.FT.
EXISTING TOTAL BUILDING AREA = 78,547 SQ.FT.
PROPOSED TEST BUILDING AREA = 24,100 SQ.FT.

MAX. BUILDING COVERAGE = (38,783+24,100)/448,015 = 14.0%

SETBACK REQUIREMENTS FROM PROPOSED TEST BUILDING:

SETBACK:	50 FEET MINIMUM	50.37' PROVIDED
FRONT SETBACK:	NOT APPLICABLE	
REAR SETBACK:	50 FEET REQUIRED	50.00' PROVIDED (MINIMUM)
SIDE SETBACK:	50 FEET REQUIRED	214.16' PROVIDED (MINIMUM)
PARKING SETBACK:	20 FEET REQUIRED	12.00' PROVIDED

(* 12' PROVIDED ALONG NORTH PROPERTY LINE, 3' PROVIDED BETWEEN ADJACENT PARKING SPACES, WAIVER REQUESTED.)

PARKING CALCULATIONS:
PERSONAL OFFICE = 1 SPACE PER 222 G.L.A.
LABORATORY = 1 SPACE PER 700 G.L.A.
TOTAL OFFICE PARKING REQUIRED = 78,547/222 = 345 SPACES
TOTAL LABORATORY PARKING REQUIRED = 24,100/700 = 34 SPACES
TOTAL REQUIRED PARKING SPACES = 379 SPACES

TOTAL PROPOSED PARKING SPACES = 384 SPACES INC. 10 H/C SPACES
BICYCLE PARKING PROVIDED = 18 SPACES EXISTING, PLUS 2 PROPOSED

LOADING CALCULATIONS:
LOADING REQUIRED = 5 SQ.FT. PER L.F. OF BUILDING FRONTAGE OR
360 SQ.FT. PER BUILDING
360 SQ.FT. AT EXISTING BUILDING
840 SQ.FT. AT PROPOSED TEST BUILDING

SOILS INFORMATION:
ACCORDING TO THE 2004 NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR OAKLAND COUNTY, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:
10C - MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES

- CITY OF NOW FIRE DEPARTMENT NOTES:**
- ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
 - ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
 - 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.
- WAIVER REQUEST:**
ALONG THE NORTH PROPERTY LINE ADJACENT TO THE PROPOSED TEST BUILDING ADDITION, THE PARKING SPACE SETBACK IS 12 FEET, NOT THE REQUIRED 20 FEET. THE DISTANCE BETWEEN THE PARKING SPACES ON THE ADJACENT PROPERTY AND THE PROPOSED TEST BUILDING DRIVE AISLE IS 31 FEET. A WAIVER IS REQUESTED FOR THIS CONDITION.

811
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NORTHERN EQUITIES GROUP
39000 COUNTRY CLUB DRIVE
FARMINGTON HILLS, MICHIGAN 48331
OVERALL SITE PLAN
DAIFUKU TEST BUILDING
30160 CABOT DRIVE
CITY OF NOW, OAKLAND COUNTY, MICHIGAN 48377

ORIGINAL ISSUE DATE:
FEBRUARY 18, 2019
PEA JOB NO: 2019-086
SCALE: 1" = 40'
DRAWING NUMBER:
C-10

NOT FOR CONSTRUCTION

DEC. TREE PLANT LIST:

No more than 10% of any genus and 10% of any species
 > THAN 200 TREES

QTY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC	COMMENT	REPLACEMENT TREE SPECIES, GENUS	10%	10%
3	AR3	Red Maple	Acer rubrum	3" Cal.	S&B	Native		10%	10%
3	CA3	American Hornbeam	Cornus canadensis	3" Cal.	S&B	Native		4%	4%
3	FB3	American Beech	Fagus grandifolia	3" Cal.	S&B	Native		10%	10%
3	GT3	Shiny Hornbeam	Opulus laevis	3" Cal.	S&B	Native		10%	10%
3	L73	Hop Tree	Elaeagnus altissima	3" Cal.	S&B	Native		4%	4%
3	NS3	Black Gum	Nyssa sylvatica	3" Cal.	S&B	Native		4%	4%
1	OV3	American Hophornbeam	Ostrya virginiana	3" Cal.	S&B	Native		2%	2%
3	PO3	American Sycamore	Platanus occidentalis	3" Cal.	S&B	Native		10%	10%
3	OB3	Swamp White Oak	Quercus bicolor	3" Cal.	S&B	Native		8%	8%
4	OM3	Bur Oak	Quercus macrocarpa	3" Cal.	S&B	Native		8%	8%
3	SR3	Japanese Tree Lilac	Syringa reticulata	3" Cal.	S&B	Non-Native		8%	8%
3	TA3	American Linden	Tilia americana	3" Cal.	S&B	Native		8%	8%
4	TE3	Crimson Linden	Tilia crumena	3" Cal.	S&B	Non-Native		8%	8%
3	UF3	Fraser Elm	Ulmus 'Fraseri'	3" Cal.	S&B	Non-Native		8%	8%
48	TOTAL DEC. TREES								

SHRUB PLANT LIST:

QTY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
8	JH6	Haze Columbian Juniper	Juniperus chinensis 'Hetzl Columbian'	6"	S&B
12	VD36	Blue Muffin Viburnum	Viburnum dentatum 'Chisness'	36" Ht.	Cont.

NOTES PER SITE OF WORK:

PLANT MATERIAL SHALL NOT BE PLANTED WITHIN 4' OF PROPERTY LINE.

NO TREES SHALL BE PLANTED CLOSER THAN 10' FROM OVERHEAD UTILITY, 10' FROM FIRE HYDRANT, CATCH BASIN OR MANHOLE, 5' FROM UNDERGROUND UTILITIES AND 7' OFF BACK OF CURB.

NO TREE TO BE LOCATED IN FRONT OF ANY SIGN OR SIGNAGE UNLESS FIELD AGENT TREES AS NECESSARY.

ALL TRANSFORMER AND UTILITY BODIES TO BE EXPOSED FOR ROW CITY DETAIL AND IN THE CASE OF ADDITIONAL BODIES TO BE EXPOSED PER CITY DETAIL.

EXISTING DAMAGED TREES WILL BE REMOVED AND REPLACED WITH NEW PLANTINGS PER CITY'S APPROVAL AND ORIGIN.

TAX PARCEL ID No: 22-00000000
 "TAMUKU NORTH AMERICAN HOLDING CO"
 #30100 CABOT DR.

LANDSCAPE CALCULATIONS:
 PER CITY OF ROW ZONING ORDINANCE, ZONED O-S-1, OFFICE SERVICE TECHNOLOGY

INTERIOR PARKING LOT LANDSCAPE:
 REQUIRED:
 A SF OF PARKING SPACE = 46,277 ÷ 7.08 = 3,471
 CSF OF ADDITIONAL PARKING = 0.2 X 18 = 0
 A+C = 0 + 3,471 + 0 = 3,471 SF OF LANDSCAPING REQUIRED
 E: 0.70% 3,471 / 200 = 17.3 CANOPY TREES REQUIRED

PROVIDED: 3,781 SF OF LANDSCAPING
 18 CANOPY TREES

VEHICULAR PERIMETER PARKING LOT:
 REQUIRED: 1 TREE PER 35 SF OF PAVED VEHICULAR PERIMETER
 1044 LF OF PARKING LOT / 35 SF = 29.8 TREES REQUIRED

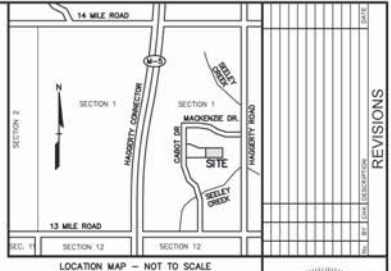
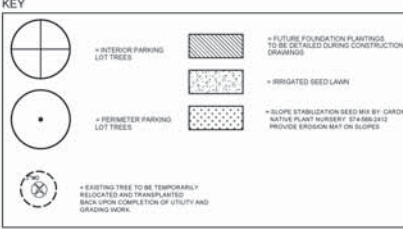
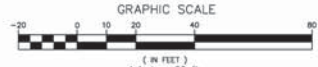
PROVIDED: 30 CANOPY TREES

FOUNDATION PLANTINGS:
 REQUIRED: 720 LF BUILDING PERIMETER x 8 = 5,760 SF FOUNDATION PLANTINGS

PROVIDED: 5,854 SF FOUNDATION PLANTINGS

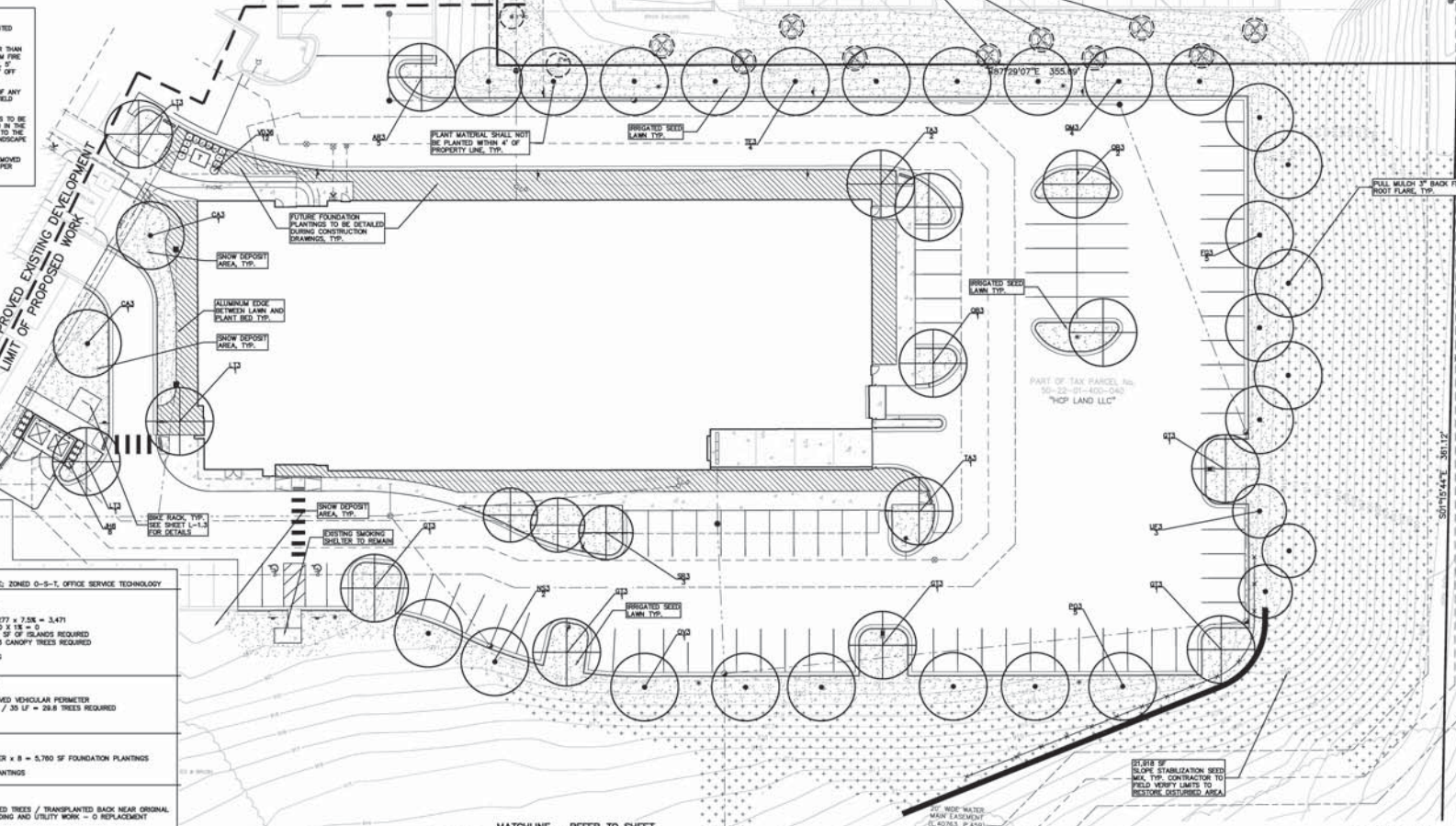
REPLACEMENT TREES:
 REQUIRED: 15 TEMPORARILY RELOCATED TREES / TRANSPORTED BACK NEAR ORIGINAL LOCATION FOLLOWING GRADING AND UTILITY WORK = 0 REPLACEMENT TREES REQUIRED

PROVIDED: 15 TEMPORARILY RELOCATED TREES / TRANSPORTED BACK TO ORIGINAL LOCATION FOLLOWING GRADING AND UTILITY WORK = 0 REPLACEMENT TREES PROVIDED



CONTRACTOR TO REMOVE (15) TREES BETWEEN TOONUM AND DAPIRUI PROPERTIES AND STOCKPILE IN TEMPORARY LOCATION DURING INSTALLATION OF UNDERGROUND UTILITY AND GRADING. TREES ARE TO BE TEMPORARILY REAPED WITH GUYLAP AND SEALED IN TEMPORARY LOCATION. CONTRACTOR IS RESPONSIBLE FOR REASONABLE CARE WHILE IN TEMPORARY LOCATION. WATER ONLY, IF AS NEEDED TO KEEP IN GOOD HEALTHY CONDITION. ONCE UTILITY AND GRADING WORK IS COMPLETE, TREES ARE TO BE REINSTALLED AS CLOSE TO ORIGINAL LOCATION AS POSSIBLE (OUTSIDE OF NEW UTILITY LINE AND EASEMENT). AT TWO YEAR WARRANTY PERIOD IS REQUIRED AND IF ANY DIE WITHIN THAT ONE YEAR FROM THE DATE OF REINSTALLATION, THEY MUST BE REPLACED WITH THE SAME SIZE AND TYPE REMOVED.

PREVIOUSLY APPROVED EXISTING DEVELOPMENT
 LIMIT OF PROPOSED WORK



MATCHLINE - REFER TO SHEET L-1.2 FOR CONTINUATION

NOT FOR CONSTRUCTION

STATE OF MICHIGAN
 JEFFREY J. MESSER
 LANDSCAPE ARCHITECT
 10000 WOODLAND DRIVE, SUITE 100
 FARMINGTON HILLS, MICHIGAN 48331
 (248) 859-1872

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 F: 248.898.1544
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NORTHERN EQUITIES GROUP
 3000 COUNTY CLUB DRIVE
 FARMINGTON HILLS, MICHIGAN 48331
 PRELIMINARY LANDSCAPE PLAN
 DALIFUKU TEST BUILDING
 30100 CABOT DRIVE, DALIFUKU AND COUNTY, MICHIGAN 48337

DES: JTS, DNL, JRG, EOR, KTR, JPS
 DATE: 02/18/2019 3:15 P.M.

ORIGINAL ISSUE DATE:
 FEBRUARY 18, 2019
 PEA JOB NO: 2019-086
 SCALE: 1" = 20'
 DRAWING NUMBER:
 L-1.1

PLANNING REVIEW



PLAN REVIEW CENTER REPORT

March 18, 2019 (revised 4-10-19)

Planning Review

Daifuku
JSP 19-13

PETITIONER

Northern Equities Group

REVIEW TYPE

Preliminary Site Plan

PROPERTY CHARACTERISTICS

Section	1	
Site Location	North of Thirteen Mile Road; East of Cabot Drive	
Site School District	Walled Lake Community School District	
Site Zoning	OST: Office Service Technology	
Adjoining Zoning	North	OST: Office Service Technology
	East	OST: Office Service Technology
	West	OST: Office Service Technology
	South	OST: Office Service Technology
Current Site Use	Vacant	
Adjoining Uses	North	Adams Tech Center South (Office)
	East	Vacant
	West	Vacant
	South	Magna Seating of America (Office)
Site Size	10.285 Acres	
Plan Date	February 18, 2019	

PROJECT SUMMARY

The applicant is proposing to construct on the east side of the property a 1-story building, consisting of 24,100 square feet and associated site improvements for research and testing use for Daifuku. The applicant previously received approval and constructed a 76,549 square foot office building on the western portion of the property.

RECOMMENDATION

Approval of the ***Preliminary Site Plan is recommended.*** The plan conforms to the requirements of the Zoning Ordinance, with additional details required at the time of Final Site Plan submittal. Façade and Wetland reviews do not recommend approval at this time, and modifications to the plans are required. **Planning Commission approval of the Preliminary Site Plan and Storm Water Management Plan is required.**

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 charts for information pertaining to

ordinance requirements. Items in **bold** below must be addressed and incorporated as part of the stamping set submittal.

1. Parking Setbacks (Sec 3.1.23.D) 20 ft. minimum required. **A waiver is requested for the 12 foot parking setback along north property line.** The Planning Commission may modify setback requirements in those instances where it determines that such modification may result in improved use of the site and/or in improved landscaping; provided, however, that such modification of the setback requirements does not reduce the total area of setback on a site below the minimum setback area requirements of this Section. **Additional setback area is provided on the south side of the proposed building, so the overall minimum setback area is exceeded for the site.**
2. Barrier Free Parking: Currently there are 2 barrier free spaces proposed only at the south entrance. Clarify which entrances will serve as public entrances. **Barrier free spaces should be provided at all accessible entrances.**
3. End Islands (Sec. 5.3.12): All parking end islands must be three feet shorter than the adjacent parking space. **Provide the dimensions to verify conformance.**
4. Dumpster Enclosure (Sec. 21-145.(c)): Refer to façade review for clarification requested for dumpster enclosure material.
5. Min. Illumination (Sec. 5.7.3.k): A minimum of 1.0 foot candles is required near building entrances of frequent use. **Provide photometric data for all walkways and building entrances. Address other lighting comments from the attached chart.**
6. Economic Impact: If known, the applicant is asked to provide economic impact information, such as the total cost of the proposed building and site improvements, and the number of anticipated jobs created (during construction and after building is occupied). **Provide the required information with the response letter.**

Other Reviews

- a. Landscape Review: Landscape recommends approval. Refer to review letter for more comments.
- b. Traffic Review: Additional comments to be addressed with Final Site Plan submittal. Traffic recommends approval.
- c. Engineering Review: Additional comments to be addressed with Final Site Plan submittal. Engineering recommends approval.
- d. Wetland/Woodland Review: Wetland consultant recommends approval. See review letter for further details. (Updated 3-28-19 to reflect revisions by applicant).
- e. Facade Review: Façade recommends approval. See review letter for further details. (Updated 4-10-19 to reflect revisions by applicant).
- f. Fire Review: Fire recommends approval.

NEXT STEP: SITE PLAN REVISIONS and PLANNING COMMISSION

All reviewers, except Wetlands and Façade, are recommending approval or conditional approval of the Preliminary Site Plan. Refer to letters for more details. The plans should be revised to address the concerns outlined in the review letters in order to gain approval from all reviewers before the Planning Commission for public hearing. **To be placed on the Planning Commission agenda for April 17, 2019, please provide the requested information or modifications from the Façade and Wetland reviews in pdf format by Tuesday, March 26.**

If found acceptable, you will then be asked to provide via email the following **by 4pm on April 10, 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.**

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, plans addressing the comments in all of the staff and consultant review letters should be submitted electronically for informal review and approval prior to printing Stamping Sets. A letter from either the applicant or the applicant's representative addressing comments in this and other review letters and associated charts is to be submitted with the electronic stamping set. This letter should address 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 **9 size 24" x 36" copies with original signature and original seals on the cover sheet (subsequent pages may use electronic seal with signature)**, to the Community Development Department for final Stamping Set approval.

If required, drafts for all legal documents with a legal transmittal are to be submitted along with stamping sets.

SITE ADDRESSING

The building would require a new address. The applicant should contact the Building Division for an address prior to applying for a building permit. Building permit applications cannot be processed without a correct address. The address application can be found on the Internet at www.cityofnovi.org under the forms page of the Community Development Department.

Please contact Brian Riley [248.347.0438] in the Community Development Department with any specific questions regarding addressing of sites.

SIGNAGE

Exterior Signage is not regulated by the Planning Division or Planning Commission. Sign permit applications that relate to construction of a new building or an addition to an existing building may submitted, reviewed, and approved as part of a site plan application. Proposed signs shall

be shown on the preliminary site plan. Alternatively, an applicant may choose to submit a sign application to the Building Official for administrative review. Following preliminary site plan approval, any application to amend a sign permit or for a new or additional sign shall be submitted to the Building Official. Please contact the Ordinance Division 248.735.5678 for information regarding sign permits.

PRE-CONSTRUCTION MEETING

Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees, and permits that must be issued before a Pre-Con can be scheduled. 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 248.347.0484 or lbell@cityofnovi.org.



Lindsay Bell – Planner



PLANNING REVIEW CHART: Office Service Technology (OST)

Review Date: March 15, 2019
Review Type: Preliminary Site Plan
Project Name: **DAIFUKU Test Building**
Plan Date: February 18, 2019
Prepared by: Lindsay Bell, Planner
E-mail: lbell@cityofnovi.org; **Phone:** (248) 347-0484

Items in **Bold** need to be addressed by the applicant before next submittal

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan (adopted August 25, 2010)	Office research development and technology	Office	Yes	
Area Study	The site does not fall under any special category	NA	Yes	
Zoning (Effective December 25, 2013)	OST: Office Service and Technology	OST	Yes	
Uses Permitted (Sec 3.1.23.B & C)	Sec. 3.1.23.B. - Principal Uses Permitted. Sec. 3.1.23.C. - Special Land Uses Permitted.	Office/Research	Yes	The Preliminary Site Plan will require Planning Commission approval
Height, bulk, density and area limitations (Sec 3.1.23.D)				
Frontage on a Public Street. (Sec. 5.12) Access To Major Thoroughfare (Sec. 5.12)	Frontage on a Public Street is required	The site has frontage and access to Cabot Drive	Yes	
Minimum Zoning Lot Size for each Unit in Ac (Sec 3.6.2.D)	Except where otherwise provided in this Ordinance, the minimum lot area and width, and the maximum percent of		NA	
Minimum Zoning Lot Size for each Unit: Width in Feet (Sec 3.6.2.D)	lot coverage shall be determined on the basis of off-street parking, loading, greenbelt screening, yard setback or usable open space		NA	
Maximum % of Lot Area Covered (By All Buildings)	(Sec 3.6.2.D)	24,100 Square feet + 76,547 sf existing; 14%	NA	
Building Height (Sec. 3.1.23.D &	46 feet or 3 stories	Maximum height: 24' 8" (1 story)	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Sec. 3.20.1)	Additional height can be proposed if met with the conditions listed in Section 3.20			
Building Setbacks (Sec 3.1.23.D)				
Front west @ Cabot Drive	50 ft.	54 ft.	Yes	
Rear east	50 ft.	216 ft.	Yes	
Side (north)	50 ft.	50 ft.	Yes	
Side (south)	50 ft.	208 ft.	Yes	
Parking Setback (Sec 3.1.23.D) Refer to applicable notes in Sec 3.6.2				
Front west @ Cabot Drive	20 ft.	Already constructed	NA	Waiver for parking setback would be required for the north side
Rear east	20 ft.	73 ft.	Yes	
Side (north)	20 ft.	12 ft	No	
Side (south)	20 ft.	134 ft.	Yes	
Note To District Standards (Sec 3.6.2)				
Exterior Side Yard Abutting a Street (Sec 3.6.2.C)	All exterior side yards abutting a street shall be provided with a setback equal to front yard.	No exterior side yards	NA	
Off-Street Parking in Front Yard (Sec 3.6.2.E)	Off-street parking is allowed in front yard	Front yard parking already existing	Yes	
Distance between buildings (Sec 3.6.2.H)	It is governed by sec. 3.8.2 or by the minimum setback requirements, whichever is greater	Second building added to the site: $((73.19 + 86.37) + 2(31.33 + 24.67)) = 45.26$ 50 feet provided	Yes	
Wetland/Watercourse Setback (Sec 3.6.2.M)	A setback of 25ft from wetlands and from high watermark course shall be maintained	Wetlands do not exist on site	Yes	
Parking setback screening (Sec 3.6.2.P)	Required parking setback area shall be landscaped per sec 5.5.3.	A landscape plan is provided	Yes	Please refer to landscape review for additional information
Modification of parking setback requirements (Sec 3.6.2.Q)	The Planning Commission may modify setback requirements in those instances where it determines that such modification may result in improved use of the site and/ or in improved landscaping; provided, however, that such	Parking setback on the north does not conform to the minimum required A significant area of setback is provided on the south side, so total area of setback is well above the minimum	No	Applicant should request a waiver for absence of parking setback. See letter for details Provide justification to make a determination.

Item	Required Code	Proposed	Meets Code	Comments
	modification of the setback requirements does not reduce the total area of setback on a site below the minimum setback area requirements of this Section			
OST District Required Conditions (Sec 3.20)				
Additional Height (Sec 3.20.1)	Properties north of Grand River Avenue: Max height: 65 ft with additional setbacks of 2 ft for every 1 ft in excess of 46 ft.	Maximum height: 25'	Yes	
Loading and Unloading Screening (Sec 3.20.2.A)	Truck service areas and overhead truck loading/unloading doors shall be totally screened from view from any public right-of-way, including freeway right-of-way, and adjacent properties, except for required driveway access.	The loading dock is proposed in the rear side of the building.	Yes	
Required Parking Calculation (Sec 3.20.2.B)	A floor plan indicating different uses, usable floor space used for calculating parking should be shown on the plans	Floor plan included. The entire floor appears to be usable area.	Yes	
Additional conditions for permitted uses in 3.1.23.B.ii – v (Sec 3.20.2.C)	Uses permitted under subsections 3.1.23.B.ii - v shall not be located on property sharing a common boundary with property zoned for R-A, R-1, R-2, R-3, R-4 or MH district use unless conditions in section 3.20.2.C are met	Research, design and development appear to be part of the proposed use description. But the property is not located adjacent to the zoning districts mentioned	NA	
Outdoor storage (Sec 3.20.2.D)	The outdoor storage of goods or materials shall be prohibited.	Note added on sheet C 4.0 for clarification	Yes	
Parking, Loading and Dumpster Requirements				
Number of Parking Spaces Professional Office (Sec.5.2.12.D)	- For buildings up to 100,000 square feet, 1 space per 222 SF GLA - Lab/warehouse: 1 space/700 sf Usable	Total Proposed = 394 spaces	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Industrial/research (Sec. 5.2.12.E)	area 76,547sf/222= 345 24,100 sf/700 = 34 spaces 379 spaces required			
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	Appear to be in conformance	Yes	See traffic letter for details
Parking stall located adjacent to a parking lot entrance (public or private) (Sec. 5.3.13)	- shall not be located closer than twenty-five (25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer	Not applicable	NA	
End Islands (Sec. 5.3.12)	- 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	End Islands are proposed wherever applicable	Yes	Include dimensions on the plan. Refer to Traffic comments. All parking end islands must be three feet shorter than the adjacent parking space.
Barrier Free Spaces <i>Barrier Free Code</i>	For total 301 to 400 = 8 spaces including 2 van accessible	10 barrier Free parking provided (2 provided at new building, south entrance)	Yes	Clarify which entrance will serve as the public entrance; barrier free spaces should be located at all public entrances
Barrier Free Space Dimensions <i>Barrier Free Code</i>	- 8' wide with an 8' wide access aisle for van accessible spaces - 8' wide with a 5' wide access aisle for regular accessible spaces	Two types of accessible spaces are provided on the site	Yes	
Barrier Free Signs <i>Barrier Free Code</i>	One sign for each accessible parking space.	One sign is proposed for each space	Yes?	Refer to Traffic review for additional comments

Item	Required Code	Proposed	Meets Code	Comments
Minimum number of Bicycle Parking (Sec. 5.16.1)	<u>General Offices:</u> Five (5) percent of required automobile spaces, minimum two (2) spaces For 379 spaces, 19 spaces	Provision for 20 bike racks is provided – 2 located behind the dumpster enclosure between the existing and proposed building	Yes	Bike Rack detail on sheet L-1.3 indicates a rack that holds 5 bikes – verify whether bike pad dimensions proposed will accommodate, update plans as needed
Bicycle Parking General requirements (Sec. 5.16)	<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 	<ul style="list-style-type: none"> - Proposed within 120 feet from the entrance - Provided in three locations - Loop bike rack is proposed 	Yes	
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	Alternate layout is proposed due to loop style bike racks. The layout appears to be acceptable	Yes	
Loading Spaces Sec. 5.4.1	<ul style="list-style-type: none"> - Within the OS districts, loading space shall be provided in the rear yard or - in the case of a double frontage lot, in the interior side yard, - in the ratio of five (5) square feet per front foot of building up to a total area of three-hundred sixty (360) square feet per building. 	Loading Area in the rear yard 840 square feet is provided at text building	Yes	
Dumpster Sec 4.19.2.F	<ul style="list-style-type: none"> - 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 	Dumpster located in the rear yard – between the two buildings Farther than 10 ft. Outside the parking setback	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	<p>than 10 ft, from property line.</p> <ul style="list-style-type: none"> - Away from Barrier free Spaces 	<p>Farther away from the barrier free spaces</p>		
<p>Dumpster Enclosure <i>Sec. 21-145. (c) Chapter 21 of City Code of Ordinances</i></p>	<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - An enclosure is shown - Masonry wall to match building is proposed with cedar gate - Wall is 6 ft. tall - Note states that dumpster cannot be more than 5' tall 	Yes	<p>Refer to architectural review for comments on dumpster enclosure</p>
<p>Exterior lighting <i>Sec. 5.7</i></p>	<p>Photometric plan and exterior lighting details needed at time of Final Site Plan submittal</p>	<p>A lighting plan is provided</p>	Yes	<p><u>Refer to Lighting comments further below</u></p>
<p>Roof top equipment and wall mounted utility equipment <i>Sec. 4.19.2.E.ii</i></p>	<ul style="list-style-type: none"> - 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 	<p>Roof top equipment is proposed</p>	Yes	
<p>Roof top appurtenances screening</p>	<p>Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.</p>	<p>Roof top equipment screening is proposed – flush metal panels</p>	Yes	
Non-Motorized Facilities				
<p>Article XI. Off-Road Non-Motorized Facilities</p>	<p>A 6 foot sidewalk is required along collector and arterial roads</p>	<p>A 6 foot side walk is provided along Cabot drive</p>	Yes	
<p>Pedestrian Connectivity</p>	<p>Assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets</p>	<p>Sidewalks are proposed throughout the site for convenient and safe pedestrian access</p>	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Building Code and Other Requirements				
Building Code	Building exits must be connected to sidewalk system or parking lot.	All exits are connected to internal sidewalk	Yes	
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Legal description for the new parcel is provided	Yes	
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).	Provided	Yes	
Economic Impact	<ul style="list-style-type: none"> - Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known) 	Information Not Provided	No	Please provide the information in the response letter prior to Planning Commission meeting
Development/ Business Sign & Street addressing	<ul style="list-style-type: none"> - Signage if proposed requires a permit. - The applicant should contact the Building Division for an address prior to applying for a building permit. 	Information Not Provided		<p>Indicate the location of any proposed signage for reference purpose</p> <p>Apply for lot addressing prior to stamping set approval</p> <p><u>For further information contact Maureen Underhill 248-735-5602.</u></p>
Project and Street naming	Some projects may need approval from the Street and Project Naming Committee.	Not required	NA	<u>For approval of project and street naming contact Hannah Smith at 248-735-0579</u>
Property Split	The proposed property split must be submitted to the Assessing Department for	Property combination has occurred	NA	

Item	Required Code	Proposed	Meets Code	Comments
	approval.			
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	A lighting and photometric plan is provided	Yes	
Lighting Plan (Sec. 5.7.A.1)	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures	A lighting and photometric plan is provided	Yes	
Lighting Plan (Sec.5.7.A.2)	Specifications for all proposed & existing lighting fixtures	Cut sheets are included	Yes	
	Photometric data	Provided only for pavement and property line	No	
	Fixture height	32.5 ft	Yes	
	Mounting & design	Pole lights, wall packs	Yes	
	Glare control devices	Provided	Yes	
	Type & color rendition of lamps	LED	Yes	
	Hours of operation	Not provided	No	
	Photometric plan illustrating all light sources that impact the subject site, including spill-over information from neighboring properties		NA	
Required Conditions (Sec. 5.7.3.A)	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses	Not adjacent to residential districts. 32.5 ft	Yes	
Required Conditions (Sec. 5.7.3.B)	<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 		No	Provide notes on the plan

Item	Required Code	Proposed	Meets Code	Comments
Required Conditions (Sec.5.7.3.E)	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1	Not provided	No	Give overall calculation for all areas being illuminated (i.e., exclude zero values)
Required Conditions (Sec. 5.7.3.F)	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps	LED lights are proposed	Yes	
Min. Illumination (Sec. 5.7.3.k)	Parking areas: 0.2 min	0.4 min	Yes	Indicate the entrances with frequent and infrequent uses to verify conformance or provide 1.0 min at all entrances; Provide photometric data up to the building and all sidewalks – include each line item in the statistics chart
	Loading & unloading areas: 0.4 min	0.7 min	Yes	
	Walkways: 0.2 min	Not shown	No	
	Building entrances, frequent use: 1.0 min	Not shown	No	
	Building entrances, infrequent use: 0.2 min	Not shown	No	
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	0.5 Maximum	Yes	
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	Does not abut residential district	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 15, 2019

Engineering Review

Daifuku Test Building Expansion
JSP19-0013

Applicant

Daifuku North America Holding Co.

Review Type

Preliminary Site Plan

Property Characteristics

- Site Location: West of Haggerty, East of Cabot Drive
- Site Size: 10.29 Acres
- Plan Date: 02/18/2019
- Design Engineer: PEA, Inc.

Project Summary

- Construction of an approximately 24,000 square-foot test building and associated parking. Site access would be provided via an existing entrance off of Cabot Drive.
- Water service would be provided by an 8-inch extension from the existing 8-inch water main to the west of the proposed test building. A 2-inch domestic lead and a 8-inch fire lead would be provided to serve the building, along with an additional hydrant.
- Sanitary sewer service would be provided by a 6-inch extension from the existing 8-inch sanitary sewer north of the proposed test building.
- Storm water would be collected by a single storm sewer collection system and conveyed/discharged to detention basin 'B' or 'C'.

Recommendation

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

Comments:

The Preliminary Site Plan meets the general requirements of the design and construction standards as set forth in Chapter 11 of the City of Novi Codified Ordinance, the Storm Water Management Ordinance and the Engineering Design Manual with the following items that must be addressed at the time of Final Site Plan submittal (further engineering detail will be required at the time of the final site plan submittal):

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

General

1. Provide a note along with the traffic control sign table stating all traffic signage will comply with the current MMUTCD standards.
2. Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Division for review.
3. Generally, all proposed trees shall remain outside utility easements. Where proposed trees are required within a utility easement, the trees shall maintain a minimum 5-foot horizontal separation distance from any existing or proposed utility. All utilities shall be shown on the landscape plan, or other appropriate sheet, to confirm the separation distance.
4. Indicate the typical foundation depth for the light poles to verify that no conflicts with utilities will occur. Light poles in a utility easement will require a License Agreement.
5. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal. They can be found on the City website (www.cityofnovi.org/DesignManual).

Water Main

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

Sanitary Sewer

9. Provide a sanitary sewer monitoring manhole, unique to this site, within a dedicated access easement or within the road right-of-way. If not in the right-of-way, provide a 20-foot wide access easement to the monitoring manhole **from the right-of-way** (rather than a public sanitary sewer easement).

10. Note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and **mains shall be SDR 26.**

Storm Sewer

11. Provide a four-foot deep sump and an oil/gas separator in the **last storm structure** prior to discharge off- site.
12. A minimum cover depth of 3 feet shall be maintained over all storm sewers.
13. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan.
14. Provide storm sewer profiles and illustrate all pipes intersecting storm structures.

Storm Water Management Plan

15. The Storm Water Management Plan for this development shall be in accordance with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual.
16. Provide details of the original Storm Water Management Plan for the entire Cabot Drive development.
17. Provide calculations verifying the post-development runoff rate directed to the proposed receiving drainage course does not exceed the pre-development runoff rate for the site.

Paving & Grading

18. Detectable warning plates are required at all barrier free ramps, hazardous vehicular crossings and other areas where the sidewalk is flush with the adjacent drive or parking pavement. The barrier-free ramps shall comply with current MDOT specifications for ADA Sidewalk Ramps. Provide the latest version of the MDOT standard detail for detectable surfaces.
19. The end islands shall conform to the City standard island design, or variations of the standard design, while still conforming to the standards as outlined in Section 2506 of Appendix A of the Zoning ordinance (i.e. 2' minor radius, 15' major radius, minimum 8' wide, 3' shorter than adjacent 19' stall).
20. Provide a line designation representing the effective 19-foot stall length for 17-foot perimeter stalls.

Flood Plain

21. A City of Novi floodplain use permit will be required for the proposed floodplain impact. This should be submitted as soon as possible. Contact the Building Department for submittal information. An MDEQ floodplain use permit may also be required prior to site plan approval.
22. Show the limits of the 100-year flood plain and floodway, if applicable, per the current FIRM maps (2006).

Soil Erosion and Sediment Control

23. A SESC permit is required. A full review has not been completed at this time. The review checklist detailing all SESC requirements is attached to this letter.

An informal review will be completed with the Final Site Plan if SESC plans are included in the submittal.

Off-Site Easements

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

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

25. An itemized construction cost estimate must be submitted to the Community Development Department at the time of Final Site Plan submittal for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and shall not include any costs associated with construction of the building or any demolition work. **The cost estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving, right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pretreatment structure and restoration).
26. Draft copies of any off-site utility easements, a recent title search, and legal escrow funds must be submitted to the Community Development Department for review and approved by the Engineering Division and the City Attorney prior to getting executed.

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

27. A draft copy of the maintenance agreement for the storm water facilities, as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department with the Final Site Plan. Once the form of the agreement is approved, this agreement must be approved by City Council and shall be recorded in the office of the Oakland County Register of Deeds.
28. A draft copy of the 20-foot wide easement for the water main to be constructed on the site must be submitted to the Community Development Department.
29. A draft copy of the 20-foot wide easement for the sanitary sewer to be constructed on the site must be submitted to the Community Development Department.
30. Executed copies of any required off-site utility easements must be submitted to the Community Development Department.

The following must be addressed prior to construction:

31. A pre-construction meeting shall be required prior to the commencement of any site work. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).

32. A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting (no application fee).
33. 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.
34. 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.
35. 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.
36. A permit for sanitary sewer construction must be obtained from the MDEQ. This permit application must be submitted through the Water and Sewer Senior Manager after the sanitary sewer plans have been approved.
37. Construction Inspection Fees will be determined once the construction cost estimate is submitted and must be paid prior to the pre-construction meeting.
38. A storm water performance guarantee, equal to 1.2 times the amount required to complete storm water management and facilities (as specified in the Storm Water Management Ordinance) must be posted with Community Development.
39. A street sign financial guarantee in an amount to be determined (\$400 per traffic control sign proposed) must be posted with Community Development.
40. Permits for the construction of the retaining wall, if it exceeds 48 inches in height (measured from bottom of the footing to top of the wall), must be obtained from the Community Development Department (248-347-0415).

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

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



Kate Richardson, EIT
Plan Review Engineer

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

LANDSCAPE PLAN



PLAN REVIEW CENTER REPORT

February 27, 2019

Preliminary Site Plan - Landscaping

Daifuku Test Building

Review Type

Preliminary Site Plan Landscape Review

Job

JSP19-0013

Property Characteristics

- Site Location: 30100 Cabot Drive
- Site Acreage: 10.3 acres
- Site Zoning: OST
- Adjacent Zoning: OST
- Plan Date: 2/18/2019

Ordinance Considerations

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

Recommendation

This project is **recommended for approval for Preliminary Site Plan**. No landscape waivers are required. Please make the changes noted below on Final Site Plans.

Ordinance Considerations

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

Provided.

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

1. Provided.
2. The island at the southeast corner of the building does not appear to be wide enough to provide 10 feet between the tree and hydrant, 4 feet between the tree and sidewalk, and 3 feet between the tree and curb. **Please adjust the island size and/or hydrant location to allow all required trees to be planted with the required spacing.**

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

1. **Please provide an existing conditions sheet that shows all trees on and within 50 feet of the project area.**
2. **Please clearly show all existing trees to be removed and to be saved.**
3. **Please provide tree fencing around all trees to remain that aren't being transplanted.**

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

Property is not adjacent to Residential.

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

The project does not front on any public right-of-way so no buffering is required.

Industrial Subdivision Landscape Requirements (LDM 2.b.)

The project does not front on any interior drive, so those requirements do not apply.

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

1. Based on the vehicular use areas 3,471 sf of islands and 17 canopy trees are required. 3,791 sf of islands and 18 trees are provided.
2. **There are 4 islands and endcap areas counted toward the requirement that don't meet the 200sf per tree requirement. Please enlarge those areas to at least 200sf each.**
3. **Please substitute a tree species that will meet the requirements for a deciduous canopy tree (minimum mature height of 30 feet and mature canopy width of 20 feet) for the Japanese Tree Lilacs.**

Parking Lot Perimeter Canopy Trees (Zoning Sec. 5.5.3.C.(3) Chart footnote)

1. Based on the perimeter, 30 trees are required and 30 trees are provided.
2. **Please move the 2 trees between the buildings to within 15 feet of the back of curb.**
3. **If possible, please space out the perimeter trees more so the trees on the east end aren't as crowded.**

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

Please provide screening shrubs to block the view of the loading zone from Haggerty Road and the property to the south.

Building Foundation Landscape (Zoning Sec 5.5.3.D.)

1. Based on the building perimeter, 5,760sf of foundation landscape area is required, and 5,954sf will be provided, based on the shaded areas shown on L-1.1.
2. Greater than 60% of the frontage facing Haggerty Road will be landscaped, at the foundation.

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

1. Provided.
2. 12 of 16 species used (75%) are native to Michigan.
3. The tree diversity meets the standards of Landscape Design Manual Section 4.
4. **Please add a summary of costs for the project, including seed, sod and mulch.**

Planting Notations and Details (LDM)

Provided.

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

1. The site's stormwater will be treated by an existing basin, so no landscaping is required. If any changes to the pond are required, the modified area must be landscaped.
2. **Please add a survey note regarding Phragmites on the site and, if found, a plan for its complete eradication.**

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.8.e.(6))

Areas are provided.

Transplanted Trees (LDM.9.e.)

Please add a note stating that any species substitutions for transplanted trees shall be

approved in writing by the City Landscape Architect before planting.

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.

A handwritten signature in black ink, appearing to read "Rick Meader". The signature is written in a cursive, flowing style.

Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART – PRELIMINARY SITE PLAN

Review Date: February 26, 2019
Project Name: JSP19 – 0013: DAIFUKU TEST BUILDING
Plan Date: February 18, 2019
Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org;
 Phone: (248) 735-5621

Items in **Bold** need to be addressed by the applicant before approval of the Final Site Plan.

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requirements (LDM (2))				
Landscape Plan <i>(Zoning Sec 5.5.2, LDM 2.e.)</i>	<ul style="list-style-type: none"> ▪ New commercial or residential developments ▪ Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. ▪ 1"=20' minimum with proper North. Variations from this scale can be approved by LA ▪ Consistent with plans throughout set 	Scale: 1"=20'	Yes	
Project Information <i>(LDM 2.d.)</i>	Name and Address	Yes	Yes	
Owner/Developer Contact Information <i>(LDM 2.a.)</i>	Name, address and telephone number of the owner and developer or association	Yes	Yes	
Landscape Architect contact information <i>(LDM 2.b.)</i>	Name, Address and telephone number of RLA	Yes	Yes	
Sealed by LA. <i>(LDM 2.g.)</i>	Requires original signature	Yes	Yes	<u>Need for Final Site Plans</u>
Miss Dig Note (800) 482-7171 <i>(LDM.3.a.(8))</i>	Show on all plan sheets	Yes	Yes	
Zoning <i>(LDM 2.f.)</i>	Include all adjacent zoning	<u>On Sheet C-1.0</u> Parcel: OST North South, East West: OST	Yes	
Survey information <i>(LDM 2.c.)</i>	<ul style="list-style-type: none"> ▪ Legal description or boundary line survey ▪ Existing topography 	<ul style="list-style-type: none"> ▪ Legal description on Sheet C-1.1 ▪ Topographic survey on Sheet C-2.1 	Yes	

Item	Required	Proposed	Meets Code	Comments
Existing plant material Existing woodlands or wetlands <i>(LDM 2.e.(2))</i>	<ul style="list-style-type: none"> Show location type and size. Label to be saved or removed. Plan shall state if none exists. 	Existing trees along the north side of the site are shown, but not the south side.	No	<ol style="list-style-type: none"> Please show all trees in the vicinity of the project to be saved and removed. Saved trees should be shown on Landscape Plan.
Soil types <i>(LDM.2.r.)</i>	<ul style="list-style-type: none"> As determined by Soils survey of Oakland county Show types, boundaries 	Sheet C-1.0	Yes	
Existing and proposed improvements <i>(LDM 2.e.(4))</i>	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
Existing and proposed utilities <i>(LDM 2.e.(4))</i>	Overhead and underground utilities, including hydrants	Yes	Yes	Please clearly show and call out any existing overhead lines on landscape plan.
Proposed grading. 2' contour minimum <i>(LDM 2.e.(1))</i>	Provide proposed contours at 2' interval	Spot elevations provided on Sheet 43C-6.1	Yes	
Snow deposit <i>(LDM.2.q.)</i>	Show snow deposit areas on plan	Yes	Yes	
LANDSCAPING REQUIREMENTS				
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o.)				
General requirements <i>(LDM 1.c)</i>	<ul style="list-style-type: none"> Clear sight distance within parking islands No evergreen trees 	Yes	Yes	
Name, type and number of ground cover <i>(LDM 1.c.(5))</i>	As proposed on planting islands	Yes	Yes	Seed is indicated on islands.
General <i>(Zoning Sec 5.5.3.C.ii)</i>				
Parking lot Islands <i>(a, b. i)</i>	<ul style="list-style-type: none"> A minimum of 200 SF to qualify A minimum of 200sf unpaved area per tree planted in an island 6" curbs Islands minimum width 10' BOC to BOC 	Islands are provided and are labeled with area in SF.	No	<ol style="list-style-type: none"> Please increase area of islands at east end of building, near transformer and next to dumpster to at least 200sf to meet minimum requirement. Please label area of long island south of building.
Curbs and Parking stall reduction <i>(c)</i>	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7	Spaces around perimeter are 17' long.	Yes	

Item	Required	Proposed	Meets Code	Comments
	ft.			
Contiguous space limit (j)	Maximum of 15 contiguous spaces	14 is maximum bay length	Yes	
Plantings around Fire Hydrant (d)	No plantings with matured height greater than 12' within 10 ft. of fire hydrants	Tree in island at southeast corner of building is 10 feet away from hydrant, but only 2 feet from the sidewalk.	No	Please enlarge the island to provide proper spacing from the hydrant, curbs and sidewalk (the tree should be at least 4 feet from sidewalk and 3 feet from curb.)
Landscaped area (g)	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Yes	Yes	
Clear Zones (LDM 2.3.(5))	25 ft corner clearance required. Refer to Zoning Section 5.5.9	NA		
Category 1: For OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district (Zoning Sec 5.5.3.C.iii)				
A = Total square footage of vehicular use areas up to 50,000sf x 7.5%	<ul style="list-style-type: none"> A = x sf * 7.5 % = A sf 46,277 * 7.5% = 3471 sf 			
B = Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %	<ul style="list-style-type: none"> B = x sf * 1% = B sf (xxx - 50000) * 1% = xx sf 	NA		
Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C.iii)				
A. = Total square footage of vehicular use area up to 50,000 sf x 5%	A = x sf * 5% = A sf	NA		
B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5%	B = 0.5% x 0 sf = B SF	NA		
All Categories				
C = A+B Total square footage of landscaped islands	3471 + 0 = 3471 SF	3791 sf	No	<ol style="list-style-type: none"> A total of 602sf of the area provided is in islands less than the minimum 200sf. Please increase the area of the islands noted previously to make the islands and trees in them eligible

Item	Required	Proposed	Meets Code	Comments
				to qualify as interior trees.
D = C/200 Number of canopy trees required	<ul style="list-style-type: none"> 3471/200 = 17 Trees 	18 trees	Yes/No	<ol style="list-style-type: none"> As noted above, some islands need to be increased in area. Please change the Japanese Tree Lilacs to a tree with a mature height of at least 30 feet and canopy width of at least 20 feet.
Parking Lot Perimeter Trees	<ul style="list-style-type: none"> 1 Canopy tree per 35 lf 1044/35 = 30 trees 	30 trees	Yes	<ol style="list-style-type: none"> Please put some trees near the smoking shelter if there aren't any there already. The trees on the east end are a little crowded. Please move the 2 perimeter trees between the building to locations within 15 feet of the back of curb.
Access way perimeter	<ul style="list-style-type: none"> 1 canopy tree per 35 lf on each side of road, less widths of access drives. (xx lf)/35 = xx trees 	The parking lot perimeter calculation includes the north access way.	Yes	
Parking land banked	NA	None		
Berms, Walls and ROW Planting Requirements				
Berms				
<ul style="list-style-type: none"> All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours Berm should be located on lot line except in conflict with utilities. Berms should be constructed with 6" of top soil. 				
Residential Adjacent to Non-residential (Sec 5.5.3.A) & (LDM 1.a)				
Berm requirements (Zoning Sec 5.5.A)	No berm is required as it isn't adjacent to residential	None	Yes	
Planting requirements (LDM 1.a.)	LDM Novi Street Tree List	NA		
Adjacent to Public Rights-of-Way (Sec 5.5.B) and (LDM 1.b)				
Berm requirements (Zoning Sec 5.5.3.A.(5))	No berm is required as the project isn't adjacent to a public right-of-way	None	Yes	
Cross-Section of Berms (LDM 2.j)				

Item	Required	Proposed	Meets Code	Comments
Slope, height and width	<ul style="list-style-type: none"> ▪ Label contour lines ▪ Maximum 33% ▪ Min. 3 feet flat horizontal area ▪ Minimum 3 feet high ▪ Constructed of loam with 6' top layer of topsoil. 	NA		
Type of Ground Cover		NA		
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	NA		Please clearly indicate any overhead lines.
Walls (LDM 2.k & Zoning Sec 5.5.3.vi)				
Material, height and type of construction footing	Freestanding walls should have brick or stone exterior with masonry or concrete interior	A retaining wall is proposed at the southeast corner of the proposed lot.	TBD	Please indicate wall elevations and provide construction details.
Walls greater than 3 ½ ft. should be designed and sealed by an Engineer		No details provided		
ROW Landscape Screening Requirements (Sec 5.5.3.B. ii)				
Greenbelt width (2)(3) (5)	NA – not adjacent to public right-of-way			
Min. berm crest width	NA – not adjacent to public right-of-way			
Minimum berm height (9)	NA – not adjacent to public right-of-way			
3' wall	(4)(7)	No		
Canopy deciduous or large evergreen trees Notes (1) (10)	NA – not adjacent to public right-of-way			
Sub-canopy deciduous trees Notes (2)(10)	NA – not adjacent to public right-of-way			
Canopy deciduous trees in area between sidewalk and curb (<i>Novi Street Tree List</i>)	NA – not adjacent to public right-of-way			
Non-Residential Zoning Sec 5.5.3.E.iii & LDM 1.d (2)				
Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM				
Interior Street to Industrial subdivision (<i>LDM 1.d.(2)</i>)	<ul style="list-style-type: none"> ▪ 1 canopy deciduous or 1 large evergreen per 35 l.f. along ROW ▪ No evergreen trees 	NA – project is not adjacent to the subdivision drive.		

Item	Required	Proposed	Meets Code	Comments
	<p>closer than 20 ft.</p> <ul style="list-style-type: none"> 3 sub canopy trees per 40 l.f. of total linear frontage Plant massing for 25% of ROW 			
<p>Screening of outdoor storage, loading/unloading <i>(Zoning Sec. 3.14, 3.15, 3.20, 4.55, 4.56, 5.5)</i></p>	<p>In the OST district, loading areas are to be completely screened from any public right-of-way and adjacent properties with a wall, the building and/or berm and plantings</p>	<p>Undetermined foundation plantings and perimeter trees</p>	<p>TBD</p>	<p>The loading zone screening should be significant. At a minimum, the foundation plantings shown along the loading zone should be tall evergreens, and additional screening should be provided along the east side and southeast corner, to completely block the loading area from Haggerty Road and from the parcel to the south.</p>
<p>Transformers/Utility boxes <i>(LDM 1.e from 1 through 5)</i></p>	<ul style="list-style-type: none"> A minimum of 2ft. separation between box and the plants Ground cover below 4" is allowed up to pad. No plant materials within 8 ft. from the doors 	<p>No</p>	<p>No</p>	<ul style="list-style-type: none"> When transformer locations are finalized, screening shrubs per standard detail are required. Please add detail to plans.
<p>Building Foundation Landscape Requirements (Sec 5.5.3.D)</p>				
<p>Interior site landscaping SF</p>	<ul style="list-style-type: none"> Equals to entire perimeter of the building x 8 with a minimum width of 4 ft. A: 720 lf x 8ft = 5760 SF 	<p>A: 5954 sf</p>	<p>TBD</p>	<ol style="list-style-type: none"> Shaded areas indicate that sufficient area is provided. Please provide detailed planting plans for foundation planting with final site plans. Foundation plantings are to be included in cost estimate.
<p><i>Zoning Sec 5.5.3.D.ii. All items from (b) to (e)</i></p>	<p>If visible from public street a minimum of 60% of the exterior building perimeter should be covered in green space</p>	<p>Greater than 60% of the east end of the building, which will be visible from Haggerty, is shown as being</p>	<p>Yes</p>	

Item	Required	Proposed	Meets Code	Comments
		landscaped.		
Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)				
Planting requirements <i>(Sec. 5.5.3.E.iv)</i>	<ul style="list-style-type: none"> ▪ Clusters shall cover 70-75% of the basin rim area ▪ 10" to 14" tall grass along sides of basin ▪ Refer to wetland for basin mix 	<ul style="list-style-type: none"> ▪ The site's storm water will be handled by the existing detention pond southeast of the site. ▪ No landscaping is proposed. 	TBD	If any changes to the pond are required, the altered areas shall be landscaped per the ordinance.
Phragmites Control <i>(Sec 5.5.6.C)</i>	<ul style="list-style-type: none"> ▪ Any and all populations of <i>Phragmites australis</i> on site shall be included on tree survey. ▪ Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site. 	None indicated	TBD	<ol style="list-style-type: none"> 1. Please survey the site for any populations of <i>Phragmites australis</i> and submit plans for its removal. 2. If none is found, please indicate that on the survey.
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date <i>(LDM 2.i. & Zoning Sec 5.5.5.B)</i>	Provide intended date	Between Mar 15 and Nov 15.	Yes	
Maintenance & Statement of intent <i>(LDM 2.m & Zoning Sec 5.5.6)</i>	<ul style="list-style-type: none"> ▪ Include statement of intent to install and guarantee all materials for 2 years. ▪ Include a minimum one cultivation in June, July and August for the 2-year warranty period. 	Yes	Yes	
Plant source <i>(LDM 2.n & LDM 3.a.(2))</i>	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
Irrigation plan <i>(LDM 2.s.)</i>	A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans.	No	No	<ol style="list-style-type: none"> 1. Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long- term survival. 2. If xeriscaping is used, please provide information about plantings included.

Item	Required	Proposed	Meets Code	Comments
Other information <i>(LDM 2.u)</i>	Required by Planning Commission	NA		
Establishment period <i>(Zoning Sec 5.5.6.B)</i>	2 yr. Guarantee	Yes	Yes	
Approval of substitutions. <i>(Zoning Sec 5.5.5.E)</i>	City must approve any substitutions in writing prior to installation.	Yes	Yes	
Plant List (LDM 2.h.) - Include all cost estimates				
Quantities and sizes	Refer to LDM suggested plant list	Yes	Yes	
Root type		Yes	Yes	
Botanical and common names		<ul style="list-style-type: none"> ▪ 12 of 16 species used (75%) are native to Michigan. ▪ The diversity standards of LDM 4 are met. 	Yes	
Type and amount of lawn		Seed	Yes	Please add areas of each in cost table.
Cost estimate <i>(LDM 2.t)</i>		For all new plantings, mulch and sod as listed on the plan	No	No
Planting Details/Info (LDM 2.i) - Utilize City of Novi Standard Details				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Evergreen Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes	
Other Plant Material Requirements (LDM 3)				
General Conditions <i>(LDM 3.a)</i>	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
Plant Materials & Existing Plant Material <i>(LDM 3.b)</i>	Clearly show trees to be removed and trees to be saved.	Yes	Yes	
Landscape tree credit <i>(LDM3.b.(d))</i>	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer	None taken		

Item	Required	Proposed	Meets Code	Comments
	to Landscape tree Credit Chart in LDM			
Plant Sizes for ROW, Woodland replacement and others <i>(LDM 3.c)</i>	2.5" canopy trees 6' evergreen trees		TBD	
Plant size credit <i>(LDM3.c.(2))</i>	NA	No		
Prohibited Plants <i>(LDM 3.d)</i>	No plants on City Invasive Species List	None proposed	Yes	
Recommended trees for planting under overhead utilities <i>(LDM 3.e)</i>	Label the distance from the overhead utilities		TBD	<ol style="list-style-type: none"> 1. Please clearly indicate any overhead lines. 2. If none exist, please add a note to landscape plan stating this.
Collected or Transplanted trees <i>(LDM 3.f)</i>		15 trees are proposed to be transplanted	TBD	<ol style="list-style-type: none"> 1. Any species substitutions for transplanted trees that didn't make it must be approved in writing by the city landscape architect. 2. It is highly recommended that the oaks to be transplanted are dug up in the spring, when they're still dormant to improve their chances of survival.
Nonliving Durable Material: Mulch <i>(LDM 10)</i>	<ul style="list-style-type: none"> ▪ Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth ▪ Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate. ▪ Refer to section for additional information 	Yes	Yes	

NOTES:

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. For the landscape requirements, please see the Zoning Ordinance landscape section 5.5 and the Landscape Design Manual for the appropriate items under the applicable zoning classification.

Item	Required	Proposed	Meets Code	Comments
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.				

WETLAND REVIEW



ECT Project No. 190180-0100
March 28, 2019

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

Re: Daifuku Test Building Expansion (JSP19-0038)
Wetland Review of the Preliminary Site Plan (PSP19-0038)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan for the proposed Daifuku Test Building Expansion project prepared by PEA, Inc. dated February 18, 2019 and stamped "Received" by the City of Novi Community Development Department on February 20, 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 has also reviewed a response letter from the applicant's engineer dated March 26, 2019.

ECT currently recommends approval of the Preliminary Site Plan for Wetlands. The Applicant shall address the items noted in the *Wetland (and Woodland) Comments* Section of this letter prior to receiving 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)	Likely Required (To Be Determined)
Wetland Mitigation	Not Required
Wetland Buffer Authorization	Required
MDEQ Permit	Likely Required (To Be Determined)
Wetland Conservation Easement	Not Required

The Plan proposes the construction of a 1-story, 24,100 square foot test building and 394 parking spaces. Storm water from the proposed site appears to be directed south to an existing storm water detention basin (Detention Basin 'B'). The Plan (*Preliminary Utility Plan*, Sheet C-8.2) indicates that storm sewer will be installed to the south of the proposed building (continuing off-site) and will be constructed with bore and jack installation. The storm sewer will be then run east to existing stormwater Detention Basin 'B'. The Plan appears to propose a storm sewer end section and riprap within the 25-foot watercourse setback of this Basin.

2200 Commonwealth
Blvd., Suite 300
Ann Arbor, MI
48105

(734)
769-3004

FAX (734)
769-3164

Based on our review of the application, Novi aerial photos, Novi GIS, the City of Novi Official Wetlands and Woodlands Maps (see Figure 1, attached) it appears as if the overall project limits contain both City-Regulated Wetlands and Woodlands.

Wetlands/Watercourse Evaluation

An existing stream/drain (indicated as 'stream' on the Plan) is located at the south side of the subject parcel (tributary to the Seeley Drain). The drain is located within a currently wooded area south of the main area of site construction; partially located on the project property. This area is indicated as both Regulated Wetland and Regulated Woodland on the City of Novi Regulated Wetland and Woodland Map (see Figure 1). It should be noted that the 25-foot natural features setback should be indicated on the Plan around this stream as well as around Detention Basin 'B'.

ECT has reviewed the City of Novi Official Regulated Wetlands Map but has not completed an onsite wetland evaluation at this time. ECT recommends that we conduct a wetland field verification in order to verify existing regulated wetland/watercourse boundary locations with respect to the limits of the proposed project. It shall be the applicant's responsibility to clearly indicate the limits of proposed disturbance in the field prior to any such site inspection. The wetland and/or watercourse boundaries shall also be delineated and flagged on-site by a professional wetland consultant if this has not already been done. It may be the case that the "stream" boundary as indicated on the Plan is the edge of the wetland/watercourse and there is no additional wetland area 'fringe' associated with this drain.

Proposed Wetland/Watercourse Impacts

As noted above, the Plan indicates that storm sewer will be constructed with bore and jack installation through (i.e., under) the existing area of wetland/watercourse and existing woodland just south of the proposed limits of grading, with the ultimate outlet to Detention Basin 'B'. The Plan notes that "*bore and jack is placed outside of tree line to avoid impact to existing wetland and woodlands*". The plan notes that an 18" storm sewer with 30" steel casing will be installed beneath the wetland/woodland area.

As such, the Plan does not indicate any impacts to wetland/watercourse or 25-foot natural features setback, however, the Plan appears to require impacts to the 25-foot setback of Detention Basin 'B' for the installation of the stormwater outfall. The Plan does not appear to include any direct impacts (i.e., cut or fill) to the existing wetland/watercourse. As noted, the Plan does not currently indicate the 25-foot natural features setback boundary for the stream or for Detention Basin 'B'. 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 (both permanent and temporary) to 25-foot natural features setback on subsequent plan submittals. The City of Novi regulates a 25-foot buffer surrounding all wetlands and watercourses.

Regulatory Status - MDEQ

The wetlands/watercourse 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 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 wetland/watercourse (i.e., ‘stream’) 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 and should not require a City of Novi or an MDEQ Wetland Permit. The installation of utilities under an existing wetland using jack and bore construction do not generally require a wetland permit if the necessary utility diameters and depth beneath the wetland are met. The Plan should include a cross-section of the proposed utility installation under the stream that meets the MDEQ requirements.

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 wetland/watercourse (i.e. ‘stream’) is regulated by the City’s Wetland and Watercourse Protection Ordinance (because they meet one or more of the essentiality criteria in the Ordinance such as 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”.

It should be noted that the wetland ordinance provides a definition of ‘watercourse’ and this includes detention basins. The definition of ‘watercourse’ is:

Watercourse shall mean any waterway, drainageway, drain, river, stream, lake, pond or detention basin, or any body of surface water having well-defined banks, whether continually or intermittently flowing.

Wetland/Watercourse Comments

Please consider the following comments when preparing the Final Site Plan submittal:

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. If possible the stormwater outfall should be constructed in the upland (i.e., outside of the 25-foot watercourse/Detention Basin 'B' setback. 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 watercourse?”

The applicant's engineer (PEA) provided a sketch of proposed off-site stormwater sewer and proposed stormwater outfall configuration at existing Detention Basin B with their March 26, 2019 review comments response letter. PEA has stated that all areas of temporary impact to the 25-foot wetland/watercourse setbacks will be provided on the Final Site Plan.

2. The 25-foot wetland/watercourse (i.e., natural features) setbacks shall be shown on the Plan. These setbacks should be indicated for both the stream and for Detention Basin 'B'. As noted in Item No. 1, the applicant's engineer will indicate all 25-foot wetland/watercourse setbacks on the Final Site Plan.
3. The Plan appears to propose direct impacts to the 25-foot wetland setback for the construction of the stormwater outlet pipe to Detention Basin 'B'. The Applicant shall indicate and quantify (square feet or acres) all areas of direct impact (both permanent and temporary) to this 25-foot setback on subsequent plan submittals. The applicant's engineer has stated that this information will be added to the Final Site Plan.
4. 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, however, it is the applicant's responsibility to confirm that the proposed utility installation plan meets the MDEQ requirements for work not requiring a Wetland Permit. 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/watercourse buffers. The applicant's engineer has stated that they have a pre-application meeting scheduled with the MDEQ in order to verify the on-site wetland delineation and confirm that an MDEQ permit is not required for the proposed project.
5. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from the MDEQ for any proposed wetland impacts. Final determination as to the regulatory status of any on-site wetlands shall be made by MDEQ. The Applicant should provide a copy of the MDEQ Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance, if applicable. 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 or watercourses,

however the applicant should provide documentation from MDEQ that the proposed storm sewer installation (jack and bore) meets the MDEQ criteria for projects not requiring an MDEQ Wetland Permit.

6. The Plan should address how any temporary impacts to wetland/watercourse buffers shall be restored. Specifically, a proposed native seed mix should be provided on the Plan for restoration of these wetland/watercourse buffer areas. Sod or common grass seed will not be authorized in these areas.
7. The Applicant is encouraged to provide wetland conservation easements for any areas of remaining wetland and 25-foot wetland buffer. The Applicant shall provide wetland conservation easements as directed by the City of Novi Community Development Department for any areas of remaining wetland as well as for any proposed wetland mitigation areas (if necessary). A Conservation Easement shall be executed covering all remaining wetland areas on site as shown on the approved plans. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Wetland and Watercourse permit

Woodland Comments

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. In addition, the City requires that all proposed work remain outside of the Critical Root Zone (CRZ) of all trees to remain. The CRZ means a circular area around a tree with a radius measured to the tree's longest dripline radius plus one (1) foot.

As a result of ECT's site inspection, it does not appear as if the proposed project (including the off-site storm sewer installation) will impact regulated trees. The Plan should however indicate the locations of all trees that are 8-inches diameter and larger and are located within 50-feet of the proposed off-site storm sewer directional drilling path. Ultimately, the Plan should indicate if any trees greater than or equal to 8-inches diameter are proposed to be removed in order to install the off-site storm sewer or any of the bore pits. Removal of trees does not appear to be necessary.

Recommendation

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

Daifuku Test Building Expansion (JSP19-0013)
Wetland Review of the Preliminary Site Plan (PSP19-0038)
March 28, 2019 (Revision 1)
Page 6 of 9

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

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Peter Hill, P.E.
Senior Associate Engineer

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

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

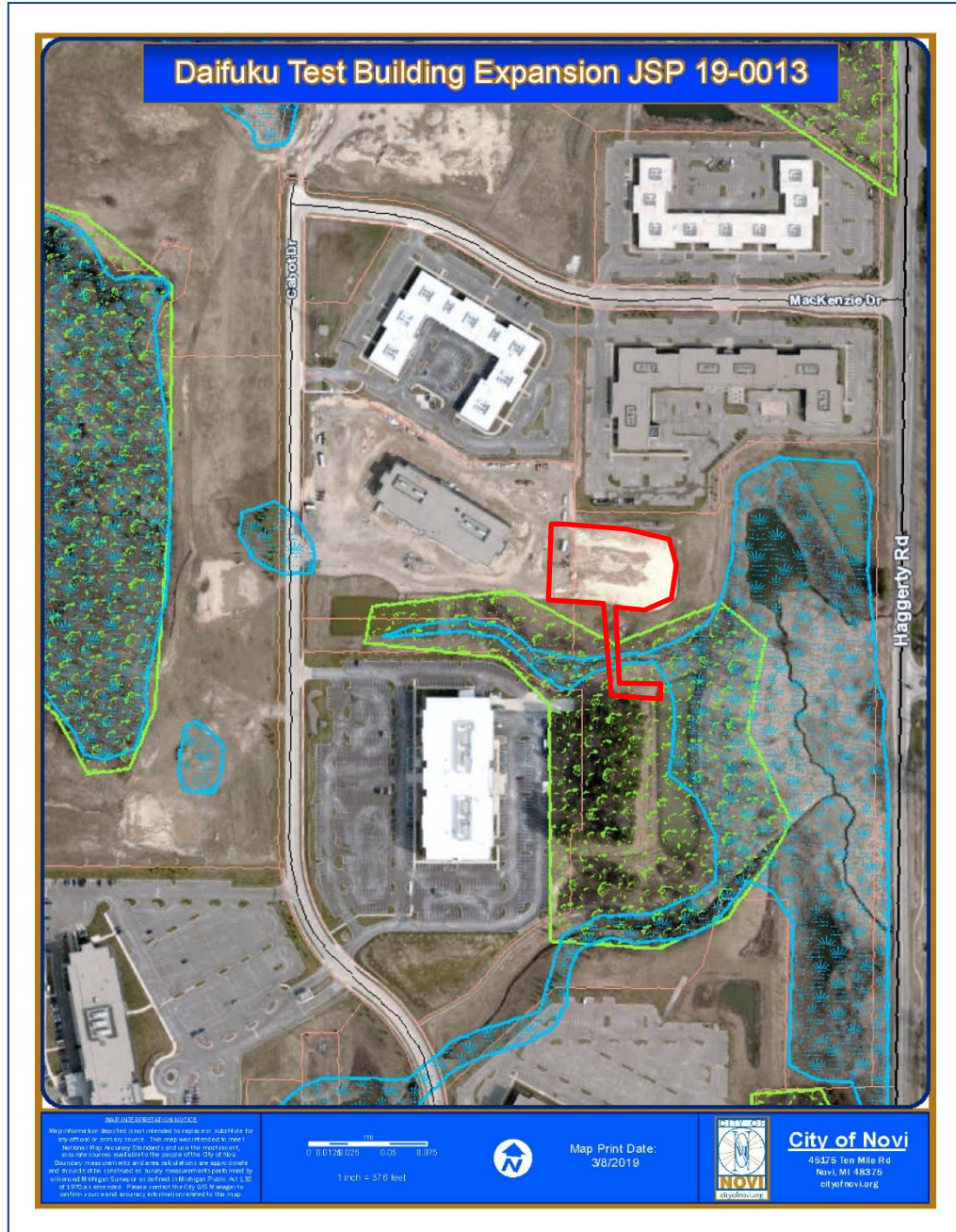


Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate project boundary shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.

Site Photos



Photo 1. Looking southeast at area of proposed off-site utility installation (ECT, March 27, 2019). Use of bore and jack installation should not impact wetlands/watercourses or woodlands as there appears to be enough previously-disturbed area available to position the bore pits outside of any wetland/woodland areas.



Photo 2. Looking east at existing drain (ECT, March 27, 2019). Use of bore and jack installation should not impact wetlands/watercourses or woodlands as there appears to be enough previously-disturbed area available to position the bore pits outside of any wetland/woodland areas.



Photo 3. Looking southeast at existing Detention Basin B (ECT, March 27, 2019). Use of bore and jack installation should not impact wetlands/watercourses or woodlands as there appears to be enough previously-disturbed area available to position the bore pits outside of any wetland/woodland areas.



Photo 4. Looking west at Daifuku building and a portion of the proposed building expansion area (ECT, March 27, 2019).

TRAFFIC REVIEW



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

Project name:
 JSP19-13 Daifuku Test Building Expansion
 Preliminary Site Plan Traffic Review

From:
 AECOM

Date:
 March 18, 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: JSP19-13 Daifuku Test Building Expansion Preliminary Site Plan 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, Northern Equities Group, is proposing a 24,100 SF expansion to the existing office building, to be used as laboratory space. The site is located on the east side of Cabot Drive, south of Mackenzie Drive.
2. Cabot Drive is under the jurisdiction of the City of Novi.
3. The parcel is currently zoned OST, Office Service Technology.
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 estimate based on the ITE Trip Generation Manual, 10th Edition, as follows:

ITE Code: 110 (General Light Industrial)
 Development-specific Quantity: 24,100 SF
 Zoning Change: None

Trip Generation Summary				
	Estimated Trips	Estimated Peak-Direction Trips	City of Novi Threshold	Above Threshold?
AM Peak-Hour Trips	16	14	100	No
PM Peak-Hour Trips	14	12	100	No

Daily (One-Directional) Trips	149	N/A	750	No
--------------------------------------	-----	-----	-----	----

2. The number of additional trips the expansion should contribute does not exceed the City's threshold of more than 750 trips per day or 100 peak-hour trips.

Trip Impact Study Recommendation	
Type of Study:	Justification
None	-

EXTERNAL SITE ACCESS AND OPERATIONS

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

1. The applicant is not proposing any changes to the external site access.

INTERNAL SITE OPERATIONS

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

1. General Traffic Flow
 - a. The applicant is proposing a loading zone that is 854 SF and fulfills the requirement of 360 SF per building as set forth in the Zoning Ordinance.
 - i. The applicant has provided truck turning movement patterns to show that a semi-truck with trailer can navigate the parking lot area but should provide the pattern to ensure that the trucks can access the loading zone.
 - b. The applicant is proposing one trash receptacle in the rear of the office building.
 - i. Truck turning movement patterns should be provided to show that the trash receptacle locations do not interfere with the use of the adjacent parking spaces.
2. Parking Facilities
 - a. The applicant is proposing 394 parking spaces and should refer to the planning review letter for parking quantity requirements.
 - b. The applicant has indicated ten (10) barrier free parking spaces, four (4) of which are van accessible, which meets the requirement of eight (8) with two (2) being van accessible.
 - c. The applicant has indicated 17.5' parking spaces with 2' overhang and 4" curbs. These appear to be dimensioned to the back of the curb, providing 17' parking spaces, which is in compliance with Section 5.3.2 of the City's Zoning Ordinance. 19' spaces are provided where there is no curb present.
 - d. The applicant has no more than 15 parking spaces in a bay without an island.
 - i. The end islands are required to have an outside radius of 15' and an inside radius of 2' as well as a minimum width of 10'. The applicant has provided dimensions where necessary and ensured that the islands met these requirements.
 - ii. Note that all end islands adjacent to a travel way shall be constructed three (3) feet shorter than the adjacent parking space. This should be indicated on the plans as it appears that the end island lengths are not in compliance with Section 5.3.12 of the City's Zoning Ordinance.
 - e. The proposed aisle widths range from 24' to 29.07'. The applicant should revise the plans so the widths are in compliance with the City standard of 24' or provide justification for the increased aisle widths.

- f. The applicant has stated they are providing 2 bicycle parking spaces in addition to the 18 that are existing. A layout of the proposed spaces as well as dimensions have been included that are in compliance with City standards. However, the bicycle rack detail shown on sheet L-1.3 states that it has 5 bicycle parking spaces and the site plan says 2 spaces are provided at this location. The applicant should address this inconsistency. The applicant should also provide the height of the bicycle rack on the detail shown on sheet L-1.3 to ensure it meets the 36" minimum height requirement.
 - i. Per Section 5.16.5.B of the City's Zoning Ordinance, all bicycle parking facilities shall be accessible from adjacent street and pathway via a paved route that as a minimum width of six (6) feet. The applicant has ensured that the sidewalk is at least 6' wide.
 - ii. Section 5.16.1.E of the City's Zoning Ordinance requires that the bicycle parking be no more than 120 feet from the entrance being served or the parking space nearest that entrance. The applicant should dimension the distance to the bicycle parking to show that it meets this requirement.
 - iii. Section 5.16.1.F of the City's Zoning Ordinance suggests providing bicycle parking at multiple entrances when more than four (4) parking spaces are required. The applicant has provided parking at 3 different locations on the property.
3. Sidewalk Requirements
 - a. The applicant has indicated 7' sidewalks where the sidewalk is adjacent to parking spaces with a 4" curb, as is required. 5' sidewalks have been provided in other areas of the site.

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).
 - a. The applicant has provided a signing quantities table. The table indicates a quantity of 1 each for the R7-8 and R7-8P signs, however there are 2 barrier free spaces that each need a R7-8 sign. This quantity table should be updated.
 - b. The signing quantity table should be updated to include sign size.
2. The applicant should 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. Traffic control signs shall use the FHWA Standard Alphabet series.
 - c. Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.
3. The applicant has included the applicable pavement marking notes and details.

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

Sincerely,

AECOM



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



Patricia Thompson, EIT
Traffic Engineer

FAÇADE REVIEW



April 10, 2019

Status Summary: Approved, full compliance w/ Façade Ordinance

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

Attn: Ms. Barb McBeth – Director of Community Development

Re: **FACADE ORDINANCE Preliminary Site Plan**
Daifuku Test Building Expansion, JSP19-13
 Façade Region: 2, Zoning District: OST

Dear Ms. McBeth:

The following is the Façade Review for the above referenced project based on the drawings provided by Faudie Architects dated 3/26/19. The drawings have been revised in response to our prior review dated 3/11/19. 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. The sample board required by Section 5.15.4.D was not provided at the time of this review.

Façade Region 2	South (Front)	West	East	North	Ordinance Maximum (Minimum)
Brick	87%	77%	90%	88%	100%
Flat Metal Panels	8%	13%	7%	7%	50%
Split Faced CMU	3%	7%	3%	5%	50%
Spandrel Glass	2%	3%	0%	0%	50%

Recommendation – In response to comments in our review letter dated 3/11/19 the applicant has reduced the percentage of Split Faced CMU and increased the percentage of Brick on all facades. The facades are now consistent with existing buildings in the surrounding area as well as the existing Daifuku facility located on the same property. This application is therefore in full compliance with the Façade Ordinance. A material sample board showing carefully coordinated colors that substantially match the existing Daifuku building should be provided for the Planning Commission meeting.

Notes to the Applicant:

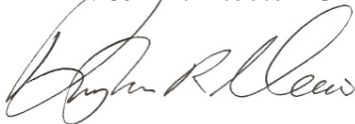
1. It should be noted that all roof top equipment must be screened from view from all vantage points both on-site and off-site using materials in compliance with the Façade Ordinance.

2. Inspections – The Façade Ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board (in this case the adjacent existing material) will be compared to materials to be installed. 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 review, please do not hesitate to call.

Sincerely,
DRN & Architects PC

A handwritten signature in black ink, appearing to read "Douglas R. Necci", written over the printed name below.

Douglas R. Necci, AIA

FIRE REVIEW



March 1, 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: Daifuku Test Building Expansion

PSP# 19-0038

Project Description:

Build a 24,100 S.Q.F.T. addition to the existing structure at 30100 Cabot Dr.

Comments:

- All fire hydrants **MUST** in installed and operational prior to any building construction begins.
- Hydrants shall be spaced approximately three hundred (300) feet apart on line in commercial, industrial, and multiple-residential areas. In cases where the buildings within developments are fully fire suppressed, hydrants shall be no more than five hundred (500) feet apart. **MUST be approved by the Fire Chief to increase to 500'. (D.C.S. Sec. 11-68 (f)(1)c)**
- Plans show two Fire Department Connections (FDC) for the structure. **MUST** tie in to the existing FDC for the new addition.
- All roads **MUST** meet City of Novi weight requirements of 35 ton. **(Novi City Ordinance 15-17 503.2.3).**

Recommendation:

APPROVED WITH CONDITIONS

Sincerely,

A handwritten signature in black ink, appearing to read 'KSP', written over a horizontal line.

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



April 10, 2019
PEA Project No: 2016-088
City of Novi Project No: JSP19-13

Lindsay Bell | Planner
City of Novi Community Development Department
45175 West 10 Mile Road
Novi, Michigan, 48375

Re: Daifuku Test Building – Review I

Dear Ms. Bell:

In response to the review letters received from various City Departments dated March 18, 2019, we offer the following responses to those comments that require change or clarification:

Planning Review (March 15, 2019)

Plan Review Center Report:

1. Parking Setbacks: **A waiver will be requested** for the 8' reduction in the required 20' minimum setback, which is proposed to be 12'. It should be noted that additional setback area is provided on the south side of the proposed development. Therefore the overall minimum setback is exceeded for the site.
2. The public access to the building will only be permitted at the southeast corner of the proposed building.
3. End Islands: additional dimensions will be added to the plans as a part of the final site plan submittal.
4. It is our understanding that the proposed trash dumpster meets the Zoning Ordinance Requirements.
5. Photometric Plan will be revised to comply with the Zoning Ordinance Requirements.
6. Other Reviews:
 - a. Landscape Review: Please refer to landscape plan responses provided.
 - b. Traffic Review: Please refer to the responses to the Traffic Review.
 - c. Engineering Review: Please refer to the responses to the Engineering Review
 - d. Façade Review: Please refer to the responses to the Façade Review
 - e. Fire Review: Please refer to the responses to the Fire Review.
7. An Economic Impact Statement has been provided by Northern Equities Group under separate cover.

Planning Review Chart (March 15, 2019):

- Parking Setback, Side (North): The parking is located 12' from the north property line. A waiver is being requested.
- End Islands: Additional dimension will be added to the final site plans.
- The public access to the building will only be permitted at the southeast corner of the proposed building
- Bicycle Rack: The bicycle rack detail will be updated on the final site plans.

- An Economic Impact Statement has been provided by Northern Equities Group under separate cover.
- Development/Business Sign: The approximate location of a proposed monument sign will be shown on the final site plans.
- Lighting and Photometric Plan all requested information and noted will be added to the final site plans.

Engineering Review (March 15, 2019):

General:

1. A note will be added to the sign table stating all signs will meet MMUTCD. This note is provided on the sign details.
2. Requested note regarding dewatering will be added.
3. All proposed utility lines and easements are shown on the landscape plan. To our knowledge no trees are proposed within an easement.
4. A foundation detail for light poles will be provided on the revised plans. No light poles are proposed within existing or proposed water main, sanitary sewer or storm sewer utility easements. The existing sanitary sewer easement that currently bisects the site will be vacated prior to construction.
5. City standard details will be provided for stamping sets.

Water Main:

6. The proposed water main connection to the existing main will be reviewed on the final site plans to reflect requirement of a tapping sleeve, valve and well.
7. If required, we will provide the requested water main profile.
8. Plans and an MDEQ permit application for public water main will be provided once the City approves the water main layout.

Sanitary Sewer:

9. The required easement will be provided.
10. The proposed material for the 6" diameter lead will be revised to reflect the requested SDR 26.

Storm Sewer:

11. Noted
12. Noted
13. Noted
14. Noted.

Storm Water Management Plan:

15. The stormwater management system for the Haggerty Corridor Corporate Park was approved and installed per the 2009 plans. In all previous developments within this park the detention calculations have been shown to meet the originally approved design. The existing detention basins located throughout the park were designed and installed prior to the City's latest storm water ordinance.
16. The stormwater management plan for the Haggerty Corridor Corporate Park was approved by the City of Novi's Engineering Department. Based upon previous projects we have completed within this development it is our understanding that the City of Novi's Engineering Department is in possession of these plans.
17. Noted.

Paving and Grading:

18. Sheet C-4.1 has notes detailing the types of detectable warning plates that will be specified on this project.
19. Noted.

20. Noted.

Floodplain:

21. This site is not located within the limits of a FEMA 100-Year Flood Plain, so a permit will not be required
22. This site is not located within the limits of a FEMA 100-Year Flood Plain or Floodway.

Soil Erosion and Sediment Control:

23. A soil erosion permit application will be submitted for this project.

Off-Site Easements:

24. Off-Site Easements will be provided.

Other Comments or Notes

Items #25 through #40 have been noted and will be provided as needed throughout final site plan approval, stamping set submittal and pre-construction meetings.

Landscaping Review (February 27, 2019) Planning Review Chart Comments:

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

2. The island at the southeast corner of the building does not appear to be wide enough to provide 10 feet between the tree and hydrant, 4 feet between the tree and sidewalk, and 3 feet between the tree and curb. **Please adjust the island size and or hydrant location to allow all required trees to be planted with the required spacing.**

Response: The island size and hydrant location will be adjusted to allow the proposed tree to have adequate space.

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

1. **Please provide an existing conditions sheet that shows all trees on and within 50 feet of the project area.**

Response: A tree survey plan will be provided showing all trees within 50' of the project area.

2. **Please clearly show all existing trees to be removed and to be saved.**

Response: All trees to be removed or saved will clearly be indicated on the tree survey plan and tree list.

3. **Please provide tree fencing around all trees to remain that aren't being transplanted.**

Response: Tree protection fencing will be shown on all existing trees to remain.

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

2. **There are 4 islands and endcap areas counted toward the requirement that don't meet the 200sf per tree requirement. Please enlarge those areas to at least 200sf each.**

Response: The islands will be revised to be a minimum 200sf each.

- 3. Please substitute a tree species that will meet the requirements for a deciduous canopy tree (min. mature height of 30 feet and mature canopy width of 20 feet) for the Japanese Tree Lilacs.**

Response: The Japanese Tree Lilac Trees will be substituted out for a larger canopy tree with a min. width of 20 feet and min. height of 30 feet.

Parking Lot Perimeter Canopy Trees (Zoning Sec. 5.5.3.C. ((3) Chart footnote)

- 2. Please move the 2 trees between the buildings to within 15 feet of the back of curb.**

Response: The aforementioned 2 trees will be relocated to be within 15 feet of the back of curb.

- 3. If possible, please space out the perimeter trees more so the trees on the east end aren't as crowded.**

Response: The trees on the east end will be spaced out as far as possible while still accommodating the ordinance requirements.

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

- 1. Please provide screening shrubs to block the view of the loading zone from Haggerty Road and the property to the south.**

Response: Screening shrubs will be provided to block the view of the loading zone from Haggerty Road.

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

- 4. Please add a summary of costs for the project, including seed, sod, and mulch.**

Response: A cost opinion will be provided.

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

- 2. Please add a survey note regarding Phragmites on the site and, if found, a plan for its complete eradication.**

Response: A phragmites note will be added to the landscape plan.

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.**

Response: An irrigation plan will be provided.

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

Response: An irrigation plan will be provided.

Transplanted Trees (LDM.9.e.)

- 1. Please add a note stating that any species substitutions for transplanted trees shall be approved in writing by the City Landscape Architect before planting.**

Response: A note will be added to the landscape plan.

Wetland Review (March 12, 2019):

The only items that would need to be addressed per the ETC letter would be to show the 25' buffer | setback around the detention basin and wetland, and quantify the area of disturbance to the buffer at the detention basin. The disruption to the 25' wetland buffer and the 25' watercourse setback is only to be temporary and will be restored after construction has been completed. The necessary soil erosion and sedimentation control measures will be installed prior to construction. It should be noted that we have a pre-application meeting scheduled with MDEQ on-site to verify the flagging of the wetland boundary, and confirm that a MDEQ permit is not required

Information regarding the wetland buffer and watercourse setback will be depicted in the plans submitted for Final Site Plan Approval | Stamping Sets

Traffic Review (March 18, 2019):

Internal Site Operations:

1. General Traffic Flow
 - a. A truck turning plan will be provided as part of the revised plan submittal.
 - b. A truck turning plan will be provided as part of the revised plan submittal.
2. Parking Facilities
 - a. Comment noted.
 - b. Comment noted.
 - c. PEA dimensions to back of curb as noted on the Dimension Plans. We have provided 17.5' long spaces in order to ensure that a 17' clear distance is provided from the rear of the space to the face of the concrete curb. If the City would prefer the spaces be drawn 17' long to back of curb, or whether the overhang is shown at 1.5' in lieu of 2', the plans can be updated if necessary.
 - d. End Islands:
 - i. Additional dimensions showing island widths can be provided on the revised plan set
 - ii. Islands will be reduced in size to provide the required 3' minimum length reduction
 - e. The 29.07' drive width only occurs at the northwest corner of the site where there is a transition in the drive with between the existing and proposed drive and parking area.
 - f. An updated detail on the bike rack can be provided showing it meets the 36" minimum height requirement.
 - i. Noted.
 - ii. Bicycle parking spaces are within 120 feet of rear building entry doors.
 - iii. Noted.
3. Comment noted.

Signing and Striping:

1. Comment noted
 - a. Comment noted.

- b. Comment noted.
2. All proposed traffic signing is shown on the plans
 - a. Notes will be added to the sign details regarding mounting post dimensions
 - b. FHWA standard alphabet series will be noted on the revised plans
 - c. HIP sheeting will be noted on the revised plans.
3. Comment noted.

Façade Review (March 11, 2019):

Refer to responses under separate cover from Faudie Architecture.

Fire Department Review (March 1, 2019):

1. Comment noted.
2. Fire hydrant locations will be installed in accordance with DCS Section 11-68(f)(1)c
3. Since the building are not connected, a separate fire line and FDC will be required for this project.
4. Comment noted.

If there are any further questions, please contact this office.

Sincerely,

PEA, Inc.



James P. Butler, PE
President

FAUDIE ARCHITECTURE

Design to Inspire

March 26, 2019

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

Attn: Ms. Barb McBeth, Director of Community Development

Re: **FAÇADE ORDINANCE**
Preliminary Site Plan
Daifuku Test Building Expansion, KJSP19-13
Façade Region: 2
Zoning District: OST

Dear Ms. McBeth:

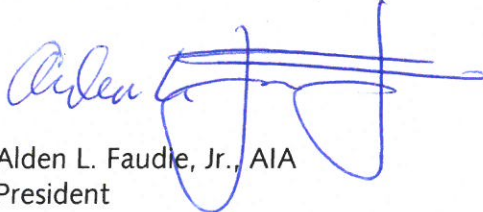
The Building Elevations have been revised to show the split-face block deleted from the building entry areas, and leaving it shown only underneath the proposed windows on the north, west and south elevations. In addition, a small amount of split-face block has also been added on at the bottom of the implied windows on the east elevation. All split-face block amounts are now below the 10% maximum as recommended by Doug Necci's March 11, 2019 review letter, and therefore in compliance. All brick will match the existing Daifuku building and any new split-face block will be in a matching or otherwise complimentary color.

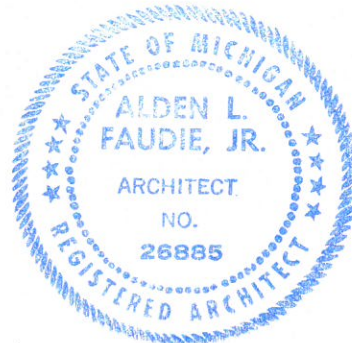
A Material Sample Board will be submitted before the Planning Commission meeting.

Please feel free to contact this office if any additional information is needed.

Thank you,

FAUDIE ARCHITECTURE, INC.


Alden L. Faudie, Jr., AIA
President



Cc: Matthew Sosin, Northern Equities Group