



## BEACON HILL JSP15-08

### BEACON HILL JSP 15-08

Public hearing at the request of The Ivanhoe Companies for Planning Commission approval of the Preliminary Site Plan with Site Condominium, Phasing Plan, Wetland Permit, Woodland Permit, and Storm water Management Plan. The subject property is currently R-4 (One-Family Residential) and B-3 (General Business) with a Planned Rezoning Overlay Agreement .The subject property is approximately 21.13-acres and is located on the northeast corner of Twelve Mile Road and Meadowbrook Road (Section 12). The applicant is proposing a 39 unit single family residential development, 10,500 square feet of commercial space, and an open space/park.

### REQUIRED ACTION

Approve/deny the Preliminary Site Plan with Site Condominium, Phasing Plan, Wetland Permit, Woodland Permit, and Stormwater Management Plan.

| REVIEW      | RESULT               | DATE     | COMMENTS  |
|-------------|----------------------|----------|---|
| Planning    | Approval recommended | 09-12-16 | <ul style="list-style-type: none"> <li>• Deviations identified for Phase 2 development. Applicant shall either conform to the code during final site plan or amend the PRO to include the deviations.</li> <li>• Items to be addressed on the Final Site Plan submittal.</li> </ul> |
| Engineering | Approval recommended | 09-09-16 | Items to be addressed on the Final Site Plan submittal.   |
| Landscaping | Approval recommended | 09-06-16 | <ul style="list-style-type: none"> <li>• Deviations identified for Phase 2 development. Applicant shall either conform to the code during final site plan or amend the PRO to include the deviations.</li> <li>• Items to be addressed on the Final Site Plan submittal.</li> </ul> |
| Wetlands    | Approval recommended | 08-31-16 | <ul style="list-style-type: none"> <li>• <b>Requires a City of Novi Minor Wetland Permit and an Authorization to encroach the 25-Foot Natural Features Setback.</b></li> <li>• Items to be addressed on the final site plan submittal</li> </ul>                                    |
| Woodlands   | Approval recommended | 08-31-16 | <ul style="list-style-type: none"> <li>• <b>Requires a City of Novi Woodland Permit</b></li> <li>• Items to be addressed on the final site plan submittal</li> </ul>  |
| Traffic     | Approval recommended | 09-16-16 | • Items to be addressed on the Final Site Plan submittal.   |
| Facade      | Approval recommended | 09-13-16 | • Deviations identified for Phase 2 development. Applicant shall either conform to the code during final site plan or amend the PRO to include the deviations.  |
| Fire        | Approval recommended | 04-15-16 |   |

## **MOTION SHEET**

### **Approval – Preliminary Site Plan with Site Condominium**

In the matter of Beacon Hill JSP15-08, motion to **approve** the Preliminary Site Plan with Site Condominium based on and subject to the following:

- a. The applicant to revise the plans for commercial development to conform to the code at the time of Final Site Plan for Phase 2 or seek approval to amend the approved Planned Rezoning Overlay agreement to include the additional deviations identified with this review;
- b. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters, as well as all of the terms and conditions of the PRO Agreement as approved, with these items being addressed on the Final Site Plan; and
- c. *(additional conditions here if any)*

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

**-AND-**

### **Approval – Phasing Plan**

In the matter of Beacon Hill JSP15-08, motion to **approve** the Phasing 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 Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

**-AND-**

### **Approval – Wetland Permit**

In the matter of Beacon Hill JSP15-08, motion to **approve** the Wetland Permit based on and subject to the following:

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

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

**-AND-**

### **Approval – Woodland Permit**

In the matter of Beacon Hill JSP15-08, motion to **approve** the Woodland Permit based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and

b. *(additional conditions here if any)*  
*(This motion is made because the plan is otherwise in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

**Approval – Stormwater Management Plan**

In the matter of Beacon Hill JSP15-08, motion to **approve** the Stormwater Management Plan, based on and subject to:

a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and

b. *(additional conditions here if any)*

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

**-OR-**

**Denial – Preliminary Site Plan with Site Condominium**

In the matter of Beacon Hill JSP15-08, motion to **deny** the Preliminary Site Plan with Site Condominium... *(because the plan is not in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

**-AND-**

**Denial –Phasing Plan**

In the matter of Beacon Hill JSP15-08, motion to **deny** the Phasing Plan... *(because the plan is not in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

**-AND-**

**Denial- Wetland Permit**

In the matter of Beacon Hill JSP15-08, motion to **deny** the Wetland Permit... *(because the plan is not in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

**-AND-**

**Denial- Woodland Permit**

In the matter of Beacon Hill JSP15-08, motion to **deny** the Woodland Permit... *(because the plan is not in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

**-AND-**

**Denial – Stormwater Management Plan**

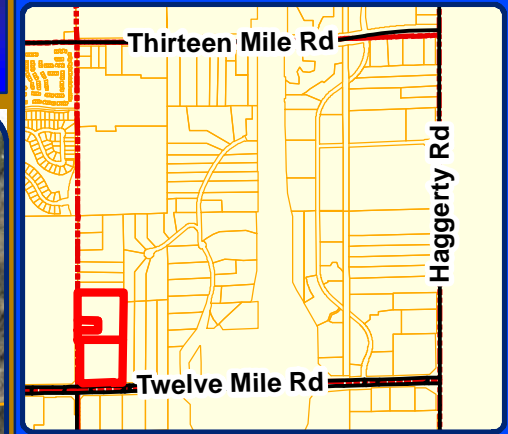
In the matter of Beacon Hill JSP15-08, motion to **deny** the Stormwater Management Plan... *(because the plan is not in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*



MAPS  
Location  
Zoning  
Future Land Use  
Natural Features

# JSP 15-08 Beacon Hill

Location



## Legend

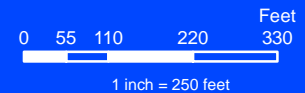
 Sections



City of Novi

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

Map Author: Sri Komaragiri  
Date: 08/31/15  
Project: JSP15-08 Beacon Hill  
Version #: 1



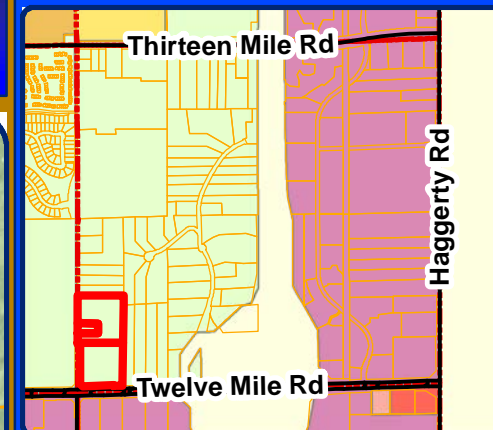
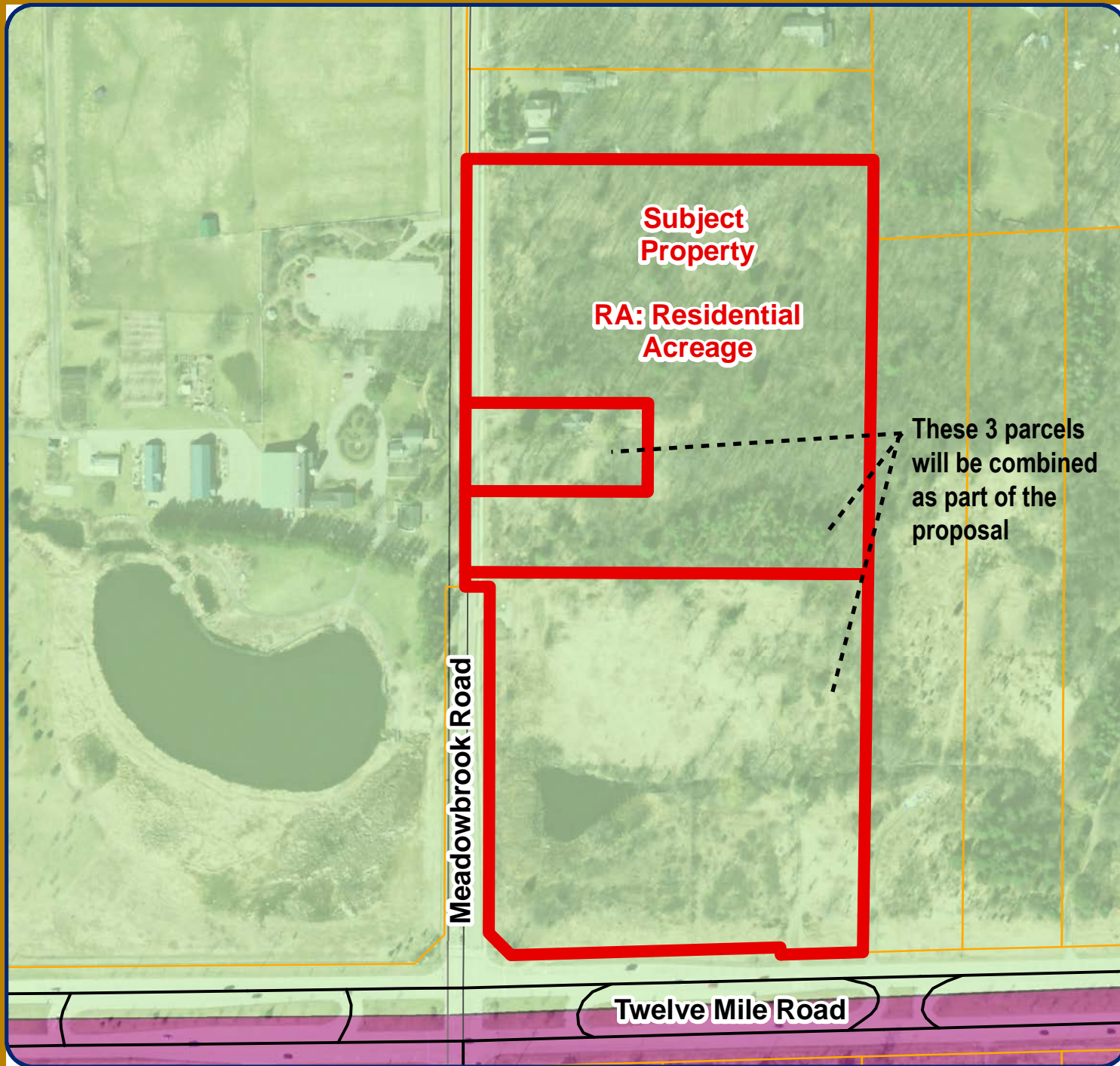
### MAP INTERPRETATION NOTICE

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



# JSP 15-08 Beacon Hill

Zoning



## Legend

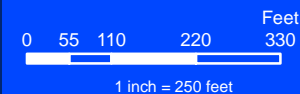
- Sections
- R-A: Residential Acreage
- RM-1: Low-Density Multiple Family
- MH: Mobile Home District
- B-2: Community Business District
- B-3: General Business District
- OST: Office Service Technology



City of Novi

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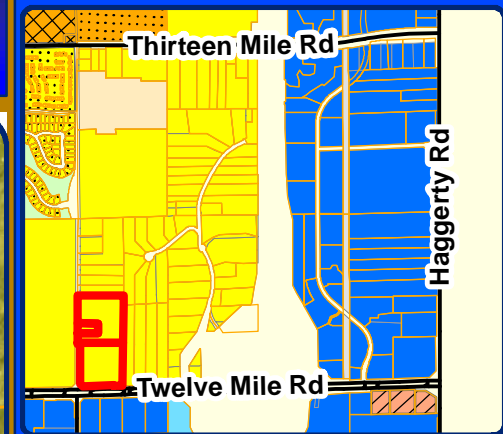
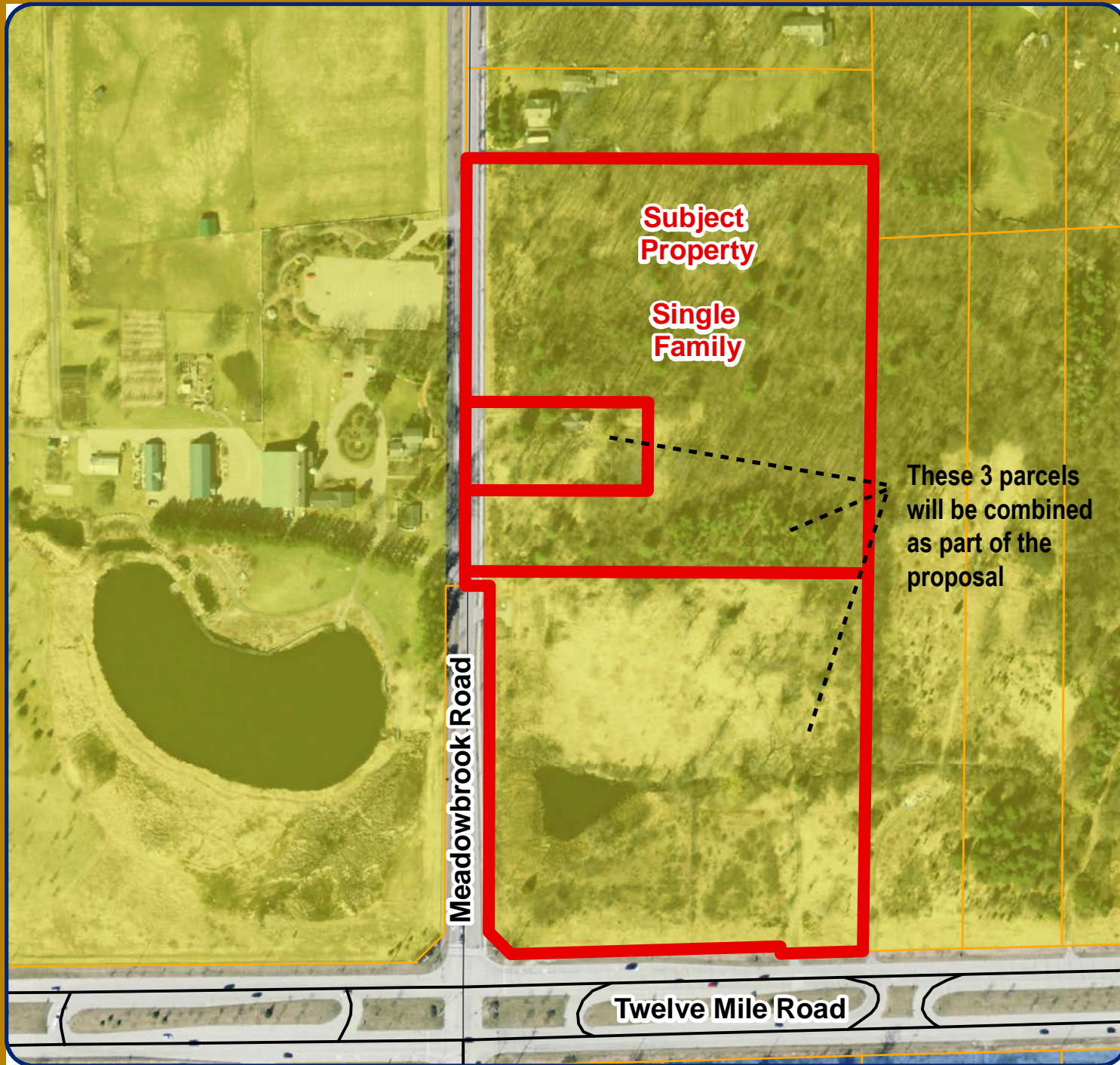
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# JSP 15-08 Beacon Hill

Future Landuse



### Legend

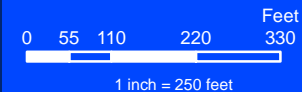
- SINGLE FAMILY
- PUD
- PD1
- MOBILE HOME PARK
- OFFICE RES DEV TECH
- COMMUNITY COMMERCIAL
- EDUCATIONAL FACILITY
- PUBLIC
- PRIVATE PARK
- UTILITY



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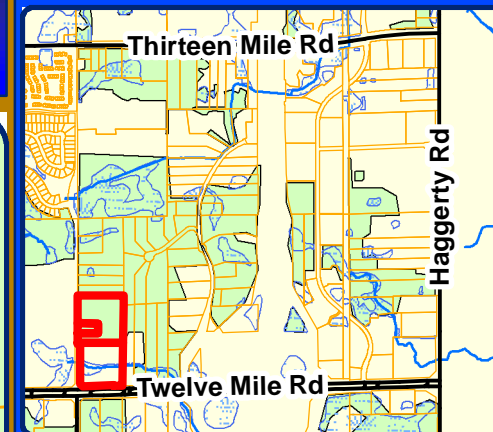
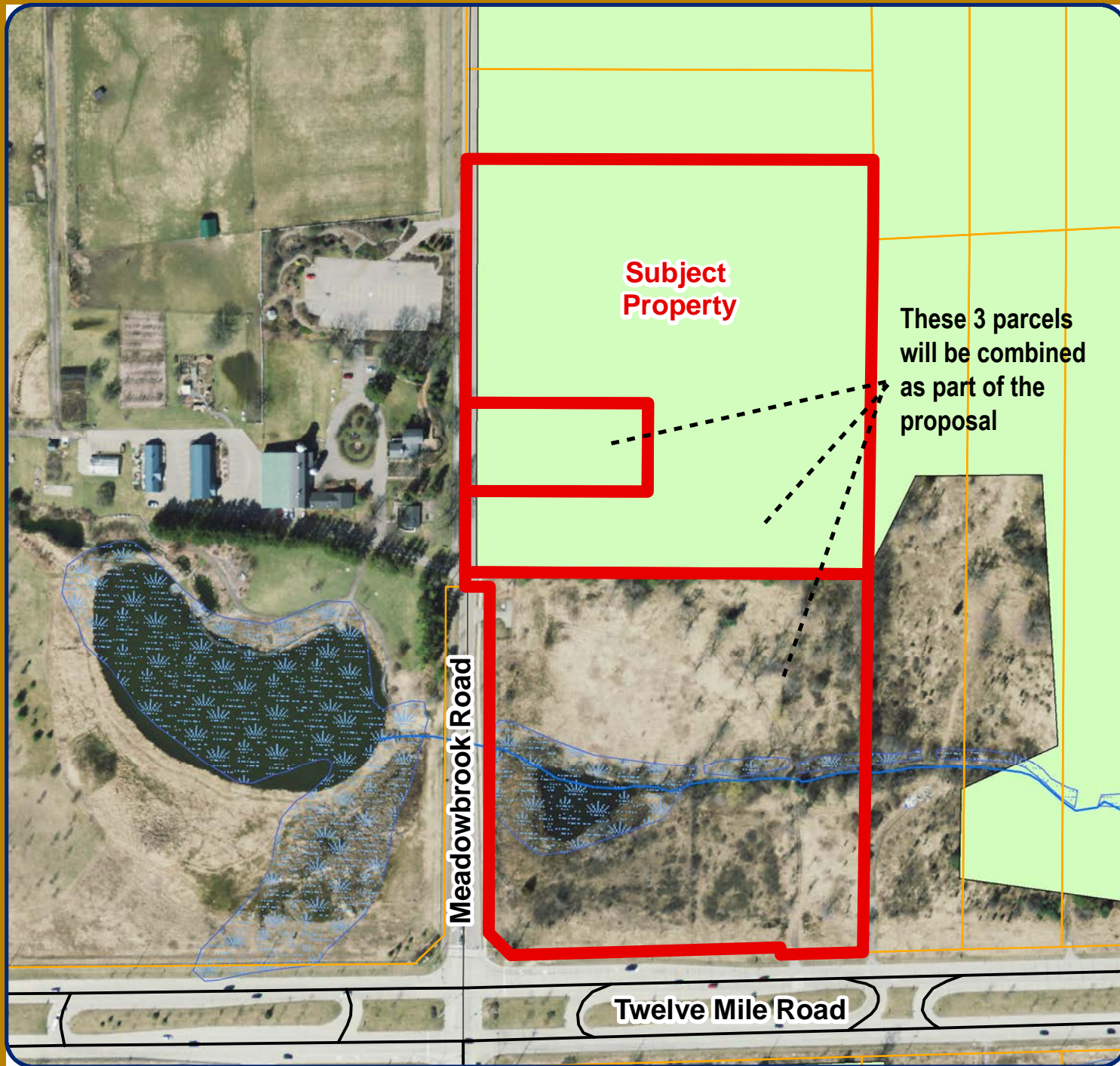
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# JSP 15-08 Beacon Hill

Natural Features



### Legend

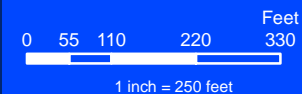
-  Wetlands
-  Woodlands



City of Novi

Dept. of Community Development  
City Hall / Civic Center  
45175 W Ten Mile Rd  
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Version #: 1

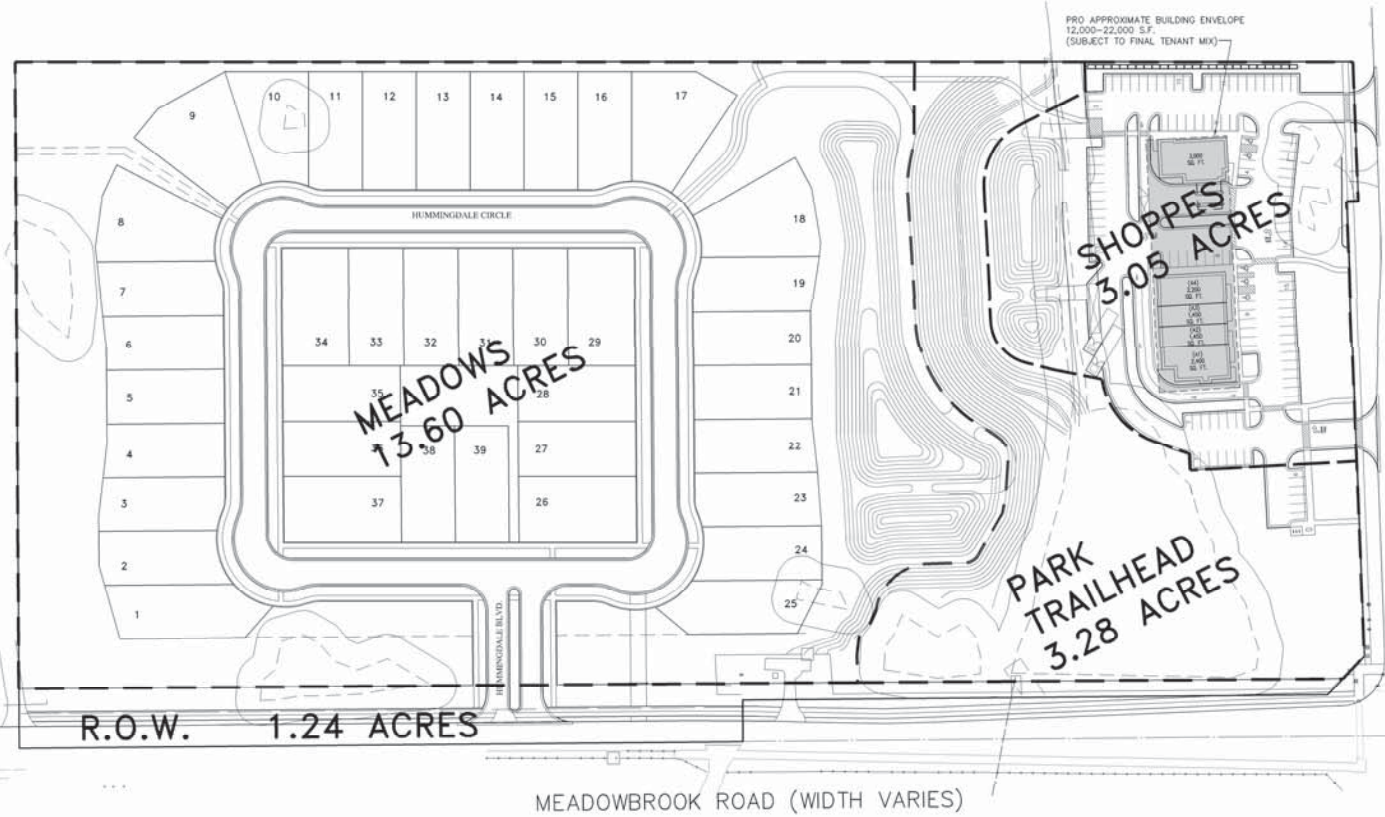


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**SITE PLAN**

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



12 MILE ROAD (WIDTH VARIES)

| PRO  |   |
|--|---|
| RESIDENTIAL MEADOWS  | 42 UNITS  |
| COMMERCIAL SHOPPES   | 12,000-22,000 S.F.<br>(SUBJECT TO FINAL TENANT MIX) |
| PHASING  |   |
| RESIDENTIAL MEADOWS  | 13.60 ACRES   |
| PARK TRAILHEAD   | 3.28 ACRES  |
| COMMERCIAL SHOPPES   | 16.65 ACRES   |
| PHASE 1  |   |
| • MEADOWS - COMPLETE CONSTRUCTION INCLUDING MASS GRADING, UNDERGROUND UTILITY INSTALLATION, PAVING, LANDSCAPING AND TREE REPLACEMENT.    |   |
| • PARK TRAILHEAD - CONSTRUCTION INCLUDING MASS GRADING, STREAM RELOCATION, WETLAND RESTORATION, LANDSCAPING AND TREE REPLACEMENT.        |   |
| • SHOPPES - MASS GRADING, INCLUDING SEDIMENTATION AND DETENTION BASINS, STORM SEWER WITHIN THE BASINS AND SITE STABILIZATION.            |   |
| PHASE 2  |   |
| • SHOPPES - BALANCE OF CONSTRUCTION INCLUDING UNDERGROUND UTILITY INSTALLATION, PAVING, LANDSCAPING, TREE REPLACEMENT AND SITE LIGHTING. |   |
| • PARK TRAILHEAD - BALANCE OF CONSTRUCTION INCLUDING PAVING, BENCH AND BIKERACK INSTALLATION AND RESTORATION OF THE DISTURBED AREAS.     |   |

**PRO AND PHASING PLAN**

| REVISIONS     | DATE    | BY | REVISIONS | DATE | BY | REVISIONS | DATE | BY | REVISIONS | DATE | BY |
|---------------|---------|----|-----------|------|----|-----------|------|----|-----------|------|----|
| PSP SUBMITTAL | 1/11/16 |    |           |      |    |           |      |    |           |      |    |
| PSP           | 4/23/16 |    |           |      |    |           |      |    |           |      |    |
| PSP           | 8/12/16 |    |           |      |    |           |      |    |           |      |    |

**ZEIMET W OZNAK**  
 CIVIL ENGINEERS AND ARCHITECTS  
 10000 HUNTERS LANE, SUITE 100  
 NEW BLOOMFIELD, MICHIGAN 48322  
 P: (248) 451-5000 F: (248) 451-5222 www.zeimetwoz.com

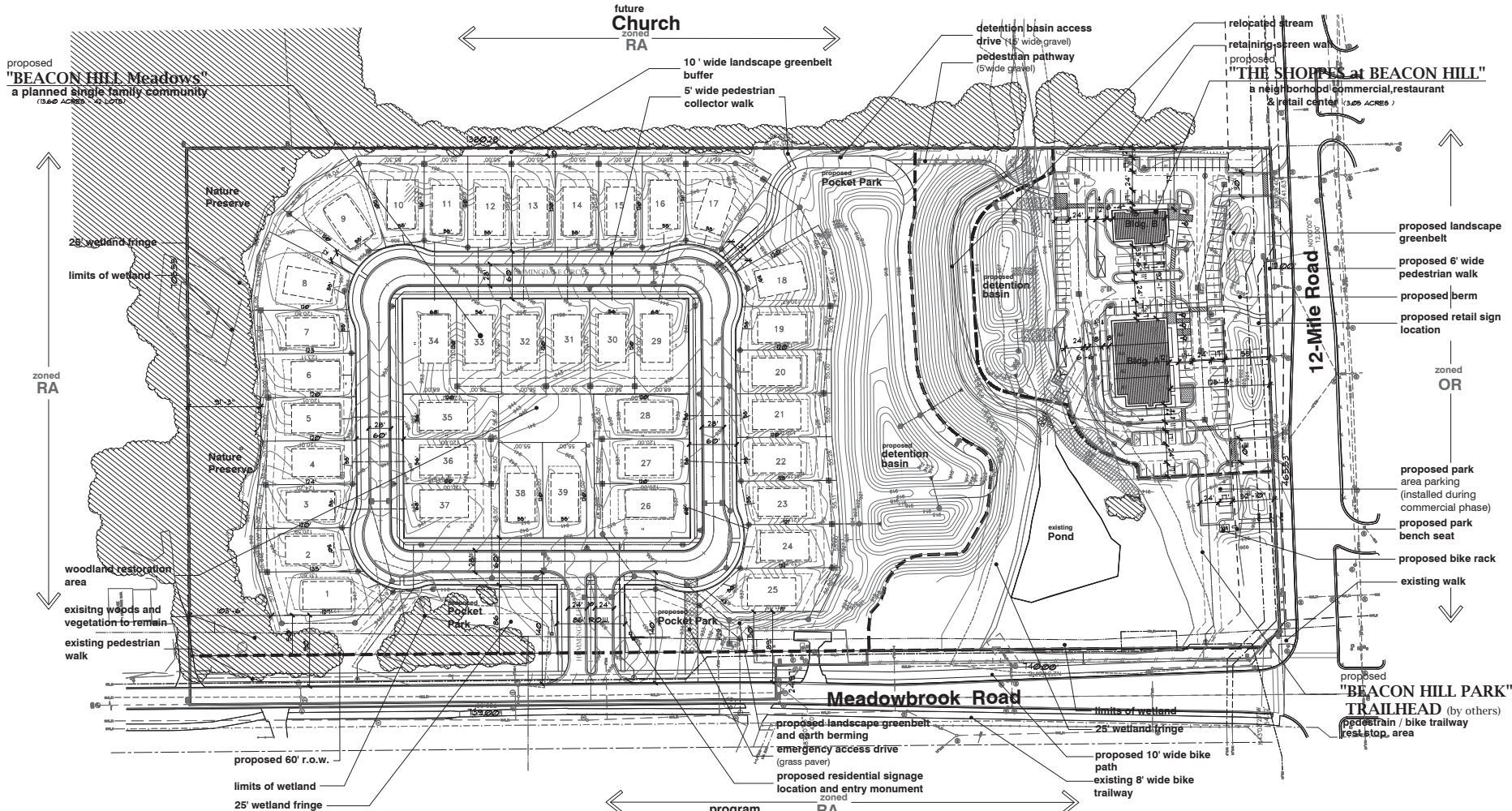
**MISS DIG SYSTEM INC.**  
 THREE FIELD WORKS/OPERATIONS ONLY NO WORKING DRILL SYSTEM  
 1-800-242-7171

PROJECT SPONSOR:  
 IVANHOE MEADOWBROOK LLC  
 6669 ORCHARD LAKE ROAD, STE. 314  
 WEST BLOOMFIELD, MI 48322 (248) 626-6114

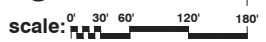
**PRO AND PHASING PLAN**  
 BEACON HILL PARK  
 NOV, MICHIGAN, SECTION 12

DATE: 1/11/16 SCALE: HOR: 1" = 60'  
 VER: 1" = N/A  
 DRAWN BY: JMS JOB NO.: 14151  
 CHECKED BY: GMS SHEET: SP-5





site plan for:  
**"Beacon Hill Park"**  
 City of Novi, Michigan

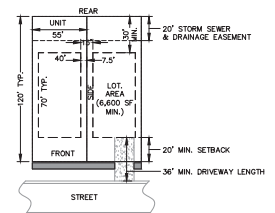


**program RA**

|  |            |
|--|------------|
| TOTAL ACRES OF SITE GRIDS                                      | 718 ±      |
| ACRES OF PROPOSED "THE SHOPPES AT BEACON HILL"                 | 3.09       |
| POTENTIAL BUILDING AREA  | 105,000 SF |
| NET AREA   | 3,988 SF   |
| BANK AREA  | 3,000 SF   |
| RESTAURANT AREA  | 4,660 SF   |
| TOTAL NO. OF PARKING REQUIRED FOR "THE SHOPPES AT BEACON HILL" | 161        |
| NET PARKING (AN 1 AS)  | 16 SPACES  |
| (1) SPACE / 200 SF = 2,000 / 100' x 143 SPACES                 |            |
| BANK PARKING (1000 SF)   | 70 SPACES  |
| (1) SPACE / 150 SF = 3,000 / 150' x 20 SPACES                  |            |
| RESTAURANT PARKING   | 11 SPACES  |
| RESTAURANT (AN) PARKING  | 36 SPACES  |
| (AN) SEATS / 200 SPACES = 10 EMPLOYEES / 20 SPACES = 100       |            |
| SEAT WAITING AREA / (5 x 6.66) SPACES = 33.66 SPACES (TOTAL)   |            |
| RESTAURANT (AN) PARKING  | 36 SPACES  |
| (AN) SEATS / 200 SPACES = 10 EMPLOYEES / 20 SPACES = 100       |            |
| SEAT WAITING AREA / (5 x 6.66) SPACES = 33.66 SPACES (TOTAL)   |            |
| TOTAL NO. OF PARKING PROVIDED FOR "THE SHOPPES AT BEACON HILL" | 160        |

**BEACON HILL PARK TRAILHEAD PARKING & SPACES (INSTALLED DURING COMMERCIAL PHASE)**

|   |            |
|---|------------|
| ACRES OF "BEACON HILL TRAILHEAD" SITE AREA        | 15.6 ±     |
| TOTAL NO. OF LOTS                                 | 35         |
| TYP. LOT SIZE                                     | 30' x 120' |
| MIN. LOT WIDTH                                    | 50'        |
| TYP. CORNER LOT WIDTH                             | 60'        |
| FRONT YARD SETBACK                                | 20'        |
| SIDE YARD SETBACK                                 | 7.5' / 15' |
| REAR YARD SETBACK                                 | 30'        |
| DENSITY PER ACRE (MEADOWS)                        | 2.86 ±     |
| DENSITY PER ACRE (TRAILHEAD PARK)                 | 7.31 ±     |
| TOTAL ACRES OF ROAD DEDICATED                     | 124 ±      |
| TOTAL ACRES OF BEACON HILL PARK TRAILHEAD AREA    | 8.81 (42%) |
| ACRES OF BEACON HILL PARK TRAILHEAD AREA          | 3.78 ±     |
| ACRES OF OPEN SPACE IN BEACON HILL MEADOWS        | 4.54 ±     |
| ACRES OF OPEN SPACE IN THE SHOPPES AT BEACON HILL | 38 ±       |



Client:  
**IVANHOE MEADOWBROOK LLC**  
 6689 Orchard Lake Road,  
 Suite 314  
 West Bloomfield, Michigan  
 48332  
 ph. (248) 626-6114

Project:  
**Beacon Hill Park**  
 A planned Single Family  
 and Neighborhood Commercial Retail

Project location:  
 City of Novi, MI  
 12-Mile Road &  
 Meadowbrook Road

Sheet title:  
 site plan

job no./issue/revision date:  
 LS16.008.00 SPA 6-29-2013  
 LS16.008.01 PSP 1-11-2015  
 LS16.008.04 PSP 4-13-2016  
 LS16.008.08 PSP 8-12-2016

drawn by:  
 JP, KH  
 checked by:  
 FP  
 date:  
 1-4-2015

notice:  
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**3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171**  
 For the details of each city flow

The location and dimensions of existing underground utilities as shown on this drawing are only approximate. No guarantee is either expressed or implied as to the completeness of accuracy. Contractor shall be exclusively responsible for determining the location and dimensions prior to the start of construction and obtaining prior to the start of construction.







PROPOSED STREET TREES TO BE LOCATED BETWEEN WALK AND ROAD CURBS. NO TREES TO BE INSTALLED OVER ANY EXISTING OR PROPOSED INGROUND UTILITIES. SEE ENGINEERING PLANS FOR LOCATION.

LAWN AREAS TO RECEIVE NATIVE WILD FLOWER SEED MIX ON FINISH GRADES. SEE SHT. LS-4 FOR SEED MIX DETAILS

HATCHING DENOTES WOODS AND VEGETATION TO REMAIN

DISTURBED LAWN AREAS TO RECEIVE METLAND SEED MIX ON FINISH GRADES. SEE SHT. LS-6 FOR SEED MIX DETAILS

PROPOSED RELOCATED STREAM  
 PROPOSED ADJACENT LANDSCAPE PLANTINGS. SEE SHEET LS-3 FOR DETAILS

PROPOSED DETENTION POND ACCESS DRIVE

HATCHING DENOTES PROPOSED TREE/CREPTED TOWARD TREE REPLACEMENT REQUIREMENTS-SEE SHT. LS-6 AND LS-7 FOR DETAILS

DETENTION BASIN - SEE ENGINEERING PLANS FOR LOCATION, SIZE, SLOPES, WATER ELEVATION, TOP OF BANK AND DETAILS. LAWN AREAS TO RECEIVE NATIVE WILD FLOWER SEED MIX ON FINISH GRADES. BASIN AREA BELOW HIGH WATER ELEVATION TO RECEIVE DETENTION POND SEED MIX AT A RATE OF 3 LBS. PER 1000 SQ. FT. ON FINISH GRADES. SEE SHT. LS-5 FOR SEED MIXTURE DETAILS

HATCHING DENOTES PROPOSED TREE/CREPTED TOWARD TREE REPLACEMENT REQUIREMENTS. SEE SHT. LS-6 AND LS-7 FOR DETAILS

LIMITS OF SINGLE FAMILY AND TRAILHEAD LINE



client:  
**IVANHOE MEADOWBROOK LLC**  
 6689 Orchard Lake Road,  
 Suite 314  
 West Bloomfield, Michigan  
 48332  
 ph. (248) 626-6114

project:  
**Beacon Hill Park**  
 A planned Single Family  
 and Neighborhood  
 Commercial Retail

project location:  
 City of Novi, MI

12-Mile Road &  
 Meadowbrook Road

sheet title:  
**Beacon Hill Meadows  
 Landscape Planting  
 Detail**

job no./issue/revision date:  
 LS16.001.006 SPA 6-20-2015  
 LS16.006.01 PSP 1-13-2016  
 LS16.006.04 PSP 4-13-2016  
 LS16.006.08 PSP 8-12-2016

drawn by:  
**JP, KH**  
 checked by:  
**FP**  
 date:  
**1-4-2015**

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The location and character of existing underground utilities as shown on this drawing are only approximate. No guarantee is either expressed or implied as to the completeness of accuracy. Contractor shall be exclusively responsible for determining the location and character of utilities prior to the start of construction.

project no.:  
**LS16.008.01**  
 sheet no.:

**LS2** of 7



R.O.M LAWN AREAS TO RECEIVE IRRIGATION #5000 ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE. SEE ENGINEERING PLANS FOR GRADES.  
 HATCHING DENOTES PROPOSED TREE/CREPTED TOWARD TREE REPLACEMENT REQUIREMENTS. SEE SHT. LS-6 AND LS-7 FOR DETAILS

HAVER FRONTAGE WITH EXISTING WOODS AND VEGETATION TO REMAIN

60' GREENBELT FRONTAGE

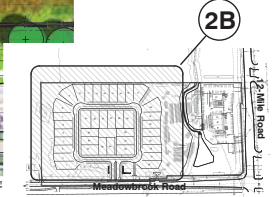
86' R.O.M

25' VEHICULAR CLEARVIEW LINE

30' GREENBELT FRONTAGE

R.O.M LAWN AREAS TO RECEIVE IRRIGATION #5000 ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE. SEE ENGINEERING PLANS FOR GRADES.

**2B Beacon Hill Meadows- landscape planting detail**  
 SCALE: 1" = 40'-0"



**key reference map**  
 NO SCALE





**3A** The Shoppes at Beacon Hill landscape planting detail  
SCALE: 1" = 40'-0"

PROPOSED STREET TREES TO BE LOCATED BETWEEN WALK AND ROAD CURB. NO TREES TO BE INSTALLED OVER ANY EXISTING OR PROPOSED UTILITY LINES. SEE ENGINEERING PLANS FOR LOCATION.

LAWN AREAS BETWEEN PARKING AND LANDSCAPE ISLANDS TO RECEIVE IRRIGATION 4.000 ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE.

PROPOSED PRIVATE TREES TO BE ALLOWED TO KNEE TOGETHER AND A HEDGE. MAINTAIN HEIGHT AT 35'

PROVIDE METAL EDGING BETWEEN LAWN AREAS AND LANDSCAPE ISLANDS.

PROPOSED SIGN LOCATION FINAL LOCATION AND METHOD OF CONSTRUCTION PER CITY STANDARDS AND REQUIREMENTS AND APPROVAL.

2 1/2" TO 3 1/2" HIGH EARLHEEZY MAXIPOST 1 ON 3 SLOPE. LAWN AREAS TO RECEIVE IRRIGATION 4.000 ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE.

LAWN AREAS TO RECEIVE IRRIGATION 4.000 ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE.

2 1/2" TO 3 1/2" HIGH EARLHEEZY MAXIPOST 1 ON 3 SLOPE. LAWN AREAS TO RECEIVE IRRIGATION 4.000 ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE.

EXISTING WETLAND - INVASIVE SPECIES TO BE TREATED AND HABITAT RESTORATION INCLUDING NATIVE WILDFLOWER SEED MIX TO BE PROVIDED TO IMPROVE PLANT SPECIES DIVERSITY. SEE WETLAND PLANS PREPARED BY KING & YACAGORSKY ENVIRONMENTAL, INC. FOR DETAILS.

EXISTING WETLAND - INVASIVE SPECIES TO BE TREATED AND HABITAT RESTORATION INCLUDING NATIVE WILDFLOWER SEED MIX TO BE PROVIDED TO IMPROVE PLANT SPECIES DIVERSITY. SEE WETLAND PLANS PREPARED BY KING & YACAGORSKY ENVIRONMENTAL, INC. FOR DETAILS.

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**3B** bike rack  
(1-COORDINATIONS)  
MANUFACTURER:  
DUMPORE SITE FURNISHINGS  
P.O. BOX 142, MIFFLINTOWN, PA 17059  
WEB: WWW.DUMPORE.COM  
PH: 800-958-4098  
MODEL NO. 130-20-51  
FINISH: BLACK

**commercial retail landscape requirements:**

|  | REQUIRED      | PROVIDED       |
|--|---------------|----------------|
| <b>greenbelt</b> (2 Mile Road)   |               |                |
| TOTAL LIN. FT. OF 12 MILE ROAD FRONTAGE  | 408'          |                |
| ONE (1) 3' DECIDUOUS OR EVERGREEN TREE PER 35 LIN. FT.                                 | 11            | 11             |
| THREE (3) SUBCANOPY TREES PER 40 LIN. FT.  | 10            | 10             |
| <b>detention</b>   |               |                |
| HIGH WATER PERIMETER   | 585'±         | 75%            |
| 10%-75% LARGE NATIVE SHRUBS ABOVE HIGH WATER BASIN RIM AREA                            | 75%           | 75%            |
| <b>parking lot trees</b> (OFFICE-CATEGORY-1)   |               |                |
| PARKING SPACE AREA   | 17540 SQ. FT. |                |
| PARKING AREA FORMULA (17540 SQ. FT. X .10 (10%) = 1754 SQ. FT.)                        | 1754 SQ. FT.  |                |
| VEHICULAR ACCESS AREA  | 42416 SQ. FT. |                |
| VEHICULAR AREA FORMULA (42416 SQ. FT. X .05 (5%) = 2121 SQ. FT.)                       | 2121 SQ. FT.  |                |
| TOTAL AREA OF INTERIOR LANDSCAPE ISLANDS AREA  | 9,875 SQ. FT. | 9,875 SQ. FT.  |
| (1754 SQ. FT. + 2121 SQ. FT.)  |               |                |
| TOTAL NO. OF PARKING LOT TREES   | 52            | 52             |
| (5,875 SQ. FT. LANDSCAPE ISLANDS / 75 (52-TREES))                                      |               |                |
| MIN. NO. OF PARKING LOT TREES TO BE LOCATED IN PERIMETER GREENSPACE                    | 54            | 55             |
| LIN. FT. OF PERIMETER PARKING (1-CANOPY TREE PER 35 LIN. FT. / (142' / 35) = 54 TREES) | 142'          |                |
| <b>building foundation</b>   |               |                |
| BUILDING FOUNDATION LANDSCAPE AREA   | 5184 SQ. FT.  | 5404 ± SQ. FT. |
| (648' PERIMETER X 8' = 5184 SQ. FT.)   |               |                |
| <b>12-Mile Road Street Tree</b>  |               |                |
| TOTAL LIN. FT. OF COMMERCIAL 12 MILE ROAD FRONTAGE                                     | 408'          |                |
| ONE (1) 3' DECIDUOUS OR EVERGREEN TREE PER 35 LIN. FT. (408' / 35) = 11.6 TREES        | 12            | 12             |
| (A) LANDSCAPE MAINTENANCE TO BE REQUESTED FOR THE REQUIRED TREE PLANTINGS              |               |                |

**residential landscape requirements:**

|  | REQUIRED   | PROVIDED |
|--|------------|----------|
| <b>greenbelt</b> (Meadowbrook Road)  |            |          |
| TOTAL LIN. FT. OF MEADOWBROOK ROAD FRONTAGE  | 366' ± (*) |          |
| ONE (1) 3' DECIDUOUS OR EVERGREEN TREE PER 35 LIN. FT.   | 10         | 10       |
| ONE (1) SUBCANOPY TREE PER 20 LIN. FT.   | 19         | 22       |
| <b>boulevard island</b>  |            |          |
| TOTAL LIN. FT. OF BOULEVARD ISLAND   |            |          |
| COMBINATION OF CANOPY TREES, SUBCANOPY TREES AND SHRUBS  | 75%        | 75%      |
| <b>detention</b>   |            |          |
| HIGH WATER PERIMETER   | 1142.41'   | 75%      |
| 10%-75% LARGE NATIVE SHRUBS ABOVE HIGH WATER BASIN RIM AREA  | 75%        | 75%      |
| * 856' TOTAL LIN. FT. SINGLE FAMILY FRONTAGE - 56' R.O.A. AND 404' (MAINTENANCE FOR EXISTING HOODLAND/VEGETATION TO BE SAVED) = 366' |            |          |

**street tree notes:**

STREET TREES SHALL BE PLANTED 10' FROM ANY DRIVEWAYS, 4' FROM ANY CURBS AND SIDEWALKS 12' FOR SUBCANOPY TREES, 35' FROM OVERHEAD UTILITY LINES 10' FROM ANY MAN HOLE OR FIRE HYDRANTS, AND 35' FROM THE INTERSECTION OF CURB LINES ON CORNER LOTS.

STREET TREES SHALL HAVE THE FOLLOWING CHARACTERISTICS: 2 1/2" CALIPER, NO. 1 GRADE B4B, NORTHERN GREEN PER CURRENT AAN STANDARDS AND INSTALLED ACCORDING TO ACCEPTED PLANTING PROCEDURES.

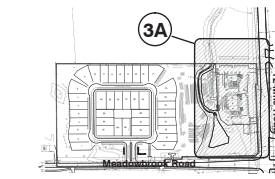
STREET TREES SHALL HAVE A CENTRAL LEADER AND RADIAL BRANCHING STRUCTURE. ANY BRANCHES THAT MAY DEVELOP INTO "V" CROTCHES SHALL BE PRUNED SO AS NOT TO BECOME DOMINANT BRANCHES. THE BRANCHES ON CANOPY TREES SHALL BE LINED UP 14" ON THE SIDE OF THE STREET AND 10" ON THE NON-STREET SIDE.

**street tree requirements:**

| PER LOT WIDTH, THE FOLLOWING STREET TREE PLANTING SHALL OCCUR:               | LOT FRONTAGE   | conditions required | provided |
|--|--|---------------------|----------|
| 3'0" AT LEAST 1 TREE   | LOTS WITH FRONTAGE <10'  | 34                  | 34       |
| 3'0" AT LEAST 2 TREES  | LOTS WITH FRONTAGE 10'-20'   | -                   | -        |
| 3'0" AT LEAST 3 TREES  | LOTS WITH FRONTAGE 20'-30'   | 4                   | 12       |
| MINIMUM STREET TREE SIZE REQUIRED 2 1/2" CALIPER AND 10" IN 35' O.C. BRACING | OPEN SPACE FRONTAGE, CUL-DE-SAC, AND BLVD. ISLAND  | NA                  | 8        |
|  | ONE (1) DECIDUOUS TREE PER 35' BETWEEN CURB AND SIDEWALK (SINGLE FAMILY MEADOWBROOK R.O.A. FRONTAGE = 110' / 35' = 22 TREES) | 110'                | 22       |
|  |  |                     | 8 ± 5    |
|  |  | TOTALS              | 75       |
|  |  |                     | 80       |



**3C** park bench seating  
(1-COORDINATIONS)  
6" WIDE BENCH SEAT BY DUMPORE, INC. MODEL NO. 3440000 (5-2) RECYCLED PLASTIC POLYESTER POWER-COATED FRAME OR EQUAL  
MANUFACTURER:  
DUMPORE SITE FURNISHINGS  
P.O. BOX 142, MIFFLINTOWN, PA 17059  
WEB: WWW.DUMPORE.COM  
PH: 800-958-4098



**key reference map**  
NO SCALE



client:  
**IVANHOE MEADOWBROOK LLC**  
6689 Orchard Lake Road,  
Suite 314  
West Bloomfield, Michigan  
48332  
ph. (248) 626-6114

project:  
**Beacon Hill Park**  
A planned Single Family  
and Neighborhood  
Commercial Retail

project location:  
City of Novi, MI

12-Mile Road &  
Meadowbrook Road

sheet title:  
The Shoppes of  
Beacon Hill Landscape  
Planting Detail

job no./issue/revision date:  
LS16.001.00 - SPA - 6-20-2013  
LS16.006.01 - PSP - 1-11-2016  
LS16.006.04 - PSP - 4-13-2016  
LS16.006.08 - PSP - 8-12-2016

drawn by:  
**JP, KH**

checked by:  
**FP**

date:  
**1-4-2015**

notice:  
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Do Not scale drawings. Use figured dimensions only.



The location and character of existing development within an above site plan drawing are only approximate; no guarantee is either expressed or implied as to the completeness of accuracy; contractor shall be exclusively responsible for determining the location and character prior to the start of construction.

project no:  
**LS16.008.01**

sheet no:  
**LS-3** of 7



# Beacon Hill Park Ivanhoe Companies



COLONIAL STREETSCAPE  
SCALE 1/4" = 1'-0"



RANCH STREETSCAPE  
SCALE 1/4" = 1'-0"







## PLANNING REVIEW



# PLAN REVIEW CENTER REPORT

September 12, 2016

## Planning Review

Beacon Hill

JSP 15-08

### Petitioner

Ivanhoe Meadowbrook, LLC

### Review Type

Preliminary Site Plan and Site Condominium

### Property Characteristics

|                             |  |   |
|-----------------------------|--|---|
| <b>Section</b>              | 10   |   |
| <b>Site Location</b>        | Northeast corner of 12 Mile and Meadowbrook  |   |
| <b>Site School District</b> | Walled Lake Community School District  |   |
| <b>Site Zoning</b>          | RA (Residential Acreage) with Planned Rezoning Overlay (PRO) to R-4 (One-Family Residential) & B-3 (General Business District) |   |
| <b>Adjoining Zoning</b>     | North  | RA, Residential Acreage                 |
|                             | East   | RA Residential Acreage;                 |
|                             | West   | RA, Residential Acreage                 |
|                             | South  | OST: Office Service Technology District |
| <b>Current Site Use</b>     | One single family home on one small lot; otherwise vacant  |   |
| <b>Adjoining Uses</b>       | North  | Vacant (proposed church);               |
|                             | East   | Single family homes;                    |
|                             | West   | MSU Tollgate Center;                    |
|                             | South  | South University                        |
| <b>Site Size</b>            | 21.13 gross acres  |   |
| <b>Plan Date</b>            | August 12, 2016  |   |

### Project Summary

The property is approximately 21.13 acres. The applicant is proposing a 39-unit single-family residential development with frontage on and access to Meadowbrook Road, up to 22,000 square feet of commercial space with frontage on Twelve Mile Road, and an open space/park area at the corner of the intersection. The applicant proposes to dedicate the open space/park area at the corner of the intersection, and commits to building vehicle and bicycle parking for a trailhead.

The residential portion of the concept plan is arranged as a cluster, with open space dedicated to parks, buffers, wetlands, and detention; homes are arranged along a ring road with a single access point on Meadowbrook Road. Secondary access for emergency vehicles and pedestrians is provided at the rear of the development by a semi-paved access path. The proposed commercial area includes two driveways onto 12 Mile Road, as well as a small parking lot adjacent to the park and trailhead.



### Recommendation

**Approval of the Preliminary Site Plan with phasing is recommended.** The plan mostly conforms to the requirements of the Zoning Ordinance, with a few deviations that were approved by City Council as part of PRO Concept plan approval. **Planning Commission's approval of Preliminary Site Plan with phasing, Site Condominium, Wetland Permit, Woodland Permit and Storm Water Management Plan approval is required.**

### Planned Rezoning Overlay

The rezoning with a Planned Rezoning Overlay was granted final approval by **City Council on August 08, 2016**. The PRO option creates a "floating district" with a conceptual plan attached to the rezoning of a parcel. As part of the PRO, the underlying zoning is proposed to be changed (in this case from RA to RT) and the applicant enters into a PRO agreement with the City, whereby the City and the applicant agree to tentative approval of a conceptual plan for development of the site. Following final approval of the PRO concept plan and PRO agreement, the applicant will submit for Preliminary and Final Site Plan approval under standard site plan review procedures. The PRO runs with the land, so future owners, successors, or assignees are bound by the terms of the agreement, absent modification by the City of Novi. If the development has not begun within two years, the rezoning and PRO concept plan expires and the agreement becomes void.

Please see the summary of Action Summaries at the end of the letter

### Changes from Approved PRO Concept Plan

1. Number of lots was reduced from 41 to 39.
2. Density decreased from 3.08 DUA to 2.86 DUA.
3. Minimum lot width is increased from 50 ft. to 55 ft. (except for two lots).
4. Potential commercial building area has been reduced from 11,550 SF to 10,500 SF.
5. The Open space remains same at 8.8 acres, approximately 42 percent.
6. A ten foot bike path is proposed along Meadowbrook Road as per Council motion.

**Staff is in agreement with the changes as they reduce the impact to the site than approved PRO Concept Plan.**

### Additional deviations not included in approved PRO agreement:

1. All properties zone B-3 abutting residential districts shall have a minimum of 20 ft. parking setback. The Current site plan is proposing 12 feet along eastern property line. The maximum building height for B-3 is 30 ft. The proposed building indicates a height of 30 ft. 2 inches. **The applicant can revise the site plan to meet the requirement or apply for an amendment to the PRO Agreement prior to submittal of final site plan for Phase 2.**
2. Facade identifies that commercial building does not meet the code. **The applicant can either revise the elevations or apply for an amendment to the approved PRO agreement to include this deviation.**

### 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. **Site Plan Review:** Staff and consultants reviewed the site plan at the level of detail for a Preliminary Site Plan for the entire site. All comments shall be addressed with the final site plan unless otherwise specified. **Planning has identified couple of deviations for the commercial site. The applicant can revise the site plan to meet the requirement or apply**

for an amendment to the PRO Agreement prior to submittal of final site plan for Phase 2. The preliminary approval will be contingent on the deviations to be addressed or City Council's approval to the PRO amendment.

2. **Phasing:** Preliminary Site Plan indicates two phases. Phasing was approved with the PRO agreement. **Preliminary site plan approval includes the entire site plan (both R-4 and B-3). Final site plans are to be submitted for review and approval for each phase separately.**
3. **Area requirements:** Provide a table indicating depth, width (frontage), acreage and depth to width ratio for each lot
4. **Bike Racks:** The applicant is requested to consider installing "City of Novi" bike racks as suggested by the Council at their meeting.
5. **Loading Spaces:** Staff is unable to determine the location and compliance of proposed loading spaces. **Provide the dimensions for required loading area and proposed loading area for commercial space and label the loading space on the plans.**
6. **Noise Impact Statement:** A noise impact statement is required subject to the standards of Sec. 5.14.10.B. **Please provide a statement with response letter**
7. **Lighting when abutting residential districts:** All lighting shall be shielded from residential uses. **Provide lighting and photometric plan to verify conformance**
8. **Public Benefits:** The current site plan falls short of the standards for the agreed public benefits. **Please provide additional details to provide the public benefits included in the PRO agreement. Refer to Planning Review chart for more detail.**
9. **Legal Documents:** Drafts for all required legal documents such as Master Deed with a legal transmittal are required along with stamping sets. Conservation easements will be required at the time of Final Site Plan submittal. See attached Transmittal.
10. **Plan Review Chart:** Please review the attached review chart in details for all the additional information requested.
11. **Signage:** Exterior Signage is not regulated by the Planning Division or Planning Commission. **Please contact Jeannie Niland (248.347.0438) for information regarding sign permits.**
12. **Other Reviews:**
  - a. **Engineering Review:** Additional comments to be addressed with Final Site Plan. Engineering recommends approval.
  - b. **Landscape Review:** Additional comments to be addressed with Final Site Plan. Landscape recommends approval.
  - a. **Wetlands Review:** The City of Novi Wetland Non-Minor Use Permit and Buffer Authorization are required for the proposed impacts to wetlands and regulated wetland setbacks. Additional comments to be addressed with Final Site Plan. Wetlands recommend approval.
  - a. **Woodlands Review:** The City of Novi Woodland permit is required for the proposed impacts to regulated woodlands. Additional comments to be addressed with Final Site Plan. Wetlands recommend approval.
  - b. **Traffic Review:** Additional comments to be addressed with Final Site Plan. Traffic recommends approval.

- c. Facade Review: Façade recommends approval. Façade identifies that commercial building does not meet the code. **The applicant can either revise the elevations or apply for an amendment to the approved PRO agreement to include this deviation.**
- d. Fire Review: Additional comments to be addressed with Final Site Plan. Fire recommends approval.

### **Next Step: PLANNING COMMISSION MEETING**

This Site Plan is scheduled to go before Planning Commission for consideration on September 28, 2016. Please provide the following **no later than 9:00am, September 21, 2016** if you wish to keep the schedule.

1. A response letter addressing ALL the comments from ALL the review letters.
2. A color rendering of the Site Plan, if any.
3. A PDF version of the site plan submitted dated August 11, 2016. **NO CHANGES MADE**

### **Final Site Plan Submittal**

After receiving Planning Commission approval of the Preliminary Site Plan, please submit the following for Final site plan review and approval for Phase 1.

1. Seven copies of Final Site Plan addressing all comments from Preliminary review
2. Response letter
3. Final Site Plan Application
4. Final Site Plan Checklist
5. Engineering Estimate
6. Landscape Estimate
7. Draft Conservation Easement
8. Any applicable off-site easement drafts
9. No Revision Façade Affidavit (if no changes are proposed for Façade)

### **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 requested to be submitted with the electronic stamping set.

### **Stamping Set Approval**

After receiving the approval for electronic stamping set submittal from all reviewing agencies, please submit **10 size 24" x 36" copies with original signature and original seals**, to the Community Development Department for final approval.

### **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.

### **Approved Ordinance Deviations and Public Benefits in PRO Agreement**

The following ordinance deviations were included in the PRO Agreement:

- a. Lot size: Reduction in the required minimum lot size and minimum lot width for one-family detached dwellings reviewed against R-4 Zoning standards to allow for smaller lots (10,000 square feet and 80 feet required, 6,000 square feet and 50 feet provided).
- b. Front yard setback: Reduction in minimum front yard setback for one-family detached dwellings reviewed against R-4 Zoning standards (30 feet required, 20 feet provided).
- c. Side yard setback: Reduction in minimum side yard setback and aggregate side yard setback for one-family detached dwellings reviewed against R-4 Zoning standards (10 feet with 25 feet aggregate required, 7.5 feet with 15 feet aggregate provided).
- d. Rear yard setback: Reduction in minimum rear yard setback for one-family detached dwellings reviewed against R-4 Zoning standards (35 feet required, 30 feet provided).
- e. Credit for upsizing Woodland Replacement Trees: Deviation of ordinance standards to allow proposed upsizing of Woodland Replacement Trees (evergreens) throughout the site in an amount not to exceed 33 percent of the evergreen trees provided (102 on the concept plan), as recommended in the Landscape Review letter, and based on the standards of the Landscape Design Manual, which does not allow additional credit for upsizing of Woodland Replacement Trees. (The staff-recommended deviation was included in City Council's motion for tentative approval and is included in the PRO Agreement.)
- f. Landscape standards: Deviation from landscaping ordinance standards for the following areas due to the proposed heavily landscaped design, and the proposed improvements to the pond and wetlands:
  - i. Deviation for the required landscape berm, and the required trees and sub-canopy trees to be planted on the berm, along the residential frontage of Meadowbrook Road due to the existing wetlands and heavy vegetation in this area;
  - ii. Deviation for the required greenbelt landscaping south of the residential area (approximately 540 feet) due to the existing wetlands, and other heavy plantings proposed for this location; and
  - iii. Deviation from the required greenbelt landscaping along the western 235 feet of the Twelve Mile Road frontage due to the existing wetlands and other heavy plantings proposed for this location.
- g. Design and Construction Standards (DCS) Waiver: DCS waiver is required for the lack of paved eyebrows within the residential development.
- h. Design and Construction Standards (DCS) Waiver: DCS waiver for lack of a stub street to the subdivision boundary at intervals not to exceed 1,300 feet along the subdivision perimeter.

When a PRO is proposed, an applicant is required to demonstrate a public benefit above and beyond what would be associated with the normal development of the site. This public benefit is included in the PRO Agreement. The public benefits associated with the subject property, and as noted in the approved PRO Agreement are as follows:

- a. Dedication of the Park Trailhead and Right of Way to the City.
- b. The following improvements shall be made by the Developer to the Park Trailhead:
  - i. Mass and fine grading of 5.63 acres, including topography enhancement, wetland and woodland replacement plantings, and seeding on upland park.
  - ii. Augmenting the creek, removal of damaged culverts, and realignment of creek.

- iii. Creation of a weir system to effectuate a waterfall/spillway to be viewed from the bank of the park.
  - iv. Enhanced design for landscaped retention ponds.
  - v. Habitat restoration including, but not limited to removal of invasive species.
  - vi. Installation of wetland enhancement plantings.
  - vii. Installation of six parking spaces, a bench, and bike racks in accordance with the PRO Plan and final approved site plans.
- c. A minimum of 42 percent of the land (or 8.8 acres) shall be open space, with a Conservation Easement to be provided over certain portions of open space as shown on the PRO Plan.
  - d. Non-motorized access shall be provided between the two phases;
  - e. The following uses, while permitted in the B-3 classification, shall not be permitted in the Commercial Phase; fast food restaurants (but allowing fast casual restaurants such as Panera Bread, Qdoba, a coffee shop, etc.), fueling stations, produce sales, day care centers, business schools and colleges, private clubs, motels, veterinary hospitals or clinics, auto washes, bus passenger stations, new and used car salesrooms, tattoo parlors, vape or vapor sales, outdoor space for car sales, or automobile service centers.
  - f. Preservation of a minimum 10 foot wide wooded buffer along the east property line, and of a minimum 50 foot wide buffer along Meadowbrook Road.

**The PRO runs with the land, so future owners, successors, or assignees are bound by the terms of the agreement, absent modification by the City of Novi. If the development has not begun within two years, the PRO concept plan expires and the agreement becomes void.**

#### **Previous Planning Commission and City Council Actions**

The rezoning and concept plan first appeared for public hearing with the **Planning Commission** on **September 9, 2015**. The Planning Commission voted to postpone consideration to allow the applicant time to address certain concerns that had been identified.

The **Planning Commission** reviewed the Concept Plan and Rezoning request at the **January 13, 2016** meeting and, following a public hearing, recommended approval of the plan as submitted at that time subject to a number of conditions.

The **Planning Commission** again reviewed a Concept Plan and Rezoning at a public hearing on **April 27, 2016** and recommended approval to the City Council.

On **May 23, 2016**, the City Council tentatively approved the rezoning request with PRO, and directed the City Attorney's office to prepare a PRO Agreement based on the following motion:

*To approve tentative indication that City Council may approve the request of The Ivanhoe Companies for Beacon Hill, JSP 15-08, with Zoning Map Amendment 18.710, to rezone property in Section 12, located on the northeast corner of Twelve Mile Road and Meadowbrook Road from RA [Residential Acreage) to R-4 (One-Family Residential) and B-3 (General Business), with a Planned Rezoning Overlay (PRO), and to approve corresponding Concept Plan, and direction to the City Attorney to prepare a proposed PRO Agreement with the following ordinance deviations:*

- a. *Reduction in the required minimum lot size and minimum lot width for one family detached dwellings reviewed against R-4 Zoning standards to allow for smaller lots (1 0,000 square feet and 80 feet required, 6,000 square feet and 50 feet provided);*
- b. *Reduction in minimum front yard setback for one-family detached dwellings reviewed against R-4 Zoning standards (30 feet required, 20 feet provided);*

- c. Reduction in minimum side yard setback and aggregate side yard setback for one-family detached dwellings reviewed against R-4 Zoning standards( 10 feet with 25 feet aggregate required, 7.5 feet with 15 feet aggregate provided);
- d. Reduction in minimum rear yard setback for one-family detached dwellings reviewed against R-4 Zoning standards (35 feet required, 30 feet provided);
- e. Deviation of ordinance standards to allow proposed upsizing of Woodland Replacement Trees (evergreens) throughout the site in an amount not to exceed 33 percent of the evergreen trees provided ( 102 on the concept plan), as recommended in the Landscape Review letter, and based on the standards of the Landscape Design Manual, which does not allow additional credit for upsizing of Woodland Replacement Trees;
- f. Deviation from landscaping ordinance standards for the following areas due to the proposed heavily landscaped design, and the proposed improvements to the pond and wetlands:
  - i. Deviation for the required landscape berm, and the required trees and sub canopy trees to be planted on the berm, along the residential frontage of Meadowbrook Road due to the existing wetlands and heavy vegetation in this area;
  - ii. Deviation for the required greenbelt landscaping south of the residential area (approximately 540 feet) due to the existing wetlands, and other heavy plantings proposed for this location; and
  - iii. Deviation from the required greenbelt landscaping along the western 235 feet of the Twelve Mile Road frontage due to the existing wetlands and other heavy plantings proposed for this location; and
- g. Design and Construction Standards (DCS) Waiver for the lack of paved eyebrows within the residential development.

The following conditions shall be requirements of the Planned Rezoning Overlay Agreement:

- a. Applicant's offer to dedicate 3.28 acres to the City for the establishment of a public park with the following improvements made by the developer:
  - i. Mass and fine grading of 5.63 acres, including topography enhancement, wetland and woodland replacement plantings, and seeding on upland park.
  - ii. Augmenting the creek, removal of damaged culverts, and realignment of creek.
  - iii. Creation of a weir system to effectuate a waterfall/spillway to be viewed from the bank of the park.
  - iv. Enhanced design for landscaped retention ponds.
  - v. Habitat restoration.
  - vi. Installation of wetland enhancement plantings.
  - vii. Applicant to construct six parking spaces, a bench, and bike racks.
- b. A minimum of 42% or 8.8 acres of open space as shown on the Concept Plan.
- c. Limiting the number of dwelling units to 42, in accordance with the Concept Plan.
- d. Limiting the commercial square footage to 22,000 square feet or less.
- e. A maximum of two drive-through establishments in the commercial area. The applicant offers to exclude many of the more intense uses permitted in the B-3 District including fast food restaurants, fueling stations, produce sales, day care centers, business schools and colleges, private clubs, motels, veterinary hospitals and clinics, auto washes, bus passenger stations, new and used car salesrooms, tattoo parlors, outdoor space for automobile sales, and automobile service centers.
- f. Preservation of a 10 foot wide wooded buffer along the east property line, and a minimum of a 50 foot wide buffer along Meadowbrook Road, as shown on the proposed Concept Plan.
- g. At the time of Preliminary Site Plan Review, the Landscaping and Facade plans for the commercial phase shall meet minimum Zoning Ordinance standards.
- h. Woodland Replacement Trees shall not be used in place of the required Street trees along Meadowbrook and Twelve Mile Roads, per the recommendations of the Landscape Review Letter, with modifications to be shown on subsequent submittals.
- i. Applicant complying with the conditions listed in the staff and consultant review letters.

*This motion is made for the following reasons:*

- a. The proposed density shown on the PRO Concept Plan is generally compatible with the existing uses on the adjacent and surrounding parcels, as indicated by the proposed density recommendation in the draft revised Master Plan for Land Use applicable to this property.*
- b. The proposed development is consistent with several objectives of the Master Plan for Land Use, as detailed in the Planning Review Letter.*
- c. While the proposal calls for a significant departure from the vision of the 2010 Master Plan, which is to provide for a maximum of 0.8 dwelling units to the acre north of Twelve Mile Road, both east and west of Meadowbrook road, the submitted PRO Concept Plan displays sensitivity to the adjacent large lot RA properties in the area through the use of buffering along the edges of the site, including preservation of existing vegetation and represents a reasonable alternative to the existing Master Plan as indicated by the draft revised Master Plan.*
- d. The proposed Concept Plan shows the preservation and enhancement of wetlands on the site.*
- e. The applicant has worked cooperatively with the Tollgate Education Center to create landscaping along Meadowbrook Road that presents a more natural look that blends well with the Tollgate frontage.*
- f. The site will be adequately served by public utilities.*
- g. The Traffic Impact Statement that was submitted with the rezoning request was found to be acceptable and the Level of Service (LOS) at study intersections is expected to remain at acceptable levels.*
- h. Submittal of a Concept Plan, and any resulting PRO Agreement, provides assurances to the Planning Commission and to the City Council of the manner in which the property will be developed.*

*With the amendment that staff discuss the additional size sidewalk or pathway consistent with the Walkable Novi Plan.*

On **August 08, 2016**, the **City Council** approved the Planned Rezoning Overlay Concept plan and Agreement based on following motion:

**Final approval of the request of The Ivanhoe Companies for Beacon Hill, JSP 15-08, with Zoning Map Amendment 18.710**, to rezone property in Section 12, located on the northeast corner of Twelve Mile Road and Meadowbrook Road from RA (Residential Acreage) to R-4 (One-Family Residential) and B-3 (General Business), subject to the related Planned Rezoning Overlay (PRO) agreement and corresponding PRO Plan, subject to the conditions listed in the staff and consultant review letters, and with any changes and/or conditions as discussed at the City Council meeting, and any final minor alterations required in the determination of the City Manager and City Attorney to be incorporated by the City Attorney's office prior to the execution of the final agreement.

Subject to the following additional condition:

The Developer shall provide a ten-foot wide pathway along the extent of the subject property along the east side of Meadowbrook Road, and a six-foot wide sidewalk along the north side of Twelve Mile Road along the extent of the subject property, to be shown on the Preliminary Site Plan.

This motion is made for the following reasons:

- a. The proposed density shown on the PRO Concept Plan is generally compatible with the existing uses on the adjacent and surrounding parcels, as indicated by the

- proposed density recommendation in the draft revised Master Plan for Land Use applicable to this property.
- b. The proposed development is consistent with several objectives of the Master Plan for Land Use, as detailed in the Planning Review Letter.
  - c. While the proposal departs from the 2010 Master Plan, which contemplates a maximum of 0.8 dwelling units to the acre north of Twelve Mile Road, both east and west of Meadowbrook road, the submitted PRO Concept Plan displays sensitivity to the adjacent large lot RA properties in the area through the use of buffering along the edges of the site, including preservation of existing vegetation and represents a reasonable alternative to the existing Master Plan as indicated by the draft revised Master Plan and given the influence of its location at the intersection of two main roads.
  - d. The proposed Concept Plan shows the preservation and enhancement of wetlands on the site.
  - e. The applicant has worked cooperatively with the Tollgate Education Center to create landscaping along Meadowbrook Road that presents a more natural look that blends well with the Tollgate frontage.
  - f. The site will be adequately served by public utilities.
  - g. The Traffic Impact Statement that was submitted with the rezoning request was found to be acceptable and the Level of Service (LOS) at study intersections is expected to remain at acceptable levels.
  - h. Submittal of a Concept Plan, and any resulting PRO Agreement, provides assurances to the Planning Commission and to the City Council of the manner in which the property will be developed.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5607 or [skomaragiri@cityofnovi.org](mailto:skomaragiri@cityofnovi.org).



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Sri Ravali Komaragiri – Planner





## PLANNING REVIEW CHART

**Review Date:** September 12, 2016  
**Review Type:** Preliminary Site Plan, Site Condominium and Phasing Plan  
**Project Name:** **JSP 15-08: BEACON HILL**  
**Plan Date:** August 12, 2016  
**Prepared by:** Sri Komaragiri, Planner  
**Contact:** **E-mail:** skomaragiri@cityofnovi.org; **Phone:** (248) 735-5607

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

| Item  | Required Code   | Proposed  | Meets Code | Comments  |
|---|---|---|------------|---|
| <b>Zoning and Use Requirements</b>              |   |   |            |   |
| <b>Master Plan</b><br>(adopted August 25, 2010) | Single Family, with master planned 0.8 maximum dwelling units per acre. | 39 Unit single family residential development with 2.86 DUA   | Yes        | <b>Planning Commission approval of the site plan, condominium is required.</b><br><br><b>The applicant reduced the density approved as part of PRO agreement to accommodate slightly wider lots.</b>  |
| <b>Zoning</b><br>(Effective December 25, 2013)  | RA (Residential Acreage)  | RA (Residential Acreage) with Planned Rezoning Overlay (PRO) to R-4 (One-Family Residential) & B-3 (General Business District)                            | Yes        | <u>The City Council approved the Planned Rezoning Overlay Concept plan and Agreement on August 08, 2016 meeting</u>   |
| <b>Uses Permitted</b><br>(Sec.3.1.6)            | Single Family Dwellings   | Single Family Dwellings, Commercial (Bank with drive-thru, retail, restaurant and a restaurant with drive-thru) and Park Trail head (to dedicate to City) | Yes        | <b>Indicate the PRO zoning designation on the plans</b><br><br><b>The applicant has indicated earlier that he is considering ranch house opposed two story dwellings. Please provide clarification with the response letter. The current elevations indicate two story buildings.</b> |
| <b>Phasing</b>                                  |   | Site plan indicates two phases<br>Phase 1 : Residential complete, part Park trail head and part commercial  | Yes        | <b>Phasing was included in the PRO agreement</b><br><br><b>Please indicate anticipated completion date.</b>   |

| Item   | Required Code  | Proposed  | Meets Code | Comments   |
|--|--|---|------------|--|
|  |  | Phase 2: Complete Commercial and complete Park trailhead  |            | <b>Number of residential units on sheet SP-5 is incorrect. Please change it to 39 units.</b>   |
| <b>Planned Rezoning Overlay</b>  |  |   |            |  |
| <b>PRO Agreements</b>  | The PRO runs with the land, so future owners, successors, or assignees are bound by the terms of the agreement, absent modification by the City of Novi. If the development has not begun within two years, the PRO concept plan expires and the agreement becomes void. |   |            | Council approved the PRO agreement on August 08, 2016  |
| <b>Public Benefits as approved part of PRO Agreement</b>   |  |   |            |  |
| i. Dedication of the Park Trailhead and ROW to the City.   |  | Dedication shall not occur until the improvements are complete  |            | <b>Please include a note on the plan in this effect</b>  |
| ii. The following improvements shall be made by the Developer to the Park Trailhead:   |  |   |            |  |
| Mass and fine grading, including topography enhancement, wetland and woodland replacement plantings, and seeding and planting of new additional landscaping; |  | Yes   | Yes        |  |
| Augmenting the creek, removal of damaged culverts and realignment of creek;  |  | A conceptual stream relocation and wetland restoration plan was included in the package   | Yes        |  |
| Creation of a weir system to effectuate a waterfall/spillway to be viewed from a bank within the Park Trailhead;   |  | The extent/height of the drop is not clear, and it is not easily visible from anywhere but the dumpster area (not the trailhead). | May be     | <b>Refer to landscape review for more options for better design</b>  |
| Enhanced design for landscaped retention ponds;  |  | The plan indicates additional, replacement, trees around the ponds  | May be     | <b>There is opportunity for enhancing the landscape around retention ponds the applicant can consider. Refer to landscape review for more details.</b> |
| Habitat restoration including, but not limited to removal of invasive species;   |  | Yes   | Yes        |  |
| Installation of wetland enhancement plantings; and   |  | Yes   | Yes        |  |
| Installation of six parking spaces, a bench and a bike rack, in accordance with the PRO Plan and final approved site plans.                                  |  | six parking spaces, a bench and a bike rack are proposed on the plan  | Yes        | <b>The applicant is requested to consider installing "City of Novi" bike racks as suggested by the Council</b>   |

| Item  | Required Code      | Proposed   | Meets Code | Comments   |
|---|--------------------|--|------------|--|
|   |                    |  |            | <b>at their meeting</b>  |
| iii. 42% of the Land shall be open space with a Conservation Easement to be provided over certain portions of the open space, as shown in the PRO Plan  |                    | The plans indicate 8.8 acres (about 42%) of open space in text   |            | <b>Show the limits of conservation easement on the plan as required. Clearly indicate on plans as how open space is calculated.</b>  |
| iv. Non-motorized access shall be provided between the two phases;  |                    | Five foot wide gravel pathway is shown on the plans connecting residential and commercial developments |            | <b>The concept plan indicated a pedestrian/emergency grass Crete drive. The current plan indicates a 5 foot pathway to commercial site and 15' wide gravel drive to basin. The emergency access is relocated to Meadowbrook Road for practical purposes.</b> |
| v. The following uses, while permitted in the B-3 classification, shall not be permitted in the Commercial Phase: fast food restaurants (but allowing fast casual restaurants such as Panera Bread, Qdoba, a coffee shop, etc.), fueling stations, produce sales, day care centers, business schools and colleges, private clubs, motels, veterinary hospitals or clinics, auto washes, bus passenger stations, new and used car salesrooms, tattoo parlors, vape or vapor sales, outdoor space for car sales, or automobile service centers. |                    | The condition is included in the PRO agreement   |            | <b>Please list all Public benefits on the plan</b>   |
| vi. Preservation of a minimum 10 foot wide wooded buffer along the east property line and of a minimum 50 foot wide buffer along Meadowbrook Road.  |                    | Yes. 10 foot buffer not preserved along commercial   | No         | <b>Provide 10 foot buffer along commercial development</b>   |
| <b>Development Standards (Sec. 3.1.5)&amp; Sec. 3.1.12)</b>   |                    |  |            |  |
| <b>Maximum Dwelling Unit Density (Sec. 3.1.6)</b>   | 4.8 DUA            | 2.86 DUA (39 Units)  | No         | <u>Council approved a density of 3.08 DUA (no more than 41 units) as part of PRO approval</u>  |
| <b>Minimum Lot Area (Sec 3.1.5)</b>   | 10,000 square feet | 6,600 square feet minimum  | No         | <u>Council approved a minimum of 6,000 square feet the deviation as part of PRO approval</u>   |
| <b>Minimum Lot Width (Sec 3.1.5)</b>  | 80 ft.             | 50 ft. minimum<br>A majority of lots have 55 ft. width   | No         | <u>Council approved a minimum of 50 feet deviation as part of PRO</u>  |

| Item   | Required Code  | Proposed   | Meets Code | Comments  |
|--|--|--|------------|---|
|  |  |  |            | <u>approval</u>   |
| <b>Front Building Setback</b>                              | <u>Residential:</u> 30 ft.<br><u>Commercial:</u> 30 ft.  | <u>Residential:</u> 20 ft.<br><u>Commercial:</u> Appears to be in conformance  | No         | <u>Council approved the deviation as part of PRO approval</u>   |
| <b>Side Building Setback</b>                               | <u>Residential:</u><br>10 ft. one side<br>25 ft. total two sides<br><u>Commercial:</u> 20 ft.  | <u>Residential:</u><br>7.5 ft. one side<br>15 ft. minimum total two sides<br><u>Commercial:</u> Appears to be in conformance | No         | <b>Show setback lines on the plan</b>   |
| <b>Rear Building Setback</b>                               | <u>Residential:</u> 35 ft.<br><u>Commercial:</u> 15 ft.  | <u>Residential:</u> 30 ft.<br><u>Commercial:</u> Appears to be in conformance  | No         |   |
| <b>Parking Setbacks</b>                                    | Front: 20 ft.<br>Rear: 10 ft.<br>Side: 10 ft.<br>Abuts residential: 20 ft.   | Unable to determine for the most part. 12 ft. from residential property on the north   | No         |   |
| <b>Maximum % of Lot Area Covered</b><br>(Sec 3.1.5)        | <u>Residential:</u> 25%<br>(By All Buildings)<br><u>Commercial:</u> Sec. 3.6.2.D   | <u>Residential:</u> Information not provided<br><u>Commercial:</u>   | Yes?       | <b>Please provide the required information to verify conformance</b>  |
| <b>Minimum Floor Area</b> (Sec 3.1.5)                      | <u>Residential:</u> 1,000 Sq.ft.<br><u>Commercial:</u>   | <u>Residential:</u> Not indicated  | Yes        | <b>Provide information on targeted floor area</b>   |
| <b>Building Height</b><br>(Sec 3.1.5.D)<br>(Sec. 3.1.23.D) | <u>Residential:</u> 35 ft. or 2.5 stories whichever is less<br><u>Commercial:</u> 30 ft.   | <u>Residential:</u> Not indicated<br><u>Commercial:</u> 30 ft 2 in   | Yes        | <u>Details reviewed at plot plan phase</u><br><br><b>Revise the building height for commercial building to conform with the code during final site plan for Phase 2</b> |
| <b>Frontage on a Public Street.</b><br>(Sec. 5.12)         | No lot or parcel of land shall be used for any purpose permitted by this Ordinance unless said lot or parcel shall front directly upon a public street, unless otherwise provided for in this Ordinance. | All units front on a proposed public road within the proposed condominium, with access to Meadowbrook Road                   | Yes        |   |
| <b>Note to District Standards (Sec 3.6.2)</b>              |  |  |            |   |
| <b>Area Requirements</b><br>(Sec 3.6.2.A & Sec. 2.2)       | - Lot width shall be measured between two lines where a front setback line intersects with side setback lines.   | Lots appear to be in conformance.  | Yes?       | <b>Provide a table indicating depth, width (frontage), acreage and depth to width ratio for each lot</b>  |

| Item  | Required Code   | Proposed   | Meets Code | Comments   |
|---|---|--|------------|--|
|   | - Distance between side lot lines cannot be less than 90% between the front setback line and the main building.                         |  |            |  |
| <b>Additional Setbacks</b><br>(Sec 3.6.2.B)                       | NA  | Single family development and no off-street parking          | NA         |  |
| <b>Exterior Side yard abutting Streets</b> (Sec 3.6.2.C)          | Not applicable  |  | NA         |  |
| <b>Parking Setback from Residential District</b><br>(Sec 3.6.2.L) | Wherever property directly abuts or is adjacent to residentially zoned property, the minimum parking setback shall be twenty (20) feet. | 12 ft. from residential property on the north                | No         | <u>Please revise the drawing to meet the requirement. Otherwise the applicant can choose to apply for an amendment to the PRO Agreement prior to submittal of final site plan for Phase 2.</u> |
| <b>Wetland/Watercourse Setback</b><br>(Sec 3.6.2.M)               | 25ft. from boundary of a wetland and 25ft. from the ordinary high water mark of a watercourse.  | 25ft. wetland buffer indicated.                              | Yes        | <b>Refer to wetlands review for additional comments</b>  |
| <b>Parking setback screening</b><br>(Sec 3.6.2.P)                 | Required parking setback area shall be landscaped per sec 5.5.3.  | Landscape plan is provided                                   | Yes        |  |
| <b>Modification of parking setback requirements</b> (Sec 3.6.2.Q) | Refer to Sec 3.6.2 for more details   | Parking setbacks for B-3 site are not conforming to the code | No         | <u>Please revise the drawing to meet the requirement. Otherwise the applicant can choose to apply for an amendment to the PRO Agreement prior to submittal of final site plan for Phase 2.</u> |
| <b>Subdivision Ordinance</b>                                      |   |  |            |  |
| <b>Blocks</b><br>(Subdivision Ordinance: Sec. 4.01)               | - Maximum length for all blocks shall not exceed 1,400 ft.<br>- Widths of blocks shall be determined by the conditions of the layout.   | Lots appear to be in conformance.                            | Yes        |  |
| <b>Lots: Sizes and Shapes</b> (Subdivision Ordinance: Sec. 4.02A) |   |  |            |  |
| <b>Lot Depth Abutting a Secondary</b>                             | Lots abutting a major or secondary  | None of the lots are abutting major or                       | NA         |  |

| Item  | Required Code   | Proposed  | Meets Code | Comments   |
|---|---|---|------------|--|
| <b>Thoroughfare</b><br>(Subdivision Ordinance: Sec. 4.02.A5)      | thoroughfare must have a depth of at least 140'   | secondary thoroughfare  |            |  |
| <b>Depth to Width Ratio</b> (Subdivision Ordinance: Sec. 4.02.A6) | Single Family lots shall not exceed a 3:1 depth to width ratio  | Lots appear to be in conformance.   | Yes        | <b>Provide a table indicating depth, width (frontage), acreage and depth to width ratio for each lot</b> |
| <b>Arrangement</b><br>(Subdivision Ordinance: Sec. 4.02.B)        | <ul style="list-style-type: none"> <li>- Every lot shall front or abut on a street.</li> <li>- Side lot lines shall be at right angles or radial to the street lines, or as nearly as possible thereto.</li> </ul>  | <ul style="list-style-type: none"> <li>- All lots front on proposed streets</li> <li>- All lots conform to shape requirement</li> </ul>           | Yes        |  |
| <b>Streets</b><br>(Subdivision Ordinance: Sec. 4.04)              | <p>Extend streets to boundary to provide access intervals not to exceed 1,300 ft. unless one of the following exists:</p> <ul style="list-style-type: none"> <li>- practical difficulties because of topographic conditions or natural features</li> <li>- Would create undesirable traffic patterns</li> </ul> | Layout appears to be in conformance   | Yes        |  |
| <b>Parking, Loading, and Dumpster Requirements</b>                |   |   |            |  |
| <b>Number of Parking Spaces</b>                                   | Total required : 107 spaces   | Total provided: 110 spaces for retail<br>6 spaces for trail head  |            |  |
| <b>Sit-down Restaurants</b><br>(Sec.5.2.12.B.a)                   | 1 for 70 sq.ft. of gross floor area or<br>1 for 2 employees, plus<br>1 for 2 customers<br>allowed under maximum capacity including waiting areas whichever is greater   | Bldg A1 and Bldg A4<br>1 per 48 customers + 1 per 10 employees, plus<br>100 SF of waiting area<br><br>36 spaces per restaurant<br>Total 72 spaces | Yes        | <b>Parking will be verified at the time of occupancy once exact users are determined</b>                 |
| <b>Banks</b><br>(Sec. 5.2.12.D)                                   | - 1 for each 150 sq. ft. of gross floor area or 6.7 spaces per 1,000 sq. ft.  | Bldg B<br>1 space per 150 SF = 20 spaces  |            |  |

| Item   | Required Code   | Proposed  | Meets Code | Comments   |
|--|---|---|------------|--|
| <b>Retail stores except as otherwise specified herein</b><br>(Sec. 5.2.12.B)                         | - 1 per 200 sq.ft. of gross leasable area   | Bldg A2 and A3<br>1 space per 2,900 SF = 15 spaces              |            |  |
| <b>Parking Space Dimensions and Maneuvering Lanes</b><br>(Sec. 5.3.2)                                | - 90° Parking: 9 ft. x 19 ft.<br>- 24 ft. two way drives<br>- 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  | - 24 ft. two way drives<br>- 9 ft. x 17 ft. parking             | Yes        |  |
| <b>Parking stall located adjacent to a parking lot entrance</b> (public or private)<br>(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  | The space at the northeast corner appears to be in conformance. | Yes        | <b>Please dimension the distance on the plans</b>  |
| <b>End Islands</b><br>(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.<br>- 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 | Unable to determine   | <b>No</b>  | <b>Provide required dimensions to verify conformance. Refer to Traffic letter for more details</b> |
| <b>Barrier Free Spaces</b><br><i>Barrier Free Code</i>   | 4 barrier free parking spaces (for total 1 to 150)& 1 van barrier free parking space  | 4 van accessible and 1 regular barrier free spaces are provided | Yes        |  |
| <b>Barrier Free Space Dimensions</b><br><i>Barrier Free Code</i>                                     | - 8' wide with an 8' wide access aisle for van accessible spaces<br>- 5' wide with a 5' wide access aisle for regular accessible spaces   | Both kinds of aisles are provided                               | Yes        |  |

| Item  | Required Code  | Proposed   | Meets Code | Comments   |
|---|--|--|------------|--|
| <b>Barrier Free Signs</b><br><i>Barrier Free Code</i>   | One sign for each accessible parking space.  | Sign indicated   | Yes        | <b>Provide the minimum required signage</b>  |
| <b>Minimum number of Bicycle Parking</b><br><i>(Sec. 5.16.1)</i>  | Not required for single family residential<br><br><u>For Commercial</u><br>Five (5) percent of required automobile spaces, minimum two (2) spaces  | A winding bike rack is proposed on the plan at Trial head.<br><br>Bike racks are not proposed near commercial building | Yes?       | <b>The applicant is requested to consider installing "City of Novi" bike racks as suggested by the Council at their meeting.</b><br><br><b>Indicate how many bike racks are proposed on the plan.</b><br><br><b>Propose bike racks near the commercial building as required. These does not have to be "City of Novi" bike racks</b> |
| <b>Bicycle Parking General requirements</b><br><i>(Sec. 5.16)</i>   | <ul style="list-style-type: none"> <li>- No farther than 120 ft. from the entrance being served</li> <li>- When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations</li> <li>- Spaces to be paved and the bike rack shall be inverted "U" design</li> <li>- Shall be accessible via 6 ft. paved sidewalk</li> </ul> | Additional details are not provided  | Yes        | <b>Provide the required information as listed</b>  |
| <b>Bicycle Parking Lot layout</b><br><i>(Sec 5.16.6)</i>  | Parking space width: 6 ft.<br>One tier width: 10 ft.<br>Two tier width: 16 ft.<br>Maneuvering lane width: 4 ft.<br>Parking space depth: 2 ft. single, 2 ½ ft. double   | Additional details are not provided  | Yes        | <b>Provide the required information as listed</b>  |
| <b>Loading Spaces</b><br><i>(Sec. 5.4.1)</i><br>Location of such facilities in a permitted side yard shall be subject to review and | <ul style="list-style-type: none"> <li>- Loading, unloading space shall be provided in the rear yard at a ratio of ten (10) square feet for each front foot of building;</li> </ul>  | There appears to be a proposed loading space next to dumpsters and one in the south west corner of the bank            | Yes?       | <b>Provide the dimensions for required loading area and proposed loading area for commercial space and label the loading space on the plans.</b>   |



| Item   | Required Code   | Proposed   | Meets Code | Comments   |
|--|---|--|------------|--|
| approval by the City                                   | <ul style="list-style-type: none"> <li>- Except in the case of a double frontage lot, loading-unloading, as well as trash receptacles may be located in an interior side yard beyond the minimum side yard setback requirement of the district.</li> </ul>  |  |            |  |
| <b>Dumpster</b><br><i>(Sec 4.19.2.F)</i>               | <ul style="list-style-type: none"> <li>- Located in rear yard or interior side yard in case of double frontage</li> <li>- Attached to the building or</li> <li>- No closer than 10 ft. from building if not attached</li> <li>- Not located in parking setback</li> <li>- If no setback, then it cannot be any closer than 10 ft, from property line.</li> <li>- Away from Barrier free Spaces</li> </ul> | <ul style="list-style-type: none"> <li>- Located in rear yard</li> <li>- Not attached to building</li> <li>- Farther than 10 ft. from the building</li> <li>- Unable to determine the parking setbacks</li> <li>- Away from barrier free spaces</li> </ul> | Yes?       | <b>Show the property lines and setback lines on the plan</b> |
| <b>Dumpster Enclosure</b><br><i>(Sec. 21-145. (c))</i> | <ul style="list-style-type: none"> <li>- Screened from public view</li> <li>- A wall or fence 1 ft. higher than height of refuse bin</li> <li>- And no less than 5 ft. on three sides</li> <li>- Posts or bumpers to protect the screening</li> <li>- Hard surface pad.</li> <li>- Screening Materials: Masonry, wood or evergreen shrubbery</li> </ul>   | The plan indicates an enclosure. Additional details are not provided   | No         | <b>Provided additional details to verify conformance</b>     |
| <b>B-3 District Required Conditions (Sec 3.10.3)</b>   |   |  |            |  |

| Item  | Required Code  | Proposed  | Meets Code | Comments   |
|---|--|---|------------|--|
| <b>Outdoor Storage of above ground storage tanks</b><br><i>(Sec. 3.10.3)</i>  | <ul style="list-style-type: none"> <li>- No truck well, loading dock, overhead door or other type of service bay door shall face a major thoroughfare, nor an abutting residential district.</li> <li>- Pedestrian exits or emergency doors are permitted on such building facades.</li> </ul> | None proposed   | NA         |  |
| <b>Restaurant in the Character of a Fast Food Carryout, Drive-In, Fast Food Drive-Through, or Fast Food Sit Down</b><br><i>(Sec. 4.40.)</i> |  |   |            |  |
| <b>Noise Impact Statement</b><br><i>(Sec. 4.40.1)</i>   | A noise impact statement is required subject to the standards of Sec. 5.14.10.B  | Information has not been provided                               | No         | <b>Please provide a statement with response letter</b>             |
| <b>Access points</b><br><i>(Sec. 4.40.2.A)</i>  | Access points shall be located at least sixty (60) feet from the intersections of any two (2) streets  | It appears to be in compliance. Label the distance on the plans | No         | Indicated on the approved PRO concept plan                         |
| <b>Uses abutting residential districts</b><br><i>(Sec. 4.40.2.B)</i>  | Such uses shall not be permitted on a parcel less than sixty (60) feet from any residential zoning district.   | Indicated on the approved PRO concept plan                      | Yes        |  |
| <b>Distance from residential districts</b><br><i>(Sec. 4.40.2.C)</i>  | All drive-through lanes shall be located at least one-hundred fifty (150) feet from any residential zoning district.   | Indicated on the approved PRO concept plan                      | Yes        |  |
| <b>Lighting when abutting residential districts</b><br><i>(Sec. 4.40.2.D)</i>   | All lighting shall be shielded from residential uses.  | Lighting plan not provided                                      | No         | <b>Provide lighting and photometric plan to verify conformance</b> |
| <b>Screening when abutting other districts</b><br><i>(Sec. 4.40.2.F)</i>  | A six (6) foot high obscuring wall shall be provided when abutting or adjacent districts are zoned for OS-1, OSC, NCC, B-1, B-2 or B-3 districts and where such abutting or adjacent districts are not separated from the proposed restaurant by a road, highway or                            | Not abutting the districts mentioned                            | NA         |  |

| Item  | Required Code  | Proposed  | Meets Code | Comments  |
|---|--|---|------------|---|
|   | freeway.   |   |            |   |
| <b>Drive-through Lanes (Sec. 5.3.11)</b>  |  |   |            |   |
| <b>Drive-Thru Stacking Spaces for fast food</b><br>(Sec. 5.3.11.I)<br>(Sec.4.40.E)              | The distance between the order board and the pick-up window shall store four (4) vehicles, and four (4) vehicles shall be stored in advance of the menu board (not including the vehicles at the pick-up window and menu board). | 4 vehicles in advance of menu board   | Yes        |   |
| <b>Drive-Thru Stacking Spaces for Financial Institutions</b><br>(Sec. 5.3.11.I)<br>(Sec.4.40.E) | Three (3) vehicles inclusive of the vehicle at the window  | 3 vehicles are shown on the plan. However the location of the window is not indicated | Yes?       | <b>Please indicate the teller window location on the plan to verify conformance</b> |
| <b>Drive-through Lanes Separation</b><br>(Sec. 5.3.11.A,C)                                      | Drive-through lanes shall be separate from the circulation routes & lanes necessary for ingress to & egress from the property  | Appears to be in conformance  | Yes        | <b>Refer to traffic for more comments</b>   |
| <b>Drive-through setbacks</b><br>(Sec. 5.3.11.A,B)  | Drive through shall follow parking setback requirements and applicable parking lot landscaping requirements  | Appears to be in conformance  | Yes        | <b>Label the setbacks on the plan</b>   |
| <b>Bypass Lane for Drive-through</b><br>(Sec. 5.3.11.D)   | Drive-through facilities shall provide 1 bypass lane, min. of 18 ft. in width, unless otherwise determined by the Fire Marshal   | Drive through lane for the restaurant does not meet the requirement                   | No         | <b>Refer to traffic for more comments</b>   |
| <b>Width &amp; Centerline Radius of Drive-through Lanes</b><br>(Sec. 5.3.11.E,F,H)              | Drive-through lanes shall have a minimum 9 ft. width, centerline radius of 25 ft. and a minimum length of 19 ft.   | Unable to determine   | Yes        | <b>Provide the dimensions as required</b>   |

| Item   | Required Code  | Proposed   | Meets Code | Comments  |
|--|--|--|------------|---|
| <b>Drive-through Lane Delineated</b><br>(Sec. 5.3.11.G)        | Drive-through lanes shall be striped, marked, or otherwise delineated  | Delineated with landscape island   | Yes        |   |
| <b>Topographic Conditions (Subdivision Ordinance Sec 4.03)</b> |  |  |            |   |
| <b>A. Flood plain</b>  | Compliance with applicable state laws and City Code<br>Areas in a floodplain cannot be platted   | No floodplain  | NA         |   |
| <b>B. Trees and Landscaping</b>                                | Compliance with Chapter 37 and Article 5 of City Zoning Code   | Landscape Plan that conforms to the code and the deviations listed in the PRO agreement are provided   | Yes        | <b>Refer to Landscape review letter for further details</b>   |
| <b>C. Natural Features</b>                                     | To be preserved<br>Lots cannot extend into a wetland or watercourse  | The site has wetlands. The applicant is willing to provide conservation easements for remaining areas of wetland, wetland buffer setback and woodland areas which will not conflict with future use of the property by residents and visitors. | Yes        | <b>Refer to Wetland review letter for more comments</b>   |
| <b>D. Man-made Features</b>                                    | To be built according to City standards  | The applicant is proposing stream relocation   | Yes        |   |
| <b>E. Open Space Areas</b>                                     | Any Open Space Area shall meet the following:<br><ul style="list-style-type: none"> <li>- Require performance guarantee</li> <li>- Shall be brought to a suitable grade</li> <li>- Compliance with zoning ordinance</li> <li>- Except for wooded areas, all ground area should be top dressed with a minimum of 25% of red fescue and a maximum of 20% perennial rye.</li> </ul> | The plans indicate 8.8 acres (about 42%) of open space in text   | Yes?       | <b>Show the limits of conservation easement on the plan as required. Clearly indicate on plans as how open space is calculated.</b> |
| <b>F. Non-Access Greenbelt Easements</b>                       | <ul style="list-style-type: none"> <li>- Along rear or side property lines for reverse frontage lots .</li> <li>- Shall be 15 feet wide</li> </ul>   | No reverse frontage lots   | NA         |   |

| Item  | Required Code  | Proposed  | Meets Code | Comments   |
|---|--|---|------------|--|
|   | along all reverse frontage lots<br>- 20 feet wide where power lines exist  |   |            |  |
| <b>G. Zoning Boundary Screening</b>   | A non-residential development abutting a residential development would need screening  | Subject property is not abutting any non-residential development  | NA         |  |
| <b>Sidewalks Requirements</b>   |  |   |            |  |
| <b>Non-Motorized Plan</b>   | A six foot wide is required along Twelve Mile Raod   | Six foot wide sidewalk is proposed along Twelve Mile Raod<br>Ten foot pathway is shown along Meadowbrook Road | Yes        | Proposed sidewalks are consistent with Council approval  |
| <b>Sidewalks</b><br><i>(Subdivision Ordinance: Sec. 4.05)</i>                             | Sidewalks are required on both sides of proposed drives  | Five foot Sidewalks are proposed on either side of the proposed public drive within the development           | Yes        |  |
| <b>Other Requirements</b>   |  |   |            |  |
| <b>Building Code</b>  | Building exits must be connected to sidewalk system or parking lot.  | All exits are connected to driveways and parking lot  | Yes        |  |
| <b>Exterior lighting</b><br><i>(Sec. 5.7)</i>   | Photometric plan and exterior lighting details needed at time of Final Site Plan submittal   | Photometric plan not provided   |            | <b>Applicant should provide a lighting and photometric plan to verify conformance with section 5.7</b> |
| <b>Residential Entryway Lighting</b>  | A residential development entrance light must be provided at the entrances to the development off of Meadowbrook Road                                      | One decorative pole light in proposed at the Meadowbrook entrance   | Yes        |  |
| <b>Roof top equipment and wall mounted utility equipment</b><br><i>(Sec. 4.19.2.E.ii)</i> | - 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 | Indicate whether rooftop equipment is proposed  | Yes?       |  |

| Item  | Required Code  | Proposed  | Meets Code | Comments   |
|---|--|---|------------|--|
| <b>Roof top appurtenances screening</b>                               | Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.  | Indicate whether rooftop equipment is proposed    | Yes?       |  |
| <b>Design and Construction Standards Manual</b>                       | Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).   | Legal description are provided                    | Yes        |  |
| <b>General layout and dimension of proposed physical improvements</b> | 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). | Inadequate information provided                   | Yes        | <b>Provide additional dimensions and information required by all staff and consultants to verify conformance and identify additional deviations not approved by Planned Rezoning Overlay Agreement</b> |
| <b>Development and Street Names</b>                                   | Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval   | Development and street names still need approval. | Yes        | <u>For more information contact Richelle Leskun 248-347-0579</u>   |
| <b>Property Split or Combination</b>                                  | Property combination or split shall be reviewed and approved by the Community Development Department.  | There are currently two parcels shown.            | No         | <u>Indicate the property lines on the plans. Will the two parcels be combined into one?</u>  |
| <b>Development/ Business Sign</b>                                     | Signage if proposed requires a permit.   | Entryway signage proposed                         | Yes/ No    | <u>For sign permit information contact Jeannie Niland 248-347-0438.</u>  |
| <b>Conservation Easements</b>   | The Applicant shall provide preservation/conservation easements for any areas of remaining   |   |            | <u>Refer to woodlands review letter for more details.</u><br><br><u>Applicant is required to</u>   |

| Item | Required Code | Proposed | Meets Code | Comments   |
|------|---------------|----------|------------|--|
|      | woodland.     |          |            | <u>submit the drafts prior to stamping sets approval</u> |

**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

09/09/2016

## Engineering Review

BEACON HILL PARK PRO

JSP15-0008

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### Applicant

CONGREGATION SHAAREY ZEDEK

### Review Type

Preliminary Site Plan

### Property Characteristics

- Site Location: N. of 12 Mile Rd. and E. of Meadowbrook Rd.
- Site Size: 21.19 acres, 13.6 acres residential, 3.05 acres retail
- Plan Date: 08/12/16
- Design Engineer: Zeimet Wozniak

### Project Summary

- Construction of a 42 lot residential development, and approximately 22,000 square-foot of retail buildings and associated parking. Site access would be provided by 2 curb cuts on 12 Mile Rd. for the retail buildings and a new roadway from Meadowbrook Rd. for the residential area. Pedestrian walkways would be constructed along the 12 Mile Rd. and Meadowbrook Rd. frontages.
- Water service would be provided by an 8-inch loop extension from the existing 16-inch water main along the east side of Meadowbrook Rd. for the residential portion of the site. Water service would be provided by an 8-inch extension from the existing 12-inch stub near the southwest corner of the site and from the existing 16-inch water main along the east side of Meadowbrook Rd. for the retail portion of the site. Fire protection for the site would be served by 11 additional hydrants.
- Sanitary sewer service would be provided by an extension for the existing 12-inch sanitary sewer on the west side of Meadowbrook Rd. for the residential development, and an extension from the existing 12-inch sanitary sewer along the north side of 12 Mile Rd.
- Storm water would be collected by a single storm sewer collection system for the residential development and a single storm sewer collection system for the retail development. Each will be detained in separate on-site basins for a 100-year storm event.

**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 Chapter 11, the Storm Water Management Ordinance and the Engineering Design Manual with the following items to 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 prior to the Final Site Plan submittal):**

**General**

1. The Non-domestic User Survey form shall be submitted to the City so it can be forwarded to Oakland County. This form only needs to be completed for the retail portion of the site. This form was included in the original site plan package.
2. Show all drives within 200-feet on both Meadowbrook Rd. and 12 Mile Rd.
3. A right-of-way permit will be required from the City of Novi and Oakland County.
4. Provide a traffic control sign table listing the quantities of each sign type proposed for the development. Provide a note along with the table stating all traffic signage will comply with the current MMUTCD standards.
5. Provide a note that compacted sand backfill shall be provided for all utilities within the influence of paved areas, and illustrate on the profiles.
6. Provide a construction materials table on the Utility Plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
7. Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Department for review.
8. 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.
9. Show the locations of all light poles on the utility plan and indicate the typical foundation depth for the pole to verify that no conflicts with utilities will occur. Light poles in a utility easement will require a License Agreement.
10. Provide a backflow prevention device on all irrigation systems. The backflow prevention device shall be an RPZ, or another approved device based on site conditions such as irrigation head heights (pop-ups), grade changes, berms etc. Please contact Kevin Roby in the Water and Sewer Division at 248-735-5640 with any questions.

11. 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](http://www.cityofnovi.org/DesignManual)).

#### Water Main

12. Relocate the water main to a point 7.5 feet inside the right-of-way, and place the hydrants at least 7 feet off back of curb (allowing 3-foot clearance from sidewalk).
13. Provide a profile for all proposed water main 8-inch and larger.
14. Three (3) sealed sets of revised utility plans along with the MDEQ permit application (1/07 rev.) for water main construction and 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

15. Provide a profile for all proposed sanitary sewer 8-inch and larger.
16. Note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
17. Provide a note on the Utility Plan and sanitary profile stating the sanitary lead will be buried at least 5 feet deep where under the influence of pavement.
18. Provide a testing bulkhead immediately upstream of the sanitary connection point. Additionally, provide a temporary 1-foot deep sump in the first sanitary structure proposed upstream of the connection point, and provide a secondary watertight bulkhead in the downstream side of this structure.
19. Seven (7) sealed sets of revised utility plans along with the MDEQ permit application (04/14 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification 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. Also, the MDEQ can be contacted for an expedited review by their office.

#### Storm Sewer

20. Provide profiles for all storm sewer 12-inches or larger.
21. A minimum cover depth of 3 feet shall be maintained over all storm sewers. Currently, a few pipe sections do not meet this standard. Grades shall be elevated and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. An explanation shall be provided where the cover depth cannot be provided.
22. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.
23. Match the 0.80 diameter depth above invert for pipe size increases.

24. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot deep plunge pool.
25. Provide a four-foot deep sump and an oil/gas separator in the last storm structure prior to discharge to the storm water basin.
26. Label all inlet storm structures on the profiles. Inlets are only permitted in paved areas and when followed by a catch basin within 50 feet.
27. Label the 10-year HGL on the storm sewer profiles, and ensure the HGL remains at least 1-foot below the rim of each structure.
28. Illustrate all pipes intersecting storm structures on the storm profiles.
29. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.

#### Storm Water Management Plan

30. The Storm Water Management Plan for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual.
31. No forebay is required for wet detention basins with a minimum permanent water level of 3-feet.
32. Provide a 5-foot wide stone bridge allowing direct access to the standpipe from the bank of the basin during high-water conditions (i.e. stone 6-inches above high water elevation). Provide a detail and/or note as necessary.
33. Provide release rate calculations for the three design storm events (first flush, bank full, 100-year).
34. A 4-foot wide safety shelf is required one-foot below the permanent water surface elevation within the basin.
35. Provide a drainage area map.

#### Paving & Grading

36. Remove the paved eyebrows at the 90-degree bends. The right-of-way would remain as currently shown.
37. Provide at least 3-foot of buffer distance between the sidewalk and any fixed objects, including hydrants. Note on the plan any location where the 3-foot separation cannot be provided.
38. Add a note to the plan stating that the emergency access gate is to be installed and closed prior to the issuance of the first TCO in the subdivision.

#### Soil Erosion and Sediment Control

39. A SESC permit is required. The review checklist detailing all SESC requirements is attached to this letter. Please submit a SESC permit application under a separate cover. The application can be found on the City's website at <http://cityofnovi.org/Reference/Forms-and-Permits.aspx>.

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

40. 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 not 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).

41. 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:**

42. 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.
43. 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.
44. 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.
45. A 20-foot wide easement where storm sewer or surface drainage crosses lot boundaries must be shown on the Exhibit B drawings of the Master Deed.
46. 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:**

47. A pre-construction meeting shall be required prior to any site work being started. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).
48. 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. Once determined, a grading permit fee must be paid to the City Treasurer's Office.
49. An NPDES permit must be obtained from the MDEQ because the site is over 5 acres in size. The MDEQ requires an approved plan to be submitted with the Notice of Coverage.
50. 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.

51. A permit for work within the right-of-way of 12 Mile Rd. and Meadowbrook Rd. must be obtained from the City of Novi. The application is available from the City Engineering Division and should be filed at the time of Final Site Plan submittal. Please contact the Engineering Division at 248-347-0454 for further information.
52. A permit for work within the right-of-way of 12 Mile Rd. must be obtained from the Road Commission for Oakland County. Please contact the RCOC (248-858-4835) directly with any questions. The applicant must forward a copy of this permit to the City. Provide a note on the plans indicating all work within the right-of-way will be constructed in accordance with the Road Commission for Oakland County standards.
53. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the City Engineer after the water main plans have been approved.
54. A permit for sanitary sewer construction must be obtained from the MDEQ. This permit application must be submitted through the City Engineer after the sanitary sewer plans have been approved.
55. Construction Inspection Fees, to be determined once the construction cost estimate is submitted, must be paid prior to the pre-construction meeting.
56. 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 at the Treasurer's Office.
57. For the residential phase of the site an incomplete site work performance guarantee, equal to 1.2 times the amount required to complete the site improvements (excluding the storm water detention facilities) as specified in the Performance Guarantee Ordinance, must be posted at the Treasurer's Office.
58. A street sign financial guarantee in an amount to be determined (\$400 per traffic control sign proposed) must be posted at the Treasurer's Office.

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 Jeremy Miller at (248) 735-5694 with any questions.

  
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cc: Theresa Bridges, Engineering  
Rob Hayes, Engineering  
Sri Komaragiri, Community Development  
Sabrina Lilla, Water & Sewer



## CITY OF NOVI ENGINEERING DIVISION SOIL EROSION AND SEDIMENTATION CONTROL PLAN CHECKLIST

PROJECT: SESC Application #: SE -  
 Contact Name: DATE COMPLETED:  
 Phone Number: DATE OF PLAN:  
 Fax Number: **STATUS:**

General Requirements – Following the initial Soil Erosion and Sedimentation Control permit application to the Community Development Department, all SESC plan revisions shall be submitted directly to the Engineering Department for further review and/or permit approval. One (1) copy of revised soil erosion plans, including response letter addressing the comments below, shall be submitted for each subsequent review until the plan has been given approval by the Engineering Department, at which point five (5) copies will be required for permit approval. Plans shall be signed and sealed, and the bond must be submitted to the Treasurer’s Office prior to permit issuance.

| ITEM NO. | ITEM  | Provided on Plans        | COMMENTS |
|----------|---|--------------------------|----------|
| 1.       | Plan shall be at scale of not more than 1" = 200', include legal description, location, proximity to lakes, streams or wetlands, slopes, etc.   | <input type="checkbox"/> |          |
| 2.       | Plan shall include a soil survey or a written description of soil types of the exposed land area.   | <input type="checkbox"/> |          |
| 3.       | Plan shall show the limits of earth disruption.   | <input type="checkbox"/> |          |
| 4.       | Plan shall show tree protection fencing and location of trees to be protected.  | <input type="checkbox"/> |          |
| 5.       | Plan shall show all existing and proposed on-site drainage and dewatering facilities (i.e. structure details, rim elev., etc.)  | <input type="checkbox"/> |          |
| 6.       | Detailed sequence of construction shall be provided on plans structured similar to the following, supplemented with site specific items:<br>1) Install tracking mat, 2) Install temp. SESC measures, 3) Construct storm water basins and install treatment structures, if applicable, 4) Install storm sewer, with inlet protection to follow immediately, 5) Remove all temp. SESC measures once site is stabilized. | <input type="checkbox"/> |          |
| 7.       | Plan must address maintenance of soil erosion and sedimentation control measures (temporary and permanent)  | <input type="checkbox"/> |          |

|     |  |                          |  |
|-----|--|--------------------------|--|
| 8.  | Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Division for review.                                 | <input type="checkbox"/> |  |
| 9.  | A grading plan shall be provided, or grade information shown on plan.  | <input type="checkbox"/> |  |
| 10. | Note that it is the developer's responsibility to grade and stabilize disturbances due to the installation of public utilities.  | <input type="checkbox"/> |  |
| 11. | The CSWO shall be listed on permit application.  | <input type="checkbox"/> |  |
| 12. | Plan sealed by registered civil engineer with original signature.  | <input type="checkbox"/> |  |
| 13. | An itemized cost estimate (Silt Fence, Inlet Filters, Topsoil/Seed/Mulch, Const. Access, etc.) shall be provided.  | <input type="checkbox"/> | The SESC financial guarantee will be \$ .<br>The SESC inspection fees will be \$ . |
| 14. | Potential stockpile areas shall be shown on the plan, with note stating a ring of silt fence will be installed surrounding any stockpiled material.  | <input type="checkbox"/> |  |
| 15. | Sediment basin: Provide filter on standpipe outlet structure until site is stabilized, then removed. Noted on plan and standpipe detail(s).  | <input type="checkbox"/> |  |
| 16. | Provide a note on the plan stating the storm water basin will be stabilized prior to directing flow to the basin.  | <input type="checkbox"/> |  |
| 17. | Pretreatment Structures: Noted to inspect weekly for sediment accumulation until site is stabilized, and will clean as required.   | <input type="checkbox"/> | .  |
| 18. | Attach the Oakland County standard detail sheet.   | <input type="checkbox"/> |  |
| 19. | Construction mud tracking entrance: 75'x20', 6" of 1" to 3" stone, on geotextile fabric.   | <input type="checkbox"/> |  |
| 20. | Silt fence: 6" anchor trench, stakes 6' on center. Prominent line type on plan, with legend.   | <input type="checkbox"/> |  |
| 21. | Provide Silt Sack with overflow capability as the inlet protection, and provide detail on plans.   | <input type="checkbox"/> |  |
| 22. | Catch basin inlet filters shall be provided on existing roadways along construction route for reasonable distance from site.   | <input type="checkbox"/> |  |
| 23. | Street sweeping and dust control shall be noted on plan as responsibility of contractor.   | <input type="checkbox"/> |  |
| 24. | Vegetation shall be established within 5 days of final grade, or whenever disturbed areas will remain unchanged for 30 days or greater. 3-4" of topsoil will be used where vegetation is required. | <input type="checkbox"/> |  |
| 25. | Vegetated buffer strips (25' wide wherever possible) shall be created or retained along the  | <input type="checkbox"/> |  |



|     |  |                          |  |
|-----|--|--------------------------|--|
|     | edges of all water bodies, water courses or wetlands.  |                          |  |
| 26. | Diversion berms or terracing shall be implemented where necessary.   | <input type="checkbox"/> |  |
| 27. | All drainage ditches shall be stabilized with erosion control blanket and shall utilize check dams as necessary. Drainage ditches steeper than 3% shall be sodded.   | <input type="checkbox"/> |  |
| 28. | Slopes steeper than 1V:6H (16%) shall be stabilized with erosion control blanket. Add this note as a general note, and also in a prominent location near any berm, etc. where a significant slope is proposed. | <input type="checkbox"/> |  |
| 29. | All culvert end sections must contain grouted rip-rap in accordance with ordinance specifications.   | <input type="checkbox"/> |  |

**ADDITIONAL COMMENTS:**

1. Please note that installation of silt fencing or tree protection fencing shall not occur prior to the initial City pre-construction meeting. When natural features exist on the site, inspection of staking may be required prior to installation of the fencing.
2. **Provide an estimated time of earth disruption at the next submittal. At that time, an inspection fee will be provided.**

Reviewed By: Lindon Ivezaj (248) 735-5694

## LANDSCAPE REVIEW



# PLAN REVIEW CENTER REPORT

September 6, 2016

## Preliminary Site Plan

Beacon Hill

### Review Type

Preliminary Site Plan Landscape Review

### Job #

JSP15-0008

### Property Characteristics

- Site Location: Northeast corner of 12 Mile Road and Meadowbrook Road
- Site Zoning: RA – Residential Acreage – seeking PRO
- Site Size: 19.93 acres
- Adjacent Zoning: RA – Residential Acreage N&E, OST across 12 Mile, RA across Meadowbrook
- Plan Date: August 12, 2016

### Ordinance Considerations

This project was reviewed for general 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 Preliminary Site Plan submittal. Underlined items will need to be addressed in Final Site Plans. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review is a summary and not intended to substitute for any Ordinance.

### Recommendation:

This conceptual plan is **recommended for approval**, but there are a number of additions and revisions that need to be made to the plans in order to get final site plan approval.

**Please add a list of all landscaping-related PRO provisions on the sheet LS-1.**

**Please add a list of all new city council variances being requested on sheet LS-1.**

### General Note:

If at all possible, the reconfigured stream should be re-graded to allow more floodplain room. As designed, it appears to be a narrow streambed with little to no room for the stream to develop a more natural meandering course, or to allow for flooding over the banks in times of heavier flow. Also, some sort of protection for the streambank where the Meadows detention pond outlets to the stream should be provided.

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

1. A full tree survey has been provided on the site plans.
2. Calculations for the trees removed and required woodland replacements have been provided. ECT will provide the woodland review.
3. **Please leave tree ids of existing trees to remain on landscape plans to assist with inspections.**

### Screening Between Residential and Non-residential – Berm (Wall) & Buffer (Zoning Sec. 5.5.3.A)

1. A landscaped berm 6-8' high is required between residential and commercial uses. As the commercial area is below the residential area, and the detention ponds are between the two uses, a berm of that height is not feasible.

2. The applicant has proposed an attractive mix of dense landscaping between the residential and commercial parts of the development and in the proposed park area, most of which are woodland replacement trees.
3. **It appears that the proposed landscaping will provide the required screening, despite the difference in height, but a section view from Meadowbrook should be added to show the proposed buffering capability of that landscaping, showing the buildings at proposed elevations and the landscaping at a height that can be expected after 2 years of growth.**
4. **If that section reveals that the screening is insufficient, additional screening in the form of dense evergreens, a landscaped berm high enough to provide the required buffering, or other screening will be required.**
5. The seed mixes are identified through callouts, and a diverse upland seed mix is proposed for the upland areas to be densely planted.
6. **A berm 6-8 feet tall is also required along the east property line, between the commercial section and the R-A property to the east. If the applicant wishes to provide a wall instead of the berm, a City Council variance will need to be requested.**

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

**MEADOWBROOK**

A 50' wide greenbelt (minimum) is proposed along the Meadowbrook frontage adjacent to the residential units. This exceeds the requirement for a 40' non-access easement.

**BERM**

- a. The frontage along Meadowbrook (1336 less 86' ROW for Hummingdale) is required to have an undulating berm with a minimum height of 4' and a 4' wide crest.
- b. **The PRO allowed the applicant to not provide a berm for the section of frontage north of Hummingdale and south of the residential section. A berm was still required for the section of residential frontage south of Hummingdale, and should be provided where the site grading will allow.**

**PLANTINGS**

- a. The frontage along Meadowbrook (1336 less 86' ROW for Hummingdale) is required to have 1 large evergreen tree or deciduous canopy tree per 35' lf of frontage and 1 subcanopy tree per 20 lf of frontage.
- b. **The PRO allowed for no greenbelt plantings for the 540 lf of frontage park area south of the residential section and for the frontage north of Hummingdale with existing vegetation to remain.**
- c. The required large trees and subcanopy trees for the remaining 366 lf of frontage are provided.
- d. **Please clearly indicate which existing trees are counting toward the requirement, and include their tree id tag in the landscape plan.**

**TWELVE MILE ROAD**

1. A 42' wide greenbelt (minimum) is proposed along the Twelve Mile Road frontage adjacent to the commercial units. This exceeds the requirement for a 20' greenbelt adjacent to parking.
2. An undulating berm at least 3' tall with a 2' crest is required between the road and the parking lot and is proposed.
3. **One large evergreen or deciduous canopy tree per 35 lf frontage is required. All required trees are provided.**
4. **One subcanopy tree per 20 lf frontage is required along the parking lot. The subcanopy calculations and trees provided need to be revised.**
5. **The PRO agreement allows the applicant to not provide a berm or greenbelt plantings for the section of frontage west of the commercial driveway.**

Street Tree Requirements (Zoning Sec. 5.5.3.E.i.c and LDM 1.d.)

**RESIDENTIAL INTERIOR:**

1. Street tree requirements appear to have been calculated correctly, and the correct number of trees has been provided.
2. Additional trees (woodland replacements) have been provided along the street along Hummingdale and the open spaces of Hummingdale Circle.

**MEADOWBROOK AND TWELVE MILE ROADS:**

1. The calculations for Meadowbrook and Twelve Mile Roads have been broken out as requested.
2. **Meadowbrook:** 1 deciduous canopy tree per 35 lf is required along Meadowbrook Road, for a total of 37 trees. All of these trees must be street trees, not woodland replacement trees.
3. **Twelve Mile:** 1 deciduous canopy tree per 35 lf is required along areas facing parking, and 1 tree per 45 lf is required along other right-of-way frontage for commercial, so a total of 17 trees are required along Twelve Mile Road. All of these trees must be street trees, not woodland replacement trees.

Parking Lot Landscape (Zoning Sec. 5.5.3.C.) – Commercial only

1. Parking lot interior landscaping was not calculated correctly. Please revise the calculations as shown on the landscape chart and provide the correct number of trees.
2. *Islands and/or planting areas need to be at least 10' wide in parking areas and 300sf in area. There are numerous trees in planting areas that are much less than 300sf and/or 10 feet wide. These trees can't be counted toward the total. Please enlarge the islands that are to have trees in them.*
3. Parking lot trees must be deciduous canopy trees, not subcanopy trees. Please replace subcanopy trees counted as parking lot trees with deciduous canopy trees. Per the ordinance definition, deciduous canopy trees must have a mature canopy width of at least 20' to provide shading effect for adjacent spaces.

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

1. Perimeter calculations have been provided as requested. After locating all required interior parking lot trees on the site, please place as many trees as possible along the perimeter without crowding them closer than 30 ft on center.
2. If all required trees can't be planted, please request a City Council variance for the missing trees (include the number of trees not planted in the variance listing). Staff will support this variance as long as the overall planting density is similar to that shown on the proposed plan.
3. Parking lot perimeter trees are required to be deciduous canopy trees. Please replace any evergreen perimeter trees with deciduous canopy species.

Transformer/Utility Box Screening (Zoning Sec 5.5.3.D.)

1. When transformers/utility boxes are added to the plans, be sure to screen them per the city standard detail.
2. Please include the utility box screening detail on the plans if actual plantings are not proposed.

Building Foundation Landscape (Zoning Sec 5.5.3.D.)

1. The required foundation landscaping has been calculated correctly.
2. 60% of the frontage visible from Twelve Mile Road should be landscaped. As proposed, approximately 67% of the combined frontage is landscaped.
3. Landscaping needs to be adjacent to outdoor patios.
4. A city council variance will be required to locate foundation landscaping away from the building.
5. Paved areas and areas without landscaping cannot be counted toward the foundation landscaping requirement.
6. Please remove the boxes from the landscape area labels to make them more legible.

**GENERAL/OTHER**

Planting Notations and Details (LDM)

1. Provided.
2. **Please revise per the notes on the Landscape Chart.**

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

1. Storm basin shrubs are provided per the ordinance in terms of coverage.
2. The proposed seed mixes have a good diversity.

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

Irrigation plans for landscaped areas are required for Final Site Plan.

Proposed topography. 2' contour minimum (LDM 2.e.(1))

Proposed topography has been provided for the site.

Snow Deposit (LDM.2.q.)

Snow deposit areas have been proposed.

Proposed trees to be saved (Sec 37 Woodland Protection 37-9, LDM 2.e.(1))

1. Trees scheduled to be removed are shown on both the plan and tree chart.
2. **Please leave the tree ids for existing trees to remain on the landscape plan.**

Corner Clearance (Zoning Sec 5.9)

Corner clearance is provided for both the residential and commercial sections of the property.

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](mailto:rmeader@cityofnovi.org).



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Rick Meader – Landscape Architect

## LANDSCAPE REVIEW SUMMARY CHART – PRELIMINARY SITE PLAN

**Review Date:** September 2, 2016  
**Project Name:** JSP15 – 0008: BEACON HILL  
**Plan Date:** August 12, 2016  
**Prepared by:** Rick Meader, Landscape Architect E-mail: [rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org);  
 Phone: (248) 735-5621

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

| Item   | Required  | Proposed | Meets Code | Comments                                |
|--|---|----------|------------|---|
| <b>Landscape Plan Requirements (LDM (2))</b>                                   |   |          |            |   |
| <b>Landscape Plan</b><br>(Zoning Sec 5.5.2,<br>LDM 2.e.)                       | § New commercial or residential developments<br>§ Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less.<br>§ 1"=20' minimum with proper North. Variations from this scale can be approved by LA<br>§ Consistent with plans throughout set | Yes      | Yes        | Overall: 1"=60'<br>Detail sheets 1"=40' |
| <b>Project Information</b><br>(LDM 2.d.)                                       | Name and Address  | Yes      | Yes        |   |
| <b>Owner/Developer Contact Information</b><br>(LDM 2.a.)                       | Name, address and telephone number of the owner and developer or association  | Yes      | Yes        |   |
| <b>Landscape Architect contact information</b><br>(LDM 2.b.)                   | Name, Address and telephone number of RLA/LLA   | Yes      | Yes        |   |
| <b>Sealed by LA.</b><br>(LDM 2.g.)   | Requires original signature   | Yes      | Yes        |   |
| <b>Miss Dig Note</b><br>(800) 482-7171<br>(LDM.3.a.(8))                        | Show on all plan sheets   | Yes      | Yes        |   |
| <b>Zoning</b> (LDM 2.f.)   | Include all adjacent zoning   | Yes      | Yes        | Sheet SP-2                              |
| <b>Survey information</b><br>(LDM 2.c.)  | § Legal description or boundary line survey<br>§ Existing topography  | Yes      | Yes        | Sheet SP-2                              |
| <b>Existing plant material Existing woodlands or wetlands</b><br>(LDM 2.e.(2)) | § Show location type and size. Label to be saved or removed.<br>§ Plan shall state if none  | Yes      | Yes        | Sheets SP-2 – SP-4                      |

| Item  | Required   | Proposed | Meets Code | Comments   |
|---|--|----------|------------|--|
|   | exists.  |          |            |  |
| <b>Soil types</b> (LDM.2.r.)  | § As determined by Soils survey of Oakland county<br>§ Show types, boundaries              | Yes      | Yes        | Sheet SP-2   |
| <b>Existing and proposed improvements</b> (LDM 2.e.(4))                           | Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W | Yes      | Yes        |  |
| <b>Existing and proposed utilities</b> (LDM 2.e.(4))                              | Overhead and underground utilities, including hydrants                                     | Yes      | Yes        |  |
| <b>Proposed grading. 2' contour minimum</b> (LDM 2.e.(1))                         | Provide proposed contours at 2' interval   | Yes      | Yes        |  |
| <b>Snow deposit</b> (LDM.2.q.)  | Show snow deposit areas on plan  | Yes      | Yes        |  |
| <b>LANDSCAPING REQUIREMENTS</b>   |  |          |            |  |
| <b>Parking Area Landscape Requirements LDM 1.c. &amp; Calculations (LDM 2.o.)</b> |  |          |            |  |
| <b>General requirements</b> (LDM 1.c)   | § Clear sight distance within parking islands<br>§ No evergreen trees                      | Yes      | Yes        |  |
| <b>Name, type and number of ground cover</b> (LDM 1.c.(5))                        | As proposed on planting islands  | Yes      | Yes        |  |
| <b>General (Zoning Sec 5.5.3.C.ii)</b>  |  |          |            |  |
| <b>Parking lot Islands</b> (a, b. i)  | § A minimum of 300 SF to qualify<br>§ 6" curbs<br>§ Islands minimum width 10' BOC to BOC   | Yes      | No         | <ol style="list-style-type: none"> <li>1. There are a number of islands that are counted toward parking whose area does not appear to be at least 300sf.</li> <li>2. If islands less than 300sf do not have an "overflow" area into adjacent greenspace (i.e. are surrounded by building or paving) they do not qualify as parking lot islands. <b>Please enlarge islands with parking lot trees to have at least 200sf planting area.</b></li> <li>3. Islands smaller than</li> </ol> |



| Item  | Required  | Proposed         | Meets Code | Comments  |
|---|---|------------------|------------|---|
|   |   |                  |            | 300sf or with street trees can also serve as building foundation planting area if they have additional landscaping (not just lawn).<br><b>4. Please adjust the landscape areas and counts accordingly.</b><br><b>5. Please remove boxes from all area counts to make them more legible.</b> |
| <b>Curbs and Parking stall reduction (c)</b>  | Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft     | No               | No         |   |
| <b>Contiguous space limit (i)</b>   | Maximum of 15 contiguous spaces   | Yes              | Yes        |   |
| <b>Plantings around Fire Hydrant (d)</b>  | No plantings with matured height greater than 12' within 10 ft. of fire hydrants                  | Yes              | Yes        | <b>Islands with hydrants can have shrub /grass/ perennial plantings behind them.</b>  |
| <b>Landscaped area (g)</b>  | Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped         | Yes              | Yes        |   |
| <b>Clear Zones (LDM 2.3.(5))</b>  | 25 ft corner clearance required. Refer to Zoning Section 5.5.9                                    | Yes              | Yes        | <b>Please add lines to plans for confirmation during installation.</b>  |
| <b>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)</b> |   |                  |            |   |
| A = Total square footage of parking spaces not including access aisles x 10%  | § A = x 10% = sf<br>§ 17540 * 10% = 1754 sf   | NA – Residential |            |   |
| B = Total square footage of additional paved vehicular use areas (not including A) under 50,000 SF) x 5%  | § B = x 5% = sf<br>§ Paved Vehicular access area includes loading areas<br>§ 32460 * 5% = 1623 sf | NA – Residential |            | <b>Please revise calculations as shown here. (50000 – 17540 = 32460 sf)</b>   |
| C= Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %  | § C = x 1% = sf<br>§ 9956 * 1% = 100 sf   | NA – Residential |            | <b>Please revise calculations as shown (42416 – 32460 = 9956 sf)</b>  |
| <b>Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C.iii)</b>  |   |                  |            |   |

| Item  | Required                                       | Proposed | Meets Code | Comments   |
|---|--|----------|------------|--|
| A. = Total square footage of parking spaces not including access aisles x 7%                                  | $A = 7\% \times \text{xx sf} = \text{xx sf}$   | NA       |            |  |
| B = Total square footage of additional Paved vehicular use areas (not including A) under 50,000 SF) x 2%      | $B = 2\% \times \text{xx sf} = \text{xx sf}$   | NA       |            |  |
| C= Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 0.5% | $C = 0.5\% \times 0 \text{ sf} = 0 \text{ SF}$ | NA       |            |  |
| <b>All Categories</b>   |  |          |            |  |
| D = A+B or A+C<br>Total square footage of landscaped islands  | $1754+1623+100 = 3477 \text{ SF}$              | 3913 SF  | Yes        | <ol style="list-style-type: none"> <li>1. Please revise calculations.</li> <li>2. Label areas more legibly – no boxes</li> </ol>   |
| E = D/75<br>Number of canopy trees required   | $3477/75=46 \text{ Trees}$                     | 52 trees | Yes/No     | <ol style="list-style-type: none"> <li>1. Interior trees should be deciduous canopy, not subcanopy trees. Please change subcanopy trees in interior islands to canopy trees.</li> <li>2. As a priority, interior parking tree requirement should be met.</li> <li>3. Perimeter trees can be added where they can fit. A City Council landscape variance can be requested for the number of perimeter trees not provided and will be supported by staff as long as the landscape density around the parking/ vehicular use areas are similar in appearance to what is currently proposed.</li> <li>4. Please call with any</li> </ol> |

| Item  | Required  | Proposed  | Meets Code | Comments   |
|---|---|---|------------|--|
|   |   |   |            | questions.   |
| <b>Perimeter Green space</b>  | <ul style="list-style-type: none"> <li>1 Canopy tree per 35 lf</li> <li>1192/35 = 34 trees</li> </ul> | 33 trees  | No         | See above  |
| <b>Parking land banked</b>  | NA  | No  |            |  |
| <b>Berms, Walls and ROW Planting Requirements</b>   |   |   |            |  |
| <b>Berms</b>  |   |   |            |  |
| § All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours<br>§ Berm should be located on lot line except in conflict with utilities. |   |   |            |  |
| <b>Cross-Section of Berms (LDM 2.j)</b>   |   |   |            |  |
| Slope, height and width   | § Label contour lines<br>§ Maximum 33% slope<br>§ Construction of loam<br>§ 6" top layer of topsoil   | No  | No         | Please provide berm cross section details showing height range, other required elements for areas where berms are provided.  |
| Type of Ground Cover  |   | No  | No         | Please indicate ground cover on berm detail  |
| Setbacks from Utilities   | Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole    | No  | No         | If there are any overhead utilities in the vicinity of the berm, please indicate their location on the detail.   |
| <b>Walls (LDM 2.k &amp; Zoning Sec 5.5.3.vi)</b>  |   |   |            |  |
| <b>Material, height and type of construction footing</b>  | Freestanding walls should have brick or stone exterior with masonry or concrete interior              | Sign wall for residential   |            | Please provide dimensioned construction details for residential posts and wall, eastern retaining/screening wall.  |
| <b>Walls greater than 3 ½ ft. should be designed and sealed by an Engineer</b>  |   | TBD   |            |  |
| <b>Residential Adjacent to Non-residential (Sec 5.5.3.A) &amp; (LDM 1.a)</b>  |   |   |            |  |
| <b>Berm requirements (Zoning Sec 5.5.A)</b>   | Refer to Residential Adjacent to Non-residential berm requirements chart                              | <ul style="list-style-type: none"> <li>No berm between commercial and residential portions due to grade change, but significant landscaping including large evergreen trees seems to provide</li> </ul> | No         | 1. Please provide requested section drawings illustrating screening that landscaping between residential and commercial sections will provide sufficient screening.<br>2. Berm 6-8 feet tall is required between |

| Item  | Required                                  | Proposed  | Meets Code | Comments  |
|---|---|---|------------|---|
|   |   | necessary screening.<br>• Only plantings are proposed as screening between commercial and property to the east. |            | commercial's eastern property line needs to be a minimum of 6-8 feet tall with respect to the residential side, to block the view of the parking lot from that parcel.<br>3. A landscape deviation approval by City Council would be required to substitute a wall with the same height for the berm. |
| <b>Planting requirements (LDM 1.a.)</b>                                     | LDM Novi Street Tree List                 | Yes   | Yes        |   |
| <b>ROW Landscape Screening Requirements (Sec 5.5.3.B. ii) - RESIDENTIAL</b> |   |   |            |   |
| <b>Greenbelt width (2)(3) (5)</b>   | 34 ft                                     | 50 ft   | Yes        |   |
| Min. berm crest width   | 4 ft                                      | No  | No         | PRO allowed no berm north of Hummingbird due to natural vegetation to be preserved, and 540 ft north of Twelve Mile due to park and proposed heavy vegetation, but must be provided where possible south of Hummingbird Lane and north of park/detention area   |
| Minimum berm height (9)   | 4 ft                                      | No  | No         | See above   |
| 3' wall   | (4)(7)                                    | TBD   | TBD        | 1. Sign wall height is unclear. <b>Please add dimensions.</b><br>2. <b>If a wall is above 3' in total height it must be designed by engineer.</b>   |
| <b>Canopy deciduous or large evergreen trees</b><br>Notes (1) (10)          | § 1 tree per 35 lf<br>$366/35 = 10$ trees | 10 trees  | Yes        | 1. PRO agreement allows no greenbelt trees to be planted along 540 ft north of Twelve Mile or north of Hummingbird Lane.<br>2. <b>Please indicate with</b>  |

| Item   | Required  | Proposed   | Meets Code | Comments   |
|--|---|--|------------|--|
|  |   |  |            | labeling similar to that used for the Commercial section which trees are Greenbelt trees and which are street trees.   |
| <b>Sub-canopy deciduous trees</b><br>Notes (2)(10)   | § 1 tree per 20 lf<br>§ 366/20= 18 trees  | 22 trees   | Yes        | See above  |
| <b>Canopy deciduous trees in area between sidewalk and curb</b><br>(Novi Street Tree List) | § 1 tree per 35 lf<br>§ 770/35= 22 trees<br>§ Section south of residential: 540/35 = 15 trees   | 1. Along residential:<br>18 proposed trees + 5 existing trees<br>2. South of residential: 15 trees | No         | 1. Please highlight existing trees counted toward requirement.<br>2. Replacement trees cannot be used in place of required street trees along portion of property between residential section and Twelve Mile Road.<br>3. Please show replacement trees as street trees and revise replacement calculations. |
| <b>ROW Landscape Screening Requirements (Sec 5.5.3.B. ii) – COMMERCIAL – B-3 Zoning</b>    |   |  |            |  |
| <b>Greenbelt width</b><br>(2)(3) (5)   | Parking: 20 ft.   | 55 ft  | Yes        |  |
| Min. berm crest width  | Parking: 2 ft.  | 2 ft min   | Yes        |  |
| Minimum berm height<br>(9)   | Parking: 3 ft.  | 3 ft min   | Yes        |  |
| 3' wall  | (4)(7)  | No   |            |  |
| <b>Canopy deciduous or large evergreen trees</b><br>Notes (1) (10)                         | § Parking: 1 tree per 35 lf.<br>§ 408/35= 12 trees  | 11 trees   | No         | Please add 1 tree.   |
| <b>Sub-canopy deciduous trees</b><br>Notes (2)(10)   | § Parking: 1 tree per 20 lf<br>§ 408/20 = 20 trees  | 10 trees   | No         | 1. Please use correct calculation. The calculation used was for industrial subdivisions.<br>2. Please add required trees.  |
| <b>Canopy deciduous trees in area between sidewalk and curb</b><br>(Novi Street Tree List) | § Parking: 1 tree per 35 lf<br>§ 408/35 = 12 trees<br>§ West of commercial:<br>220/45 = 5 trees | 1. 12 trees in front of commercial<br>2. 6 replacement trees west of commercial.                   | No         | 1. Replacement trees cannot be used in place of required street trees along portion of property between  |

| Item   | Required  | Proposed                         | Meets Code | Comments  |
|--|---|----------------------------------|------------|---|
|  |   |                                  |            | <p><b>commercial and Meadowbrook.</b></p> <p>2. Please show the western 5 trees as standard street trees (1 can be removed) and revise replacement calculations.</p>  |
| <p><b>Residential Subdivisions Sec 5.5.3.E.iii &amp; LDM 1.d (2)</b><br/>                     Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM</p> |   |                                  |            |   |
| <p><b>Street trees on lots</b></p>   | <ul style="list-style-type: none"> <li>• 1 per 35 lf frontage – see LDM for breakdown:</li> <li>• 51 required</li> </ul>  | <p>54 trees in front of lots</p> | <p>Yes</p> | <ol style="list-style-type: none"> <li>1. 8 street trees also provided along Hummingbird Blvd</li> <li>2. 11 replacement trees also provided along open space street frontage</li> <li>3. <b>Please position street trees at least 10 feet away from all utility structures (manholes, catch basins, hydrants, etc.)</b></li> </ol> |
| <p><b>Non-Residential Zoning Sec 5.5.3.E.iii &amp; LDM 1.d (2)</b><br/>                     Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM</p>   |   |                                  |            |   |
| <p><b>Interior Street to Industrial subdivision (LDM 1.d.(2))</b></p>  | <p>§ 1 canopy deciduous or 1 large evergreen per 35 lf along ROW</p> <p>§ 3 sub canopy trees per 40 lf of total linear frontage</p>   | <p>NA</p>                        |            |   |
| <p><b>Screening of outdoor storage, loading/unloading (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)</b></p>  |   | <p>No</p>                        | <p>TBD</p> | <ol style="list-style-type: none"> <li>1. NA for residential section.</li> <li>2. Dumpsters in rear.</li> <li>3. <b>No loading/unloading areas indicated in commercial area.</b></li> </ol>   |
| <p><b>Transformers/Utility boxes (LDM 1.e from 1 through 5)</b></p>  | <p>§ A minimum of 2ft. separation between box and the plants</p> <p>§ Ground cover below 4" is allowed up to pad.</p> <p>§ No plant materials within 8 ft. from the doors</p> | <p>No</p>                        | <p>No</p>  | <ol style="list-style-type: none"> <li>1. No transformers shown on either residential or commercial areas.</li> <li>2. <b>Please add a note that all transformers/utility boxes will be screened per the city detail (for both residential and commercial).</b></li> <li>3. <b>Please revise detail</b></li> </ol>                  |

| Item  | Required   | Proposed                          | Meets Code  | Comments  |
|---|--|-----------------------------------|---|---|
|   |  |                                   |   | on Sheet LS-4 per City detail (attached with this review).  |
| <b>Building Foundation Landscape Requirements (Sec 5.5.3.D) – Commercial only</b> |  |                                   |   |   |
| Interior site landscaping SF  | § Equals to entire perimeter of the building x 8 with a minimum width of 4 ft.<br>§ 648 If x 8ft = 5148 SF | 5409 sf                           | Yes, but it's not easy to confirm areas counted toward requirement. | 1. Please remove boxes from area call-outs to make them more legibly.<br>2. A City Council variance will be required to count landscape areas away from the building as foundation landscaping.<br>3. Areas of only lawn do not qualify as landscaped area. Add additional plantings to those areas that are currently open, but are counted as building foundation areas.<br>4. Areas that contain parking lot trees need landscaping in addition to those trees to count as foundation landscaping (i.e. trees can't be double-counted as parking lot trees and foundation landscaping). If additional landscaping is added, the islands can count.<br>5. The additionally landscaped areas along the greenbelt can be counted toward the foundation landscaping. |
| Zoning Sec 5.5.3.D.ii. All items from (b) to                                      | If visible from public street a minimum of 60%   | 102/153 lf (67%) visible frontage | Yes   | Per 5.5.3.D.ii.e, patios are to have adjacent   |

| Item  | Required  | Proposed                             | Meets Code | Comments   |
|---|---|--------------------------------------|------------|--|
| (e)   | of the exterior building perimeter should be covered in green space   | from Twelve Mile Road is landscaped. |            | <b>landscaping. Please add where necessary.</b>  |
| <b>Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)</b>               |   |                                      |            |  |
| <b>Planting requirements (Sec. 5.5.3.E.iv)</b>                                | § Clusters shall cover 70-75% of the basin rim area<br>§ 10" to 14" tall grass along sides of basin<br>§ Refer to wetland for basin mix   | Yes                                  | Yes        | 1. Both detention areas are acceptably landscaped.<br>2. Seed mixes are provided on Sheet LS5.   |
| <b>LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS</b>                    |   |                                      |            |  |
| <b>Landscape Notes – Utilize City of Novi Standard Notes</b>                  |   |                                      |            |  |
| <b>Installation date (LDM 2.l. &amp; Zoning Sec 5.5.5.B)</b>                  | Provide intended date range of between March 15 and Nov 15  | No                                   | No         | <b>Please revise City of Novi Landscape Note #6 accordingly or remove that note as planting seasons are discussed in Note 4 on Sheet L5.</b> |
| <b>Maintenance &amp; Statement of intent (LDM 2.m &amp; Zoning Sec 5.5.6)</b> | § Include statement of intent to install and guarantee all materials for 2 years.<br>§ Include a minimum one cultivation in June, July and August for the 2-year warranty period. | Yes/No                               | Yes/No     | <b>Please add cultivation note.</b>  |
| <b>Plant source (LDM 2.n &amp; LDM 3.a.(2))</b>                               | Shall be northern nursery grown, No.1 grade.  | Yes                                  | Yes        | <b>Please add required note (should apply to all plants, not just street trees).</b>   |
| <b>Irrigation plan (LDM 2.s.)</b>   | A fully automatic irrigation system and a method of draining is required with Final Site Plan   | No                                   |            | <u>Need for final site plan</u>  |
| <b>Other information (LDM 2.u)</b>  | Required by Planning Commission   | NA                                   |            |  |
| <b>Establishment period (Zoning Sec 5.5.6.B)</b>                              | <b>2 yr. Guarantee</b>  | Yes                                  | Yes        |  |
| <b>Approval of substitutions. (Zoning Sec 5.5.5.E)</b>                        | City must approve any substitutions in writing prior to installation.   | Yes                                  | Yes        | <b>Please add "in writing" to Note #5 on Sheet LS-1</b>  |
| <b>Plant List (LDM 2.h.) – Include all cost estimates</b>                     |   |                                      |            |  |
| Quantities and sizes  | Refer to LDM suggested plant list   | Yes                                  | Yes        |  |
| Root type   |   | Yes                                  | Yes        |  |



| Item   | Required  | Proposed | Meets Code | Comments  |
|--|---|----------|------------|---|
| Botanical and common names   |   | Yes      | Yes        |   |
| Type and amount of lawn  |   | Yes      | Yes        |   |
| Cost estimate (LDM 2.t)  | For all new plantings, mulch and sod as listed on the plan  | Yes      | Yes        | <u>Final costs required for Final Site Plans.</u>   |
| <b>Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details</b> |   |          |            |   |
| Canopy Deciduous Tree  | Refer to LDM for detail drawings  | Yes      | Yes        | <b>Please revise all tree planting notes to say basket and burlap should be pulled halfway down ball, all ropes/wires removed from trunk.</b> |
| Evergreen Tree   |   | Yes      | Yes        | <b>See above</b>  |
| Shrub  |   | Yes      | Yes        |   |
| Perennial/<br>Ground Cover   |   | Yes      | Yes        |   |
| Tree stakes and guys.<br>(Wood stakes, fabric guys)                            |   | Yes      | Yes        |   |
| Tree protection fencing  | Located at Critical Root Zone (1' outside of dripline)  | No       | No         | <b>Please provide detail in plan set.</b>   |
| <b>Other Plant Material Requirements (LDM 3)</b>                               |   |          |            |   |
| <b>General Conditions (LDM 3.a)</b>  | Plant materials shall not be planted within 4 ft. of property line  | Yes      | Yes        | <b>Please add note near property lines stating this.</b>  |
| <b>Plant Materials &amp; Existing Plant Material (LDM 3.b)</b>                 | Clearly show trees to be removed and trees to be saved.   | Yes      | Yes        |   |
| <b>Landscape tree credit (LDM3.b.(d))</b>                                      | Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM | No       |            |   |
| <b>Plant Sizes for ROW, Woodland replacement and others (LDM 3.c)</b>          | Canopy Deciduous shall be 3" and sub-canopy deciduous shall be 2.5" caliper. Refer to section for more details  | Yes      | Yes        |   |
| <b>Plant size credit (LDM3.c.(2))</b>  | NA  | No       |            |   |
| <b>Prohibited Plants (LDM 3.d)</b>   | No plants on City Invasive Species List   | No       | Yes        |   |

| Item  | Required  | Proposed | Meets Code | Comments  |
|---|---|----------|------------|---|
| <b>Recommended trees for planting under overhead utilities</b><br>(LDM 3.e) | Label the distance from the overhead utilities  |          |            | <b>Please add dimensions of trees near overhead lines to be sure conflicts don't occur.</b> |
| <b>Collected or Transplanted trees</b><br>(LDM 3.f)                         |   | No       |            |   |
| <b>Nonliving Durable Material: Mulch</b> (LDM 4)                            | § Trees shall be mulched to 4" depth and shrubs, groundcovers to 3" depth<br>§ Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate.<br>§ 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.
3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.

WETLANDS REVIEW



August 31, 2016 (REV.1)

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

Re: Beacon Hill (JSP15-0008)  
Wetland Review of the Preliminary Site Plan (PSP16-0126)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan for Beacon Hill Park, Beacon Hill Meadows, The Shoppes at Beacon Hill, and Beacon Hill Park Trailhead prepared by Zeimet-Wozniak & Associates, Inc. dated August 12, 2016 (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 previously visited the site for the purpose of a woodland verification as well as a wetland boundary verification with the applicant's wetland consultant King and MacGregor Environmental, Inc. (KME).

**ECT currently recommends approval of the Preliminary Site Plan for Wetlands. ECT recommends that the Applicant address the items noted in the *Wetland and Watercourse Comments* section of this letter prior to approval of the Final Site Plan.**

The following wetland-related items are required for this project:

| Item  | Required/Not Required/Not Applicable |
|---|--------------------------------------|
| Wetland Permit (specify Non-Minor or Minor) | Required (Non-Minor)                 |
| Wetland Mitigation                          | Not Required                         |
| Wetland Buffer Authorization                | Required                             |
| MDEQ Permit                                 | Required                             |
| Wetland Conservation Easement               | Required                             |

The proposed development is located at the northeast corner of Twelve Mile Road and Meadowbrook Road, in Section 12. The Plan continues to propose both single-family residential lots (39 lots on 13.60 acres) as well as a commercial, restaurant and retail center (3.05 acres). An area of park trailhead is also proposed on the Plan totaling 3.28 acres. In addition the Plan proposes two (2) storm water detention basins as well as associated roads, parking and utilities. The total site acreage is approximately 20 acres. The proposed development has been divided in the following three (3) development areas:

- Beacon Hill Meadows (Residential);
- The Shoppes at Beacon Hill (Commercial);
- Beacon Hill Park Trailhead.

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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), and a previously-completed on-site wetland boundary verification, it appears as if this proposed project site contains both Regulated Wetlands and Regulated Woodlands. This property includes a total of seven (7) individual wetland areas, including an open water/emergent wetland and a stream/drain which is tributary to the Walled Lake Branch of the Rouge River.

**On-Site Wetland Evaluation & Proposed Wetland Impacts**

ECT has previously completed a wetland boundary verification for this property. At that time, ECT verified the on-site wetland boundaries with the applicant’s wetland consultant, King & MacGregor Environmental, Inc. (KME). The nine (9) existing wetland areas that were flagged on-site (Wetlands A, B, C, D, E, EE, F, G, and H) are indicated on the current Plan along with the wetland flag number information. The wetlands appear to be accurately portrayed on the Plan. Wetland A is a forested wetland. Wetland B is a scrub-shrub wetland. Wetland C is an emergent/scrub-shrub wetland located along Meadowbrook Road. Wetlands D, E, G and H are emergent/wet meadow wetlands. Wetland EE is a larger emergent/open water wetland located in the southwest corner of the proposed development site, and Wetland F is an emergent/open water wetland associated with the drain that runs from west to east within the southern portion of the site. It should be noted that emergent Wetlands D, G, and H are of marginal quality and offer little in terms of environmental benefit (i.e., habitat and storm water storage capacity appear to be minimal/limited).

The emergent wetland area associated with the existing drain (Wetlands EE and F) is currently dominated by invasive species including common reed and reed canary grass. The adjoining upland is also dominated by invasive species such as common buckthorn. The Plan proposes a plan to treat some of these areas for invasive species and restore with native wildflower and plant species.

Currently, the Plan appears to indicate impacts to seven (7) of the nine (9) on-site wetlands. Based on the *Wetland and Wetland Buffer Impact Table*, Wetlands A and C will not be impacted. The other wetlands will be filled for the purpose of construction, or otherwise impacted as part of the stream channel relocation/abandonment, etc.

The Plan also proposes to abandon approximately 350 lineal feet of the existing stream channel (Wetland F). The stream will be relocated via approximately 485 lineal feet of constructed stream channel design. The following table summarizes the existing wetlands and the proposed wetland impacts as listed on the *Wetland & Buffer Impact Plan* (Sheet SP-15):

**Table 1. Existing Wetlands and Proposed Wetland Impacts**

| Development Area | Wetland ID | Wetland Area    | Impact Area     | Estimated Impact Volume | City Regulated? | MDEQ Regulated? |
|------------------|------------|-----------------|-----------------|-------------------------|-----------------|-----------------|
|                  |            | Sq. Ft. (Acres) | Sq. Ft. (Acres) | (cubic yards)           |                 |                 |
| Meadows          |            |                 |                 |                         |                 |                 |
|                  | A          | 4,572 (0.10)    | N/A             | N/A                     | YES             | No              |
|                  | B          | 382 (0.009)     | 382 (0.009)     | Not Indicated           | YES             | No              |
|                  | C          | 5,903 (0.14)    | N/A             | N/A                     | YES             | No              |
|                  | D          | 770 (0.02)      | 770 (0.02)      | Not Indicated           | YES             | YES             |
| Shoppes          |            |                 |                 |                         |                 |                 |
|                  | G          | 783 (0.02)      | 783 (0.02)      | Not Indicated           | YES             | YES             |

| Development Area | Wetland ID | Wetland Area         | Impact Area          | Estimated Impact Volume | City Regulated? | MDEQ Regulated? |
|------------------|------------|----------------------|----------------------|-------------------------|-----------------|-----------------|
|                  |            | Sq. Ft. (Acres)      | Sq. Ft. (Acres)      | (cubic yards)           |                 |                 |
|                  | H          | 876 (0.02)           | 876 (0.02)           | Not Indicated           | YES             | YES             |
| Park Trailhead   |            |                      |                      |                         |                 |                 |
|                  | E          | 4,477 (0.10)         | 3,092 (0.07)         | Not Indicated           | YES             | YES             |
|                  | EE         | 48,121 (1.10)        | 3,223 (0.07)         | Not Indicated           | YES             | YES             |
|                  | F          | 1,411 (0.03)         | 1,410 (0.03)         | Not Indicated           | YES             | YES             |
| <b>TOTAL</b>     | --         | <b>67,295 (1.54)</b> | <b>10,537 (0.24)</b> | <b>Not Indicated</b>    | --              | --              |

It should be noted that the Plan indicates an impact to Wetland E, however no wetland impact hatch is shown on the *Wetland & Buffer Impact Plan* (Sheet SP-14). The applicant should review and revise as necessary on the Plan. Currently, the Plan proposes impacts to 0.24-acre of the total 1.54 acres of on-site wetland (i.e., approximately 16% of the existing wetlands). These impacts remain unchanged from the previously-reviewed Concept Plan.

The following table summarizes the existing wetland/watercourse setbacks and the proposed wetland/watercourse setback impacts as listed on the Plan:

*Table 2. Proposed 25-Foot Wetland/Watercourse Buffer Impacts*

| Development Area | Wetland Buffer ID | Wetland Buffer Area  | Buffer Impact Area   | Estimated Impact Volume | City Regulated? | MDEQ Regulated? |
|------------------|-------------------|----------------------|----------------------|-------------------------|-----------------|-----------------|
|                  |                   | Sq. Ft. (Acres)      | Sq. Ft. (Acres)      | (cubic yards)           |                 |                 |
| Meadows          |                   |                      |                      |                         |                 |                 |
|                  | A                 | 6,753 (0.16)         | N/A                  | N/A                     | YES             | No              |
|                  | B                 | 3,985 (0.09)         | 3,985 (0.09)         | Not Indicated           | YES             | No              |
|                  | C                 | 12,456 (0.29)        | 1,775 (0.04)         | N/A                     | YES             | No              |
|                  | D                 | 5,347 (0.12)         | 5,347 (0.12)         | Not Indicated           | YES             | No              |
| Shoppes          |                   |                      |                      |                         |                 |                 |
|                  | G                 | *                    | *                    | Not Indicated           | YES             | No              |
|                  | H                 | 8,950 (0.21)         | 8,950 (0.21)         | Not Indicated           | YES             | No              |
| Park Trailhead   |                   |                      |                      |                         |                 |                 |
|                  | E                 | **                   | **                   | Not Indicated           | YES             | No              |
|                  | EE                | 48,516 (1.11)        | 23,285 (0.53)        | Not Indicated           | YES             | No              |
|                  | F                 | **                   | **                   | Not Indicated           | YES             | No              |
| <b>TOTAL</b>     | <b>0.02</b>       | <b>86,007 (1.98)</b> | <b>43,342 (0.99)</b> | <b>Not Indicated</b>    | --              | --              |

\*Included in buffer area for Wetland H.  
\*\*Included in buffer area for Wetland EE.

Currently, the Plan proposes impacts to 0.99-acre of the total 1.98 acres of on-site wetland buffer (i.e., approximately 50% of the existing wetland buffer). These impacts remain unchanged from the previously-reviewed Concept Plan. It should be noted however that the applicant proposes a total of 28,636 square feet (0.66-acre) of restoration within these areas. Therefore 0.66-acre of the 0.99-acre of wetland buffer disturbance is essentially temporary in nature. The Plan proposes:

- 28,636 square feet (0.66-acre) of temporary buffer impacts (67% of all buffer impacts);
- 0.33-acre of permanent buffer impacts (33% of all buffer impacts).

As noted above, the Plan proposes to restore the degraded functions of both the wetland and the stream located on the southern end of the site. The following restoration activities are proposed:

- Approximately 350-feet of the existing stream channel will be abandoned;
- A relocated stream channel (approximately 480-feet) will be constructed using natural channel design;
- The applicant proposes to improve plant species diversity within the existing open water/emergent wetland through mechanical and chemical treatment of common reed and reed canary grass. These areas will be replanted with native species, including wildflowers and trees.
- The applicant proposes to restore the 25-foot natural features setback in all areas of temporary impact. A 25-foot watercourse setback is also proposed along the drain that is to be relocated. It should be noted that the area of proposed seed mix does not appear to be graphically indicated on the *Stream Relocation Plan* (Sheet W-3). The hatching associated with the proposed seed mix does not appear to be indicated on the Plan. The applicant should review and clarify this information on the Plan.

The current Plan does include the construction of two (2) storm water management basins located adjacent to the existing stream/proposed relocated stream channel. As indicated on the Preliminary Utility Plan, there will be proposed storm water outlets to the relocated stream/wetland.

#### **Wetland Permit Requirements**

It appears as though a MDEQ Wetland Permit, a City of Novi *Non-Minor Wetland Use Permit* and a City *Authorization to Encroach the 25-Foot Wetland Setback* would be required for any proposed impacts to site wetlands. In a letter from the Michigan Department of Environmental Quality (MDEQ) dated January 20, 2016, it is stated that Wetlands D, E, EE, F, G, and H are regulated by the MDEQ as they are either directly connected or contiguous (i.e., within 500 feet) to the stream. Wetlands A, B, and C are not regulated by the MDEQ as they are greater than 500 feet from the stream/drain and otherwise isolated and less than five acres in size.

Regarding the stream, DEQ and the applicant's wetland consultant (KME) agreed upon a representative cross section, bankfull bench and stream reach slope that can be used to measure morphological data for the relocated channel. The bankfull bench must be at least three (3) bankfull widths wide to maintain a stable floodplain. The MDEQ notes that by applying these dimensions and maintaining a slope greater than or equal to 0.2% the stream work will meet MDEQ permit requirements for the stream relocation.

In addition, the MDEQ states that the proposed wetland restoration would be an improvement over the dense common reed (*Phragmites australis*) vegetation that currently surrounds the pond on site. Treatment of the

Phragmites to the west, was also discussed and encouraged in order to help ensure the restoration will be successful on the project site.

As noted above, a City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland buffers.

#### **Wetland and Watercourse Comments**

The following are repeat comments from our Wetland Review of the Revised Concept Plan (PSP16-0018) dated March 21, 2016. The current status of these comments appears to be unchanged. The current status of each follows in ***bold italics***:

1. It appears as though a MDEQ Wetland Permit and a City of Novi *Wetland Use Permit* would be required for any proposed impacts to site wetlands. The wetlands associated with the existing stream are likely regulated by MDEQ due to their proximity to an inland stream. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland buffers.

***This comment still applies. As noted in the applicant's wetland consultant's (KME) plan review comments response letter dated January 11, 2016, an on-site pre-application meeting was held with MDEQ staff members Sue Tepatti and Patrick Durack on December 3, 2015. The MDEQ confirmed that the Agency would have jurisdiction over the stream and wetlands within 500 feet of the stream and that a MDEQ permit will be required for the proposed development. KME states that the applicant intends to apply for all necessary wetland related approvals from the City of Novi.***

***The Applicant should provide a copy of the MDEQ Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City Wetland and Watercourse Permit cannot be issued until this information has been provided.***

2. ECT encourages the Applicant to minimize impacts to on-site wetlands and wetland setbacks to the greatest extent practicable. The Applicant should consider modification of the proposed site design to preserve wetland and wetland buffer areas. 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".***

***The applicant's wetland consultant (KME) has noted that the wetlands and wetland buffers proposed for impact are primarily emergent/wet meadow wetland habitats that are largely dominated by non-native wetland plant species. The Plan proposes the establishment of open space adjoin the wetlands to remain. The Plan appears to propose wetland and watercourse buffers/setbacks equal to or greater than 25 feet.***

***It should be noted that the area of proposed seed mix associated with the wetland buffers does not appear to be graphically indicated on the Stream Relocation Plan (Sheet W-3). The hatching associated***



*with the proposed seed mix does not appear to be indicated on the Plan. The applicant should review and clarify this information on the Plan.*

3. While the Plan appears to involve proposed impacts to on-site wetlands and the associated 25-foot wetland setbacks, these impacts do not appear to be indicated, quantified and labeled on the Plan. In addition, the overall on-site acreage of wetlands and wetland setbacks should be included on the Plan. The Plan should be reviewed and revised as necessary.

*As noted in Comment #2, the area of proposed seed mix associated with the wetland buffers does not appear to be graphically indicated on the Stream Relocation Plan (Sheet W-3). The hatching associated with the proposed seed mix does not appear to be indicated on the Plan. The applicant should review and clarify this information on the Plan.*

4. A plan to replace or mitigate for any permanent impacts to existing wetland buffers should be provided by the Applicant. In addition, the Plan should address how any temporary impacts to wetland buffers shall be restored, if applicable.

*See Comments #2 and #3 above.*

5. The City's threshold for the requirement of wetland mitigation is 0.25-acre of proposed wetland impact. This should be taken into account on subsequent site Plan submittals, if necessary.

*This comment still applies. The Plan currently proposes impacts to 0.24-acre of the total 1.54 acres of on-site wetland (i.e., approximately 16% of the existing wetlands). The MDEQ states that the proposed wetland restoration would be an improvement over the dense common reed (*Phragmites australis*) vegetation that currently surrounds the pond on site. ECT agrees with the MDEQ's comments and believes that the proposed Plan and the associated wetland and wetland buffer restoration aspects will provide an improvement to the natural features to remain on-site.*

6. The Applicant should demonstrate that alternative site layouts that would reduce the overall impacts to wetlands and wetland setbacks have been reviewed and considered.

*This comment has been addressed. The Plan proposes impacts to four small, isolated wetlands (B, D, G, and H) and a small portion of the largest wetland on-site; Wetland EE. Many of the areas of impact are dominated by invasive wetland plant species. The applicant has provided an acceptable wetland and wetland buffer restoration plan.*

7. The Applicant is encouraged to provide wetland conservation easements for any areas of remaining wetland or 25-foot wetland buffer.

*The applicant's wetland consultant (KME) notes that that the applicant is willing to provide conservation easements for remaining areas of wetland, wetland buffer setback and woodland areas which will not conflict with future use of the property by residents and visitors. All proposed conservation easements shall be graphically indicated on the Plan. Please review and revise the Plan as necessary.*

8. 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 impact. Final determination as to the regulatory status of each of the on-site wetlands shall be made by MDEQ.

The Applicant should provide a copy of the MDEQ Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information. Based on a search of the MDEQ's Coastal and Inland Waters Permit Information System (CIWPIS), there does not appear to be an active file associated with this project location. This information is required before the City of Novi can issue a Wetland Permit.

***This comment still applies. As noted in Comment #1, the Applicant should provide a copy of the MDEQ Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City Wetland and Watercourse Permit cannot be issued until this information has been provided.***

Please also consider the following additional comment:

9. The MDEQ has noted that the treatment of the Phragmites to the west of the property (i.e., at Tollgate Farms) was also discussed and encouraged in order to help ensure the restoration will be successful on the project site. The applicant should address this request from MDEQ and provide any associated restoration details on the Plan as necessary. Applicable notes should be added to the Wetland Restoration Plan as necessary.

### **Conclusion**

In general, the small, isolated wetlands that are proposed to be impacted provide minimal environmental benefit in terms of wildlife habitat and/or stormwater storage capacity, etc. These wetlands and wetland buffers are primarily emergent/wet meadow wetland habitats that are largely dominated by non-native wetland plant species. The Plan does propose the establishment of open space adjoining the wetlands to remain. The Plan appears to propose wetland and watercourse buffers/setbacks equal to or greater than 25 feet. ECT agrees with the MDEQ's comment stating that the proposed wetland restoration would be an improvement over the dense common reed (*Phragmites australis*) vegetation that currently surrounds the pond on site.

### **Recommendation**

ECT currently recommends approval of the Preliminary Site Plan for Wetlands. ECT recommends that the Applicant address the items noted in the *Wetland and Watercourse Comments* section of this letter prior to approval of the Final Site Plan.

Beacon Hill (JSP15-0008)  
Wetland Review of the Preliminary Site Plan (PSP16-0126)  
August 31, 2016 (REV.1)  
Page 8 of 11

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

Respectfully submitted,

**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**



Peter Hill, P.E.  
Senior Associate Engineer



Matthew Carmer  
Senior Scientist  
Professional Wetland Scientist #1746

cc: Sri Komaragiri, AICP, City of Novi Planner  
Richelle Leskun, City of Novi Planning Assistant  
Rick Meader, City of Novi, Landscape Architect  
Kirsten Mellem, City of Novi Planner

Attachments: Figure 1 & Site Photos



Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate property 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 open water wetland (Wetland EE) on South side of the subject property (July 24, 2015).



**Photo 2.** Looking north at forested wetland (Wetland A) along northern edge of the subject property (July 24, 2015).



**Photo 3.** Looking east at emergent wetland (Wetland C) on the west side of the subject property (July 24, 2015).



**Photo 4.** Looking south towards Wetland E on the west side of the subject property (July 24, 2015).

WOODLANDS REVIEW





August 31, 2016 (REV.1)

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

Re: Beacon Hill (JSP15-0008)  
Woodland Review of the Preliminary Site Plan (PSP16-0126)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan for Beacon Hill Park, Beacon Hill Meadows, The Shoppes at Beacon Hill, and Beacon Hill Park Trailhead prepared by Zeimet-Wozniak & Associates, Inc. dated August 12, 2016 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37. ECT has previously visited the site for the purpose of a woodland and wetland verification.

**ECT currently recommends approval of the Preliminary Site Plan for Woodlands. ECT recommends that the Applicant address the items noted in the *Woodland Comments* section of this letter prior to approval of the Final Site Plan.**

The following woodland-related items are required for this project:

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

The purpose of the Woodlands Protection Ordinance is to:

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

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- 3) *Provide for the paramount public concern for these natural resources in the interest of health, safety and general welfare of the residents of the city.*

The proposed development is located at the northeast corner of Twelve Mile Road and Meadowbrook Road, in Section 12. The Plan continues to propose both single-family residential lots (39 lots on 13.60 acres) as well as a commercial, restaurant and retail center (3.05 acres). An area of park trailhead is also proposed on the Plan totaling 3.28 acres. In addition the Plan proposes two (2) storm water detention basins as well as associated roads, parking and utilities. The total site acreage is approximately 20 acres. The proposed development has been divided in the following three (3) development areas:

- Beacon Hill Meadows (Residential);
- The Shoppes at Beacon Hill (Commercial);
- Beacon Hill Park Trailhead.

The Plan indicates that the total number of regulated trees being removed for the site development is unchanged from the last submittal. The number of Woodland Replacement trees required, and the number of Woodland Replacement trees to be provided on-site, also remain unchanged from the last submittal.

In addition, to working with City Staff and Consultants the applicant has been working to have a proposed development that will be complimentary to the Tollgate Education Center property directly to the west. The applicant notes that this collaboration has resulted in an open space running north and south the entire length of Meadowbrook Road, adjacent to the 5-acre park within the development and the deeper open space park area in front of the commercial section of the property. The community continues to be designed to have 42% open space. The applicant has specifically revised the Plan to include an additional 50-foot landscaped natural corridor along Meadowbrook Road. The Tollgate Education Center has strongly recommended that the applicant propose landscaping on the east side of Meadowbrook Road that presents a natural progression of plantings from low shrubs to medium understory plantings to canopy trees, in order to provide a natural appearance. In order to accomplish this, the applicant will require flexibility in the proposed landscaping along Meadowbrook Road. The Plan proposes to move some of the required landscaping into the Meadowbrook Road right-of-way in order to preserve the existing vegetation and provide a natural buffer while maintaining site distance visibility.

#### **Onsite Woodland Evaluation**

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on July 24, 2015. Previously, the applicant's engineer, Zeimet Wozniak & Associates (ZWA), noted in a supplemental letter dated June 22, 2015 that the locations of the regulated trees shown on previously-submitted plans are depicted with a tree symbol and that this information was obtained from an old tree survey. They stated that a new tree survey, meeting the requirements of the City of Novi Woodland Ordinance/Code of Ordinances, would be addressed on subsequent site plan submittals. The tree identification and sizing list was updated by King & MacGregor Environmental, Inc. (KME) in October of 2015.

It should be noted that the surveyed trees were marked with white spray paint in the field (see Site Photos). The current Plan now includes a *Tree Removal List* (Sheet SP-4). Based on field notes recorded in July 2015, ECT was able to verify the specific information with regard to tree location, species and diameters of trees observed in the field. In general, the tree survey and *Tree Removal List* appear to accurately represent the on-site trees.

The entire site is approximately 21 acres, with City-regulated Woodland mapped across approximately the northern half of the project site (see Figure 1). A portion of the southern half of the site contains previously-disturbed/cleared

land located along Twelve Mile Road. The highest quality woodlands on site are found in the northern section of the site. Some of these areas also contain regulated wetlands (i.e. forested wetland area located along the northern project boundary). It appears as if the proposed site development will involve a significant amount of impact to regulated woodlands and will include a significant number of tree removals.

On-site woodland within the project area consists of species including box elder (*Acer negundo*), Norway maple (*Acer platanoides*), silver maple (*Acer saccharinum*), bitternut hickory (*Carya ovata*), white ash (*Fraxinus americana*), black walnut (*Juglans nigra*), eastern red cedar (*Juniperus virginiana*), apple (*Malus pumila*), eastern white pine (*Pinus strobus*), common pear (*Pyrus communis*), American basswood (*Tilia americana*), Scotch pine (*Pinus sylvestris*), eastern cottonwood (*Populus deltoides*), black cherry (*Prunus serotina*), choke cherry (*Prunus virginiana*), American elm (*Ulmus americana*), Siberian elm (*Ulmus pumila*), and red elm (*Ulmus rubra*). Based on the existing tree data provided by KME, about 50% of the on-site tree species consist of American basswood, Scotch pine and black walnut.

Based on the information provided on the Plan, the maximum size tree diameters on the site are a 63-inch diameter-at-breast-height (DBH) white willow (Tree No. 603) and a 51-inch dbh white willow (Tree No. 764). Both of these trees will be removed for the proposed site development. The average diameter of the surveyed trees is 13 inches. In terms of habitat quality and diversity of tree species, the on-site areas of mapped City regulated woodlands are of fair quality. Although many areas of the site have been previously disturbed, the wooded areas (i.e., approximately the north ½ of the development site) provide a fair level of environmental benefit. As the on-site woodlands are connected to a larger wooded system that extends both east and north of the subject property. In terms of a scenic asset, wind block, noise buffer or other environmental asset, the woodland areas proposed for impact are considered to be of good quality.

After our woodland evaluation and review of the tree survey information provided by KME the applicant's woodland consultant, there are nineteen (19) trees on-site that meet the minimum caliper size for designation as a specimen tree. These trees include:

- Tree #60, 24" silver maple (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #743, 24" silver maple (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #703, 24.3" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #707, 24.8" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #251, 25.3" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #169, 25.4" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #23, 26"/17" black cherry (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #737, 26" Norway maple (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #171, 27.3" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #700, 27.4" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #268, 28.2" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #283, 28.3" American basswood (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #702, 28.4" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #252, 28.8" American basswood (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #168, 29.8" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #20, 30.5" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #676, 34.2" black walnut (measures  $\geq 24"$ , the minimum caliper size for specimen trees);

- Tree #300, 35.2" American basswood (measures  $\geq 24"$ , the minimum caliper size for specimen trees);
- Tree #170, 38.0" American basswood (measures  $\geq 24"$ , the minimum caliper size for specimen trees);

Of these nineteen (19) potential specimen trees, two (2) of these trees (11% of the potential specimen trees) will be saved (Tree No. 268 and No. 283) and seventeen (17) are proposed for removal (89% removal of the potential specimen trees). The Applicant should be aware of the City's Specimen Tree Designation as outlined in Section 37-6.5 of the Woodland Ordinance. This section states that:

*"A person may nominate a tree within the city for designation as a historic or specimen tree based upon documented historical or cultural associations. Such a nomination shall be made upon that form provided by the community development department. A person may nominate a tree within the city as a specimen tree based upon its size and good health. Any species may be nominated as a specimen tree for consideration by the planning commission.*

*Any tree designated by the planning commission as an historical or specimen tree shall be so depicted on an historic and specimen tree map to be maintained by the community development department. The removal of any designated specimen or historic tree will require prior approval by the planning commission. Replacement of the removed tree on an inch for inch basis may be required as part of the approval".*

**Proposed Woodland Impacts and Replacements**

It appears as if the proposed development will cover a large portion of the site and will involve a considerable number of tree removals. The current Plan continues to incorporate revisions to the original site design that have resulted in the removal of fewer total regulated trees. The current Plan includes several areas of woodland preservation. This includes areas along the northern section, the northwest section and a section in the center of the Beacon Hill Meadows section of the development.

It should be noted that the tree survey information provided by KME appears to include a total of 577 total trees surveyed on the development site. Of these existing trees, some are non-woodland trees (i.e., not located within City of Novi Regulated Woodland as indicated on the City's Regulated Woodland Map). It should be noted that the City of Novi replacement requirements pertain to regulated trees with DBH greater than or equal to 8 inches located within areas mapped as regulated woodland on the City of Novi Regulated Woodland Map. The woodland replacement requirements also pertain to the removal of any tree 36" inches or greater DBH.

The following table (Table 1) summarizes the proposed Woodland Impacts. This information is from Sheet LS-7 of 7:

**Table 1. Proposed Woodland Impacts and Required Replacements**

|  | <b>Meadows</b> | <b>Shoppes</b> | <b>Trailhead</b> | <b>Total</b> |
|--|----------------|----------------|------------------|--------------|
| Total No. of existing trees to be removed                  | 432            | 22             | 6                | 460          |
| No. of exempt trees (dead or poor condition) to be removed | 55             | 3              | -                | 58           |
| <b>No. of regulated trees removed</b>                      | <b>377</b>     | <b>19</b>      | <b>6</b>         | <b>402</b>   |
| Trees 8"-11" DBH removed                                   | 183            | 3              | 1                | 187          |
| Trees 11"-20" DBH removed                                  | 144            | 9              | 4                | 157          |
| Trees 20"-29" DBH removed                                  | 17             | 3              | -                | 20           |
| Trees 30" or greater DBH removed                           | 4              | 1              | 1                | 6            |

|   | Meadows     | Shoppes   | Trailhead    | Total       |
|---|-------------|-----------|--------------|-------------|
| No. of trees with multi-trunk                             | 29          | 3         | -            | 32          |
| <b>Total No. of woodland replacement credits required</b> | <b>657</b>  | <b>48</b> | <b>13</b>    | <b>718</b>  |
| 187 – (8"-11" DBH) x 1-Tree Credit                        | 183         | 3         | 1            | 187         |
| 157 – (11"-20" DBH) x 2-Tree Credit                       | 288         | 18        | 8            | 314         |
| 20 – (20"-29" DBH) x 3-Tree Credit                        | 51          | 9         | -            | 60          |
| 6 – (30" DBH or greater) x 4-Tree Credit                  | 16          | 4         | 4            | 24          |
| 32 – (Multi-trunk) 954.3"/8"                              | 119         | 14        | -            | 133         |
| <b>Total No. of tree replacement credits provided</b>     | <b>388</b>  | <b>-</b>  | <b>333</b>   | <b>721</b>  |
| 158 trees – 2 ½" deciduous tree @ 1.0 credits/tree        | 85          | -         | 73           | 158 (21.9%) |
| 153 trees – 7' evergreen @ .67 credits/tree               | 76 (115)    | -         | 25 (38)      | 101 (14.0%) |
| 75 – 10' evergreen @ 1.5 credits/tree                     | 67 (45)     | -         | 45 (30)      | 112 (15.5%) |
| 433 – 30" shrubs @ 1 credit/6 shrubs                      | 36 (221)    | -         | 35 (212)     | 71 (9.8%)   |
| 19,530 sq. yards – native seeding @ 1 credit/70 sq. yard  | 124 (8,680) | -         | 155 (10,850) | 279 (38.7%) |

It should be noted that the total number of regulated trees removed and the total number of woodland replacement credits required for these removals remains unchanged from the previously-submitted concept plans. The applicant has modified the make-up of the woodland replacement material being provided. The applicant appears to be prepared to meet the Woodland Replacement credit requirement through the on-site planting of 2 ½" deciduous trees, 7' evergreens, 10' evergreens, 30" shrubs and native seed mix at both the Meadows residential development and the Park Trailhead area.

It should be noted that almost 40% of the required Woodland Replacement credits are being provided by way of native seeding on the Plan, as opposed to trees or shrubs. The Woodland Ordinance notes that the Planning Commission may approve the planting of a variety of native woodland plants toward the required woodland replacement credits. In order to ensure a variety of plant types the maximum allowable percentage of replacement credits for any plant type is listed in the ordinance. Site plans including proposed Woodland Credits should include a chart (such as the one above) that documents the percentage of vegetation types utilized. The native groundcover seeding type does not have a maximum use percentage defined in the woodland ordinance.

The current plan also includes a *Tree Replacement Plan Material List* on Sheet LS-7 of 7. This applicant has provided a list of proposed deciduous and coniferous trees as well as shrubs and native seed mix that are intended to meet the Woodland Replacement credit requirements. The proposed species all appear to be acceptable.

The current Plan continues to quantify the proposed number, location and species of the trees, shrubs and perennial seed mix that are all intended to satisfy the total required Woodland Replacement Tree credits. As noted in the City's Landscape Review of the Revised Conceptual Site Plan #3 letter dated April 15, 2016, the applicant had previously proposed the use (in some areas of the site) of Woodland Replacement Trees in place of the required Street Trees along Meadowbrook Road and Twelve Mile, and the use of upsized evergreen trees (i.e., 10-foot height) for additional Woodland Replacement credits. Like the City's Landscape architect, ECT supports the

alternate streetscape landscaping that the applicant has developed through coordinated work with the Tollgate Education Center. ECT supports the use of Woodland Replacement Trees and shrubs as currently proposed in order to supplement the required trees along Meadowbrook Road but we do not support the replacement of Street Tree requirements with Woodland Replacement Trees. **The applicant has specifically noted in a response letter from Zeimet Wozniak & Associates dated August 12, 2016 that no Woodland Replacement trees are proposed as required Street trees on the current Plan.**

In our previous review of the Concept Plan, we noted that the City's Landscape Design Manual specifically forbids the upsizing of Woodland Replacement Trees for additional Credits (Section 3.c.(2)). The applicant can, however, request a deviation as part of the PRO agreement. ECT and the City Landscape Architect support the use of some upsizing with credit within the PRO in order to provide additional landscape interest and screening along Meadowbrook Road and along the south edge of the residential portion of the development to provide additional screening from the commercial part of the development. That being said, the number of additional credits through the use of upsized Woodland Replacement trees (i.e., 10-foot evergreen trees) seemed excessive on the previous plan.

As noted in the previous Landscape Review of the Concept Plan, 40% of the proposed evergreen trees were upsized from 7' to 10' height (i.e., 102 of 253 total evergreens are proposed as 10' tall trees). Consistent with the Landscape Design Manual, the applicant is requesting 1.5 credits per 10' tree instead of the 0.67-credit per tree that is normally allowed for a 7' tall evergreen per the Woodland Ordinance. The result is an additional 85 Woodland Replacement Credits on 102 replacement trees provided. As this is a PRO, there can be some flexibility in terms of allowing extra Woodland Replacement credits for the use of upsized trees which are normally not allowed by the Landscape Design Manual. ECT does support the use of some upsized evergreens in this development in order to provide more interest along Meadowbrook Road and more screening between the residential and commercial portions of the site. ECT concurs with the Landscape Review in that the amount of credits for the providing upsized evergreen trees as Woodland Replacement trees should be limited. The total benefit in credits derived from the "upsized" Woodland Replacement material should not be more than 33% of the total number of "upsized" trees planted. **The applicant has revised the woodland replacement plan to include a total of 228 total evergreen trees. Of these, 75 of these trees (or 32.9%) of these trees will be upsized (10-foot tall) evergreens (white spruce, eastern white pine, and Canadian hemlock).**

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

- *The location of replacement trees shall be subject to the approval of the planning commission and shall be such as to provide the optimum enhancement, preservation and protection of woodland areas. Where woodland densities permit, tree relocation or replacement shall be within the same woodland areas as the removed trees. Such woodland replanting shall not be used for the landscaping requirements of the subdivision ordinance or the zoning landscaping;*
- *Where the tree relocation or replacement is not feasible within the woodland area, the relocation or replacement plantings may be placed elsewhere on the project property;*
- *Where tree relocation or replacement is not feasible within the woodland area, or on the project property, the permit grantee shall pay into the city tree fund monies for tree replacement in a per tree amount*



*representing the market value for the tree replacement as approved by the planning commission. The city tree fund shall be utilized for the purpose of woodland creation and enhancement, installation of aesthetic landscape vegetation, provision of care and maintenance for public trees and provision and maintenance of specialized tree care equipment. Tree fund plantings shall take place on public property or within right-of-ways with approval of the agency of jurisdiction. Relocation or replacement plantings may be considered on private property provided that the owner grants a permanent conservation easement and the location is approved by the planning commission;*

- *Where replacements are installed in a currently non-regulated woodland area on the project property, appropriate provision shall be made to guarantee that the replacement trees shall be preserved as planted, such as through a conservation or landscape easement to be granted to the city. Such easement or other provision shall be in a form acceptable to the city attorney and provide for the perpetual preservation of the replacement trees and related vegetation.*

The applicant shall demonstrate that the all proposed Woodland Replacement Trees will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. The applicant's engineer has noted that preservation/conservation easements will be provided and that provisions to guarantee that woodland replacement trees shall be preserved as planted will be provided.

**City of Novi Woodland Review Standards and Woodland Permit Requirements**

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

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

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

There are a significant number of replacement trees required for the construction of the proposed development. Some degree of impact to on-site woodlands is deemed unavoidable if this property is to be developed for the proposed use, however, the current Plan appears to clear all proposed lots of existing trees. The current site development plan appears to propose the removal of 460 of the 577 total on-site trees (i.e., 80% of the existing trees are to be removed). Of these removals, 402 are regulated trees (i.e., 87% of the trees to be removed are City-regulated trees).

A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch d.b.h. or greater and located within areas designated as City of Novi Regulated Woodlands. Such trees shall be relocated or replaced by the permit grantee. All replacement trees shall be two and one-half (2 ½) inches caliper or greater deciduous trees or 6-foot tall (minimum) coniferous trees. Deciduous replacement trees shall be provided at a 1:1 replacement ratio and coniferous replacement trees shall be provided at a 1.5:1 replacement ratio. All Woodland Replacement Trees shall be species found on the City's Woodland Tree Replacement Chart (attached).

**Woodland Comments**

ECT recommends that the Applicant address the items noted below prior to submitting the Final Stamping Set Plan:

1. The headings in the Woodland Tree Replacement Summary on Sheet LS-7 of 7 appear to have been mislabeled. The heading for "Trailhead" and for "Shoppes" appear to have been switched in the top two sections of the table (i.e., *trees removed* and *tree replacement credits required* sections). Please review and revise the Plan as necessary.
2. Almost 40% of the required Woodland Replacement credits are being provided by way of native seeding on the Plan, as opposed to trees or shrubs. The Woodland Ordinance notes that the Planning Commission may approve the planting of a variety of native woodland plants toward the required woodland replacement credits. In order to ensure a variety of plant types the maximum allowable percentage of replacement credits for any plant type is listed in the ordinance. Site plans including proposed Woodland Credits should include a chart (such as the one above) that documents the percentage of vegetation types utilized. The native groundcover seeding type does not have a maximum use percentage defined in the woodland ordinance.
3. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of remaining woodland and woodland replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of this permit. These proposed easements shall be clearly indicated on the Plan.
4. A Woodland Replacement financial guarantee for the planting of replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400. The Plan proposes a total of 718 Woodland Replacements to be planted. Based on the on-site Woodland Replacement tree credits proposed (718), the Woodland Replacement Financial guarantee will be \$287,200.00 (718 credits x \$400/credit).

Based on a successful inspection of the installed on-site Woodland Replacement trees, seventy-five percent (75%) of the original Woodland Financial Guarantee shall be returned to the Applicant. Twenty-five percent (25%) of the original Woodland Replacement financial guarantee will be kept for a period of 2-years after the successful inspection of the tree replacement installation as a *Woodland Maintenance and Guarantee Bond*.

5. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on-site.
6. During site landscaping, woodland replacement material should not be located 1) within 10' of built structures or the edges of utility easements and 2) over underground structures/utilities or within their associated easements. In addition, replacement tree spacing should follow the *Plant Material Spacing Relationship Chart for Landscape Purposes* found in the City of Novi *Landscape Design Manual*.

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**Recommendation**

ECT currently recommends approval of the Preliminary Site Plan for Woodlands. ECT recommends that the Applicant address the items noted in the *Woodland Comments* section of this letter prior to approval of the Final Site Plan.

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

Respectfully submitted,

**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**



Peter Hill, P.E.  
Senior Associate Engineer



Matthew Carmer  
Senior Scientist  
Professional Wetland Scientist #1746

cc: Sri Komaragiri, AICP, City of Novi Planner  
Richelle Leskun, City of Novi Planning Assistant  
Rick Meader, City of Novi, Landscape Architect  
Kirsten Mellem, City of Novi Planner

Attachments: Figure 1 and Site Photos





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

*Site Photos*



**Photo 1.** Looking southwest towards southwest corner of site. Site is relatively open and previously disturbed (ECT, July 24, 2015).



**Photo 2.** Looking west along north side of existing drain area. (ECT, July 24, 2015).





**Photo 3.** Tree No. 251 (25.3" black walnut) located in the north-central section of the site. This potential specimen tree is proposed for removal (ECT, July 24, 2015).



**Photo 4.** Higher quality trees located in the northern section of the site; near existing forested wetland area (ECT, July 24, 2015).

### Woodland Tree Replacement Chart

(from Chapter 37 Woodlands Protection)

(All canopy trees to be 2.5" cal or larger, evergreens as listed)

| Common Name                         | Botanical Name                       |
|-------------------------------------|--------------------------------------|
| Black Maple                         | <i>Acer nigrum</i>                   |
| Striped Maple                       | <i>Acer pennsylvanicum</i>           |
| Red Maple                           | <i>Acer rubrum</i>                   |
| Sugar Maple                         | <i>Acer saccharum</i>                |
| Mountain Maple                      | <i>Acer spicatum</i>                 |
| Ohio Buckeye                        | <i>Aesculus glabra</i>               |
| Downy Serviceberry                  | <i>Amelanchier arborea</i>           |
| Yellow Birch                        | <i>Betula alleghaniensis</i>         |
| Paper Birch                         | <i>Betula papyrifera</i>             |
| American Hornbeam                   | <i>Carpinus caroliniana</i>          |
| Bitternut Hickory                   | <i>Carya cordiformis</i>             |
| Pignut Hickory                      | <i>Carya glabra</i>                  |
| Shagbark Hickory                    | <i>Carya ovata</i>                   |
| Northern Hackberry                  | <i>Celtis occidentalis</i>           |
| Eastern Redbud                      | <i>Cercis canadensis</i>             |
| Yellowwood                          | <i>Cladrastis lutea</i>              |
| Beech                               | <i>Fagus sp.</i>                     |
| Thornless Honeylocust               | <i>Gleditsia triacanthos inermis</i> |
| Kentucky Coffeetree                 | <i>Gymnocladus dioica</i>            |
| Walnut                              | <i>Juglans sp.</i>                   |
| Eastern Larch                       | <i>Larix laricina</i>                |
| Sweetgum                            | <i>Liquidambar styraciflua</i>       |
| Tuliptree                           | <i>Liriodendron tulipifera</i>       |
| Tupelo                              | <i>Nyssa sylvatica</i>               |
| American Hophornbeam                | <i>Ostrya virginiana</i>             |
| White Spruce_(1.5:1 ratio) (6' ht.) | <i>Picea glauca</i>                  |
| Black Spruce_(1.5:1 ratio) (6' ht.) | <i>Picea mariana</i>                 |
| Red Pine                            | <i>Pinus resinosa</i>                |
| White Pine_(1.5:1 ratio) (6' ht.)   | <i>Pinus strobus</i>                 |
| American Sycamore                   | <i>Platanus occidentalis</i>         |
| Black Cherry                        | <i>Prunus serotina</i>               |
| White Oak                           | <i>Quercus alba</i>                  |
| Swamp White Oak                     | <i>Quercus bicolor</i>               |
| Scarlet Oak                         | <i>Quercus coccinea</i>              |
| Shingle Oak                         | <i>Quercus imbricaria</i>            |
| Burr Oak                            | <i>Quercus macrocarpa</i>            |
| Chinkapin Oak                       | <i>Quercus muehlenbergii</i>         |
| Red Oak                             | <i>Quercus rubra</i>                 |
| Black Oak                           | <i>Quercus velutina</i>              |
| American Bladdernut                 | <i>Staphylea trifolia</i>            |
| Bald Cypress                        | <i>Taxodium distichum</i>            |
| American Basswood                   | <i>Tilia americana</i>               |
| Hemlock (1.5:1 ratio) (6' ht.)      | <i>Tsuga canadensis</i>              |

TRAFFIC REVIEW

## Memorandum

|         |   |      |   |
|---------|---|------|---|
| To      | Barbara McBeth, AICP  | Page | 1 |
| CC      | Sri Komaragiri, Kirsten Mellem, Rob Hayes, Jeremy Miller, Richelle Leskun |      |   |
| Subject | JSP 15-0008 – Beacon Hill – Preliminary – Traffic Review                  |      |   |
| From    | Matt Klawon, PE   |      |   |
| Date    | September 9, 2016   |      |   |

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, Ivanhoe Companies, is proposing to develop a 21 acre parcel in the northeast quadrant of Twelve Mile Road and Meadowbrook Road. The proposed development would be mixed-use and could include 39 residential lots, commercial/retail/restaurant and recreation/park elements.
2. The parcel is currently zoned RA (Residential Acreage) and the applicant is requesting a PRO approval to accommodate the proposed mixed-use development (B-3, General Business, and RM-1, Multiple Family Residential).
3. Twelve Mile Road is under the jurisdiction of the Road Commission for Oakland County. Meadowbrook Road is under the jurisdiction of the City of Novi.

### TRAFFIC IMPACTS

A full-scale Traffic Impact Statement (TIS) was included in a previous submittal. Comments regarding the TIS can be found in a previously submitted letter that was intended to specifically summarize and address the TIS.

### EXTERNAL SITE ACCESS AND OPERATIONS

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

1. Provide dimensions for the nose offset, boulevard length, and entering and exiting radii of the divided entrance at Hummingdale Blvd.
2. Provide dimensions for the entering and exiting radii of the two driveways of the commercial development along 12 Mile Road.
3. Tapers are required at both driveways to the commercial development on Twelve Mile Road, based on the volumes indicated in the TIS.

- a. The east driveway is close to the property line and may require additional right-of-way to install a properly designed taper.
  - b. The west driveway is constructed along the taper for the westbound Twelve Mile Road right turn lane.
4. Provide sight distance measurements at the driveway entrances along Meadowbrook Road and Twelve Mile Road.
5. Driveway spacing for both developments meets the minimum requirements from the City of Novi.
6. Adequate site access drives provided (number and type of access drives)

## INTERNAL SITE OPERATIONS

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

1. General traffic flow
  - a. Provide turning radii in order to confirm that large trucks and emergency vehicles are able to access and maneuver throughout the site.
  - b. The emergency access gate detail on sheet SP-7 does not meet the required widths shown in Figure VIII-K of Chapter 11 of the City's Code of Ordinances.
  - c. Please provide details describing the location and dimensions of the proposed loading zones for the commercial portion of the development. It appears as if there is a loading zone for Building B; however, it is not clearly identified nor dimensioned. The possible loading zone may also interfere with drive-thru operations.
  - d. It appears as if there may not be adequate space in front of the south dumpster in order for a large truck to maintain its maneuverability.
  - e. Building A Drive-Thru
    - i. The number of stacking spaces shown in the plans is in compliance with City of Novi standards.
    - ii. The drive-thru lane should be a minimum of nine feet in width.
    - iii. Please provide the dimension of the centerline radius of the drive-thru lane.
    - iv. Dimension the stacking space length.
    - v. Provide delineation in order to separate the drive-thru lane from the bypass lane.
    - vi. The by-pass lane must be 18 feet wide. The existing by-pass lane does not appear to be 18 feet wide based on the dimension stating 18 feet going beyond the extents of the bypass lane.
  - f. Building B Drive-Thru
    - i. The number of stacking spaces shown in the plans is in compliance with City of Novi standards.
    - ii. Show that each drive-thru lane has a minimum width of nine feet.
    - iii. Dimension the stacking space length
    - iv. Provide delineation in order to separate the drive-thru lanes.
    - v. The aisle adjacent to the drive-thru lanes will suffice as a bypass lane such that the possible loading zone does not interfere with two-way driveway.
2. Parking facilities

- a. The amount of parking spaces provided is generally in compliance with the City of Novi standards. Additional review will be required once the tenant is determined and the number of spaces is finalized.
  - b. Please provide:
    - i. Additional parking space dimensions, such as width.
    - ii. Additional details and dimensions of the handicap accessible parking area.
    - iii. Width, length, and radii of parking end islands.
    - iv. Clarification on the proposed locations of the various curb and gutter designs.
  - c. Consider providing bicycle parking for the commercial area in addition to the bicycle parking provided for the proposed park.
3. Road and aisle widths meet City requirements; however, turning radii dimensions are needed for most curves (including the eyebrow designs) through the development.
  4. Sidewalk Requirements
    - a. Sidewalk width is compliant with City of Novi standards.
    - b. Provide details such as ADA compliant ramp design, and connections and stubs for the proposed sidewalks in both the residential and commercial development.
  5. All signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). Proposed signing and pavement markings were not included in this submittal and will be reviewed in detail when provided.

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

Sincerely,

**AECOM**



Sterling J. Frazier, E.I.T.  
Reviewer, Traffic/ITS Engineer



Matthew G. Klawon, PE  
Manager, Traffic Engineering and ITS Engineering Services



FAÇADE REVIEW



September 13, 2016

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

**Review Status Summary:**

Residential Units – Approved  
Commercial Bldgs. - Not Approved; revise for full compliance or amend the PRO Agreement.

Attn: Ms. Barb McBeth – Director of Community Development

Re: **FACADE ORDINANCE – Preliminary Site Plan**  
**Beacon Hill, PSP16-0126**  
Façade Region: 1, Zoning District: RA

Dear Ms. McBeth:

The following is the Façade Review for the above referenced project based on the drawings provided by Rogvoy Architects 8/12/16. This project consists of 39 detached single family dwellings and 2 commercial buildings. Façades of the detached residential units are subject to Ordinance Section 3.7; the Similar / Dissimilar Ordinance. The commercial buildings are subject to Ordinance Section 5.15; the Façade Ordinance. The sample board required by Section 5.15.4.D was not provided at the time of this review.

**Similar / Dissimilar Ordinance (Section 3.7)** - The Similar / Dissimilar Ordinance requires a variation in appearance in the front elevations of adjacent homes (Sec. 3.7.2), and requires that homes within the larger development be consistent in design quality based on certain criteria; size (square footage), types of material, and overall architectural design character (Sec. 3.7.1).

The applicant has provided front elevations for 6 models which represent significant design diversity. Based on our experience on similar projects we believe that compliance with the Similar / Dissimilar Ordinance can readily be achieved assuming approximately equal distribution of these façades. The models exhibit extensive architectural features such as full return cornices, brick soldier courses and arches above garage doors and windows, shutters, brackets, dormer windows, tapered columns, trussed gable features, shake siding, carriage house and raised panel garage doors with arch windows, and full width cornices. All models appear to have brick or stone up to the first floor ceiling line with shake or horizontal wood siding above. It should be noted that the drawings are conceptual in nature with no material notations and that rear and side elevations have not been provided. It should be noted that the construction drawings should maintain consistency with the conceptual drawings with respect to the quantity and type of architectural details and materials on all elevations, including side and rear elevations.

**Facade Ordinance (Section 5.15)** – The maximum (and minimum) percentages allowed by the Façade Ordinance are shown in the right hand column of the charts below. Materials that are in non-compliance with the Façade Schedule are highlighted in bold.

| <b>Commercial Bldg. A<br/>(10,500 SF)</b> | South<br>(Front) | North      | East       | West       | Ordinance<br>Maximum<br>(Minimum) |
|---|------------------|------------|------------|------------|-----------------------------------|
| Brick                                     | <b>0%</b>        | <b>0%</b>  | <b>0%</b>  | <b>0%</b>  | 100% (30% Min)                    |
| C-Brick                                   | <b>30%</b>       | <b>80%</b> | <b>40%</b> | <b>70%</b> | 25%                               |
| Split Faced CMU                           | 0%               | 9%         | 8%         | 10%        | 10%                               |
| Asphalt Shingles                          | 6%               | 6%         | 10%        | 0%         | 25%                               |
| EIFS                                      | 8%               | 5%         | 5%         | 5%         | 25%                               |
| Cement Board Siding                       | <b>19%</b>       | 0%         | <b>17%</b> | 0%         | 0%                                |
| Cultured Stone                            | 27%              | 0%         | 10%        | 7%         | 50%                               |
| Fabric Awnings                            | 10%              | 0%         | 10%        | 8%         | 10%                               |

| <b>Commercial Bldg. B,<br/>Bank (3,000 SF)</b> | South<br>(Front) | North      | East       | West       | Ordinance<br>Maximum<br>(Minimum) |
|--|------------------|------------|------------|------------|-----------------------------------|
| Brick  | <b>0%</b>        | <b>0%</b>  | <b>0%</b>  | <b>0%</b>  | 100% (30% Min)                    |
| C-Brick  | <b>40%</b>       | <b>72%</b> | <b>56%</b> | <b>70%</b> | 25%                               |
| Split Faced CMU                                | 5%               | 5%         | 5%         | 5%         | 10%                               |
| Asphalt Shingles                               | 5%               | 5%         | 5%         | 5%         | 25%                               |
| EIFS   | 6%               | 4%         | 6%         | 8%         | 25%                               |
| Cement Board Siding                            | <b>22%</b>       | 0%         | <b>12%</b> | 0%         | 0%                                |
| Cultured Stone                                 | 8%               | 14%        | 10%        | 12%        | 50%                               |
| Fabric Awnings                                 | <b>14%</b>       | 0%         | 6%         | 0%         | 10%                               |

As shown above significant deviations from the Façade Ordinance exist; the minimum amount of Brick is not provided on all facades and the percentage of C-Brick, Cement Board Siding, and Fabric Awnings exceed the maximum amounts allowed by the Façade Ordinance on various facades. It is our understanding that the PRO Agreement required full compliance with the Façade Ordinance. Therefore, the applicant should revise the drawings for full compliance with the Façade Ordinance or alternately the applicant may amend the PRO Agreement to allow the aforementioned deviations. It should be noted that adjacent façade materials must extend behind all awnings and that all 4 sides of the raised roof bay should have equal treatment including hip roof, asphalt shingles and decorative cornice brackets.

A dumpster detail has not been provided. The dumpster enclosures are required to be constructed of brick matching the primary building.

The entrance monument indicated on sheet LS-4 is constructed primarily of cultured stone and limestone with a decorative vinyl fence and appears to comply with the Façade Ordinance.

**Notes to the Applicant:**

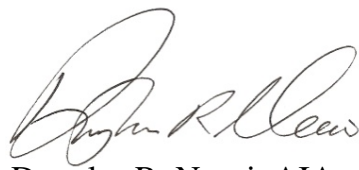
1. It should be noted that any roof top equipment must be screened from view from all on-site and off-site vantage points using compliant materials consistent with the building design.

2. Inspections – The Façade Ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board will be compared to materials delivered to the site. It is the applicant’s responsibility to request the inspection of each façade material at the appropriate time. Inspections may be requested using the Novi Building Department’s Online Inspection Portal with the following link. Please click on “Click here to Request an Inspection” under “Contractors”, then click “Façade”.

<http://www.cityofnovi.org/Services/CommDev/OnlineInspectionPortal.asp>.

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

Sincerely,  
DRN & Associates, Architects PC

A handwritten signature in black ink, appearing to read "Douglas R. Necci". The signature is fluid and cursive, with a large initial "D" and "N".

Douglas R. Necci, AIA

**FIRE REVIEW**



April 15, 2016

TO: Barbara McBeth- Deputy Director of Community Development  
Sri Komaragiri- Plan Review Center  
Christopher Gruba- Plan Review Center

**CITY COUNCIL**

**Mayor**  
Bob Gatt

**Mayor Pro Tem**  
Dave Staudt

Gwen Markham

Andrew Mutch

Wayne Wrobel

Laura Marie Casey

Brian Burke

**City Manager**  
Pete 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**  
Jerrod S. Hart

RE: Beacon Hill

PSP# 16-0036

**Project Description:** A 42 single family and commercial development at Meadowbrook and Twelve Mile

**Comments:**

Emergency drive must meet city standards.

**Recommendation:**

- 1) A secondary access driveway shall be a minimum of twenty (20 feet in width and paved to provide all-weather access and shall be designed to support a vehicle of thirty-five (35) tons. Minimum easement width for secondary access driveways shall be twenty-five (25) feet. A permanent "break-away" gate shall be provided at the secondary access driveway's intersection with the public roadway in accordance with Figure VIII-K of the Design and Construction Standards. To discourage non-emergency vehicles, emergency access roads shall be designated by signage as for emergency access only, shall be separated from the other roadways by mountable curbs, and shall utilize entrance radii designed to permit emergency vehicles while discouraging non-emergency traffic. **(D.C.S. Sec 11-194 (a)(19))**

**Recommendation**

**Approved**

Sincerely,

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

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

cityofnovi.org

cc: file





APPLICANT RESPONSE LETTER

**RECEIVED**

**SEP 21 2016**

**CITY OF NOVI  
COMMUNITY DEVELOPMENT**

**Letter of Transmittal**

**ZEIMET WOZNIAK  
& ASSOCIATES**

Civil Engineers & Land Surveyors

55800 Grand River Avenue, Suite 100  
New Hudson, Michigan 48165-9318  
248.437.5099 · 248.437.5222 fax  
www.zeimetwozniak.com

|                                 |
|---------------------------------|
| Date: 9/21/16                   |
| Job Number: 14151               |
| Attn: Ms. Sri Ravali Komaragiri |
| Re: Beacon Hill Park            |
|                                 |
|                                 |

To: City of Novi  
Community Development  
\_\_\_\_\_  
\_\_\_\_\_

PLEASE NOTE: we are sending attached via hand carried the following items:

- Shop Drawings       Prints       Plans       Samples       Specifications
- Copy Of Letter       Change Order       Other:

| Copies | Date    | No: | Description  |
|--------|---------|-----|--|
| 1      | 9/19/16 |     | All response letters to the Plan Review Center Report dated September 12, 2016 |
| 1      | 8/11/16 |     | A PDF version of the site plan dated August 11, 2016                           |
| 1      |         |     | A colored rendering will be sent in the next day or so.                        |
|        |         |     |  |
|        |         |     |  |
|        |         |     |  |

These are transmitted as checked below:

- For Approval       Approved as Submitted       Resubmit Copies for Approval
- For Your Use       Approved as Noted       Submit Copies for Distribution
- As Requested       Returned for Corrections       Return Corrected Prints
- For Review and Comment       Other: \_\_\_\_\_
- For Bids Due \_\_\_\_\_       Prints Returned After Loan to Us

**Remarks:**

Copy to \_\_\_\_\_  
FILE

Signed \_\_\_\_\_  
Andy Wozniak

If enclosures are not as noted, kindly notify us at once.

**Z EIMET W OZNIAK**  
& ASSOCIATES

Civil Engineers & Land Surveyors

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New Hudson, Michigan 48165-9318  
248.437.5099 · 248.437.5222 fax  
www.zeimetwozniak.com

September 19, 2016

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

RE: Beacon Hill Park PSP  
Response to Planning Review

Dear Ms. McBeth:

We would like to thank Community Development for their planning review of the Preliminary Site Plan with phasing and recommendation for approval.

We have reviewed the Plan Review Center Report dated September 12, 2016 and offer the following response to the review comments:

Changes from the Approved PRO Concept Plan

Please note that all of the sites will be a minimum of 55 feet wide. There was a typo on two of the sites.

Additional deviations not included in the approved PRO agreement

Both of these items pertain to the commercial portion of the project and will be addressed during Final Site Plan submittal.

Ordinance Requirements

All of the items in this section and on the attached chart will be addressed during Final Site Plan submittal. A few items should be noted:

A "City of Novi" bike rack will be installed in the park trailhead and an additional bike rack will be installed near the commercial buildings.

See façade renderings for the Meadows (residential) indicating ranch and two-story houses.

A conservation easement for the open space areas will be provided.

Should you need any additional information please don't hesitate to contact us.

Very truly yours,



Andrew J. Wozniak

**Z EIMET W OZNAK**  
& ASSOCIATES

Civil Engineers & Land Surveyors

55800 Grand River Avenue, Suite 100  
New Hudson, Michigan 48165-9318  
248.437.5099 · 248.437.5222 fax  
www.zeimetwozniak.com

September 19, 2016

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

RE: Beacon Hill Park, PSP  
Response to Engineering Review

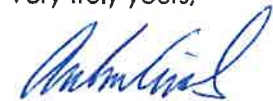
Dear Ms. McBeth:

We would like to thank Engineering for their recommendation for approval of the Preliminary Site Plan and Preliminary Storm Water Management Plan.

We have reviewed their letter dated September 9, 2016 and will address the comments during Final Site Plan submittal.

Should you need any additional information please don't hesitate to contact us.

Very truly yours,



Andrew J. Wozniak

# ZEIMET WOZNIAK & ASSOCIATES

Civil Engineers & Land Surveyors

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New Hudson, Michigan 48165-9318

248.437.5099 · 248.437.5222 fax

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September 19, 2016

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

RE: Beacon Hill Park, PSP  
Response to Landscape Review

Dear Ms. McBeth:

We would like to thank City staff for their landscape review of the Preliminary Site Plan and recommendation for approval.

We have reviewed the landscape report dated September 6, 2016.

We offer the following response to the review comments.

**Please add a list of all landscaping-related PRO provisions on the sheet LS-1.**

**Please add a list of all new city council variances being requested on sheet LS-1.**

These lists will be added to the plans during Final Site Plan submittal.

#### Existing Trees

- 3. Please leave tree ids of existing trees to remain on landscape plans to assist with inspections.**

Tree ids will be added to the landscape plans.

#### Screening Between Residential and Non-residential – Berm (Wall) & Buffer

- 3. It appears that the proposed landscaping will provide the required screening, despite the difference in height, but a section view from Meadowbrook should be added to show the proposed buffering capability of that landscaping, showing the buildings at proposed elevations and the landscaping at a height that can be expected after 2 years of growth.**

A section view will be provided during Final Site Plan submittal.

4. **If that section reveals that the screening is insufficient, additional screening in the form of dense evergreens, a landscaped berm high enough to provide the required buffering, or other screening will be required.**

Noted and will be addressed during Final Site Plan submittal.

6. **A berm 6-8 feet tall is also required along the east property line, between the commercial section and the R-A property to the east. If the applicant wishes to provide a wall instead of the berm, a City Council variance will need to be requested.**

Noted and will be addressed during Final Site Plan submittal.

#### Adjacent to Public Rights-of-Way – Berm (Wall & Buffer

##### Meadowbrook

##### Berm

- b. **The PRO allowed the applicant to not provide a berm for the section of frontage north of Hummingdale and south of the residential section. A berm was still required for the section of residential frontage south of Hummingdale, and should be provided where the site grading will allow.**

A 50' wide landscape buffer is being provided in lieu of a berm due to site grading and entry details.

##### Plantings

- b. **The PRO allowed for no greenbelt plantings for the 540 lf of frontage park area south of the residential section and for the frontage north of Hummingdale with existing vegetation to remain.**

Noted

- d. **Please clearly indicate which existing trees are counting toward the requirement, and include their tree id tag in the landscape plan.**

This will be addressed during Final Site Plan submittal

3. **One large evergreen or deciduous canopy tree per 35 lf frontage is required. All required trees are provided.**

Noted

4. **One subcanopy tree per 20 lf frontage is required along the parking lot. The subcanopy calculations and trees provided need to be revised.**

The calculations will be revised during Final Site Plan submittal

- 5. The PRO agreement allows the applicant to not provide a berm or greenbelt plantings for the section of frontage west of the commercial driveway.**

Noted

#### Street Tree Requirements

Meadowbrook and Twelve Mile Roads:

- 2. Meadowbrook: 1 deciduous canopy tree per 35 lf is required along Meadowbrook Road, for a total of 37 trees. All of these trees must be street trees, not woodland replacement trees.**

Noted and will be addressed during Final Site Plan submittal

- 3. Twelve Mile: 1 deciduous canopy tree per 35 lf is required along areas facing parking, and 1 tree per 45 lf is required along other right-of-way frontage for commercial, so a total of 17 trees are required along Twelve Mile Road. All of these trees must be street trees, not woodland replacement trees.**

Noted and will be addressed during Final Site Plan submittal

#### Parking Lot Landscape – Commercial Only

##### Parking Lot Perimeter Canopy Trees

##### Transformer/Utility Box Screening

##### Building Foundation Landscape

All of the above items are in Phase 2. They have been noted and will be addressed during Final Site Plan submittal.

#### General/Other

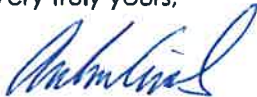
Proposed Trees to be saved

- 2. Please revise per the notes on the Landscape Chart.**

The chart will be revised during Final Site Plan submittal

Again, we would like to thank you for this review and we look forward to working with you on this project.

Very truly yours,



Andrew J. Wozniak



**Z EIMET W OZNAK**  
**& ASSOCIATES**

**Civil Engineers & Land Surveyors**

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New Hudson, Michigan 48165-9318

248.437.5099 · 248.437.5222 fax

[www.zeimetwozniak.com](http://www.zeimetwozniak.com)

September 19, 2016

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

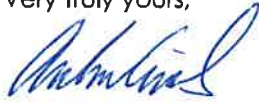
RE: Beacon Hill Park PSP  
Response to Traffic Review

Dear Ms. McBeth:

We would like to thank AECOM for their traffic review and recommendation for approval of the Preliminary Site Plan. We have reviewed the AECOM report dated September 9, 2016 and will address the comments on the Final Site Plan submittal as requested.

Should you need any additional information please don't hesitate to contact us.

Very truly yours,



Andrew J. Wozniak

**Z EIMET W OZNAK**  
& ASSOCIATES

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September 19, 2016

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

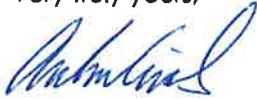
RE: Beacon Hill Park, PSP  
Response to Wetland Review

Dear Ms. McBeth:

We would like to thank ECT for their wetland review and recommendation for approval of the Preliminary Site Plan. We have reviewed the ECT report dated August 31, 2016 and will address the comments on the Final Site Plan submittal as requested.

Should you need any additional information please don't hesitate to contact us.

Very truly yours,



Andrew J. Wozniak

# ZEIMET WOZNIAK & ASSOCIATES

Civil Engineers & Land Surveyors

55800 Grand River Avenue, Suite 100  
New Hudson, Michigan 48165-9318  
248.437.5099 · 248.437.5222 fax  
www.zeimetwozniak.com

September 19, 2016

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

RE: Beacon Hill Park, PSP  
Response to Woodland Review

Dear Ms. McBeth:

We would like to thank ECT for their woodland review and recommendation for approval of the Preliminary Site Plan. We have reviewed the ECT report dated August 31, 2016.

We offer the following response to the review comments.

- 1. The headings in the Woodland Tree Replacement Summary on Sheet LS-7 of 7 appear to have been mislabeled. The heading for "Trailhead" and for "Shoppes appear to have been switched in the top two sections of the table (i.e. trees removed and tree replacement credits required sections) Please review and revise the Plan as necessary.**

The headings will be revised during Final Site plan Submittal.

- 2. Almost 40% of the required Woodland Replacement credits are being provided by way of native seeding on the Plan, as opposed to trees or shrubs. The Woodland Ordinance notes that the Planning Commission may approve the planting of a variety of native woodland plants toward the required woodland replacement credits. In order to ensure a variety of plant types the maximum allowable percentage of replacement credits for any plant type is listed in the ordinance. Site plans including proposed Woodland Credits should include a chart (such as the one above) that documents the percentage of vegetation types utilized. The native groundcover seeding type does not have a maximum use percentage defined in the woodland ordinance.**

Noted

- 3. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of remaining woodland and woodland replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to**

***the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of this permit. These proposed easements shall be clearly indicated on the Plan.***

Preservation/ conservation easements will be provided.

- 4 A Woodland Replacement financial guarantee for the planting of replacement trees will be required, if applicable. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400. Based on a successful inspection of the installed on-site Woodland Replacement trees, seventy-five percent (75%) of the original Woodland Financial Guarantee shall be returned to the Applicant. Twenty-five percent (25%) of the original Woodland Replacement financial guarantee will be kept for a period of 2-years after the successful inspection of the tree replacement installation as a Woodland Maintenance and Guarantee Bond.***

Noted

- 5. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on-site.***

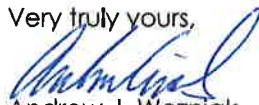
Noted

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

Replacement material is not proposed to be located within 10' of built structures or the edges of easements and over underground structures/utilities or within their associated easements.

Again, we would like to thank you for this review and we look forward to working with you on this project.

Very truly yours,



Andrew J. Wozniak

**Z EIMET W OZNAK**  
**& ASSOCIATES**

Civil Engineers & Land Surveyors

55800 Grand River Avenue, Suite 100  
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248.437.5099 · 248.437.5222 fax  
[www.zeimetwozniak.com](http://www.zeimetwozniak.com)

September 19, 2016

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

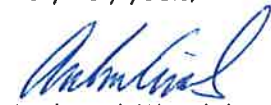
RE: Beacon Hill Park, PSP  
Response to Facade Review

Dear Ms. McBeth:

We would like to thank DRN & Associates for their facade review and recommendation for approval of the revised Preliminary Site Plan. We have reviewed the DRN report dated September 13, 2016 and will address the notes and comments on the Final Site Plan submittal as requested.

Should you need any additional information please don't hesitate to contact us.

Very truly yours,



Andrew J. Wozniak

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September 19, 2016

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

RE: Beacon Hill Park, PSP  
Response to Fire Department Review

Dear Ms. McBeth,

We would like to thank the Fire Department for their recommendation for approval of the Preliminary Site Plan.

We have reviewed their letter dated April 15, 2016 and will meet the specifications for the required secondary access and break away gate.

Should you need any additional information please don't hesitate to contact us.

Thank you.

Sincerely,



Andrew Wozniak



## Komaragiri, Sri

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**From:** Gary Shapiro <gshapiro@ivanhoe-aberdeen.com>  
**Sent:** Thursday, September 22, 2016 3:56 PM  
**To:** Komaragiri, Sri  
**Cc:** awozniak@zeimetwozniak.com  
**Subject:** Beacon Hill

**Importance:** High

Sri:  
RE: Beacon Hill

The preliminary site plan review letters have comments about the commercial component (phase 2) of the PRO. We will address those phase 2 comments when we file for final site plan for phase 2. Further, to the extent our proposed final site plan for phase 2 differs from the PRO or the City's Ordinances, we will pursue an amendment of the PRO (and PRO Agreement) to obtain the appropriate deviation(s) as may be needed.

Thank you,

Gary Shapiro  
Ivanhoe Companies  
6689 Orchard Lake Road #314  
West Bloomfield, MI 48322  
Office: 248-626-6114  
Cell: 248-520-6980  
Email: [gshapiro@ivanhoe-aberdeen.com](mailto:gshapiro@ivanhoe-aberdeen.com)