



## DIXON MEADOWS JSP14-46 with Rezoning 18.709

### DIXON MEADOWS JSP14-46 with Rezoning 18.709

Public hearing at the request of Pulte Homes for Planning Commission's recommendation to City Council for rezoning of property in Section 10, on the east side of Dixon Road, north of Twelve Mile Road from RA (Residential Acreage) to RM-1 (Low Density, Low-Rise Multiple-Family Residential) with a Planned Rezoning Overlay. The subject property is approximately 22.36 acres and the applicant is proposing a 95 unit single-family residential detached site condominium development.

### REQUIRED ACTION

Recommend to City Council approval or denial of rezoning request from RA to RM-1 with a Planned Rezoning Overlay

REVIEW	RESULT	DATE	COMMENTS
Planning	<b>Postponement recommended</b>	03-26-15 Revised: 08-14-15	<ul style="list-style-type: none"> <li>• Further review for open space/tree preservation</li> <li>• City Council approval for deviations to minimum required lot area, width, front, side and rear building setbacks and maximum lot coverage</li> <li>• Items to be addressed on next plan submittal</li> </ul>
Engineering	Approval recommended	03-24-15 Revised: 07-31-15	<ul style="list-style-type: none"> <li>• Applicant to provide additional study of the 12 Mile Road sanitary pump station and make any necessary improvements to accommodate the additional density that is proposed.</li> <li>• Items to be addressed on the next site plan submittal</li> </ul>
Landscaping	Approval recommended	03-16-15 Revised: 08-17-15	<ul style="list-style-type: none"> <li>• Items to be addressed on next plan submittal</li> </ul>
Traffic	Approval recommended	03-27-15	<ul style="list-style-type: none"> <li>• Design and Construction Standards (DCS) variance for the lack of paved eyebrows</li> <li>• Items to be addressed on the Preliminary site plan submittal</li> </ul>
Wetlands	<b>Modifications recommended to avoid wetland impact</b>	03-25-15	<ul style="list-style-type: none"> <li>• City of Novi Wetland Minor Use Permit and Authorization to Encroach is required; modifications recommended to avoid wetland impacts.</li> </ul>
Woodlands	<b>Modifications recommended to reduce woodland impact</b>	03-25-15 Revised: 08-14-15	<ul style="list-style-type: none"> <li>• Woodland Permit required for removal of 89% of the site's regulated trees; further evaluation recommended to reduce woodland impacts</li> </ul>
Facade	Approval recommended	04-27-15	<ul style="list-style-type: none"> <li>• Items to be addressed on next plan submittal</li> </ul>
Fire	Approval recommended	06-22-15	<ul style="list-style-type: none"> <li>• Items to be addressed on next plan submittal</li> </ul>

## Motion sheet

### Postpone

In the matter of the request of Pulte Homes for Dixon Meadows JSP14-46 with Zoning Map Amendment 18.709 motion to **postpone making a recommendation on the proposed PRO and Concept Plan to allow the applicant time to consider further modifications to the Concept Plan that would preserve existing trees, or provide additional usable open space on site.** This recommendation is made for the following reasons:

- a. The Planning Commission may wish to discuss with the applicant whether additional tree preservation on site may be possible, given the information that was provided regarding the extent of the required soil remediation, which does not include the entire site area. The applicant should also be prepared to substantiate the cost of remediation to the extent that it is a basis for seeking removal of trees in non-contaminated areas.
- b. The Concept Plan provides a very limited amount of common open space for the enjoyment by the residents, with the central playground/open space consisting of about 0.77 of an acre, or approximately 3.5 percent of the total site area. A comparable development, Berkshire Pointe, provides approximately 22 percent of the site in open space, some of which consists of preserved natural features.
- c. Given the relatively small size of the proposed lots, (the applicant has proposed a minimum lot size of 5,400 square feet and a minimum width of 45 feet), in addition to the proposed reduction in the minimum building setbacks, and the request to exceed maximum lot coverage standards of the R-4 zoning district, additional open space on the site may be appropriate for the residents to enjoy common area for recreational amenities, or for undisturbed open space. The initial plan reviewed at the Pre-Application meeting included additional pocket parks near the entrance, which have now been removed from the plan.
- d. While the Concept Plan does not provide as much open space as other comparable developments, the applicant has presented a reasonable alternative to the Master Plan's Single Family designation of the property from a maximum of 1.65 units/acre to a maximum of 4.4 units/acre since the development of single family detached homes at about 4.4 units to the acre provides a reasonable transitional use and density between the Liberty Park single family detached homes on the west side of Dixon Road (planned density of 15 units/acre) and the Carleton Forest attached condominiums to the east (planned density of 6.5 units/acre).
- e. The site will be adequately served by the public water supply, and the applicant will need to provide a further study of the capacity of the Section 10 pump station in order to propose and construct any improvements necessary to serve the expanded service area, as indicated in the August 4, 2015 Engineering Review memo.

### Approval

In the matter of the request of Pulte Homes for Dixon Meadows JSP14-46 with Zoning Map Amendment 18.709 motion to **recommend approval** to the City Council to rezone the subject property RA (Residential Acreage) to RM-1 (Low Density, Low-rise Multiple-family residential) with a Planned Rezoning Overlay. The recommendation shall include the following ordinance deviations for consideration by the City Council:

- 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 (10,000 square feet and 80 feet required, 5,400 square feet and 45 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 rear yard setback for one-family detached dwellings reviewed against R-4 Zoning standards ( 35 feet required, 30 feet provided);
- d. 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, 5 feet with 10 feet aggregate provided);
- e. Increase in maximum lot coverage permitted per Zoning Ordinance (maximum of 30 percent of total site required; 35 percent of total site provided);
- f. A Design and Construction Standards (DCS) waiver for the lack of paved eyebrows as per Traffic Engineering review.

*If the City Council approves the rezoning, the Planning Commission recommends the following conditions be requirements of the Planned Rezoning Overlay Agreement:*

- a. Applicant must provide additional study and identify any necessary capacity improvements to the existing sanitary sewer infrastructure that the developer will need to make to accommodate the additional density
- b. Acceptance of applicant's offer of Public benefits as proposed:
  - i. Paving of approximately 2,100 linear feet of Dixon Road from the existing terminus point at Twelve Mile Road to the northern entrance of the proposed development.
  - ii. Housing style upgrades as shown on the elevations enclosed with the PRO Application.
  - iii. Use of woodland replacement plantings along the Dixon Road frontage to enhance the 'regional feel of the road'.
  - iv. Remediation of the existing on-site arsenic contamination.
  - v. Provide housing options to create a wider diversity of housing choices within the City.
  - vi. Proposed pocket park and associated amenities throughout the development.
  - vii. Dedication of public right-of-way along Dixon Road.
- c. Applicant complying with the conditions listed in the staff and consultant review letters.

This motion is made because:

- a. The applicant has presented a reasonable alternative to the Master Plan's Single Family designation of the property from a maximum of 1.65 units/acre to a maximum of 4.4 units/acre since the development of single family detached homes at about 4.4 units to the acre provides a reasonable transitional use between the Liberty Park single family detached homes on the west side of Dixon Road (planned density of 15 units/acre) and the Carleton Forest attached condominiums to the east (planned density of 6.5 units/acre).
- b. The roadways and surrounding intersections are expected to maintain acceptable levels of service with the addition of the site generated traffic, and the proposed paving of approximately 2,100 linear feet of Dixon Road from the existing terminus point at Twelve Mile Road to the northern entrance of the proposed development may be seen as a public benefit to the potential residents of the new development, as well the residents who currently use Dixon Road.
- c. 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.
- d. *(Additional reasons here if any).*

-OR-

**Denial**

In the matter of the request of Pulte Homes for Dixon Meadows JSP14-46 with Zoning Map Amendment 18.709 motion to **recommend denial** to the City Council to rezone the subject property RA (Residential Acreage) to RM-1 (Low Density, Low-rise Multiple-family residential) with a Planned Rezoning Overlay. *...because the proposed zoning is not consistent with maximum density recommended by the Master Plan for Land Use.*

Maps  
Location  
Zoning  
Future Land Use  
Natural Features

# JSP 14-46 Dixon Meadows

Location

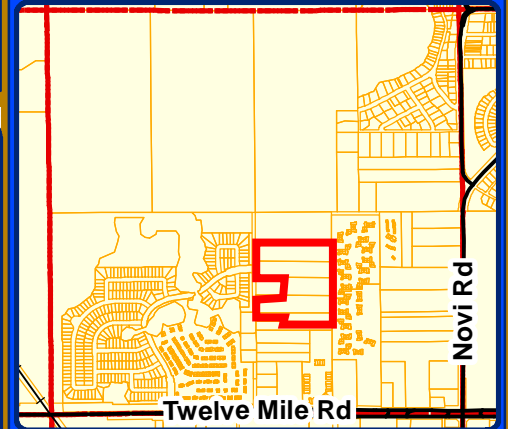
Twelve 1/2 Mile Road

Dixon Road

**Subject  
Property**

**Section 10**

Carlton Way Drive



## 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: 08/20/15  
Project: JSP14-46 Dixon Meadows  
Version #: 1



1 inch = 233 feet



### MAP INTERPRETATION NOTICE

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

# JSP 14-46 Dixon Meadows

Zoning

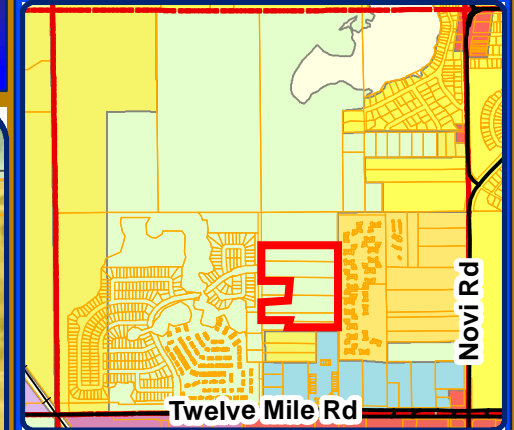
Twelve 1/2 Mile Road












Dixon Road

**Subject  
Property**

**RA: Residential  
Acreage**

Carlton Way Drive



-  Sections
-  R-A: Residential Acreage
-  R-1: One-Family Residential District
-  R-2: One-Family Residential
-  R-4: One-Family Residential District
-  RM-1: Low-Density Multiple Family
-  B-3: General Business District
-  I-1: Light Industrial District
-  OS-1: Office Service District
-  OST: Office Service Technology
-  RC: Regional Center District



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: 08/20/15  
Project: JSP14-46 Dixon Meadows  
Version #: 1



1 inch = 233 feet



#### MAP INTERPRETATION NOTICE

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

# JSP 14-46 Dixon Meadows

Future Landuse

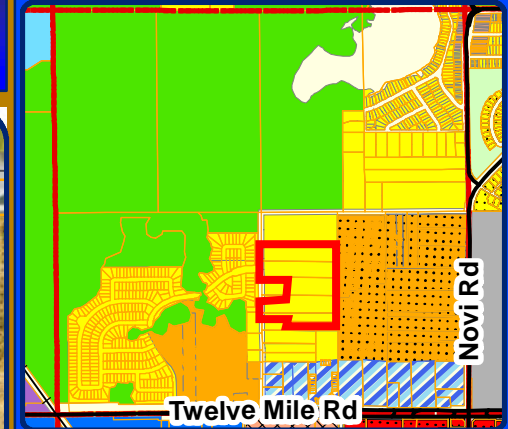
Twelve 1/2 Mile Road

Dixon Road

Subject Property

Single Family

Carlton Way Drive



	SINGLE FAMILY
	PUD
	MULTIPLE FAMILY
	PD1
	COMMUNITY OFFICE
	OFFICE RES DEV TECH
	INDUSTRIAL RES DEV TECH
	LOCAL COMMERCIAL
	REGIONAL COMMERCIAL
	PD2
	PUBLIC
	PUBLIC PARK
	PRIVATE PARK
	CEMETERY



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: 08/20/15  
Project: JSP14-46 Dixon Meadows  
Version #: 1



1 inch = 233 feet



### MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximated 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 14-46 Dixon Meadows

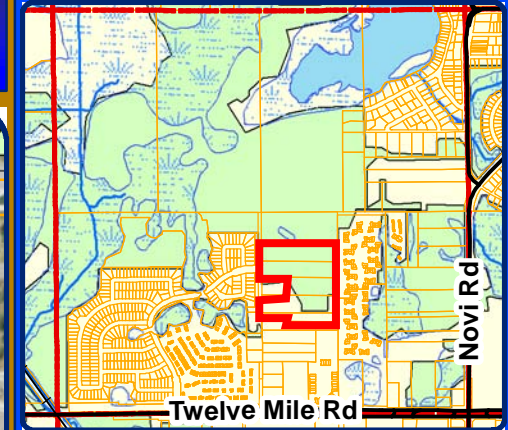
## Natural Features

Twelve 1/2 Mile Road

Dixon Road

Carlton Way Drive

**Subject Property**



### Legend

-  Sections
-  Wetlands
-  Woodlands



**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: 08/20/15  
Project: JSP14-46 Dixon Meadows  
Version #: 1



1 inch = 233 feet



### MAP INTERPRETATION NOTICE

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

**CONCEPT PLAN**

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

As submitted for Revised Preliminary Site Plan on June 18, 2015

Seal: \_\_\_\_\_

Title:  
**Landscape Plan**

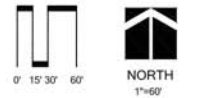
Project:  
**Dixon Meadows  
 Novi, Michigan**

Prepared for:  
 Plute Homes  
 100 Bloomfield Hills Parkway, Suite 140  
 Bloomfield Hills, 48304

<b>Revision:</b>	<b>Issued:</b>
Revised	February 27, 2015
Submitted	March 6, 2015
Revised	June 18, 2015

**Job Number:**  
 14-042

**Drawn By:** jad      **Checked By:** jad



**Sheet No.** \_\_\_\_\_



## PLANNING REVIEW

Review based on Revised Concept Site Plan on June 18, 2015

CONCEPT PLAN SUBMITTAL SCHEDULE		
Type of Submittal	Date of Submittal	Reviewed by
Concept Plan	March 09, 2015	All Agencies
Revised Concept Plan	June 18, 2015	All Agencies except Traffic, Wetlands and Facade



## PLAN REVIEW CENTER REPORT

August 14, 2015

### Planning Review

Dixon Meadows fka Trailside  
JSP14-46 with Rezoning 18.708

---

#### Petitioner

Pulte Homes

#### Review Type

Rezoning Request from RA (Residential Acreage) to RM-1 (Low Density, Low-Rise Multiple-Family Residential) with Planned Rezoning Overlay (PRO)

#### Property Characteristics

- Site Location: East side of Dixon Road, north of Twelve Mile Road (Section 10)
- Site Zoning: RA, Residential Acreage
- Adjoining Zoning: North: RA; East: RM-1; West (across Dixon Road): RA; South: R-1, One-Family Residential and OS-1, Office Service
- Current Site Use: Single-family residential
- Adjoining Uses: North: vacant; East: Carlton Forest (multiple-family); West (across Dixon Road): Liberty Park (single-family); South: single-family residential and office
- School District: Novi Community School District
- Site Size: 22.36 gross acres; 21.6 net acres

#### Project Summary

The petitioner is requesting a Zoning Map amendment for a 22.36-acre property on the east side of Dixon Road, north of Twelve Mile Road (Section 10) from RA (Residential Acreage) to RM-1 (Low Density, Low-Rise Multiple-Family Residential) utilizing the City's Planned Rezoning Overlay (PRO) option. The applicant states that the rezoning request is necessary to allow the development of a 95-unit single-family site condominium.

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 RM-1) 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 (2) years, the rezoning and PRO concept plan expires and the agreement becomes void.

The applicant has proposed a 95-unit single-family development. The PRO Concept Plan shows two on-site detention ponds in the southwest corner of the site with an open space/park area located near the center of the site. Two access points (one boulevarded) are proposed off of Dixon Road with a stub street connection proposed at the northeast corner of the site. Stub streets are also shown to the excluded developed parcel near the center of the site to allow for possible future development of that site.

The applicant has indicated that the site's historical use was an orchard, and numerous pesticides were utilized that contained chemicals that are now banned for commercial application. The applicant indicates that remediation plans have been prepared by Pulte and their soils consultant. Soils that contain arsenic levels that exceed residential use standards are proposed to be removed from the site. The plan indicates that a significant amount (89 percent) of the regulated woodland trees on site will need to be removed along with those soils. A detailed woodland survey was presented with this application and reviewed by the City's Woodland consultant.

Additionally, the applicant has provided a copy of the Incremental Soil Sampling and Analyses for a portion of the property, prepared in January 2015, which appears to indicate that certain areas that were tested do exceed the established Regional Background Level for arsenic, and may require remediation, while other areas of the site apparently do not exceed the established standards for remediation.

### **Recommendation**

**Staff recommends the Planning Commission hold the public hearing and postpone making a recommendation on the proposed PRO and Concept Plan to allow the applicant time to consider further modifications to the Concept Plan that would preserve existing trees, or provide additional usable open space on site.** This recommendation is made for the following reasons:

- The Planning Commission may wish to discuss with the applicant whether additional tree preservation on site may be possible, given the information that was provided regarding the extent of the required soil remediation, which does not include the entire site area.
- The Concept Plan provides a very limited amount of common open space for the enjoyment by the residents, with the central playground/open space consisting of about 0.77 of an acre, or approximately 3.5 percent of the total site area. A comparable development, Berkshire Pointe, provides approximately 22 percent of the site in open space, some of which consists of preserved natural features.
- Given the relatively small size of the proposed lots, (the applicant has proposed a minimum lot size of 5,400 square feet and a minimum width of 45 feet), in addition to the proposed reduction in the minimum building setbacks, and the request to exceed maximum lot coverage standards of the R-4 zoning district, additional open space on the site may be appropriate for the residents to enjoy common area for recreational amenities, or for undisturbed open space. The initial plan reviewed at the Pre-Application meeting included additional pocket parks near the entrance, which have now been removed from the plan.
- While the Concept Plan does not provide as much open space as other comparable developments, the applicant has presented a reasonable alternative to the Master Plan's Single Family designation of the property from a maximum of 1.65 units/acre to a maximum of 4.4 units/acre since the development of single family detached homes at about 4.4 units to the acre provides a reasonable transitional use and density between the Liberty Park single family detached homes on the west side of Dixon Road (planned density of 15 units/acre) and the Carleton Forest attached condominiums to the east (planned density of 6.5 units/acre).
- The site will be adequately served by the public water supply, and the applicant will need to provide a further study of the capacity of the Section 10 pump station in order to propose and construct any improvements necessary to serve the expanded service area, as indicated in the August 4, 2015 Engineering Review memo.

### **Planning Commission Options**

The Planning Commission has the following options for its recommendation to City Council:

1. Recommend City Council approve the request to rezone the parcel to RM-1 Low Density, Low-Rise Multiple-Family Residential with a Planned Rezoning Overlay (*APPLICANT REQUEST and*); OR

2. Recommend City Council deny the request to rezone the parcel to RM-1 with a PRO, with the zoning of the property to remain RA; OR
3. Recommend City Council rezone the parcel to a zoning district other than RA or RM-1 (an additional public hearing may be required); OR
4. Postpone consideration of the request for further study (**STAFF RECOMMENDATION**).

### **Master Plan for Land Use**

The Future Land Use Map (adopted Aug. 25, 2010) of the City of Novi Master Plan for Land Use 2010 designates this property and the property to the north as "Single Family" with a recommended density of 1.65 units per acre. The property to the south also shares the "Single Family" designation and a portion is also designated as "Private Park." The property to the east (the existing Carlton Forest Development) is shown as the eligible for the "PD-1" or Planned Development option with a planned density of 6.5 units per acre and the property to the west, across Dixon Road, (the existing Liberty Park Development) is designated for "Multiple-Family", "Single-Family" and "Public Park" uses with a planned density of 15 units per acre.

The proposal would follow objectives listed in the Master Plan for Land Use including the following:

Objective: Encourage the use of functional open space in new residential developments. *(The applicant has a usable park space near the center of the development.)*

Objective: Attract new residents to the City by providing a full range of quality housing opportunities that meet the housing needs of all demographic groups including but not limited to singles, couples, first time home buyers, families and the elderly. *(The proposal would include smaller-lot single-family dwelling units, which is a product that has proven to be attractive to a wide demographic.)*

The rezoning request was presented to the Master Plan & Zoning Committee on October 22, 2014, along with a PRO conceptual plan with 95 lots, and a similar layout to what is currently presented. Detention ponds have been relocated, and adjustments have been made to some of the lots and the open space areas. Members of the Committee were receptive to the concept plan, but requested additional information regarding surrounding planned and existing land uses be provided prior to the matter coming forward for formal review. The applicant has since provided additional information regarding surrounding land uses and densities of neighboring developments.

### **Density proposed**

The applicant is proposing 95 units on the 21.6 net acres resulting in approximately 4.4 units/acre. As previously mentioned, the Master Plan for Land Use recommends 1.65 units per acre for the subject property and the properties immediately to the north and a portion to the south. The proposed density exceeds the recommended density of the master plan. However, it should be noted that the adjacent Carlton Forest development was developed at approximately 6.5 units per acre and the Liberty Park development on the opposite side of Dixon Road has a maximum density of 15 units per acre. The proposed density would still be well below the densities of these adjacent developments.

The proposed density of 4.4 units/acre is most consistent with the RT zoning district, but the applicant is seeking RM-1 Zoning in order to allow smaller lot sizes than the RT zoning district allows.

The Concept Plan has been modified from the plan that was reviewed for Pre-Application submittal, which had included two additional pocket parks located near the entrance drives. Instead, the concept plan provides two stormwater detention basins near the south entrance, with a proposed sidewalk along the north side of one basin. A proposed brick paver patio with benches overlooks one basin. Usable open space near the center of the site, consisting of approximately

33,600 square feet, or 0.77 acre (3.5 percent of the total site area) includes pathways, and a proposed playground with benches.

As a means for comparison, the Berkshire Pointe site plan, now under development on Wixom Road, south of Grand River, consists of 86 units on 29.15 acres of land, with similar size lots and home styles as proposed in Dixon Meadows. The Berkshire Pointe site contains quality woodlands and wetlands. The approved Final Site Plan for Berkshire Pointe included the preservation of 6.5 acres of open space, or approximately 22 percent of the site. A large portion of the open space contains wetlands on the north part of the site, buffering the homes from the commercial development to the north, with additional preservation area along the south and west property lines which provides a buffer between the homes and Catholic Central.

While the Dixon Meadows site does not appear contain the quality wetlands that the Berkshire Pointe development contains, the open space provided within Berkshire Pointe development offers an opportunity for some quality natural features to be integrated into the site design for the benefit of the residents. The central Open Space proposed for Dixon Meadows provides the majority of the usable open space on the site, and is a relatively small area of the overall development. **Staff suggests that the applicant consider providing additional open space on the Dixon Meadows site, through the preservation of natural features (quality woodlands or specimen trees), or additional open space/recreational amenities, and modify the concept plan accordingly.** At the public hearing, the Planning Commission may wish to discuss with the applicant whether additional open space may benefit the development, either as usable open space, or through the preservation of some additional quality woodlands or specimen trees.

**Existing Zoning and Land Use**

The following table summarizes the zoning and land use status for the subject property and surrounding properties.

**Land Use and Zoning  
 For Subject Property and Adjacent Properties**

	<b>Existing Zoning</b>	<b>Existing Land Use</b>	<b>Master Plan Land Use Designation</b>
Subject Property	RA, Residential Acreage	Single-Family Residential	Single-Family Residential
Northern Parcels	RA, Residential Acreage	Vacant	Single-Family Residential (Public Park – further to the north)
Southern Parcels	R-1, One-Family Residential and OS-1, Office Service	Single-Family Residential and Office	Single-Family Residential
Eastern Parcels	RM-1, Low Density, Low-Rise Multiple-Family Residential	Carlton Forest Multiple-Family Development	PD-1
Western Parcels (across Dixon Road)	RA, Residential Acreage	Liberty Park Residential Development	Multiple-Family, Single-Family and Public Park

**Compatibility with Surrounding Land Use**

The surrounding land uses are shown on the above chart. The compatibility of the proposed PRO concept plan with the zoning and uses on the adjacent properties should be considered by the



Planning Commission in making the recommendation to City Council on the rezoning request with the PRO option.

The property directly **north** of the subject property is vacant land. The properties further to the north (on the opposite side of Twelve and One-Half Mile Road) are currently preserved natural areas that are part of Lakeshore Park. Impacts to these properties as a result of the proposal would be expected as part of the development of any residential development on the subject property and could include construction noise and additional traffic.

Directly to the **south** of the subject property are a handful of single-family residential homes on residential lots along Dixon Road and an existing office development fronting on Twelve Mile Road. All of these properties would experience greater traffic volumes along Dixon Road than what would be expected with development under the current zoning. The loss of woodland area on the property would present an aesthetic change but that would also happen with development under the current zoning.

The property to the **west** of the subject property (across Dixon Road) is the Liberty Park residential development. Liberty Park is composed of both single- and multiple-family homes with a maximum density of 15 units/acre for the entire development. Single-family homes sites are similarly sized when compared to the proposal. Residents of the existing development would experience increased traffic and visual impacts similar to those described for properties to the south.

The property to the **east** of the subject parcels contains Carlton Forest multiple-family development (master planned for 6.5 units/acre). Similar to the other residential properties in the area, this development would experience greater traffic volumes in the area and the loss of the wooded buffer currently separating the development from Dixon Road. Traffic impacts may be slightly less as the entrance to Carlton Forest is off of Twelve Mile Road and the entrance to the proposed Dixon Meadows development is planned off of Dixon Road.

**Comparison of Zoning Districts**

The following table provides a comparison of the current (RA) and proposed (RM-1) zoning classifications.

	<b>RA Zoning (Existing)</b>	<b>RM-1 Zoning (Proposed)</b>
Principal Permitted Uses	1. One-family dwellings 2. Farms and greenhouses 3. Publicly owned and operated parks 4. Cemeteries 5. Schools 6. Home occupations 7. Accessory buildings and uses 8. Family day care homes	1. All uses as regulated in the RT District 2. Multiple-family dwellings 3. Independent and congregate elderly living facilities 4. Accessory buildings and uses
Special Land Uses	1. Raising of nursery plant materials 2. Dairies 3. Keeping and raising of livestock 4. All special land uses in Section 402 5. Nonresidential uses of historical buildings 6. Bed and breakfasts	1. Convalescent homes (subject to conditions) 2. Accessory buildings and uses

	RA Zoning (Existing)	RM-1 Zoning (Proposed)
Minimum Lot Size	43,560 square feet (1 acre)	Determined by off-street parking, loading, greenbelt screening, yard setback or usable open space requirements (10,000 sq. ft. for single-family dwellings)
Minimum Lot Width	150 feet	Determined by off-street parking, loading, greenbelt screening, yard setback or usable open space requirements (80 feet for single-family dwellings)
Building Height	2 1/2 stories -or- 35 feet	2 stories -or- 35 feet (2.5 stories permitted for single-family dwellings)
Building Setbacks	Front: 45 feet Side: 20 feet (aggregate 50 feet) Rear: 50 feet	Front: 50 feet Side: 75 feet Rear: 75 feet  (For Single-Family Dwellings): Front: 30 feet Side: 10 feet (aggregate 25 feet) Rear: 35 feet

**Infrastructure Concerns**

An initial engineering review was done as part of the rezoning with PRO application to analyze the information that has been provided thus far (see attached letter from engineering, and supplemental August 4, 2015 memo). The engineering review notes that additional study of the Section 10 sanitary sewer pump station located at Declaration Drive and 12 Mile Road will be needed to be done by the applicant, prior to submittal of a site plan, to determine the capacity of that station, and to propose any improvements that will be necessary to serve the expanded service area. Water main is currently available to connect into along Dixon Road. Sanitary sewer would be extended as part of the development. There are minor items to be addressed on the Preliminary Site Plan submittal. A full scale engineering review would take place during the course of the Site Plan Review process for any development proposed on the subject property, regardless of the zoning.

The City’s traffic consultant has reviewed the Rezoning Traffic Impact Study and notes a minimal impact on surrounding traffic as a result of the development as the current traffic volume on Dixon Road is relatively low. Even with the addition of the development traffic, the Levels of Service at nearby intersections would also operate at acceptable levels. There are some minor road design issues on the concept plan which would need to be addressed in future plan submittals. See the traffic review letter for additional information.

**Natural Features**

There is a significant area of regulated woodlands on the site including trees that are considered specimen trees. The applicant has proposed woodland impacts and will need to plant woodland replacement trees and contribute money to the tree fund to account for said impacts. The applicant has submitted the required tree survey. The Woodland Review letter indicates that about 89 percent of the regulated woodland trees on the site are proposed to be removed, while 11 percent of the regulated woodland trees are proposed to be preserved. The applicant should consider providing woodland conservation easements for any areas containing woodland replacement trees and for those woodland areas being preserved as open space. The applicant is

encouraged to modify lot boundaries to minimize impacts to quality/specimen trees. Please refer to the woodland review letter or additional information.

Additionally, the applicant has provided a copy of the Incremental Soil Sampling and Analyses for a portion of the property, prepared in January 2015. The analyses focused on two former orchard areas located on primarily the western portions of the subject property. Soil samples were taken to determine the presence of arsenic in certain areas and if identified in sufficient concentrations that would require remediation and removal of soils from the site. The analyses indicated that certain areas that were tested do not exceed the established Regional Background Level for arsenic, and may not require remediation. **Planning staff suggests that the Planning Commission discuss with the applicant whether additional tree preservation on site may be possible, given the information that was provided regarding the extent of the required soil remediation does not include the entire site area. Additionally, the Concept Plan provides a very limited amount of open space with the central playground/open space consisting of about 0.77 of an acre, or approximately 3.5 percent of the total site area. A comparable development, Berkshire Pointe, provides approximately 22 percent of the site in open space, some of which consists of preserved natural features.**

There is a portion of one on-site regulated wetland and the concept plan proposes approximately 0.011 acres of impact to the wetland. An impact on the 25 foot natural features setback is anticipated as well. The applicant is encouraged to modify lot boundaries to minimize impacts to the wetlands and wetland buffer areas. Please refer to the wetland review letter for additional information.

#### **Development Potential**

Development under the current RA zoning could result in the construction of up to 18 single-family homes under the allowable density and net acreage of the site. It is not known whether the site could be developed with 18 lots that meet the dimensional requirements of the RA zoning district. Development under the proposed RM-1 zoning without a PRO option could result in as many as 117 three bedroom units or 160 two bedroom units. Up to 20 percent of the units are permitted to be one bedroom which would result in additional density on the site. As proposed, the development would be limited to 95 homes.

#### **Major Conditions of Planned Rezoning Overlay Agreement**

The Planned Rezoning Overlay process involves a PRO concept plan and specific PRO conditions in conjunction with a rezoning request. The submittal requirements and the process are codified under the PRO ordinance (Section 7.13.2). Within the process, which is completely voluntary by the applicant, the applicant and City Council can agree on a series of conditions to be included as part of the approval.

The applicant is required to submit a conceptual plan and a list of terms that they are willing to include with the PRO agreement. The applicant has submitted a conceptual plan showing the general layout of the internal roads and lots, location of proposed detention ponds, location of proposed open space and preserved natural features and a general layout of landscaping throughout the development. Also included were conceptual renderings of housing styles and floor plans. (See the façade review letter for additional information on the provided renderings.) The applicant has provided a narrative describing the proposed public benefits and requested deviations.

1. Maximum number of units shall be 95.
2. Minimum unit width shall be 45 feet and minimum square footage of 5,400 square feet.
3. Paving of 2,100 linear feet of Dixon Road.
4. Planting of woodland replacement trees along the Dixon Road frontage.
5. Remediation of on-site arsenic contamination.
6. Pocket park and associated amenities within the development.

7. Housing style upgrades as shown on the elevations enclosed with the PRO Application.
8. Housing size 2,500 square feet minimum up to 3,000 square feet.
9. Dedication of public right-of-way along Dixon Road.

### **Ordinance Deviations**

Section 7.13.2.D.i.c(2) permits deviations from the strict interpretation of the Zoning Ordinance within a PRO agreement. These deviations must be accompanied by a finding by City Council that *"each Zoning Ordinance provision sought to be deviated would, if the deviation were not granted, prohibit an enhancement of the development that would be in the public interest, and that approving the deviation would be consistent with the Master Plan and compatible with the surrounding areas."* Such deviations must be considered by City Council, who will make a finding of whether to include those deviations in a proposed PRO agreement. The proposed PRO agreement would be considered by City Council after tentative approval of the proposed concept plan and rezoning.

The concept plan submitted with an application for a rezoning with a PRO is not required to contain the same level of detail as a preliminary site plan. Staff has reviewed the concept plan in as much detail as possible to determine what deviations from the Zoning Ordinance are currently shown. The applicant may choose to revise the concept plan to better comply with the standards of the Zoning Ordinance, or may proceed with the plan as submitted with the understanding that those deviations would have to be approved by City Council in a proposed PRO agreement. The following are deviations from the Zoning Ordinance and other applicable ordinances shown on the concept plan. The applicant has submitted a narrative describing the requested deviations. **The applicant should consider submitting supplemental material discussing how if each deviation "...were not granted, [it would] prohibit an enhancement of the development that would be in the public interest, and that approving the deviation would be consistent with the Master Plan and compatible with the surrounding areas."**

1. **Lot Size and Width:** Per Section 3.1.7.B of the Zoning Ordinance, one-family detached dwellings are to be reviewed against the regulations for the R-4 Zoning District. **The minimum lot size is 10,000 square feet and the minimum lot width is 80 feet. The applicant has proposed a minimum lot size of 5,400 square feet and a minimum width of 45 feet.** For reference, the lots in Phase 1 of Liberty Park (located on the north side of Twelve Mile Road, west of Novi Road) are similarly sized as are the lots in the Berkshire Pointe Development, which is currently under construction near the intersection of Twelve Mile Road and Wixom Road.
2. **Setbacks:** **The minimum side yard setback for a single-family dwelling in this district is 10 feet with an aggregate of 25 feet. The minimum front yard setback is 30 feet and the minimum rear yard setback is 35 feet. The applicant has proposed a minimum 5 foot side yard setback (with an aggregate of 10 feet) and a minimum 20 foot front yard setback and a minimum 30 foot rear yard setback.**
3. **Lot Coverage:** **The maximum permitted lot coverage per the Zoning Ordinance is 30 percent of the total site. The applicant is proposing 35 percent lot coverage for the smallest lots.**
4. **Design and Construction Standards (DCS) Waiver:** **DCS waiver is required for the lack of paved eyebrows.** See the Traffic Engineering Review letter for additional information.

Prior to the matter being considered by the City Council, and as an additional condition of the PRO Agreement, as detailed in the August 4, 2015 memo from the Engineering Division, the **applicant must provide additional study and identify any necessary capacity improvements to the existing sanitary sewer infrastructure that the developer will need to make to accommodate any development on the proposed site.**

### **Applicant Burden under PRO Ordinance**

The Planned Rezoning Overlay ordinance requires the applicant to demonstrate that certain requirements and standards are met. The applicant should be prepared to discuss these items,

especially in number 1 below, where the ordinance suggests that the enhancement under the PRO request would be unlikely to be achieved or would not be assured without utilizing the Planned Rezoning Overlay. Section 7.13.2.D.ii states the following:

1. *(Sec. 7.13.2.D.ii.a) Approval of the application shall accomplish, among other things, and as determined in the discretion of the City Council, the integration of the proposed land development project with the characteristics of the project area, and result in an enhancement of the project area as compared to the existing zoning, and such enhancement would be unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay.*
2. *(Sec. 7.13.2.D.ii.b) Sufficient conditions shall be included on and in the PRO Plan and PRO Agreement on the basis of which the City Council concludes, in its discretion, that, as compared to the existing zoning and considering the site specific land use proposed by the applicant, it would be in the public interest to grant the Rezoning with Planned Rezoning Overlay; provided, in determining whether approval of a proposed application would be in the public interest, the benefits which would reasonably be expected to accrue from the proposal shall be balanced against, and be found to clearly outweigh the reasonably foreseeable detriments thereof, taking into consideration reasonably accepted planning, engineering, environmental and other principles, as presented to the City Council, following recommendation by the Planning Commission, and also taking into consideration the special knowledge and understanding of the City by the City Council and Planning Commission.*

#### **Public Benefit Under PRO Ordinance**

Section 7.13.2.D.ii states that the City Council must determine that the proposed PRO rezoning would be in the public interest and the public benefits of the proposed PRO rezoning would clearly outweigh the detriments:

1. Paving of approximately 2,100 linear feet of Dixon Road from the existing terminus point at Twelve Mile Road to the northern entrance of the proposed development.
2. Housing style upgrades as shown on the elevations enclosed with the PRO Application.
3. Use of woodland replacement plantings along the Dixon Road frontage to enhance the 'regional feel of the road'.
4. Remediation of the existing on-site arsenic contamination.
5. Provide housing options to create a wider diversity of housing choices within the City.
6. Proposed pocket park and associated amenities throughout the development.
7. Dedication of public right-of-way along Dixon Road.

These proposed benefits should be weighed against the proposal to determine if they clearly outweigh any detriments of the proposed rezoning. Of the seven benefits listed, two – woodland replacement plantings and the remediation of existing arsenic contamination - would be requirements of any conceivable residential subdivision development of the subject property under existing RA zoning. Housing style upgrades would be considered enhancements over the minimum requirements of the ordinance. (See the façade consultant's review letter.)

The remaining benefits – Dixon Road paving, pocket park and amenities and right-of-way dedication along Dixon Road – are enhancements that would benefit the public that would not be required as part of a residential development under the existing RA zoning. However, it should be noted that the preservation of open space (i.e. pocket park) and environmental features is something that would be encouraged as part of a development review and, although not required, the right-of-way dedication is typical of developments. Additionally, the City has no plans to pave portions of Dixon Road in the near future.

**Submittal Requirements**

- The applicant is required to provide a survey and legal description of the property in accordance with submittal requirements.
- Rezoning signs must be erected along the property's frontage in accordance with submittal requirements and in accordance with the public hearing requirements for the rezoning request. The signs should be erected no later than 15 days prior to the scheduled public hearing. **Detail shown on Sheet 06 is incorrect, please verify with staff the required rezoning signs planned to be installed on the property.**
- A traffic study must be submitted and reviewed by the City's Traffic Consultant.
- A written statement by the applicant describing the development and noting the information required in this review letter must be submitted prior to review by the Planning Commission.

---

Barbara McBeth, AICP – Deputy Director of Community Development  
bmcbeth@cityofnovi.org or 248-347-0587

Attachments: Planning Review Chart

**Planning Review Summary Chart**

Trailside JSP14-46

Rezoning with Planned Rezoning Overlay Concept Plan Review

Plan Date: 06-16-15

**Bolded items must be addressed by the applicant**

Item	Proposed	Meets Requirements?	Comments
<b>Master Plan</b> Single Family Residential @ 1.65 dwelling units per acre	4.4 dwelling units per acre	<b>No</b>	<b>The proposed rezoning would not be in compliance with the current Master Plan.</b>
<b>Zoning</b> RA	RM-1 with PRO		Density permitted in RM-1
<b>The remainder of the review is against RM-1 standards.</b> (Single-family uses in the RM-1 District are to be reviewed against the standards of the R-4 District.)			
<b>Use</b> Uses listed in Section 3.1.7	Single-Family Site Condominium	Yes	
<b>Min. Lot Size</b> (Sec. 3.1.7.D) 10,000 sq. feet	Lots range from 5,400 sq. feet to 15,103 sq. feet	<b>No</b>	<b>Applicant has indicated they will seek a deviation from the Ordinance as part of the PRO process.</b>
<b>Min. Lot Width</b> (Sec. 3.1.5.D) 80 feet  At no point between the front yard setback & the building can the lot width be less than 90% of the min. width (72 feet)	Min. 45 feet	<b>No</b>	<b>Applicant has indicated they will seek a deviation from the Ordinance as part of the PRO process.</b>
<b>Max. Lot Coverage</b> (Sec. 3.1.5.D) 25%	35%	<b>No</b>	<b>Applicant has indicated they will seek deviations from the Ordinance as part of the PRO process.</b>
<b>Min. Building Setbacks</b> (Sec. 3.1.5.D) Front: 30 feet Rear: 35 feet Side (each): 10 feet Side (total): 25 feet	Front: 20 feet Rear: 30 feet Side (each): 5 feet Side (total): 10 feet	<b>No</b>	<b>Applicant has indicated they will seek deviations from the Ordinance as part of the PRO process.</b>
<b>Min. Building Floor Area</b> (Sec. 3.1.5.D) 1,000 sq. ft.	2,500 sq. ft. – 3,000 sq. ft.		Individual buildings are reviewed as part of the building permit application
<b>Max. Building Height</b> (Sec. 3.1.5.D) 2 ½ stories or 35 ft.	Building elevations not provided		
<b>Lot Depth Abutting a Secondary Thoroughfare</b> (Sec. 4.02.A.5 of the Sub. Ord.) Lots abutting a major or secondary thoroughfare	No rear lot lines abutting a secondary thoroughfare	N/A	

Item	Proposed	Meets Requirements?	Comments
must have a depth of at least 140 feet			
<b>Non-access greenbelt easements</b> (Sec. 5.5.3.E.i.b) 40 ft. wide non-access greenbelt easements required adjacent to major thoroughfares	40 ft. greenbelt provided	Yes	
<b>Maximum length of blocks</b> (Sec. 4.01 of the Sub. Ord.) Blocks cannot exceed length of 1,400 ft. except where the Planning Commission determines that conditions may justify a greater length	Largest block is less than 1,000 ft. long	Yes	
<b>Depth to Width Ratio</b> (Sec. 4.02.A.6 of the Sub. Ord.) Single Family lots shall not exceed a 3:1 depth to width ratio	No lots greater than 3:1 depth	Yes	
<b>Streets</b> (Sec. 4.04.A.1.b of the Sub. Ord.) Extend streets to boundary to provide access intervals not to exceed 1,300 ft. unless one of the following exists: <ul style="list-style-type: none"> <li>• Impractical difficulties because of topographic conditions or natural features</li> <li>• Would create undesirable traffic patterns</li> </ul>	Street connection provided to adjacent property on northern boundary near 770 feet	Yes	
<b>Wetland and Watercourses</b> (City Code Sec. 12-174(a)(4)) Lots cannot extend into a wetland or watercourse	Wetland pocket located along Dixon Road		<b>See wetland review letter</b>
<b>Woodlands</b> (City Code Chapter 37) Replacement of removed trees	Woodland impacts proposed	Yes?	<p><b>See woodland review letter</b></p> <p><b>Applicant should demonstrate alternative layouts were considered</b></p> <p><b>Applicant is encouraged to provide woodland conservation easements within open space areas</b></p> <p><b>Applicant is encouraged to modify lot boundaries to minimize impacts to quality/specimen trees</b></p>



Item	Proposed	Meets Requirements?	Comments
<p><b>Development in the Floodplain</b> (Sec. 4.03 of the Sub. Ord.) Areas in a floodplain cannot be platted</p>	N/A	N/A	
<p><b>Sidewalks and Pathways</b> (Sub. Ord. Sec. 4.05, Bicycle &amp; Pedestrian Master Plan &amp; Non-Motorized Plan) The Non-Motorized Plan recommends a neighborhood connector on-road route for Dixon Road</p> <p>5 ft. sidewalk required on both sides of all internal streets</p>	<p>5 ft. sidewalk shown along both sides of internal streets</p> <p>5 ft. concrete sidewalk proposed in the Dixon Road right of way, including approximately 230 feet along the excluded parcel near the center of the site.</p>	Yes	
<p><b>Master Deed/Covenants and Restrictions</b> Applicant is required to submit this information for review with the Final Site Plan submittal</p>	Master Deed not submitted	Yes	Plans will not be stamped approved until the Master Deed has been reviewed and approved by staff and the City Attorney's office
<p><b>Exterior Lighting</b> (Section 5.7) Photometric plan required at FSP</p> <p>A residential development entrance light must be provided at the entrances to the development off of Dixon Road</p>	Entrance lights now appear to be provided at both entrances off of Dixon Road	Yes	See the engineering review letter for more information.

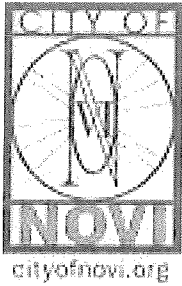
Item	Proposed	Meets Requirements?	Comments
<b>Design and Construction Standards Manual</b> Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided	Yes	
<b>Development and Street Names</b> Development and street names must be approved by the Street and Project Naming Committee before Preliminary Site Plan approval	The project name Dixon Meadows has been approved by the Street and Project Naming Committee. <b>Street names still need to be submitted.</b>	Yes/No	<b>Contact Richelle Leskun at 248-347-0579 to proposed additional alternatives and schedule a meeting with the Committee</b>
<b>Residential Entryway Signs</b> (Chapter 28) Signs are not regulated by the Planning Division or Planning Commission	Signage indicated	<b>If a residential entryway sign is proposed, contact Jeannie Niland at 248.347.0438 or <a href="mailto:jniland@cityofnovi.org">jniland@cityofnovi.org</a> for information</b>	
<b>Area for Future Development</b>	2 areas for future development indicated along Dixon Road		<b>Applicant should consider making these areas more functional for the time being or plan for the possibility that a road and development lots may never happen</b>
<b>Economic Impact</b> Total cost of the proposed building & site improvements  Home size & expected sales price of new homes  Number of jobs created (during construction, and if known, after a building is occupied)	Home size 2,500 – 3,000 square feet		<b>Applicant has provided a statement regarding the potential economic impact of the development in the response letter, including the following: The expected sales price of the new homes will be consistent with the homes currently being constructed in Berkshire Pointe, which start around \$400,000. The total anticipated cost will be approximately \$30 million dollars.</b>
<b>Additional Planned Rezoning Overlay Agreement Terms: Public Benefit (Sec. 7.13.2.D.ii)</b> As part of a PRO, the applicant shall demonstrate an enhancement of area as compared to existing zoning that results in a public benefit			
<b>Dixon Road Improvements</b> Pave approximately 2,100 linear feet of Dixon Road from existng Twelve Mile Road terminus point to the northern entrance of proposed development	<b>This would be considered a benefit. See the engineering review letter for additional information.</b>		

Item	Proposed	Meets Requirements?	Comments
<b>Housing Style</b> High end quality home construction			See the façade review comments for additional information
<b>Dixon Road Landscaping</b> Use of woodland replacement plantings along Dixon Road			See the landscape review letter for additional information. Woodland replacement plantings are a requirement of the Woodland Ordinance.
<b>Arsenic Remediation</b> Environmental cleanup			This would be considered a benefit
<b>Provision of Housing Options</b> Meets need for a wider diversity of housing choices no currently prevalent in the City			Although this would meet one of the goals and objectives listed in the Master Plan for Land Use, this would not necessarily be considered a public benefit
<b>Proposed Park and Site Amenities</b> A proposed pocket park and associated amenities within the development			This would be considered a benefit, although relatively small in size. Applicant should consider additional open space.
<b>Additional ROW Property Donation</b> Donate additional right-of-way along Dixon Road to City			This is not required as part of the development of the property but it is fairly typical for developers to donate planned right-of-way

## ENGINEERING REVIEW

Review based on Revised Concept Site Plan on June 18, 2015

CONCEPT PLAN SUBMITTAL SCHEDULE		
Type of Submittal	Date of Submittal	Reviewed by
Concept Plan	March 09, 2015	All Agencies
Revised Concept Plan	June 18, 2015	All Agencies except Traffic, Wetlands and Facade



## PLAN REVIEW CENTER REPORT

07/31/2015

### Engineering Review

Dixon Meadows  
JSP14-0046

---

#### Applicant

PULTE HOMES OF MICHIGAN

#### Review Type

Revised Concept Plan

#### Property Characteristics

- Site Location: N. of Twelve Mile Road and W. of Novi Road
- Site Size: 22.5 acres
- Plan Date: June 19, 2014

#### Project Summary

- Construction of an approximately 95 lot residential development. Site access would be provided by two entrances from Dixon Rd. to proposed public roads.
- Water service would be provided by a looped extension from the existing 24-inch water main along the east side of Dixon Rd. along with 9 additional hydrants.
- Sanitary sewer service would be provided by an extension from the existing 8-inch sanitary sewer stub at the intersection of Dixon Rd. and Declaration Dr.
- Storm water would be collected by a single storm sewer collection system and detained in two on-site detention basins.

#### Recommendation

**Approval of the Revised Concept Plan and Concept Storm Water Management Plan is recommended.**

**Comments:**

The Concept 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. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.
2. 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)).
3. Revise the plan set to reference at least one city established benchmark. An interactive map of the City's established survey benchmarks can be found under the 'Map Gallery' tab on cityofnovi.org.
4. Provide a water main and sanitary sewer stub for future extension to the south.
5. Provide a street light at the proposed north entrance on Dixon Road. The City will coordinate the installation with Detroit Edison and invoice the developer as stated in the Street Lighting Policy.
6. 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.
7. Provide a note that compacted sand backfill shall be provided for all utilities within the influence of paved areas, and illustrate on the profiles.
8. Provide a construction materials table on the Utility Plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
9. Provide a utility crossing table indicating that at least 18-inch vertical clearance will be provided, or that additional bedding measures will be utilized at points of conflict where adequate clearance cannot be maintained.
10. Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Department for review.
11. Provide a combination of easements and right-of-way to provide 20-feet of public access centered on the sanitary sewer and water main.

Water Main

12. Note that a tapping sleeve, valve and well will be provided at the connection to the existing water main.
13. Provide a profile for all proposed water main 8-inch and larger.

14. The water main stub to the north shall terminate with a hydrant followed by a valve in well. If the hydrant is not a requirement of the development for another reason, the hydrant can be labeled as temporary allowing it to be relocated in the future.
15. Provide the size of the existing and proposed water main.
16. 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 Department 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

17. Note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
18. 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.
19. 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.
20. Seven (7) sealed sets of revised utility plans along with the MDEQ permit application (11/07 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification Checklist should be submitted to the Engineering Department 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

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. 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

29. 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.
30. An adequate maintenance access route to the basin outlet structure and any other pretreatment structures shall be provided (15 feet wide, maximum slope of 1V:5H, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.
31. 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.
32. Provide an access easement for maintenance over the storm water detention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.
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 soil boring in the vicinity of the storm water basin to determine soil conditions and to establish the high water elevation of the groundwater table.

#### Paving & Grading


36. Provide a paving cross-section for the proposed roadway and sidewalk.
37. Provide top of curb/walk and pavement/gutter grades to indicate height of curb.
38. Provide the standard Type 'M' approach at the Dixon Rd. intersections.
39. A **Design and Construction Standards variance from Section 11-194(a)(8) of the Novi City Code** granted by City Council is required for the lack of paved eyebrows. City Staff supports this variance request.

#### Off-Site Easements

40. Any off-site utility easements anticipated must be executed by both parties **prior to final approval of the plans**. Drafts of the easement shall be submitted at the time of the Preliminary Site Plan submittal for review, and shall be approved by the City prior to final signatures.



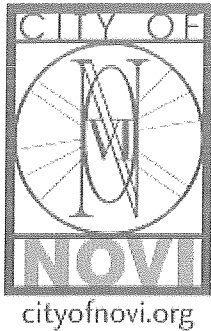
Please contact Jeremy Miller at (248) 735-5694 with any questions.



Handwritten signature of Jeremy Miller in cursive script, positioned above a horizontal line.

cc: Ben Croy, Engineering  
Brian Coburn, Engineering  
Kristen Kapelanski, Community Development  
Sabrina Lila, Water & Sewer

# MEMORANDUM



**TO:** BARBARA MCBETH, DEPUTY DIRECTOR  
COMMUNITY DEVELOPMENT

**FROM:** JEREMY MILLER, STAFF ENGINEER *JM*

**SUBJECT:** REVIEW OF REZONING IMPACT ON PUBLIC UTILITIES  
REZONING 18.708, DIXON MEADOWS PRO

**DATE:** AUGUST 4, 2015

---

The Engineering Division has reviewed the planned rezoning overlay (PRO) request for the 22.36 gross acres located on the east side of Dixon Road between 12 Mile Road and 12.5 Mile Road. The applicant is requesting to rezone 22.36 acres (21.6 acres, net) from R-1 to RM-1 as part of a planned rezoning overlay. The Master Plan for Land Use indicates a master planned density of 1.65 units per acre, equivalent to the current R-1 zoning on the property. While the applicant is proposing to rezone the property to RM-1 (4.68 units per acre density), a concept plan has been provided as part of the PRO which includes 95 lots.

#### Utility Demands

A residential equivalent unit (REU) equates to the utility demand from one single family home. If the area were developed under the current zoning, demand on the utilities for the site would be approximately 37 REUs. The proposed RM-1 zoning would yield 128 REUs, an increase of 91 REUs over the current zoning and the master plan utility demand. The proposed concept plan submitted as part of the proposed planned rezoning overlay indicates that 95 lots are proposed for a proposed utility demand of 95 REUs.

#### Water System

The project is located within the Intermediate Water Pressure District. Water service is currently available from a large diameter transmission main on the west side of Dixon Road. The proposed rezoning would have minimal impact on available capacity, pressure and flows in the water system.

#### Sanitary Sewer

The project is located within the Huskey Sewer District. Sanitary service is proposed to be extended to the site from an existing stub west of the development under Dixon Road from Declaration Drive. The proposed development was not included in the planned service area for the Section 10 pump station located at Declaration Drive and 12 Mile Road, therefore the applicant will be required to study the capacity of the station and propose any improvements that will be necessary to serve the expanded service area. The applicant will also be responsible for confirming that there is sufficient downstream sewer capacity for the additional flows.

Summary

The concept plan provided with the PRO request proposes 95 lots which is higher than the current zoning. The applicant must provide additional study and make necessary capacity improvements to the existing sanitary sewer infrastructure to accommodate any development on the proposed site.

cc: Brian Coburn, P.E.; Engineering Manager

## **McDowell & Associates**

*Geotechnical, Environmental & Hydrogeological Services • Materials Testing & Inspection*

21355 Hatcher Avenue, Ferndale, MI 48220

Phone: (248) 399-2066 • Fax: (248) 399-2157

January 15, 2015

Pulte Homes of Michigan  
100 Bloomfield Hills Parkway  
Suite 140  
Bloomfield Hills, Michigan 48304

Job No. 14-15312

Attention: Mr. Bob Halso

Subject: Incremental Soil Sampling and Analyses  
Two Former Orchard Areas Located on an Approximate 24-Acre Parcel  
East of Dixon Road, South of 12½ Mile Road  
Novi, Oakland County, Michigan

Dear Mr. Halso:

Pursuant to your request, McDowell & Associates has completed Incremental Soil Sampling and Analyses for two former orchard areas on the subject property. A Site Location Map, which shows the approximate location of the subject property, is included as Attachment I.

As part of this assessment, McDowell & Associates conducted an Incremental Sampling Methodology (ISM) approach to characterize the former orchard areas. The former orchard areas were divided into 32 approximate 0.5-acre Decision Units (DU). 50 systematic random increment samples were collected at varying depths from each of the DUs, and triplicate samples were collected from two of the DUs. Samples were submitted for testing to determine the presence of arsenic.

Results of chemical testing show concentrations of arsenic in Decision Units 1, 3, 4, 8, 12, 14, 18, 24, 25 and 32 do not exceed the established Regional Background Level for arsenic of 15 mg/kg and would not require remediation.

Arsenic concentrations in remaining DUs exceed the Regional Background Level calculated for arsenic to varying depths. Based on results of testing, the estimated volume of soil requiring remediation to meet MDEQ Criteria for Generic Residential Closure and unrestricted residential use is approximately 17,800 in-place cubic yards. Assuming a soil expansion factor of 1.5, the volume is calculated to be 26,700 truck yards. Using an estimate of \$30/yard, the estimated cost for soil removal and disposal is \$828,000.

It should be noted that after division of the former orchard into approximate 0.5-acre DUs and number designation of the DUs, it was determined that the majority of DUs 26 and 27 were not included in the subject property. Samples were not collected from those DUs.

### **Mid-Michigan Office**

3730 James Savage Road, Midland, MI 48642

Phone: (989) 496-3610 • Fax: (989) 496-3190

It should be noted that buildings are currently located with some of the DUs requiring remediation, which could affect the soil quantity estimates.

This assessment was completed for the exclusive use of Pulte Homes of Michigan, and they may rely on its contents.

The results of our investigation are presented below.

### Background

In 2004 and 2005, McDowell & Associates completed soil sampling and analyses for the two former orchard areas using discrete methodologies. Results of sampling and testing of 298 soil samples showed arsenic in soil at concentrations ranging between 2.1 mg/kg and 100 mg/kg. Since that investigation, the MDEQ has announced their acceptance of the use of Incremental Sampling Methodologies for characterization of sites.

This report describes results obtained when the site was resampled and tested using the incremental sampling approach, which is considered to be more representative of conditions in orchard soils.

### Regional Background Level for Arsenic

Arsenic occurs naturally in soil, and often occurs in southeast Michigan at concentrations above the Michigan Statewide Default Background Level. Current MDEQ guidelines permit the calculation of a Facility-Specific Background Level if metals are found above Statewide Default Background Levels and are suspected of being naturally occurring.

According to the MDEQ Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria (S<sup>3</sup>TM, 2002), the objective of using a Background Level is to determine whether site concentrations are significantly higher than what would be expected of a naturally occurring condition.

The S<sup>3</sup>TM presents a series of statistical tests that can be completed to evaluate a background data set. A minimum of nine samples are to be obtained from a background area and analyzed for the metal in question. According to the S<sup>3</sup>TM, the data set should be evaluated for its statistical distribution using calculated summary statistics, probability plots, and the Shapiro-Wilk test (less than 50 data points) or the Shapiro-Francia test (greater than 50 data points). The final choice of the statistical distribution should be based upon evaluation of the collective results of the different methods described. In general, the data set is considered valid if it has a normal or lognormal distribution.

The mean value of the sample concentrations along with the standard deviation are used to calculate a Facility-Specific Background Level, which is equivalent to the mean plus three standard deviations.

McDowell & Associates compiled background topsoil arsenic data from 25 sites that we have sampled in Novi, Northville, Commerce, Lyon, and Farmington Hills. These areas were selected due to their proximity to the subject property and that they are also within the Huron-Erie Glacial Lobe. The data set consisted of 350 topsoil grab samples obtained from 0" - 6" from about 2000 through 2012. Test results range from <0.1 mg/kg to 38 mg/kg. Statistical tests were performed on the data set, and it was concluded that three of the values (<0.1 mg/kg, 0.22 mg/kg and 38 mg/kg) were outliers. Those values were removed from the data set. Calculations that show outlier testing are provided in the calculations attachment.

Statistical tests on the remaining 347 sample results for both raw and log-transformed data showed the following:

Minimum: 1.2 mg/kg

Maximum: 20 mg/kg

Mean: 6.78 mg/kg

Standard Deviation: 2.88

Coefficient of Variation: 0.42 (raw) and 0.22 (log-transformed)

Coefficient of Skewness: 1.49 (raw) and -0.13 (log-transformed)

Probability Plot ( $R^2$ ): 0.891 (raw) and 0.981 (log-transformed)

The data set has a log-normal distribution. The Regional Background Level calculated from the data set is 15 mg/kg. This Regional Background Level is consistent with the recent MDEQ "Draft" Interim Process for Addressing Elevated Background Concentrations of Arsenic in Southeast Michigan Soils which identifies concentrations between 12 mg/kg and 16 mg/kg as typical concentrations.

McDowell & Associates requested written concurrence from MDEQ of the appropriateness of using 15 mg/kg as an acceptable Regional Background Level for topsoil for comparative purposes at a nearby property in 2012. A written response was received on August 27, 2012, which indicates the department agrees with comparing soil results to a Regional Background Level of 15 mg/kg.

### Field Work

McDowell & Associates divided the former orchard areas into 32 approximate 0.5-acre "Decision Units" (DU) designated DU-1 through DU-32. The DUs are depicted on the accompanying Decision Unit Map.

Each DU was gridded into 50 sections, and a systematic random sampling approach was utilized within each of the sections. Increment samples were collected from varying depths and designated as follows:

\* "a" - 0" - 6"

\* "b" - 6" - 12"

\* "c" - 12" - 18"

\* "d" - 18" - 24"

\* "e" - 24" - 30"

Additional depths were also collected from some of the DUs for potential future testing. Replicate systematic random samples were collected from DU-17 and DU-23 and designated with A, B, and C at the end.

A random number generator was utilized to select sample locations within each of the sections. Samples were collected by McDowell & Associates between December 4 and 31, 2014 utilizing direct push methods and from a geoprobe liner. Sampling tools were cleaned between samples to limit cross-contamination.

Samples were placed in labeled and laboratory-provided containers and hand-delivered to a representative of Trace Analytical Laboratories, Inc. of Muskegon, Michigan, for chemical testing. Sample chain-of-custody documentation is attached.

#### Chemical Testing Program

Samples were submitted to Trace Analytical Laboratories, Inc. of Muskegon, Michigan for chemical testing to determine the presence of arsenic (Method 6020). Samples were processed and prepared at the laboratory using US EPA SW-846 Method 8330B.

Initial testing depths were based on historic information; and based upon the results, deeper or shallower samples were subsequently submitted.

#### Chemical Test Results

The accompanying Table 1 summarizes arsenic concentrations for each sample in comparison to the Regional Background Level and MDEQ Generic Residential Criteria.

The following table summarizes arsenic concentrations in mg/kg at each of the DUs along with proposed soil removal depths.

DU	a	b	c	d	e	Proposed Removal Depth
1	13	15	9.1	---	---	none
2	---	20	15	13	---	12"
3	14	8.0	6.6	8.2	---	none
4	6.7	4.8	---	---	---	none
5	---	17	14	---	---	12"
6	---	25	11	14	---	12"
7	---	26	12	---	---	12"
8	8.6	6.3	6.8	7.7	7.9	none
9	---	17	8.1	---	---	12"
10	---	18	9.6	---	---	12"
11	---	38	13	---	---	12"
12	11	5.9	---	---	---	none
13	---	37	9.1	---	---	12"
14	14	9.0	5.4	---	---	none

DU	a	b	c	d	e	Proposed Removal Depth
15	---	---	19	25	---	>24"
16	---	---	19	12	---	18"
17	---	A = 20 B = 17 C = 14	A = 8.6 B = 7.6 C = 8.4	---	---	12"
18	15	9.7	---	---	---	none
19	---	41	31	13	---	18"
20	---	---	22	12	---	18"
21	---	31	12	---	---	12"
22	25	---	5.4	---	---	6" - 12"
23	---	A = 18 B = 19 C = 14	A = 3.8 B = 4.5 C = 5.3	---	---	12"
24	13	11	---	---	---	none
25	4.3	3.4	---	---	---	none
28	32	13	9.0	---	---	6"
29	---	19	6.2	---	---	12"
30	33	13	---	---	---	6"
31	33	10	---	---	---	6"
32	4.5	3.4	---	---	---	none

Individual chemical test results are attached.

#### Limitations

No environmental assessment can eliminate uncertainty regarding the potential for recognized environmental conditions or the presence of contaminants in connection with a property. This environmental assessment is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with the property within reasonable limits of time and cost. The conclusions represent our professional opinion based upon information obtained during assessment procedures and may not represent those that would be made under other conditions.

Nothing in this report constitutes a legal opinion or legal advice. It is suggested that environmental counsel be retained to evaluate site conditions and property transaction-related issues from a legal perspective.

Property lines and soil sample locations estimated on maps are estimates and are limited by scale inaccuracies. The approximate boundaries shown on report attachments are not intended to be exact, but rather approximations to assist with review.

It should be noted that after division of the former orchard into approximate 0.5-acre DUs and number designation of the DUs, it was determined that the majority of DUs 26 and 27 were not included in the subject property. Samples were not collected from those DUs.



Conclusions

McDowell & Associates has completed Incremental Soil Sampling and Analyses for two former orchard areas on the subject property.

As part of this assessment, McDowell & Associates conducted an Incremental Sampling Methodology (ISM) approach to characterize the former orchard areas. The former orchard areas were divided into 32 approximate 0.5-acre Decision Units (DU). 50 systematic random increment samples were collected at varying depths from each of the DUs, and triplicate samples were collected from two of the DUs. Samples were submitted for testing to determine the presence of arsenic.

Results of chemical testing show concentrations of arsenic in Decision Units 1, 3, 4, 8, 12, 14, 18, 24, 25 and 32 do not exceed the established Regional Background Level for arsenic of 15 mg/kg and would not require remediation.

Arsenic concentrations in remaining DUs exceed the Regional Background Level calculated for arsenic to varying depths. Based on results of testing, the estimated volume of soil requiring remediation to meet MDEQ Criteria for Generic Residential Closure and unrestricted residential use is approximately 17,800 in-place cubic yards. Assuming a soil expansion factor of 1.5, volume is calculated to be 26,700 truck yards. Using an estimate of \$30/yard, the estimated cost for soil removal and disposal is \$828,000.

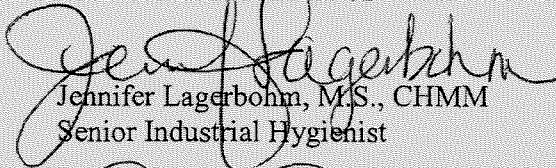
It should be noted that after division of the former orchard into approximate 0.5-acre DUs and number designation of the DUs, it was determined that the majority of DUs 26 and 27 were not included in the subject property. Samples were not collected from those DUs.

It should be noted that buildings are currently located with some of the DUs requiring remediation, which could affect the soil quantity estimates.

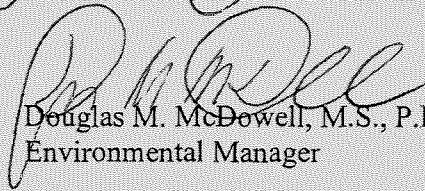
If you have any questions regarding the information contained in this report, or if we can be of further service, please do not hesitate to call.

Very truly yours,

McDOWELL & ASSOCIATES



Jennifer Lagerbohm, M.S., CHMM  
Senior Industrial Hygienist



Douglas M. McDowell, M.S., P.E.  
Environmental Manager

JL/jl/jb/nm

# DECISION UNIT MAP



— APPROXIMATE PROPERTY BOUNDARY



## LANDSCAPE REVIEW

Review based on Revised Concept Site Plan on June 18, 2015

<b>CONCEPT PLAN SUBMITTAL SCHEDULE</b>		
<b>Type of Submittal</b>	<b>Date of Submittal</b>	<b>Reviewed by</b>
Concept Plan	March 09, 2015	All Agencies
Revised Concept Plan	June 18, 2015	All Agencies except Traffic, Wetlands and Facade



# PLAN REVIEW CENTER REPORT

August 17, 2015

## Conceptual Site Plan

Dixon Meadows

### Review Type

Conceptual Landscape Review

### Job #

JSP14-0046

### Property Characteristics

- Site Location: Dixon Road
- Site Zoning: RA
- Adjacent Zoning: RM-1 to east, RA to north and south, RA to west
- Plan Date: 6/16/2015

### Ordinance Considerations

This project was reviewed for conformance with Chapter 37: Woodland Protection, Zoning Article 5.5 Landscape Standards, the Landscape Design Manual and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed and incorporated as part of the Preliminary Site Plan submittal. 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 concept is **recommended for approval**. While detailed landscape plans are needed to show that all requirements are met, the conceptual plans provided indicate that they can be.

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

**Soil information is provided.**

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

**Utilities are shown on the topographic survey, but need to be added to the Landscape Plans to ensure conflicts are avoided.**

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

**Existing trees and proposed removals have been shown.**

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

1. **Show proposed tree fencing at a minimum of 1' outside of tree driplines.**
2. **Include tree planting detail that shows fencing at 1' outside of tree driplines.**

#### Woodland Replacement Trees

1. **Please include planting plans for off-site replacement plantings that indicate size, species and counts of replacement trees.**
2. **If possible, please indicate exact location of replacement trees on above-requested plans.**

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

1. **Calculations have been provided and the proposed trees appear to meet the requirements.**

2. Please uniquely label plants according to the requirement they meet.

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

1. Calculations have been provided and the proposed trees appear to meet the requirements.
2. Please uniquely label plants according to the requirement they meet.

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

1. Calculations have been provided and shrub clouds indicate compliance with the requirement for 70-75% of the rim being planted with clusters of large native shrubs.
2. Please add the High Water Line (HWL) to the landscape plans.

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

When proposed transformers/utilities/fire hydrants are available, add to landscape plan and adjust plant spacing accordingly.

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

Plant lists are not required on conceptual plans, but need to be provided on Preliminary and Final Site Plans.

Planting Notations and Details (LDM)

1. Details provided meet City of Novi requirements.
2. Include all standard City of Novi landscape notes on plans. Available upon request.

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

Irrigation plan for landscaped areas is required for Final Site Plan.

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

Please show contours for entire site – not just berms and detention basin.

Snow Deposit (LDM.2.q.)

Please indicate areas to be used for snow plowing that won't harm existing or proposed landscaping.

Corner Clearance (Zoning Sec 5.9)

Indicate Corner Clearance triangles for interior roads as well as intersection at Dixon Road.

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



---

Rick Meader – Landscape Architect

## LANDSCAPE REVIEW SUMMARY CHART – REVISED CONCEPTUAL PLAN

**Review Date:** July 1, 2015  
**Project Name:** JSP14 – 0046: DIXON MEADOWS  
**Plan Date:** June 16, 2015  
**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.

**SUMMARY: Concept Landscape plans indicate that the City's Landscaping requirements can be satisfactorily implemented on this proposed development.**

Item	Required	Proposed	Meets Code	Comments
<b>Landscape Plan Requirements (LDM (2))</b>				
<b>Landscape Plan</b> (Zoning Sec 5.5.2, LDM 2.e.)	<ul style="list-style-type: none"> <li>▪ New commercial or residential developments</li> <li>▪ Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less.</li> <li>▪ 1"=20' minimum with proper North. Variations from this scale can be approved by LA</li> <li>▪ Consistent with plans throughout set</li> </ul>	Yes L-1 – overall 1"=60' L-3 – details 1"=30'	Yes	
<b>Project Information</b> (LDM 2.d.)	<ul style="list-style-type: none"> <li>▪ Name and Address</li> </ul>	Yes	Yes	
<b>Owner/Developer Contact Information</b> (LDM 2.a.)	<ul style="list-style-type: none"> <li>▪ Name, address and telephone number of the owner and developer or association</li> </ul>	Yes	Yes	
<b>Landscape Architect contact information</b> (LDM 2.b.)	<ul style="list-style-type: none"> <li>▪ Name, Address and telephone number of RLA</li> </ul>	Yes	Yes	
<b>Sealed by LA.</b> (LDM 2.g.)	<ul style="list-style-type: none"> <li>▪ Requires original signature</li> </ul>	No		<u>Need for Final Site Plan</u>
<b>Miss Dig Note</b> (800) 482-7171 (LDM.3.a.(8))	<ul style="list-style-type: none"> <li>▪ Show on all plan sheets</li> </ul>	Yes	Yes	
<b>Zoning</b> (LDM 2.f.)	<ul style="list-style-type: none"> <li>▪ Include all adjacent zoning</li> </ul>	Yes/No		1. Site is proposed to have zoning RM-1. 2. <b>Please add adjacent zoning on Preliminary Site Plans</b>
<b>Survey information</b> (LDM 2.c.)	<ul style="list-style-type: none"> <li>▪ Legal description or boundary line survey</li> </ul>	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>Existing topography</li> </ul>			
<b>Existing plant material</b> <b>Existing woodlands or wetlands</b> (LDM 2.e.(2))	<ul style="list-style-type: none"> <li>Show location type and size. Label to be saved or removed.</li> <li>Plan shall state if none exists.</li> </ul>	Yes	Yes	Removals shown on sheets L-4, L-5, indicated on tree charts L-6 and L-7.
<b>Soil types</b> (LDM.2.r.)	<ul style="list-style-type: none"> <li>As determined by Soils survey of Oakland county</li> <li>Show types, boundaries</li> </ul>	Yes	Yes	
<b>Existing and proposed improvements</b> (LDM 2.e.(4))	<ul style="list-style-type: none"> <li>Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W</li> </ul>	Yes	Yes	
<b>Existing and proposed utilities</b> (LDM 2.e.(4))	<ul style="list-style-type: none"> <li>Overhead and underground utilities, including hydrants</li> </ul>	Yes/No		1. Please add "T" and "TV" lines to legend on C-2 and indicate whether they are underground or overhead on Preliminary Site Plans. 2. Please show proposed utilities on Preliminary Site Plans.
<b>Proposed grading. 2' contour minimum</b> (LDM 2.e.(1))	<ul style="list-style-type: none"> <li>Provide proposed contours at 2' interval</li> </ul>	Yes/No		1. Proposed grading shown for detention ponds. 2. Please add HWL label to detention ponds on Preliminary Site Plans. 3. Please add proposed grading contours for entire site, including berms, on Preliminary Site Plans.
<b>Snow deposit</b> (LDM.2.g.)	<ul style="list-style-type: none"> <li>Show snow deposit areas on plan</li> </ul>	NA		
<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)	<ul style="list-style-type: none"> <li>Clear sight distance within parking islands</li> <li>No evergreen trees</li> </ul>	NA		
<b>Name, type and number of ground cover</b> (LDM 1.c.(5))	<ul style="list-style-type: none"> <li>As proposed on planting islands</li> </ul>	NA		

Item	Required	Proposed	Meets Code	Comments
<b>General (Zoning Sec 5.5.3.C.ii)</b>				
<b>Parking lot Islands (a, b. i)</b>	<ul style="list-style-type: none"> <li>A minimum of 300 SF to qualify</li> <li>6" curbs</li> <li>Islands minimum width 10' BOC to BOC</li> </ul>	NA		
<b>Curbs and Parking stall reduction (c)</b>	<ul style="list-style-type: none"> <li>Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.</li> </ul>	NA		
<b>Contiguous space limit (i)</b>	Maximum of 15 contiguous spaces	NA		
<b>Landscaped area (g)</b>	<ul style="list-style-type: none"> <li>Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped</li> </ul>	NA		
<b>Clear Zones (LDM 2.3.(5))</b>	<ul style="list-style-type: none"> <li>25 ft corner clearance required. Refer to Zoning Section 5.5.9</li> </ul>	NA		
<b>Berms, Walls and ROW Planting Requirements</b>				
<b>Berms</b>				
	<ul style="list-style-type: none"> <li>All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours</li> <li>Berm should be located on lot line except in conflict with utilities.</li> <li>Berms should be constructed with 6" of top soil.</li> </ul>	No		<b>Please add berms on Preliminary Site Plans.</b>
<b>Residential Adjacent to Non-residential (Zoning Sec 5.5.3.A and LDM 1.a)</b>				
<b>Berm requirements (Zoning Sec 5.5.A)</b>	<ul style="list-style-type: none"> <li>Refer to Residential Adjacent to Non-residential berm requirements chart</li> </ul>	NA		
<b>Planting requirements (LDM 1.a.)</b>	<ul style="list-style-type: none"> <li>LDM Novi Street Tree List</li> </ul>	NA		
<b>Cross-Section of Berms (Zoning Sec 5.5.3.B and LDM 2.j)</b>				
<b>Slope, height and width (Zoning Sec 5.5.3.A.v)</b>	<ul style="list-style-type: none"> <li>Label contour lines</li> <li>Maximum 33% slope</li> <li>Min. 4 feet crest</li> </ul>			<b>Please add required berms on Preliminary Site Plans.</b>
<b>Type of Ground Cover</b>		Lawn	Yes	
<b>Setbacks from Utilities</b>	<ul style="list-style-type: none"> <li>Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole</li> </ul>			<b>If overhead lines are in vicinity of greenbelt, please indicate, dimension distance of closest tree(s) to lines, and select plants</b>



Item	Required	Proposed	Meets Code	Comments
				appropriate for line heights.
<b>Walls (LDM 2.k &amp; Zoning Sec 5.5.3.vi)</b>				
<b>Material, height and type of construction footing</b>	<ul style="list-style-type: none"> <li>Freestanding walls should have brick or stone exterior with masonry or concrete interior</li> </ul>	NA		<b>No walls are proposed.</b>
<b>Walls greater than 3 ½ ft. should be designed and sealed by an Engineer</b>		NA		
<b>ROW Landscape Screening Requirements (Sec 5.5.3.B. ii)</b>				
<b>Greenbelt width (2)(3) (5)</b>	<ul style="list-style-type: none"> <li>34 ft.</li> </ul>	40'	Yes	
<b>Berm requirements (Zoning Sec 5.5.3.A.(5))</b>	<ul style="list-style-type: none"> <li>Undulating berm of varying heights and widths that meet below as a minimum</li> </ul>	No		<ol style="list-style-type: none"> <li>Room proposed in greenbelt is sufficient.</li> <li><b>Please provide required berms on Preliminary Site Plans.</b></li> </ol>
Min. berm crest width	<ul style="list-style-type: none"> <li>4 ft.</li> </ul>			
Minimum berm height (9)	<ul style="list-style-type: none"> <li>4 ft.</li> </ul>			
3' wall (4) (7)	<ul style="list-style-type: none"> <li>NA</li> </ul>	NA		
<b>Canopy deciduous or large evergreen trees</b> Notes (1) (10)	<ul style="list-style-type: none"> <li>1 tree per 35 l.f.;</li> <li>770/35= 22 trees</li> </ul>	22 new trees	Yes	<ol style="list-style-type: none"> <li>Calculations provided.</li> <li>Appears that required plantings can be provided in greenbelt.</li> <li><b>Please uniquely label plants on Preliminary Site Plans to distinguish from other required plantings.</b></li> </ol>
<b>Sub-canopy deciduous trees</b> Notes (2)(10)	<ul style="list-style-type: none"> <li>1 tree per 20 l.f.;</li> <li>770/20=39 trees</li> </ul>	39 new trees	Yes	<b>See above</b>
<b>Street Trees (LDM 1.d.(1) and Novi Street Tree List)</b>	<ul style="list-style-type: none"> <li>1 tree per 35 l.f.</li> <li>770/35 = 22 trees</li> </ul>	22 (8 existing trees + 14 new trees)	Yes	<b>See above</b>
<b>Island &amp; Boulevard Planting (Zoning Sec &amp; LDM 1.d.(1)(e))</b>	<ul style="list-style-type: none"> <li>Must be landscaped &amp; irrigated</li> <li>Mix of canopy/sub-canopy trees, shrubs, groundcovers, etc.</li> <li>No plant materials between heights of 3-6</li> </ul>	Yes	Yes	<b>Please label plants on Preliminary Site Plans</b>

Item	Required	Proposed	Meets Code	Comments
	feet as measured from street grade			
<b>Transformers/Utility boxes/Fire Hydrants</b> (LDM 1.e from 1 through 5)	<ul style="list-style-type: none"> <li>▪ A minimum of 2ft. separation between box and the plants</li> <li>▪ Ground cover below 4" is allowed up to pad.</li> <li>▪ No plant materials within 8 ft. from the doors</li> <li>▪ No plantings with matured height greater than 12' within 10 ft. of fire hydrants</li> </ul>	No		<b>When proposed transformers/utilities/fire hydrants are available, please add/adjust landscaping as necessary.</b>

**Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)**

<b>Planting requirements</b> (Sec. 5.5.3.E.iv)	<ul style="list-style-type: none"> <li>▪ Clusters shall cover 70-75% of the basin rim area</li> <li>▪ 10" to 14" tall grass along sides of basin</li> <li>▪ Refer to wetland for basin mix</li> </ul>	Yes	Yes	<ol style="list-style-type: none"> <li>1. Calculations are given.</li> <li>2. Shrub clouds indicate conformance with ordinance.</li> <li>3. <b>Please add plant labels for Preliminary Site Plans.</b></li> <li>4. <b>Please add HWL label to detention ponds on Preliminary Site Plans.</b></li> </ol>
---	---	-----	-----	---

**Woodland Replacements (Chapter 37 Woodlands Protection)**

<b>Woodland Replacement Calculations – Required/Provided</b>	<ul style="list-style-type: none"> <li>▪ Show calculations based on existing tree chart.</li> <li>▪ Indicate boundary of regulated woodland on plan</li> </ul>	Yes	Yes	Shown on sheets 2, L-2 and L-7
<b>Woodland Replacement Trees Proposed</b>	<ul style="list-style-type: none"> <li>▪ Show clearly on plan and plant list which trees are proposed as woodland replacement trees</li> <li>▪ Reforestation credit table breakdown, if applicable</li> </ul>	No		<ol style="list-style-type: none"> <li>1. <b>On Preliminary Site Plans, please uniquely label onsite woodland replacement trees proposed.</b></li> <li>2. <u>For Final Site Plans, please add planting plans for offsite woodland replacement trees to be planted.</u></li> </ol>

**LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS**

Landscape Notes – Utilize City of Novi Standard Notes				
<b>Installation date</b> (LDM 2.i. & Zoning Sec 5.5.5.B)	▪ Provide intended date	Spring or Fall 2016	Yes	
<b>Maintenance &amp; Statement of intent</b> (LDM 2.m & Zoning Sec 5.5.6)	▪ Include statement of intent to install and guarantee all materials for 2 years. ▪ Include a minimum one cultivation in June, July and August for the 2-year warranty period.	Yes	Yes	
<b>Plant source</b> (LDM 2.n & LDM 3.a.(2))	▪ Shall be northern nursery grown, No.1 grade.	Yes	Yes	
<b>Irrigation plan</b> (LDM 2.s.)	▪ 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</b> (LDM 2.u)	▪ Required by Planning Commission	NA		
<b>Establishment period</b> (Zoning Sec 5.5.6.B)	<b>2 yr. Guarantee</b>	Yes	Yes	
<b>Approval of substitutions.</b> (Zoning Sec 5.5.5.E)	▪ City must approve any substitutions in writing prior to installation.	Yes	Yes	

Plant List (LDM 2.h.) – Include all cost estimates				
Quantities and sizes	▪ Refer to LDM suggested plant list	No		1. Not necessary for conceptual plan. 2. <b>Please provide on Preliminary Site Plans.</b>
Root type		No		See above
Botanical and common names		No		See above
Breakdown of genus/species diversity (LDM 1.d.(1).d.				
Type and amount of lawn		Seed/sod	Yes	
Cost estimate (LDM 2.t)		▪ For all new plantings, mulch and sod as listed on the plan	No	
Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details				
Canopy Deciduous Tree	▪ Refer to LDM for detail drawings	Yes	Yes	

Evergreen Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes	
<b>Other Plant Material Requirements (LDM 3)</b>				
<b>General Conditions</b> (LDM 3.a)	<ul style="list-style-type: none"> <li>Plant materials shall not be planted within 4 ft. of property line</li> </ul>	No		<b>On Preliminary Site Plans, add notes near property line with statement to left.</b>
<b>Plant Materials &amp; Existing Plant Material</b> (LDM 3.b)	<ul style="list-style-type: none"> <li>Clearly show trees to be removed and trees to be saved.</li> </ul>	Yes	Yes	
<b>Landscape tree credit</b> (LDM3.b.(d))	<ul style="list-style-type: none"> <li>Substitutions to landscape standards for preserved canopy trees outside woodlands/wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM</li> </ul>	NA		
<b>Plant Sizes for ROW, Woodland replacement and others</b> (LDM 3.c)	Refer to Chapter 37, LDM for more details	No		<b>To be indicated on plant list.</b>
<b>Plant size credit</b> (LDM3.c.(2))	NA	NA		Extra tree credits can be gained by using larger trees for landscaping other than ROW, street trees and Woodland Replacement trees.
<b>Prohibited Plants</b> (LDM 3.d)	No plants on City Invasive Species List	NA		No species proposed at this time.
<b>Recommended trees for planting under overhead utilities</b> (LDM 3.e)	<ul style="list-style-type: none"> <li>Label the distance from the overhead utilities</li> </ul>	No		<b>When proposed transformers/utilities/fire hydrants are available, please add/adjust landscaping as necessary.</b>
<b>Collected or Transplanted trees</b> (LDM 3.f)		NA		
<b>Nonliving Durable Material: Mulch</b> (LDM	<ul style="list-style-type: none"> <li>Trees shall be mulched to 4" depth and shrubs,</li> </ul>	Yes	Yes	

4)	groundcovers to 3" depth ■ Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate. ■ Refer to section for additional information			
----	--	--	--	--

**NOTES:**

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

## WETLANDS REVIEW

Review based on Concept Site Plan on March 09, 2015

CONCEPT PLAN SUBMITTAL SCHEDULE		
Type of Submittal	Date of Submittal	Reviewed by
Concept Plan	March 09, 2015	All Agencies
Revised Concept Plan	June 18, 2015	All Agencies except Traffic, Wetlands and Facade

March 25, 2015

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

Re: Trailside (JSP14-0046)  
Wetland Review of the Concept Plan (PSP15-0033)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Concept Plan for the proposed Trailside single-family residential condominium project prepared by Atwell, L.L.C. dated March 6, 2015 (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 conducted a wetland evaluation for the property on October 10, 2014 with the Applicant's wetland consultant, King & MacGregor Environmental, Inc. (KME).

The proposed development is located north of Twelve Mile Road and east of Dixon Road in Section 10. The Plan proposes the construction of ninety-five (95) single-family residential site condominiums, associated roads and utilities, and two storm water detention basins. Although not indicated on the City's Regulated Wetlands Map (see Figure 1), the proposed project site contains one area of City-Regulated Wetlands (see Figure 2). Some wetland areas are located to the north of the project property. A very small portion of 25-foot wetland buffer/setback extends onto the north side of the site from one of these wetlands.

**Onsite Wetland Evaluation**

ECT visited the site on October 10, 2014 for the purpose of a wetland boundary verification with the applicant's wetland consultant King & MacGregor Environmental (KME). The focus of the inspection was to review site conditions in order to determine whether on-site wetland is considered regulated under the City of Novi's Wetland and Watercourse Protection Ordinance. Wetland boundary flagging was not in place at the time of this site inspection. ECT and KME identified four wetland areas (Wetlands 1, 2, 3 and 4) in the field. Property lines were not clearly marked at the time, and the three wetlands identified along the northern property line (Wetlands 1, 2, and 3) have been shown to be located outside of the limits of the subject parcel. The approximate locations of the four wetland areas identified during the wetland boundary verification are depicted in Figure 2.

Wetlands 1-4 are all forested and scrub-shrub wetlands which may contain semi-permanent areas of standing water. Plant species identified include silver maple (*Acer saccharinum*), American elm (*Ulmus americana*), silky dogwood (*Cornus amomum*), rice-cut grass (*Leersia oryzoides*), sedge (*Carex intumescens*), false nettle (*Boehmeria cylindrica*), and wood reedgrass (*Cinna arundinacea*). A regulated wetland is depicted to the north on the adjacent parcel in the available mapping, and on the official City of Novi Regulated Wetland and Watercourse map. The wetlands identified as

Wetland 1-2 are associated with this wetland and do not actually extend onto the subject site. These are indicated as Wetlands A and B on the Plan. It should be noted that the 25-foot wetland setback/buffer of Wetland A (i.e., Wetland 1) extends slightly onto the subject property.

The *Dimensional Plan* (Sheet 3) indicates one (1) on-site wetland area. This wetland is located in the western/central portion of the property and appears to lie on a parcel line. As such, a portion of the small wetland lies on the subject property and a portion appears to be located on a residential property that is not included as part of the subject property. The overall area of this wetland does not appear to be indicated on the Plan.

This forested wetland area appears to be of fair quality and impact to this wetland is proposed as part the site design. ECT has verified that the wetland boundaries appear to be accurately depicted on the Plan.

What follows is a summary of the wetland impacts associated with the proposed site design.

#### **Wetland Impact Review**

The Plan includes proposed impacts to the only small on-site wetland and the associated 25-foot wetland setback located on this property. As noted above, this wetland is located in the western/central portion of the property and appears to lie on a parcel line. As such, a portion of the small wetland lies on the subject property and a portion appears to be located on a residential property that is not included as part of the subject property. The overall area of this wetland does not appear to be indicated on the Plan. Based on the dimensions shown on the Plan it appears as if the total wetland area is approximately 900 square feet (0.02-acre). The Plan proposes to fill the half (approximate) of the wetland (and 25-foot wetland setback) that lies on the subject property for the purpose of developing Lot 37. The Plan proposes the following wetland impacts:

- Wetland Impact: 0.011-acre (fill)

As shown, the southern half of this small wetland area (and 25-foot wetland buffer) will remain on the residential property to the south that is not currently a part of the proposed site development.

In addition to wetland impacts, the Plan also specifies impacts to the 25-foot natural features setback. The Plan proposes the following wetland buffer impacts:

- Wetland Buffer Impact: 0.062-acre (fill)

The majority of the proposed development site consists of buildable upland. ECT suggests that efforts should be made in order to avoid impacts to this existing area of forested wetland.



**Permits & Regulatory Status**

The on-site wetland does not appear to be regulated by the MDEQ as it does not appear to be within 500 feet of a watercourse/regulated drain. In addition, it is not greater than 5 acres in size. The Applicant has provided documentation from MDEQ that contains follow-up information to an October 16, 2014 pre-application meeting for the project (letter dated February 23, 2015). The letter states that based on the information provided by the applicant, the MDEQ's Water Resources Division (WRD) has determined that a permit is not required under Part 303 of the NREPA (Natural Resources and Environmental Protection Act, 1994 PA 451, as amended).

The project as proposed will require a City of Novi *Wetland Minor Use Permit* as well as an *Authorization to Encroach the 25-Foot Natural Features Setback*. This permit and authorization are required for the proposed impacts to wetlands and regulated wetland setbacks. As noted, the on-site wetland appears to be considered essential by the City as it appears to meet one or more of the essentiality criteria set forth in the City's Wetland and Watercourse Protection Ordinance (i.e., storm water storage/flood control, wildlife habitat, etc.).

**Comments and Recommendations**

ECT recommends that the Applicant address the items noted below in subsequent site Plan submittals prior to receiving Wetland approval:

1. 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 lot boundaries and/or site design in order 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 on-site wetland is located in the western/central portion of the property and appears to lie on a parcel line. As such, a portion of the small wetland lies on the subject property and a portion appears to be located on a residential property that is not included as part of the subject property. The majority of the proposed development site consists of buildable upland. ECT suggests that efforts should be made in order to avoid impacts to this existing area of forested wetland and the 25-foot wetland buffer.

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

3. The Applicant is encouraged to provide wetland conservation easements for any areas of remaining wetland or 25-foot wetland buffer. The Applicant should consider modification of the proposed lot boundaries and/or site design in order to preserve all wetland and wetland buffer areas.
4. The overall areas of the existing wetland and wetland buffer should be indicated on the Plan. The Plan indicates the acreage of proposed permanent disturbance to the wetland and wetland buffer but does not list the acreage of the wetland/wetland buffer areas themselves. The Plan should be reviewed and revised as necessary.
5. 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.

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

Respectfully submitted,

**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**



Pete Hill, P.E.  
Senior Associate Engineer

cc: Kristen Kapelanski, AICP, City of Novi Planner  
Sri Komaragiri, City of Novi Planner  
Rick Meader, City of Novi Landscape Architect  
Stephanie Ramsay, City of Novi Customer Service

Attachments: Figure 1, Figure 2, 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).



**Figure 2.** Approximate Wetland Boundaries as observed (shown in red). Approximate property boundary is shown in white (aerial photo source: Google Earth, accessed January 27, 2015).

## WOODLANDS REVIEW

Review based on Revised Concept Site Plan on June 18, 2015

<b>CONCEPT PLAN SUBMITTAL SCHEDULE</b>		
<b>Type of Submittal</b>	<b>Date of Submittal</b>	<b>Reviewed by</b>
Concept Plan	March 09, 2015	All Agencies
Revised Concept Plan	June 18, 2015	All Agencies except Traffic, Wetlands and Facade

August 14, 2015

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

Re: Trailside (JSP14-0046)  
Woodland Review of the Concept Plan (PSP15-0033)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Concept Plan for the proposed Trailside single-family residential condominium project prepared by Atwell, L.L.C. dated March 6, 2015 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37. ECT conducted a woodland evaluation for the property on Tuesday, March 17, 2015.

The proposed development is located north of Twelve Mile Road and east of Dixon Road in Section 10. The Plan proposes the construction of ninety-five (95) single-family residential site condominiums, associated roads and utilities, and two storm water detention basins. The proposed project site contains several areas of City-Regulated Woodland (see Figure 1 and Site Photos).

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*
- 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.*

### **Onsite Woodland Evaluation**

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on Tuesday, March 17, 2015. An existing tree survey has been completed for this property by Allen Design. The *Woodland Plan* (Sheets L-4 and L-5) contain existing tree survey information (tree locations and tag numbers). The *Woodland List* is included on Sheets L-6 and L-7, and includes tree tag numbers, diameter-at-breast-height (DBH), common/botanical name, and condition of all surveyed trees as well as the required woodland replacement credit requirements.

The surveyed trees have been marked with aluminum tree tags allowing ECT to compare the tree diameters reported on the *Woodland List* to the existing tree diameters in the field. ECT found that the *Woodland Plan* and the *Woodland List* appear to accurately depict the location, species composition and the size of the existing trees. ECT took a sample of diameter-at-breast-height (DBH) measurements and found that the data provided on the Plan was consistent with the field measurements.

The entire site is approximately 22 acres with regulated woodland mapped across a significant portion of the property. The mapped City-regulated woodlands area generally located within the northern and central sections of the site (see Figure 1). 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 black cherry (*Prunus serotina*), sugar maple (*Acer saccharum*), American elm (*Ulmus americana*), green spruce (*Picea pungens*), box elder (*Acer negundo*), black locust (*Robinia pseudoacacia*), aspen (*Populus spp.*), eastern red cedar (*Juniperus virginiana*), common pear (*Prunus communis*), common apple (*Malus spp.*), sweet cherry (*Prunus avium*), black walnut (*Juglans nigra*), silver maple (*Acer saccharinum*), scotch pine (*Pinus Sylvestris*), norway spruce (*Picea abies*), red maple (*Acer rubrum*), white cedar (*Thuja occidentalis*), eastern cottonwood (*Populus deltoides*) and several other species. Black cherry trees comprise approximately 34% of the on-site trees and sugar maple trees comprise approximately 14% of the on-site trees.

Based on the information provided on the Plan, the maximum size tree diameter on the site is a sugar maple (54-inch DBH). The *Woodland List* includes eight (8) other trees greater than or equal to 36-inches DBH. The *Woodland List* also includes thirty-two (32) total trees greater than or equal to 24-inches DBH. In terms of habitat quality and diversity of tree species, the project site is of fair quality. The majority of the woodland areas consist of relatively immature growth trees of good to fair health. Although disturbed in many areas, this wooded area provides a fair level of environmental benefit; however the subject property is surrounded by existing residential use. 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 fair quality. It should be noted that areas of the existing understory have been disturbed. In particular the understory within the wooded area on the south side of the property appears to have been brush-hogged or cleared relatively recently.

After our woodland evaluation and review of the *Woodland List* submitted by the applicant's woodland consultant, there are a significant number (23) of trees on-site that meet the minimum caliper size for designation as a specimen tree. These trees include:

- American elm (1 tree measuring  $\geq 24''$ , the minimum caliper size for specimen trees);
- Black cherry (3 trees measuring  $\geq 24''$ , the minimum caliper size for specimen trees);
- Norway spruce (1 tree measuring  $\geq 24''$ , the minimum caliper size for specimen trees);
- Red Maple (1 tree measuring  $\geq 24''$ , the minimum caliper size for specimen trees);
- Scotch pine (1 tree measuring  $\geq 24''$ , the minimum caliper size for specimen trees);
- Silver maple (1 tree measuring  $\geq 24''$ , the minimum caliper size for specimen trees);
- Sugar maple (14 trees measuring  $\geq 24''$ , the minimum caliper size for specimen trees);
- Sweet cherry (1 tree measuring  $\geq 24''$ , the minimum caliper size for specimen trees).

Of these 23 potential specimen trees, 3 of these trees will be saved and 20 are proposed for removal. 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 historical 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**

As shown, there appear to be substantial impacts to regulated woodlands associated with the proposed site development. It appears as if the proposed work (proposed lots and roads) will cover the majority of the site and will involve a considerable number of tree removals. It should be noted that the City of Novi replacement requirements pertain to regulated trees with d.b.h. greater than or equal to 8 inches.

A *Woodland Summary* Table has been included on the *Woodland List* (Sheet L-7). The Applicant has noted the following:

- Total Trees: 822
- Regulated Trees Removed: 733 (89% removal)
- Regulated Trees Preserved: 89 (11% preservation)



- Stems to be Removed 8" to 11": 424 x 1 replacement (Requiring 424 Replacements)
- Stems to be Removed 11" to 20": 201 x 2 replacements (Requiring 402 Replacements)
- Stems to be Removed 20" to 30": 21 x 3 replacements (Requiring 63 Replacements)
- Stems to be Removed 30"+: 6 x 4 replacements (Requiring 24 Replacements)
- Multi-Stemmed Trees: (Requires 305 Replacements)
  
- Sub-total Replacement Trees Required: 1,218
- Less credit for "non-woodland tree preservation": 54  
(The applicant proposes the preservation of 18 trees that lie outside of the City's Regulated Woodland Boundary and is requesting credits towards required Woodland Replacements)
  
- Total Woodland Replacement Required: 1,164

In addition, the *Greenbelt Plan* (Sheet L-1) requests that the following trees count as credit towards the total Woodland Replacements required:

- 66 additional street trees;
- 114 trees (approximately) are to be added to the Dixon Road improvements south of the site;
- 30 trees planted in the Liberty Park greenbelt;
- 253 trees (80 deciduous and 173 evergreen );
- Total trees provided = 463 Trees
- Trees to be paid into the City of Novi Tree Fund = 701

The current Plan does not clearly quantify the proposed number, location and species of the trees that will satisfy the 463 on-site Woodland Replacement Tree credits. The Plan should clearly indicate the locations, sizes, species and quantities of all on-site woodland replacement trees. The applicant should review and revise the Plan in order to better indicate how the Woodland Replacement requirements will be met on-site. It is recommended that the applicant provide a table that specifically describes the species and quantities of proposed Woodland Replacement trees. It should also be noted that all deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1-to-1 replacement ratio. All coniferous replacement trees shall be 6-feet in height (minimum) and provide 1.5 trees-to-1 replacement credit replacement ratio (i.e., each coniferous tree planted provides for 0.67 credits).

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

- *The location of replacement trees shall be subject to the approval of the planning commission and shall be such as to provide the optimum enhancement, preservation and protection of woodland areas. Where woodland densities permit, tree relocation or replacement shall be within the same woodland areas as the removed trees. Such woodland replanting shall not be used for the landscaping requirements of the subdivision ordinance or the zoning landscaping;*

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

The applicant shall demonstrate that 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.

#### **Site Soil Sampling and Analyses**

Based on the information in the McDowell & Associates Incremental Soil Sampling and Analyses Report dated January 15, 2015, areas of the site have been preliminarily shown to contain levels of arsenic in the soil that exceed the Regional Background Level. These areas are potentially in need of soil remediation. The report also noted that ten (10) of the thirty-two (32) total site assessment areas resulted in concentrations of arsenic that did not exceed the Regional Background Level. In general, these areas that did not appear to exceed the Regional Background Level for arsenic are located around the perimeter (north and east) sides of the proposed development.

The applicant should consider providing alternatives in order to further preserve quality woodlands the areas that will not require soil remediation. Preservation of areas around the perimeter of the site and areas containing potential specimen trees and higher-quality woodlands is suggested.

**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. The Trailside development consists of 95 single-family residences. The subject property is surrounded by existing residential use on the east, west and south sides, and by an undeveloped parcel and 12 ½ Mile Road to the north. Some degree of impacts to on-site woodlands is deemed unavoidable if these properties are to be developed for residential use, however, the current Plan appear to clear all proposed lots of existing trees. ECT suggests that the applicant consider preserving existing trees to the greatest extent possible even on individual proposed lots, outside of the proposed building envelope.

**Comments and Recommendations**

ECT recommends that the Applicant address the items noted below in subsequent site Plan submittals prior to receiving Woodland approval:

1. ECT encourages the Applicant to minimize impacts to on-site Woodlands to the greatest extent practicable; especially those trees that may meet the minimum size qualifications to be considered a Specimen Tree (as described above). Eleven percent (11%) of the regulated on-site trees are proposed to be preserved and eighty-nine percent (89%) are proposed for removal. The applicant should demonstrate why additional trees cannot be preserved within the proposed lots in areas that fall outside of the proposed building envelopes, as well as in proposed open-space areas.
2. Soil analyses have been provided that indicate that areas of the site have been preliminarily shown to contain levels of arsenic in the soil that exceed the Regional Background Level. These areas are potentially in need of soil remediation. In general, these areas that did not appear to exceed the Regional Background Level for arsenic are located around the perimeter (north and east) sides of the proposed development. The applicant should consider providing alternatives in order to further preserve quality woodlands the areas that

will not require soil remediation. Preservation of areas around the perimeter of the site and areas containing potential specimen trees and higher-quality woodlands is suggested.

3. The Applicant should demonstrate that alternative site layouts that would reduce the overall impacts to woodlands have been reviewed and considered. The Applicant should consider modification of the proposed lot boundaries in order to preserve existing woodland areas.
4. The Applicant is encouraged to provide preservation/conservation easements for any areas of remaining woodland.
5. The Applicant is encouraged to provide woodland conservation easements for any areas containing woodland replacement trees, if applicable. It is not clear how all of the proposed replacement trees will be guaranteed in perpetuity. As stated in the woodland ordinance:

*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.*

6. The Plan states that a total of 463 on-site woodland replacement trees will be provided. The Plan shall clearly state the locations, sizes, species and quantities of all Woodland Replacement trees. It is recommended that the applicant provide a table that specifically describes the species and quantities of proposed Woodland Replacement trees.
7. A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch d.b.h. or greater. 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.
8. 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*.

9. 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.

Trailside (JSP14-0046)  
Woodland Review of the Concept Plan (PSP15-0033) – REV.1  
August 14, 2015  
Page 8 of 12

10. 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*.

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

Respectfully submitted,

**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**



Pete Hill, P.E.  
Senior Associate Engineer

cc: Kristen Kapelanski, AICP, City of Novi Planner  
Sri Komaragiri, City of Novi Planner  
Rick Meader, City of Novi Landscape Architect  
Stephanie Ramsay, City of Novi Customer Service

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 west near the central portion of the northern property boundary (ECT, 3/17/15).



**Photo 2.** Looking south near the central portion of the northern property boundary (ECT, 3/17/15).



**Photo 3.** Looking north near the central portion of the property (ECT, 3/17/15).



**Photo 4.** Looking southwest near the south portion of the property (ECT, 3/17/15).





**Photo 5.** Looking west near the southern property boundary – area appears to have been brush-hogged/cleared (ECT, 3/17/15).



**Photo 6.** Trees have been marked with aluminum tags.  
Tree #936, 9" DBH black cherry, to be removed (ECT, 3/17/15).

## TRAFFIC REVIEW

Review based on Concept Site Plan on March 09, 2015

CONCEPT PLAN SUBMITTAL SCHEDULE		
Type of Submittal	Date of Submittal	Reviewed by
Concept Plan	March 09, 2015	All Agencies
Revised Concept Plan	June 18, 2015	All Agencies except Traffic, Wetlands and Facade



March 27, 2015

Barbara McBeth, AICP  
Deputy Director of Community Development  
City of Novi  
45175 W. 10 Mile Road  
Novi, MI 48375

**SUBJECT: Trailside, Traffic Review for Rezoning, Traffic Study and Conceptual Plan Submission  
JSP14-0046**

Dear Ms. McBeth,

URS has completed our review of the rezoning, traffic study and conceptual plan submission for the above referenced applicant. Our comments are as follows:

**1. General Comments**

- a. The applicant, Pulte Homes of Michigan, is proposing to develop on the 22.36 acre parcel located on the east side of Dixon Road, north of 12 Mile Road, in the City of Novi.
- b. Dixon Road is a local road under the City of Novi's jurisdiction.
- c. The applicant is proposing a single family residential development of 95 units.

**2. Rezoning Comments**

- a. The site is currently zoned as RA (residential acreage).
- b. The applicant is proposing to rezone the site as RM-1 (low density, low-rise multiple family residential) utilizing the City's Planned Rezoning Overlay (PRO) option.
- c. The applicant is proposing a density of 4.4 net units per acre whereas the City's Master Plan recommends a density of 1.65 units per acre (under R-1 zoning).
- d. The applicant listed public benefits of the rezoning that included Dixon Road improvements, landscaping, and proposed parks.
  - i. The Dixon Road improvements are proposed from 12 Mile Road to the northerly entrance of the development. Dixon Road to the north of the site would remain as a gravel road. The applicant should consider the installation of signing to warn traffic of the change in roadway material.
  - ii. The applicant could consider working with the City to determine if the speed limit on Dixon Road should be modified. The speed limit is currently not posted and considered to be 55 miles per hour (mph). The speed limit on 12 ½ Mile Road is posted as 25 mph.
- e. Because the volume of traffic on Dixon Road, under existing conditions, is relatively low, the roadway and surrounding intersections are expected to maintain acceptable levels of service with the addition of site generated traffic (per the Traffic Study provided by the applicant). That being the case, **URS recommends approval of the rezoning** of the site from a traffic impact perspective.



### 3. Traffic Study Comments

- a. The applicant provided the City with a Traffic Impact Study (TIS) which indicates the proposed site of 95 units has a minimal impact on the surrounding traffic.
- b. The Levels of Service (LOS) at the study intersections remain at acceptable levels under future conditions, thereby indicating that the surrounding roadway network can likely accommodate the additional traffic generated by the site.
- c. Approximately 880 more trips are expected to be generated by the 95 units, under RM-1 zoning, compared to the estimated number of trips generated under R-A zoning.
- d. The volume listed in Figure 4 for the westbound right turn movement from 12 Mile Road onto Dixon Road should be 20 vehicles, as opposed to the 17 vehicles listed.

### 4. Conceptual Plan Comments - Initial review of the plans generally show compliance with City standards; however, the following items at minimum may require further detail in the Preliminary Site Plan submittal.

- a. **The applicant is requesting a variance for the unpaved eyebrow design.**
- b. Sheet 5 shows the divided entrance detail from the Road Commission for Oakland County. This detail does not meet all the standards shown in the divided entrance detail (Figure IX.3) or the taper lengths shown in the right turn acceleration/deceleration lanes detail (Figure IX.11) of the City's Code of Ordinances. As stated in the traffic impact study, right turn lane tapers are not required based on the projected volumes for the site.
  - i. Provide detailed (dimensioned) plans for each proposed roadway intersection with Dixon Road, including sight distance, as well as details on the interior roadway, to allow the reviewer to confirm compliance with City standards.
- c. The spacing between the two entrances along Dixon Road is in conformance with City standards.
- d. A 5' sidewalk is proposed along Dixon Road and throughout the site, which is in conformance with City standards.
- e. The applicant should consider including signing and pavement marking details in the Preliminary Site Plan submittal.

The rezoning, traffic study and conceptual plans as submitted were reviewed to the level of detail provided and additional information is required to fully review the traffic-related elements. URS recommends **approval** of the rezoning, traffic study and concept plans with the condition that the applicant will address the comments within this letter in the preliminary plans submission and that the responses to the comments are acceptable to the City and in conformance with City requirements and standards.

Sincerely,

**URS Corporation Great Lakes**

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

**URS Corporation**  
27777 Franklin Road, Suite 2000  
Southfield, Michigan 48034  
Tel: 248.204.5900  
Fax: 248.204.5901  
www.urs.com

## FACADE REVIEW

Review based on Concept Site Plan on March 09, 2015

CONCEPT PLAN SUBMITTAL SCHEDULE		
Type of Submittal	Date of Submittal	Reviewed by
Concept Plan	March 09, 2015	All Agencies
Revised Concept Plan	June 18, 2015	All Agencies except Traffic, Wetlands and Facade



April 27, 2015

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

Attn: Ms. Barb McBeth – Director of Community Development

Re: FACADE ORDINANCE – Conceptual Plan

**Trailside, PSP15-0033**

Façade Region: 1, Zoning District: B-2, Building Size: 500 S.F.

Dear Ms. McBeth:

The following is the Façade Review for the above referenced project based on the Development Plan provided Atwell Group dated March 6, 2015, including eight (8) conceptual façade renderings, pictured below. This project consists of 95 detached single family condominium units. Façade of the detached residential units are subject to Ordinance Section 3.7, the Similar / Dissimilar Ordinance. The overall project is also subject to the Planned Rezoning Overlay (PRO) Ordinance (Section 7.13).

**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).

With respect to Section 3.7.2, all nearby homes (two on the left, two on the right and any across the street that overlap by 50%) must not be “substantially similar” in appearance to the proposed home. Specific criteria for compliance can be found in the Ordinance. The applicant has provided renderings of nine models. Significant design diversity is evident in these models. 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 the nine models.



**ELEVATION 1**



**ELEVATION 2**



**ELEVATION 3**



**ELEVATION 4**



**ELEVATION 5**



**ELEVATION 6**



**ELEVATION 7**



**ELEVATION 8**

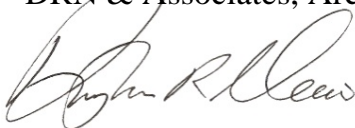
With respect to Section 3.7.1 of the Ordinance, the proposed facades consist of quality materials with a brick or stone extending to the second floor belt line on 6 models and full brick on two models. The façades exhibit pleasing proportions and architectural details. The features include return cornices, gable truss feature, stepped trim and fascia, wood columns, wrought iron balustrades, decorative shutters, and divided light windows. Of particular note is that upper roof areas are delineated by dormers, and arched or gabled window tops on all models. The renderings also indicate raised panels and window features on the front facing garage doors. A soldier coursed arched headers above the garage door occurs on two models. Based on the type and quantity of materials and architectural features indicated on these examples it is our recommendation that the façade elevations provided would be consistent with Section 3.7.1 of the Similar / Dissimilar Ordinance.

**Planned Rezoning Overlay Ordinance (Section 7.13)** - The PRO Ordinance requires that the development “result in an enhancement of the project area as compared to the existing zoning, and such enhancement would be unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay.” *It is our recommendation that type and quantity of materials and architectural features indicated on the façade elevations represent an enhancement to what may otherwise be constructed in the absence of the PRO.*

It should be noted that the renderings are defined as “conceptual” and lack notations as to the proposed materials. This review is based on our understanding of the materials as depicted artistically. Notations should be added to all elevations to clearly identifying all façade materials and side and rear elevations should be provided. It should be noted that the type and quantity architectural features and materials is key to compliance with the City Ordinances, particularly the PRO Ordinance. It is anticipated that the type and extent of these materials and features will be maintained on all elevations, including side and rear elevations, on the drawings eventually submitted for Building Permits.

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", written in a cursive style.

Douglas R. Necci, AIA



## FIRE REVIEW

Review based on Revised Concept Site Plan on June 18, 2015

CONCEPT PLAN SUBMITTAL SCHEDULE		
Type of Submittal	Date of Submittal	Reviewed by
Concept Plan	March 09, 2015	All Agencies
Revised Concept Plan	June 18, 2015	All Agencies except Traffic, Wetlands and Facade



August 12, 2014

June 22, 2015

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

RE: Dixon Road site development/ Trailside

~~PSP#15-0033~~

**PSP#15-0096**

**Project Description:** Proposed single family development on the east side of Dixon Rd. North of Twelve Mile

**CITY COUNCIL**

**Mayor**

Bob Gatt

**Mayor Pro Tem**

Dave Staudt

Gwen Markham

Andrew Mutch

Wayne Wrobel

Laura Marie Casey

Doreen Poupard

**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**

Victor C.M. Lauria

**Assistant Chief of Police**

Jerrold S. Hart

**Comments:**

- 1) Relocate hydrant from center of lot #37 to the corner of the stub road and entry roadway.
- 2) Relocate hydrant from the center of lot# 45/46 to the center of lot # 47/48
- 3) Provide water main size on all submittals.

**Recommendation: 6/22/15 --No corrections have been made.**

Approval with above conditions

Sincerely,

Joseph Shelton- 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

APPLICANTS RESPONSE LETTER



ONE COMPANY.  
INFINITE SOLUTIONS.

August 20, 2015

Ms. Barbara McBeth, AICP  
Deputy Director of Community Development  
**CITY OF NOVI**  
45175 West Ten Mile Road  
Novi, Michigan 48375

Re: Dixon Meadows - Planned Rezoning Overlay Submittal Package  
Dixon Road, City of Novi

Dear Ms. McBeth:

On behalf of our client, Pulte Homes, please accept the accompanying Conceptual PRO plans for Dixon Meadows, a single-family residential community located on the east side of Dixon Road, north of Twelve Mile Road. In addition, we offer the following responses to the current city staff review comments dated August 14, 2015:

**Planning Review - dated 8/14/15**

No required response or objections except as follows:

*Staff suggests that the applicant consider providing additional open space on the Dixon Meadows site, through the preservation of natural features (quality woodlands or specimen trees) or additional open space / recreational amenities, and modify the concept plan accordingly.*

**Response:** The intent and character of the proposed layout is that of an urban development that will complement adjacent density and land uses, and still provide high-quality, affordable single-family housing within the desirable boundary of the City of Novi. In addition, the functional open space (park area) provided is relatively consistent with the staff referenced Berkshire Pointe development. Specifically, Berkshire Pointe provides 1.58 acres or 5.42% of functional open space, while Dixon Meadows provides a comparable 0.95 acres or 4.27% of functional open space. The balance of the Berkshire development is non-functional wetlands and buffers, detention basins, and perimeter buffer.

Moreover, as depicted in the graphic below, the proposed pocket park open space provided in Dixon Meadows is complementary to the surrounding uses, and the subject development location provides valuable single-family housing next to a prominent City of Novi's woodland asset, being the 600+ acre Lakeshore Park, located just 450 feet north of the proposed housing development, which is less than a two minute walk.



ONE COMPANY.  
INFINITE SOLUTIONS.



## DIXON MEADOWS

Functional  
Open Space = **4.27%**

Central Park Square  
0.77 acres

Pocket Park  
0.18 acres

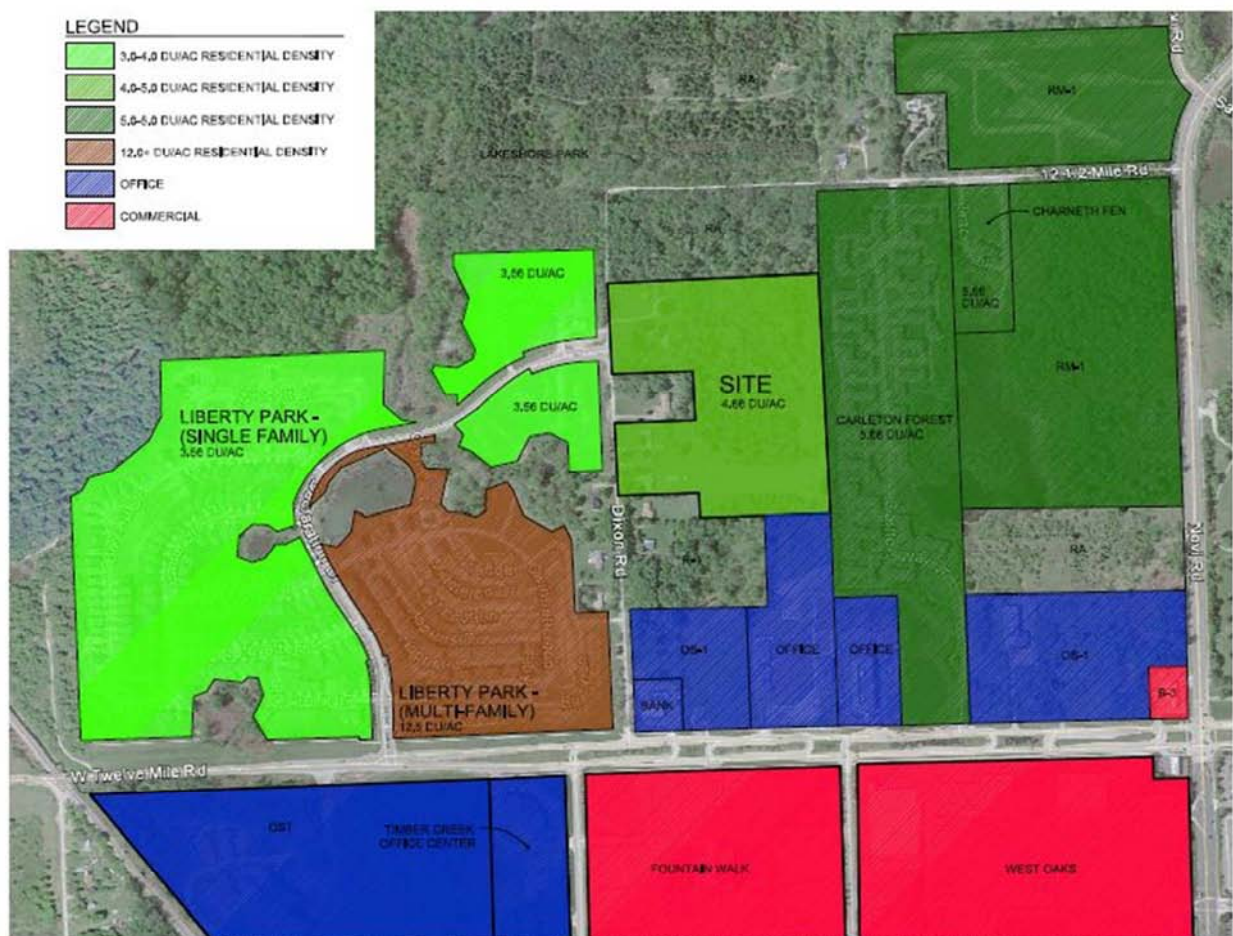
***Ordinance Deviations:** The applicant should consider submitting supplemental material discussing how if each deviation “were not granted, it would prohibit an enhancement of the development that would be in the public interest, and that approving the deviation would be consistent with the Master Plan and compatible with the surrounding areas.”*

**Response:** A response to this request was provided in our resubmittal letter dated June 15, 2015. The specific response was as follows: Pulte Homes is currently under construction in the nearby Berkshire Pointe development. That housing product and development has been very well received in market, with a lot size and price point that varies from a majority of the single family product within the City,



ONE COMPANY.  
INFINITE SOLUTIONS.

something that is specifically encouraged in the Master Plan. The variances requested allow for the addition of internal pocket parks and functional open space, which is also encouraged in the Master Plan. Finally, the density provided in Dixon Meadows provides a logical transition between adjacent developments as depicted in the graphic below.



In addition to the above response, it should be noted that the architectural features of the proposed homes exceed what could typically be developed in a traditional residential development as depicted in DRN & Associates letter dated April 27, 2015. Excerpts from that letter include:

*“the proposed facades consist of quality materials with a brick or stone extending to the second floor belt line on 6 models and full brick on two models. The façades exhibit pleasing proportions and architectural details. The features include return cornices, gable truss feature, stepped trim and fascia, wood columns, wrought iron balustrades, decorative shutters, and divided light windows. Of particular note is that*



ONE COMPANY.  
INFINITE SOLUTIONS.

*upper roof areas are delineated by dormers, and arched or gabled window tops on all models. The renderings also indicate raised panels and window features on the front facing garage doors. A soldier coursed arched headers above the garage door occurs on two models.”*

*“It is our recommendation that type and quantity of materials and architectural features indicated on the façade elevations represent an enhancement to what may otherwise be constructed in the absence of the PRO.”*

#### **Engineering Review - dated 7/31/15**

The staff recommended approval of the Conceptual PRO. No required response or objections except as follows.

*In addition, a request was made for the client to provide an additional study of the Section 10 sanitary sewer pump station located at Declaration Drive and 12 Mile Road to determine the capacity of that station and to propose any improvements that will be necessary to serve the expanded service area.*

**Response:** Pulte Homes has authorized this study to be completed and the results will be provided to the City prior to the submittal of the Site Plan.

#### **Traffic Review - dated 3/27/15**

The comments recommend approval of the rezoning with a list of requests to be addressed during the Preliminary Site Plan submittal. We concur with all comments provided and have no objections.

#### **Landscape Comments - dated 6/16/15**

The comments recommend approval of the plans and we have no objections to any of the specific requests for additional information at Site Plan. It should be noted that we would like to address the berm requirement for this project. While it is shown on the plans as it is required by the City ordinance, Dixon Road is a rural road with an older, historical feel to it. Our desire is to maintain this feel with oversized landscape plantings rather than have to provide a big suburban berm along our frontage.

#### **Woodland Review comments - dated 3/25/15**

No required response or objections except as follows:

*ECT encourages the Applicant to minimize impacts to on-site Woodlands to the greatest extent practicable: especially those trees that may meet the minimum size qualifications to be considered a Specimen Tree.*

**Response:** The overall design for Dixon Meadows focuses on the urban character with smaller lots. The complicated grading as a result of having to provide adequate drainage around these lots limits the ability to preserve trees along lot lines. That said, an analysis is currently underway to determine the ability to preserve a select few perimeter trees.



ONE COMPANY.  
INFINITE SOLUTIONS.

*The applicant should consider providing alternatives in in order to preserve quality woodlands in the areas that will not require soil remediation. Preservation of areas around the perimeter of the site and areas containing potential specimen trees and higher quality woodlands is suggested.*

**Response:** Please see prior response. In addition, our landscape architect has reached out to City staff to discuss Woodland credits. The question posed is as follows: The 1.5:1 evergreen credit doesn't really work since the cost of providing two trees for one credit is prohibitive. What if the size is increased from a 6' evergreen to an 8' evergreen? This height will be equivalent to a 2.5" deciduous replacement tree and is on par with a 1:1 credit. I believe this requirement may have been the result of previous developments in the 90's using an abundance of evergreens (less expensive) to satisfy the required replacement. If an 8' tree is allowed at a 1:1 ratio, you can cap the evergreens to 30% to ensure a similar habitat value as what was removed. Bloomfield Township is similar to this.

I believe there is value in allowing additional credit for upsizing plant material. There is a cost break at about 12' height that is equivalent to two trees. Anything larger than that costs more than the credit gained. I do see benefit in the larger trees since they provide immediate impact and the varying heights are more natural in appearance.

### **Wetland comments dated 3/25/15**

#### **Comments and Recommendations:**

1. *ECT encourages the Applicant to minimize impacts to on-site wetlands and wetland setbacks to the greatest extent practicable.* **Response:** The wetland on site is non – regulated with the MDEQ. The proposed plan minimizes impacts to 0.011 acre of wetland impacts and 0.062 acre of wetland buffer impacts. It is our position that the nominal size of the impacts doesn't justify the need to modify a lot.
2. *The applicant should demonstrate that alternative site layouts that would reduce the overall impacts to the wetlands and wetland setbacks have been reviewed and considered.* **Response:** The applicant has prepared several conceptual plans throughout the course of the due diligence process. Importantly, this site was a prior orchard operation, and will require arsenic remediation as part of any residential development. Even in open space areas, which could be utilized for wetland preservation, need to be remediated as part of the residential development. That said, preservation of the minor wetland areas is not practical for this project site.
3. *The applicant is encouraged to provide wetland conservation easements for any areas of remaining wetland or buffer.* **Response:** A conservation easement will be proposed for the bio-swale in the rear of lots 44-49.
4. *The overall areas of the existing wetland and wetland buffer should be indicated on the plan.* **Response:** The overall areas of the existing wetland and buffer are now shown on the existing conditions plan (sheet 2.)





ONE COMPANY.  
INFINITE SOLUTIONS.

5. *A plan to 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.* **Response:** A proposed bio-swale is proposed to be constructed on the rears of lots 44 –49 to assure continued hydration of the two off-site wetlands adjacent to the northern property line. These bio-swales will capture and treat all rear yard drainage prior to entering the wetlands. Additional details of the bio-swales will be provided on the Preliminary Site Plan package and as part of the Wetland Minor Use Permit. No temporary impacts to the wetlands are proposed.

We look forward to presenting Dixon Meadows project to the City Planning Commission on your August 26<sup>th</sup> agenda. For your record, included with this submittal are the following documents:

- A PDF Version of the Site Plan package
- A PDF of a color rendering of the site

Thank you for your assistance and cooperation with respect to this project. If you should have any questions or need any additional information, please contact us.

Sincerely,  
**Atwell, LLC**

A handwritten signature in blue ink, appearing to read "JA", with a long horizontal flourish extending to the right.

John Ackerman  
Project Manager



ONE COMPANY.  
INFINITE SOLUTIONS.

Xc: Robert Halso, Pulte Homes  
Joe Skore, Pulte Homes  
William Anderson, Atwell