CITY of NOVI CITY COUNCIL

Agenda Item 2
December 8, 2014

SUBJECT: Consideration of the request of Toll Brothers for JSP 14-18 with Zoning Map Amendment 18.707 to rezone property in Section 26, on the east side of Novi Road, south of Ten Mile Road from I-1, Light Industrial and OS-1, Office Service to RM-1, Low Density Low-Rise Multiple-Family Residential with a Planned Rezoning Overlay. The property totals 20.9 acres and the applicant is proposing a 93 unit attached condominium multiple-family residential development.

SUBMITTING DEPARTMENT: Community Development Department - Planning

CITY MANAGER APPROVAL:

BACKGROUND INFORMATION:

The petitioner is requesting a Zoning Map amendment for a 20.09-acre property located southeast of Novi and Ten Mile Roads, accessed off of Nick Lidstrom Drive (Section 26) from I-1 (Light Industrial) and OS-1 (Office Service) 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 93-unit owner-occupied attached condominium project.

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 I-1 and OS-1 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 93-unit multiple-family development. The PRO concept plan shows two on-site detention ponds on the site, preservation of wetland areas along the site's northern and eastern property lines, a pathway connection through the site to future development to the north and an offsite pathway at the site's southeast corner to the Novi Dog Park to the south. Two access points (one boulevarded) are proposed off of Nick Lidstrom Drive.

Staff and Consultant Comments and Recommendations

Staff and consultants have completed a review of the rezoning and concept plan.

The planning review letter recommends approval of the plan noting that the applicant has presented a reasonable alternative to the proposed Master Plan designation of Community Office and Industrial, Research Development and Technology and that the proposed property lines maintain a significant buffer (~350 ft.) from the adjacent railroad

and industrial uses to the east of the subject property. Furthermore, the proposed multiple-family use would complement the existing multiple-family uses to the south and in the general area. Additionally, the submittal and approval of a PRO Agreement and concept plan provides assurances to the City of the manner in which the property will be developed.

The engineering review letter notes the rezoning with conceptual plan would result in a negligible impact on public utilities and both the engineering and fire review letters note items to be addressed on the Preliminary Site Plan submittal.

The traffic review lists the required waivers previously detailed for the cul-de-sac design and driveway spacing and also states the proposed zoning and concept plan would generate less traffic than development could generate under the existing zoning. There are minor items to be addressed on the Preliminary Site Plan submittal.

The landscape review notes several minor changes to be addressed in subsequent submittals. The applicant has requested waivers for the reduced berm height and lack of berms along the east, west and north property boundaries. Staff supports these waivers with conditions.

The wetlands and woodlands review letter notes there are significant natural features on the site. The applicant has completed the woodland and wetland surveys. Additional items to be addressed on the Preliminary Site Plan submittal are included in the review letter. A conservation easement has been proposed for undisturbed natural features.

The façade review letter states that the elevations represent an enhancement to what may otherwise be constructed in the absence of the PRO. A Section 9 waiver is recommended for the underage of brick and overage of siding and asphalt shingles.

Public Benefit

As part of the PRO, the applicant is required to provide a public benefit that would demonstrate more than just the usual benefits associated with the standard rezoning and development of the property. The applicant has offered the following benefits as part of their application materials.

1. Attractive use of property with high-quality residences in an area adjacent to City-owned property.
2. Construction of pathway for public use through site from Nick Lidstrom Drive to north property line for connection to future development of the non-residential property to the north.
3. Construction of offsite pathway to new Novi Dog Park commencing from site's southeast corner along rear property line of Novi Sport's Club as well as a connection to the existing pathway along Nick Lidstrom Drive.
4. Pedestrian directional signage along proposed pathways.
5. Preservation of natural features along north and east property lines and remaining wetlands, wetland buffer areas and woodlands on site through the execution of a conservation easement.

The construction of pathways, both to the north and south of the site are enhancements that would benefit the public that would not be required as part of development. Coordination with the property to the north will be required to make the pedestrian connection if that is determined to be appropriate when that property is proposed for development. The addition of a pathway connecting directly to Nick Lidstrom Drive and

pedestrian directional signage in particular will provide greater access to the site and a more significant benefit to the public at large than was previously proposed. Access easements will need to be provided in order to the pathways fully open to the public.

Ordinance Deviations Requested

Included with the proposed PRO Concept Plan, the applicant is seeking positive consideration of several Zoning Ordinance deviations as listed in the Planning Review. The Zoning Ordinance permits deviations from the Ordinance provided that the City Council finds 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."*

The deviations requested are the following:

1. Circulation and Driveway Spacing Waivers: A waiver from the Design and Construction Standards would be required to allow the proposed cul-de-sac to be built to standards less than the general layout standards for local streets. This waiver is recommended only if the applicant satisfies items i. through iv. under point 12.C in the traffic review letter. Additionally, a same-side driveway spacing waiver would be required for the south access drive (84 feet provided, 105 feet required).
2. Landscape Waivers: Staff supports waivers for a reduction in minimum berm height from 6 feet to 4-5 feet along the southern property boundary and the lack of berms along the east, west and north property boundaries.
3. Building Materials: Staff recommends a Section 9 waiver be granted for the underage of brick and the overage of siding and asphalt shingles provided the applicant complies with those conditions noted in the façade review letter.
4. Building Orientation: Section 2400, footnote e requires buildings be oriented at a 45° angle to all property lines. The proposed building orientation ranges from 50 degrees to 90 degrees.
5. Setback Coverage: Section 2400, footnote e states not more than 30 percent of the required front, side or rear yard building setback areas can be used for off-street parking, maneuvering lanes, service drives or loading areas. The applicant has proposed 47 percent coverage and has indicated they would like deviation from this requirement included in the PRO Agreement.
6. Building Setbacks: Per Section 2400, the minimum setback is 75 feet from the property line. The southeastern most building is setback 66 feet from the angled property line. The applicant has indicated they would like deviation from this requirement included in the PRO Agreement.

PRO Conditions

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 units, the location of the proposed detention ponds, location of the proposed pathways and the preservation of a large area of natural features. Also included were conceptual renderings of unit styles and materials proposed for the development. The only "terms" or "conditions" within the submittal are the design elements illustrated on the conceptual plan and the public benefits outlined in the corresponding letter.

Public Hearing and Planning Commission Recommendation

The public hearing for the rezoning request was held by the Planning Commission on November 12, 2014. At that meeting, the Planning Commission recommended approval of JSP 14-18 with Zoning Map Amendment 18.707 to rezone property in Section 26, on the

east side of Novi Road, south of Ten Mile Road from I-1, Light Industrial and OS-1, Office Service to RM-1, Low Density Low-Rise Multiple-Family Residential with a Planned Rezoning Overlay. Relevant draft minutes from the Planning Commission meeting are attached.

City Council Action

If the City Council is inclined to approve the rezoning request with PRO at this time, the City Council's motion would be to direct the City Attorney to prepare a PRO Agreement to be brought back before the City Council for approval with specified PRO Conditions.

RECOMMENDED ACTION:

Tentative indication that Council may approve the request of Novi Ten Townhomes JSP14-18 with Zoning Map Amendment 18.707 to rezone the subject property from I-1 (Light Industrial) and OS-1 (Office Service) to RM-1 (Low Density Low-Rise Multiple-Family Residential) with a Planned Rezoning Overlay Concept Plan and direction to the City Attorney to prepare a proposed PRO Agreement with the following ordinance deviations:

a. Construction of proposed cul-de-sac to standards less than the general layout standards for local streets as described in the traffic review letter dated September 9, 2014;
b. Deficient same-side driveway spacing for south access drive (84 feet provided, 105 feet required);
c. Reduction in minimum berm height from 6 feet to 4-5 feet along the southern property boundary;
d. Lack of berms along the east, west and north property boundaries;
e. Section 9 façade waiver for the underage of brick and overage of siding and asphalt shingles;
f. Building orientation to property lines greater than 45 degrees (50 degrees to 90 degrees proposed);
g. Off-street parking, maneuvering lanes, service drives and/or loading areas covering 47 percent of the required front, side and rear yard building setback areas (maximum 30 percent coverage permitted);
h. Reduction in required building setback for the southeastern most building (75 feet required, 66 feet provided);

And subject to the following conditions:

a. Applicant must satisfy items i. through iv. under point 12.C in the traffic review letter dated September 9, 2014;
b. Applicant must provide understory plantings on the proposed berm along the southern property boundary to assure adequate buffering;
c. Applicant relocating interior sidewalks further away from the proposed roadway where feasible as indicated in the applicant's response letter;
d. Applicant providing pedestrian style lighting along the frontage of City streets as indicated in the applicant's response letter;
e. The staff and council will work with the owner and developer at the time of contract negotiations regarding the arsenic issues raised by Member Anthony during the public hearing and comments; and
f. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and items listed in those letters begin addressed on the Preliminary Site Plan.

This motion is made because:

a. The applicant has presented a reasonable alternative to the proposed Master Plan designation of Community Office and Industrial Research Development and Technology as outlined in the planning review letter;

b. The proposed property lines maintain a significant buffer (approximately 350 feet) from the adjacent railroad and industrial uses to the east of the subject property;
c. The proposed multiple-family use would complement the existing multiple-family uses to the south and in the general area;
d. The plan meets several goals, objectives and implementation strategies included in the Master Plan for Land Use as outlined in the planning review letter;
e. The applicant has made an effort to minimize impacts to on-site wetlands to the extent practical and has offered to preserve all remaining natural features via a conservation easement; and
f. The site will be adequately served by public utilities and the proposed zoning and proposed use represents fewer peak hour trips than the current zoning would require.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Markham				

	1	2	Y	N
Council Member Mutch				
Council Member Poupard				
Council Member Wrobel				

Maps

Location

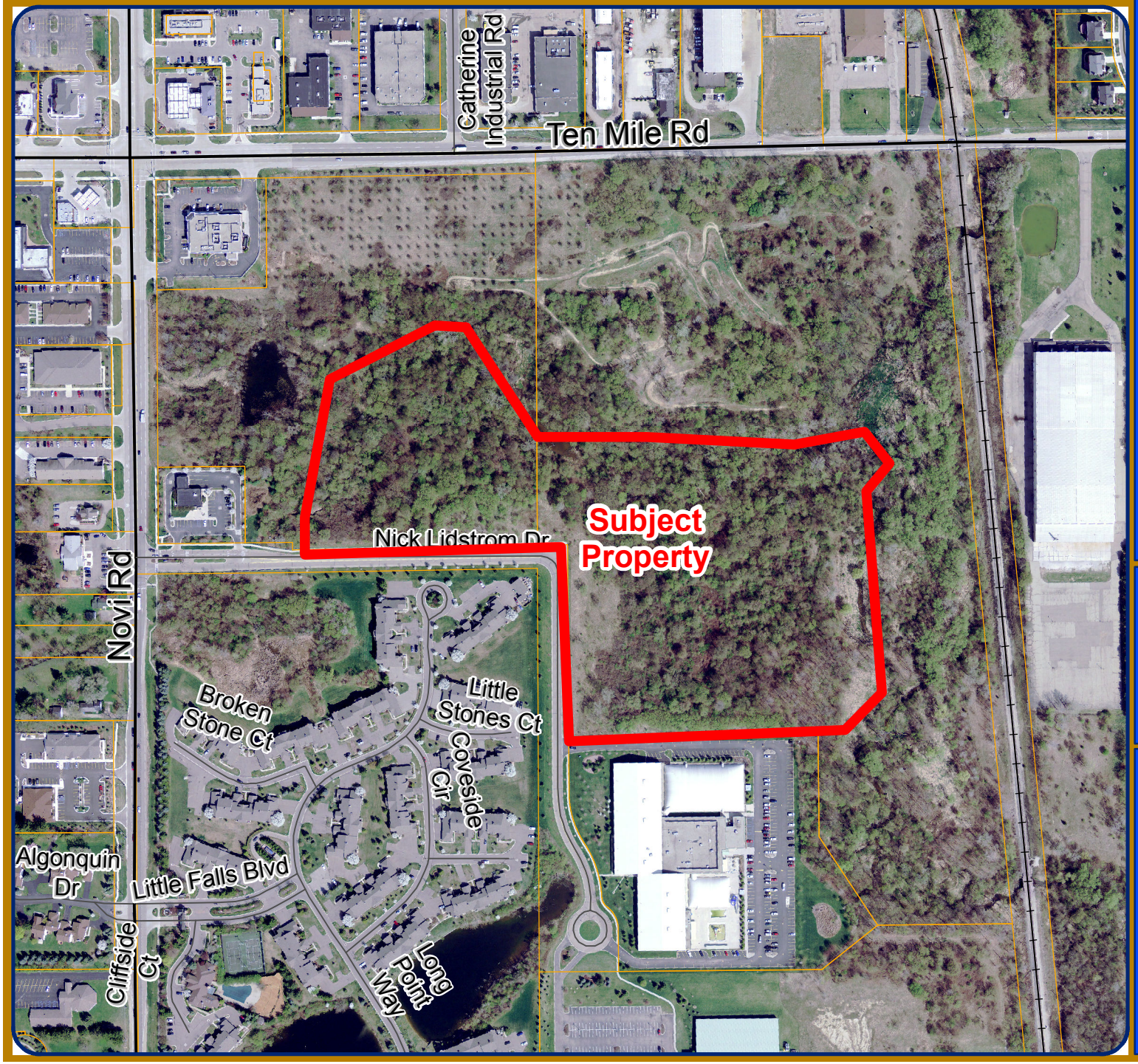
Zoning

Future Land Use

Natural Features

JSP14-18 Novi Ten Townhomes PRO

Location



Map Legend

Subject Property

Feet

0 105 210 420 630

1 inch = 374 feet

City of Novi

Planning Division
Community Development Dept.
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

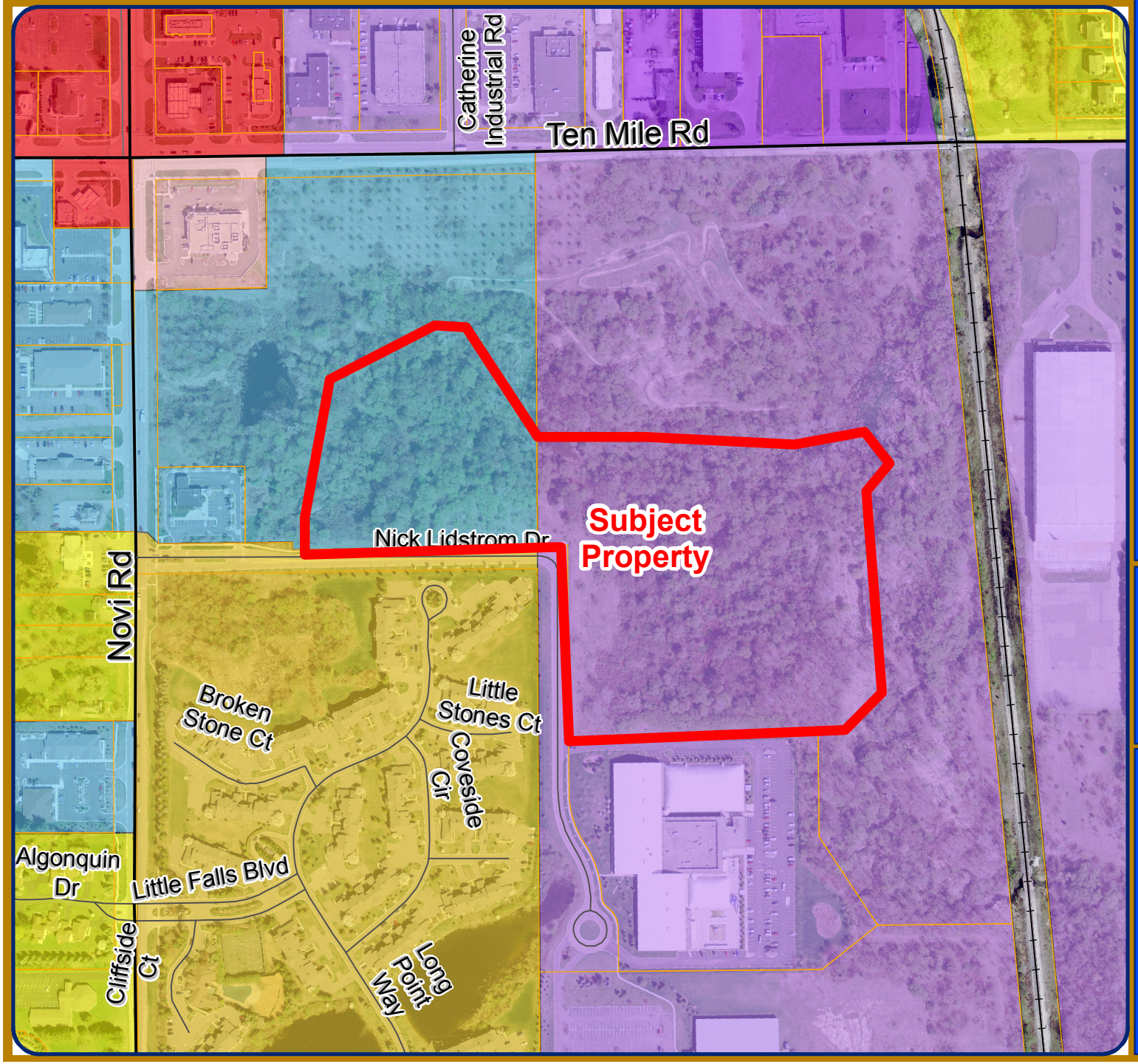
Map Author: Sara Roediger
Date: 06-30-14

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.

JSP14-18 Novi Ten Townhomes PRO

Zoning



Map Legend

- **Subject Property**
- R-4: One-Family Residential
- RM-1: Low-Density Multiple Family
- B-1: Local Business
- B-3: General Business
- I-1: Light Industrial
- I-2: General Industrial
- OS-1: Office Service

Feet

0 105 210 420 630

1 inch = 374 feet

City of Novi
Planning Division
Community Development Dept.
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

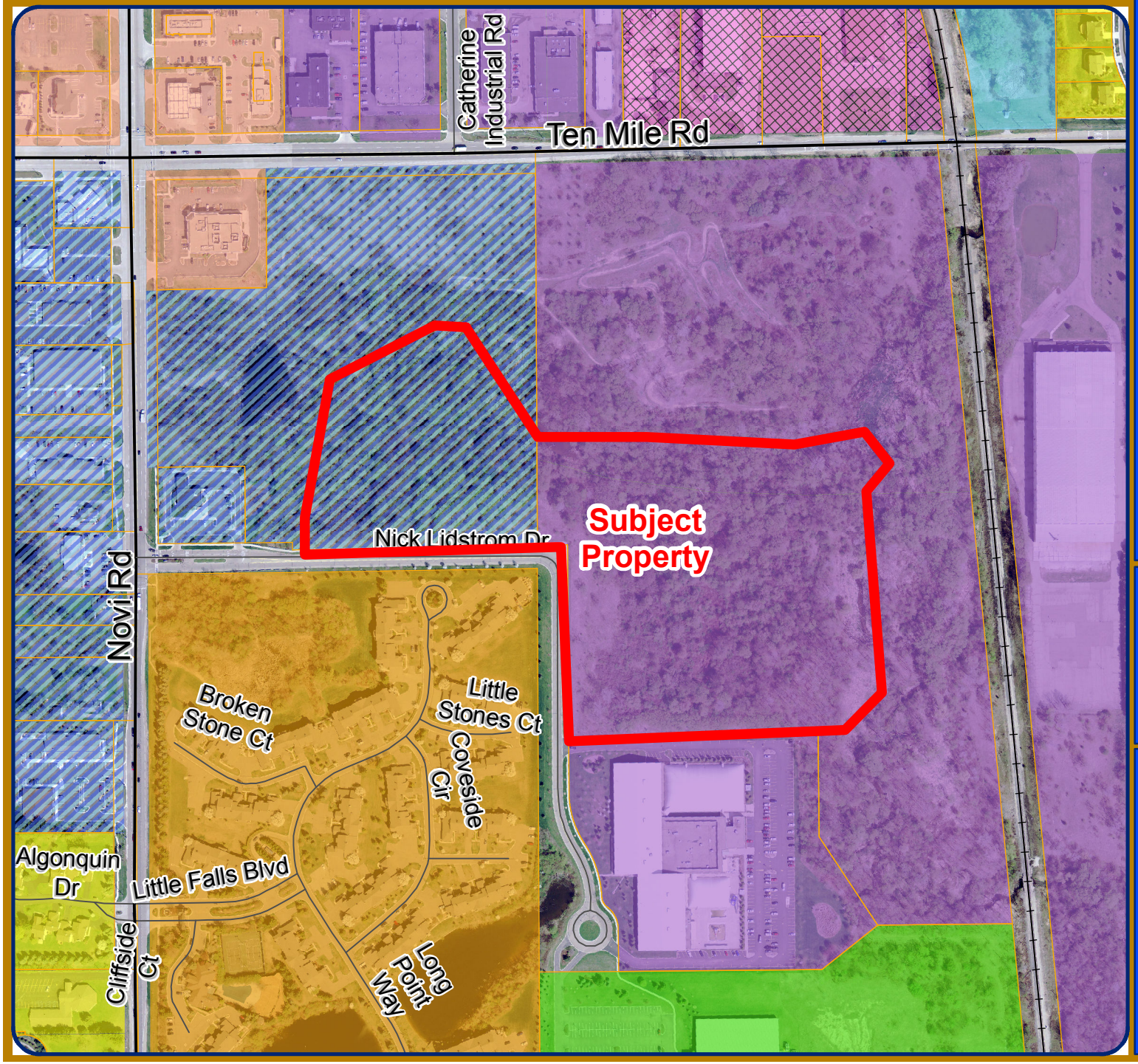
Map Author: Sara Roediger
Date: 06-30-14

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.

JSP14-18 Novi Ten Townhomes PRO

Future Land Use



Map Legend

- Subject Property
- Single Family
- Multiple Family
- Community Office
- Industrial R&D Technology
- Heavy Industrial
- Local Commercial
- Public
- Public Park

Feet

0 105 210 420 630

1 inch = 374 feet

City of Novi

Planning Division
Community Development Dept.
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

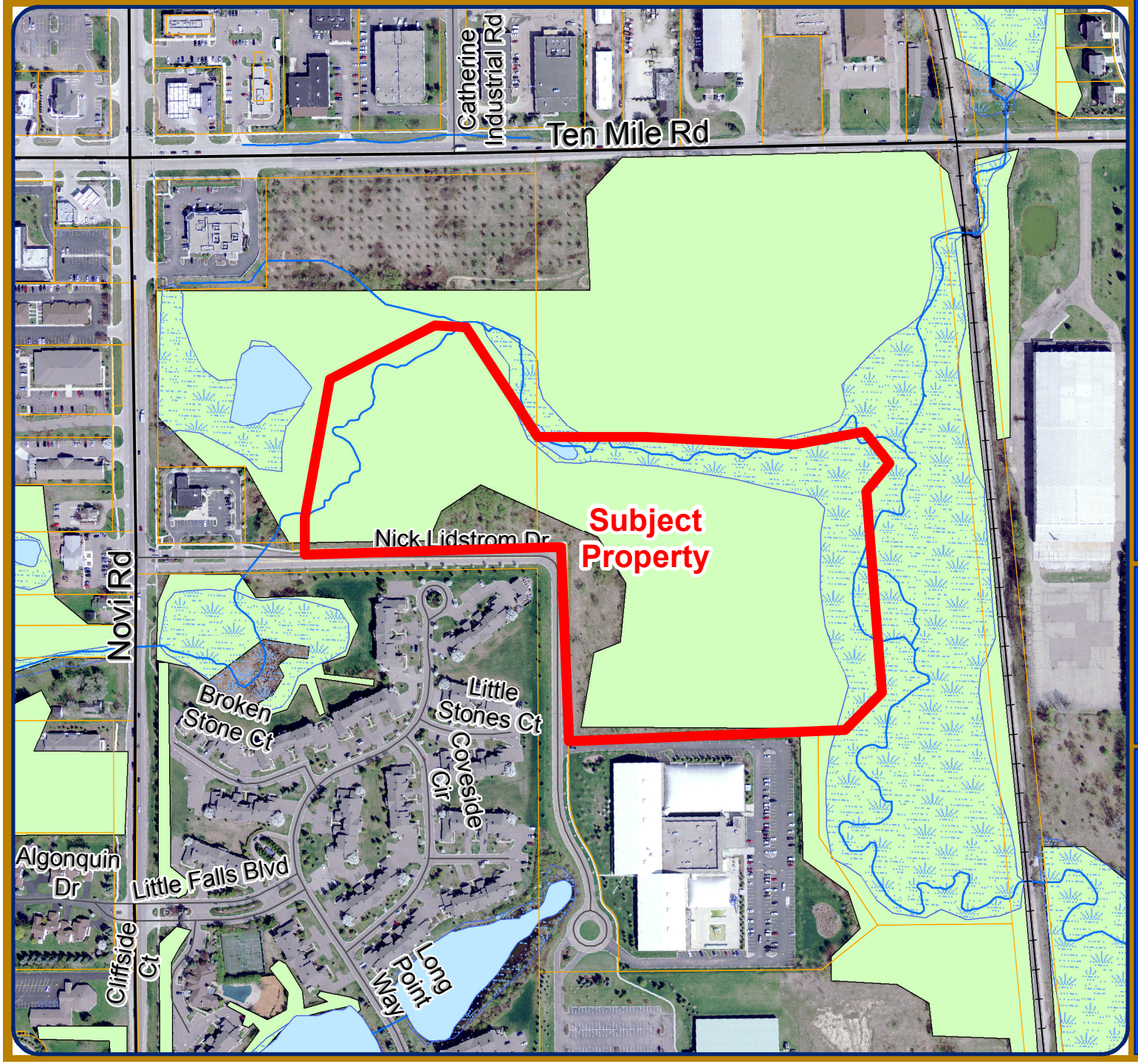
Map Author: Sara Roediger
Date: 06-30-14

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.

JSP14-18 Novi Ten Townhomes PRO

Natural Features



Map Legend

- Subject Property
- Waterways
- Pond
- Wetlands
- Woodlands

Feet

0 105 210 420 630

1 inch = 374 feet

City of Novi
Planning Division
Community Development Dept.
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

Map Author: Sara Roediger
Date: 06-30-14

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

Landscape Summary

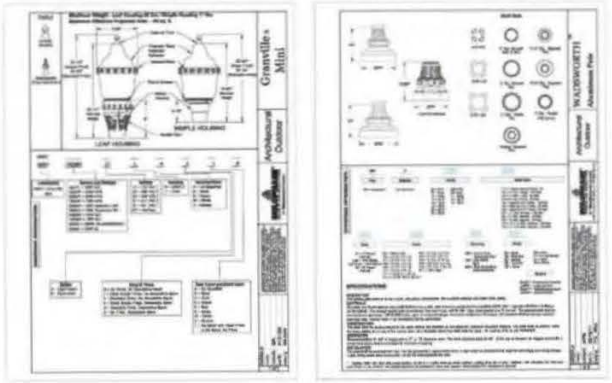
Street Trees	
Street Frontage	4,946 l.f.
Trees Required	141 Trees (4,946 / 35')
Trees Provided	141 Trees
Street Lawn	
Street Frontage	1,139 l.f.
Trees Required	25-3 Trees (1,139 / 45')
Trees Provided	25 Trees (20 Existing)
Greenbelt	
Greenbelt Length	1,139 l.f.
Trees Required	33 Trees (1,139 / 35')
Trees Provided	33 Trees
Sub-Canopy Trees Required	46 Trees (1,139 / 25')
Sub-Canopy Trees Provided	46 Trees
Detention Pond Plantings	
Freeboard Length	1,161 l.f.
Planting Required	812 l.f. (70%)
Planting Provided	870 l.f. (75%)

Woodland to Remain

Nick Lidstrom Drive

Entry Light
34' Greenbelt
25' Corner Clearance

Entry Light



811
Know what's below. Call before you dig.

ALLEN DESIGN
LAND PLANNING / LANDSCAPE ARCHITECTURE
557 CARPENTER • NORTHVILLE, MI 48167
248.467.4668 • Fax 248.349.0559
Email: jca@allendesignstudio.com

Toll Brothers

Seal:

Title:
Landscape Plan

Project:
Novi Ten Townhomes
Novi, Michigan

Prepared for:
Toll Brothers
39665 William K. Smith Dr., Suite B
New Hudson, Michigan 48165

Revision:	Issued:
Submission	August 13, 2014

Job Number:
13-022

Drawn By:	Checked By:
jca	jca

0' 30' 60'
NORTH
1"=60'

Sheet No.
L-1

Planning Commission Draft Meeting Minutes
Excerpt – November 12, 2014

PLANNING COMMISSION MINUTES

CITY OF NOVI
Regular Meeting
NOVEMBER 12, 2014 7:00 PM
Council Chambers | Novi Civic Center | 45175 W. Ten Mile
(248) 347-0475

CALL TO ORDER
The meeting was called to order at or about 7:00 PM.

ROLL CALL
Present: Member Anthony, Member Greco, Member Lynch, Chair Pehrson, Member Zuchlewski
Absent: Member Baratta (excused), Member Giacopetti (excused)
Also Present: Barbara McBeth, Community Development Deputy Director; Kristen Kapelanski, Planner; Jeremy Miller, Staff Engineer; Tom Schultz, City Attorney; Pete Hill, Environmental Consultant

PLEDGE OF ALLEGIANCE
Member Zuchlewski led the meeting attendees in the recitation of the Pledge of Allegiance.

APPROVAL OF AGENDA
Moved by Member Greco and seconded by Member Anthony:

VOICE VOTE ON THE AGENDA APPROVAL MOTION MADE BY MEMBER GRECO AND SECONDED BY MEMBER ANTHONY:

Motion to approve the November 12, 2014 Planning Commission Agenda. *Motion carried 5-0.*

PUBLIC HEARINGS

2. NOVI TEN TOWNHOMES, JSP14-18, WITH REZONING 18.707

Public hearing of the request of Toll Brothers for Planning Commission's recommendation to City Council for rezoning of property in Section 26, on the south side of Novi Road, east of Ten Mile Road from I-1, Light Industrial and OS-1, Office Service to RM-1, Low Density, Low-Rise Multiple-Family Residential with a Planned Rezoning Overlay. The subject property is approximately 20.9 acres.

Planner Kapelanski said the applicant is proposing a rezoning with PRO to develop 93 attached condominium units on a 21 acre site in the southeast quadrant of the intersection of Novi Road and Ten Mile Road. The parcels are currently made up of vacant land. Land to the north of the proposed parcel lines and fronting on Ten Mile Road is vacant. To the east is industrial land and the Novi Ridge apartments. To the west is a Walgreen's store, a bank and River Oaks West multiple-family development, which also borders the property on the south. Also to the south are the Sports Club of Novi and the Novi Ice Arena. The subject property is zoned I-1, Light Industrial and OS-1, Office Service. The applicant has proposed RM-1 zoning. The property to the north is zoned I-1 and OS-1. The property to the east, opposite the railroad tracks, is zoned I-1 and RM-1. The property to the south is zoned I-1 and RM-1 and property to the west is zoned OS-1 and RM-

1. The future land use map indicates community office and industrial uses for the subject property as well as the property to the north. The properties to the east are planned for industrial uses. The properties to the south are master planned for industrial and multiple-family and the area to the west is planned for community office uses. The proposed rezoning is contrary to the current recommendations of the Future Land Use map. There are significant amounts of natural features on the site. Impacts to wetlands and wetland buffer areas have been minimized to the extent practical. However, woodland impacts are unavoidable if the site is to be developed for residential use. Permits for wetland and woodland impacts would be required at the time of site plan review and approval.

The applicant is proposing 93 attached condominium units. Given it's a history as a former orchard, a large part of the site contains contamination that must be mitigated for residential use. The applicant intends to remove the affected dirt and construct a berm along Ten Mile Road with the fill. This will be further evaluated at the Preliminary Site Plan submittal when more detailed plans will be required. Planning staff has recommended approval of the proposed rezoning to RM-1 with a PRO as the plan proposes a reasonable alternative to the recommendations of the master plan for the reasons outlined in the planning review letter. The plan also meets several goals, objectives and implantation strategies in the master plan. A PRO requires the applicant propose a public benefit that is above and beyond the activities that would occur as a result of the normal development of the property. The applicant has proposed the construction of a pathway for public use through the site from Nick Lidstrom Drive to the north property line for a connection to a future development to the north as well as an offsite pathway to the new Novi Dog Park and a connection to the existing pathway along Nick Lidstrom Drive. Pedestrian directional signage is proposed along the pathways. The applicant has also offered to preserve the remaining onsite natural features with a conservation easement. Ordinance deviations have been requested by the applicant for inclusion in the PRO Agreement for the following items: to allow the proposed cul-de-sac to be built to standards less than the general layout standards for local streets, deficient same-side driveway spacing; reduction in minimum berm height along the southern property boundary; lack of berms along the east, west and north property boundaries; façade waiver for the overage of siding and asphalt shingles; building orientation to the property line greater than 45 degrees; off-street parking, maneuvering lanes and service drives covering more than 30% of the required front, side and rear yard building setback areas; and a reduction in the required building setback for the southeastern most building. The Facade Review recommends approval stating the proposed facades would be considered enhancements over the minimum ordinance requirements. The engineering, traffic, landscape, wetland, woodland and fire reviews all recommend approval and note items to be addressed on the Preliminary Site Plan submittal. The Planning Commission is asked to make a recommendation on the proposed rezoning with PRO this evening.

Mathew Quinn spoke on behalf of Toll Brothers. We've got Jason Minock, the Toll division vice president; Mike Noles, the Toll land development vice present; Pat Keast for engineering; and Jim Allen the landscape architect. They are all ready to answer any questions that you have tonight. For this rezoning we appreciate the favorable letters from the staff and consultants. I think it shows that they see the merit to this rezoning and how it fits in with the future master plan when it's modified again here sometime this year or next year. And ending up with 92 beautiful homes which are 2,000 to 2,600 square feet each, will bring a good tax value to the city. With all of the nature areas that they're saving, it will be a great benefit to the city. The path that they're going to take to the dog park not only stops at the dog park, it goes all the way through the dog park and ends up at the driveway there on Nick Lidstrom Drive, south of the ice arena. So that's going to asphalt path and it will be open to the public all the way. Plus, as was stated, the path through the project to the north, whenever the development along Ten Mile is developed, we

will already have constructed a bridge across that area that's there so that the next project will just be able to continue that right to Ten Mile. So you'll have the pedestrian bike link from Ten Mile all the way to ice arena and sports club. So we're here to answer any questions that you may have this evening.

Member Lynch said I was unable to download the whole package, I thought we already approved this, but apparently what we approved on was just a concept plan?

Deputy Director McBeth said you may recall that this came to the Master Plan and Zoning Committee for a brief review and discussion.

Member Lynch said ok I guess since I didn't read the detail, I was comfortable with the prior review and now that it's presented I'm certainly comfortable with what they're proposing. I think it is a benefit in the area and I don't have any problem changing the zoning. I think it actually is a better use of the land than what we currently had it zoned so I'm in support of this.

Member Anthony said I was just going to echo Member Lynch's comments. I think it attracts the kind of residential development that I know Toll Brothers is keen on and the product that they're going to bring in. I think it's going to be a great addition into this area. I would also be in favor of this.

Member Greco said when I first looked at this project and I saw the location, I thought 'uh-oh, what is it now?' because we discussed this property before but then once I saw it, I was very happy with the project. My one question or concern is, because I'm regularly on Nick Lidstrom Drive going to the sports club, with the townhomes going in there without some going to the north and a pathway going there, is Nick Lidstrom Drive as the only way in and out to what will now be the townhomes, sports club, and ice arena? It looks like staff and everybody is satisfied that that drive, at least for right now, can satisfy that.

Mr. Quinn said I think the traffic study showed 600 trips per day coming out of here, one way trips. With the traffic light at Novi and Nick Lidstrom, it's a timed light so it senses the traffic. I don't think that the traffic consultant had any problems with the traffic flow at all.

Member Greco said that concludes my comments. I will be supporting this.

Member Anthony said I like this development too and I like the rezoning, I think it fits better. Kristen, I might have misunderstood you, did you say a berm along Ten Mile was part of this?

Planner Kapelanski said that will be part of this. As part of the remediation for the contamination on that site, they need to put that dirt somewhere.

Member Anthony said what type of contamination is that?

Planner Kapelanski said I believe its arsenic contamination.

Mr. Quinn said this is an old orchard. So its arsenic that was applied to the apples and the trees and it's been there for ages. So it's going to be scraped off and then along Ten Mile Road it'll be created into a berm that will be capped and that's allowed by the MDEQ.

Member Anthony said are we viewing that property along Ten Mile as being developed at some point in the future?

Planner Kapelanski said it would still be available to be developed. It would remain OS-1 and I-1. In some instances, particularly if there is parking in the front yard of an I-1 district, a berm is required to screen that parking. So a berm could work well. I don't know what the future plans are as far as what the owner of the property will do.

Member Anthony asked what are the continuing obligations you would have in maintaining that berm with the arsenic contamination.

Mr. Quinn said it's my understanding that it's going to be seeded. So you'll have the grass growing on the berm and so that keeps the dirt stationary underneath the sod or seed.

Member Anthony said and this property in the berm has open access to people on Ten Mile Road walking down.

Mr. Quinn said there's no sidewalk there at this point in time. Any development in the future would have to put a sidewalk there.

Mike Noles, Toll Brothers, said we're cleaning this up to what the MDEQ calls residential standards. So there's a couple different ways that you can handle arsenic tainted soils. The arsenic was used as a pesticide on apple orchards for fifty years and we still find that in historic orchard areas. And for residential standards, you'd have to have three feet of clean soil on top of it. They just don't want direct contact with that. Now depending on what happens on this property, it could be developed as residential in the future because we'll be following those MDEQ residential standards. However, the standards are a little bit lighter in commercial, industrial, or office uses where you can put it underneath parking lots and pave a parking lot on top of it and that suffices for the MDEQ remediation standards for remediation of those soils. So essentially what you're doing is making it not accessible to direct contact and that is acceptable to the MDEQ and that's what we'll be doing in this particular case.

Member Anthony said so let me ask a few questions. So I would assume that the property that the apartments are on is one separate legal parcel so you obtain your residential closure. Are you submitting the wrap to the MDEQ for their review and approval?

Mr. Noles said yes that's right. So the 21 acres subject to the rezoning this evening will have closure, no further action required, from the environmental scientists who originally tested the soils and determined the chemistry. So they'll be out there full time during the remediation to ensure that all of it is removed from the residential site so that we can have a clean closure for that site.

Member Anthony said sure and then the other site where you are building the berm, that's a separate legal parcel?

Mr. Noles said it will be, yes. Currently, its one legal parcel but we're splitting it into two legal parcels.

Member Anthony said so at the time when you first acquired the property, was it all one parcel or two separate?

Mr. Noles said well we haven't acquired any property yet. So we have a contract to acquire the property, so it's all still one legal parcel.

Member Anthony said he understood. So will you be acquiring the property with the berm?

Mr. Noles said no, we will not be acquiring the property with the berm. We will just acquire the 21 acres subject to the rezoning this evening.

Member Anthony said do you know if this property is currently designated as a facility with MDEQ.

Mr. Noles said it is not a facility. The DEQ does not designate historical use of arsenic as a pesticide as a facility or the whole state would be a facility.

Member Anthony said but there's still a need to prevent exposure to residential property.

Mr. Noles said yes, there are MDEQ requirements for residential development and that is one of them for sure.

Member Anthony said ok, let's focus on the property that's left to the north because it's clear this development you'll have remediated the arsenic. It won't be there. You'll go through DEQ review. So now let's look back up at the property at the north where the arsenic is then placed as the berm. That now becomes the responsibility of the owner for the property to the north. Is that portion designated as a facility?

Mr. Noles said no.

Member Anthony said how then, if we're not designated as a facility for the place where the arsenic is, yet it presents hazard or risk to the residential property, are we assured that the owner of the property to the north will maintain their continuing obligations of that berm. Even though there is no sidewalk there, it's still open. You still have kids that ride their bikes there. I mean I look at the aerial photo and you see all the dirt trails and bike trails through there. So you know that they're riding their bikes through that area. So I mean what kind of controls do we have to ensure that the berm, with its sod and cover, will be inspected and maintained. It would be called continuing obligation so that it does prevent future exposure.

Mr. Noles said MDEQ does specify what those continuing obligations are and their different depending on how you ultimately dispose of the soils. So there are some areas of the site that have steeper slopes. That if we were to do this in a different configuration, it would require monitoring wells over the years and periodic testing just to watch that. But in this particular application and the way that we're doing it, following the MDEQ requirements, there are very little if any requirements going forward once we have closed the site. We're remediated through residential standards with the cap.

Member Anthony said McDowell's is a good, reputable firm. They do a great job. So the development that you own, I'm good with that. I'm sure the way the berm will be initially constructed will be fine because that also I assume be under you environmental consultants review. So I'm fine with that. Where I have the concern and part of the problem here is that they don't own it and without a facility designation on the property, I don't know if DEQ has any legal jurisdiction in order to ensure its fine throughout the years. Arsenic is a really difficult thing in our state. I don't think the state has any legal jurisdiction to do inspections and ensure that that cap for that berm is maintained. And we do know, from aerial photos and from walking and inspecting the property, there are trails back there where people are accessing the property

and you can wear a trail within that and it causes problems. And this may be independent of your development because there's a new owner, but it creates a new issue for us in how do we ensure that someone is inspecting and maintaining that the landscaping is being kept in order and there's no bare spots. We can require a geo-tech style that is put down before it's sodded or landscaped, therefore, you have an obvious visual site in the event that you have wearing and boom there is the orange tech style, or whatever color it is, you see it and then you know that some violation is issued for the owner to repair. The burden is going to fall on the city to inspect because with DEQ, if this is not a facility, they are not going to have any jurisdiction on it. You know what, it's probably better not to make it a facility at this time. But we still need some mechanism in order to inspect and require maintenance on that berm.

City Attorney Schultz said right. So the handy thing for this particular developer is there is the opportunity to put in place some mechanism. This is a PRO. There's a contract between the property owner and the city. As part of that overall contractual relationship, we would have the ability to make sure that, even the north property, is properly documented in some sort of agreement accorded against the property to make sure all those things happen. But I guess I would also say this is their proposal as to what to with the development. As part of the city's future review, we're going to decide whether or not that plan actually works. If it doesn't work, they're going to have to find some other way to deal with that dirt but will continue to have the opportunity to do all of the things that you said because the city's engineer is taking a look and telling us what we need to do to make sure this is safely done.

Member Anthony said and it's important that there is a little bit more detail given to you here in that the problem with arsenic, in that it was used for agricultural purposes, is that there's a clause in DEQ's definition of contamination that a release must occur first. There's an exemption for releases if it's an agricultural chemical applied according to the rules of the manufacturer. That's how arsenic, above a residential exposure level, has a risk for residential that you want to remove it but yet doesn't trigger your facility designation. It doesn't mean that it doesn't pose a human health risk, it means that the regulatory loop hole prevents it. It can be used to not trigger it as a facility. I don't know how to incorporate that. It just creates a new issue up there on Ten Mile Road.

City Attorney Schultz said so if the Planning Commission is ok with concept as a general proposition without all of the final details, then that would be your recommendation to council. That council will decide whether it's ok with that. Then what they do at the council level is they direct our office to work with the administration and consultants to draft the agreements. That's the point which we raise those issues. We have the minutes of the Planning Commission and everybody hearing their concerns. With our environmental people to make sure that everything we're supposed to do can be done. Or we decide that we don't think it can be done.

Member Anthony said is there a way to add in the approval that somewhere in the agreement that staff works with the owner of the northern property to define continuing obligations to prevent future exposure above DEQ residential criteria. The reason I word it that way is because if it's worded according to DEQ regulations, it fits the loop hole and we would do nothing. But if we say that continuing obligations to prevent human exposure based on DEQ residential levels, now you've worked around that exclusion.

City Attorney Schultz said so the short answer is we will take those comments and concerns and make sure that our consultants for the city understand that and if that turns out that that's the recommendation, then absolutely. There is a mechanism in the agreement to do exactly that if that's what the city's consultants decide pertinent.

Member Anthony said ok, alright. I have no problem with the development. It's just once you move the arsenic up to Ten Mile in just a berm, it's just another issue we need to address.

Moved by Member Greco and seconded by Member Anthony:

ROLL CALL VOTE ON THE NOVI TEN TOWNHOMES WITH ZONING MAP AMENDMENT 18.707 APPROVAL MOTION MADE BY MEMBER BARATTA AND SECONDED BY MEMBER ANTHONY:

In the matter of the request of Novi Ten Townhomes JSP14-18 with Zoning Map Amendment 18.707 motion to recommend approval to the City Council to rezone the subject property from I-1 (Light Industrial) and OS-1 (Office Service) to RM-1 (Low Density Low-Rise Multiple-Family Residential) with a Planned Rezoning Overlay for the development of a 93 unit condominium project. The recommendation shall include the following ordinance deviations:

a. **Construction of proposed cul-de-sac to standards less than the general layout standards for local streets as described in the traffic review letter dated September 9, 2014;**
b. **Deficient same-side driveway spacing for south access drive (84 ft. provided, 105 ft. required);**
c. **Reduction in minimum berm height from 6 ft. to 4-5 ft. along the southern property boundary;**
d. **Lack of berms along the east, west and north property boundaries;**
e. **Section 9 façade waiver for the underage of brick and overage of siding and asphalt shingles;**
f. **Building orientation to property lines greater than 45º (50º-90º proposed);**
g. **Off-street parking, maneuvering lanes, service drives and/or loading areas covering 47% of the required front, side and rear yard building setback areas (maximum 30% coverage permitted);**
h. **Reduction in required building setback for the southeastern most building (75 ft. required, 66 ft. provided);**

And subject to the following conditions:

a. **Applicant must satisfy items i. through iv. under point 12.C in the traffic review letter dated September 9, 2014;**
b. **Applicant must provide understory plantings on the proposed berm along the southern property boundary to assure adequate buffering;**
c. **Applicant relocating interior sidewalks further away from the proposed roadway where feasible as indicated in the applicant's response letter;**
d. **Applicant providing pedestrian style lighting along the frontage of City streets as indicated in the applicant's response letter;**
e. **The staff and council will work with the owner and developer at the time of contract negotiations regarding the arsenic issues raised by Member Anthony during the public hearing and comments; and**
f. **The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and items listed in those letters begin addressed on the Preliminary Site Plan.**

This motion is made because:

a. **The applicant has presented a reasonable alternative to the proposed Master Plan designation of Community Office and Industrial Research Development and Technology as outlined in the planning review letter;**
b. **The proposed property lines maintain a significant buffer (approximately 350 ft.) from the adjacent railroad and industrial uses to the east of the subject property;**

c. The proposed multiple-family use would complement the existing multiple-family uses to the south and in the general area;
d. The plan meets several goals, objectives and implementation strategies included in the Master Plan for Land Use as outlined in the planning review letter;
e. The applicant has made an effort to minimize impacts to on-site wetlands to the extent practical and has offered to preserve all remaining natural features via a conservation easement; and
f. The site will be adequately served by public utilities and the proposed zoning and proposed use represents fewer peak hour trips than the current zoning would require.

Planning Review

PLAN REVIEW CENTER REPORT

September 11, 2014

Planning Review

Novi Ten Townhomes

JSP14-18 Rezoning 18.707 with a PRO

Petitioner

Toll Brothers

Review Type

Rezoning request from I-1 Light Industrial and OS-1, Office Service to RM-1 Low-Density Multiple-Family with Planned Rezoning Overlay (PRO) – Revised Concept Plan

Property Characteristics

- Site Location: South of the Novi Road and east of Ten Mile Road (Section 26)
- Site Zoning: I-1, Light Industrial and OS-1, Office Service
- Adjoining Zoning: North: I-1 and OS-1; East: I-1 (across railroad tracks), RM-1, Low Density, Low-Rise Multiple Family Residential (just east of I-1); South: I-1 and RM-1; West: OS-1 and RM-1
- Current Site Use: Vacant land
- Adjoining Uses: North: Vacant; East: Industrial, Novi Ridge Apartments (east of industrial use); South: River Oaks West Multi-Family, Sports Club of Novi and Novi Ice Arena; West: Walgreen's, bank, and River Oaks West Multi-Family
- School District: Novi Community
- Site Size: 20.09 acres
- Plan Date: 8/18/14

Project Summary

The petitioner is proposing a Zoning Map amendment for a portion of two vacant parcels that total 20.09 acres located southeast of Ten Mile and Novi Roads, accessed off of Nick Lidstrom Drive in Section 26 of the City of Novi from I-1 Light Industrial and OS-1, Office Service to RM-1 Low-Density Multiple-Family. The current zoning is split between OS-1, Office Service and I-1, Light Industrial. The applicant states that the rezoning is intended to allow for the development of a 93 unit high quality, owner occupied condominium project.

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 I-1 and OS-1 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 years, the rezoning and PRO concept plan expires and the agreement becomes void.

The applicant has proposed a 93-unit multiple-family development. The PRO concept plan shows two on-site detention ponds on the site, preservation of wetland areas along the site's northern and eastern property lines, a pathway connection through the site to future development to the north, and an offsite pathway at the site's southeast corner to the Novi Dog Park to the south. Two access points (one boulevarded) are proposed off of Nick Lidstrom Drive. The applicant has made some minor

adjustments to the concept plan and provided additional information to address comments from the previous review.

Recommendation

Provided the applicant alters the proposed elevations to at least comply with the minimum façade ordinance standards as described in the façade review letter dated October 29, 2014, staff **recommends approval** of the proposed PRO and concept plan to rezone property from I-1 Light Industrial and OS-1, Office Service to RM-1 Low-Density Multiple-Family with a Planned Rezoning Overlay for the following reasons:

- The plan proposes a reasonable alternative to the recommendations of the Master Plan for Land Use as the proposed property lines maintain a significant buffer (~350 ft.) from the adjacent railroad and industrial uses to the east of the subject property. Furthermore, the proposed multiple-family use would complement the existing multiple-family uses to the south and in the general area.
- The plan meets several goals, objectives and implementation strategies included in the Master Plan for Land Use as described later in this review letter.
- The applicant has made an effort to minimize impacts to on-site wetlands to the extent practical and has offered to preserve all remaining natural features via a conservation easement.
- 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.

Master Plan for Land Use

Staff anticipates that the Master Plan for Land Use will undergo a review during this fiscal year. The existing Future Land Use Map (adopted Aug. 25, 2010) of the City of Novi Master Plan for Land Use 2010 designates this site, and the site to the north, as Community Office and Industrial Research Development & Technology. The properties south and east of the site are also planned for Industrial Research Development & Technology; however the actual uses south of the site are recreational in nature. In addition, there is also a substantial amount of multiple-family use planned south of the western portion of the site. This is also true for the area west of the southern portion of the site, while the northern portion of the site is bordered by community office uses.

The City of Novi Master Plan for Land Use Review (February 26, 2010) included an extensive analysis of future land use within this geographic area called "Special Planning Project Area 1", which is included at the end of this report. This review and analysis, which included three draft alternatives for land use including multiple-family, and ultimately multiple family residential uses, were rejected due to non-compatibility with neighboring industrial uses and rail traffic.

The applicant is arguing that because of the multiple-family and recreation uses to the south and west, multiple-family zoning would act as a good transitional use between those uses and the existing and planned industrial and office uses to the north and east.

The Planning Commission may want to consider how the proposed PRO meets the goals, objectives and implementation strategies listed in the Master Plan for Land Use for this possible change in use including the following:

> 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 high-quality, owner occupied condominiums, with both first floor master bedrooms and traditional layout units to appeal to a wide market.)*
>
> Objective: Encourage residential developments that promote healthy lifestyles. *(The applicant has*

proposed the construction of pathway connections to the north of the site and south off-site to the City of Novi Dog Park.)

Implementation Strategy: Educate the public and developers on the benefits of making residential developments more walkable and bikeable and encourage developers to build walkable and bikeable residential developments that are connected to the City's non-motorized transportation system where possible. *(The applicant has proposed the construction of pathway connections to the north of the site and south off-site to the City of Novi Dog Park.)*

Goal: Protect Novi's remaining woodlands and wetlands. *(The applicant has proposed the preservation of wetlands along its northern and eastern property lines.)*

Goal: Increase recreation opportunities in the City in the face of diminished open space and funding. *(The applicant has proposed the construction of pathway connections to the north of the site and south off-site to the City of Novi Dog Park.)*

Goal: Interconnect the City's pedestrian and bicycle paths. *(The applicant has proposed the construction of pathway connections to the north of the site and south off-site to the City of Novi Dog Park.)*

The rezoning request was presented to the Master Plan & Zoning Committee on July 9, 2013 as a rezoning with a Planned Rezoning Overlay from I-1 Light Industrial and OS-1, Office Service to RM-1 Low-Density Multiple-Family. The applicants presented their concept plan and proposed public benefits. The members of the Committee were receptive to the concept plan and rezoning noting the site presented challenges considering the significant amount of natural features throughout the property.

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

	Existing Zoning	Existing Land Use	Master Plan Land Use Designation
Subject Property	I-1, Light Industrial OS-1, Office Service	Vacant	Community Office, Industrial Research Development & Technology
North	I-1, Light Industrial OS-1, Office Service	Vacant	Community Office, Industrial Research Development & Technology
East (across railroad tracks)	I-1, Light Industrial RM-1, Low-Rise Low Density Multiple-Family Residential (east of I-1)	Industrial, Novi Ridge Apartments (east of industrial)	Industrial Research Development & Technology, Multiple-Family (east of Light Industrial)
South	I-1, Light Industrial, RM-1, Low-Rise Low Density Multiple-Family Residential	River Oaks West Multi-Family, Sports Club of Novi & Novi Ice Arena	Industrial Research Development & Technology, Multiple-Family

West	OS-1, Office Service, RM-1, Low-Rise Low Density Multiple-Family Residential	Walgreen's, bank, River Oaks West Multi-Family	Community Office, Multiple-Family

Compatibility with Surrounding Land Use

The surrounding land uses are shown on the above chart. The compatibility of the requested RM-1 zoning with the zoning and uses on the adjacent properties should be considered when examining the proposed rezoning with the PRO option.

Directly to the **north** of the subject property is vacant property zoned I-1 (Light Industrial) and OS-1 (Office Service). Multiple-family use at this location could serve as a logical land use transition between the planned non-residential uses to the north and the multiple-family and recreation uses to the south.

Directly **east** of the subject property is a light industrial development with Novi Ridge Apartments directly east of the industrial building. There are railroad tracks separating the subject property and the industrial development, therefore there would be minimal impacts to these properties.

The properties to the **south** of the subject property include the River Oaks West Multi-Family development, and the Novi Sports Club and Novi Ice Arena. As previously mentioned, multiple-family use at this location could serve as a logical land use transition between the planned non-residential uses to the north and the multiple-family and recreation uses to the south. The proposed rezoning would increase traffic on Nick Lidstrom Drive.

The properties to the **west** of the subject property include the Walgreens store and a bank. The nearby uses would likely benefit from having additional customers within the immediate area. Again, the proposed multiple-family uses are more compatible with the existing River Oaks West Multi-Family development than as currently zoned.

Comparison of Zoning Districts

The following table provides a comparison of the existing (I-1 and OS-1) and proposed (RM-1) zoning classifications.

	I-1 (Existing)	**OS-1 (Existing)**	**RM-1 (Proposed)**
Principal Permitted Uses	1. Office buildings/medical office/office sales 2. Accessory structures/uses 3. Public parks/outdoor recreation facilities 4. Indoor fitness facilities (< 2,000 sf) 5. Medical offices (including labs & clinics)	1. Office buildings 2. Medical offices 3. Facilities for human care 4. Financial institutions 5. Personal service 6. Off-street parking lots 7. Churches 8. Similar uses 9. Accessory structures/uses 10. Publicly owned parks, outdoor recreation facilities 11. Indoor fitness facilities (< 2,000 sf)	1. One-family dwellings 2. Two-family dwellings 3. Multiple-family dwellings 4. Farms and greenhouses 5. Public parks 6. Cemeteries 7. Family & group day care homes 8. Churches 9. Schools 10. Utility & public service buildings 11. Day care centers 12. Private non-commercial recreation 13. Golf courses 14. Colleges 15. Private pools 16. Mortuaries 17. Bed & breakfasts

	I-1 (Existing)	OS-1 (Existing)	RM-1 (Proposed)
			18. Shared, independent & congregate elderly housing
Special Land Uses *(Italics denotes a special land use only when adjacent to residential)*	*1. Research & development, design facilities* *2. Data processing & computer centers* *3. Warehouse & wholesale establishments* *4. Manufacture, compounding, processing, packaging or treatment of products such as bakery goods, pharmaceuticals, hardware, except tool & die, bone, pottery, cloth, fur, metal, etc.* *5. Manufacture, compounding, assembling or treatment of articles of merchandise from previously prepared materials* *6. Manufacture of pottery & figurines* *7. Manufacture of musical instruments, toys, rubber stamps, etc.* *8. Manufacture/assembly of appliances* *9. Manufacture/repair of signs, sheet metal* *10. Industrial sales, service & office* *11. Trade/industrial schools* *12. Labs (experimental, film, or testing)* *13. Greenhouses* *14. Public utilities* *15. Indoor recreational facilities (> 2,000 sf)* *16. Private outdoor recreational facilities* *17. Similar uses* *18. Accessory structures/uses* *19. Pet boarding facilities* *20. Vet hospitals / clinics* *21. Motion picture, television, radio, & radio production facilities* 22. Metal plating, buffing, polishing & molded rubber products 23. Uses meeting limited needs of industrial park 24. Automobile service establishments 25. Self-storage facilities 26. Ancillary retail sales activity 27. Central dry cleaning	1. Accessory uses related to principal uses (i.e., pharmacies, optical, etc.) 2. Mortuaries 3. Public buildings 4. Nursery schools, child care/ adult day care 5. Indoor recreation facilities (> 2,000 sf) 6. Private outdoor recreational facilities	1. Convalescent homes 2. Child care facilities

	I-1 (Existing)	OS-1 (Existing)	RM-1 (Proposed)
	plants/laundries 28. Railroad transfer classification & storage yards 29. Tool, die, gauge & machine shops 30. Storage facilities for building materials 31. Municipal uses 32. Motion picture, television, radio & photographic production facilities 33. Accessory structures/uses		
Min. Lot Size (Area)	Based on the amount of off-street parking, landscaping, and setbacks required	Based on the amount of off-street parking, landscaping, and setbacks required	Number of rooms (not including kitchen, dining or bath) ≤ net site area/2,000 200 sq. ft. usable open space per dwelling unit
Max. Building Height	40 feet	30 feet	2 stories or 35 feet
Min. Building Setbacks	Front: 40 feet Sides: 20 feet Rear: 20 feet	Front: 20 feet Sides: 15 feet Rear: 20 feet	Front: 50 feet Sides: 75 feet Rear: 75 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 letters from engineering dated June 13, 2014 and September 3, 2014). The engineering review indicated there would be a negligible impact in utility demands as a result of the proposed rezoning. 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 but the Engineering Division did not note any significant concerns with the proposed concept plan at this time.

A Rezoning Traffic Impact Study was not required for this request as the amount of traffic being generated by this project is estimated to be 604 daily trips, which is well below the additional 1,000 trip generated threshold. There are some other road design issues on the concept plan which will need to be addressed via a revised concept plan that include the location and design of parking spaces being located along major and minor drives in the development. A DCS waiver noted later in this later specifically addresses the preceding issue. See the traffic review letter dated September 9, 2014 for additional information.

The City's Fire Marshall also did an initial review of the proposed plan and no issues to be addressed at this time.

Natural Features

The majority of the site consists of regulated woodlands including trees that could be considered specimen trees. The applicant has provided the required Woodland Plan and Woodland Tree List as part of this most recent submittal. There are significant amount of good quality woodlands on this site which will be impacted by the proposed plan, including the removal of all seven specimen trees on the site. The woodland review letter notes that these impacts are essentially "unavoidable" if the site is to be developed for residential use. It is not clear at this time whether the applicant plans to replace affected woodlands on site or pay into the City's tree fund in lieu of on-site replacements. A Woodland Replacement Plan will be required. The applicant has offered to place a conservation easement over any remaining woodlands. Please refer to the woodland review letter dated September 10, 2014 for additional information.

The site contains wetlands along its northern and eastern property lines (all of which are moderate to high quality). The plans generally quantify proposed impacts to wetlands and wetland buffers; however, impacts as a result of the proposed boardwalk/bridge will need to be included in future submittals. The City's environmental consultant notes impacts to wetland and wetland buffer impacts have been minimized. Additionally, the applicant has offered to place a conservation easement over any remaining wetland and wetland buffer areas. Please refer to the wetland review letter dated September 10, 2014 for additional information.

Development Potential

Development under the current OS-1 and I-1 zoning could result in the construction of a substantial amount of office and industrial space. Development under the proposed RM-1 zoning without a PRO option could result in as many as 108 three bedroom units or 146 two bedroom units, based on gross acreage as net acreage has not been provided. Up to 20% of the units are permitted to be one bedroom which would result in additional density on the site.

The applicant is proposing 93 units on the 20 gross acre (18.45 net acre) property, resulting in approximately 5.04 units per net acre, which is well below the maximum density for 3+ bedroom units which is 5.4 units per net acre. The Master Plan for Land Use does not anticipate residential use of this property, so no density guidelines are provided on the plan. The proposed density for the multiple family development to the southwest of the site is 7.3 units per acre.

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 (Article 34, Section 3402). 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, buildings, and detention basins. Also included were conceptual renderings and floor plans of styles and materials proposed for the development. (See the façade review letter dated October 29, 2014 for additional information on the provided renderings.) The applicant drafted a letter describing the public benefits of the proposed rezoning. As part of the revised concept plan submittal the applicant included a response letter noting slight alterations to the proposed pathways (as recommended by staff) as well as offering conservation easements to preserve the remaining natural features.

Ordinance Deviations and Additional Comments

Section 3402.D.1.c 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 inasmuch detail as possible to determine what deviations from the Zoning Ordinance are currently shown. In many cases, additional information is required to make a determination if a deviation is required. 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 (Section 501.1) and other applicable ordinances shown on the most recent concept plan:

1. Circulation and Driveway Spacing Waivers: A **waiver from the Design and Construction Standards would be required to allow the proposed cul-de-sac to be built to standards less than the general layout standards for local streets**. This waiver is recommended only if the applicant satisfies items i. through iv. under point 12.C in the traffic review letter. Additionally, a **same-side driveway spacing waiver** would be required for the south access drive (84 ft. provided, 105 ft. required). Please see the traffic review letter dated September 9, 2014 for additional information regarding circulation and driveway spacing waivers and required waivers. Modifications to the plans should be made to meet ordinance requirements **or deviations from these requirements should be included in the PRO Agreement**.
2. Landscape Waivers: Please see the landscape review letter dated June 13, 2014 for additional information regarding landscape deficiencies and required waivers. Modifications to the plans should be made to meet ordinance requirements **or deviations from these requirements should be included in the PRO Agreement**. Note that **staff supports the deviation from the berm requirement along property lines that abut an industrial use to preserve the existing natural features.**
3. Building Materials: Please see the facade review letter dated November 5, 2014 for additional information regarding building materials. **Staff recommends a Section 9 waiver be granted provided the applicant complies with those conditions noted in the façade review letter.**
4. Building Orientation: Section 2400, footnote e requires buildings be oriented at a 45º angle to all property lines. **The proposed building orientation ranges from 50º to 90º. The applicant has indicated they would like deviation from this requirement included in the PRO Agreement**.
5. Setback Coverage: Section 2400, footnote e states not more than 30% of the required front, side or rear yard building setback areas can be used for off-street parking, maneuvering lanes, service drives or loading areas. **The applicant has proposed 47% coverage and has indicated they would like deviation from this requirement included in the PRO Agreement**.
6. Building Setbacks: Per Section 2400, the minimum setback is 75 feet from the property line. The **southeastern most building is setback 66 feet from the angled property line. The applicant has indicated they would like deviation from this requirement included in the PRO Agreement**.
7. Off-Site Work: The plans indicate proposed fill to be placed off-site bordering Ten Mile Road, an important corridor in the City. **The applicant should provide additional information regarding said fill addressing whether or not berming is proposed and the height of said berm, whether tree removals will be required to allow for the proposed temporary access drive and whether any plantings are proposed in the area of the fill.**
8. Proposed Sidewalks and Streetscape Features: The Community Development Department has received the following suggestions regarding the proposed sidewalks and streetscapes: (a) The applicant should consider relocating the interior sidewalks further away from the proposed roadway to allow for a larger buffer space between the proposed sidewalks and proposed roadway. (b) The applicant should consider pedestrian style lighting along the frontage of the City streets. **The applicant should comment on these items in the required response letter.**

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 3402.D.2 states the following:

1. *(Sec. 3402.D.2.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. 3402.D.2.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 3402.D.2.b 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. The application materials dated May 19, 2014 and supplemental information dated August 18, 2014 note the following "public benefits":

1. Attractive use of property compared to current I-1 and OS-1 zoning.
2. Construction of pathway for public use through site from Nick Lidstrom Drive to north property line for connection to future development to the north.
3. Construction of offsite pathway to new Novi Dog Park commencing from site's southeast corner along rear property line of Novi Sport's Club as well as a connection to the existing pathway along Nick Lidstrom Drive.
4. Pedestrian directional signage along proposed pathways.
5. Preservation of natural features along north and east property lines and remaining wetlands, wetland buffer areas and woodlands on site through the execution of a conservation easement.

These proposed benefits should be weighed against the proposal to determine if they clearly outweigh any detriments of the proposed rezoning. A conservation easement while always encouraged is not a requirement of typical development process.

The construction of pathways, both to the north and south of the site are enhancements that would benefit the public that would not be required as part of development. Coordination with the property to the north will be required to make the pedestrian connection. The addition of a pathway connecting directly to Nick Lidstrom Drive and pedestrian directional signage in particular will provide greater access to the site and a more significant benefit to the public at large than what was previously proposed. Access easements will need to be provided in order to the pathways fully open to the public.

Submittal Requirements

- The applicant has provided a survey and legal description of the property in accordance with submittal requirements.
- Rezoning signs will need to 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.
- A rezoning traffic impact statement is not warranted by the change to residential zoning as the daily trip generation is less than 1,000 trips.
- A written statement by the applicant has been submitted.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.347.0586 or kkapelanski@cityofnovi.org.

Kristen Kapelanski, AICP – Planner

Attachments: Planning Review Chart

Planning Review Summary Chart
Novi Ten Townhomes PRO JSP14-18
Revised Concept Plan/Rezoning Review
Plan Date: 8/18/14

Bolded items must be addressed by the applicant

Item	Proposed	Meets Requirements?	Comments
Master Plan Community Office, Industrial Research Development & Technology	Multiple-Family	**No**	**The proposed rezoning is not in compliance with the current Master Plan and the proposal was considered by the Master Plan and Zoning Committee on July 9, 2014**
Zoning (Art. 11 & 19) I-1 Light Industrial & OS-1 Office Service	RM-1 Low-Density Multiple-Family with PRO		Attached condominiums are permitted in the RM-1 District
Use Uses permitted in Article 6	93 Multiple-Family Attached Condominiums	Yes	
Max. Density (Sec. 2400, footnote d) # of rooms (not including kitchen, dining and sanitary facilities) shall not be more than the net site area of the parcel in sq. ft. 3 bedroom units max. density = 5.4 units/net acre	93 three bedroom units on 18.45 net acres resulting in 5.04 units per acre	Yes	
Max. Building Height (Sec. 2400) 35 ft. two stories	Max. 35 feet	Yes	**A note should be added to the site data box on Sheet 2 indicating max. building height**
Additional RM-1 Requirements (Sec. 2400, footnote e)			
Min. Shoreline Setback 150 ft.	Not applicable		
Street Frontage Must front on public or private road	Fronts Nick Lidstrom Dr., a public road	Yes	
Building Length 180 ft. or up to 360 ft. if building setback increased 1 ft. for every 3 ft. building length when bordering a residential district or major thoroughfare	Max. building length of approx.150 ft.	Yes	
Perimeter Building Orientation Structures located along an outer	Predominately buildings at	**No**	**The applicant has indicated they would**

Item	Proposed	Meets Requirements?	Comments
perimeter property line shall be oriented at a min. angle of 45° to adjacent properties	right angles to adjacent properties but varies between 50º to 90º		**like this deviation included in the PRO Agreement**
Max. Impervious Surface in Setback Max. 30% of setback areas parking, drives & loading area	47% setback coverage	**No**	**The applicant has indicated they would like this deviation included in the PRO Agreement**
Location of Parking & Drives Off-street parking & drives shall not be located closer than 25 ft. to any wall of a dwelling structure which contains openings involving living areas nor closer than 8 ft. to any wall that does not contain openings	Max. 25 ft.	Yes	
Sidewalk Connectivity 5 ft. sidewalks along internal roads	5 ft. sidewalks proposed along internal streets	Yes	
Min. Distance between Buildings S = LA + LB + 2(HA + HB)/6 Regulated according to the length & height of buildings, min. 30 ft. unless there is a corner-to-corner relationship in which case the min. 15 ft.	All buildings meet minimum distances	Yes	
Min. Open Space Area (Sec. 2400, footnote f) 200 sq. ft. usable open space per unit 200 x 93= 18,600 sq. ft. required	471,300 sq. ft. provided?	Additional information required	**The applicant must provide a plan sheet showing applicable open space areas shaded and calculations provided** **See Section 2400 footnote f for a definition of areas that can be counted towards open space requirements in the RM-1 District**
Min. Floor Area (Sec. 2400) 750 sq. ft. (2 bed), 500 sq. ft. (1 bed), 400 sq. ft. efficiency	2,000 to 2,600 sq. ft.	Yes	
Max. Lot Coverage (Sec. 2400, footnote e) 25%	17%	Yes	

Item	Proposed	Meets Requirements?	Comments
Building Setbacks (Sec. 2400, footnotes b & c)			
1. Front (Nick Lidstrom Dr.): 75 ft.	75 ft.	Yes	
2. Side interior (south): 75 ft.	66 ft.	**No**	**The applicant has indicated they would like this deviation included in the PRO Agreement**
3. Side interior (west): 75 ft.	75+ ft.	Yes	
4. Rear (north/east): 75 ft.	75+ ft.	Yes	
Wetland & Watercourses (City Code Sec. 12-174(a)(4)) Lots cannot extend into a wetland or watercourse	Lots do not extend into wetland or watercourse	Yes	**Wetland Minor Use Permit required, see wetland review letter** **Applicant has agreed to provide a conservation easement over remaining wetland and natural features setback areas**
Woodlands (City Code Chpt. 37) Replacement of removed trees	Not indicated	**Additional information required** **See woodland review letter**	**Woodland Permit required, see woodland review letter** **Applicant has agreed to provide a conservation easement over remaining wetland and natural features setback areas** **Applicant is encouraged to minimize impacts to quality trees**
Nat. Features Setback (Sec. 2400 (t)) 25 ft. setback from wetlands	25 ft. from wetlands	Yes	**Authorization to Encroach the 25 ft. Natural Features Setback required, see wetland review letter**
Development in the Floodplain (Sec. 4.03 of the Sub. Ord.) Areas in a floodplain cannot be platted	0.27 acres of floodplain fill, 0.33 acres of compensation	Work with the Building Official, Tom Walsh 248-347-0417 or twalsh@cityofnovi.org to obtain any required permits	

Item	Proposed	Meets Requirements?	Comments
	area		
Master Deed/ Covenants & Restrictions	Documents not submitted		Information required for review with FSP
Exterior Lighting (Section 2511) Photometric plan required at FSP A residential development entrance light must be provided at the entrances to the development	Entrance light indicated	Yes	Applicant will need to work with the Engineering Division on the installation of the light as part of the site plan and construction process If additional exterior lighting is proposed, applicant should provide photometric plan at FSP
Sidewalks and Pathways (Sub. Ord. Sec. 4.05, Bicycle & Pedestrian Master Plan & Non-Motorized Plan) 6 ft. sidewalk required along Nick Lidstrom Drive 5 ft. sidewalk required on both sides of all internal streets	6 ft. sidewalk exists along Nick Lidstrom Dr. 5 ft. sidewalks proposed along internal streets	Yes	**Additional connection to north & of-site south of the site to the Dog Park are proposed as part of the public benefit**
Economic Impact 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)	Total cost of buildings and site improvements - >$30,000,000 Home sizes - 2,000 sq. ft. to 2,600 sq. ft. (average 2,152 sq. ft.) Sales price – average $369,495 Est. 186 jobs created during construction	Information provided	
Residential Entryway Signs (Chpt. 28) Signs are not regulated by the Planning Division or Planning Commission	None shown	If a residential entryway sign is proposed, contact Jeannie Niland at 248.347.0438 or jniland@cityofnovi.org for information	
Additional Planned Rezoning Overlay Agreement Terms: Public Benefit (Sec. 3402.D) As part of a PRO, the applicant shall demonstrate an enhancement of area as compared to existing			

Item	Proposed	Meets Requirements?	Comments
zoning that results in a public benefit			
Use of Property Attractive use of property compared to current I-1 and OS-1 zoning			
Off Site Pathway to South Construction of offsite pathway to new Novi Dog Park commencing from site's southeast corner along rear property line of Novi Sport's Club Path will connect directly to the dog park as indicated in the applicant's response letter and has been extended westward to connect directly to Nick Lidstrom Drive Pedestrian directional signage proposed along walk		**Work with the Engineering Division and Jeff Muck, the Director for the Parks, Recreation, and Cultural Services Department at 248.347.0402 or jmuck@cityofnovi.org on the connection of the path to the entrance of the dog park** **Staff recommends establishing an access easement across the property to allow the general public to use the proposed walk,** **Details on proposed pedestrian signage to the dog park needed at the time of site plan submittal**	
Pathway Connection to North Construction of pathway for public use through site from Nick Lidstorm Dr. to north property line for connection to future development to the north Pedestrian directional signage proposed along walk		**Construction & access easements required**	
Open Space Preservation of natural features along north and east property lines		**Conservation easements proposed over remaining wetlands, natural features setbacks and woodlands** **See the wetland and woodland review letters for additional information**	

Prepared by Kristen Kapelanski, AICP 248.347.0586 or kkapelanski@cityofnovi.org

Engineering Review

cityofnovi.org

PLAN REVIEW CENTER REPORT

September 8, 2014

Engineering Review

Novi Ten Townhomes
JSP13-0075

Petitioner
Toll Brothers Land Development, applicant

Review Type
Concept Plan Review

Property Characteristics

- Site Location: South of Ten Mile Road and east of Novi Road
- Site Size: 20.09 acres
- Plan Date: August 18, 2014

Project Summary

- Construction of a 93 unit attached multi-family subdivision on approximately 20 acres. Site access would be provided by proposed public roadways off of Nick Lidstrom Drive.
- Water service would be provided by connecting to the existing 8-inch water main stubs on-site.
- Sanitary sewer service would be provided by an extension from the existing 8-inch sanitary sewer on Nick Lidstrom Drive and a connection to the existing 36-inch trunkline sewer.
- Storm water would be collected by two storm sewer collection systems. The western 9.46 acres of the development is tributary to Detention Basin "A" with the 3.03 acres in the northeast corner of the development tributary to Detention Basin "B". These basins outlet into the existing wetlands east of the development.

Recommendation

Approval of the Concept Plan is recommended.

Comments:
The Concept Plan meets the general requirements of Chapter 11 with the following items to be addressed at the time of Preliminary Site Plan submittal (further engineering detail will be required at the time of the final site plan submittal):

General

1. A full engineering review was not performed due to the limited information provided in this submittal. Further information related to the utilities, easements, etc. will be required to provide a more detailed review.
2. The site plan shall be designed in accordance with the Design and Construction Standards (Chapter 11).
3. A letter from either the applicant or the applicant's engineer must be submitted with the Preliminary Site Plan submittal highlighting the changes made to the plans addressing each of the comments in this review.

Water Main

4. Note that hydrants shall be placed no less than seven (7) feet, but no more than fifteen (15) feet, from the back of curb or the edge of pavement where there is no curb. Hydrants shall be placed approximately five hundred (500) feet apart.
5. The water main terminates near the southwest corner of the site short of the proposed buildings and should be looped back to the point of connection to the west at the southeast corner of the site or to Nick Lidstrom Drive at the southern entrance.
6. A water main stub shall be provided to the parcel to the north.
7. Provide a water main connection from the development to the existing water main near the boulevard entrance.

Sanitary Sewer

8. Provide the diameter and material type for all proposed and existing sanitary sewer at the time of Preliminary Site Plan submittal.

Storm Sewer

9. Revise the plan set to provide rear yard drainage systems to minimize the distance that surface drainage must pass through to reach a drainage structure. Untreated sheet flow into wetland areas is not permitted.
10. Provide the location for all residential sump leads. All leads must discharge into the subdivision's storm sewer network.
11. Provide an oil/gas separator with a four (4) foot sump at the last structure prior to discharge into the basins.
12. Soil borings shall be provided for a preliminary review of the constructability of the proposed development (roads, basin, etc.). Borings identifying soil types, and groundwater elevation should be provided at the time of Preliminary Site plan.

Storm Water Management Plan

13. The Storm Water Management Plan for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the Engineering Design Manual.

14. The SWMP must detail the storm water system design, calculations, details, and maintenance as stated in the ordinance. The SWMP must address the discharge of storm water off-site, and evidence of its adequacy must be provided. This should be done by comparing pre- and post-development discharge areas, rates and volumes. The area being used for this off-site discharge should be delineated and the ultimate location of discharge shown. The applicant is responsible for verifying that the proposed discharge point(s) has adequate capacity to accept the designed drainage flows.
    a. Revise the plan set to provide a pre and post-development tributary area map.
    b. Revise the post-development tributary area to account for all disturbed areas that are not maintained in their respective natural state.
15. Verify that the proposed maintenance access routes do not conflict with the proposed landscaping.
16. Revise the plan set to provide a minimum length to width ratio of 3 to 1 for the proposed detention basins. Additional pretreatment may be required if this requirement cannot be met.
17. Revise the plan set to combine basin inlets provide a means of preventing direct flow from the basin inlets to the sediment standpipe where the inlets and outlet are not placed at opposite ends of the basins. A sheet pile wall, rip-rap berm or earthen berm are acceptable methods.

Paving & Grading

18. Include a ramp detail with spot elevations for all ADA ramps and level landings at street crossings.
19. Provide two spot elevations where each pathway stub terminate or intersects and existing pathway.
20. Revise the pathway connections to the adjacent parcels to be eight foot wide and concrete and show the proposed pathway easement on the plan.
21. Specify whether the proposed roadway network will be public or private.

Flood Plain

22. Application for a City floodplain permit shall be submitted as soon as possible to begin the review process. The City's floodplain consultant will review the submittal and provide initial comments regarding the review process.

Off-Site Easements

23. Any off-site easements must be executed prior to final approval of the plans. Drafts shall be submitted at the time of the Preliminary Site Plan submittal.

The following must be provided at the time of Preliminary Site Plan resubmittal:

24. A letter from either the applicant or the applicant's engineer must be submitted with the Preliminary Site Plan highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved.

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

Jeremy J. Miller

cc: Kristen Kapelanski, Community Development Department

MEMORANDUM

TO: SARA ROEDIGER, CITY PLANNER

FROM: ADAM WAYNE, CONSTRUCTION ENGINEER

SUBJECT: REVIEW OF REZONING IMPACT ON PUBLIC UTILITIES
REZONING 18.707, NOVI TEN TOWNHOMES PRO

DATE: JUNE 11, 2014

The Engineering Division has reviewed the planned rezoning overlay (PRO) request for the 20.09 acres located off of Nick Lindstrom Drive, north of the Novi Ice Arena. The applicant is requesting to rezone 20.09 acres to RM-1 under a PRO from office (OS-1) and light industrial (I-1). The Master Plan for Land Use does not indicate an allowable residential density with the subject area allocated for community office and industrial research development and technology. The applicant is proposing a 93 unit attached multi-family development.

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 81 REUs. The proposed RM-1 zoning would yield 115 REUs, an increase of 34 REUs over the current zoning and the master plan utility demand. The proposed concept plan submitted as part of the PRO indicates that 93 units are proposed with a utility demand of 73 REUs.

Water System

The project is located within the Intermediate Water Pressure District. Water service is currently available on Nick Lindstrom Drive and via on-site water main stub. 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 Nine Mile Sewer District. Sanitary service is proposed to be extended to the site from an existing stub on Nick Lindstrom Drive and the 36-inch trunkline sewer which runs through the property. The proposed rezoning is not anticipated to have an apparent impact on the capacity of the downstream sanitary sewer.

Summary

The concept plan provided with the PRO requests proposes a maximum of 93 attached residential units which are less than the utility demand if the property were to be developed under the current zoning. Therefore, the plan would have negligible impact on the utilities.

cc: Brian Coburn, P.E.; Engineering Manager
Tim Kuhns, P.E.; Water & Sewer Senior Engineer

Traffic Review

clearzoning

September 9, 2014

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

SUBJECT: Novi-Ten Townhomes, JSP14-0018,
Traffic Review of Revised PRO Concept Plan, PSP14-0149

Dear Ms. McBeth:

At your request, we have reviewed the above and offer the following recommendation and supporting comments.

Recommendation

We recommend approval of the concept plan, subject to (a) Council specifically waiving the Design and Construction Standards for a cul-de-sac (DCS Fig VIII-F) – subject to conditions listed below – and (b) subject to the preliminary site plan satisfactorily addressing the issues shown below in **bold**.

Site Description
What is the applicant proposing, and what are the surrounding land uses and road network?

1. The applicant is proposing a 93-unit residential condominium development north and east of Nick Lidstrom Drive (see our attached aerial photo). The plan includes two points of vehicular access, a street loop in the eastern portion of the site, and a short cul-de-sac in the western portion of the site. Two 8-ft-wide asphalt paths are also proposed, one extending off-site to the north and one extending off-site to the southeast.

2. A similar development lies across Nick Lidstrom Drive. The proposed development would be directly north and adjacent to the Sports Club of Novi.

3. Nick Lidstrom Drive is classified a local residential street under City of Novi jurisdiction, but functions as a non-residential collector. The east-west section is 36 ft wide (the standard width for a collector), but the north-section section is only 28 ft wide (the standard width for a local street). Nick Lidstrom Drive is signalized at Novi Road and has a speed limit of 25 mph.

Trip Generation & Traffic Study
Was a traffic study submitted and was it acceptable? How much new traffic would be generated?

4. According to ITE data and methodology, the proposed development can be expected to generate about 604 one-way vehicle trips per day, 49 in the AM peak hour (8 in and 41 out) and 57 in the PM peak hour (38 in and 19 out).

5. Per the *City of Novi Site Plan and Development Manual*, a rezoning traffic study would be warranted in this case only if the proposed zoning change would increase daily trips by 1,000

or more over what would be generated by site development under the current zoning (a mix of OS-1 and I-1). Since total daily trip generation under the proposed residential zoning (RM-1) would be only 604, the threshold for a rezoning traffic study is obviously not met. Also, given the trip generation forecast cited in comment 4 (above), none of the City thresholds for other types of traffic study is met either.

Vehicular Access Locations
Do the proposed "driveway" locations meet City spacing standards?

6. No. The proposed south access drive would be only 84 ft north of the existing Sports Club drive (near-back-of-curb to near-back-of-curb). **Since the City's minimum same-side driveway spacing on a 25-mph roadway is 105 ft, the proposed south driveway spacing requires a Planning Commission waiver.**

Vehicular Access Improvements
Will there be any improvements to the abutting road(s) at the proposed access point(s)?

7. No.

Access Drive Design and Control
Are the proposed design, pavement markings, and signage satisfactory?

8. The proposed boulevard-style west access drive generally conforms to City standards. As required by those standards (DCS Fig IX.3), the applicant has "shown cause for" proposing the minimum boulevard nose offset (6 ft as opposed to the 12-ft standard) – so as to provide a pedestrian refuge in the median.

9. STOP and Keep Right signs are proposed in generally appropriate locations. **The preliminary and final site plans should provide more details on all proposed traffic control devices, however, including MMUTCD sign codes, a Signing Quantities Table, and an indication that the proposed STOP (R1-1) signs will be of the 24-inch size.**

Pedestrian Access
Are pedestrians safely and reasonably accommodated?

10. **To accommodate pedestrians wanting to cross the boulevard drive near its north end, sidewalk stubs (with ADA ramps) should be provided on the southwest and southeast corners of the internal tee intersection.** Larger vehicles turning from WB to SB to exit the development at this location will require that the median strip be set back as it now is shown, but crossing pedestrians can be expected to safely pass north of the median strip (a formal crosswalk need not be marked).

11. **Driveway crossing locations for the 8-ft-wide pathway – just east of the boulevard entrance and on the curve in the southeast corner of the site – should be marked with zebra-bar markings (2-ft-wide white bars parallel to the curbs, 4 ft on-center).**

Circulation and Parking
Can vehicles safely and conveniently maneuver through the site?

12. As we stated in our review letter of 5-29-14, the standards found in Sec 2514 of the Zoning Ordinance apply here since this is a proposed multi-family development. Given the ordinance definition of a "major" drive, we will accept the applicant's contention that the inner loop between the two access points can now be construed as that type of drive. Due to a change in the proposed alignment of the drive, it will no longer be the "stem" of to a tee intersection, and the "minor" drive to the east will face STOP signs on both of its approaches to the major drive. **Under this new interpretation, however, Sec 2514 imposes the following specific requirements in this case:**

    a. **Sec 2514.B(ii) – dealing with minor drives – states that "Where on-street parking is proposed, it shall be limited to one side of the minor drive…" To best meet this requirement, given the series of minimum (100-ft) radius centerline curves, parking bays near those curves, and the amount of curb space lost to residential driveways, the entire inside of the minor east drive should be posted for no parking (with the obvious exception of the parking bays themselves, which constitute "adjacent" parking).**

    b. **By definition, the major drive extends between and includes the two site access drives. As we previously pointed out, Sec 2514.B(v) expressly prohibits perpendicular parking spaces along a major drive; hence, the five easternmost perpendicular parking spaces in the proposed bank of nine opposite the boulevard entrance must be eliminated.**

    c. **Per Sec 2514.B, a private drive network of this type "shall be built to City of Novi Design and Construction Standards for local streets…,"** with certain exceptions listed that are not applicable here. The proposed cul-de-sac does not comply with those standards (specifically, DCS Fig VIII-F), and we are particularly concerned about pedestrian safety related to the parking spaces in the island. **If a cul-de-sac design of this general type is permitted, we recommend that Council explicitly waive the preceding standard only with the following conditions being required:**

        i. **The circulating (circular) roadway shall be posted for one-way counterclockwise operation (just as a standard cul-de-sac). This will require the placement of a non-diagrammatic Keep Right (R4-7a) sign on the island directly ahead of the approaching street centerline.**

        ii. **The width of the circulating roadway shall be 32 ft (back-of-curb to back-of-curb)(just as a standard cul-de-sac).** The extra 4 ft of pavement width will improve the sight lines for circulating drivers, as well as better facilitate the movement of moving vans and the City's largest fire truck (the centerline radius of the roadway is now proposed to be only 55 ft, substantially less than the 100-ft minimum for private drives generally).

        iii. **The entry and exit curb radii, now dimensioned to be only 25 ft, shall be increased to 67 ft (just as a standard cul-de-sac).** This will facilitate circulation by large moving vans, which would find it very difficult to circulate around the design now proposed.

iv. **The four parking spaces on the west side of the island shall be deleted, but two spaces can be added to the easterly module, one at each end of it**. As drivers enter and circulate counterclockwise, they should find it easier to see potential conflicts with vehicles and pedestrians entering/exiting the easterly spaces than the westerly spaces.

v. **The remainder of the island's periphery shall be posted for no parking**, utilizing two back-to-back pairs of 12" x 12" No Parking Symbol (R8-3) signs. The two sign posts should be located at the 9 o'clock and 12 o'clock positions relative to the Keep Right sign at the 6 o'clock position.

Sincerely,
CLEARZONING, INC.

Rodney L. Arroyo, AICP
President

William A. Stimpson, P.E.
Director of Traffic Engineering

Attachment: Aerial photo

Vicinity Aerial – Proposed Novi-Ten Townhomes

Landscape Review

PLAN REVIEW CENTER REPORT

September 10, 2014

Landscape Review

Novi Ten Townhomes JSP14-18

Review Type

Rezoning request with a Planned Rezoning Overlay

Property Characteristics

- Site Location: Nick Lidstrom Drive
- Site Zoning: OS-1 - Office Service; I-1 Light Industrial
- Proposed Zoning: RM-1 – Multiple Family Residential
- Site Use: Vacant
- Site Size: 20.09 acres
- Proposed Use: Multifamily Condominiums
- Plan Date: 8/18/14

Staff recommends approval of the rezoning request with a PRO for Novi Ten Townhomes JSP14-18 provided a statement is included within the PRO Agreement as noted below.

Ordinance Considerations

Residential Adjacent to Non-Residential (Sec.2509.3.a)

1. Residential adjacent to an industrial use is required to be buffered by a 10-15' high landscape berm with a 6' wide crest. This would be required between the proposed development and all adjacent non-residential sites. The Applicant has proposed a shorter berm of 4' to 5' height along the southern property boundary. This berm will have enhanced landscape including 24 evergreens as buffer. **An adjustment to the PRO Agreement would be necessary for the reduced berm height. Without the addition of understory plantings to assure adequate buffering, Staff cannot support the PRO Adjustment for the reduced height berm.**
2. **Preservation of natural features along the east, west and north boundaries of the project site may be preferable to the installation of required 4'-6" to 6' high berms in order to preserve natural features. Natural features in these locations include woodlands, wetlands and steep slopes. Waiver of the berm requirement in these locations would require an adjustment of the PRO Agreement. Staff is in support.**

Adjacent to Public Rights-of-Way – Berm (Wall) & Buffer (Sec. 2509.3.b.)

1. A 20' landscape greenbelt is required where parking or an access drive is proposed where adjacent to parking or access drives. A 34' landscape greenbelt is required where not adjacent to parking or access drives. This requirement has been met.
2. A 2' high berm with a 3' wide crest is required adjacent to parking or access drives. A 4' high berm with a 4' wide crest is required where not adjacent to parking or access drives. This requirement has been met.

3. A canopy tree or large evergreen is required per 35 l.f. of road frontage (Lidstrom Drive). Please note that the Applicant has proposed additional plantings along the Nick Lidstrom Drive frontage as an enhanced buffer. This requirement has been met.
4. A sub-canopy tree is required per 20 l.f. of road frontage where adjacent to parking or access drives. A sub-canopy tree is required per 25 l.f. l.f. not adjacent to parking or access drives. This requirement has been met.

Street Tree Requirements (Sec. 2509.3.b.) and

1. One street tree along the Lidstrom road frontage is required per 35 l.f. where adjacent to parking or access drives. One street tree along the Lidstrom road frontage is required per 35 l.f. where not adjacent to parking or access drives. This requirement has been met.

Parking Landscape (Sec. 2509.3.c.)

1. No more than 15 contiguous parking spaces are allowed without a parking lot island. No large parking areas are proposed. This requirement has been met.
2. Twenty five foot clear vision areas are shown at access points.

Parking Lot Perimeter Canopy Trees (Sec. 2509.3.c.(3))

1. Parking area perimeter trees are required at one per 35' of the parking lot boundaries. This requirement has been met.

Building Foundation Landscape (Sec. 2509.3.d.)

1. A minimum 4' wide landscape bed is required at the building foundations with the exception of access points. No detail has been provided for foundation plantings at this time. *Please provide required calculations and these plantings upon subsequent site plan submittals.*
   These plantings will be required in detail upon subsequent site plan submittals.
2. A total of 8' x the building perimeters is required as building foundation landscaping. *Please provide required calculations and these plantings upon subsequent site plan submittals.*

Multi-Family/ Attached Dwelling Units (Sec. 3509.3.e.(2))

1. Three (3) canopy trees are required per unit. The use of native species is recommended. This requirement appears to have been met. *Please provide required calculations upon subsequent site plan submittals.*
2. One street tree along interior access drives is required per 35 l.f. of frontage excluding driveways, interior roads adjacent to public right of ways and parking entry drives. This requirement has been met.
3. A minimum of 60% of the front of each ground floor unit must be provided with a mixture of shrubs and sub-canopy trees, perennials and annuals. *Please provide required calculations and these plantings upon subsequent site plan submittals.*

Plant List (LDM)

1. Please provide a Plant List as provided meeting the requirements of the Ordinance and the Landscape Design Manual.

Planting Notations and Details (LDM)

1. Please provide Planting Details and Notations meeting the requirements of the Ordinance and the Landscape Design Manual.

Storm Basin Landscape (LDM)

1. The storm basin high water rim is to have 70-75% of the high water line planted with large shrubs. These plantings should be placed within multiple unified beds such that no mowing occurs on the basin side of these plantings. Plantings should be staggered in minimum double rows. *Please provide required calculations and these plantings upon subsequent site plan submittals.*

Irrigation (Sec. 2509 3.f.(6)(b))

1. An Irrigation Plan and Cost Estimate must be provided upon Final Site Plan submittal.

General

1. Inclusion of site amenities is encouraged with a residential development of this size. One sidewalk and boardwalk is proposed that appears to lead to adjacent property to the north. Additional walkways/trails, small gathering areas, benches or picnic tables are amenities that are encouraged for the development.
2. The Applicant should work with Community Development and Parks, Recreation and Cultural Services on the location of the walkway toward the future Novi Dog Park currently under construction.
3. Please provide more detail for the central area of the circular drive to the west.
4. *The site contains significant natural features such as woodlands and wetlands. Please see the woodland and wetland reviews for additional comments. Woodland replacements will be required. The Applicant has the opportunity to use a mix of native canopy trees, evergreens, shrubs and groundcovers to meet the requirements.*

Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review is a summary and not intended to substitute for any Ordinance. For the landscape requirements, see the Zoning Ordinance landscape section on 2509, Landscape Design Manual and the appropriate items in the applicable zoning classification.

Reviewed by: David R. Beschke, RLA

Pre-app Landscape Chart JSP 14-18 **September 15, 2014**

Project Name: Novi Ten Townhomes
Project Location: Novi Road and Ten Mile Road
Plan Date: 9/5/2014
Review Type: Concept Plan

Item	Required	Proposed	Meets Requirement	Comments
Name, address and telephone number of the owner and developer or association. (LDM 2.a.)	Yes	Yes	Yes	
Name, Address and telephone number of RLA (LDM 2.b.)	Yes	Yes	Yes	
Legal description or boundary line survey.(LDM 2.c.)	Yes	Yes	Yes	
Project Name and Address (LDM 2.d.)	Yes	Yes	Yes	
A landscape plan 1"-20' minimum Proper north (LDM 2.e.)	Yes	Yes	Yes	LA may approve larger scale.
Proposed topography. 2' contour minimum (LDM 2.e.(1))	Yes	Yes	Yes	Show at a minimum 2' contour interval
Existing plant material (LDM 2.e.(2))	Yes	Yes	Yes	Show location type and size. Label to be saved or removed. Plan shall state if none exists.
Proposed plant material. (LDM 2.e.(3))	Yes	Yes	Yes	Show location, type and size.
Existing and proposed overhead and underground utilities, including hydrants.(LDM 2.e.(4))	Yes	Yes	Yes	
Clear Vision Zone (LDM 2.3.(5) - 2513)	Yes	Yes	Yes	Measurements are to be taken from R.O.W.
Zoning (LDM 2.f.)	GE	GE	pending	

Item	Required	Proposed	Meets Requirement	Comments
Sealed by LA. (LDM 2.g.)	Yes	Yes	Yes	Stamping Set must provide an original signature.
Plant List (LDM 2.h.)	No			Plant schedule that includes key, quantity, botanical name, common name, size, root, comments and cost estimate
Quantities	No			
Sizes	No			Canopy trees must be 3" in caliper Sub-Canopy trees must be 2.5" in caliper
Type and amount of mulch	No			
Turf	No			Must provide type and quantity of all ground cover.
Acceptable species	No			There are no prohibited plantings.
Diversity	No			
Planting Details/Info (LDM 2.i.)	Yes	Yes	Yes	
Deciduous Tree	Yes	Yes	Yes	
Evergreen Tree	Yes	Yes	Yes	
Shrub	Yes	Yes	Yes	
Perennial/ Ground Cover	Yes	Yes	Yes	
Transformers (LDM 1.e.5.)	Yes	Yes	pending	Show locations and screening.
Berm Plantings (LDM 1)	Yes	Yes	Yes	
Walls (LDM 2.k.)	NA			Show materials, height and type of construction including footings.
Landscape Notes	Yes	Yes	Yes	
Miss Dig Note	Yes	Yes	Yes	
Mulch	Yes	Yes	Yes	Natural color, finely shredded hardwood bark required for all plantings. 4" thick bark mulch for trees in 4-foot diameter circle with 3" pulled away from trunk. 3" thick bark for shrubs and 2" thick bark for perennials.
2 yr. Guarantee	Yes	Yes	Yes	Indicate 2 year guarantee on plant material. Replace failing material within one year, or the next appropriate planting period.
Approval of substitutions.	Yes	Yes	Yes	All substitutions or deviations from the landscape plan must be approved by the city prior to installation.
Tree stakes	Yes	Yes	Yes	Remove after one winter season.

Item	Required	Proposed	Meets Requirement	Comments
Parking Area Landscape Calculations (LDM 2.0.)	Yes	Yes	Yes	Islands a minimum 300 square feet to qualify.
A. For : OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district	NA			A - Total square footage of parking spaces not including access aisles X 10% (parking space square footage x .10) 148,793 x 10% = 14,879 SF
B. For : OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district	NA			B - Square footage of all additional paved vehicular use areas under 50,000 sq. ft. x 5% (square footage x .05) 0 x 5% = 0
C. For : OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district	NA			C - square footage of all additional paved vehicular use areas over 50,000 sq. ft. x 1% (square footage x .01) 219,293 x .01 = 2,193
A. For: I-1 and I-2 1. Landscape area required due to # of parking spaces	NA			A - Total square footage of parking spaces not including access aisles X 7% (parking space square footage x .07)
B. For: I-1 and I-2 2. Landscape area required due to vehicular use area	NA			B – Square footage of all additional paved Vehicular use areas under 50,000 sq. ft. x 2% (square footage x .02)
C. For: I-1 and I-2 2. Landscape area required	NA			C – square footage of all additional paved vehicular use areas over 50,000 sq. ft. x 1% (square footage x .01)

Item	Required	Proposed	Meets Requirement	Comments
due to vehicular use area				
Total A, B and C above = Total interior parking lot landscaping requirement	NA			A+B+C = 14,879 + 2,193 = 17,072 square feet required 21,689 SF provided
Parking lot tree requirement	Yes	Yes	Yes	Total square footage requirement / 75 228 required 228 provided
Perimeter Canopy Tree Plantings	Yes	Yes	Yes	Minimum 1 per 35 linear feet as a minimum.
Parking Lot Plants	Yes	Yes	Yes	Maintain shrubs at max. 24" in height within lot. No plants over 12" within 10 feet of fire hydrant. No evergreen trees in islands.
15 parking space limit	Yes	Yes	Yes	Only 15 permitted without island
Parking Land Banked	NA			
Foundation Landscape calculation (LDM.2.p.)	Yes	No	No	Square footage equal in quantity to the building perimeter x 8'. Minimum 4' required 12,584 required 44,570 provided
Snow Deposit (LDM.2.q.)	Yes	No	No	Location(s) shown.
Irrigation plan (LDM 2.s.)	Yes	No	No	Provide with final landscape plan.
Cost Estimate (LDM 2.t.)	Yes	No	No	Provide as a column on plant schedule consistent with the City's current fee calculation chart.
Plant Placement (LDM 3.a.(4)	Yes	Yes	Yes	All plants except creeping vine type plantings, shall not be located within 4' of a property line
Residential adjacent to non-residential	Yes			
Berm (2509.3.a.)	Yes	Yes	pending	
Planting (LDM 1.a.)	Yes	Yes	Yes	
Adjacent to Public Rights-of-Way	Yes	Yes	Yes	
Berm (2509.3.b.)	Yes	Yes	Yes	Call out any requested waivers if berm is not provided.
Street trees	Yes	Yes	Yes	

Item	Required	Proposed	Meets Requirement	Comments
Detention Basin Plantings (LDM 1.d.(3))	Yes	No	No	70-75% of basin rim planted.
Transformer Screening (LDM 1.d.(3))	Yes	Yes		Provide 8 to 10 feet of clear space in front of the doors. 24" clear on sides.
R.O.W. Trees (2509.3.f - LDM 1.d))	Yes	Yes	Yes	
Single Family				
40 wide non-access greenbelt	NA			
Street Trees	NA			
Islands and boulevards	NA			Irrigated
Multi family	Yes			
Condo Trees	Yes	Yes	Yes	3 canopy of deciduous for each first floor unit
Street trees	Yes	Yes	Yes	1 per 35 linear feet
Interior street trees	Yes	Yes	Yes	1 per 35 linear feet Evergreens no closer than 20 feet.
Subcanopy trees	NA			1 per 25 linear feet
Basin plantings	Yes	No	pending	
Loading Zone (2507)	NA			Placed at rear of building / screened.

NOTES:

1. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This table is a summary chart and not intended to substitute for any Ordinance. The appropriate section of the applicable ordinance is indicated in parenthesis.
   For the landscape requirements, see the Zoning Ordinance landscape section on 2509, Landscape Design Manual and the appropriate items in the applicable zoning classification.
2. NA means not applicable.
3. Critical items that need to be addressed are in bold italics.
4. For any further questions, please contact:
   David R. Beschke
   City of Novi Landscape Architect
   45175 W. Ten Mile Road
   Novi, Michigan 48375-3024
   (248) 735-5621
   (248) 735-5600 fax
   City web site www.cityofnovi.org

Wetlands Review

Environmental Consulting & Technology, Inc.

September 10, 2014

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

Re: Novi Ten Townhomes (JSP14-0018)
Wetland Review of the Planned Rezoning Overlay (PRO)/Concept Plan (PSP14-0149)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Revised Planned Rezoning Overlay (PRO)/Concept Plan (Plan) for the proposed Novi Ten Townhomes project prepared by Seiber, Keast Engineering, L.L.C. dated August 18, 2014. 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 most recently visited the site on June 3, 2014 and has also previously visited this site for the purpose of a wetland boundary verification.

The proposed development is located east of Novi Road and north of Nick Lidstrom Drive, Section 26. The Plan appears to propose the construction of 21 multi-family residential site buildings, associated roads and utilities, and a stormwater detention basin. The proposed project site contains several areas of City-Regulated Wetlands and is adjacent to Chapman Creek (see Figures 1 & 2).

ECT previously visited the site for the purpose of conducting a wetland verification in 2008 as well as in 2014. In 2008, ECT (John Freeland) has met onsite with the applicant's wetland consultant (Jeff King of King & MacGregor Environmental) to review a previously flagged wetland boundary prior to final survey. In addition, it is ECT's understanding that the site was also subsequently evaluated by the MDEQ through their Level 3 Wetland Interpretation Program. After the MDEQ evaluation, some boundaries were further adjusted, resulting in further minor increase in mapped wetland area.

The development site is adjacent to small emergent-scrub shrub wetlands as well as higher-quality forested and open-water wetland. The site contains floodplain areas associated with a tributary of the Rouge River (Chapman Creek, per Plan). At the time, ECT discussed some particular areas that proposed development should work hard to avoid and minimize impacts. Those areas include forested and open water wetland areas.

Onsite Wetland Evaluation

The *Planned Rezoning Overlay Plan* (Sheet 2) indicates areas of wetland surrounding the proposed development site. As noted, these wetland areas were delineated by King & MacGregor Environmental, Inc.

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

(734) 769-3004

FAX (734) 769-3164

All of these wetlands are of moderate to high quality and only relatively minor impacts are 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

Currently, the Plan does not indicate proposed, direct impact to wetlands. However the Planned Rezoning Overlay (PRO) Plan (Sheet 2) does indicate a proposed 8' wide pedestrian boardwalk/bridge. The impacts associated with this work do not appear to be indicated or quantified on the Plan. Subsequent site plans should include a detailed description of both permanent and temporary wetland and wetland buffer impacts associated with this proposed boardwalk/bridge.

The Plan indicates a total permanent wetland buffer impact of 0.124-acre for the purpose of constructing proposed stormwater detention basin "B" as well as a small area of impact associated with the construction of one of the proposed buildings.

While the Plan includes proposed impacts to on-site wetland buffer, the Applicant has made an attempt to minimize proposed wetland disturbance. The following table summarizes the existing wetlands and the proposed wetland impacts as listed on the *Planned Rezoning Overlay Plan* (Sheet 2):

Table 1. *Proposed Wetland Impacts*

Wetland Area	***Wetland Area (acres)***	***City Regulated?***	***MDEQ Regulated?***	***Impact Area (acre)***	***Estimated Impact Volume (cubic yards)***
A	1.64	**Yes City Regulated /Essential**	**Yes**	None Indicated	None Indicated
TOTAL	**1.64**	**--**	**--**	**None Indicated**	**None Indicated**

As noted, the Plan specifies impacts to the 25-foot natural features setback. The following table summarizes the existing wetland setbacks and the proposed wetland setback impacts as listed on the *Planned Rezoning Overlay Plan*):

Table 2. *Proposed Wetland Buffer Impacts*

Wetland Setback/Buffer Area	***Wetland Buffer Area (acres)***	***Impact Area (acre)***
A	Not Provided	0.12
A	Not Provided	0.004
TOTAL	**--**	**0.124**

Subsequent site plan submittals shall identify, label and quantify all proposed impacts to wetland and 25-foot wetland buffers/setbacks, including any impacts associated with the proposed boardwalk/bridge. In addition, the plan shall label and quantify any wetland or wetland setback impacts associated with the proposed "off-site" 8-inch sanitary sewer connection that is proposed to the east of the site.

Permits & Regulatory Status

All of the wetland on the project site appears to be considered essential and regulated by the City of Novi and any impacts to wetlands or wetland buffers would require approval and authorization from the City of Novi. All of the wetland areas appear to be considered essential by the City as they appear 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.). This information has been noted in the *Proposed Wetland Impacts* table, above.

All associated wetland also appears to be regulated by the MDEQ as it appears to be within 500 feet of a watercourse/regulated drain (Chapman Creek, per Plan). It should however, be noted that final determination of regulatory status should be made by the MDEQ. It is the Applicant's responsibility to contact MDEQ in order to determine the regulatory status of the on-site wetlands. It is ECT's understanding that the site was also subsequently evaluated by the MDEQ through their Level 3 Wetland Interpretation Program. The applicant states that a copy of the MDEQ wetland boundary verification approval letter was enclosed with the plan review comments response letter. A copy does not appear to have been provided to our office.

The project as proposed will likely 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.

Comments

The following are repeat comments from our Wetland Review of the Planned Rezoning Overlay Plan letter dated June 6, 2014. The current status of these comments follows below, in ***bold italics***:

1. ECT encourages the Applicant to minimize impacts to on-site wetlands and wetland setbacks to the greatest extent practicable.

   This comment has been addressed. Although the Plan currently includes 0.124-acre of proposed permanent impact to the 25-foot wetland setback, the Applicant has made an attempt to minimize proposed wetland disturbance.

2. Subsequent site plan submittals shall identify, label and quantify all proposed impacts to wetland and 25-foot wetland buffers/setbacks.

   This comment still applies. Subsequent site plan submittals shall identify, label and quantify all proposed impacts to wetland and 25-foot wetland buffers/setbacks, including any impacts associated with the proposed boardwalk/bridge. In addition, the plan shall label and quantify any wetland or wetland setback impacts associated with the proposed "off-site" 8-inch sanitary sewer connection that is proposed to the east of the site.

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

   This comment appears to have been addressed. The Planned Rezoning Overlay Plan notes that "Conservation easement shall be provided over remaining woodlands, wetlands, and natural features setbacks".

4. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from the MDEQ for any proposed wetland impact. Final determination as to the regulatory status of each of the on-site wetlands shall be made by MDEQ. The Applicant should provide a copy of the MDEQ Wetland Use Permit application or letter of no jurisdiction to the City (and our office) for review and a copy of the approved permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information.

   This comment still applies.

5. It is ECT's understanding that the site was also subsequently evaluated by the MDEQ through their Level 3 Wetland Interpretation Program. A copy of the MDEQ wetland boundary verification approval letter should be provided to the City for review.

This comment still applies. The applicant states that a copy of the MDEQ wetland boundary verification approval letter was enclosed with the plan review comments response letter. A copy does not appear to have been provided to our office. Please submit a copy of this letter to our office.

Recommendation

In general, ECT recommends approval of the Revised Planned Rezoning Overlay (PRO)/Concept Plan for Wetlands with the condition that the Applicant address the items noted above under "Comments" in subsequent site plan submittals.

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: David Beschke, City of Novi, Licensed Landscape Architect
Kristen Kapelanski, AICP, City of Novi Planner
Valentina Nuculaj, City of Novi Customer Service

Attachments: Figures 1 & 2

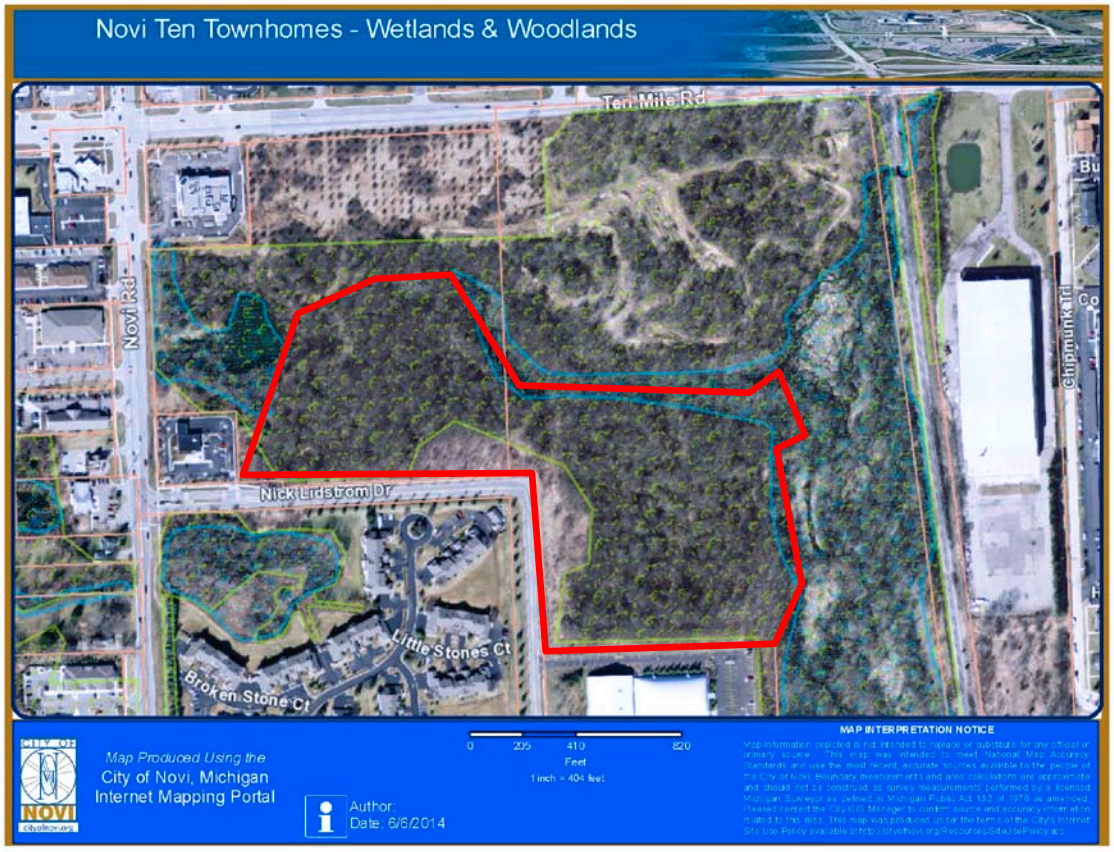


Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate property boundary shown in red). Regulated Woodland areas are shown in green and regulated Wetland areas are shown in blue).

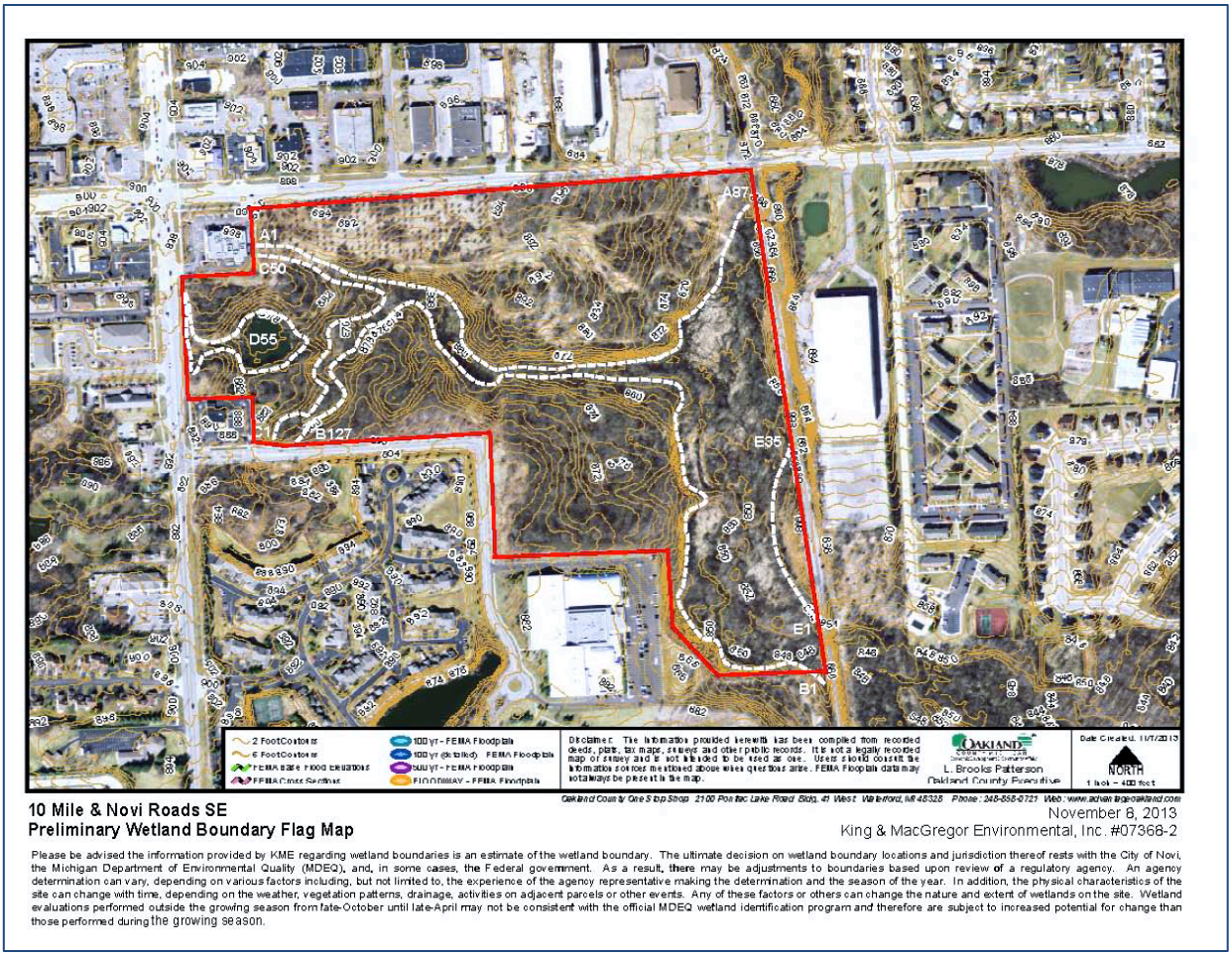


Figure 2. Wetland Delineation Map (Provided by King & MacGregor Environmental, Inc.

Woodlands Review

Environmental Consulting & Technology, Inc.

September 11, 2014

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

Re: Novi Ten Townhomes (JSP14-0018)
Woodland Review of the Revised Planned Rezoning Overlay (PRO)/Concept Plan (PSP14-0149)

Dear Ms. McBeth:

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Revised Planned Rezoning Overlay (PRO)/Concept Plan (Plan) for the proposed Novi Ten Townhomes project prepared by Seiber, Keast Engineering, L.L.C. dated August 18, 2014. The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37. 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.*

ECT most recently visited the site on June 3, 2014 for the purpose of a woodland evaluation.

The proposed development is located east of Novi Road and north of Nick Lidstrom Drive, Section 26. The Plan appears to propose the construction of 21 multi-family residential site buildings, associated roads and utilities, and a stormwater detention basin. The proposed project site contains a

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

(734) 769-3004

FAX (734) 769-3164

significant amount of City-Regulated Woodland area and is adjacent to areas of existing wetland and Chapman Creek (see Figure 1), a tributary of the Rouge River.

A *Woodland Plan* (Sheets L-2 & L-3) and *Woodland Tree List* (Sheet L-4) have been provided with the Plan. The existing site woodland information (tree sizes, species and conditions) have now been provided by the Applicant. In addition, proposed impacts to on-site regulated woodlands have now been described/quantified.

Onsite Woodland Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite woodland evaluation on June 3, 2014.

As noted above, the proposed project site contains a significant area of regulated woodland (see Figure 1). The majority of the proposed development limits lie within areas of existing City-Regulated Woodland. The highest quality woodlands on site are found in the northwestern portion of the project (located north of Nick Lidstrom Drive). The site is surrounded by areas of City- and MDEQ-regulated wetlands. The proposed site development will involve a significant amount of impact to regulated woodlands and will include a significant number of tree removals.

The on-site trees have been identified in the field with metal tags on fishing line allowing ECT to compare the tree diameters reported on the *Woodland Tree List* to the existing tree diameters in the field. ECT found that the *Woodland Plan* and the *Woodland Tree 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 (d.b.h.) measurements and found that the data provided on the Plan was consistent with the field measurements.

On-site woodland within the project area consists of American elm (*Ulmus americana*), basswood (*Tilia americana*), bitternut hickory (*Carya cordiformis*), black cherry (*Prunus serotina*), black locust (*Robinia pseudoacacia*), black walnut (*Juglans nigra*), boxelder (*Acer negundo*), silver maple (*acer saccharinum*), sugar maple (*Acer saccharum*), green ash (*Fraxinus pennsylvanica*), cottonwood (*Populus deltoides*) and several other species.

Based on the *Tree List* information as well as our site assessment, the maximum size tree diameter on the site is 33-inch d.b.h. (sugar maple) and the average d.b.h. is approximately 12-inch d.b.h. In terms of habitat quality and diversity of tree species, the project site is of good quality. The majority of the woodland areas consist of relatively-mature growth trees of good health. This wooded area provides a relatively high level environmental benefit and in terms of a scenic asset, windblock, noise buffer or other environmental asset, the woodland areas proposed for impact are considered to be of good quality.

After our woodland evaluation and review of the *Woodland Tree List,* there are several (7) trees on-site that meet the minimum caliper size for designation as a specimen tree. These trees include:

- Tree # 15, 26”/27” hawthorn (18” is minimum caliper size for specimen trees);
- Tree # 143, 25” black cherry (24” is minimum caliper size for specimen trees);
- Tree # 317, 33” silver maple (24” is minimum caliper size for specimen trees);
- Tree # 486, 11”/27” black cherry (24” is minimum caliper size for specimen trees);
- Tree # 541, 24” black locust (24” is minimum caliper size for specimen trees);
- Tree # 3750, 27” black cherry (24” is minimum caliper size for specimen trees);
- Tree # 3751, 32” black cherry (24” is minimum caliper size for specimen trees).

Of these 7 potential specimen trees, all 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. Typical tree species by caliper size that are eligible for nomination as specimen trees must meet the minimum size qualifications as shown below:

Specimen Trees Minimum Caliper Size

Common Name	Species	DBH
Arborvitae	*Thuja occidentalis*	16”
Ash	*Fraxinus spp.*	24”
American basswood	*Tilia Americana*	24”
American beech	*Fagus grandifolia*	24”
American elm	*Ulmus americana*	24”
Birch	*Betula spp.*	18”
Black alder	*Alnus glutinosa*	12”
Black tupelo	*Nyssa sylvatica*	12”
Black walnut	*Juglans nigra*	24”
White walnut	*Juglans cinerea*	20”
Buckeye	*Aesculus spp.*	18”
Cedar, red	*Juniperus spp.*	14”
Crabapple	*Malus spp.*	12”
Douglas fir	*Pseudotsuga menziesii*	18”
Eastern hemlock	*Tsuga Canadensis*	14”
Flowering dogwood	*Cornus florida*	10”
Ginkgo	*Ginkgo biloba*	24”
Hickory	*Carya spp.*	24”
Kentucky coffee tree	*Gymnocladus dioicus*	24”
Larch/tamarack	*Larix laricina (eastern)*	14”

Locust	*Gleditsia triacanthos/Robinia pseudoacacia*	24”
Sycamore	*Platanus spp.*	24”
Maple	*Acer spp. (except negundo)*	24”
Oak	*Quercus spp.*	24”
Pine	*Pinus spp.*	24”
Sassafras	*Sassafras albidum*	16”
Spruce	*Picea spp.*	24”
Tulip tree	*Liriodendron tulipifera*	24”
Wild cherry	*Prunus spp.*	24”

A nomination for designation of a historic or specimen tree shall be brought on for consideration by the planning commission. Where the nomination is not made by the owner of the property where the tree is located, the owner shall be notified in writing at least fifteen (15) days in advance of the time, date and place that the planning commission will consider the designation. The notice shall advise the owner that the designation of the tree as a historic or specimen tree will make it unlawful to remove, damage or destroy the tree absent the granting of a woodland use permit by the city. The notice shall further advise the owner that if he objects to the tree designation the planning commission shall refuse to so designate the tree.

Absent objection by the owner, the planning commission may designate a tree as an historic tree upon a finding that because of one (1) or more of the following unique characteristics the tree should be preserved as a historic tree: The tree is associated with a notable person or historic figure;

- The tree is associated with the history or development of the nation, the state or the city;
- The tree is associated with an eminent educator or education institution;
- The tree is associated with art, literature, law, music, science or cultural life;
- The tree is associated with early forestry or conservation;
- The tree is associated with American Indian history, legend or lore.

Absent objection by the owner, the planning commission may designate a tree as a specimen tree upon a finding that because of one (1) or more of the following unique characteristics the tree should be preserved as a specimen tree:

- The tree is the predominant tree within a distinct scenic or aesthetically-valued setting;
- The tree is of unusual age or size. Examples include those trees listed on the American Association Social Register of Big Trees, or by the Michigan Botanical Club as a Michigan Big Tree, or by nature of meeting the minimum size standards for the species as shown in the "Specimen Trees Minimum Caliper Size" chart, above;

- The tree has gained prominence due to unusual form or botanical characteristics.

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

Proposed Woodland Impacts and Replacements

As shown, there appear to be substantial impacts proposed to regulated woodlands associated with the site construction. It appears as if the proposed work (proposed buildings 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 Plan* (Sheet L-3). The Applicant has noted the following:

- Total Trees: 760
- Regulated Trees Removed: 593
- Regulated Trees Preserved: 120

- Stems to be Removed 8" to 11": 315 x 1 replacement (Requiring 315 Replacements)
- Stems to be Removed 11" to 20": 188 x 2 replacements (Requiring 376 Replacements)
- Stems to be Removed 20" to 30": 10 x 3 replacements (Requiring 3099 Replacements)
- Stems to be Removed 30"+: 1 x 4 replacements (Requiring 4 Replacements)
- Multi-Stemmed Trees: (Requires 263 Replacements)

- Total Replacement Trees Required: 988

It should be noted that the supplemental spreadsheet/tree list provided by Allen Design is consistent with the information on the Plan and notes that 988 Woodland Replacement credits are required. It is currently not clear if the Applicant is proposing any on-site Woodland Replacement credits or if the intent is to pay all of the required Woodland Replacement Credits into the City of Novi Tree Fund. This should be clarified on future site plan submittals.

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 grant or denial of an application for a use permit required by this article:

No application shall be denied solely on the basis that some trees are growing on the property under consideration. However, the protection and conservation of irreplaceable natural

resources from pollution, impairment, or destruction is of paramount concern. Therefore, the preservation of woodlands, trees, similar woody vegetation, and related natural resources shall have priority over development when there are location alternatives.

In addition,

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

There are a significant number of replacement trees required for the construction of the proposed development. Novi Ten Townhomes consists of 21 multi-family residential buildings. Residential and commercial developments are located south of the proposed site and wetlands are located along the northern edge. Impacts to a portion of the site woodlands are deemed unavoidable if this property is to be developed for residential use. While the overall ecological values of the existing woodlands cannot be immediately replaced through the planting of woodland replacement trees, the applicant will need to show that they are prepared to meet the requirements of the Woodland Ordinance through on-site Woodland Replacement Credits and/or a payment to the City of Novi Tree Fund.

Proposed woodland impacts will require a Woodland Permit from the City of Novi that allows for the removal of trees eight (8)-inch diameter-at-breast-height (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.

Comments and Recommendations

The following are repeat comments from our Woodland Review of the Planned Rezoning Overlay Plan letter dated June 6, 2014. The current status of these comments follows below, in ***bold italics***. ECT recommends that the Applicant address the items noted below in subsequent site plan submittals:

1. A woodlands plan, tree inventory, removal & replacement plan shall be provided on subsequent site plans.

   This comment has been addressed.

2. 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).

   This comment still applies.

3. 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.

This comment still applies. It is currently not clear if the Applicant is proposing any on-site Woodland Replacement credits or if the intent is to pay all of the required Woodland Replacement Credits into the City of Novi Tree Fund. This should be clarified on future site plan submittals.

4. The Applicant is encouraged to provide woodland conservation easements for any areas containing woodland replacement trees, if applicable.

   This comment has been addressed. The Applicant has stated in their comments letter dated August 18, 2014 that a wetland and woodland Conservation Easement will be provided over the remaining woodlands, wetlands and natural features setbacks. The area shall be indicated on the Preliminary Site Plan.

5. A Woodland Replacement financial guarantee for the planting of replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of $400.

   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***.

   This comment still applies.

6. 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.

   This comment still applies.

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

   This comment still applies.

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

Respectfully submitted,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Senior Associate Engineer

cc: David Beschke, City of Novi, Licensed Landscape Architect
Kristen Kapelanski, AICP, City of Novi Planner
Valentina Nuculaj, City of Novi Customer Service

Attachments: Figure 1 & Site Photos

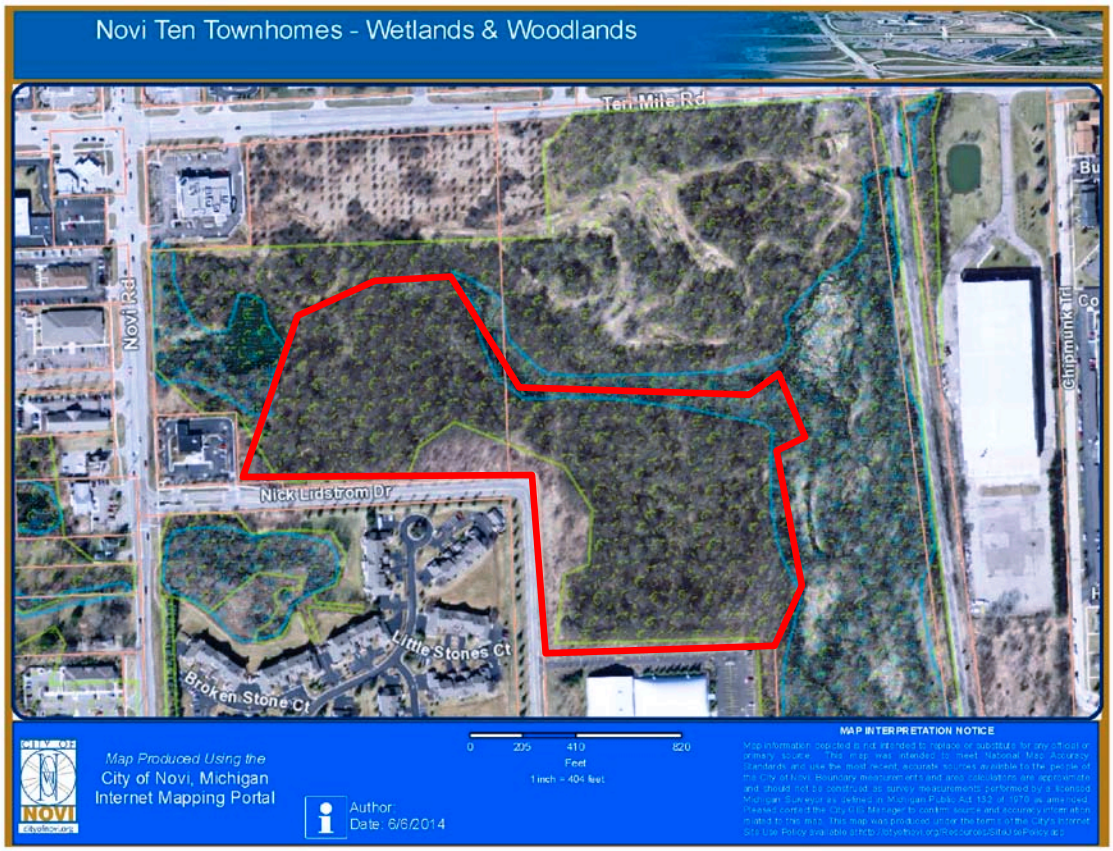


Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate property boundary shown in red). Regulated Woodland areas are shown in green and regulated Wetland areas are shown in blue).

Site Photos

Photo 1. View north along Nick Lidstrom Dr. from Sports Club of Novi.

Photo 2. View northwest along Nick Lidstrom Dr.

Photo 3. Tree #134, ~12-inch beech tree.

Photo 4. View north along edge of Chapman Creek floodplain.

Façade Review

DRN & ASSOCIATES, ARCHITECTS, PC
Phone: (248) 880-6523
E-Mail: dnecci@drnarchitects.com
Web: drnarchitects.com
50850 Applebrooke Dr., Northville, MI 48167

November 5, 2014

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 REVIEW
Novi Ten Townhomes, Revised PRO Concept Plan, SP14-0088
Façade Region: 1, Zoning District: RA

Dear Ms. McBeth:
The following is the Facade Review for the Revised PRO Concept plan for the above referenced project. Our review is based on the drawings with revisions initialed by Jason Minock on 11/4/14 (attached), of Toll Brothers Development, in response to our prior review. The applicant has provided four models to be used within the project. The percentages of materials proposed for each model are as shown in the tables below. The maximum (and minimum) percentages allowed by the Schedule Regulating Façade Materials of Ordinance Section 2520 are shown in the bottom row. Materials that are in non-compliance with the Facade Schedule are highlighted in bold.

Larchmont, Brandywine	Front	Rear	Side (Entrance)	Rear Concealed Units	Ordinance Maximum (Minimum)
Stone or Brick	**20%**	**10%**	**20%**	0%	100% (30% Min)
Horizontal Siding	20%	35%	**55%**	**45%**	50% (Note 11)
Asphalt Shingles	**55%**	**50%**	15%	**50%**	25%
Wood Trim	5%	5%	5%	5%	25%

Pentwater, Brandywine	Front	Rear	Side (Entrance)	Rear Concealed Units	Ordinance Maximum (Minimum)
Stone or Brick	**20%**	**5%**	NA	0%	100% (30% Min)
Horizontal Siding	20%	**60%**	NA	**65%**	50% (Note 11)
Asphalt Shingles	**55%**	**30%**	NA	**30%**	25%
Wood Trim	5%	5%	NA	5%	25%

Eastport, Brandywine	Front	Rear	Side (Entrance)	Rear Concealed Units	Ordinance Maximum (Minimum)
Stone or Brick	**20%**	**10%**	NA	0%	100% (30% Min)
Horizontal Siding	20%	**55%**	NA	**65%**	50% (Note 11)
Asphalt Shingles	**55%**	30%	NA	**30%**	25%
Wood Trim	5%	5%	NA	5%	25%

Bristol, Manor	Front	Rear	Side (Entrance)	Rear Concealed Units	Ordinance Maximum (Minimum)
Stone or Brick	**20%**	**10%**	**20%**	0%	100% (30% Min)
Horizontal Siding	40%	**65%**	45%	**75%**	50% (Note 11)
Asphalt Shingles	**30%**	15%	25%	15%	25%
Wood Trim	10%	10%	10%	10%	25%

Section 2520 – The Façade Ordinance

The applicant has added significant amounts of Brick or Stone to the models since or prior review. The applicant has indicated that all models will as a minimum have Brick or Stone up to the second floor belt line on the front and garage return wall, and up to the window sill line on all side facades. The rear facades of units visible from the public street will also have brick or stone up to the window sill line. Rear facades concealed form the public street will have no brick or masonry.

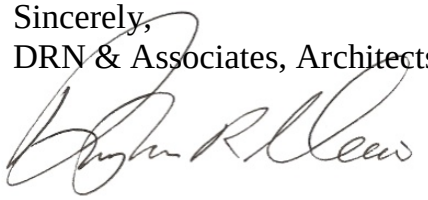
Section 3402 – The Planned Rezoning Overlay (PRO) Ordinance

The PRO Ordinance requires that the *proposed land development project ….. 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.* We believe that the requirements of Section 2520, The Façade Ordinance with respect to the types and percentages of materials must be met or exceeded to achieve compliance with this Section.

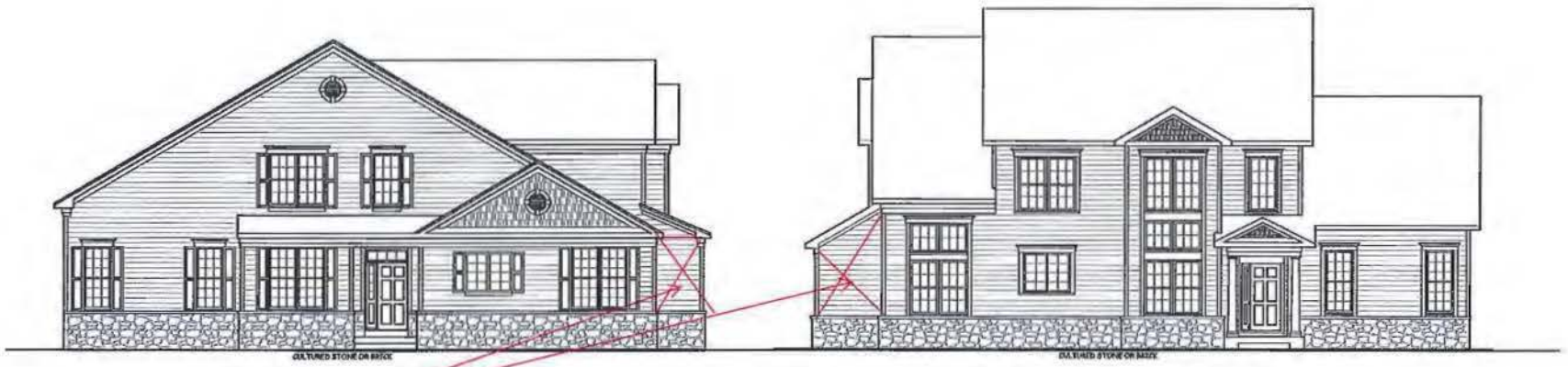
Recommendation: It is our recommendation that the revised facades meet the intent and purpose of the Façade Ordinance and that a Section 9 waiver be granted for the underage of brick and overage of siding and asphalt shingles. Likewise, the revised facades are consistent with the intent and purpose of Ordinance Section 3402.

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

Sincerely,
DRN & Associates, Architects PC



Douglas R. Necci, AIA



LARCHMONT SIDE ELEVATION

BRISTOL SIDE ELEVATION

BRICK OR STONE ON GARAGE RETURN WALLS, TYPICAL. PLEASE ALSO SHOW COURTYARD SIDE OR PROVIDE STATEMENT THAT COURTYATD RETURN WALLS WILL BE BRICK OR STONE UP TO THE THE SOFFIT LINE.

I agree
11-4-14

BRISTOL REAR ELEVATION

EASTPORT REAR ELEVATION

PENTWATER REAR ELEVATION

LARCHMONT REAR ELEVATION

ELEVATIONS

CARRIAGE AND TOWNHOME

T. HILL

2014.10.13

Toll Architecture
FLORIDA TEXAS CORPORATE SEATTLE

BRICK OR STONE ON RETURN WALLS. PLEASE ALSO SHOW THIS ON THE SIDE AND COURT ELEVATIONS.

BRICK OR STONE

I agree

10/7/14

ELEVATIONS

CARRIAGE AND TOWNHOME

T. HILL

2014.10.13

Toll Architecture

FLORIDA TEXAS CORPORATE SEATTLE

Fire Review

May 29, 2014

August 22, 2014

TO: Barbara McBeth- Deputy Director of Community Development
Kristen Kapelanski- Plan Review

RE: Novi Ten Townhomes

PSP#14-0088
PSP#14-0149

Project Description: A 93 unit condominium development located in Section # 26 on Nick Lidstrom Dr.

Comments: Meet Fire Department Standards Items corrected.

Recommendation: Approval

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

Applicant Response Letter

Toll Brothers
LAND DEVELOPMENT

To: Kristen Kapelanski, AICP – Planner

From: Mike Noles, Vice President of Land Development

Date: November 6, 2014

Re: Plan Review Center Report **NOVI TEN TOWNHOMES**
JSP14-18 Rezoning 18.707 with a PRO Planned Rezoning Overlay

Ordinance Deviations

1. Circulation and Driveway Spacing Waivers: A waiver from the Design and Construction Standards to allow the proposed cul-de-sac to deviate from the layout standards for local streets. We agree to satisfy items i. through iv. under point 12.C in the traffic review letter. Additionally, a same-side driveway spacing waiver is requested for the south access drive (84 ft. provided, 105 ft. required). We agree that any deviations from these requirements should be included in the PRO Agreement.
2. Landscape Waivers: We agree that any deviations from the requirements noted in the landscape review letter dated June 13, 2014, should be included in the PRO Agreement
3. Building Materials: We agree with staff's recommendation to seek a Section 9 waiver and agree to the conditions noted in the facade review letter dated November 5, 2014.
4. Building Orientation: We would request that a deviation from the requirement that buildings be oriented at a 45º angle be included in the PRO Agreement.
5. Setback Coverage: As noted, we would request a deviation from this requirement be included in the PRO Agreement.
6. Building Setbacks: As noted, we would request a 9' deviation from the 75' minimum requirement be included in the PRO Agreement, but only at the location noted, where it abuts a large wooded wetland and floodplain area.
7. Off-Site Work: Berming will be proposed along 10 Mile. Precise height has not been determined but it will be built in accordance with city standards and no deviations from city requirements are anticipated. The plans (sheets L-2 and L-3) illustrate the proposed tree impacts. More information with regard to tree replacement, berms, plantings and grading will be provided on the Preliminary and Final Site Plans.
8. Proposed Sidewalks and Streetscape Features:

   (a) There are some areas where it is feasible to relocate the interior sidewalks further away from the proposed roadway to allow for a larger buffer space between the proposed sidewalks and proposed roadway. This reconfiguration will be provided on the Preliminary Site Plan

   (b) We would be willing to consider and commit to providing pedestrian style lighting along the frontage of the City streets, and look forward to hearing input on this topic from staff and the Planning Commission.

Toll Brothers
LAND DEVELOPMENT

Paving The Way For American's Luxury Home Builder

May 19, 2014

Sara Roediger, Community Planner
City of Novi – Planning Department
45175 West 10 Mile Road
Novi, Michigan 48375

Re: **NOVI – TEN TOWNHOMES – RM-1 -PLANNED REZONING OVERLAY**
Toll Brothers
Nick Lidstrom Drive, City of Novi

Dear Ms. Roediger:

As you know, a proposal to rezone this parcel to RM-1 had been presented to your office for consideration, and after hearing the review comments received at the Pre-Application Review meeting held April 4, 2014, and the staff's suggestion that we consider a Planned Rezoning Overlay (PRO) for the development, we are now submitting application for a Rezoning from OS- and I-1 to RM-1 with Planned Rezoning Overlay in accordance with Article 34 of the Zoning Ordinance. Attached please find ten (10) sets of the PRO Site Plans, Application for PRO and other documents in support of the proposal being presented here.

PROJECT DESCRIPTION

The rezoning is requested in order to facilitate the development of multifamily project proposed to be constructed by Toll Brothers, Inc. that would contain a high quality, owner occupied condominiums with similar architecture and floor plans that are found at other successful townhome projects Toll Brothers has built in Novi, such as the Island Lake of Novi Arbors and the Island Lake of Novi North Woods products. Each unit will contain floor plans that range from 2000-2600 SF. There will be units available with both first floor master bedrooms and traditional layout units to appeal to a wide market segment.

The parcel to be rezoned, which has roadway access on Nick Lidstrom Drive, will be split off and a property line established along the northern boundary at the approximate location of the existing drainage course that flows west to east through the parcels. This stream as well as the wetlands and woodlands along its banks will be preserved and will provide a natural buffer to the remainder parcels that will continue to be zoned as I-1 (fronting on Ten Mile Road) and OS-1 (fronting on both Novi Road and Ten Mile Road).

New York Stock Exchange – Symbol TOL
29665 WM K. Smith Dr., Suite B, New Hudson, MI 48165
Phone: **(248) 446-5100** • Fax: **(248) 446-5106**
tollbrothers.com

IMPACTS - SURROUNDING AREA

Although the adjacent area is technically "industrial" it has been developed with low impact industrial, residential, and has natural barriers to adjacent uses. For example, the acreage immediately southwest and west of the proposed development is multi-family residential, which is consistent with the proposal that is being presented here. Residents of that community would most likely welcome a similar use, rather than an industrial/office complex.

South of the proposed site there is the Sports Club of Novi, the Novi Ice Arena and the proposed Novi dog park. We feel that these are fantastic recreational opportunities and are generally perceived by the public as recreational use rather than industrial use, despite their technical designation. A residential community within walking distance of these City of Novi recreational facilities as well as a private exercise facility would be mutually beneficial to one another. Further walking connectivity will be achieved with the public benefit (described below) being offered to construct a pathway system for public use between Nick Lidstrom Drive and the site to the north, as well as an offsite pathway connection to the proposed Novi Dog Park. The usability of these pathway connections could potentially be more effective with a residential development than that built within an industrial/office facility.

To the North there are commercial and industrial uses, but those uses are buffered by 10 mile road and the natural wetland stream complex. Similarly, there is an elevated train track and wide expanse of wetlands serving as a visual barrier from existing industrial uses to the east.

The proposed rezoning will result in an expansion of the existing RM-1 zoned property (Saddle Creek Apartments) located south and west of the subject parcel. The I-1 zoned property located directly south of the parcel and east of Nick Lidstrom Drive is currently developed as the Novi Sports Club. Buffering in the form of berming and landscaping, as required by Novi ordinance will be shown when the site plan is submitted.

PROPOSED USE ACHIEVED THROUGH PRO

The attached PRO Site Plan illustrates how the proposed buildings will fit into the existing topography while preserving natural features to the north and east. Proposed berming and landscaping along the south property line and Nick Lidstrom Drive will also provide buffering. As previously described, each unit will contain floor plans that range from 2000-2600 SF. There will be units available with both first floor master bedrooms and traditional layout units to appeal to a wide market segment. High quality materials similar to that found in other Toll Brothers developments, with exterior products consisting of cement board, cultured stone, brick and shake siding will be used (see attached elevations) in all proposed buildings.

With a straight rezoning to RM-1, the above would be unlikely to be achieved or would not be assured without utilizing the PRO.

PUBLIC BENEFITS

The following is a list of the public benefits that are being offed as part of this proposal,

1. Attractive use of property compared to current I-1 and OS-1 zoning.
2. Construction of pathway for public use through site from Nick Lidstrom Drive to north property line for connection to future development to the north.
3. Construction of offsite pathway to new Novi Dog Park commencing from site's southeast corner along rear property line of Novi Sport's Club.
4. Preservation of natural features along north and east property lines.

Considering these public benefits and the Proposed Use Achieved through PRO described above, we feel the proposed PRO rezoning would be in the public interest and that the proposed PRO rezoning would clearly outweigh the detriments.

Sincerely,

TOLL BROTHERS LAND DEVELOPMENT

Mr. Michael T. Noles
Vice President

encl.

PLANNED REZONING OVERLAY (PRO) PLAN

NOVI TEN TOWNHOMES

SECTION 26, TOWN 1 NORTH, RANGE 8 EAST,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

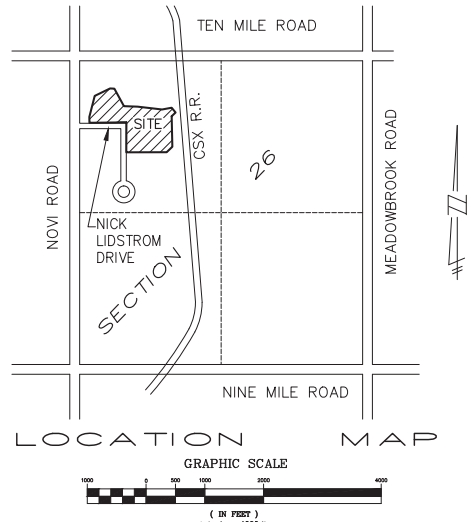
PREPARED FOR:
TOLL BROTHERS
29665 WILLIAM K. SMITH DR., SUITE B
NEW HUDSON, MICHIGAN 48165
248.446.5100

LEGAL DESCRIPTION

COMMENCING AT THE NORTHWEST CORNER OF SECTION 26, T.1N, R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN; THENCE N86°27'27"E 2123.10 FEET ALONG THE CENTERLINE OF TEN MILE ROAD; THENCE S07°58'33"E 2072.30 FEET; THENCE S86°56'27"W 355.53 FEET; THENCE N35°58'56"W 279.43 FEET; THENCE N03°03'33"W 269.20 FEET TO THE POINT OF BEGINNING; THENCE S86°56'27"W 658.95 FEET; THENCE N02°47'33"W 509.40 FEET; THENCE S86°27'27" W 630.00 FEET; THENCE N03°32'33"W 100.00 FEET; THENCE N11°35'45"E 370.00 FEET; THENCE N60°51'08"E 290.00 FEET; THENCE N90°00'00"E 75.00 FEET; THENCE S31°29'21"E 339.99 FEET; THENCE N89°23'14"E 231.65 FEET; THENCE S86°22'13"E 420.86 FEET; THENCE N76°46'23"E 167.10 FEET; THENCE S41°34'10"E 105.00 FEET; THENCE S43°34'07"W 91.51 FEET; THENCE S04°10'41"E 519.60 FEET; THENCE S42°47'02"W 133.85 FEET; THENCE S86°56'27"W 30.00 FEET TO THE POINT OF BEGINNING, CONTAINING 20.09 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD, IF ANY.

FIRE DEPARTMENT NOTES

1. All fire hydrants and water mains shall be installed and in service prior to above foundation building construction as each phase is built.
2. All roads shall be paved and capable of supporting 35 tons prior to construction above foundation.
3. Building addresses shall be posted facing the street during all phases of construction. Addresses shall be a minimum of three inches in height on a contrasting background.
4. Provide 4–6" diameter concrete filled steel posts 48" above finish grade at each hydrant as required.
5. Fire lanes shall be posted with "Fire Lane – No Parking" signs in accordance with Ordinance #85.99.02.



SHEET INDEX

NOTES

1. ALL WORK SHALL CONFORM TO THE CITY OF NOVI'S CURRENT STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE CITY OF NOVI FOR ANY WORK WITHIN THE RIGHT–OF–WAY OF NICK LIDSTROM DRIVE.
3. ALL PAVEMENT MARKINGS, TRAFFIC CONTROL SIGNS, AND PARKING SIGNS SHALL COMPLY WITH THE DESIGN AND PLACEMENT REQUIREMENTS OF THE 2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

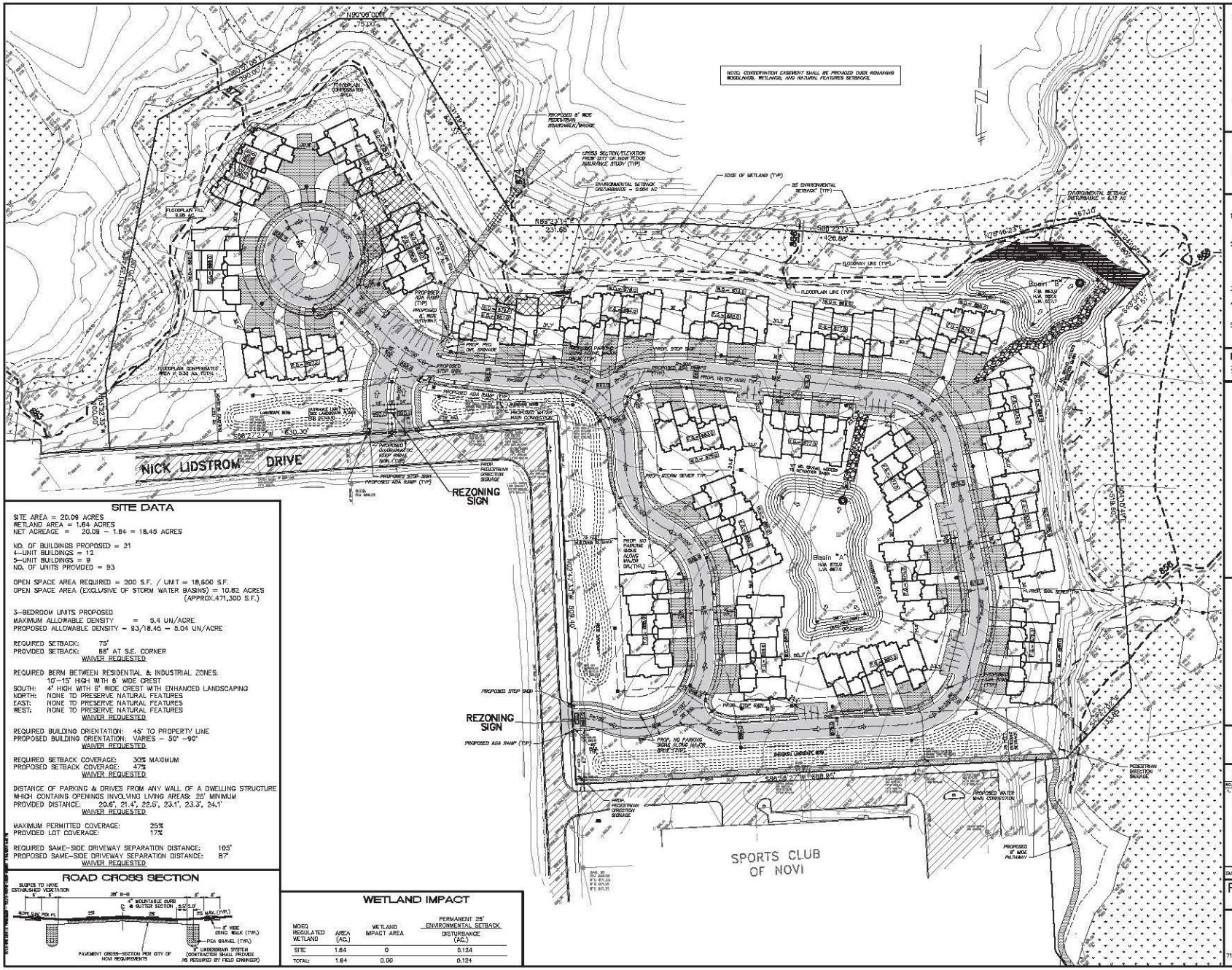
SEIBER, KEAST ENGINEERING, L.L.C.
CONSULTING ENGINEERS
7125 ORCHARD LAKE ROAD • SUITE 304 • WEST BLOOMFIELD, MI • 48322
PHONE: 248.562.7357 FAX: 248.562.7397

SURVEY PROVIDED BY:
ESE CONSULTANTS, INC.
29665 WILLIAM K. SMITH DR. SUITE B
NEW HUDSON, MICHIGAN 48165
PHONE: 248.446.5103

TREE SURVEY AND LANDSCAPE PLANS PROVIDED BY:
ALLEN DESIGN
557 CARPENTER
NORTHVILLE, MICHIGAN 48167
PHONE: 248.467.4668

REVISIONS			ENGINEER'S SEAL
NO.	ITEM	DATE	
1.	PER CITY REVIEW	8-18-14	

DATE: 05-15-14 | DESIGNED BY: A.A. | JOB NUMBER: 13-036
CHECKED BY: P.K. | DRAWING FILE: 01-13036-CN



Min. 8" high letters

ZONING CHANGE PROPOSED FROM OS-1 & I-1 TO RM-1 WITH PRO

FOR MORE INFORMATION CALL:

NOVI COMMUNITY DEVELOPMENT DEPARTMENT

248-347-0475

Min. 4" high letters

REZONING SIGN DETAIL

GRAPHIC SCALE

(IN FEET)

1 inch = 60 ft.

PROPOSED IMPROVEMENTS

1. MUNICIPAL SEWER TO BE PROVIDED BY CONNECTING TO AN EXISTING SANITARY SEWER ON THE EAST SIDE OF NICK LIDSTORM DRIVE AND TO SANITARY SEWER EAST OF THE SITE.
2. MUNICIPAL WATER TO BE PROVIDED BY CONNECTING TO AN EXISTING 8" WATER MAIN STUB LOCATED ON THE NORTH SIDE OF NICK LIDSTORM DRIVE AND CONNECTING TO A EXISTING 8" WATER MAIN LOCATED AT THE NORTH SIDE OF SPORTS CLUB OF NOVI.
3. STORM WATER DETENTION SHALL BE PROVIDED ON SITE.
4. 5' WIDE CONCRETE SIDEWALKS SHALL BE CONSTRUCTED WHERE INDICATED.
5. A CITY OF NOVI RIGHT-OF-WAY PERMIT IS REQUIRED FOR WORK WITHIN ANY PUBLIC ROAD RIGHT-OF-WAY.

NOTE:

25' WIDE VEGETATED BUFFER SHALL BE PROVIDED AROUND THE PERIMETER OF EACH STORM WATER BASIN.

SOILS MAP

SOIL CLASSIFICATIONS

(PER "SOILS SURVEY OF OAKLAND COUNTY MICHIGAN", UNITED STATES DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE IN COOPERATION WITH MICHIGAN AGRICULTURAL EXPERIMENT STATION, ISSUED MARCH 1982)

10B – MARLETTE SANDY LOAM, 1 TO 6 PERCENT SLOPES
10C – MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
43 – SLOAN-MARLETTE ASSOCIATION

LEGEND

EXISTING	PROPOSED	
		PAVEMENT (ASPHALT)
		SIDE WALK (CONCRETE) CONCRETE CURB AND GUTTER
		STORM SEWER
		SANITARY SEWER
		WATER MAIN
		MANHOLE
		CATCH BASIN W/STREAM GUARD
		CURB INLET W/SILT SAC
		END SECTION
		GATE VALVE
		HYDRANT
		FLOOD PLAIN
1000	1000	CONTOURS
+ 1000.0	1000.00	SPOT ELEVATION

SITE DATA

SITE AREA = 20.09 ACRES
WETLAND AREA = 1.64 ACRES
NET ACREAGE = 20.09 – 1.64 = 18.45 ACRES

NO. OF BUILDINGS PROPOSED = 21
4-UNIT BUILDINGS = 12
5-UNIT BUILDINGS = 9
NO. OF UNITS PROVIDED = 93

OPEN SPACE AREA REQUIRED = 200 S.F. / UNIT = 18,600 S.F.
OPEN SPACE AREA (EXCLUSIVE OF STORM WATER BASINS) = 10.82 ACRES (APPROX.471,300 S.F.)

3-BEDROOM UNITS PROPOSED
MAXIMUM ALLOWABLE DENSITY = 5.4 UN/ACRE
PROPOSED ALLOWABLE DENSITY = 93/18.45 = 5.04 UN/ACRE

REQUIRED SETBACK: 75'
PROVIDED SETBACK: 68' AT S.E. CORNER
WAIVER REQUESTED

REQUIRED BERM BETWEEN RESIDENTIAL & INDUSTRIAL ZONES:
10'-15' HIGH WITH 6' WIDE CREST
SOUTH: 4' HIGH WITH 6' WIDE CREST WITH ENHANCED LANDSCAPING
NORTH: NONE TO PRESERVE NATURAL FEATURES
EAST: NONE TO PRESERVE NATURAL FEATURES
WEST: NONE TO PRESERVE NATURAL FEATURES
WAIVER REQUESTED

REQUIRED BUILDING ORIENTATION: 45' TO PROPERTY LINE
PROPOSED BUILDING ORIENTATION: VARIES – 50° -90°
WAIVER REQUESTED

REQUIRED SETBACK COVERAGE: 30% MAXIMUM
PROPOSED SETBACK COVERAGE: 47%
WAIVER REQUESTED

DISTANCE OF PARKING & DRIVES FROM ANY WALL OF A DWELLING STRUCTURE WHICH CONTAINS OPENINGS INVOLVING LIVING AREAS: 25' MINIMUM
PROVIDED DISTANCE: 20.6', 21.4', 22.5', 23.1', 23.3', 24.1'
WAIVER REQUESTED

MAXIMUM PERMITTED COVERAGE: 25%
PROVIDED LOT COVERAGE: 17%

REQUIRED SAME-SIDE DRIVEWAY SEPARATION DISTANCE: 105'
PROPOSED SAME-SIDE DRIVEWAY SEPARATION DISTANCE: 87'
WAIVER REQUESTED

ROAD CROSS SECTION

WETLAND IMPACT

MDEQ REGULATED WETLAND	AREA (AC.)	WETLAND IMPACT AREA	PERMANENT 25' ENVIRONMENTAL SETBACK DISTURBANCE (AC.)
SITE	1.64	0	0.124
TOTAL:	1.64	0.00	0.124

NOVI TEN TOWNHOMES

SECTION 28, TOWN 1 NORTH, RANGE 8 EAST
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

REVISIONS

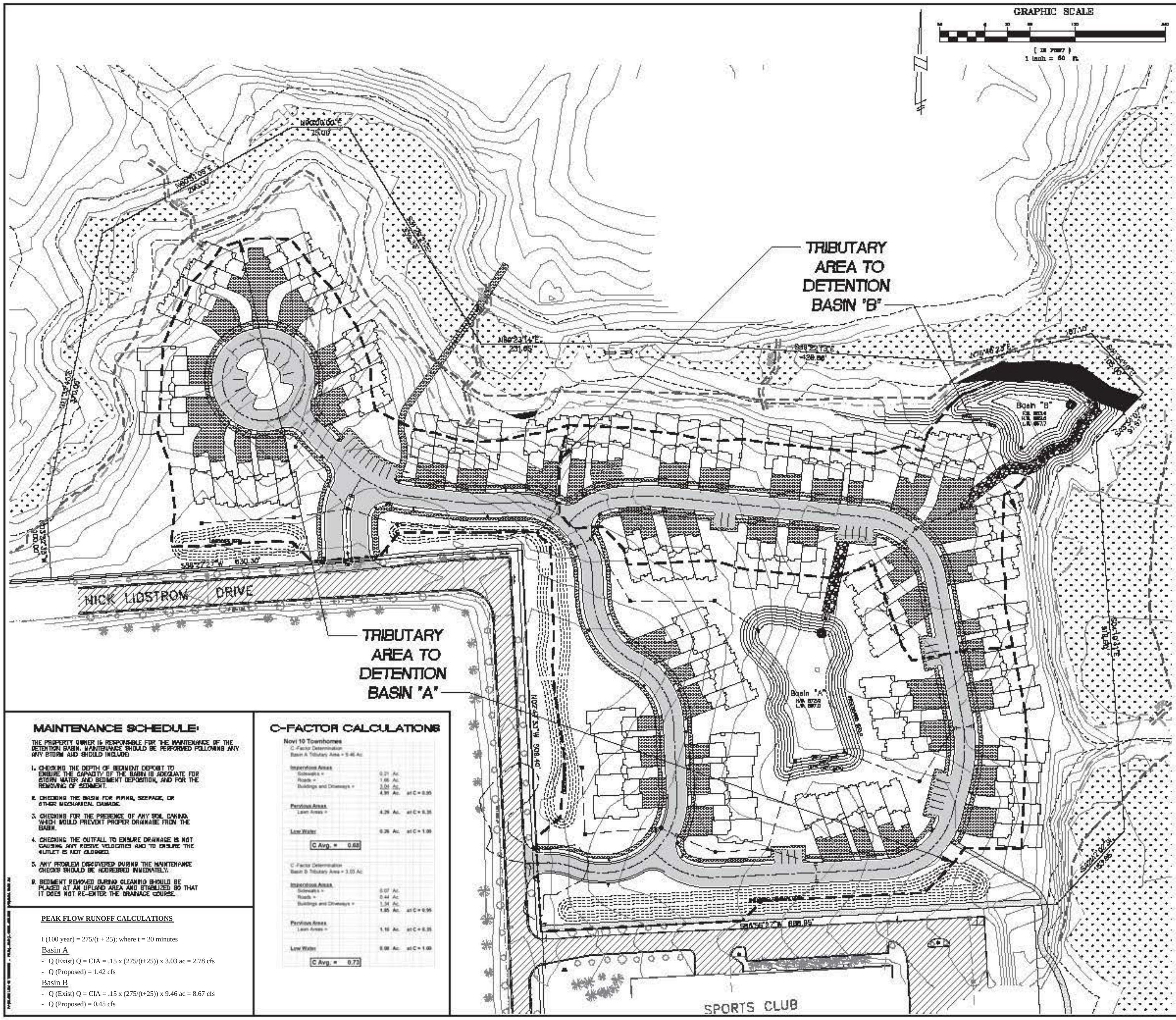
NO.	ITEM	DATE
1.	PER CITY REVIEW	8-18-14

DATE: 06-16-14 DESIGNED BY: J.A. JOB NUMBER: 13-338
DRAWN BY: F.K. DRAWING FILE: S-13038-ZC.DWG

PLANNED REZONING OVERLAY (PRO) PLAN

SEIBER, KEAST ENGINEERING, L.L.C.
CONSULTING ENGINEERS
7125 ORCHARD LAKE ROAD * SUITE 304 * WEST BLOOMFIELD, MI * 48322
PHONE: 248.582.7357 FAX: 248.582.7397

SHEET 2



STORM WATER DETENTION CALCULATIONS

BASIN "A"

DETERMINE DETENTION REQUIRED (100-YEAR STORM)

Qall =	1.42 cfs (0.15 cfs/AC)	
AC =	9.46 (AREA TRIBUTARY TO THE DETENTION BASIN)	
C =	0.68	
Qo =	Qall / (AC x C) =	0.22
T =	-25 + SQRT(10312.5/Qo) =	191.22 min
Vs =	(18000 x T/(T + 25)) - (40 x Qo x T) =	12904.06 C.F./Ac. imp
Vt =	Vs x AC x C =	83015.181 C.F.

TOTAL DETENTION VOLUME REQUIRED = 83,015 C.F.

TOTAL DETENTION PROVIDED (100 YEAR)

ELEVATION	AREA(s.f.)	VOLUME
872	23249	
		86570 C.F.
867	11379	
TOTAL		86570 C.F.

BASIN "B"

DETERMINE DETENTION REQUIRED (100-YEAR STORM)

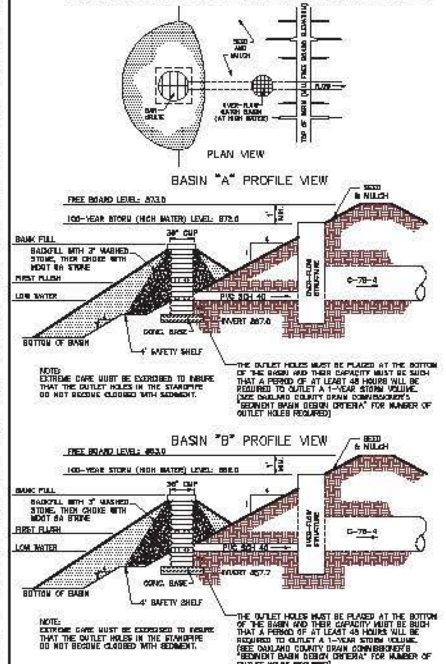
Qall =	0.45 cfs (0.15 cfs/AC)	
AC =	3.03 (AREA TRIBUTARY TO THE DETENTION BASIN)	
C =	0.73	
Qo =	Qall / (AC x C) =	0.21
T =	-25 + SQRT(10312.5/Qo) =	199.03 min
Vs =	(18000 x T/(T + 25)) - (40 x Qo x T) =	13022.87 C.F./Ac. imp
Vt =	Vs x AC x C =	28805.277 C.F.

TOTAL DETENTION VOLUME REQUIRED = 28,805 C.F.

TOTAL DETENTION PROVIDED (100 YEAR)

ELEVATION	AREA(s.f.)	VOLUME
860	10107	
		29109 C.F.
857.7	3432	
TOTAL		29109 C.F.

DETENTION BASIN SEDIMENT FILTER DETAIL



MAINTENANCE SCHEDULE:

THE PROPERTY OWNER IS RESPONSIBLE FOR THE MAINTENANCE OF THE DETENTION BASIN. MAINTENANCE SHOULD BE PERFORMED FOLLOWING ANY ANY STORM AND SHOULD INCLUDE:

1. CHECKING THE DEPTH OF SEDIMENT DEPOSIT TO ENSURE THE CAPACITY OF THE BASIN IS ADEQUATE FOR STORM WATER AND SEDIMENT DEPOSITION, AND FOR THE REMOVING OF SEDIMENT.
2. CHECKING THE BASIN FOR PIPING, SEEPAGE, OR OTHER MECHANICAL DAMAGE.
3. CHECKING FOR THE PRESENCE OF ANY SOIL CAVING WHICH WOULD PREVENT PROPER DRAINAGE FROM THE BASIN.
4. CHECKING THE OUTFALL TO ENSURE DRAINAGE IS NOT CAUSING ANY EROSIVE VELOCITIES AND TO ENSURE THE OUTLET IS NOT CLOGGED.
5. ANY PROBLEM DISCOVERED DURING THE MAINTENANCE CHECKS SHOULD BE ADDRESSED IMMEDIATELY.
6. SEDIMENT REMOVED DURING CLEANING SHOULD BE PLACED AT AN UPLAND AREA AND STABILIZED SO THAT IT DOES NOT RE-ENTER THE DRAINAGE COURSE.

PEAK FLOW RUNOFF CALCULATIONS

I (100 year) = 275/(t + 25); where t = 20 minutes

Basin A
- Q (Exist) Q = CIA = .15 x (275/(t+25)) x 3.03 ac = 2.78 cfs
- Q (Proposed) = 1.42 cfs

Basin B
- Q (Exist) Q = CIA = .15 x (275/(t+25)) x 9.46 ac = 8.67 cfs
- Q (Proposed) = 0.45 cfs

C-FACTOR CALCULATIONS

Novi 10 Townhomes

C-Factor Determination
Basin A Tributary Area = 9.46 Ac

Impervious Areas			
Sidewalks =	0.21	Ac.	
Roads =	1.66	Ac.	
Buildings and Driveways =	3.04	Ac.	
	4.91	Ac.	at C = 0.95
Pervious Areas			
Lawn Areas =	4.29	Ac.	at C = 0.35
Low Water	0.26	Ac.	at C = 1.00
C Avg. = 0.68			

C-Factor Determination
Basin B Tributary Area = 3.03 Ac

Impervious Areas			
Sidewalks =	0.07	Ac.	
Roads =	0.44	Ac.	
Buildings and Driveways =	1.34	Ac.	
	1.85	Ac.	at C = 0.95
Pervious Areas			
Lawn Areas =	1.10	Ac.	at C = 0.35
Low Water	0.08	Ac.	at C = 1.00
C Avg. = 0.73			

NOVI TEN TOWNHOMES

SECTION 35, TOWN 1 NORTH, RANGE 8 EAST
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

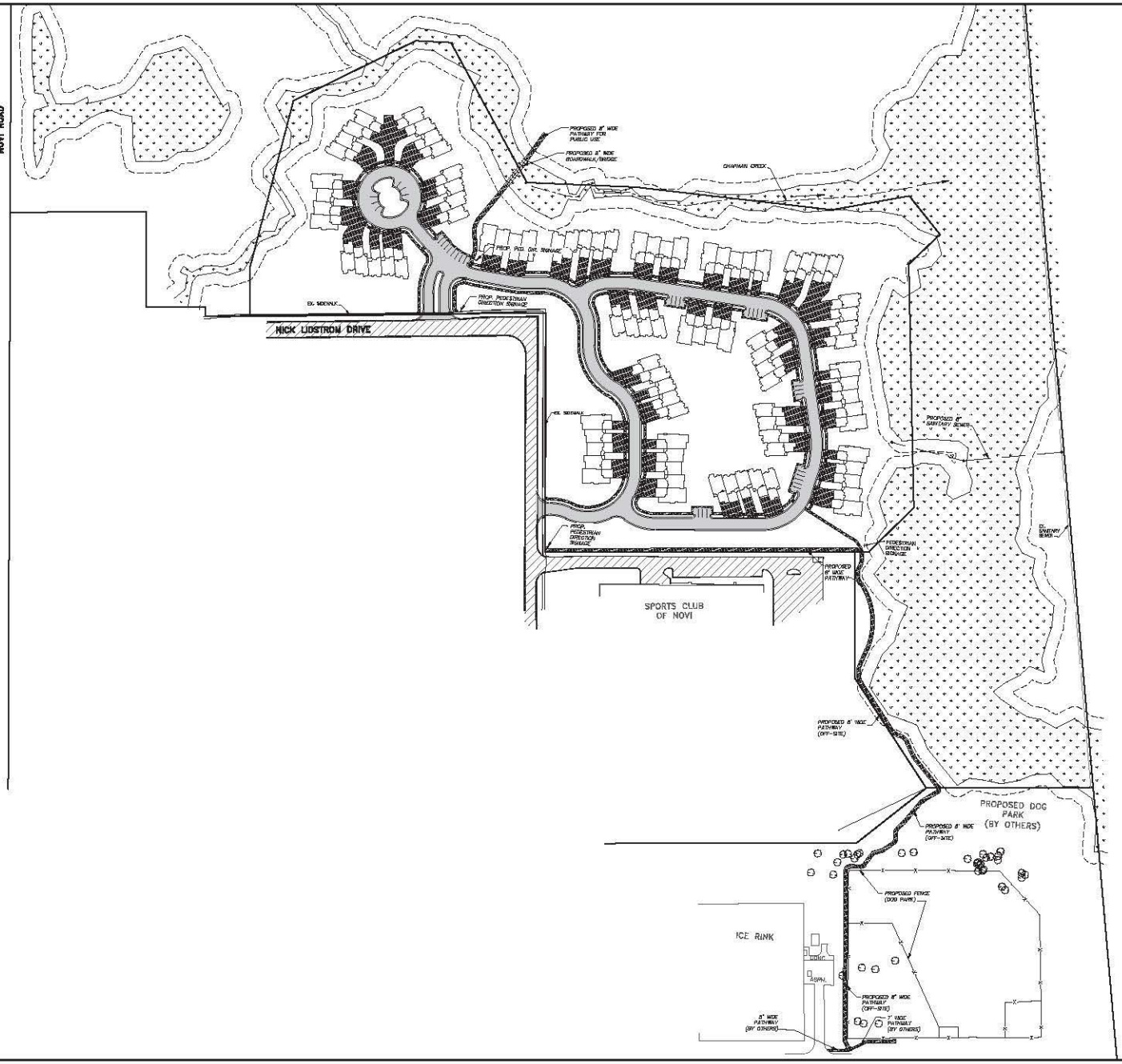
REVISIONS

DATE: 06-18-14

STORM WATER MANAGEMENT PLAN

SEIBER, KEAST ENGINEERING, L.L.C.
CONSULTING ENGINEERS
7128 ORCHARD LAKE ROAD • SUITE 304 • WEST BLOOMFIELD, MI • 48322
PHONE: 248.682.7357 FAX: 248.682.7397

SHEET 3



GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

LEGEND

EXISTING	PROPOSED	
		PAVEMENT (ASPHALT)
		SIDE WALK (CONCRETE)
		CONCRETE CURB AND GUTTER
		STORM SEWER
		SANITARY SEWER
		WATER MAIN
		MANHOLE
		CATCH BASIN W/STREAM GUARD
		CURB INLET W/SILT SAC
		END SECTION
		GATE VALVE
		HYDRANT
		FLOOD PLAIN
1000	1000	CONTOURS
+ 1000.0	1000.00 T/C	SPOT ELEVATION

NOVI TEN TOWNHOMES

SECTION 25, TOWN 1 NORTH, RANGE 8 EAST
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

REVISIONS

NO.	ITEM	DATE
1.	PER CITY REVIEW	8-18-14

DATE: 06-16-14 | DESIGNED BY: J.A. | JOB NUMBER: 13-338
CHECKED BY: F.K. | DRAWING FILE: OS-13338-OY

OFF-SITE IMPROVEMENTS PLAN

SEIBER, KEAST ENGINEERING, L.L.C.
CONSULTING ENGINEERS
7125 ORCHARD LAKE ROAD * SUITE 304 * WEST BLOOMFIELD, MI * 48322
PHONE: 248.582.7357 FAX: 248.582.7397

SHEET 4

Landscape Summary

Street Trees	
Street Frontage	4,946 l.f.
Trees Required	141 Trees (4,946 / 35')
Trees Provided	141 Trees
Street Lawn	
Street Frontage	1,139 l.f.
Trees Required	25.3 Trees (1,139 / 45')
Trees Provided	25 Trees (29 Existing)
Greenbelt	
Greenbelt Length	1,139 l.f.
Trees Required	33 Trees (1,139 / 35')
Trees Provided	33 Trees
Sub-Canopy Trees Required	46 Trees (1,139 / 25')
Sub-Canopy Trees Provided	46 Trees
Detention Pond Plantings	
Freeboard Length	1,161 l.f.
Planting Required	812 l.f. (70%)
Planting Provided	870 l.f. (75%)

Woodland to Remain

Nick Lidstrom Drive

Entry Light

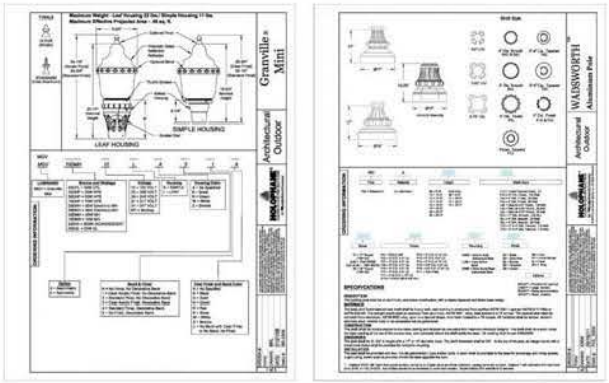
34' Greenbelt

25' Corner Clearance

Basin "B"

Basin "A"

Entry Light



811 Know what's below. Call before you dig.

ALLEN DESIGN
LAND PLANNING / LANDSCAPE ARCHITECTURE
557 CARPENTER • NORTHVILLE, MI 48167
248.467.4668 • Fax 248.349.9559
Email: jca@wideopenwest.com

Toll Brothers

Seal:

Title:
Landscape Plan

Project:
Novi Ten Townhomes
Novi, Michigan

Prepared for:
Toll Brothers
39665 William K. Smith's Dr., Suite B
New Hudson, Michigan 48165

Revision:	Issued:
Submission	August 13, 2014

Job Number:
13-022

Drawn By:	Checked By:
jca	jca

0' 30' 60'

NORTH
1"=60'

Sheet No.
L-1

Matches Sheet 3

ALLEN DESIGN
LAND PLANNING / LANDSCAPE ARCHITECTURE
557 CARPENTER • NORTHVILLE, MI 48167
248.467.4668 • Fax 248.349.0559
Email: jca@allendesignmail.com

Toll Brothers

Seal:

Title:
Woodland Plan

Project:
Novi Ten Townhomes
Novi, Michigan

Prepared for:
Toll Brothers
39665 William K. Smith Dr., Suite B
New Hudson, Michigan 48165

Revision:	Issued:
Submission	August 13, 2014

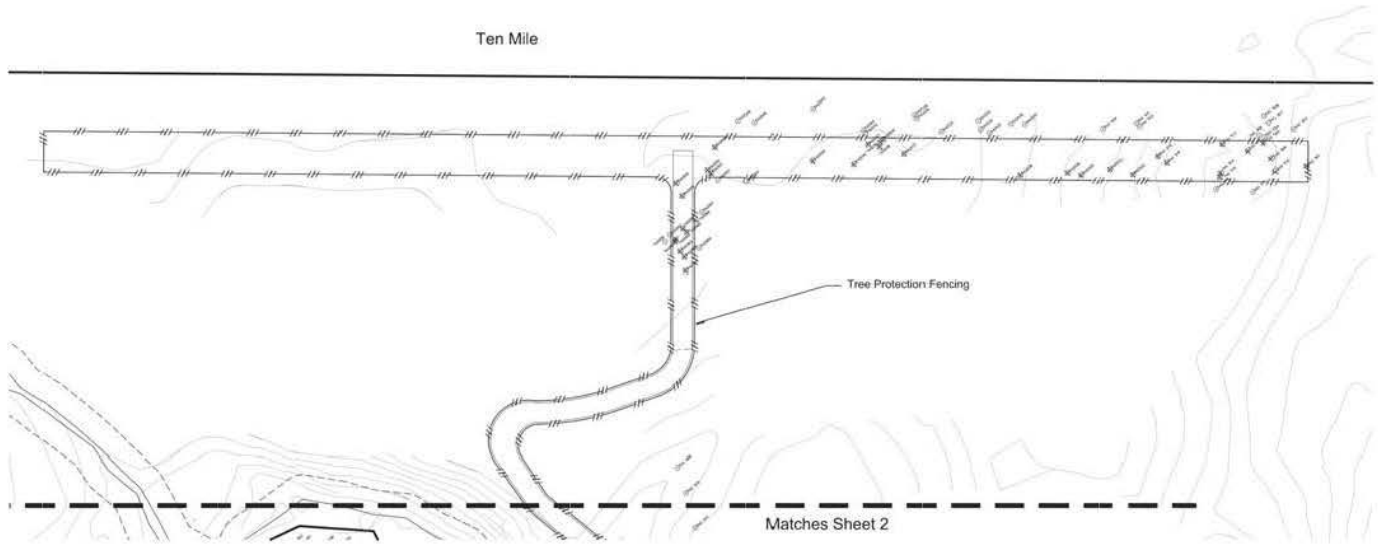
Job Number:
13-022

Drawn By:	Checked By:
jca	jca

0' 30' 60'
NORTH
1"=60'

Sheet No.
L-2

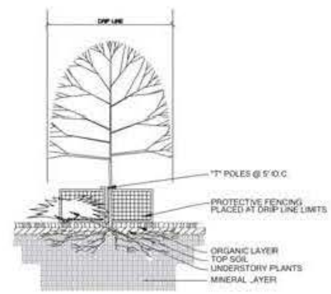
811 Know what's below. Call before you dig.



Key
× Denotes Removed

Woodland Summary

Total Trees		760 Trees
Non Regulated Trees		47 Trees
Regulated Trees Removed		593 Trees
Regulated Trees Preserved		120 Trees
Replacement Required		
Trees 8" - 11"	315 trees x 1=	315 Trees
Trees 11" - 20"	188 trees x 2=	376 Trees
Trees 20" - 30"	10 trees x 3=	30 Trees
Trees 30"+	1 tree x 4=	4 Trees
Multi-Stemmed Trees		263 Trees
Total Replacement Required		988 Trees



TREE PROTECTION DETAIL

NO SCALE

ALLEN DESIGN
LAND PLANNING / LANDSCAPE ARCHITECTURE
557 CARPENTER • NORTHVILLE, MI 48167
248.467.4668 • Fax 248.349.0559
Email: jca@wideopenwest.com

Toll Brothers

Seal:

Title:
Woodland Plan

Project:
Novi Ten Townhomes
Novi, Michigan

Prepared for:
Toll Brothers
39665 William K. Smith Dr., Suite B
New Hudson, Michigan 48165

Revision:	Issued:
Submission	August 13, 2014

Job Number:
13-022

Drawn By:	Checked By:
jca	jca

0' 30' 60'
NORTH
1"=60'

Sheet No.
L-3

811 Know what's below. Call before you dig.

Tree #	DBH	Scientific Name	Common Name	Remarks	Status	Replacement
1	5,5	Acer negundo	Box Elder	Good	Remove	0
2	14	Acer negundo	Box Elder	Good	Remove	2
3	12	Malus spp.	Common Apple	Good	Remove	2
4	20	Prunus serotina	Black Cherry	Good	Remove	2
5	8	Acer negundo	Box Elder	Good	Remove	1
7	13	Acer negundo	Box Elder	Good	Remove	2
8	9	Acer negundo	Box Elder	Good	Remove	1
9	13	Acer negundo	Box Elder	Good	Remove	2
10	16	Acer negundo	Box Elder	Good	Remove	2
11	11	Acer negundo	Box Elder	Good	Remove	1
12	20	Prunus serotina	Black Cherry	Good	Remove	2
13	8	Prunus serotina	Black Cherry	Good	Remove	1
14	3,4,4,7	Crataegus spp.	Hawthorn	Good	Remove	0
15	8	Acer negundo	Box Elder	Good	Remove	1
16	12	Acer negundo	Box Elder	Good	Remove	2
17	6,6	Acer negundo	Box Elder	Good	Remove	0
18	9	Acer negundo	Box Elder	Good	Remove	1
19	18	Acer negundo	Box Elder	Good	Remove	2
20	7,13	Malus spp.	Common Apple	Good	Remove	2
21	13	Acer negundo	Box Elder	Good	Remove	2
22	8	Acer negundo	Box Elder	Good	Remove	1
23	7	Acer negundo	Box Elder	Good	Remove	0
25	8	Acer negundo	Box Elder	Good	Remove	1
26	15	Acer negundo	Box Elder	Good	Remove	2
27	7	Acer negundo	Box Elder	Good	Remove	0
28	19	Prunus serotina	Black Cherry	Good	Remove	2
29	8	Acer negundo	Box Elder	Good	Remove	1
30	7	Acer negundo	Box Elder	Good	Remove	0
31	16	Prunus serotina	Black Cherry	Good	Remove	2
32	11	Acer negundo	Box Elder	Good	Remove	1
33	16	Acer negundo	Box Elder	Good	Remove	2
34	18	Prunus serotina	Black Cherry	Good	Remove	2
35	8	Acer negundo	Box Elder	Good	Remove	1
36	8	Acer negundo	Box Elder	Good	Remove	1
37	7	Acer negundo	Box Elder	Good	Remove	0
38	19	Prunus serotina	Black Cherry	Good	Remove	2
39	10	Populus deltoides	Eastern Cottonwood	Good	Remove	1
40	9	Acer negundo	Box Elder	Good	Remove	1
41	15	Acer negundo	Box Elder	Good	Remove	2
42	14	Acer negundo	Box Elder	Good	Remove	2
43	8	Prunus serotina	Black Cherry	Good	Remove	1
44	15	Acer negundo	Box Elder	Good	Remove	2
45	12,15	Acer negundo	Box Elder	Good	Remove	4
46	12	Acer negundo	Box Elder	Good	Remove	2
47	15	Acer negundo	Box Elder	Good	Remove	2
48	12	Acer negundo	Box Elder	Good	Remove	2
49	14	Acer negundo	Box Elder	Good	Remove	2
50	10	Acer negundo	Box Elder	Good	Remove	1
51	8	Acer negundo	Box Elder	Good	Remove	1
52	8	Fraxinus pennsylvanica	Green Ash	Good	Remove	1
53	13	Acer negundo	Box Elder	Good	Remove	2
54	9	Acer negundo	Box Elder	Good	Remove	1
55	6,7,11	Malus spp.	Common Apple	Good	Remove	2
56	7	Populus deltoides	Eastern Cottonwood	Good	Remove	0
57	11	Acer negundo	Box Elder	Good	Remove	1
58	9	Acer negundo	Box Elder	Good	Remove	1
59	Dead				Remove	0
60	10	Acer negundo	Box Elder	Good	Remove	1
61	8	Acer negundo	Box Elder	Good	Remove	1
62	8	Acer negundo	Box Elder	Good	Remove	1
63	18	Acer negundo	Box Elder	Fair	Remove	2
65	14	Acer negundo	Box Elder	Good	Remove	2
66	14	Acer negundo	Box Elder	Good	Remove	2
67	7,7,13,12,21	Acer negundo	Box Elder	Good	Remove	6
68	19	Acer negundo	Box Elder	Good	Remove	2
69	7,7	Acer negundo	Box Elder	Good	Remove	0
70	8	Acer negundo	Box Elder	Good	Remove	1
71	11	Acer negundo	Box Elder	Good	Remove	1
73	15	Prunus serotina	Black Cherry	Good	Remove	2
74	9	Acer negundo	Box Elder	Good	Remove	1
75	8	Acer negundo	Box Elder	Good	Remove	1
76	16	Prunus serotina	Black Cherry	Good	Remove	2
77	4,5,6	Acer negundo	Box Elder	Good	Remove	0
78	8	Acer negundo	Box Elder	Good	Remove	1
79	7	Acer negundo	Box Elder	Good	Remove	0
80	10,13	Acer negundo	Box Elder	Good	Remove	3
81	Dead				Remove	0
82	8	Acer negundo	Box Elder	Good	Remove	1
83	8	Acer negundo	Box Elder	Good	Remove	1
84	12	Prunus serotina	Black Cherry	Good	Remove	2
85	10	Populus deltoides	Eastern Cottonwood	Good	Remove	1
86	8	Populus deltoides	Eastern Cottonwood	Good	Remove	1
87	16	Acer negundo	Box Elder	Good	Remove	2
88	9,9	Populus deltoides	Eastern Cottonwood	Good	Remove	1
89	10	Acer negundo	Box Elder	Good	Remove	1
90	16	Prunus serotina	Black Cherry	Good	Remove	3
92	9	Robinia pseudoacacia	Black Locust	Good	Remove	1
93	7	Acer negundo	Box Elder	Good	Remove	0
94	7,7	Acer negundo	Box Elder	Good	Remove	0
95	18	Prunus serotina	Black Cherry	Good	Remove	2
96	Dead				Remove	0
97	11	Acer negundo	Box Elder	Good	Remove	1
98	10	Acer negundo	Box Elder	Good	Remove	1
99	8	Acer negundo	Box Elder	Good	Remove	1
100	11	Acer negundo	Box Elder	Good	Remove	1
101	9	Acer negundo	Box Elder	Good	Remove	1
102	14	Acer negundo	Box Elder	Fair	Remove	2
103	12	Acer negundo	Box Elder	Good	Save	
104	11,14	Malus spp.	Common Apple	Poor	Remove	4
105	14	Acer negundo	Box Elder	Good	Remove	2
106	9	Prunus serotina	Black Cherry	Good	Remove	1
107	8	Prunus serotina	Black Cherry	Good	Save	
108	18	Acer negundo	Box Elder	Good	Save	
113	10	Prunus serotina	Black Cherry	Good	Remove	1
114	10,15	Acer negundo	Box Elder	Good	Remove	4
115	11	Prunus serotina	Black Cherry	Good	Remove	1
116	13	Prunus serotina	Black Cherry	Good	Save	
119	14	Acer negundo	Box Elder	Good	Save	
120	11	Prunus serotina	Black Cherry	Good	Remove	1
122	29	Acer negundo	Box Elder	Good	Remove	3
123	10	Prunus serotina	Black Cherry	Good	Remove	1
124	10	Prunus serotina	Black Cherry	Good	Remove	1
125	10	Acer negundo	Box Elder	Good	Remove	1
126	11	Ulmus parvifolia	Chinese Elm	Good	Remove	1
128	13	Acer saccharum	Sugar Maple	Good	Remove	2
129	14	Prunus serotina	Black Cherry	Good	Remove	2
130	10	Malus spp.	Common Apple	Good	Remove	1
131	9	Prunus serotina	Black Cherry	Good	Remove	1
133	12	Malus spp.	Common Apple	Good	Remove	2
134	10	Fagus grandifolia	American Beech	Good	Remove	1
135	11	Prunus serotina	Black Cherry	Good	Remove	1
136	12	Ulmus americana	American Elm	Good	Remove	2
137	12	Acer negundo	Box Elder	Good	Remove	2
138	11	Prunus serotina	Black Cherry	Good	Save	
139	12	Acer negundo	Box Elder	Good	Save	
140	10	Acer negundo	Box Elder	Good	Remove	1
141	20	Prunus serotina	Black Cherry	Good	Remove	2
142	9	Acer negundo	Box Elder	Good	Remove	1
143	10	Prunus serotina	Black Cherry	Good	Remove	1
144	12,17,17	Acer negundo	Box Elder	Good	Remove	6
145	5,7	Acer negundo	Box Elder	Good	Remove	0
146	11	Prunus serotina	Black Cherry	Good	Remove	1
148	11	Acer negundo	Box Elder	Good	Save	
149	12	Acer negundo	Box Elder	Good	Remove	2
150	10,12	Acer negundo	Box Elder	Fair	Remove	3

Tree #	DBH	Scientific Name	Common Name	Remarks	Status	Replacement
151	9	Acer negundo	Box Elder	Good	Remove	1
152	11	Prunus serotina	Black Cherry	Good	Remove	1
153	13	Acer negundo	Box Elder	Good	Remove	2
154	7	Acer negundo	Box Elder	Good	Remove	0
155	10	Acer saccharinum	Silver Maple	Good	Remove	1
156	7,8	Rhamnus cathartica	Buckthorn	Good	Remove	1
157	8	Populus deltoides	Eastern Cottonwood	Good	Remove	1
158	12	Prunus serotina	Black Cherry	Good	Remove	2
159	8	Acer negundo	Box Elder	Good	Remove	1
160	8	Acer negundo	Box Elder	Good	Remove	1
161	9	Prunus serotina	Black Cherry	Good	Remove	1
162	15	Prunus serotina	Black Cherry	Fair	Remove	2
163	15,18	Acer negundo	Box Elder	Fair	Remove	5
165	11	Juglans nigra	Black Walnut	Good	Save	
166	14	Acer negundo	Box Elder	Good	Remove	2
167	11	Prunus serotina	Black Cherry	Good	Remove	1
168	11	Prunus serotina	Black Cherry	Good	Remove	1
169	10	Acer negundo	Box Elder	Good	Remove	1
170	15	Acer negundo	Box Elder	Good	Remove	2
171	9	Malus spp.	Common Apple	Good	Remove	1
172	15	Prunus serotina	Black Cherry	Good	Remove	2
173	10	Juglans nigra	Black Walnut	Good	Remove	1
174	12	Acer negundo	Box Elder	Good	Remove	2
175	14	Acer negundo	Box Elder	Good	Save	
176	10	Malus spp.	Common Apple	Good	Remove	1
177	14	Prunus serotina	Black Cherry	Good	Remove	2
179	8,8	Acer negundo	Box Elder	Good	Remove	2
180	9	Acer negundo	Box Elder	Good	Remove	1
181	12	Acer negundo	Box Elder	Fair	Remove	2
182	18	Prunus serotina	Black Cherry	Good	Remove	2
183	14,15,19	Ulmus parvifolia	Chinese Elm	Good	Remove	9
184	10	Acer negundo	Box Elder	Good	Save	
185	10	Prunus serotina	Black Cherry	Good	Remove	1
187	9	Acer negundo	Box Elder	Good	Save	
188	9	Populus deltoides	Eastern Cottonwood	Good	Remove	1
189	19	Acer negundo	Box Elder	Good	Remove	2
190	13	Prunus serotina	Black Cherry	Good	Remove	2
191	21	Populus deltoides	Eastern Cottonwood	Good	Remove	3
193	11	Prunus serotina	Black Cherry	Good	Save	
194	10	Prunus serotina	Black Cherry	Good	Save	
195	12	Prunus serotina	Black Cherry	Good	Remove	2
196	9	Malus spp.	Common Apple	Good	Remove	1
197	9	Prunus serotina	Black Cherry	Good	Save	
198	8,16	Acer negundo	Box Elder	Good	Save	
199	9	Acer negundo	Box Elder	Good	Remove	1
200	8,9	Robinia pseudoacacia	Black Locust	Good	Remove	1
201	10	Prunus serotina	Black Cherry	Good	Remove	1
202	15	Prunus serotina	Black Cherry	Good	Remove	2
203	9	Acer negundo	Box Elder	Good	Remove	1
204	Dead				Remove	0
205	7,10,12	Prunus serotina	Black Cherry	Good	Remove	3
206	9	Prunus serotina	Black Cherry	Good	Remove	1
207	8,10,11,11	Acer negundo	Box Elder	Good	Remove	5
208	8,10,13	Juglans nigra	Black Walnut	Good	Remove	3
209	12,12,16	Acer negundo	Box Elder	Good	Remove	5
210	16	Acer negundo	Box Elder	Good	Remove	2
211	16	Prunus serotina	Black Cherry	Good	Remove	2
212	8,9	Acer negundo	Box Elder	Good	Remove	3
213	8,8,8,10,11,12,16	Acer negundo	Box Elder	Good	Remove	10
214	19	Prunus serotina	Black Cherry	Good	Remove	2
215	5,8,10	Malus spp.	Common Apple	Good	Remove	3
216	7	Prunus serotina	Black Cherry	Good	Remove	0
217	10	Prunus serotina	Black Cherry	Good	Remove	1
218	7	Prunus serotina	Black Cherry	Good	Remove	0
219	7	Prunus serotina	Black Cherry	Good	Remove	0
220	8	Prunus serotina	Black Cherry	Good	Remove	1
221	8	Prunus serotina	Black Cherry	Good	Remove	1
222	7	Prunus serotina	Black Cherry	Good	Remove	0
223	7	Prunus serotina	Black Cherry	Good	Remove	0
224	8	Prunus serotina	Black Cherry	Good	Remove	1
225	10,10	Prunus serotina	Black Cherry	Good	Remove	3
226	9,10	Prunus serotina	Black Cherry	Good	Remove	3
227	19	Prunus serotina	Black Cherry	Good	Remove	2
228	15	Ulmus americana	American Elm	Good	Save	
229	8	Prunus serotina	Black Cherry	Good	Save	
230	11	Prunus serotina	Black Cherry	Good	Save	
231	17	Prunus serotina	Black Cherry	Good	Remove	2
232	9,20	Prunus serotina	Black Cherry	Good	Remove	4
233	13	Prunus serotina	Black Cherry	Good	Save	
234	7,13,18	Prunus serotina	Black Cherry	Good	Save	
235	10	Malus spp.	Common Apple	Poor	Save	
236	8	Acer negundo	Box Elder	Good	Save	
237	14	Acer negundo	Box Elder	Good	Save	
238	19	Acer negundo	Box Elder	Good	Save	
239	12	Acer negundo	Box Elder	Good	Save	
240	10	Acer negundo	Box Elder	Good	Save	
241	12	Acer negundo	Box Elder	Good	Save	
242	12	Acer negundo	Box Elder	Good	Save	
243	10	Acer negundo	Box Elder	Good	Save	
244	12	Prunus serotina	Black Cherry	Good	Save	
245	7,12	Prunus serotina	Black Cherry	Good	Remove	2
246	11	Prunus serotina	Black Cherry	Good	Remove	1
247	13	Prunus serotina	Black Cherry	Good	Remove	2
248	11	Prunus serotina	Black Cherry	Good	Remove	1
249	8	Prunus serotina	Black Cherry	Good	Remove	1
250	10	Prunus serotina	Black Cherry	Good	Remove	1
251	18	Prunus serotina	Black Cherry	Good	Save	
252	Dead				Remove	0
253	12	Prunus serotina	Black Cherry	Good	Remove	2
254	10	Prunus serotina	Black Cherry	Good	Save	
255	9	Prunus serotina	Black Cherry	Good	Save	
256	12	Acer negundo	Box Elder	Good	Save	
257	7	Prunus serotina	Black Cherry	Good	Save	
258	14	Acer negundo	Box Elder	Good	Save	
259	9	Acer negundo	Box Elder	Good	Save	
260	16	Acer negundo	Box Elder	Good	Save	
261	16	Acer negundo	Box Elder	Good	Save	
262	10	Acer negundo	Box Elder	Good	Save	
263	17	Acer negundo	Box Elder	Good	Save	
264	12	Prunus serotina	Black Cherry	Good	Remove	2
265	11	Prunus serotina	Black Cherry	Good	Remove	1
266	11	Prunus serotina	Black Cherry	Good	Remove	1
267	13	Prunus serotina	Black Cherry	Good	Save	
268	8	Prunus serotina	Black Cherry	Good	Remove	1
269	8	Prunus serotina	Black Cherry	Good	Remove	1
270	10	Prunus serotina	Black Cherry	Good	Remove	1
271	11,11	Prunus serotina	Black Cherry	Good	Remove	2
272	8,9,10,11	Malus spp.	Common Apple	Fair	Remove	4
273	8,13,13	Prunus serotina	Black Cherry	Good	Remove	5
274	14	Prunus serotina	Black Cherry	Good	Remove	2
276	13,13,14	Malus spp.	Common Apple	Poor	Save	
277	9	Acer negundo	Box Elder	Fair	Save	
278	21	Populus deltoides	Eastern Cottonwood	Good	Save	
279	10,13	Acer negundo	Box Elder	Good	Save	
303	12	Prunus serotina	Black Cherry	Good	Save	
310	8	Prunus serotina	Black Cherry	Good	Remove	1
311	11	Pyrus communis	Pear	Good	Remove	1
314	5	Acer negundo	Box Elder	Good	Remove	0
317	11	Prunus serotina	Black Cherry	Good	Remove	1
319	24	Populus deltoides	Eastern Cottonwood	Good	Save	
323	17	Acer negundo	Box Elder	Good	Remove	2
326	9	Prunus serotina	Black Cherry	Good	Save	
332	10	Prunus serotina	Black Cherry	Good	Save	
335	13	Acer negundo	Box Elder	Good	Remove	2
336	11	Malus spp.	Common Apple	Good	Remove	1

Tree #	DBH	Scientific Name	Common Name	Remarks	Status	Replacement
340	10	Acer negundo	Box Elder	Good	Remove	1
344	7,10	Acer negundo	Box Elder	Good	Save	
346	Dead				Remove	0
350	9	Prunus serotina	Black Cherry	Good	Remove	1
352	10	Prunus serotina	Black Cherry	Good	Remove	1
353	10	Prunus serotina	Black Cherry	Good	Remove	1
355	9	Prunus serotina	Black Cherry	Good	Remove	1
359	8	Malus spp.	Common Apple	Poor	Remove	1
362	12,18,19	Prunus serotina	Black Cherry	Good	Remove	5
366	17	Prunus serotina	Black Cherry	Good	Remove	2
367	10	Prunus serotina	Black Cherry	Good	Remove	1
373	7	Prunus serotina	Black Cherry	Good	Remove	0
376	10	Prunus serotina	Black Cherry	Good	Remove	1
379	10	Prunus serotina	Black Cherry	Good	Remove	1
382	12	Prunus serotina	Black Cherry	Good	Remove	2
383	9	Prunus serotina	Black Cherry	Good	Remove	1
385	11	Ulmus americana	American Elm	Good	Save	
389	12	Prunus serotina	Black Cherry	Good	Save	
393	8,9	Prunus serotina	Black Cherry	Good	Remove	3
396	4,7,7,8	Malus spp.	Common Apple	Good	Remove	1
400	7,7	Prunus serotina	Black Cherry	Good	Remove	0
403	9	Acer negundo	Box Elder	Good	Save	
407	18	Acer negundo	Box Elder	Good	Remove	2
410	10,16	Prunus serotina	Black Cherry	Good	Save	
437	10	Prunus serotina	Black Cherry	Good	Remove	1
438	13	Acer negundo	Box Elder	Good	Save	
441	28	Acer negundo	Box Elder	Good	Save	
444	19	Prunus serotina	Black Cherry	Good	Save	
447	14	Prunus serotina	Black Cherry	Good	Save	
450	9	Prunus serotina	Black Cherry	Good	Remove	1
451	10	Acer negundo	Box Elder	Good	Save	
456	14	Acer negundo	Box Elder	Poor	Save	
457	18	Acer negundo	Box Elder	Good	Remove	2
458	10	Prunus serotina	Black Cherry	Good	Remove	1
460	9	Malus spp.	Common Apple	Good	Remove	1
462	10	Prunus serotina	Black Cherry	Good	Remove	1
463	11	Prunus serotina	Black Cherry	Good	Remove	1
471	10,17	Prunus serotina	Black Cherry	Good	Remove	2
475	10	Prunus serotina	Black Cherry	Good	Remove	1
476	5,8,9,10	Carya cordiformis	Bitternut Hickory	Good	Remove	4
477	Dead				Remove	0
478	14	Prunus serotina	Black Cherry	Good	Remove	2
480	15	Prunus serotina	Black Cherry	Good	Remove	2
482	9	Prunus serotina	Black Cherry	Good	Remove	1
485	12,22	Prunus serotina	Black Cherry	Good	Save	
486	16	Prunus serotina	Black Cherry	Good	Remove	2
487	13	Prunus serotina	Black Cherry	Good	Remove	2
488	19	Acer negundo	Box Elder	Poor	Save	
492	Dead				Remove	0
494	11	Prunus serotina	Black Cherry	Good	Remove	1
501	7,10	Acer negundo	Box Elder	Good	Remove	1
503	9	Acer negundo	Box Elder	Good	Save	
504	13	Robinia pseudoacacia	Black Locust	Good	Save	
505	8	Robinia pseudoacacia	Black Locust	Good	Remove	1
506	6,11	Robinia pseudoacacia	Black Locust	Good	Save	
507	7	Ulmus americana	American Elm	Good	Save	
508	8	Robinia pseudoacacia	Black Locust	Good	Save	
509	6,13	Robinia pseudoacacia	Black Locust	Good	Remove	2
510	24	Robinia pseudoacacia	Black Locust	Good	Remove	3
511	8	Robinia pseudoacacia	Black Locust	Good	Save	
512	8	Robinia pseudoacacia	Black Locust	Good	Remove	1
513	18	Acer platanoides	Norway Maple	Good	Remove	2
514	Dead				Remove	0
515	9	Acer platanoides	Norway Maple	Good	Remove	1
516	37	Acer negundo	Box Elder	90% Dead	Save	
518	9	Robinia pseudoacacia	Black Locust	Good	Remove	1
519	9	Robinia pseudoacacia	Black Locust	Good	Remove	1
520	17	Robinia pseudoacacia	Black Locust	Good	Save	
521	17	Robinia pseudoacacia	Black Locust	Good	Save	
522	11,13,14	Acer negundo	Box Elder	Good	Remove	5
523	11	Robinia pseudoacacia	Black Locust	Good	Remove	1
524	17	Robinia pseudoacacia	Black Locust	Good	Save	
525	10,13,13	Acer negundo	Box Elder	Good	Remove	5
526	9	Robinia pseudoacacia	Black Locust	Good	Remove	1
527	8	Robinia pseudoacacia	Black Locust	Good	Remove	1
528	8	Robinia pseudoacacia	Black Locust	Good	Remove	1
529	16	Robinia pseudoacacia	Black Locust	Good	Save	
530	11	Robinia pseudoacacia	Black Locust	Good	Save	
531	9,10	Robinia pseudoacacia	Black Locust	Good	Save	
532	9,11	Robinia pseudoacacia	Black Locust	Good	Save	
533	15	Robinia pseudoacacia	Black Locust	Good	Save	
534	22	Acer negundo	Box Elder	Good	Save	
535	14	Robinia pseudoacacia	Black Locust	Good	Save	
536	27	Catalpa speciosa	Catalpa	Hollow	Save	
537	9,16	Robinia pseudoacacia	Black Locust	Good	Remove	4
538	9	Robinia pseudoacacia	Black Locust	Good	Remove	1
539	9	Robinia pseudoacacia	Black Locust	Good	Remove	1
540	10	Robinia pseudoacacia	Black Locust	Good	Remove	1
541	9	Robinia pseudoacacia	Black Locust	Good	Save	
542	8	Robinia pseudoacacia	Black Locust	Good	Save	
543	21	Juglans nigra	Black Walnut	Good	Save	
544	10,23	Acer saccharinum	Silver Maple	Good	Remove	8
545	19,21	Ulmus parvifolia	Chinese Elm	Good	Remove	8
546	26,27	Aesculus hippocastanum	Horse Chestnut	Good	Remove	7
547	9	Robinia pseudoacacia	Black Locust	Good	Remove	1
548	9,15	Acer negundo	Box Elder	Good	Save	
549	14,14	Acer negundo	Box Elder	Good	Save	
550	10,12,12,13	Acer negundo	Box Elder	Good	Remove	6
551	14	Acer negundo	Box Elder	Good	Remove	2
552	11	Acer negundo	Box Elder	Poor	Remove	1
553	8	Morus alba	Mulberry	Good	Save	
554	13,14	Acer negundo	Box Elder	Good	Save	
555	10	Acer negundo	Box Elder	Good	Remove	1
556	9	Acer negundo	Box Elder	Good	Remove	1
557	8	Acer negundo	Box Elder	Good	Remove	1
558	8	Acer negundo	Box Elder	Good	Save	
559	9	Acer negundo	Box Elder	Good	Remove	1
560	15	Acer negundo	Box Elder	Good	Remove	2
561	11	Acer negundo	Box Elder	Good	Remove	1
563	9,9	Acer negundo	Box Elder	Good	Remove	6
564	14	Acer negundo	Box Elder	Good	Remove	2
565	18	Acer negundo	Box Elder	Good	Remove	2
566	12	Acer negundo	Box Elder	Good	Save	
567	11	Acer negundo	Box Elder	Good	Save	
568	15	Acer negundo	Box Elder	Good	Save	
569	5,10,12,13	Populus deltoides	Eastern Cottonwood	Good	Save	
570	22	Acer negundo	Box Elder	Poor	Save	
571	8	Acer negundo	Box Elder	Good	Save	
572	9	Acer negundo	Box Elder	Good	Remove	1
573	14	Acer negundo	Box Elder	Good	Remove	2
574	10	Acer negundo	Box Elder	Good	Remove	1
575	14	Acer negundo	Box Elder	Good	Remove	2
576	9	Acer negundo	Box Elder	Good	Remove	1
578	12	Acer negundo	Box Elder	Good	Save	
579	12,15	Malus spp.	Common Apple	Poor	Save	
580	13	Acer negundo	Box Elder	Good	Remove	2
581	12	Acer negundo	Box Elder	Good	Remove	2
582	10,12,14	Acer negundo	Box Elder	Good	Save	
592	9	Acer negundo	Box Elder	Good	Remove	1
593	11	Prunus serotina	Black Cherry	Good	Remove	1
594	15	Prunus serotina	Black Cherry	Good	Remove	1
595	11	Prunus serotina	Black Cherry	Good	Remove	1
596	7	Prunus serotina	Black Cherry	Good	Remove	1
597	8	Prunus serotina	Black Cherry	Good	Remove	1
598	9	Prunus serotina	Black Cherry	Good	Remove	1
599	12	Acer negundo	Box Elder	Good	Remove	2

TREE SURVEY PROVIDED BY:
ALLEN DESIGN
557 CARPENTER
NORTHVILLE, MICHIGAN 48167
PHONE: 248.467.4668

NOVI-TEN TOWNHOMES

SECTION 26, TOWN 1 NORTH, RANGE 8 EAST
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

REVISIONS

NO.	ITEM	DATE
1.	PER CITY REVIEW	8-18-14

DATE: 06-18-14 | DRAWN BY: A.L. | JOB NUMBER: 12-086
CHECKED BY: S.K. | DRAWING FILE:

WOODLAND TREE LIST

SEIBER, KEAST ENGINEERING, L.L.C.
CONSULTING ENGINEERS
7125 ORCHARD LAKE ROAD • SUITE 304 • WEST BLOOMFIELD, MI • 48322
PHONE: 248.855.7067 FAX: 248.855.7067

SHEET L-4

Tree #	DBH	Scientific Name	Common Name	Remarks	Status	Replacement
601	12	Prunus serotina	Black Cherry	Good	Remove	2
602	9	Acer negundo	Box Elder	Good	Remove	1
623	9,11,14	Acer negundo	Box Elder	Good	Remove	5
626	17	Acer negundo	Box Elder	Good	Remove	2
627	17	Prunus serotina	Black Cherry	Good	Remove	2
3522	10	Acer saccharum	Sugar Maple	Good	Remove	1
3523	12	Acer saccharum	Sugar Maple	Good	Remove	2
3524	9,10,11	Tilia americana	Basswood	Good	Remove	4
3525	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3526	9	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3528	9	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3529	8,8,8	Carya cordiformis	Bitternut Hickory	Good	Remove	2
3532	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3533	9	Acer saccharum	Sugar Maple	Good	Remove	1
3534	11	Prunus serotina	Black Cherry	Good	Remove	1
3535	10	Prunus serotina	Black Cherry	Good	Remove	1
3536	13	Acer saccharum	Sugar Maple	Good	Remove	2
3537	Dead				Remove	0
3538	11	Prunus serotina	Black Cherry	Good	Remove	1
3539	11	Prunus serotina	Black Cherry	Good	Remove	1
3540	8	Acer saccharum	Sugar Maple	Good	Remove	1
3541	10	Prunus serotina	Black Cherry	Good	Remove	1
3542	9	Acer saccharum	Sugar Maple	Good	Remove	1
3543	11	Prunus serotina	Black Cherry	Good	Remove	1
3544	9	Prunus serotina	Black Cherry	Good	Remove	1
3545	8	Prunus serotina	Black Cherry	Good	Remove	1
3546	8	Prunus serotina	Black Cherry	Good	Remove	1
3547	8	Prunus serotina	Black Cherry	Good	Remove	1
3548	11	Prunus serotina	Black Cherry	Good	Remove	1
3549	12	Prunus serotina	Black Cherry	Good	Remove	2
3550	9	Acer saccharum	Sugar Maple	Good	Remove	1
3551	8	Acer saccharum	Sugar Maple	Good	Remove	1
3552	8	Acer saccharum	Sugar Maple	Good	Remove	1
3553	8	Acer saccharum	Sugar Maple	Good	Remove	1
3554	8	Acer saccharum	Sugar Maple	Good	Remove	1
3555	8	Tilia americana	Basswood	Good	Save	
3556	8	Carya cordiformis	Bitternut Hickory	Good	Save	
3557	9	Carya cordiformis	Bitternut Hickory	Good	Save	
3558	4,9	Tilia americana	Basswood	Good	Save	
3559	13	Tilia americana	Basswood	Good	Save	
3560	8	Carya cordiformis	Bitternut Hickory	Good	Save	
3561	9	Tilia americana	Basswood	Good	Save	
3562	13	Carya cordiformis	Bitternut Hickory	Good	Save	
3563	9	Acer negundo	Box Elder	Good	Remove	1
3564	8,11	Carya cordiformis	Bitternut Hickory	Good	Remove	3
3565	7	Carya cordiformis	Bitternut Hickory	Good	Remove	0
3566	8	Acer saccharum	Sugar Maple	Good	Remove	1
3567	9	Prunus serotina	Black Cherry	Good	Remove	1
3568	10	Prunus serotina	Black Cherry	Good	Remove	1
3569	8	Prunus serotina	Black Cherry	Good	Remove	1
3570	9	Acer negundo	Box Elder	Good	Remove	1
3571	9	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3572	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3573	11	Prunus serotina	Black Cherry	Good	Remove	1
3574	11	Prunus serotina	Black Cherry	Good	Remove	1
3575	9	Acer saccharum	Sugar Maple	Good	Remove	1
3576	12	Prunus serotina	Black Cherry	Good	Remove	2
3577	11	Prunus serotina	Black Cherry	Good	Remove	1
3578	9	Prunus serotina	Black Cherry	Good	Remove	1
3579	8	Acer saccharum	Sugar Maple	Good	Remove	1
3580	8	Prunus serotina	Black Cherry	Good	Remove	1
3581	14	Acer saccharum	Sugar Maple	Good	Remove	2
3582	9	Prunus serotina	Black Cherry	Good	Remove	1
3583	9	Prunus serotina	Black Cherry	Good	Remove	1
3584	9	Prunus serotina	Black Cherry	Good	Remove	1
3585	13	Prunus serotina	Black Cherry	Good	Remove	2
3586	11	Prunus serotina	Black Cherry	Good	Remove	1
3587	9	Acer saccharum	Sugar Maple	Good	Remove	1
3588	13	Prunus serotina	Black Cherry	Good	Remove	2
3589	9	Acer saccharum	Sugar Maple	Good	Remove	1
3590	14	Prunus serotina	Black Cherry	Good	Remove	2
3591	9	Prunus serotina	Black Cherry	Good	Remove	1
3592	8	Acer saccharum	Sugar Maple	Good	Remove	1
3593	12	Acer saccharum	Sugar Maple	Good	Remove	2
3594	12	Populus tremuloides	Quaking Aspen	Good	Remove	2
3595	8	Acer saccharum	Sugar Maple	Good	Remove	1
3596	11	Populus tremuloides	Quaking Aspen	Good	Remove	1
3597	6,8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3598	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3599	14	Prunus serotina	Black Cherry	Good	Remove	2
3600	7	Ulmus americana	American Elm	Good	Remove	0
3601	9	Prunus serotina	Black Cherry	Good	Remove	1
3602	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3603	7	Prunus serotina	Black Cherry	Good	Remove	0
3604	10	Acer negundo	Box Elder	Good	Remove	1
3605	12	Populus tremuloides	Quaking Aspen	Good	Remove	2
3606	8	Populus tremuloides	Quaking Aspen	Good	Remove	1
3607	13	Acer saccharum	Sugar Maple	Good	Remove	2
3608	10	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3609	9	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3610	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3611	7,11,13	Tilia americana	Basswood	Good	Save	
3612	11	Carya cordiformis	Bitternut Hickory	Good	Save	
3613	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3614	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3615	10	Carya cordiformis	Bitternut Hickory	Good	Save	
3616	8	Acer negundo	Box Elder	Good	Save	
3617	18	Acer negundo	Box Elder	Poor	Save	
3618	9	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3619	10	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3620	9	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3621	10	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3622	8	Acer saccharum	Sugar Maple	Good	Remove	1
3623	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3624	8	Acer saccharum	Sugar Maple	Good	Remove	1
3625	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3626	9	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3627	12	Carya cordiformis	Bitternut Hickory	Good	Remove	2
3628	8	Acer saccharum	Sugar Maple	Good	Save	
3629	11	Acer saccharum	Sugar Maple	Good	Remove	1
3630	13	Ulmus americana	American Elm	Good	Remove	2
3631	7,10	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3632	10	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3633	11	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3634	9	Ulmus americana	American Elm	Good	Remove	1
3635	8,9	Carya cordiformis	Bitternut Hickory	Good	Remove	3
3636	11	Carya cordiformis	Bitternut Hickory	Good	Save	
3637	9	Acer saccharum	Sugar Maple	Good	Save	
3638	8	Acer saccharum	Sugar Maple	Good	Save	
3639	12	Acer saccharum	Sugar Maple	Good	Save	
3640	7,8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3641	8	Carya cordiformis	Bitternut Hickory	Good	Remove	1
3642	8	Prunus serotina	Black Cherry	Good	Remove	1
3643	10	Prunus serotina	Black Cherry	Good	Remove	1
3644	9	Prunus serotina	Black Cherry	Good	Remove	1
3645	13	Prunus serotina	Black Cherry	Good	Remove	2
3646	15	Prunus serotina	Black Cherry	Good	Remove	2
3647	14	Prunus serotina	Black Cherry	Good	Remove	2
3648	16	Acer rubrum	Red Maple	Good	Remove	2
3649	12	Prunus serotina	Black Cherry	Good	Remove	2
3650	10	Prunus serotina	Black Cherry	Good	Remove	1
3651	13	Prunus serotina	Black Cherry	Good	Remove	2
3652	12	Acer negundo	Box Elder	Good	Remove	2
3653	9	Rhamnus cathartica	Buckthorn	Good	Remove	1
3654	15	Acer saccharum	Sugar Maple	Good	Remove	2
3655	13	Prunus serotina	Black Cherry	Good	Remove	2

Tree #	DBH	Scientific Name	Common Name	Remarks	Status	Replacement
3656	12	Prunus serotina	Black Cherry	Good	Remove	2
3657	18	Prunus serotina	Black Cherry	Good	Remove	2
3658	9	Acer negundo	Box Elder	Good	Remove	1
3659	4,10	Acer saccharum	Sugar Maple	Good	Remove	1
3660	8	Prunus serotina	Black Cherry	Good	Remove	1
3661	9	Prunus serotina	Black Cherry	Good	Remove	1
3662	11,27	Prunus serotina	Black Cherry	Good	Remove	5
3663	14	Prunus serotina	Black Cherry	Good	Remove	2
3664	9	Ulmus americana	American Elm	Good	Remove	1
3665	8	Prunus serotina	Black Cherry	Good	Remove	1
3666	11	Prunus serotina	Black Cherry	Good	Remove	1
3667	9	Prunus serotina	Black Cherry	Good	Remove	1
3668	9,10	Prunus serotina	Black Cherry	Good	Remove	3
3669	22	Prunus serotina	Black Cherry	Good	Remove	3
3670	6,17	Morus alba	Mulberry	Good	Remove	2
3671	12	Prunus serotina	Black Cherry	Good	Remove	2
3672	8	Acer negundo	Box Elder	Good	Remove	1
3673	10,14	Prunus serotina	Black Cherry	Good	Remove	3
3674	9	Acer saccharum	Sugar Maple	Good	Remove	1
3675	14	Prunus serotina	Black Cherry	Good	Remove	2
3676	14	Acer saccharum	Sugar Maple	Good	Remove	2
3677	9	Prunus serotina	Black Cherry	Good	Remove	1
3678	17	Prunus serotina	Black Cherry	Good	Remove	2
3679	12	Prunus serotina	Black Cherry	Good	Remove	2
3680	10	Prunus serotina	Black Cherry	Good	Remove	1
3681	9	Prunus serotina	Black Cherry	Good	Remove	1
3682	17	Prunus serotina	Black Cherry	Good	Remove	2
3683	8	Prunus serotina	Black Cherry	Poor	Remove	1
3684	6,8,11	Acer negundo	Box Elder	Good	Remove	4
3685	21	Acer saccharum	Silver Maple	Good	Remove	3
3686	13	Prunus serotina	Black Cherry	Good	Remove	2
3687	12	Prunus serotina	Black Cherry	Good	Remove	2
3688	7	Fraxinus pennsylvanica	Green Ash	Poor	Remove	0
3689	12	Prunus serotina	Black Cherry	Good	Remove	2
3690	16	Prunus serotina	Black Cherry	Good	Remove	2
3691	13	Carya cordiformis	Bitternut Hickory	Good	Remove	2
3692	16	Prunus serotina	Black Cherry	Good	Remove	2
3693	15	Prunus serotina	Black Cherry	Good	Remove	2
3694	12	Prunus serotina	Black Cherry	Good	Remove	2
3695	13	Acer negundo	Box Elder	Good	Remove	2
3696	12	Acer negundo	Box Elder	Good	Remove	2
3698	Dead				Remove	0
3701	13	Acer negundo	Box Elder	Good	Remove	2
3702	8	Acer negundo	Box Elder	Good	Remove	1
3703	10	Acer negundo	Box Elder	Good	Remove	1
3704	17	Prunus serotina	Black Cherry	Good	Remove	2
3705	9	Prunus serotina	Black Cherry	Good	Remove	1
3706	13	Acer saccharum	Silver Maple	Good	Remove	2
3708	12,15	Acer negundo	Box Elder	Poor	Remove	4
3709	12	Prunus serotina	Black Cherry	Good	Remove	2
3710	9	Prunus serotina	Black Cherry	Good	Remove	1
3711	8,11	Prunus serotina	Black Cherry	Good	Remove	3
3712	9	Acer negundo	Box Elder	Good	Remove	1
3713	8	Acer negundo	Box Elder	Good	Remove	1
3714	9	Prunus serotina	Black Cherry	Good	Remove	1
3715	8	Malus spp.	Common Apple	Good	Remove	1
3716	12	Acer negundo	Box Elder	Good	Remove	2
3717	9,10	Prunus serotina	Black Cherry	Good	Remove	3
3718	9	Acer negundo	Box Elder	Poor	Remove	1
3721	12	Prunus serotina	Black Cherry	Good	Remove	2
3722	15	Prunus serotina	Black Cherry	Good	Remove	2
3723	9	Acer negundo	Box Elder	Good	Remove	1
3724	14	Prunus serotina	Black Cherry	Good	Remove	2
3725	13	Prunus serotina	Black Cherry	Good	Remove	2
3726	16	Prunus serotina	Black Cherry	Good	Remove	2
3727	10	Acer negundo	Box Elder	Good	Remove	1
3728	13	Acer negundo	Box Elder	Good	Remove	2
3729	18	Acer negundo	Box Elder	Good	Remove	2
3730	9	Prunus serotina	Black Cherry	Good	Remove	1
3731	3,5,6	Rhamnus cathartica	Buckthorn	Good	Remove	1
3732	25	Prunus serotina	Black Cherry	Good	Remove	3
3733	10,17	Acer negundo	Box Elder	Good	Remove	3
3734	16	Acer negundo	Box Elder	Good	Remove	2
3735	5,7,8	Malus spp.	Common Apple	Good	Remove	2
3736	14	Malus spp.	Common Apple	Good	Remove	2
3737	9	Acer negundo	Box Elder	Good	Remove	1
3738	13,16	Acer negundo	Box Elder	Good	Remove	3
3739	4,8,8	Acer negundo	Box Elder	Good	Remove	1
3740	18	Ulmus americana	American Elm	Good	Remove	2
3741	12,14	Acer negundo	Box Elder	Good	Remove	4
3742	20	Populus deltoides	Eastern Cottonwood	Good	Remove	2
3743	21	Populus deltoides	Eastern Cottonwood	Good	Remove	3
3744	12	Prunus serotina	Black Cherry	Good	Remove	2
3746	15	Acer negundo	Box Elder	Good	Remove	2
3747	10	Acer negundo	Box Elder	Good	Remove	1
3748	20	Acer negundo	Box Elder	Good	Remove	3
3750	27	Prunus serotina	Black Cherry	Good	Remove	3
3751	10	Prunus serotina	Black Cherry	Good	Remove	1
3752	9	Prunus serotina	Black Cherry	Good	Remove	1
3753	13,20	Prunus serotina	Black Cherry	Good	Remove	2
3754	9	Prunus serotina	Black Cherry	Good	Remove	1
3755	6,9	Acer negundo	Box Elder	Good	Remove	1
3756	7,9,9	Acer negundo	Box Elder	Good	Remove	3
3757	10	Acer negundo	Box Elder	Good	Remove	1
3759	9	Juglans nigra	Black Walnut	Good	Remove	1
3761	9	Acer negundo	Box Elder	Good	Remove	1
3763	9	Prunus serotina	Black Cherry	Good	Remove	1
3764	7,17	Acer negundo	Box Elder	Good	Remove	2
3765	8	Prunus serotina	Black Cherry	Good	Remove	1
3766	12	Acer negundo	Box Elder	Good	Remove	2
3767	10	Acer negundo	Box Elder	Good	Remove	1
3768	9	Acer negundo	Box Elder	Good	Remove	1
3769	10	Acer negundo	Box Elder	Good	Remove	1
3770	16	Acer negundo	Box Elder	Good	Remove	2
3771	10	Acer negundo	Box Elder	Good	Remove	1
3772	12	Acer saccharum	Silver Maple	Good	Remove	2
3774	4,4,5,5,6,7	Rhamnus cathartica	Buckthorn	Good	Remove	0
3775	9	Prunus serotina	Black Cherry	Good	Remove	1
3776	9	Prunus serotina	Black Cherry	Good	Remove	1
3777	9	Prunus serotina	Black Cherry	Good	Remove	1
3778	9	Prunus serotina	Black Cherry	Good	Remove	1
3779	8	Prunus serotina	Black Cherry	Good	Remove	1
3781	12	Prunus serotina	Black Cherry	Good	Remove	2
3782	12	Prunus serotina	Black Cherry	Good	Remove	2
3783	8	Acer negundo	Box Elder	Good	Remove	1
3784	14,15	Acer negundo	Box Elder	Good	Remove	4
3785	12	Acer negundo	Box Elder	Good	Remove	2
3786	9	Acer negundo	Box Elder	Good	Remove	1
3787	9	Acer negundo	Box Elder	Good	Remove	1
3788	15	Acer negundo	Box Elder	Good	Remove	2
3789	7	Acer negundo	Box Elder	Good	Remove	0
3790	7	Acer negundo	Box Elder	Good	Remove	0
3791	8	Acer negundo	Box Elder	Good	Remove	1
3792	9	Acer negundo	Box Elder	Good	Remove	1
3793	5,7,9	Acer negundo	Box Elder	Good	Remove	1
3794	11	Prunus serotina	Black Cherry	Good	Remove	1
3795	17	Acer negundo	Box Elder	Good	Remove	2
3796	19	Ulmus americana	American Elm	Good	Remove	2
3797	8	Acer negundo	Box Elder	Good	Remove	1
3798	8	Acer negundo	Box Elder	Good	Remove	1
3799	9,11,17	Acer negundo	Box Elder	Good	Remove	3
3800	15	Acer negundo	Box Elder	Good	Remove	2
3804	16	Acer negundo	Box Elder	Good	Remove	2
3805	9	Juglans nigra	Black Walnut	Good	Remove	1
3806	13	Acer negundo	Box Elder	Good	Remove	3
3807	8	Prunus serotina	Black Cherry	Good	Remove	1
3808	16	Acer negundo	Box Elder	Good	Remove	2

Tree #	DBH	Scientific Name	Common Name	Remarks	Status	Replacement
3809	16	Prunus serotina	Black Cherry	Split Trunk	Remove	2
3810	8	Acer negundo	Box Elder	Good	Remove	1
3811	18	Acer negundo	Box Elder	Poor	Remove	2
3812	8	Malus spp.	Common Apple	Good	Remove	1
3813	9	Acer negundo	Box Elder	Good	Remove	1
3814	9	Acer negundo	Box Elder	Good	Remove	1
3815	9	Acer negundo	Box Elder	Good	Remove	1
3816	9	Acer negundo	Box Elder	Good	Remove	1
3817	32	Prunus serotina	Black Cherry	Good	Remove	4
3818	13	Acer negundo	Box Elder	Good	Remove	2
3819	12	Acer negundo	Box Elder	Good	Remove	2
3820	10	Acer negundo	Box Elder	Good	Remove	1
3821	11	Acer negundo	Box Elder	Good	Remove	1
3822	14	Acer negundo	Box Elder	Good	Remove	2
3823	8	Acer negundo	Box Elder	Good	Remove	1
3824	13	Prunus serotina	Black Cherry	Good	Remove	2
3825	8	Acer negundo	Box Elder	Good	Remove	1
3826	7,7,9	Acer negundo	Box Elder	Good	Remove	1
3827	11	Prunus serotina	Black Cherry	Good	Remove	1
3828	10	Acer negundo	Box Elder	Good	Remove	1
3829	7	Acer negundo	Box Elder	Good	Remove	0
3830	11	Acer negundo	Box Elder	Good	Remove	1
3831	13	Acer negundo	Box Elder	Good	Remove	2
3832	8	Acer negundo	Box Elder	Good	Remove	1
3833	9	Acer negundo	Box Elder	Good	Remove	1
3834	18	Acer negundo	Box Elder	Good	Remove	2
3835	17	Malus spp.	Common Apple	Good	Remove	2
3837	10	Prunus serotina	Black Cherry	Good	Remove	1
3838	11	Prunus serotina	Black Cherry	Good	Remove	1
3839	7,17	Acer saccharinum	Silver Maple	Good	Remove	2
3840	13,20	Acer negundo	Box Elder	Split	Remove	5
3841	16	Ulmus americana	American Elm	Good	Remove	2
3842	3,4,8	Robinia pseudoacacia	Black Locust	Good	Remove	1
3843	10	Robinia pseudoacacia	Black Locust	Good	Remove	1
3844	12	Robinia pseudoacacia	Black Locust	Good	Remove	2
3845	9	Robinia pseudoacacia	Black Locust	Good	Remove	1
3846	9	Prunus serotina	Black Cherry	Good	Remove	1
3847	12	Prunus serotina	Black Cherry	Good	Remove	2
3848	12	Acer negundo	Box Elder	Good	Remove	2
3849	16	Acer negundo	Box Elder	Good	Remove	2
3850	8,14	Acer negundo	Box Elder	Good	Remove	3
3851	8	Acer negundo	Box Elder	Good	Remove	1
3852	18	Acer negundo	Box Elder	Good	Remove	2
3853	15	Prunus serotina	Black Cherry	Good	Remove	2
3854	13	Acer negundo	Box Elder	Good	Remove	2
3855	9	Prunus serotina	Black Cherry	Good	Remove	1
3856	13	Acer negundo	Box Elder	Good	Remove	2
3857	9	Acer negundo	Box Elder	Good	Remove	1
3858	9	Acer negundo	Box Elder	Good	Remove	1
3859	8	Fraxinus pennsylvanica	Green Ash	Good	Remove	1
3860	10	Prunus serotina	Black Cherry	Good	Remove	1
3861	8,10,10	Acer negundo	Box Elder	Good	Remove	2
3862	10	Robinia pseudoacacia	Black Locust	Good	Remove	1
3863	12	Robinia pseudoacacia	Black Locust	Good	Remove	2
3864	14	Prunus serotina	Black Cherry	Good	Remove	2
3865	12	Prunus serotina	Black Cherry	Good	Remove	2
3870	11	Acer saccharum	Sugar Maple	Good	Remove	1
3871	10	Juglans nigra	Black Walnut	Good	Remove	1
3872	15	Acer negundo	Box Elder	Good	Remove	2
3873	14	Acer negundo	Box Elder	Good	Remove	2
3877	10	Prunus serotina	Black Cherry	Good	Save	
3878	18	Acer negundo	Box Elder	Good	Save	
3879	10	Acer negundo	Box Elder	Good	Remove	1
3881	8	Prunus serotina	Black Cherry	Good	Remove	1
3882	9	Prunus serotina	Black Cherry	Good	Remove	1
3884	9	Acer negundo	Box Elder	Good	Remove	1
3885	12	Prunus serotina	Black Cherry	Good	Remove	2
3886	10	Acer negundo	Box Elder	Good	Remove	1
3886	13	Prunus serotina	Black Cherry	Good	Save	
3887	9	Acer negundo	Box Elder	Good	Remove	0
3888	8	Acer negundo	Box Elder	Good	Remove	1
3889	7	Acer negundo	Box Elder	Good	Remove	0
3891	8	Acer negundo	Box Elder	Good	Remove	1
3892	8	Acer negundo	Box Elder	Good	Remove	1
3893	23	Acer negundo	Box Elder	Good	Remove	3
3894	8	Populus deltoides	Eastern Cottonwood	Good	Remove	1
3895	10	Acer negundo	Box Elder	Good	Remove	1
3896	5,7	Acer negundo	Box Elder	Good	Remove	0
3898	15	Acer negundo	Box Elder	Good	Remove	2
3899	8	Prunus serotina	Black Cherry	Good	Remove	1
3900	8	Populus deltoides	Eastern Cottonwood	Good	Remove	1
			Replacement Trees Required			368

TREE SURVEY PROVIDED BY:
ALLEN DESIGN
557 CARPENTER
NORTHVILLE, MICHIGAN 48167
PHONE: 248.467.4668

NOVI-TEN TOWNHOMES

SECTION 26, TOWN 1 NORTH, RANGE 8 EAST
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

REVISIONS

NO.	ITEM	DATE
1.	PER CITY REVIEW	8-18-14

DATE: 06-18-14 | DRAWN BY: A.J. | JOB NUMBER: 12-086 | CHECKED BY: T.K. | DRAWING FILE:

WOODLAND TREE LIST

SEIBER, KEAST ENGINEERING, L.L.C.
CONSULTING ENGINEERS
7125 ORCHARD LAKE ROAD • SUITE 304 • WEST BLOOMFIELD, MI • 48322
PHONE: 248.855.7067 FAX: 248.855.7067

SHEET L-5