



CHAPTER 4

NATURAL FEATURES REVIEW PROCESS



cityofnovi.org

SECTION 1 WOODLANDS PROTECTION

INTRODUCTION

This document is intended to provide a general overview of the City of Novi's woodland review process. Potential applicants should contact the Community Development Department to arrange a meeting to discuss questions and concerns related to the Woodland Ordinance and/or Woodland Use Permits. Furthermore, the provisions of this manual are not intended to repeal, eliminate or otherwise limit any of the requirements or provisions contained in the Zoning Ordinance or City Code. City ordinances and codes should be thoroughly researched prior to application for a woodland review or permit.

WHEN IS A WOODLAND USE PERMIT REQUIRED?

Any activity which results in a temporary or permanent disturbance to or the removal of any vegetation from the ground up within woodlands depicted on the Regulated Woodlands Map, a temporary or permanent disturbance to or the removal of any tree 36" diameter at breast height (d.b.h.) or greater or of a designated historic or a specimen tree requires a Woodland Use Permit. An applicant should refer to Chapter 37 of the Code of Ordinances for specific requirements.

WHAT NEEDS TO BE SUBMITTED TO BEGIN THE FORMAL WOODLAND USE PERMIT REVIEW PROCESS FOR PROJECTS REQUIRING SITE PLAN APPROVAL?

- A completed [Application for Site Plan and Land Use Approval](#) (found in [Attachment A](#) and at cityofnovi.org) listing the exact acreage of regulated woodlands on site
- Ten sets of signed and sealed size 24" x 36" folded plans included as part of the Preliminary Site Plan submittal package depicting the regulated woodlands line, all regulated trees (size and type) and a tree replacement plan (if applicable).

A woodlands survey plan will be required as part of the plan sets. Trees should be numbered using paint, tags on fishline or other pre-approved methods which do not have the potential to damage the tree. For trees with multiple stems, each trunk/stem will need to be measured providing that at least one stem has a d.b.h. of 8" or greater. Site designs submitted should represent the best alternative that saves the most amount of and highest quality woodlands.

- A check payable to the City of Novi for review fees. (Fees will be calculated as part of the Preliminary Site Plan review submittal. An invoice will be forwarded to the applicant by City staff)

SECTION 1 WOODLANDS PROTECTION

INTRODUCTION AND OVERVIEW

WHAT NEEDS TO BE SUBMITTED TO BEGIN THE FORMAL WOODLAND USE PERMIT REVIEW PROCESS FOR PROJECTS NOT REQUIRING SITE PLAN APPROVAL?

- A completed [Woodlands Affidavit](#) (found in [Attachment A](#) and at cityofnovi.org)
- A plot plan showing the following:
 - The dimensioned lot
 - The footprint of the structure(s)
 - "Building Area" as defined in Chapter 37 of the City Code
 - The existing line of regulated woodlands on the property
 - Location of all trees with a d.b.h. of 8" or greater on the property
 - A key which describes the trees that are also marked in the field
 - The location of all proposed and existing replacement trees
 - The location of protective fencing
 - The location of any other regulated trees within 50 feet of any proposed grading or construction or area of disturbance
 - The location of regulated wetlands and buffer areas with the protective fence installed in the correct location
- A check payable to the City of Novi for review fees (Fees will be calculated as part of the Preliminary Site Plan review submittal. An invoice will be forwarded to the applicant by City staff.)

WHAT ARE THE STEPS IN THE WOODLAND USE PERMIT REVIEW AND APPROVAL PROCESS FOR PROJECTS REQUIRING SITE PLAN APPROVAL?

STEP 1: An applicant may request a Woodlands Evaluation Meeting with the City's Environmental Consultant at the Novi Civic Center or on site to discuss woodlands issues and/or walk the site. An applicant should contact the Community Development Department at 248-347-0475 to arrange a meeting. Applicable fees will be charged and must be paid prior to the meeting.

STEP 2: Formal site plan/Woodland Use Permit request is submitted by the applicant and reviewed by the Community Development Department staff and the City's Environmental Consultant and comments are forwarded to the applicant via email. A list of items that should be included as part of the plan set when a site contains regulated woodlands or trees are included previously in this section. The City's Environmental Consultant will determine if a Woodland Use Permit is required at the time of Preliminary Site Plan review.

SECTION 1 WOODLANDS PROTECTION

OVERVIEW

STEP 3: A public hearing notice and map are published in a newspaper of general circulation and mailed out to property owners within 300 feet of the property at least five days prior to the public hearing date.

STEP 4: The Planning Commission will hold the public hearing and take one of the following actions on the Preliminary Site Plan and Woodland Use Permit:

- Approve the Preliminary Site Plan and Woodland Use Permit
- Deny the Preliminary Site Plan and Woodland Use Permit
- Table the Preliminary Site Plan and Woodland Use Permit

The applicant or applicant's representative must attend the meeting at which their permit is scheduled for consideration. Failure to appear will cause the Planning Commission to postpone consideration of the permit.

STEP 5: Provided an applicant receives the approval of the Planning Commission, an applicant proceeds with the Final Site Plan and Stamping Set submittal process outlined in [Chapter 1](#). The amount of fees and financial guarantees that may be required are determined at the time of Final Site Plan review. Preservation easement documents also need to be submitted to the City with the Final Site Plan review submittal package.

Woodland Use Permits will expire at the time of the site plan expiration.

STEP 6: Once the Stamping Sets have been approved by all reviewing parties and all required woodlands fees and financial guarantees have been paid, a pre-construction meeting may be held. Refer to [Chapter 6](#) for additional details on required pre-construction meetings and the construction process.

STEP 7: Following the pre-construction meeting, the City's Environmental Consultant will inspect the staking of the clearing limits. The City's Environmental Consultant will fax or email a copy of a Snow Fence Inspection Form to the contact person for the site.

If the staking line is in a densely vegetated area, one pass may be made with appropriate machinery to clear an area for the staking. If there are problems with the location or protective fencing installation, clearing and grubbing will not be allowed to occur until they are corrected.

STEP 8: Once the protective fencing is acceptable, the Woodland Use Permit will be issued and clearing and removal may occur.

Inspection of protective fencing occurs throughout construction of the site or overall development.

SECTION 1 WOODLANDS PROTECTION

OVERVIEW

STEP 9: Once construction activities have ceased on the site and/or the developer applies for a Temporary Certificate of Occupancy, a final woodlands inspection can be scheduled. The City's Environmental Consultant will inspect the site and replacement trees. Any items yet to be completed will be written in a Woodlands Final Inspection Letter that will be sent to the Building Division with copies sent to the developer or owner of the property and all other applicable parties.

STEP 10: Once all items on the Woodlands Final Inspection Letter have been completed, the protective fencing can be removed and an applicant can request that financial guarantees be reduced or returned. Requests should be made through the Building Division. A 2 year warranty period is required for all woodland replacement trees and landscaping. Financial guarantees will be required.

Regulated woodland impacts on subdivision lots or condominiums which require individual Building Permits will be evaluated at the time of the Building Permit submission. In most cases, regulated woodland impacts have already been taken into account and permitted as part of the site plan approval process.

WHAT ARE THE STEPS IN THE WOODLAND USE PERMIT REVIEW AND APPROVAL PROCESS FOR PROJECTS NOT REQUIRING SITE PLAN APPROVAL?

STEP 1: An applicant may request a Woodlands Evaluation Meeting with the City's Environmental Consultant at the Novi Civic Center or on site to discuss woodlands issues and/or walk the site. An applicant should contact the Community Development Department at 248-347-0475 to arrange a meeting. Applicable fees will be charged and must be paid prior to the meeting.

STEP 2: Formal Woodland Use Permit request is submitted by the applicant and reviewed by the Community Development Department staff and the City's Environmental Consultant and comments are forwarded to the applicant via email. A list of items that should be included as part of the submittal are included previously in this section. The amount of fees and financial guarantees that may be required are determined at the time of review.

STEP 3: If applicable, a public hearing notice and map are published in a newspaper of general circulation and mailed out to property owners within 300 feet of the property at least five days prior to the public hearing date.

In some cases, Woodland Use Permit requests may be approved administratively by Community Development Department staff and/or the City's Environmental Consultant. In those instances, a public hearing and approval of the Planning Commission is not required.

SECTION 1 WOODLANDS PROTECTION

OVERVIEW

STEP 4: The Planning Commission will hold the public hearing and take one of the following actions on the Woodland Use Permit:

- Approve the Woodland Use Permit
- Deny the Woodland Use Permit
- Table the Woodland Use Permit

The applicant or applicant's representative must attend the meeting at which their permit is scheduled for consideration. Failure to appear will cause the Planning Commission to postpone consideration of the permit.

STEP 5: Once all required woodlands fees and financial guarantees have been paid, a pre-construction meeting, if required, may be held.

STEP 6: Community Development Department staff and/or the City's Environmental Consultant will inspect the staking of the clearing limits.

STEP 7: Once the protective fencing is acceptable, the Woodland Use Permit will be issued and clearing and removal may occur.

If the staking line is in a densely vegetated area, one pass may be made with appropriate machinery to clear an area for the staking. If there are problems with the location or protective fencing installation, clearing and grubbing will not be allowed to occur until they are corrected.

STEP 8: Once construction activities have ceased on the site, a final woodlands inspection can be scheduled. Community Development Department staff and/or the City's Environmental Consultant will inspect the site and replacement trees. Any items yet to be completed will be written in a Woodlands Final Inspection Letter that will be sent to the Building Division with copies sent to the developer or owner of the property and all other applicable parties.

STEP 9: Once all items on the Woodlands Final Inspection Letter have been completed, the protective fencing can be removed and an applicant can request that financial guarantees be reduced or returned. Requests should be made through the Building Division. A 2 year warranty period is required for all woodland replacement trees and landscaping. Financial guarantees will be required.

Inspection of protective fencing occurs throughout construction of the site or overall development.

SECTION 1 WOODLANDS PROTECTION

OVERVIEW

HOW IS A TREE DESIGNATED AS A HISTORIC/SPECIMEN TREE?

A tree may be designated as a Historic/Specimen Tree by the Planning Commission. It is unlawful to remove, damage or destroy a Historic/Specimen Tree without first obtaining a Woodland Use Permit from the City. An individual wishing to nominate a tree as a Historic/Specimen Tree should contact the Community Development Department at 248-347-0475. If the nomination is made by someone other than the owner of the property, the Community Development Department shall notify the owner of the property at least fifteen days prior to the Planning Commission meeting where the nomination will be considered. Notification shall include the time, date and location of the meeting and inform the owner of the ramifications of such a designation. If the owner declines the designation, the Planning Commission shall refuse to designate the tree. If no objection is raised, a tree may be designated by the Planning Commission as "Historic" per the criteria outline in Chapter 37 of the City Code.

SECTION 2 WETLANDS AND WATERCOURSE PROTECTION

INTRODUCTION

This document is intended to provide a general overview of the City of Novi's wetland review process. Potential applicants should contact the Community Development Department to arrange a meeting to discuss questions and concerns related to the Wetland Ordinance and/or Wetland Permits. Furthermore, the provisions of this manual are not intended to repeal, eliminate or otherwise limit any of the requirements or provisions contained in the Zoning Ordinance or City Code. City ordinances and codes should be thoroughly researched prior to application for a wetland review or permit.

WHEN IS A WETLAND USE PERMIT REQUIRED?

Any activity which results in a temporary or permanent disturbance of a wetland determined to be regulated by the City or the 25 foot natural features setback buffer is required to obtain a Wetland Use Permit. The approximate location of regulated wetlands is identified on the City's Regulated Wetlands and Watercourse Map. An applicant should refer to Chapter 12, Article V of the Code of Ordinances for specific requirements.

WHAT TYPES OF WETLAND USE PERMITS ARE ISSUED BY THE CITY?

There are three different types of Wetland Use permits.

- A Residential Minor Use Permit is granted by the Community Development Department for activity on property used for a single-family residence.
- A Nonresidential Minor Use Permit is granted by the Community Development Department when one of the following activities are proposed:
 - Minor fills of 300 cubic yards or less and not exceeding 10,000 square feet;
 - The installation of a single water outfall; or
 - Watercourse crossings by utilities, pipelines, cables and sewer lines.
- A Non-Minor Use Permit is generally granted by the Planning Commission for any activities other than those outlined above.

When an activity results in the impairment or destruction of any wetland area 2 acres or greater, an essential wetland area 0.25 acres or greater or a wetland area contiguous to a lake, pond, river or stream, mitigation is required. Refer to Section 12-176 of the City Code for additional information on wetland mitigation.

WHAT NEEDS TO BE SUBMITTED TO BEGIN THE FORMAL WETLAND USE PERMIT REVIEW PROCESS FOR PROJECTS REQUIRING SITE PLAN APPROVAL?

- A completed [Application for Site Plan and Land Use Approval](#) (found in [Attachment A](#) and at cityofnovi.org) listing the exact acreage of wetlands on site

SECTION 2 WETLANDS AND WATERCOURSE PROTECTION

INTRODUCTION

- Ten sets of signed and sealed size 24" x 36" folded plans included as part of the Preliminary Site Plan submittal package including a topographic map delineating the wetlands and natural features buffer and identifying any proposed impacts and mitigation. Refer to Section 12-176 of the City Code for mitigation plan requirements.

The boundary lines of any watercourses or wetlands on property should be clearly flagged or staked and such flagging or staking shall remain in place throughout the conduct of permit activity.

- A check payable to the City of Novi for review fees. (Fees will be calculated as part of the Preliminary Site Plan review submittal. An invoice will be forwarded to the applicant by City staff.)

WHAT NEEDS TO BE SUBMITTED TO BEGIN THE FORMAL WETLAND USE PERMIT REVIEW PROCESS FOR PROJECTS NOT REQUIRING SITE PLAN APPROVAL?

- A completed [Wetlands Affidavit](#) (found in [Attachment A](#) and at cityofnovi.org)
- A plot plan showing the following:
 - The legal property description
 - Zoning classification and zoning classifications of adjacent parcels
 - Existing structures
 - Existing watercourse and wetland areas
 - Location and nature of any existing easements
 - Size and location of all elements of the proposed activity
 - Field survey of existing wetland boundaries and watercourse locations
 - Any MDEQ permit applications or issued permits, if applicable
 - Topographic maps (See Section 12-172 of the City Code)

The boundary lines of any watercourses or wetlands on property should be clearly flagged or staked and such flagging or staking shall remain in place throughout the conduct of permit activity.

- A check payable to the City of Novi for review fees (Fees will be calculated as part of the Preliminary Site Plan review submittal. An invoice will be forwarded to the applicant by City staff.)

SECTION 2 WETLANDS AND WATERCOURSE PROTECTION

OVERVIEW

WHAT ARE THE STEPS IN THE WETLAND USE PERMIT REVIEW AND APPROVAL PROCESS FOR PROJECTS REQUIRING SITE PLAN APPROVAL?

STEP 1: An applicant may request a Wetlands Evaluation Meeting with the City's Environmental Consultant at the Novi Civic Center or on site to discuss wetlands issues and/or walk the site. An applicant should contact the Community Development Department at 248-347-0475 to arrange a meeting. Applicable fees will be charged and must be paid prior to the meeting.

STEP 2: Formal site plan/Wetland Use Permit request is submitted by the applicant and reviewed by the Community Development Department staff and the City's Environmental Consultants and comments are forwarded to the applicant via email. A list of items that should be included as part of the plan set when a site contains regulated wetlands is included previously in this section. The City's Environmental Consultant will determine if a Wetland Use Permit is required and the type of permit required at the time of Preliminary Site Plan review.

STEP 3: If a Non-Minor Use Permit is required, a public hearing notice and map are published in a newspaper of general circulation and mailed out to property owners within 300 feet of the property at least five days prior to the public hearing date.

STEP 4: If a Non-Minor Use Permit is required, the Planning Commission will hold the public hearing and take one of the following actions on the Preliminary Site Plan and Wetland Use Permit:

- Approve the Preliminary Site Plan and Wetland Use Permit
- Deny the Preliminary Site Plan and Wetland Use Permit
- Table the Preliminary Site Plan and Wetland Use Permit
- Recommend approval of the Preliminary Site Plan and Wetland Use Permit to City Council, if applicable
- Recommend denial of the Preliminary Site Plan and Wetland Use Permit to City Council, if applicable

The applicant or applicant's representative must attend the meeting in which their permit is scheduled for consideration. Failure to appear will cause the Planning Commission to postpone consideration of the permit.

STEP 5: City Council consideration and approval of the Preliminary Site Plan and Wetlands Permit is required in certain Zoning Districts. Refer to the Zoning Ordinance for specific regulations. Most Preliminary Site Plans and Wetland Use Permits can be approved by the Planning Commission.

Wetland Use Permits associated with a site plan will expire at the time of the site plan expiration.

SECTION 2 WETLANDS AND WATERCOURSE PROTECTION

OVERVIEW

An applicant may appeal the determination made by the City's Environmental Consultant to the Planning Commission. A request for appeal must be filed within ten calendar days of the receipt of the letter noting the determination.

STEP 6: Provided an applicant receives the approval of the Planning Commission (or City Council, if applicable), an applicant proceeds with the Final Site Plan and Stamping Set submittal process outlined in [Chapter 1](#). The amount of fees and financial guarantees that may be required are determined at the time of Final Site Plan review. Preservation easement documents also need to be submitted to the City with the Final Site Plan review submittal package.

The boundaries of platted lots within a subdivision and of building sites within a site condominium may not extend into a wetland or watercourse.

STEP 7: Once the Stamping Sets have been approved by all reviewing parties and all required wetlands fees and financial guarantees have been paid, the City's Environmental Consultant will inspect the protective fencing and the Wetland Permit will be issued. A pre-construction meeting may be held. Refer to Chapter 6 for additional details on required pre-construction meetings and the construction process.

Additional inspections may be required during construction.

STEP 8: Once construction activities have ceased on the site and/or the developer applies for a Temporary Certificate of Occupancy, a final wetlands inspection can be scheduled. The City's Environmental Consultant will inspect the site and the condition of wetlands, watercourses and mitigation. Any items yet to be completed will be written in a Wetlands Final Inspection Letter that will be sent to the Building Division with copies sent to the individual that requested the inspection.

STEP 9: Once all items on the Wetlands Final Inspection Letter have been completed, the applicant can enter the monitoring period where periodic inspections and reports will take place. The applicant is responsible for submitting a Wetland Monitoring Report to the Community Development Department by December 1 of each year. Upon final acceptance of the established wetland, an applicant can request that financial guarantees be reduced or returned. Requests should be made through the Building Division.

WHAT ARE THE STEPS IN THE WETLAND USE PERMIT REVIEW AND APPROVAL PROCESS FOR PROJECTS NOT REQUIRING SITE PLAN APPROVAL?

STEP 1: An applicant may request a Wetlands Evaluation Meeting with the City's Environmental Consultant at the Novi Civic Center or on site to discuss wetlands issues and/or walk the site. An applicant should contact the Community Development Department at 248-347-0475 to arrange a meeting. Applicable fees will be charged and must be paid prior to the meeting.

SECTION 2 WETLANDS AND WATERCOURSE PROTECTION

OVERVIEW

STEP 2: A formal Wetland Use Permit request is submitted by the applicant and reviewed by the Community Development Department staff and the City's Environmental Consultants and comments are forwarded to the applicant via email. A list of items that should be included as part of the submittal are included previously in this section. The amount of fees and financial guarantees that may be required are determined at the time of review.

STEP 3: If a Non-Minor Use Permit is required, a public hearing notice and map are published in a newspaper of general circulation and mailed out to property owners within 300 feet of the property at least five days prior to the public hearing date.

STEP 4: If a Non-Minor Use Permit is required, the Planning Commission will hold the public hearing and take one of the following actions on the Wetland Use Permit:

- Approve the Wetland Use Permit
- Deny the Wetland Use Permit
- Table the Wetland Use Permit
- Recommend approval of the Wetland Use Permit to City Council, if applicable
- Recommend denial of the Wetland Use Permit to City Council, if applicable

STEP 5: City Council consideration and approval of the Wetland Use Permit is required in certain Zoning Districts. Refer to the Zoning Ordinance for specific regulations. Most Wetland Use Permits can be approved by the Planning Commission.

Wetland Use Permits not associated with a site plan will generally expire after 12 months.

An applicant may appeal the determination made by the City's Environmental Consultant to the Planning Commission. A request for appeal must be filed within ten calendar days.

STEP 6: Once the Stamping Sets have been approved by all reviewing parties and all required wetlands fees and financial guarantees have been paid, the City's Environmental Consultant will inspect the protective fencing and the Wetland Permit will be issued. A pre-construction meeting may be held. Refer to Chapter 6 for additional details on required pre-construction meetings and the construction process.

Additional inspections may be required during construction.

STEP 7: Once construction activities have ceased on the site and/or the developer applies for a Temporary Certificate of Occupancy, a final wetlands inspection can be scheduled. The City's Environmental Consultant will inspect the site and the condition of wetlands, watercourses and mitigation. Any items yet to be completed will be written in a Wetlands Final Inspection Letter that will be sent to the Building Division with copies sent to the individual that requested the inspection.

SECTION 2 WETLANDS AND WATERCOURSE PROTECTION

OVERVIEW

STEP 8: Once all items on the Wetlands Final Inspection Letter have been completed, the applicant can enter the monitoring period where periodic inspections and reports will take place. The applicant is responsible for submitting a Wetland Monitoring Report to the Community Development Department by December 1 of each year. Upon final acceptance of the established wetland, an applicant can request that financial guarantees be reduced or returned. Requests should be made through the Building Division.

WHAT IS A WETLAND BOUNDARY DETERMINATION?

An applicant may request a Wetland Boundary Determination to confirm the boundaries and status of potential wetlands on a property. The City's Environmental Consultant will evaluate the site and the application materials and make a determination that will be forwarded to the applicant. If the wetland is

An applicant may appeal the determination made by the City's Environmental Consultant to the Planning Commission. A request for appeal must be filed within ten calendar days of the receipt of the letter noting the determination.

regulated by the City and/or State, a Wetland Use Permit would be required for any of the activities highlighted earlier in this section.

An applicant shall submit the following materials to begin the Wetland Boundary Determination process:

- A completed **Wetland Boundary Determination Application** (found in [Attachment A](#) and at cityofnovi.org):
- A plot plan showing the following:
 - The legal property description
 - Existing watercourse and wetland areas
 - Field survey of existing wetland boundaries and watercourse locations; and

The boundary lines of any watercourses or wetlands on property should be clearly flagged or staked .

- A check payable to the City of Novi for review fees. (Fees will be calculated at the time of submittal. An invoice will be forwarded to the applicant by City staff.)



CHAPTER 5

ADDITIONAL STUDIES



cityofnovi.org

SECTION 1 TRAFFIC IMPACT STUDIES

INTRODUCTION

This document is intended to provide a general overview of the City of Novi's requirements for traffic impact studies. Potential applicants should contact the Community Development Department to arrange a meeting to discuss questions and concerns related to Traffic Impact Studies. Furthermore, the provisions of this manual are not intended to repeal, eliminate or otherwise limit any of the requirements or provisions contained in the Zoning Ordinance or City Code. City ordinances and codes should be thoroughly researched prior to application for a rezoning or site plan approval.

WHAT IS THE PURPOSE OF PROVIDING A TRAFFIC IMPACT STUDY?

The City of Novi recognizes the direct correlation between land use decisions and traffic operations. The intent of a Traffic Impact Study (including a Traffic Impact Statement, a Traffic Impact Assessment and a Rezoning Traffic Impact Study) is to provide for accurate evaluation of expected impacts of proposed projects to assist in decision-making. This section is further intended to help achieve the following objectives:

- To help ensure safe and reasonable traffic operating conditions on streets and intersections after development of the proposed use;
- To reduce negative traffic impacts created by individual developments;
- In the case of a rezoning, to evaluate if the rezoning is timely and (if it is inconsistent with the Master Plan for Land Use) if the rezoning would be a logical alternative from a traffic perspective;
- To realize a comprehensive approach to the overall impacts of various developments along a corridor or within a community rather than a piecemeal approach;
- To provide direction to community decision makers, road agencies and developers regarding the expected impacts of a project;
- To alert the community, transportation agencies and developers of improvements or modifications needed to the roadway, access or site design; and
- To protect the substantial public investment in the existing street system.

HOW ARE TERMS ASSOCIATED WITH A TRAFFIC IMPACT STUDY DEFINED?

The following terms used in this section shall be defined as follows:

- Average Day: A Tuesday, Wednesday or Thursday during a non-holiday week for most uses. The average day may be a Saturday for uses that have higher or similar peak-hour traffic volumes on a Saturday rather than mid-week.
- Development: A site plan, subdivision tentative preliminary plat, condominium project, mobile home park, redevelopment, reuse or expansion of a use or building.

SECTION 1 TRAFFIC IMPACT STUDIES

INTRODUCTION

- Level of Service: A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed, travel time, delay, freedom to maneuver, traffic interruptions, comfort, convenience and safety.
- Master Plan: The Master Plan for Land Use adopted by the City of Novi Planning Commission which illustrates the intended future land use pattern and may also describe roadway functional classifications and intended improvements to the transportation system (i.e., Comprehensive Plan, Future Land Use Plan, Thoroughfare Plan, etc.)
- Peak Hour: A one-hour period representing the highest hourly volume of traffic flow on the adjacent street system during the morning (a.m. peak hour) and the afternoon or evening (p.m. peak hour) or representing the hour of highest volume of traffic entering or exiting a site (peak hour of generator).
- Study Area: The geographic area containing those critical arterial intersections (and connecting roadway segments) which are expected to be affected by the site traffic generated by a development, as determined by the City's traffic consultant.
- Traffic Impact Study: The analysis of the potential traffic impacts generated by a proposed project. The type of study and level of analysis will vary depending on the type and size of the project.
- Trip: A single or one-direction vehicle movement with either the origin or the destination (exiting or entering) inside a study site. Entering or exiting the site is therefore two trips within the same peak hour.

Prior to submittal of any type of Traffic Impact Study, the applicant shall contact the City's traffic consultant to establish the framework and scope of the study. For developments that are either located on or will impact State or County roads, the study requirements should be discussed and coordinated with the Road Commission for Oakland County (RCOC), the Wayne County Road Commission (WCRC) and/or the Michigan Department of Transportation (MDOT), as appropriate.

WHAT ARE THE TYPES OF TRAFFIC IMPACT STUDIES AND WHEN IS A TRAFFIC IMPACT STUDY REQUIRED?

A Traffic Impact Study shall be submitted by a petitioner for a rezoning, Preliminary Site Plan, area plan, concept plan or subdivision plan under any of the situations listed below.

TRAFFIC IMPACT STATEMENT (TIS): Full scale Traffic Impact Statements are required for all projects expected to generate over 100 or more directional trips during the peak hour of the traffic generator or the peak hour of adjacent streets or over 750 trips in an average day. See Table 1 on the following page for examples of land uses and expected trips generated.

SECTION 1 TRAFFIC IMPACT STUDIES

INTRODUCTION

Table 1—Examples of Land Use Size Thresholds/Based on Trip Generation Characteristics (1) (2)

Land Use	100 Peak-Hour, Peak-Direction Trips	750 Daily (One-Directional) Trips
Residential Land Uses		
Single Family Homes	155 units	70 units
Apartments	250 units	105 units
Condominiums/Townhouses	305 units	120 units
Mobile Home Park	280 units	135 units
Commercial and Industrial Uses		
Shopping Center/Retail (GLA) (3)	17,260 sq. ft. (weekday) 10,040 sq. ft. (Saturday)	3,370 sq. ft. (weekday)
Fast Food Restaurant with drive-through (GFA) (3)	3,970 sq. ft. (am) (4) 5,680 sq. ft. (pm) (4)	1,510 sq. ft.
Convenience Store with gas sales (GFA) (3) (5)	2,060 sq. ft. or 10 nozzles	890 sq. ft. or 5 nozzles
Banks with drive-through (GFA) (3)	7,500 sq. ft.	5,060 sq. ft.
Hotel/Motel	280/330 rooms	90/130 rooms
General Office (GFA) (3)	37,200 sq. ft. (5)	47,340 sq. ft.
Medical/Dental Office (GFA) (3)	41,190 sq. ft.	23,600 sq. ft.
Research and Development (GFA) (3)	88,680 sq. ft. or 7.1 acres	92,480 sq. ft. or 9.4 acres
Light Industrial (GFA) (3)	145,690 sq. ft. or 14.8 acres	114,050 sq. ft. or 14.5 acres
Manufacturing (GFA) (3)	190,030 sq. ft.	196,340 sq. ft.
Church (GFA) (3)	17,000 sq. ft. (6)	20,480 sq. ft. (6)
Day Care Center	220 students	170 students

Notes:

1. Rates/equations used to calculate the above thresholds are the Trip Generation 8th Edition, 2008, by the Institute of Transportation Engineers.
2. For example, a full Traffic Impact Study should be completed if thresholds are met or exceeded. The City has the discretion to determine which column, day, and peak hour to apply, based on a case-by-case evaluation.
3. GLA = Gross Leasable Area and GFA = Gross Floor Area.
4. Using a.m. peak hour rates/equations would produce a lower threshold; however, adjacent roadway volumes are usually higher during the p.m. peak hour.
5. Based on higher of "Gas Station with Market" and "Convenience Market with Pumps" forecast.
6. Based on Sunday data.

For further trip generation characteristics of the above land uses or of other uses not illustrated above, refer to the latest edition of the Trip Generation by ITE. Values listed in this table have been rounded to the nearest 5 dwelling units or 10 sq. ft.



SECTION 1 TRAFFIC IMPACT STUDIES

INTRODUCTION AND OVERVIEW

TRAFFIC IMPACT ASSESSMENT (TIA): Traffic Impact Assessments are abbreviated versions of a Traffic Impact Statement and are required for all projects expected to generate over 75-100 directional trips during the peak hour of the traffic generator or the peak hour of adjacent streets. See [Table 1](#) on the previous page for examples of land uses and expected trips generated.

Traffic Impact Statements and Assessments are required for new phases to existing projects meeting the above thresholds and for substantial changes to projects with a Traffic Impact Statement or Assessment greater than two years old and where roadway conditions have changed more than two percent annually.

REZONING TRAFFIC IMPACT STUDY (RTIS): Rezoning Traffic Impact Studies are abbreviated versions of a Traffic Impact Statement and are required in the following instances:

- Any proposed zoning change from residential to non-residential;
- Any proposed zoning change to a residential category two or more categories higher than the current residential designation (e.g., R-1 to R-3); or
- Any other proposed zoning change that would likely increase trips generated per day by 1,000 or more over one or more principal permitted uses in the current zoning district.

WHAT SHOULD BE INCLUDED IN A TRAFFIC IMPACT STATEMENT (TIS)?

The following information should be included as part of Traffic Impact Statement:

- **Background Information:** The applicant should provide illustrations and a narrative describing the site, surroundings, study area and adjacent roadway system (functional classifications, lanes, speed limits, etc.). The description should include surrounding land uses, expected development in the vicinity which could influence future traffic conditions, special site features and a description of any committed roadway improvements. The narrative should define and justify the study area selected for analysis.
- **Description of the Requested Use:** The applicant should provide a description of factors such as the number and types of dwelling units, the gross and leasable floor area and the number of employees and shift change factors. Intended phasing or future expansion should also be noted.
- **Description of Existing Traffic Conditions:** The applicant should provide the following:
 - **Traffic Counts:** Existing conditions including existing peak-hour traffic volumes (and daily volumes) on streets adjacent to the site should be provided. Existing counts and levels of service for intersections in the vicinity which are expected to be impacted, as identified by City staff and consultants at a Pre-Application meeting or through previous discussions should also be provided. Traffic counts shall be taken on a Tuesday, Wednesday or Thursday of non-holiday weeks. Additional counts (e.g., on Saturday for a proposed commercial development) may also be required in some cases.

SECTION 1 TRAFFIC IMPACT STUDIES

OVERVIEW

The individual or firm preparing the Traffic Impact Statement shall obtain the traffic counts during average or higher than average volume conditions (i.e. regarding weather or seasonal variations and in consideration of any construction or special events) for the area under study.

Traffic count data shall not be over two years old, except the City may permit counts up to three years old to be increased by a factor supported by documentation or a finding that traffic has increased at a rate less than two percent annually in the past three to five years.

- **Roadway Characteristics and Existing Conditions:** The applicant should describe and illustrate roadway characteristics as appropriate. Features to be addressed include lane configurations, geometrics, signal timing, traffic control devices, posted speed limits and any sight distance limitations. Existing levels of service shall be calculated for intersections included within the study area. Existing driveways and potential turning movement conflicts in the vicinity of the site shall be illustrated and described. The existing and proposed right-of-way shall be identified.
- **Background Traffic Growth:** The applicant should note that for any project requiring a Traffic Impact Statement with a completion date beyond one year of the time the Traffic Impact Statement was prepared, the analysis shall also include a scenario analyzing forecast traffic and levels of service at the expected date of completion along the adjacent street network using historic annual percentage increases and/or future development in the area which has been approved.
- **Trip Generation:** The applicant should provide forecasted trip generation of the proposed use for the a.m. (if applicable) and p.m. peak hours and an average 24-hour day. A table should be provided showing the use, ITE code number, trip rate and trips in and out. The forecasts shall be based on the data and procedures outlined in the most recent edition of Trip Generation published by the Institute of Transportation Engineering (ITE). The applicant may use other commonly accepted sources of data or supplement the standard data with data from at least two similar projects in Michigan. Any trip reduction for pass-by trips, transit, ride-sharing, other modes, internal capture rates, etc. shall be based on ITE findings and documented survey results acceptable to the City. The community may elect to reduce the trip reduction rates used. For projects intended to be developed in phases, trip generation by phase shall be described.
- **Trip Distribution:** The applicant should ensure that the project traffic generated is distributed (inbound v. outbound, left turn v. right turn) onto the existing street network to project turning movements at site access points and at nearby intersections. Projected turning movements shall be illustrated in the report. A description by the applicant of standard engineering procedures for determining the distribution should also be attached (trip distribution model, market studies, counts at existing driveways, etc.)

SECTION 1 TRAFFIC IMPACT STUDIES

OVERVIEW

- **Impact Analysis:** The applicant should provide as part of the Traffic Impact Statement level of service or "capacity" analysis at the proposed access points using the procedures outlined in the most recent edition of the Highway Capacity Manual published by the Transportation Research Board. Before and after capacity analyses shall also be performed at the closest signalized intersection and for all street intersections where the expected traffic generated at the site will comprise at least five percent of the existing intersection volume and/or for roadway sections and intersections experiencing congestion, as determined by City staff and consultants.
- **Access Design/Access Management Standards:** The Traffic Impact Statement shall include a map (or reduced copy of the site plan at size 11"x17") and description of the location and design of proposed access (driveway or new street intersections) including any sight distance limitations, dimensions from adjacent driveways and intersections within 200 feet on either side of the main roadway, data to demonstrate the number of driveways proposed is the fewest necessary and support that the access points will provide safe and efficient traffic operation and be in accordance with the standards of the City and the applicable road agency.
- **Other Study Items:** The Traffic Impact Statement shall include the following:
 - The need for (or provision of) any additional right-of-way where planned or desired by the City or applicable road agency;
 - Changes which should be considered to the site plan layout (or plat);
 - Description of any needed non-motorized facilities;
 - The adequacy of the queuing/stacking area if the use involves a drive-through facility;
 - The relationship of anticipated traffic to traffic signal warrants in the Michigan Manual of Uniform Traffic Control Devices if a traffic signal is being requested (Analysis should also be provided on the impacts to traffic progression along the roadway through coordinated timing, etc.); and
 - Description of the site circulation and available sight distances at site driveways.

If a median crossover is desired, separate analysis should be provided.

- **Mitigation/Alternatives:** The applicant should outline mitigation measures as part of the Traffic Impact Statement and demonstrate any changes to the level of service achieved by these measures. Any alternatives or suggested phasing of improvements should be described. The mitigation measures may include items such as roadway widening, need for the bypass lanes or deceleration tapers/lanes, changes to signalization, use of access management techniques or a reduction in the proposed intensity of use. The responsibility and timing of roadway improvements shall be described. A traffic signing and striping plan must accompany the Final Site Plan.

Proposed mitigation measures should be discussed with the applicable road agency.

SECTION 1 TRAFFIC IMPACT STUDIES

OVERVIEW

WHAT SHOULD BE INCLUDED IN A TRAFFIC IMPACT ASSESSMENT (TIA)?

A Traffic Impact Assessment is an abbreviated version of a Traffic Impact Statement. The following information as described in the requirements for a Traffic Impact Statement should be included as part of Traffic Impact Assessment:

- Background Information;
- Description of the Requested Use;
- Description of Existing Traffic Conditions;
- Background Traffic Growth;
- Trip Generation;
- Trip Distribution;
- Access Design/Access Management Standards; and
- Other Study Items.

WHAT SHOULD BE INCLUDED IN A REZONING TRAFFIC IMPACT STUDY (RTIS)?

A Rezoning Traffic Impact Study is an abbreviated version of a Traffic Impact Statement. The following information as described in the requirements for a Traffic Impact Statement should be included as part of Rezoning Traffic Impact Study:

- Background Information;
- Description of the Requested Use; and
- Trip Generation.

In addition, a Rezoning Traffic Impact Study shall include available traffic counts (peak hour and daily) within one mile of the subject property. Also, the trip generation section shall compare trip generation of typical uses permitted under the requested zoning district with those in the existing zoning district.

WHAT ARE THE QUALIFICATIONS FOR PREPARERS AND REVIEWERS OF TRAFFIC IMPACT STUDIES?

The Traffic Impact Study shall include a résumé of the preparer(s) responsible for the report. The Traffic Impact Study should also be signed by the preparer(s) with full recognition of potential liability for the results and recommendations outlined in the report.

Preparer: The preparation of a thorough Traffic Impact Study requires extensive background and experience in traffic-related analyses. The person(s) responsible for the preparation of the study shall meet the following requirements:

SECTION 1 TRAFFIC IMPACT STUDIES

OVERVIEW

- Three or more years of recent experience in the preparation of Traffic Impact Studies;
- The development of Traffic Impact Studies (and similar intersection and/or corridor analyses) must comprise a major component of the preparer's recent professional experience;
- Specific education, training and/or professional course work in traffic impact analysis;
- The study preparer(s) shall be an associate (or higher) member of one or more professional transportation-related organizations (i.e., The Institute of Transportation Engineers (ITE) or the Transportation Research Board (TRB)); and
- The study preparer(s) must be a registered professional engineer (PE), a community planner with AICP or PCP certification or have a professional traffic operations engineer (PTOE) certification.

Any Traffic Impact Study involving roadway or traffic signal design work shall be prepared by or under the supervision of a registered professional engineer (PE) with specific training in traffic engineering.

Reviewer: Review of the Traffic Impact Study is important to ensure that the analysis and recommendations are based on accepted practices. The Traffic Impact Study shall be reviewed by a trained traffic engineer or transportation planner. The qualifications of the reviewer should parallel those of the preparers as outlined above and on the previous page.

CAN THE REQUIREMENT FOR A TRAFFIC IMPACT STUDY BE WAIVED?

An applicant may request a waiver of a Traffic Impact Study from the Planning Commission. In order to request a waiver, the applicant should submit a written statement requesting the waiver and documenting the reasons for the requested waiver. Waiver requests would be considered by the Planning Commission at the time of Preliminary Site Plan review, after review and recommendation by City staff and consultants. Factors to be considered include:

- The existing level of service along the roadway is not expected to drop below LOS "C" due to the proposed development;
- The existing level of service is not expected to be significantly impacted by the proposed development due to specific conditions at this location; and/or
- A similar Traffic Impact Study was previously prepared for the site and is considered applicable by City staff and consultants..

SECTION 2 COMMUNITY IMPACT STATEMENT

INTRODUCTION AND OVERVIEW

This document is intended to provide a general overview of the City of Novi's Community Impact Statement requirements. Potential applicants should contact the Community Development Department to arrange a meeting to discuss questions and concerns. Furthermore, the provisions of this manual are not intended to repeal, eliminate or otherwise limit any of the requirements or provisions contained in the Zoning Ordinance or City Code. City ordinances and codes should be thoroughly researched prior to application for a rezoning or site plan approval.

WHAT IS THE PURPOSE OF PROVIDING A COMMUNITY IMPACT STATEMENT (CIS)?

A Community Impact Statement provides the Planning Commission and/or City Council with information to aid in the planning and implementation of infrastructure needs for the City. It may also be used to evaluate the potential impact(s) of special land uses.

WHEN IS A COMMUNITY IMPACT STATEMENT REQUIRED?

A Community Impact Statement is required for all non-residential projects over 30 acres in size for a principal permitted use or ten acres in size for a special land use and all residential projects with more than 150 units. In the case of a mixed-use development, staff shall determine whether a Community Impact Statement is required.

WHAT SHOULD BE INCLUDED IN A COMMUNITY IMPACT STATEMENT?

A Community Impact Statement should address all of the following information:

- Expected annual number of police responses for the proposed development (can be based on statistics from similar developments);
- Expected annual number of fire responses for the proposed development (can be based on statistics from similar developments);
- Anticipated number of employees (include both permanent and construction jobs on site);
- Statement regarding compliance with City Performance Standards (Section 2519 of the Zoning Ordinance);
- Estimated number of sewer and water taps and information on peak hour demand and min/max operating pressures for water system;
- Relationship of the proposed development with surrounding uses;
- Description of proposed land use;
- Description of the environmental factors and impacts addressing the following:
 - Natural features on the site (e.g., unusual topography, habitat areas, wetlands, woodlands, historic trees, etc.);
 - Temporary and permanent impacts to natural features on the site;

SECTION 2 COMMUNITY IMPACT STATEMENT

OVERVIEW

- Manufacture, use or storage of any hazardous or toxic materials on the site including Environmental Protection Agency requirements and the need for a Pollution Incidence Prevention Plan (PIPP);
- Location, type, depth and contents of any existing or proposed underground storage tanks;
- Environmental use and/or contamination history of the site (i.e., groundwater contamination, landfill, chemical spills, etc.); and
- Potential impacts to existing wildlife on site; and
- Description of the social impacts addressing the following:
 - Replacement or relocation of any existing uses or occupants on the site;
 - Traffic impacts (information can come from any required Traffic Impact Study or statistics from other similar developments when a study is not required);
 - Proposed site amenities (i.e., sidewalks, public parks, bicycle paths, etc.); and
 - Increases in the permanent population of the City as a result of the proposed development (specific number should be identified and statistics from similar developments can be used).

CAN THE REQUIREMENT FOR A COMMUNITY IMPACT STATEMENT BE WAIVED?

In the case of low impact developments (e.g., small parking lot expansion on an existing fifteen acre site), an applicant may request a waiver of a Community Impact Statement from City staff. A waiver will be discussed at the Pre-Application meeting.



CHAPTER 6

OVERVIEW OF CONSTRUCTION PROCESS AND REQUIRED PERMITS



cityofnovi.org

SECTION 1 PRE-CONSTRUCTION PROCESS

INTRODUCTION AND OVERVIEW

This document is intended to provide a general overview of the City of Novi's pre-construction process. Potential applicants should contact the Community Development Department to discuss questions and concerns related to the pre-construction process. Furthermore, the provisions of this manual are not intended to repeal, eliminate or otherwise limit any of the requirements or provisions contained in the Zoning Ordinance or City Code.

WHAT IS REQUIRED BEFORE CONSTRUCTION CAN BEGIN?

Once all approvals from the Planning Division of the Community Development Department are secured in accordance with the process generally outlined in [Chapter 1](#) of this document, the pre-construction process can begin. Applicants can initiate the pre-construction process following the issuance of Final Site Plan approval letters by contacting the Community Development Department at 248-347-0415. Construction of site improvements (i.e., utilities, roads, etc.) can begin once the following is complete:

- A project has received Stamping Set approval from the Planning Division;
- The applicant and City staff have reviewed, completed and provided all applicable documentation and financial guarantees noted in the [Pre-Construction Checklist](#), a copy of which is provided in [Attachment A](#); and

The [Pre-Construction Checklist](#) will be completed by City staff. An applicant will be notified of the items to be submitted and any required financial guarantees once the pre-construction process is initiated by contacting the Community Development Department.

- A pre-construction meeting has been held.

WHEN IS A PROJECT ELIGIBLE FOR BUILDING PERMIT REVIEW?

Applicants generally submit Building Permit review applications following the issuance of Final Site Plan approval letters from the Planning Division. An applicant may apply for Building Permits after approval of the Preliminary Site Plan. Applicants should be aware that any changes required during the Final Site Plan Planning Division review could require changes to the Building Permit review plans.

Chapter 26.5 of the City of Novi Code of Ordinances generally requires all projects be completed within two years of the issuance of any starting permit. Please contact the Community Development Department at 248-347-0415 for additional information on starting permits. An applicant should review and be aware of the requirements of Chapter 26.5 before starting construction.

SECTION 2 SOIL EROSION AND SEDIMENTATION CONTROL

INTRODUCTION AND OVERVIEW

This document is intended to provide a general overview of the City of Novi's soil erosion and sedimentation control provisions. Potential applicants should contact the Community Development Department to discuss questions and concerns related to soil erosion and sedimentation control. Furthermore, the provisions of this manual are not intended to repeal, eliminate or otherwise limit any of the requirements or provisions contained in the Zoning Ordinance or City Code.

WHAT ARE THE STEPS INVOLVED IN OBTAINING A SOIL EROSION PERMIT?

STEP 1: A Soil Erosion Permit application (available at cityofnovi.org), one set of Soil Erosion Control Plans and the appropriate plan review fee are submitted to the Building Division of the Community Development Department by the applicant. The application and plans are reviewed by the City's Engineering Division within thirty days.

STEP 2: If revisions to the plans are required, the applicant will be advised of the revisions in writing and by way of marked up plans. A revised plan may be submitted electronically to the reviewing engineer who will approve the revisions. Additional review fees may apply. Five sets of finalized plans are required to be sent directly to the Engineering Division for final distribution.

STEP 3: Upon approval of the plans, a permit will be written and sent back to the Building Division along with four sets of stamped approved plans. One copy will be forwarded to the applicant. A letter of credit (based on the estimated total cost of all temporary and permanent soil erosion sedimentation control measures included in the approved plan) will be required where costs exceed \$1,000.

The owner of the property (or an authorized agent) must sign the permit and post any required financial guarantees before the permit is considered valid. A pre-construction meeting is required for all projects requiring site plan approval prior to any clearing, grubbing or earthwork activities. Refer to [Section 1](#) of this chapter for additional information on the pre-construction process.

STEP 4: After all necessary approvals are obtained (including initial inspections of the site perimeter protection measures such as silt fencing) and earthwork on the site commences, the City will conduct routine inspections to ensure that the site is in compliance with the Soil Erosion and Sedimentation Control Ordinance and the approved plan. Upon the City's direction, additional measures shall be constructed or maintenance work shall be performed to assure erosion and sedimentation control.

It is the responsibility of the applicant to ensure that all soil erosion and sedimentation control measures are installed and maintained throughout the duration of the project until all bare soils on the site are completely stabilized with permanent vegetation. A Soil Erosion Permit is valid for one year and it is the applicant's responsibility to renew the permit prior to expiration.

STEP 5: The City will inspect the project at the time of complete soil stabilization of the site or at the applicant's request for release of monies.